



THEEWATERSKLOOF MUNICIPALITY

TENDER NO. ENG 16/2021/22

CONTRACT DOCUMENT

FOR THE

UPGRADING OF GRABOUW BULK WATER SERVICES PHASE 5.1: MECHANICAL AND ELECTRICAL UPGRADES

(RETURNABLE DOCUMENT)

Name of Tenderer	
Address (Physical)	
Telephone Number	
Fax Number	
Date	
Signature	
Amount (VAT Included)	
Duration	

NOTE:

- The Form of Offer and Acceptance (C1.1) of this document (see also Clause C.4.6)

PREPARED BY:

THEEWATERSKLOOF MUNICIPALITY

P O BOX 24

CALEDON

7230

Tel: (028) 214 3300

Fax: (028) 214 1289

November 2021

PART A - INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE THEEWATERSKLOOF MUNICIPALITY					
Bid Number:	ENG15/2021/22	Closing Date:	17 December 2021	Closing Time:	12:00
Description:	UPGRADING OF GRABOUW BULK WATER SERVICES PHASE 5.1: MECHANICAL AND ELECTRICAL UPGRADES				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (FORM OF OFFER AND ACCEPTANCE).					
Bid Response Documents may be Deposited in the Bid Box NO. 1 situated at:					
MUNICIPAL HEAD OFFICE					
6 PLEIN STREET					
CALEDON					
7230					
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
TAX COMPLIANCE STATUS	TCS PIN:		OR	CSD No:	
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE [TICK APPLICABLE BOX]	<input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT <input type="checkbox"/> Yes <input type="checkbox"/> No		
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]					
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED? <input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER PART B:3]		
TOTAL NUMBER OF ITEMS OFFERED			TOTAL BID PRICE	R	
SIGNATURE OF BIDDER		DATE		
CAPACITY UNDER WHICH THIS BID IS SIGNED					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:			TECHNICAL INFORMATION MAY BE DIRECTED TO:		
DEPARTMENT	SCM		CONTACT PERSON	NIGEL KAYSER	
CONTACT PERSON	ASHLEY HENDRICKS		TELEPHONE NUMBER	028 214 3300	
TELEPHONE NUMBER	028 214 3300		FACSIMILE NUMBER	028 214 1289	
FACSIMILE NUMBER	028 212 1229		E-MAIL ADDRESS	NigelKa@twk.org.za	
E-MAIL ADDRESS	ashleyhe@twk.org.za				

PART B - TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR ONLINE**
- 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.

2. TAX COMPLIANCE REQUIREMENTS

- 2.1 Bidders must ensure compliance with their tax obligations.
- 2.2 Bidders are required to submit their unique personal identification number (pin) issued by SARS to enable the organ of state to view the taxpayer's profile and tax status.
- 2.3 Application for the Tax Compliance Status (TCS) certificate or pin may also be made via e-filing. In order to use this provision, taxpayers will need to register with SARS as e-filers through the website www.sars.gov.za.
- 2.4 Foreign suppliers must complete the pre-award questionnaire in part B:3.
- 2.5 Bidders may also submit a printed TCS certificate together with the bid.
- 2.6 In bids where consortia / joint ventures / sub-contractors are involved, each party must submit a separate TCS Certificate/Pin/CSD number.
- 2.7 Where no TCS is available but the bidder is registered on the central supplier database (CSD), a CSD number must be provided.

3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

- 3.1. IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? ☐ YES ☐ NO
- 3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA? ☐ YES ☐ NO
- 3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? ☐ YES ☐ NO
- 3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? ☐ YES ☐ NO
- 3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? ☐ YES ☐ NO

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.

NB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID. NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:

**THEEWATERSKLOOF MUNICIPALITY****TENDER NO. ENG 16/2021/22****UPGRADING OF GRABOUW BULK WATER SERVICES: MECHANICAL AND ELECTRICAL UPGRADES**

GENERAL TENDER INFORMATION

TENDER ADVERTISED	:	Friday, 12 November 2021
ESTIMATED CIDB CONTRACTOR GRADING	:	6ME and/or 6EB or 6EP Main Contractor 4ME subcontractor for Mechanical Works 4EB/EP subcontractor for Electrical Works
VENUE FOR CLARIFICATION MEETING	:	Thursday, 25 November 2021 Grabouw Municipal Offices, 1 Arbor Drive, Molteno Park, Grabouw at 10:00am
CLOSING DATE	:	Friday, 17 December 2021
CLOSING TIME	:	12:00
CLOSING VENUE	:	Tender Box 1 at the Municipal Office, 6 Plein Street, Caledon.
VALIDITY PERIOD OF TENDER	:	90 days

TENDER BOX : *The Tender Documents (which includes the Form of Offer and Acceptance) completed in all respects, plus any additional supporting documentation required, must be submitted in a sealed envelope with the name and address of the tenderer, the tender No. and title and the closing date indicated on the envelope. The sealed envelope must be inserted into the appropriate official tender box before closing time. The onus remains with the tenderer to ensure that the tender is placed in the correct tender box.*

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TENDER	
T1	TENDERING PROCEDURES

T1.1 Tender Notice and Invitation to Tender

T1.2 Tender Data

T1.3 Standard Conditions of Tender

T1.1 TENDER NOTICE AND INVITATION TO TENDER

Theewaterskloof Municipality, Director: Technical and Infrastructure Implementation Services invites tenders for contract no: **ENG 16/2021/22 – UPGRADING OF GRABOUW BULK WATER SERVICES PH 5.1: MECHANICAL AND ELECTRICAL UPGRADES.**

Only tenderers who satisfy the eligibility and responsiveness criteria stated in the Tender Conditions and Tender Data (Clause C.2.1) and Special Conditions (Clause C.4.14) are eligible to submit tenders. It is estimated that tenderers should have a CIDB minimum Construction Industry Development Board (CIDB) grading of 6ME and/or 6EB/EP are be eligible to tender.

All bids received shall be evaluated in terms of the Theewaterskloof Municipality's Supply Chain Management Policy, read with the Preferential Procurement Regulations of 2017. The 80/20 preference points system will be applicable. Tenders will be evaluated in terms of price and preference.

NB: This tender is also subject to Local Content Criteria as defined by the Department of Trade & Industry. Only locally produced or locally manufactured goods, works and services with the stipulated minimum threshold for local production and content will be considered.

The successful tenderer must also be registered on the Centralized Supplier Database (CSD). Tenderers can register on www.csd.gov.za.

A set of tender documents may be obtained from Theewaterskloof Municipality, Directorate: Technical and Infrastructure Implementation Services from Friday, **12 November 2021** between 07:45 to 13:00 and 13:45 to 16:45, Monday to Thursday and between 07:45 to 13:00 and 13:45 to 15:30 on Fridays. Payment of a non-refundable tender participation fee of R 500.00 (VAT inclusive) is applicable. This is an eligibility criterion and is payable by means of electronic transfer or direct deposit only. Proof of payment of the participation fee should accompany your tender document when submitting it. Enquiries in this regard can be referred to Mr Hanro September at hanrose@twk.org.za.

An electronic version of the tender document for information purposes only can be requested via email from hanrose@twk.org.za

All **technical queries** relating to this tender may be addressed to Mr Jacques Jordaan, Tel No. 041 363 1984, e-mail: j.jordaan@lukhozi.co.za

A compulsory clarification meeting with representatives of the Employer will take place at the Grabouw Municipal Offices, 1 Arbor Drive, Molteno Park, Grabouw on 25 November 2021 starting at 10:00, followed by a site visit. Prospective tenderers who arrive later than 10:15 will not be allowed into the Clarification meeting. Tenderers should be represented at the site visit/clarification meeting by a person who is suitably qualified and experienced to comprehend the implications of the work involved.

The closing time for receipt of tenders is **12:00** on Friday, **17 December 2021** at the Theewaterskloof Municipality, 6 Plein Street, Caledon. Tenders, in sealed envelopes, marked "**ENG 16/2021/22 – UPGRADING OF GRABOUW BULK WATER SERVICES PH 5.1: MECHANICAL AND ELECTRICAL UPGRADES**", must be placed in Tender Box No. 1, located at the main entrance of Theewaterskloof Municipality, 6 Plein Street, Caledon. Please note that the tender box is open 24/7 and that the deposit slot opening is 5 x 30 cm. Telegraphic, telephonic, telex, facsimile, e-mail and late tenders will not be accepted.

Tenders must only be submitted on the original tender documentation that is issued from Theewaterskloof Municipality. Council reserves the right to accept a tender in full, partially or not at all and is not obliged to accept the lowest tender received.

DP Lubbe
Municipal Manager
Theewaterskloof Municipality
P O Box 24
CALEDON
7230

T1.2 TENDER DATA

The Conditions of Tender are the Standard Conditions of Tender as contained in Annexure C of Department of Public Works Notice 423 of 2019, CIDB Standard for Uniformity (SFU) in Engineering and Construction Works, August 2019.

The Standard Conditions of Tender make several references to the Tender Data. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender. Each clause below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

Clause 2019	Data
C.1	Add the following: The Employer is the Theewaterskloof Municipality, represented by the Director: Technical and Infrastructure Implementation Services
C.1.2	Refer to the CONTENTS of this document for a complete list of tender documents issued by the Employer.
C.1.4	The Employer's Agent is: LUKHOZI CONSULTING ENGINEERS (PTY) LTD UNIT B17, 1ST FLOOR CENTURY SQUARE HERON CRESCENT CENTURY CITY 7441 Contact Person: Mr JACQUES JORDAAN Email: j.jordaan@lukhozi.co.za Tel: 021 686 2550
C.1.4	The language for communications is English.
C.1.5.4	Add the following: The Employer may reject a tender if, in the opinion of the Employer, the tenderer will be unable to achieve the contract participation goal tendered, in the performance of the contract.
C.1.6	A competitive negotiation procedure or proposal procedure using the two-stage system will not to be used.
C.2.1	Add the following to C.2.1
C.2.1.1	<u>Eligibility Criteria</u> Only those tenderers who substantiate their offer by providing sufficient proof, relevant to each of the following criteria and in terms of the scope of work included in this contract, are eligible to submit tenders: a) Must comply with a CIDB grading of 6ME and/or 6EP or 6EB or higher. T2.1.9 <ul style="list-style-type: none"> The Tenderer or his mechanical subcontractors is required to be registered with the CIDB with minimum CIDB grading of 4ME. The Tenderer or his electrical subcontractor is required to be registered with the CIDB with minimum CIDB grading of 4EP or 4EB.

Clause 2019	Data
	<p>b) Payment of a non-refundable tender deposit of R500.00 (Vat Inclusive). T2.1.19</p> <p>c) Attendance of the compulsory clarification meeting. (Signed attendance register) T2.1.21</p> <p>d) Must have completed at least six (6) projects for Mechanical and Electrical Services for the installation of pumping equipment with a, value of at least R10M, completion certificates to be attached and will be verified. If the tenderer was a sub-contractor a letter from the Main Contractor will suffice. Of the 6 projects that have been completed three (3) of them must be in the Western Cape. T2.1.8</p> <p>e) Only those tenderers who complies with the minimum threshold for local content will be considered. Refer to T.1.15: Certificate of Local Content Declaration.</p> <p>Only those tenderers who are registered with the CIDB, 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 6ME and/or 6EP or 6EB class of construction work, are eligible to have their tenders evaluated.</p> <p>Joint Ventures are eligible to submit tenders provided that:</p> <ol style="list-style-type: none"> 1. Every member of the joint venture is registered with the CIDB. 2. The lead partner has a contractor grading of 6. 3. The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a 6ME or 6EB or 6EP class of construction work or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations. <p>Notwithstanding the above, tenderers who are capable of being so registered prior to the evaluation of submissions may be evaluated at the sole discretion of the Employer (the evaluation of tenders shall be deemed to take place when the Employer's Bid Evaluation Committee meets to make a recommendation to the Bid Adjudication Committee).</p>
C.2.2	The Employer will not compensate the Tenderer for any costs incurred for making a tender submission or for attending tender interviews in the office of the Employer or the Employer's Agent.
C.2.7	The arrangements are as stated in the tender notice and invitation to tender. Addenda will be issued to, and tenders will be received only from, those tendering entities appearing on the attendance list.
C.2.12	No alternative offers will be considered.
C.2.13.2	<p>Replace sub-clause C.2.13.2 with the following:</p> <p>Return all returnable documents to the employer after completing them in their entirety, by writing in non-erasable ink.</p>
C.2.13.3	Add the following to C.2.13.3

Clause 2019	Data
	Parts of each tender offer communicated on paper shall be submitted as an original, plus 1 (one) copy.
C.2.13.4	The tender shall be signed by a person duly authorized to do so. Tenders submitted by joint ventures of two or more firms shall be accompanied by the document of formation of the joint venture, authenticated by a notary public or other official deputed to witness sworn statements, in which is defined precisely the conditions under which the joint venture will function, its period of duration, the persons authorized to represent and obligate it, the participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning.
C.2.13.5 C.2.15	<p>Add the following to C.2.13.5:</p> <p>The tender shall be enclosed in a sealed envelope, bearing the correct identification details as below:</p> <p>Tender reference number:</p> <p>ENG 16/2021/22</p> <p>Title of Tender:</p> <p>UPGRADING OF GRABOUW BULK WATER SERVICES PHASE 5.1: MECHANICAL AND ELECTRICAL UPGRADES</p> <p>The employer's address for delivery of tender offers is:</p> <p>Location of tender box:</p> <p>Tender Box No. 1 at the entrance of the municipal head office</p> <p>Physical address:</p> <p>Theewaterskloof Municipality, 6 Plein Street, Caledon, 7230</p> <p>Sealed tenders with the Tenderer's name and address and the endorsement "TENDER ENG 16/2021/22: PROJECT: UPGRADING OF GRABOUW BULK WATER SERVICES PHASE 5.1: MECHANICAL AND ELECTRICAL UPGRADES" on the envelope, must be placed in the appropriate official tender box at the abovementioned address.</p> <p>The tender box is open 24/7 and the deposit slot opening is 5cm x 30cm.</p> <p>The closing time for submission of tender offers is as stipulated in T1.1 Tender Notice and Invitation to Tender.</p>
C.2.13.6	A two-envelope procedure will not be followed (C.3.5).
C.2.14	<p>The Tenderer is required to submit with his tender all returnable schedules. No Tenderer will be allowed to submit documentation or sign any of the schedules after the tender has closed unless specified otherwise. Failure to complete and submit:</p> <ol style="list-style-type: none"> 1. Returnable Schedules for Tender Evaluation Purposes T2.1 will result in the tender being declared non-responsive. 2. Returnable Schedule T2.2 for Preference Scoring Purposes will result in the Tenderer scoring zero points for preference.

Clause 2019	Data
	<p>3. Returnable Schedule T2.3 for schedules that will be incorporated into the contract will result in the tender being declared non-responsive.</p> <p>Note: A Tenderer will <u>not</u> be allowed to sign any of the tender documents after the tender has closed unless indicated otherwise in Administrative Criteria.</p> <p>A Tenderer will <u>not</u> be allowed to submit Returnable Documentation after the tender has closed unless indicated otherwise in Administrative Criteria.</p>
C.2.15.1	<p>Add the following to C.2.15.1:</p> <p>The closing time for submission of tender offers is as stipulated in T1.1 Tender Notice and Invitation to Tender. Telephonic, telegraphic, telex, facsimile or e-mailed tender offers shall not be accepted.</p>
C.2.16	The tender offer validity period is 90 days.
C.2.17	<p>Add the following to C.2.17:</p> <p>A tender will be rejected as non-responsive if the tenderer fails to provide any clarification requested by the employer within the time for submission stated in the employer's written request for such clarification. A tender will also be rejected as non-responsive if the tenderer fails, within the time stated in writing by the Employer, to comply with the requirements of C.3.8</p>
C.2.18	<p>Delete the following word in F.2.18.1:</p> <p>"Notarized".</p> <p>Add the following to F.2.18.1:</p> <p>Provide, on written request by the Employer, where the tendered amount inclusive of VAT exceeds R10 million:</p> <ol style="list-style-type: none"> i. audited annual financial statement for 3 years, or for the period since establishment if established during the last 3 years, if required by law to prepare annual financial statements for auditing; ii. a certificate signed by the tenderer certifying that the tenderer has no undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days; iii. particulars of any contracts awarded to the tenderer 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; iv. a statement indicating whether any portion of the goods or services are expected to be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality or municipal entity is expected to be transferred out of the Republic. <p>Each party to a Consortium/Joint Venture shall submit separate certificates/statements in the above regard.</p>

Clause 2019	Data
C.2.19	Access to site shall be provided during working hours to tenderers by prior arrangement.
C.2.22	Tender documentation submitted will not be returned to the Tenderer.
C.2.23	Add the following: The tenderer is required to submit the following with his tender:
C.2.23.1	Certificate of Contractor Registration (CIDB) The Certificate of Contractor Registration is issued by the Construction Industry Development Board. Where a tenderer satisfies CIDB contractor grading designation requirements through joint venture formation, such tenderers must submit the Certificates of Contractor Registration in respect of each partner. Append to T2.1.9 .
C.2.23.2	Tax Clearance Certificate Tenderers shall be registered and in good standing with the South African Revenue Service (SARS) and shall submit documentary evidence in the form of a valid Tax Compliance Status Pin Certificate issued by SARS. Append to T2.1.11 In the event that certificate expires during the construction period, the Contractor must submit a new valid certificate within 14 days after expiry of the certificate. Each party to a Consortium/Joint Venture shall submit a separate valid Tax Compliance Status Pin Certificate.
C.2.23.3	Bargaining Council Certificates Where applicable, a certificate of compliance issued by the relevant Bargaining Council must be submitted. Append to T2.1.22 . Each party to a Consortium/Joint Venture shall submit separate certificates in the above regard. When submitting, please ensure that the letter of good standing is from the Bargaining Council.
C.3.2	Add the following to F.3.2: Notwithstanding any requests for confirmation of receipt of Addenda issued, the tenderer shall be deemed to have received such addenda if the employer can show proof of transmission thereof (or a notice in respect thereof) via electronic mail, facsimile or registered post.
C.3.4	The time and location for opening of the tender offers are: Time: Tenders will be opened immediately after the closing time for receipt of tenders, as stated in the Tender Notice and Invitation to Tender Location: Theewaterskloof Municipality Council Chambers, 6 Plein Street, Caledon
C.3.8	Add the following: <u>RESPONSIVENESS CRITERIA</u> Tenders will be considered non-responsive if, inter alia: (This is a requirement on submission of bid document) a) The tenderer did not sign and complete the Form of Offer part Contract Data C1.1, b) The tenderer does not comply with the eligibility criteria listed in Tender Data C2.1.1, c) The tenderer has failed to comply with the specifications as advertised,

Clause 2019	Data
	<p>d) The tenderer has failed to comply with the Special Conditions of tender as specified in Clause C.4.14,</p> <p>e) The tenderer has failed to comply with the Pricing instructions,</p> <p>f) The tenderer has failed to comply with the Additional Conditions of Tender as specified in Clause C.4.6, and</p> <p>g) The tenderer has failed to comply with the Scope of Works.</p> <p>Add the following after C.3.8</p> <p><u>ADMINISTRATIVE CRITERIA</u></p> <p>Tenders will be considered non-compliant if, inter alia: (These documents may be requested)</p> <p>h) The tenderer has failed to clarify or submit any supporting documentation within the time for submission stated in the employer's written request.</p> <p>i) The tenderer has failed to include, append and sign, where prompted in the Returnable Schedules, any and all additional information requested.</p> <p>j) The tenderer has not submitted a municipal account of where the head office of the company is registered or in case where the premises are leased, the tenderer has not provided a copy of the lease of the premises. The successful contractor will be required to submit updated municipal accounts on a quarterly basis.</p> <p>k) The tenderer has failed to complete T2.1.11 and failed to submit a valid tax compliance status pin certificate. A valid tax compliance status pin certificate may be requested.</p> <p>l) The tenderer has failed to submit proof of good standing from the Department of Labour related to good standing with regards to COIDA and UIF payments. A certified copy of the proof of good standing may be requested. Refer to Schedule T2.1.25</p> <p>m) The tenderer has failed to submit proof of payment of the non-refundable tender participation fee to T2.1.19. Proof of payment could be requested.</p> <p>n) The tenderer has failed to submit proof of good standing with the relevant Bargaining Council (or relevant affiliation). Should such be in place, a certified copy of the proof of good standing may be requested.</p> <p>o) The tenderer has failed to fully complete the MBD 6.2 schedule, it can be requested from the tenderer to fully complete and submit the schedule to the employer.</p> <p>p) The tenderer has failed to submit a certified valid B-BBEE certificate, QSE or EME affidavit, whereas points were claimed and a copy of certificate or affidavit was supplied, a certified valid copy of the B-BBEE certificate, QSE or EME Affidavit may be requested;</p> <p>The Employer reserves the right to accept a tender offer which does not, in the Employer's opinion, materially and/or substantially deviate from the terms, conditions, and specifications of the tender documents.</p>
C.3.9.5	<p>Add the following sub-clause C.3.9:</p> <p>Check responsive tender offers for unbalanced unit rates and request tenderers to consider amending and adjusting any rates declared unbalanced by the Employer in</p>

Clause 2019	Data																				
	<p>accordance with C.4.4 while retaining the total of the prices derived after any correction made in terms of this condition to tender.</p> <p>Reject a tender offer if the tenderer does not correct or accept the correction of arithmetical errors and consider rejection of a tender offer if the tenderer refuses to amend/adjust an unreasonable, unbalanced rate in the manner described above.</p>																				
C3.11	<p>Add the following:</p> <p>Tenders shall be evaluated in terms of the Preferential Procurement Regulations 2017. The value of the tender is estimated to not exceed R 50 000 000-00 and therefore the 80/20 system shall be applicable.</p> <p>The financial offer will be scored using the formula $NFO = W1 \times A$ where the value of $W1$ is 80 points and A is the number calculated using the formula describe below. Up to a maximum of 20 points for this tender, will be awarded in terms of the tenderers B-BBEE status level of contribution.</p> $A = (1 - \frac{(Pt - Pmin)}{Pmin})$ <p>Where:</p> <p>Pt = Price of bid under consideration</p> <p>$Pmin$ = Price of lowest acceptable</p> <p>The total number of tender evaluation points will be calculated as $TEV = NFO + NP$ as detailed below.</p> <p>Where:</p> <ul style="list-style-type: none"> NFO is the number of tender evaluation points awarded for the financial offer as stated above <p>NP is the number of tender evaluation points awarded for B-BBEE Status Level Contribution in accordance with T2.2.1.</p> <p>Points awarded for B-BBEE Status Level of Contribution</p> <p>In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:</p> <table border="1"> <thead> <tr> <th>B-BBEE Status Level of Contributor</th><th>Number of points (80/20 system)</th></tr> </thead> <tbody> <tr><td>1</td><td>20</td></tr> <tr><td>2</td><td>18</td></tr> <tr><td>3</td><td>14</td></tr> <tr><td>4</td><td>12</td></tr> <tr><td>5</td><td>8</td></tr> <tr><td>6</td><td>6</td></tr> <tr><td>7</td><td>4</td></tr> <tr><td>8</td><td>2</td></tr> <tr><td>Non-compliant contributor</td><td>0</td></tr> </tbody> </table>	B-BBEE Status Level of Contributor	Number of points (80/20 system)	1	20	2	18	3	14	4	12	5	8	6	6	7	4	8	2	Non-compliant contributor	0
B-BBEE Status Level of Contributor	Number of points (80/20 system)																				
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4	12																				
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8	2																				
Non-compliant contributor	0																				

Clause 2019	Data
	<p>Bidders who qualify as EMEs in terms of the B-BBEE Act must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates.</p> <p>Bidders other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.</p> <p>A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.</p> <p>A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.</p> <p>Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.</p> <p>A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.</p> <p>A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.</p> <p>If a valid B-BBEE certificate (construction sector scorecard) of EME affidavit is not attached it will be interpreted that the preference points for B- BBEE status level or contribution are not claimed.</p> <p>If a valid B-BBEE certificate (construction sector scorecard) or EME affidavit is attached and if points is not claimed in terms of MBD 6.1 it will be interpreted that the preference points for B- BBEE status level or contribution are not claimed.</p> <p>Please note that the municipality will not request a valid B- BBEE certificate or Sworn Affidavits if such is not attached to the bidders tender at closing date of this tender.</p>

Clause 2019	Data												
	<p>Scoring Financial Offers</p> <p>The financial offer will be scored using the formula $NFO = W1 \times A$ where the value of $W1$ is:</p> <p>1) 80 points where the financial value inclusive of VAT of one or more responsive tender offers equals or less than R50 000 000-00.</p> <p>For this contract, the financial offers will be scored using the value where $W1$ is: 80 tender evaluation points. Up to a maximum of 100 minus $W1$ namely 20 tender evaluation points will be awarded for Preference with responsive tenders scoring points in accordance with the 80 Financial/20 Preference scoring criteria listed below.</p> <table border="1"> <thead> <tr> <th colspan="2">80 Financial/20 Preference</th></tr> <tr> <th>Points</th><th>Description</th></tr> </thead> <tbody> <tr> <td></td><td>FINANCIAL OFFER</td></tr> <tr> <td>80</td><td>PRICE</td></tr> <tr> <td></td><td>PREFERENCES</td></tr> <tr> <td>20</td><td>B-BBEE Status Level Contribution</td></tr> </tbody> </table> <p>Scoring Preferences</p> <p>Points for preferences claimed will be determined in accordance with the Preferential Procurement Regulations, 2017. Points will be awarded to tenderers who are eligible for preferences in terms of T2.1.13: Preference Points Claim Form (where preferences are granted in respect of B-BBEE Status Level Contribution) which is included in T2.2.1 Returnable Schedules.</p>	80 Financial/20 Preference		Points	Description		FINANCIAL OFFER	80	PRICE		PREFERENCES	20	B-BBEE Status Level Contribution
80 Financial/20 Preference													
Points	Description												
	FINANCIAL OFFER												
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	PREFERENCES												
20	B-BBEE Status Level Contribution												
C.3.13	<p>Add the following to C.3.13:</p> <ol style="list-style-type: none"> the tenderer has in his or her possession a valid Tax Compliance Status Pin Certificate issued by the South African Revenue Services or has made arrangements to meet outstanding tax obligations. (In the event that certificate expires during the construction period, the Contractor must submit a new valid certificate within 14 days after expiry of the original certificate); the tenderer is registered with the CIDB with an appropriate category of registration; the tenderer is not in arrears for more than THREE (3) months with municipal rates and taxes and municipal service charges. (Contractors must submit proof of payment of municipal rates and taxes to the Client on a three-monthly basis); 												

Clause 2019	Data
	<p>d) the tenderer or any of its directors 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;</p> <p>e) the tenderer has not:</p> <ol style="list-style-type: none"> i. abused the Employer's Supply Chain Management System; or ii. failed to perform on any previous contract and has been given a written notice to this effect; <p>f) 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.</p>
C.3.13.2	<p>SCM Related Appeals</p> <p>Clause 53 of the Theewaterskloof Supply Chain Management Policy gives any person whose rights have been affected by such a decision, the right to appeal such decision within 21 days of notification of the decision.</p> <p>Any tenderer wishing to exercise this right, must submit their appeal in writing to the Municipal Manager, marked for the attention of the THEEWATERSKLOOF MUNICIPALITY, 6 Plein Street, CALEDON, 7230. The format of the appeal must:</p> <ul style="list-style-type: none"> • set out the reasons for the appeal; • state in which way the appellant's rights have been affected by the decision; • state the remedy sought, and • be accompanied by a copy of the notification advising the tenderer of the decision of the Supply Chain Management Bid Adjudication Committee. <p>Tenderers are hereby informed also of their right to request reasons for the decision in terms of the Promotion of Administrative Justice Act (No. 3 of 2000).</p> <p>The notification of the decision sent to the successful tenderer is not acceptance of the tender and no rights shall accrue to the successful tenderer in terms of this notification. The successful tenderer will be notified in writing after 21 days of the notification of any final decision (i.e., Acceptance) or of any developments with respect to the appeal process, and if applicable, procedures for the commencement of the work.</p> <p>The consideration of appeals and if necessary, the invalidation of any decision made, shall be dealt with in terms of the Municipality's appeals process and supply chain management policy</p>
C.3.17	The number of paper copies of the signed contract to be provided by the employer is one.
C.4	The additional conditions of tender are:
C.4.1	<p>Compliance with Occupational Health and Safety Act 1993</p> <p>Tenderers are to note the requirements of the Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations 2014 issued in terms of Section 43 of the Act. The tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith.</p>

Clause 2019	Data
	<p>The Health and Safety Plan shall cover inter-alia the following details:</p> <ol style="list-style-type: none"> (1) Management Structure, Site Supervision and Responsible Persons, including a succession plan. (2) Contractor's induction training program for employees, sub-contractors and visitors to the Site. (3) Health and safety precautions and procedures to be adhered to in order to ensure compliance with the Act, Regulations and Safety Specifications. (4) Regular monitoring procedures to be performed. (5) Regular liaison, consultation and review meetings with all parties. (6) Site security, welfare facilities and first aid. (7) Site rules and fire- and emergency procedures. <p>Tenderers are to note that the Contractor is required to ensure that all sub-contractors or others engaged in the performance of the contract also comply with the above requirements.</p> <p>The Contractor shall prepare and maintain a Health and Safety File in respect of the project, which shall be available for inspection on Site at all times and handed over to the Employer on Final Completion of the project.</p> <p>The Contractor is required to submit to the Employer the Occupational Health and Safety Agreement .</p>
C.4.2.	<p>Eligibility with respect to expanded public works program</p> <p>This Contract does not qualify for consideration as an Expanded Public Works Programme project.</p>
C.4.3.	<p>Claims arising after submission of tender</p> <p>No claim for any extras arising out of any doubt or obscurity as to the true intent and meaning of anything shown on the Contract Drawings or contained in the Conditions of Contract, Scope of Work and Pricing Data, will be admitted by the Employer/Employer's Agent after the submission of any tender and the Tenderer shall be deemed to have:</p> <ol style="list-style-type: none"> 1) inspected the Contract Drawings and read and fully understood the Conditions of Contract. 2) read and fully understood the whole text of the Scope of Work and Pricing Data and thoroughly acquainted himself with the nature of the works proposed and generally of all matters which may influence the Contract. 3) visited the site of the proposed works, carefully examined existing conditions, the means of access to the site, the conditions under which the work is to be done, and acquainted himself with any limitations or restrictions that may be imposed by the Municipal or other Authorities in regard to access and transport of materials, plant and equipment to and from the site and made the necessary provisions for any additional costs involved thereby. 4) requested the Employer or his duly authorised agent to make clear the actual requirements of anything shown on the Contract Drawings or anything contained in the Scope of Work and Pricing Data, the exact meaning or interpretation of which is not clearly intelligible to the Tenderer.

Clause 2019	Data
	<p>Before submission of any tender, the Tenderer should check the number of pages, and if any are found to be missing or duplicated, or the figures or writing indistinct, or if the Pricing Data contain any obvious errors, the tenderer must apply to the Employer/Employer's Agent at once to have the same rectified, as no liability will be admitted by the Employer/Employer's Agent in respect of errors in any tender due to the foregoing</p>
C.4.4	<p>Imbalance in tendered rates</p> <p>In the event of tendered rates or lump sums being declared by the Employer to be unacceptable to it because they are either excessively low or high or not in proper balance with other rates or lump sums, the Tenderer may be required to produce evidence and advance arguments in support of the tendered rates or lump sums objected to. If, after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the tendered rates or lump sums objected to, it may request the tenderer to amend these rates and lump sums along the lines indicated by it.</p> <p>The Tenderer will then have the option to alter and/or amend the rates and lump sums objected to and such other related amounts as are agreed on by the Employer, but this shall be done without altering the tender offer as tendered or, if applicable, the corrected total of prices in accordance with C.3.9.5.</p> <p>Should the Tenderer fail to amend his Tender in a manner acceptable to the Employer, the Employer may reject the Tender.</p>
C.4.5	<p>Use of Local Labour</p> <p>The Contractor is to provide monthly report to Technical and Infrastructure Implementation Services Department stating/showing Local Labour employed during construction as well as contact details. This information will be checked randomly, on a monthly basis by Technical and Infrastructure Implementation Services Department. (Report should include cell number and I.D. number). Refer to T2.1.5</p>
C.4.6	<p>Invalid tenders</p> <p>Tenders shall be considered invalid and shall be endorsed and recorded as such in the tender opening record, by the responsible official who opened the tender, in the following circumstances:</p> <ul style="list-style-type: none"> a) if the tender offer is not submitted on the Form of Offer and Acceptance bound into this tender document (Form of Offer and Acceptance); b) if the tender is not completed in handwritten non-erasable black ink; c) if the offer has not been signed; and d) if the offer is signed, but the name of the tenderer is not stated or is indecipherable. e) Tenderers must complete and sign all schedules. The Company's name must not be used as signature. If the section/schedules is signed by the person authorised to sign the tender is, the municipality will interpret that the section/schedule is not signed.
C.4.7	<p>Negotiations with preferred tenderers</p> <p>The Employer may negotiate the final terms of a contract with tenderers identified through a competitive tendering process as preferred tenderers provided that such negotiation:</p>

Clause 2019	Data
	<p>a) does not allow any preferred tenderer a second or unfair opportunity;</p> <p>b) is not to the detriment of any other tenderer; and</p> <p>c) does not lead to a higher price than the tender as submitted.</p> <p>Minutes of any such negotiations shall be kept for record purposes.</p>
C.4.8	<p>General supply chain management conditions applicable to tenders</p> <p>In terms of its Supply Chain Management Policy, the Municipality may not consider a tender unless the provider who submitted the tender:</p> <p>a) has furnished the Municipality with that provider's:</p> <ul style="list-style-type: none"> • full name; • identification number or company or other registration number; and • tax reference number and VAT registration number, if any; • Certificate of attendance at a compulsory site inspection, where applicable. <p>b) has indicated whether:</p> <ul style="list-style-type: none"> • the provider is in the service of the state, or has been in the service of the state in the previous twelve months; • the provider is not a natural person, whether any of the directors, managers, principal shareholders or stakeholders is in the service of the state, or has been in the service of the state in the previous twelve months; or • whether a spouse, child or parent of the provider or of a director, manager, shareholder or stakeholder referred to above is in the service of the state, or has been in the service of the state in the previous twelve months. <p>Irrespective of the procurement process followed, the Municipality is prohibited from making an award to:</p> <ul style="list-style-type: none"> • a person who is in the service of the state; • a juristic entity of which any director, manager, principal shareholder or stakeholder is in the service of the state; • an advisor or consultant contracted with the Municipality; or • a person, advisor or corporate entity involved with the bid specification committee, or a director of such corporate entity. <p>In this regard, tenderers shall complete T2.1.2, Part T2.1: Returnable Schedules: Compulsory Enterprise Questionnaire. Failure to complete this schedule will result in the tender being declared non-responsive.</p>
C.4.9	<p>Combating abuse of the Supply Chain Management Policy</p> <p>In terms of the Supply Chain Management Policy, the Employer may reject the tender of any tenderer if that tenderer or any of its directors has:</p> <p>a) failed to pay municipal rates and taxes or municipal service charges and such rates, taxes and charges are in arrears for more than three months;</p> <p>b) failed, during the last five years, to perform satisfactorily on a previous contract with the City or any other organ of state after written notice was given to that tenderer that performance was unsatisfactory;</p>

Clause 2019	Data
	<p>c) abused the supply chain management system of the Municipality or has committed any improper conduct in relation to this system;</p> <p>d) been convicted of fraud or corruption during the past five years;</p> <p>e) wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or</p> <p>f) been listed with the Register of Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004) or has been listed on National Treasury's database as a person or juristic entity prohibited from doing business with the public sector.</p> <p>In this regard, tenderers shall complete T2.1.16, T2.1.17 and T2.1.18, Part T2.1: Returnable Schedules: Declaration in terms of the Municipal Finance Management Act and Certificate of Independent Tender Determination. Failure to complete this schedule may result in the tender not being considered.</p>
C.4.10	<p>COIDA payments</p> <p>The Tenderer shall submit to Council a letter from the Department of Labour indicating his good standing with regard to COIDA payments. Refer to Schedule T2.1.25 and append the letter in this regard.</p>
C.4.11	<p>Price Variations</p> <p>The Contract Price shall not be subject to any contract price adjustment, the rates and prices tendered in the bills of quantities shall be final and binding throughout the period of the contract. However, price adjustments for variations in the costs of special materials may be applicable where the Employer/Employer's Agent specifies such materials and the relevant information in the Contract Data.</p> <p>Notwithstanding the above, if, as a result of any extension of time granted, the duration of the contract period exceeds one year, the contract will automatically be subject to contract price adjustment for that period by which the extended contract period exceeds such one year.</p>
C.4.12	<p>Requests for contract documents, or parts thereof, in electronic format</p> <p>The Employer shall not formally issue tender documents in electronic format as contemplated in C.2.13.2 and C.2.13.3 and shall only issue tender documents in hard copy. An electronic version of the issued tender documents may be made available to the tenderer, upon written request in terms of this clause, subject to the following:</p> <ol style="list-style-type: none"> Electronic copies of the contract document, or parts thereof, will only be provided to tenderers who have been issued with the tender documents as contemplated in C.1.2 in hardcopy. The electronic version shall not be regarded as a substitute for the issued tender documents. The Employer shall not accept tenders submitted in electronic format. Tenderers may not complete and submit a printed copy of the electronic version of the tender document or part thereof. Only those tenders that have been completed on the issued hard copy tender document shall be considered. The Employer accepts no responsibility or liability arising from any reliance on or use of the electronic version provided in terms of this clause. The Employer further does not guarantee that the electronic version corresponds with the issued tender documents in all respects. Tenderers are alerted to

Clause 2019	Data
	<p>the fact that electronic versions of the tender documents may not reflect any notices or addenda that amend the tender document.</p> <p>e) Any non-compliance with these provisions, including effecting any unauthorised alterations to the tender document as contemplated in C.2.11, shall render the tender invalid. The Employer reserves the right to take any action against such tenderer allowed in law including, in circumstances where the tender had already been awarded, the right to cancel the contract.</p> <p>f) In requesting the electronic version of the tender document or parts thereof, the tenderer is deemed to have read, understood and accepted all of the above conditions.</p>
C.4.13	<p>Bidders who do not submit a valid B-BBEE Status Level Verification Certificates or are non-compliant contributors to B-BBEE do not qualify for preference points for B-BBEE but should not be disqualified from the bidding process. They will score points out of 90 or 80 for price only and zero (0) points out of 10 or 20 for B-BBEE.</p> <ul style="list-style-type: none"> - A trust, consortium or joint venture must submit a consolidated B-BBEE Status. Level Verification Certificate for every separate bid.
C.4.14	Tenderers must complete T2.3.4: Special Conditions of Tender in the Returnable Schedules.
C.4.15	The local content will be dealt with in terms of all relevant circulars issued by the National Treasury in relation to local content.

T1.3 STANDARD CONDITIONS OF TENDER

The Standard Conditions of Tender are as per CIDB Standard for Uniformity (SFU) in Engineering and Construction Works, August 2019, Annexure C.

C.1 General

C.1.1 Actions

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

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

Note: 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.

2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

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

C.1.2 Tender Documents

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

C.1.3 Interpretation

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

C.1.3.2 These conditions of tender, the tender data and tender schedules which are required for tender evaluation purposes, shall form part of any contract arising from the invitation to tender.

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

- a) **conflict of interest** means any situation in which:
- someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially;
 - an individual or tenderer is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
 - incompatibility or contradictory interests exist between an employee and the tenderer who employs that employee.
- b) **comparative offer** means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration;
- c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process;
- d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels;

C.1.4 Communication and employer's agent

Each communication between the employer and a tenderer shall be to or from the employer's agent only, and in a form that can be readily read, copied and recorded. Communications shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a tenderer. The name and contact details of the employer's agent are stated in the tender data.

C.1.5 Cancellation and Re-Invitation of Tenders

C.1.5.1 An employer may, prior to the award of the tender, cancel a tender if-

- a) due to changed circumstances, there is no longer a need for the engineering and construction works specified in the invitation;
- b) funds are no longer available to cover the total envisaged expenditure; or
- c) no acceptable tenders are received.
- d) there is a material irregularity in the tender process.

C.1.5.2 The decision to cancel a tender invitation must be published in the same manner in which the original tender invitation was advertised

C.1.5.3 An employer may only with the prior approval of the relevant treasury cancel a tender invitation for the second time.

C.1.6 Procurement procedures

C.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject to C.3.13, be concluded with the tenderer who in terms of C.3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.

C.1.6.2 Competitive negotiation procedure

C.1.6.2.1 Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of C.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of C.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

C.1.6.2.2 All responsive tenderers or at least a minimum of not less than three responsive tenderers that are highest ranked in terms of the evaluation criteria stated in the tender data shall be invited to enter into competitive negotiations based on the principle of equal treatment, keeping confidential the proposed solutions and associated information.

Notwithstanding the provisions of C.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.

C.1.6.2.3 At the conclusion of each round of negotiations, tenderers shall be invited by the employer to revise their tender offer based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.

C.1.6.2.4 The contract shall be awarded in accordance with the provisions of C.3.11 and C.3.13 after tenderers have been requested to submit their best and final offer.

C.1.6.3 Proposal procedure using the two stage-system

C.1.6.3.1 Option 1

Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.

C.1.6.3.2 Option 2

C.1.6.3.2.1 Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.

C.1.6.3.2.2 The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.

C.2 Tenderer's obligations**C.2.1 Eligibility**

C.2.1.1 Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer.

C.2.1.2 Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.

C.2.2 Cost of tendering

C.2.2.1 Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.

C.2.2.2 The cost of the tender documents charged by the employer shall be limited to the actual cost incurred by the employer for printing the documents. Employers must attempt to make available the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.

C.2.3 Check documents

Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.

C.2.4 Confidentiality and copyright of documents

Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.

C.2.5 Reference documents

Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.

C.2.6 Acknowledge addenda

Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

C.2.7 Clarification meeting

Attend, where required, a clarification meeting at which tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the tender data.

C.2.8 Seek clarification

Request clarification of the tender documents, if necessary, by notifying the employer at least five (5) working days before the closing time stated in the tender data.

C.2.9 Insurance

Be aware that the extent of insurance to be provided by the employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.

C.2.10 Pricing the tender offer

C.2.10.1 Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable fourteen (14) days before the closing time stated in the tender data.

C.2.10.2 Show VAT payable by the employer separately as an addition to the tendered total of the prices.

C.2.10.3 Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.

C.2.10.4 State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

C.2.11 Alterations to documents

Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations.

C.2.12 Alternative tender offers

C.2.12.1 Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.

C.2.12.2 Accept that an alternative tender offer must be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.

C.2.12.3 An alternative tender offer must only be considered if the main tender offer is the winning tender.

C.2.13 Submitting a tender offer

C.2.13.1 Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.

C.2.13.2 Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.

C.2.13.3 Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.

C.2.13.4 Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.

C.2.13.5 Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.

C.2.13.6 Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.

C.2.13.7 Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.

C.2.13.8 Accept that the employer will not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.

C.2.13.9 Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

C.2.14 Information and data to be completed in all respects

Accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the employer as non-responsive.

C.2.15 Closing time

C.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.

C.2.15.2 Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

C.2.16 Tender offer validity

C.2.16.1 Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.

C.2.16.2 If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.

C.2.16.3 Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted. If the validity period stated in C.2.16 lapses before the employer evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).

C.2.16.4 Where a tender submission is to be substituted, a tenderer must submit a substitute tender in accordance with the requirements of C.2.13 with the packages clearly marked as "SUBSTITUTE".

C.2.17 Clarification of tender offer after submission

Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

Note: Sub-clause C.2.17 does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the Employer elect to do so.

C.2.18 Provide other material

C.2.18.1 Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment.

Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non-responsive.

C.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

C.2.19 Inspections, tests and analysis

Provide access during working hours to premises for inspections, tests and analysis as provided for in the tender data.

C.2.20 Submit securities, bonds and policies

If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.

C.2.21 Check final draft

Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.

C.2.22 Return of other tender documents

If so instructed by the employer, return all retained tender documents within twenty-eight (28) days after the expiry of the validity period stated in the tender data.

C.2.23 Certificates

Include in the tender submission or provide the employer with any certificates as stated in the tender data.

C.3 The employer's undertakings**C.3.1 Respond to requests from the tenderer**

C.3.1.1 Unless otherwise stated in the tender Data, respond to a request for clarification received up to five (5) working days before the tender closing time stated in the Tender Data and notify all tenderers who collected tender documents.

C.3.1.2 Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:

- a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;
- b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
- c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

C.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until three (3) working days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all tenderers who collected tender documents.

C.3.3 Return late tender offers

Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.

C.3.4 Opening of tender submissions

C.3.4.1 Unless the two-envelope system is to be followed, open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.

C.3.4.2 Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices, number of points claimed for its BBBEE status level and time for completion for the main tender offer only.

C.3.4.3 Make available the record outlined in C.3.4.2 to all interested persons upon request.

C.3.5 Two-envelope system

C.3.5.1 Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.

C.3.5.2 Evaluate functionality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the functionality evaluation more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any points claimed on BBBEE status level. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for functionality.

C.3.6 Non-disclosure

Not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.

C.3.7 Grounds for rejection and disqualification

Determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

C.3.8 Test for responsiveness

C.3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received:

- a) complies with the requirements of these Conditions of Tender,
- b) has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the tender documents.

C.3.8.2 A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

- a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or
- c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

C.3.9 Arithmetical errors, omissions and discrepancies

C.3.9.1 Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.

C.3.9.2 Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with C.3.11 for:

- a) the gross misplacement of the decimal point in any unit rate;
- b) omissions made in completing the pricing schedule or bills of quantities; or
- c) arithmetic errors in:
 - (i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
 - (ii) the summation of the prices.

C.3.9.3 Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.

C.3.9.4 Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:

- a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.

- b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

C.3.10 Clarification of a tender offer

Obtain clarification from a tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

C.3.11 Evaluation of tender offers

The Standard Conditions of Tender standardize the procurement processes, methods and procedures from the time that tenders are invited to the time that a contract is awarded. They are generic in nature and are made project specific through choices that are made in developing the Tender Data associated with a specific project.

Conditions of tender are by definition the document that establishes a tenderer's obligations in submitting a tender and the employer's undertakings in soliciting and evaluating tender offers. Such conditions establish the rules from the time a tender is advertised to the time that a contract is awarded and require employers to conduct the process of offer and acceptance in terms of a set of standard procedures.

The CIDB Standard Conditions of Tender are based on a procurement system that satisfies the following system requirements:	
Requirement	Qualitative interpretation of goal
Fair	The process of offer and acceptance is conducted impartially without bias, providing simultaneous and timely access to participating parties to the same information.
Equitable	Terms and conditions for performing the work do not unfairly prejudice the interests of the parties.
Transparent	The only grounds for not awarding a contract to a tenderer who satisfies all requirements are restrictions from doing business with the employer, lack of capability or capacity, legal impediments and conflicts of interest.
Competitive	The system provides for appropriate levels of competition to ensure cost effective and best value outcomes.
Cost effective	The processes, procedures and methods are standardized with sufficient flexibility to attain best value outcomes in respect of quality, timing and price, and least resources to effectively manage and control procurement processes.

The activities associated with evaluating tender offers are as follows:

- a) Open and record tender offers received
- b) Determine whether or not tender offers are complete
- c) Determine whether or not tender offers are responsive
- d) Evaluate tender offers
- e) Determine if there are any grounds for disqualification
- f) Determine acceptability of preferred tenderer
- g) Prepare a tender evaluation report
- h) Confirm the recommendation contained in the tender evaluation report

C.3.11.1 General

The employer must appoint an evaluation panel of not less than three persons conversant with the proposed scope of works to evaluate each responsive tender offer using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

C.3.12 Insurance provided by the employer

If requested by the proposed successful tenderer, submit for the tenderer's information the policies and / or certificates of insurance which the conditions of contract identified in the contract data, require the employer to provide.

C.3.13 Acceptance of tender offer

Accept the tender offer; if in the opinion of the employer, it does not present any risk and only if the tenderer:

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement;
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract;
- c) has the legal capacity to enter into the contract;
- d) is not; insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act No. 2008, bankrupt or being wound up, has his/her affairs administered by a court or a judicial officer, has suspended his/her business activities or is subject to legal proceedings in respect of any of the foregoing;
- e) complies with the legal requirements, if any, stated in the tender data; and
- f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

C.3.14 Prepare contract documents

C.3.14.1 If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of:

- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents and
- c) other revisions agreed between the employer and the successful tenderer.

C.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

C.3.15 Complete adjudicator's contract

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.

C.3.16 Registration of the award

An employer must, within twenty-one (21) working days from the date on which a contractor's offer to perform a construction works contract is accepted in writing by the employer, register and publish the award on the cidb Register of Projects.

C.3.17 Provide copies of the contracts

Provide to the successful tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

C.3.18 Provide written reasons for actions taken

Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.

T2 RETURNABLE DOCUMENTS AND SCHEDULES

The following documents are to be completed and returned, as they constitute the tender. Whilst many of the returnables are required for the purpose of evaluation of the tenders, some will form part of the subsequent contract, as they form the basis of the tender offer. For this reason, it is very important that the Tenderers return **all information requested**.

T2.1 RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION		
The Tenderer's attention is drawn to clause C.2.14 of the Tender Data which stipulates that failure to submit the returnable schedules listed below will result in the Tenderer being declared <u>non-responsive</u> .		
In the event of a Joint Venture, the Tenderers attention is drawn to clause C2.1 of the Tender Data which stipulates that failure to submit the returnable schedules listed below for each member of the Joint Venture will result in the Tenderer being declared <u>non-responsive</u> .		
T2.1.1	Tendering Entity and Authority of Signatory	Tick if completed and submitted
T2.1.2	Compulsory Enterprise Questionnaire	Tick if completed and submitted
T2.1.3	Contractor's Information	Tick if completed and submitted
T2.1.4	Schedule of Proposed Sub-Contractors	Tick if completed and submitted
T2.1.5	Schedule of estimated Local Labour to be employed on the contract	Tick if completed and submitted
T2.1.6	Preliminary Program	Tick if completed and submitted
T2.1.7	Estimated Monthly Cash-flow	Tick if completed and submitted
T2.1.8	Completion Certificates for Similar Projects	Tick if completed and submitted
T2.1.9	Certificate of Contractor Registration Issued by the CIDB	Tick if completed and submitted
T2.1.10	Certificate of Authority for Joint Ventures	Tick if completed and submitted
T2.1.11	MBD2: Tax Clearance Certificate	Tick if completed and submitted
T2.1.12	MBD4: Declaration of Interest	Tick if completed and submitted
T2.1.13	MBD5: Declaration for Procurement Above R10 Million (Vat Included)	Tick if completed and submitted
T2.1.14	MBD6.1(a): Preference Certificate (80:20)	Tick if completed and submitted
T2.1.15	MBD6.2: Certificate of local content declaration (MBD 6.2)	Tick if completed and submitted
T2.1.16	MBD8: Declaration of Bidder's Past Supply Chain Management Practices	Tick if completed and submitted
T2.1.17	MBD9: Certificate of Independent Bid Determination	Tick if completed and submitted
T2.1.18	Declaration in terms of the MFMA (Act 56 of 2003) in terms of Municipal Rates and Taxes	Tick if completed and submitted
T2.1.19	Proof of Payment of Tender Participation Fee	Tick if completed and submitted
T2.1.20	Financial References	Tick if completed and submitted
T2.1.21	Clarification Meeting Certificate	Tick if completed and submitted

T2.1.22	Registration with the Bargaining Council	Tick if completed and submitted
T2.1.23	Schedule of Mechanical Equipment Technical Information	Tick if completed and submitted
T2.1.24	Schedule of Electrical Equipment Technical Information	Tick if completed and submitted
T2.1.25	Schedule of Letter of Good Standing to Relevant Authorities	Tick if completed and submitted
T2.2 RETURNABLE SCHEDULES REQUIRED FOR PREFERENCE SCORING		
<p>The Tenderer's attention is drawn to clause C2.14 of the Tender Data which stipulates that failure to submit the returnable schedules listed below will result in the Tenderer <u>scoring zero points</u> for Preference.</p> <p>In the event of a Partnership / Joint Venture / Consortium, a consolidated BBBEE Verification Certificate must be submitted for the Partnership / Joint Venture / Consortium, failure to submit the returnable schedules listed below will result in the Tenderer <u>scoring zero points</u> for Preference.</p>		
T2.2.1	Broad Based Black Economic Empowerment (BBBEE) Certificate (MBD6.1)	Tick if completed and submitted
T2.3 RETURNABLE SCHEDULES THAT WILL BE INCORPORATED INTO THE CONTRACT (to be attached with submission)		
<p>The Tenderer's attention is drawn to clause C.2.14 of the Tender Data which stipulates that failure to submit the returnable schedules listed below will result in the Tenderer being declared <u>non-responsive</u>.</p>		
T2.3.1	Addenda / Notices Issued to Tenderers	Tick if completed and submitted
T2.3.2	Form of Indemnity	Tick if completed and submitted
T2.3.3	Occupational Health and Safety Plan	Tick if completed and submitted
T2.3.4	Special Conditions of Tender	Tick if completed and submitted
T2.3.5	Rates for Special Materials	Tick if completed and submitted
T2.4 OTHER DOCUMENTS AND AFFIDAVITS THAT WILL BE INCORPORATED INTO THE CONTRACT		
<p>All documents contained in T2.1, T2.2 and T2.3 will form part of the offer submitted by the Tenderer and will form part of the Contract if the Tenderer's offer is accepted by the Employer.</p>		

T2.1	RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION
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T2.1.1 TENDERING ENTITY AND AUTHORITY OF SIGNATORY

The purpose of this Schedule is to obtain the necessary information about the tendering entity, and to establish authority of the signatory to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender, as well as to sign any contract, and any and all documentation, resulting from the award of the tender to the tendering entity.

INSTRUCTIONS FOR COMPLETING SCHEDULE:

Tendering entities may be sole proprietors, partnerships, trusts, companies, close corporations or consortia / joint ventures. Schedule 1 must be completed as follows:

- If the tendering entity is a sole proprietor, trust, partnership, company or close corporation, complete both this page and Section 1 of this Schedule, and clearly mark Section 2 (both 2.1 and 2.2) as "Not Applicable".
- If the tendering entity is a consortium or joint venture, then complete both this page and Section 2 (both 2.1 and 2.2) of this Schedule, and clearly mark Section 1 as "Not Applicable".
- The contact details below must be the officially designated contact addresses which will be used by the *Employer* for any and all communication in regard to this tender, and if the tender is awarded, also during the execution of the contract.

THE TENDERING ENTITY IS: (*Circle the applicable option)

*A Sole Proprietor / Partnership / Trust / Company / Close Corporation / Consortium / Joint Venture.

NAME OF THE TENDERING ENTITY:

.....
(Legally correct full name of the tendering entity)

CONTACT DETAILS:

Physical Address:

.....

.....

..... (Postal Code)

Telephone number:

Mobile number:

Email address:

Schedule 1 continues with Section 1 on the next page.

Section 1: Resolution of board of *Trustees/Directors/Members/Partners

Notes:

1. *Delete which is not applicable.
2. IMPORTANT: This resolution must be signed by ALL the trustees/directors/members/partners of the tendering entity.
3. Should the number of trustees/directors/members/partners exceed the space available below, additional names and signatures must be supplied on a separate page.

RESOLUTION by the *Proprietor/Board of *Trustees/Directors/Members/Partners of:

.....
 (Legally correct full name and registration number, if applicable, of the tendering entity)

Taken at On
 (Place) (Date)

	Name of Proprietor/Trustee/Director/Member/Partner	Capacity	Signature
1			
2			
3			
4			
5			
6			

(Append separate page if not enough space)

RESOLVED that:

1. The entity submits a bid to the THEEWATERSKLOOF MUNICIPALITY in respect of Tender No: ENG 15/2021-22 :
UPGRADING OF GRABOUW BULK WATER SERVICES PHASE 5.1: MECHANICAL AND ELECTRICAL UPGRADES
2. *Mr/Mrs/Ms:

in *his/her capacity as:
 (Position in the entity)

and who will sign as follows:

AUTHORISED SIGNATURE OF TENDERER

be, and is hereby, authorised to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender, as well as to sign any contract, and any and all documentation, resulting from the award of the bid to the entity mentioned above.

Date:.....

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

Section 2.1: Resolution to enter into Consortium / Joint Venture

Notes:

1. *Delete which is not applicable
2. A separate copy of this Section 2.1 must be duly completed, signed and submitted for each consortium/joint venture partner.
3. IMPORTANT: This resolution must be signed by ALL the trustees/directors/members/partners of the entity entering into the consortium/joint venture.
4. Should the number of representatives exceed the space available below, additional names and signatures must be supplied on a separate page.

RESOLUTION by the *Proprietor/Board of *Trustees/Directors/Members/Partners of:

.....
 (Legally correct full name and registration number, if applicable, of the entity)

Taken at On
 (Place) (Date)

	Name of Proprietor/Trustee/Director/Member/Partner	Capacity	Signature
1			
2			
3			
4			
5			
6			

(Append separate page if not enough space)

RESOLVED that:

1. The entity submits a bid, in consortium/joint venture with the following entities to the THEEWATERSKLOOF MUNICIPALITY in respect of Tender No ENG 16/2021/22: UPGRADING OF GRABOUW BULK WATER SERVICES PHASE 5.1: MECHANICAL AND ELECTRICAL UPGRADES

	Full legally correct name of entity	Registration No (if applicable)
1		
2		
3		
4		
5		
6		

(Append separate page if not enough space)

2. *Mr/Mrs/Ms:

in *his/her capacity as:
(Position in the entity)

and who will sign as follows:

AUTHORISED SIGNATURE

be, and is hereby authorised to sign a consortium/joint venture agreement with the parties listed under item 1 above, and any and all other documents and/or correspondence in connection with and relating to the consortium/joint venture, in respect of the tender described in item 1 above.

3. The entity accepts joint and several liability with the parties listed under item 1 above for the due fulfilment of the obligations of the consortium/joint venture deriving from, and in any way connected with, the contract to be entered into with the Department in respect of the tender under item 1 above.
4. The entity chooses as its domicilium citandi et executandi for all purposes arising from this consortium/joint venture agreement and the contract with the Department in respect of the tender under item 1 above, the physical address and contact details as furnished on the first page of this Schedule.

Date:.....

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

Section 2.2: Resolution to bid as Consortium / Joint Venture

Notes:

1. IMPORTANT. This resolution must be signed by ALL the representatives of the bidding consortium/joint venture.
2. Should the number of representatives exceed the space available below, additional names and signatures must be supplied on a separate page.
3. Enter the entity details and representative details in the same and corresponding numerical sequence into the respective tables below.

RESOLUTION of a meeting of the duly authorised representatives of the following legal entities who have entered into a consortium/joint venture to jointly tender for Tender No: ENG 16/2021/22:UPGRADING OF GRABOUW BULK WATER SERVICES PHASE 5.1: MECHANICAL AND ELECTRICAL UPGRADES

	Full legally correct name of entity	Registration No (if applicable)
1		
2		
3		
4		
5		
6		

(Append separate page if not enough space)

Held at (Place) (Date) On.....

	Name of authorised representative	Capacity	Signature
1			
2			
3			
4			
5			
6			

(Append separate page if not enough space)

RESOLVED that:

- A. The abovementioned entities submit a bid in consortium/ joint venture to the THEEWATERSKLOOF MUNICIPALITY in respect of the tender mentioned above.

B. *Mr/Mrs/Ms:

in *his/her capacity as:
(Position in the bidding consortium/joint venture)

and who will sign as follows:

AUTHORISED SIGNATURE OF TENDERER

be, and is hereby, authorised to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender, as well as to sign any contract, and any and all documentation, resulting from the award of the tender to the entities in the consortium/joint venture mentioned above.

- C. The entities constituting the consortium/joint venture, notwithstanding its composition, shall conduct all business under the name and style of:

.....
(Consortium/joint venture name)

- D. The entities to the consortium/joint venture accept joint and several liability with the parties above for the due fulfillment of the obligations of the consortium/joint venture deriving from, and in any way connected with, the contract to be entered into with the Department in respect of the tender mentioned above.
- E. Any of the entities to the consortium/joint venture intending to terminate the consortium/joint venture agreement, for whatever reason, shall give the Department 30 days written notice of such intention. Notwithstanding such decision to terminate, the entities shall remain jointly and severally liable to the Department for the due fulfillment of the obligations of the consortium/joint venture as mentioned under item D above.
- F. No entity to the consortium/joint venture shall, without the prior written consent of the other entities to the consortium and of the Department, cede any of its rights or assign any of its obligations under the consortium/joint venture agreement in relation to the contract with the Department referred to herein.
- G. The entities choose as domicilium citandi et executandi of the consortium/joint venture for all purposes arising from the consortium/joint venture agreement and the contract with the Department in respect of the tender mentioned above, the physical address and contact details as furnished on the first page of this Schedule.

Date:.....

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.2 COMPULSORY ENTERPRISE QUESTIONNAIRE

Note: In the case of a consortium/joint venture, separate enterprise questionnaires as per this schedule in respect of each consortium/joint venture partner must be completed and submitted.

Section 1: Name of enterprise: Address of enterprise:		
Section 2: VAT registration number, if any:		
Section 3.1: CIDB registration number, if any:	Section 3.2: Central Supplier Database Registration Number:	
Section 4: Particulars of sole proprietors and partners in partnerships		
Name*	Identity number*	Personal income tax number*
* Complete only if sole proprietor or partnership and append separate page if more than 6 partners		
Section 5: Particulars of companies and close corporations Company registration number..... Close corporation number..... Tax reference number.....		
Section 6: Record of service of the state 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:		

- ☐ a member of any municipal council
☐ a member of any provincial legislature
☐ a member of the National Assembly or the National Council of Province
☐ a member of the board of directors of any municipal entity
☐ an official of any municipality or municipal entity
- ☐ 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)
☐ a member of an accounting authority of any national or provincial public entity
☐ an employee of Parliament or a provincial legislature

If any of the above boxes are marked, disclose the following:

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 months

Append separate page if not enough space

Section 7: Record of spouses, children and parents in the service of the state

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 been in the service of any of the following:

- ☐ a member of any municipal council
☐ a member of any provincial legislature
☐ a member of the National Assembly or the National Council of Province
☐ a member of the board of directors of any municipal entity
☐ an official of any municipality or municipal entity
- ☐ 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)
☐ a member of an accounting authority of any national or provincial public entity
☐ 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 months

Append separate page if not enough space

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

- i) authorizes the *Employer* to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- ii) confirms that 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;
- iv) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

DURATION			
APPROXIMATE VALUE	R	R	R
DATES CONTRACTS WERE SIGNED			
PAYMENT TERMS			
9. PREVIOUS CONTRACTS WITH COUNCIL (Last financial year only)			
CONTRACT NO.			
APPROXIMATE VALUE	R	R	R
10. NAME AND ADDRESS OF AUDITORS/ACCOUNTING OFFICERS			
NAME			
ADDRESS			
CODE			

11. PROFESSIONALS ATTACHED TO THE CONCERN WITH QUALIFICATIONS (Name and Qualification)

Initials	Qualifications	Surname

PART 2

12. NAMES AND NUMBERS OF DIRECTORS/PARTNERS/MEMBERS - % SHAREHOLDING

	Initials *HDI	Surname	ID Number	Sex	% Holding	
1.						YES/NO
2.						YES/NO
3.						YES/NO
4.						YES/NO
5.						YES/NO
6.						YES/NO
7.						YES/NO
8.						YES/NO

13. INDICATE ON WHICH DATE YOUR BUSINESS STARTED ITS CURRENT TYPE OF BUSINESS

--	--	--	--	--	--	--	--	--	--

I..... (FULL NAME) HEREBY CERTIFY THAT THE ABOVE
INFORMATION IS TRUE AND CORRECT

.....
SIGNATURE

.....
DATE

(ADDITIONAL INFORMATION MAY BE ATTACHED IF NECESSARY.)

*DEFINITION OF HISTORICALLY DISADVANTAGED INDIVIDUAL (HDI) MEANS A SOUTH AFRICAN CITIZEN.

- WHO, DUE TO THE APARTHEID POLICY THAT HAD BEEN IN PLACE, HAD NO FRANCHISE IN NATIONAL ELECTIONS PRIOR TO THE INTRODUCTION OF THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA, 1983 (ACT NO. 110 OF 1983) OR THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA, 1993 (ACT NO. 200 OF 1993) ("THE INTERIM CONSTITUTION") AND/OR
 - WHO IS A FEMALE; AND/OR
 - WHO HAS A DISABILITY

PROVIDED THAT A PERSON, WHO OBTAINED SOUTH AFRICAN CITIZENSHIP ON OR AFTER THE COMING INTO EFFECT OF THE INTERIM CONSTITUTION, IS DEEMED NOT TO BE A HDI.

T2.1.4 SCHEDULE OF PROPOSED SUB-CONTRACTORS

We notify you that it is our intention to employ the following Sub-contractors to work on this contract.

If we are awarded the contract we agree that this notification does not change the requirement for us to submit the names of proposed Subcontractors in accordance with requirements in the contract for such appointments. **If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.**

Refer to Schedule T2.3.4 – Special Conditions of Tender

No.	Name and Address of Proposed Subcontractor	Nature and Extent of Work	Previous Experience with Subcontractor
1.			
2.			
3.			
4.			
5.			
6.			

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.5 SCHEDULE OF LOCAL LABOUR TO BE EMPLOYED ON THE CONTRACT

DESCRIPTION	NUMBER				TOTAL
DESCRIPTION OF TASK / ELEMENT / TRADE	ARTISANS AND OR SKILLED LABOUR	SEMI-SKILLED LABOUR	LABOURERS	OTHERS	LABOUR / TASK
TOTAL ACTUAL LOCAL LABOUR:					

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Note: where the same labour is to be re-used on various tasks the total labour/tasks and the total actual labour will differ

T2.1.6 PRELIMINARY PROGRAM

The tenderer shall attach a preliminary programme, to this schedule.

This programme, and all subsequent programmes shall be in the MS Projects format acceptable (approved by the Employer) time/activity form reflecting the proposed sequence, critical path, and tempo of the various activities and the quantities that will be carried out every week under each of the elements, comprising the work for this contract. The programme shall also indicate the point where the tenderer intends to commence work operations and the direction in which the work will proceed. The working hours shall be indicated.

The tenderer shall also take into account the additional requirements stated in the Project Specifications when drawing up the programme.

Details of the preliminary programme shall be appended to this Schedule.

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.7 ESTIMATED MONTHLY CASH-FLOW

The Tenderer shall state below the estimated value of work to be completed every month, based on his preliminary programme and his tendered unit rates.

The amounts for Contingencies and Contract Price Adjustment must not be included. The Tenderer must make note of any cash-flow restrictions.

MONTH	VALUE
1	
2	
3	
4	
TOTAL	

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.8 COMPLETION CERTIFICATES OF SIMILAR PROJECTS

Must have completed at least six (6) projects for Mechanical and Electrical Services for the installation of pumping equipment with a value of at least R10M, completion certificates to be attached and will be verified. If the tenderer was a sub-contractor a letter from the Main Contractor will suffice. Of the 6 projects that have been completed three (3) of them must be in the Western Cape.

Municipality/Other Entity	Contact Person Name and Number	Project Description	Contract Value	Completion Certificate issue date

Tenderers are reminded to attach Completion certificates to this schedule.

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.9 CERTIFICATE OF CONTRACTOR REGISTRATION ISSUED BY CIDB

The tenderer should attach to this page either a certificate of Contractor Registration issued by the Construction Industry Development Board or proof of registration in terms of the Construction Industry Development Board Act.

T2.1.10 CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

a) This returnable schedule is to be completed by joint ventures.

We, the undersigned, are submitting this tender offer in joint venture and hereby authorize Mr/Ms

....., authorized signatory of the company, close corporation or partnership

....., acting in the capacity of lead partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner		Signature..... Name..... Designation.....
		Signature..... Name..... Designation.....
		Signature..... Name..... Designation.....
		Signature..... Name..... Designation.....

Note: A copy of the Joint Venture Agreement showing clearly the **percentage contribution of each partner** to the Joint Venture shall be appended to this schedule.

T2.1.11 MBD2 : TAX CLEARANCE CERTIFICATE

MBD 2

It is a condition of bid that the taxes of the successful bidder **must** be in order, or that satisfactory arrangements have been made with South African Revenue Services (SARS) to meet the bidder's tax obligations.

1. In order to meet this requirement, Tenderers are required to complete in full the TCC 0001 form, "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally or on the website www.sars.gov.za. The Tax Clearance Certificate Requirements are also applicable to foreign Tenderers / individuals who wish to submit bids.
2. Applications for the Tax Clearance Certificates may also be made via e-Filing. In order to use this provision, taxpayers will need to register with SARS as e-Fileers through the website www.sars.gov.za
3. SARS will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
4. In bids where Consortia / Joint Ventures / Sub-Contractors are involved, each party must submit a separate Tax Clearance Certificate.
5. Tax Compliance Status (TCS) Pin as of 18 April 2016
 - a. In terms of the new Tax Compliance Status System implemented by SARS on 18 April 2016, taxpayers are now able to issue the municipality with a TCS Pin which can be used to verify a bidder's tax status online via SARS E-filing.
 - b. The taxpayer must issue the municipality with the following:

Bidders who are not in possession of an original Tax Clearance Certificate must provide at least 2 of the 3 numbers listed below in order to verify the Tax Clearance Certificate via SARS e-filing.

1.	Tax Reference Number:	
2.	Tax Compliance Status Pin:	
3.	Tax Clearance Certificate Number:	

- c. If a bidder is registered on the Theewaterskloof Municipality Supplier's Database and the Municipality is already in possession of an original tax clearance certificate which is valid on closing date of bid, it **MUST** be indicated as such on this page, whereby the attaching of a new tax clearance certificate to this page will not be needed.
6. Should a Tax Clearance Certificate not be verifiable on the SARS e-filing system, the bidder will be afforded an opportunity to submit a valid, verifiable Tax Clearance Certificate. It will result in the invalidation of the bid, should the bidder fail to provide a valid, verifiable Tax Clearance Certificate.

T2.1.12 MBD4 : DECLARATION OF INTEREST

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

3.1 Full Name of bidder or his or her representative:

3.2 Identity Number:

3.3 Position occupied in the Company (director, trustee, shareholder.....

3.4 Company Registration Number:

3.5 Tax Reference Number

3.6 VAT Registration Number:

3.7 The names of all directors/ trustees/ shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.

3.8 Are you presently in the service of the state? YES ☐ / NO ☐

3.8.1 If yes, furnish particulars.

.....

3.9 Have you been in the service of the state for the past twelve months? YES ☐ / NO ☐

3.9.1 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 ☐

¹ MSCM Regulations: "In the service of the state" means to be –

- (a) a member of –
 - i) any municipal council;
 - ii) any provincial legislature; or
 - iii) the national Assembly or the national Council of provinces;
- (b) a member of the board of directors of any municipal entity;
- (c) an official of any municipality or municipal entity;
- (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999);
- (e) a member of the accounting authority of any national or provincial public entity; or
- (f) an employee of Parliament or a provincial legislature.

² 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.

3.10.1 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 ☐

3.11.1 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 ☐

3.12.1 If yes, furnish particulars.

3.13 Are any spouse, child or parent of the company's directors trustees, managers, principal shareholders or stakeholders in service of the state? YES ☐ / NO ☐

3.13.1 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 ☐

3.14.1 If yes, furnish particulars.

4. Full details of directors/ trustees/ members/ shareholders:

Full Name	Identify Number	State Employee Number

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

T2.1.13 MBD5: DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (VAT INCLUDED)

For all procurement expected to exceed R10 million (VAT included), bidders must complete the following questionnaire:

1. Are you by law required to prepare annual financial statements for auditing?	YES		NO	
1.1. If yes, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.				
2. Do you have any outstanding undisputed commitments for municipal services towards a municipality 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 a municipality or other service provider in respect of which payment is overdue for more than 30 days.				
2.2. If yes, provide particulars.				
3. Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract?	YES		NO	
3.1. If yes, furnish particulars				
4. Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic?	YES		NO	
4.1 If yes, furnish particulars				
CERTIFICATION I, the undersigned (name) _____, certify that the information furnished on this declaration form is correct. I accept that the state may act against me should this declaration prove to be false.				
SIGNATURE:		NAME (PRINT):		
CAPACITY:		DATE:		
NAME OF FIRM:				

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.14 MBD6.1: PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017 AND CODES OF GOOD PRACTICE

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to all bids:
 - the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
 - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).
- 1.2 The value of this bid is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable.
- 1.3 Points for this bid shall be awarded for:
 - (a) Price; and
 - (b) B-BBEE Status Level of Contributor.
- 1.4 The maximum points for this bid are allocated as follows:

	POINTS
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTOR	20
Total points for Price and B-BBEE must not exceed	100

- 1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2. DEFINITIONS

- (a) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) **“B-BBEE status level of contributor”** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- (d) **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) **“EME”** means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) **“functionality”** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) **“prices”** includes all applicable taxes less all unconditional discounts;
- (h) **“proof of B-BBEE status level of contributor”** means:
 - 1) B-BBEE Status level certificate issued by an authorized body or person;
 - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;

3) Any other requirement prescribed in terms of the B-BBEE Act;

- (i) “**QSE**” means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) “**rand value**” means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

3. POINTS AWARDED FOR PRICE

3.1 THE 80/20 PREFERENCE POINT SYSTEM

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

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

Where

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

4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

- 4.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (80/20 system)
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

5. BID DECLARATION

- 5.1 Tenderers who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

6. B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1

- 6.1 B-BBEE Status Level of Contributor: = (maximum of 20 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

7. SUB-CONTRACTING

7.1 Will any portion of the contract be sub-contracted?

(Tick applicable box)

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

7.1.1 If yes, indicate:

- i) What percentage of the contract will be subcontracted..... %
- ii) The name of the sub-contractor.....
- iii) The B-BBEE status level of the sub-contractor.....
- iv) Whether the sub-contractor is an EME or QSE

(Tick applicable box)

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

- v) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations, 2017:

Designated Group: An EME or QSE which is at least 51% owned by:	EME √	QSE √
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

8. DECLARATION WITH REGARD TO COMPANY/FIRM

8.1 Name of company/firm:

8.2 VAT registration number:

8.3 Company registration number:

8.4 Type of Company/ Firm

- ☐ Partnership/Joint Venture / Consortium
- ☐ One person business/sole propriety
- ☐ Close corporation
- ☐ Company
- ☐ (Pty) Limited

[TICK APPLICABLE BOX]

8.5 Describe Principal Business Activities

.....

.....

.....

8.6 Company Classification

- ☐ Manufacturer
- ☐ Supplier
- ☐ Professional service provider
- ☐ Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

8.7 Municipal Information

Municipality where business is situated:

Registered Account Number:

Stand Number:

8.8 Total number of years the company/firm has been in business:.....

8.9 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding 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 bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury 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.

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.15 CERTIFICATE OF LOCAL CONTENT DECLARATION (MBD 6.2)

This Municipal Bidding Document (MBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2017 (Regulation 8) make provision for the promotion of local production and content.
- 1.2. Regulation 8.(2) prescribes that in the case of designated sectors, organs of state must advertise such tenders with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for tenders referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

x is the imported content in Rand

y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as indicated in paragraph 4.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on [http://www.thedti.gov.za/industrial development/ip.jsp](http://www.thedti.gov.za/industrial%20development/ip.jsp) at no cost.

- 1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation;

2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

Item no	Description	Stipulated minimum threshold %
1	Steel Conveyance, Pipe Fittings and Specials	100%
2	Textile, Clothing, Leather and Footwear (PPE)	100%
3	Plastic Pipes	100%
4	Steel Products and components for Construction	100%
5	Valve Products and Actuators	70%
6	Electrical Cables	90%
7	Cement	100%

3. Does any portion of the goods or services offered have any imported content?

(Tick applicable box)

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

3.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency at 12:00 on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on www.reservebank.co.za

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used. The rates of exchange tendered by the bidder will be verified for accuracy.

4. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the AO/AA provide directives in this regard.

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO.

ISSUED BY: (Procurement Authority / Name of Institution):

.....
 NB

- 1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- 2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thdti.gov.za/industrial_development/ip.jsp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names),

do hereby declare, in my capacity as

.....
 of(name of bidder entity), the following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that:
 - (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (c) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above.

The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

- (d) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

DATE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

ANNEXURE C										SATS 1286.2011				
Local Content Declaration – Summary Schedule														
(C1) Tender No.		ENG16/2021/22						NOTE: VAT to be excluded from all calculations						
(C2) Tender Description		UPGRADING OF GRABOUW BULK WATER SERVICES PHASE 5.1												
(C3) Designated product(s)														
(C4) Tender Authority		Theewaterskloof Municipality												
(C5) Name of Tendering Entity														
(C6) Tender Exchange Rate		Pula			EU							GBP		
(C7) Specified local content %														
Calculation of local content														
Tender Item No's	List of Items	Tender Price – each	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Quantity	Total tender value	Total exempted imported content	Total imported content			
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)			
A2.2	Personal Protective Clothing & Equipment							Sum						
B2	Structural (Cement)							Sum						
B2	Structural (Steel)							Sum						
C1	Pipe Fitting Schedule							Sum						
C2	Pipe Schedule							Sum						
C3	Pipe Valves							Sum						
C4	Pumps							Sum						
D2	Distribution Boards							Sum						
D3, D4, D6, D7	Cables							Sum						
D5	Wireways							Sum						
D8	Standby Generator							Sum						
(C20) Total tender value														
(C21) Total Exempt imported content														
(C22) Total Tender value net of exempt imported content														
(C23) Total Imported content														
(C24) Total local content														
(C25) Average local content % of tender														
SIGNATURE OF TENDERER AS PER LOCAL CONTENT DECLARATION														
DATE														

ANNEXURE D

SATS 1286.2011

Imported Content Declaration – Supporting Schedule to Annexure C

(D1)	Tender No.	ENG 16/2021/22						NOTE: VAT to be excluded from all calculations
(D2)	Tender Description	UPGRADING OF GRABOUW BULK WATER SERVICES PHASE 5.1						
(D3)	Designated product(s)							
(D4)	Tender Authority	Theewaterskloof Municipality						
(D5)	Tendering Entity's Name							
(D6)	Tender Exchange Rate	Pula		EU		GBP		

A. Exempted imported content				Calculation of imported content						Summary	
Tender item no's	Description of imported content	Local supplier	Overseas supplier	Foreign currency value as per Commercial Invoice	Tender Exchange Rate	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost	Tender Quantity	Exempted imported value
(D7)	(D8)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)

ANNEXURE D – Continued

SATS 1286.2011

Imported Content Declaration – Supporting Schedule to Annexure C

NOTE: VAT to be excluded from all calculations

C. Imported by a 3 rd party and supplied to the Tenderer				Calculation of imported content						Summary	
Description of imported content	Unit of measure	Local supplier	Overseas supplier	Foreign currency value as per Commercial Invoice	Tender Exchange Rate	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost	Quantity imported	Total imported value
(D33)	(D34)	(D35)	(D36)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)

(D45) Total imported value by 3rd party

D. Other foreign currency payments			Calculation of foreign currency payments		Summary of Payments	
Type of payment	Local supplier making the payment	Overseas beneficiary	Foreign currency value paid	Tender rate of exchange	Local value of payments	
(D46)	(D47)	(D48)	(D49)	(D50)	(D51)	

(D52) Total of foreign currency payments declared by tenderer and/or 3rd party

(D53) Total of imported content and foreign currency payments – (D32), (D45) and (D52) above

SIGNATURE OF TENDERER AS PER LOCAL CONTENT DECLARATION

This total must correspond with Annex C – (C23)

DATE

ANNEXURE E		SATS 1286.2011
Local content Declaration – Summary Schedule to Annexure C		
(E1) Tender No.	ENG 16/2021/22	NOTE: VAT to be excluded from all calculations
(E2) Tender Description	UPGRADING OF GRABOUW BULK WATER SERVICES PHASE 5.1	
(E3) Designated product(s)		
(E4) Tender Authority	Theewaterskloof Municipality	
(E5) Tendering Entity's Name		

LOCAL PRODUCTS (Goods, Services and Works)		
Description of items purchased	Local suppliers	Value
(E6)	(E7)	(E8)
(E9) Total local products (Goods, service and works)		

(E10) Manpower costs (Tenderer's own manpower cost)

(E11) Factory overheads (Rental, depreciation & amortization, utility costs, consumables, etc.)

(E12) Administration overheads and mark-up (Marketing, insurance, financing interest, etc.)

(E13) Total local content

This total must correspond with Annex C – C24

SIGNATURE OF TENDERER AS PER LOCAL CONTENT DECLARATION

DATE

T2.1.16 MBD8 : DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

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

Item	Question	Yes	No
4.1	<p><i>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?</i></p> <p>(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied).</p> <p>The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	<p><i>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)?</i></p> <p>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.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		

Item	Question	Yes	No
4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.7.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)
CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM TRUE AND CORRECT.

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.17 MBD9: CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Municipal Bidding Document (MBD) must form part of all bids¹ invited.
- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - a. takes all reasonable steps to prevent such abuse;
 - b. rejects 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. cancels a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
- 4 This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

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.

MBD 9**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: _____ that:
(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - a) has been requested to submit a bid in response to this bid invitation;
 - b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder
6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - a) Prices;
 - b) Geographical area where product or service will be rendered (market allocation);
 - c) Methods, factors or formulas to calculate prices;
 - d) The intention or decision to submit or not to submit, a bid;
 - e) The submission of a bid which does not meet the specifications and conditions of the bid; or
 - 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.

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.

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

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.18 DECLARATION IN TERMS OF THE MFMA (ACT 56 OF 2003) IN TERMS OF MUNICIPAL RATES AND TAXES

NAME OF ENTERPRISE / TENDERER*:

I the undersigned, who warrants that he/she is duly authorized to do so on behalf of the abovementioned enterprise/tenderer, do hereby declare that, to the best of my knowledge, neither the enterprise nor any of its directors, members or partners has:

- a. failed to pay municipal rates and taxes or municipal service charges and such rates, taxes and charges are in arrears for more than three months;
- b. failed, during the last five years, to perform satisfactorily on a previous contract with the Theewaterskloof Municipality or any other organ of state after written notice was given to that tenderer that performance was unsatisfactory;
- c. abused the supply chain management system of the Theewaterskloof Municipality or has committed any improper conduct in relation to this system;
- d. been convicted of fraud or corruption during the past five years;
- e. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
- f. been listed with the Register of Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004) or has been listed on National Treasury's database as a person or juristic entity prohibited from doing business with the public sector.

I acknowledge that any misrepresentation in respect of this declaration may be regarded as reason to cancel any contract arising out of this tender.

* where the entity tendering is a joint venture, each party to the joint venture must sign a declaration in terms of the Municipal Finance Management Act and attach it to this schedule

DOCUMENTARY EVIDENCE IN TERMS OF GOOD STANDING WITH MUNICIPAL RATES AND TAXES AND SERVICE CHARGES SHALL BE ATTACHED TO THIS FORM.

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.19 PROOF OF PAYMENT OF TENDER PARTICIPATION FEE

The tenderer should attach to this page proof of payment of the tender participation fee as stipulated in the tender advertisement.

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.20 FINANCIAL REFERENCES

The Tenderer shall attach to this form a letter from the bank at which he declares he conducts his account. The contents of the bank's letter must state the credit rating that it, in addition to the information required below, accords to the Tenderer for the business envisaged by this tender.

The Tenderers banking details as they appear below shall be completed.

If the Tenderer is a joint venture enterprise, the same required details as specified above of all members of the joint venture shall be provided and attached to this form.

DESCRIPTION OF BANK DETAIL	BANK DETAILS
Credit Limit	
Name of Account Holder	
Account Number	
Name of Bank	
Branch Name	
Branch Code	
Bank Rating (Current) Attach letter from Bank	
Bank and Branch Contact Details	

T2.1.21 CLARIFICATION MEETING CERTIFICATE

Note: This site/clarification meeting certificate must be taken along to the meeting, completed and signed by a duly authorised and knowledgeable representative of the tenderer, able to comprehend and interpret site conditions and information conveyed, thereby enabling the tenderer to put forward an informed bid, with full understanding of the factors likely to influence the work and cost thereof. This certificate **MUST** be countersigned by a representative of the *Employer* at the time of the meeting, failure of which will render the tender non-compliant and invalid. The attendance register at the site/clarification meeting must also be signed by the tenderer's representative.

This is to certify that I,
(Name)

representing:
(Tenderer)

attended the site clarification meeting on:
(Date)

held at:
(Place)

I am sufficiently knowledgeable and experienced to be able to understand all aspects of the tender and work to be undertaken as described in this tender document. I have made myself familiar, as far as is practically possible, with all local conditions, risks, contingencies and other circumstances likely to influence the execution of the work and the cost thereof. I further certify that I am satisfied with the description of the work and explanations given at the clarification meeting and that I understand fully the work to be done, as specified and implied, in the execution of this contract.

SIGNED ON BEHALF OF TENDERER

SIGNED ON BEHALF OF <i>Employer</i>

Name of *Employer's* Representative:

Date:

T2.1.22 REGISTRATION WITH THE BARGAINING COUNCIL

Tenderers shall attach to this schedule a copy of their **certificate of compliance** issued by the relevant Bargaining Councils.

Tenderers must attach a certificate of compliance issued by the Bargaining Council applicable to the industry the Tenderer and/or his subcontractor/s are part of. These are respectively the NBCEI (National Bargaining Council for the Electrical Industry of South Africa) and / or BCCEI (Bargaining Council for the Civil Engineering Industry).

T2.1.23 SCHEDULE OF MECHANICAL EQUIPMENT TECHNICAL INFORMATION

The Tenderers must complete the following schedules and submit them with their tender submission.

The Tenderers shall read C3.8 Mechanical Works Specification. Where preferred brands are specified the Contractor take cognisance of these requirements. Alternatives may be offered but shall be approved in writing by the Engineer prior to supply and installation.

The schedules will be scrutinised by the Representative / Agent and should any material offered not comply with the requirements contained in the specification, the Contractor will be required to supply material in accordance with the contract at no additional cost.

Tenderers shall provide at least the following information:

SUB-CONTRACTORS & SUPPLIERS

Pump Supplier: _____

Pump Motor Supplier: _____

ITEM DESCRIPTION	REMARKS
1. PUMPS	
Pump Make & Model Number	
Guaranteed Flow (l/s) at Duty Head (m)	
Pump Speed (rpm)	
Duty point efficiency (%)	
Best efficiency point	
Type of internal coating	
Pressure gauges (Range/Make)	
Make & Model of drive couplings	
2. MOTORS	
Make and Model of Electric Drive motors	
Type of Motor	
Motor Rating (Kw)	
Motor Speed (rpm)	
3. PIPING, VALVES AND FITTINGS	
Manufacturer	
Pipe and Flange material	
Pipe wall thickness (mm)	
Make and model of Gate Valves	
Make and model of Check Valves	
Make and Model of Air Valve	
Make and Model of Knife Gate Valves	
Pressure rating of valves (PN)	
Coating and Painting system to be applied	
Coating thickness (DFT in micron)	
Make and Model of Flow meters	
Make and Model of Pressure transducers	

ITEM DESCRIPTION	REMARKS
Make and Model of Level sensor controls	
Make and Model of Pressure sensors	

Note: In addition, characteristic curves and brochures / catalogues / dimensioned layout sketches showing details of the equipment offered shall be submitted with the tender.

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.24 SCHEDULE OF ELECTRICAL EQUIPMENT TECHNICAL INFORMATION

The Contractor must complete the following schedules and submit them with their tender submission.

The Contractor shall read C3.9 Electrical Works Specification. Where preferred brands are specified the Contractor take cognisance of these requirements. Alternatives may be offered but shall be approved in writing by the Engineer prior to supply and installation.

The schedules will be scrutinised by the Representative / Agent and should any material offered not comply with the requirements contained in the specification, the Contractor will be required to supply material in accordance with the contract at no additional cost.

NB: Only one manufacturer's name to be inserted for each item.

ITEM	MATERIAL	MAKE OR TRADE NAME	COUNTRY OF ORIGIN	SANS
1	Distribution boards			
2	Motion sensors			
3	Conduit			
4	Conduit boxes			
5	Switches			
6	Weatherproof switches			
7	ON-OFF key switch 16A			
8	16A combination flush socket outlets SANS 164-1 and SANS 164-2			
9	Weather proof enclosure (IP65)			
10	Galvanised cable tray			
11	Galvanised trunking and cover			
12	Luminaires : Type C Corrosion resistant			
13	Electricity Consumption Meter			

NOTE: The tenderer shall be deemed to have read the specifications before selecting the materials listed above. Under no circumstances will the tenderer be permitted to deviate from the materials specified above unless agreed in writing, by the Engineer, prior to award of tender.

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.25 LETTER OF GOOD STANDING TO RELEVANT AUTHORITIES

The tenderer should attach to this page a letter from the relevant authorities indicating his good standing with regard to UIF payments and COIDA. Each party to a joint venture or consortium shall submit separate documents

SIGNED BY TENDERER:

T2.2	RETURNABLE SCHEDULES REQUIRED FOR PREFERENCE SCORING
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T2.2.1 BROAD BASED BLACK ECONOMIC EMPOWERMENT (BBBEE) CERTIFICATE (MBD6.1)
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Attach as part of your tender submission the documentation to be submitted with the tender in terms of returnable T2.1.13 Preference Points Claim Form for 80/20 Version (MBD6.1).

In the event of a Partnership / Joint Venture / Consortium, a consolidated BBBEE Verification Certificate must be submitted for the Partnership / Joint Venture / Consortium, failing which the Tenderer will score zero points for Preference.

T2.3	RETURNABLE SCHEDULES THAT WILL BE INCORPORATED INTO THE CONTRACT
-------------	---

T2.3.1 ADDENDA / NOTICES ISSUED TO TENDERERS

We confirm that the following communications / addenda / notice(s) to tenderers received from the *Employer* before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer (If no addenda/notices mark schedule NIL, if not enough space, attach additional pages):

ADDENDUM No	DATE	SUBJECT MATTER OF ADDENDUM / NOTICE

Documentary evidence of addenda / notices issued to tenderers indicating proof of receipt must accompany this Schedule.

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL)

T2.3.2 FORM OF INDEMNITY

The tenderer must complete this page

THE MUNICIPAL MANAGER
Theewaterskloof Municipality

INDEMNITY

Given by(Name of Company)
of
.....
(registered address of Company) a company incorporated with limited liability according to the
Company Laws of the Republic of South Africa (hereinafter called the Contractor),
represented herein by
..... (Name of Representative) in his capacity as
..... (Designation) of the Contractor is
duly authorised hereto by a resolution dated
To sign on behalf of the Contractor.

WHEREAS THE CONTRACTOR HAS ENTERED INTO A CONTRACT DATED
WITH THEEWATERSKLOOF MUNICIPALITY (HEREINAFTER CALLED THE MUNICIPALITY)
WHO REQUIRE THIS INDEMNITY FROM THE CONTRACTOR FOR THE

CONTRACT: ENG 16/2021/22 – UPGRADING OF GRABOUW BULK WATER SERVICES PHASE 5.1: MECHANICAL AND ELECTRICAL INSTALLATIONS

NOW THEREFORE THIS DEED WITNESSES that the Contractor does hereby indemnify and hold harmless the Municipality in respect of all loss or damage that may be incurred or sustained by the Municipality by reason of or in any way arising out of or caused by operations that may be carried out by the Contractor in connection with the aforementioned contract; and also in respect of all claims that may be made against the Municipality in consequence of such operations, by reason of or in any way arising out of any accidents or damage to life or property or any other cause whatsoever; and also in respect of all legal or other expenses that may be incurred by the Municipality in examining, resisting or settling any such claims; for the due performance of which the Contractor binds itself according to law.

SIGNATURE:

THUS DONE AND SIGNED for and on behalf on the Contractor.

At on the day of
In the presence of the subscribing witnesses.

AS WITNESSES

1. (Designation)
2. (Designation)

T2.3.3 OCCUPATIONAL HEALTH & SAFETY PLAN

OCCUPATIONAL HEALTH AND SAFETY ACT (Act No 85 of 1993)

Tenderers are to note the requirements of the Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations 2014 issued in terms of Section 43 of the Act. The Tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith.

In this regard the Tenderer shall prepare and attach a Health and Safety Plan in respect of the Works in order to demonstrate the necessary competencies and resources to perform the construction work all in accordance with the Act and Regulations. Such Health and Safety Plan shall cover inter-alia the following details:

- (1) Management Structure, Site Supervision and Responsible Persons including a succession plan.
- (2) Contractor's induction training programme for employees, sub-contractors and visitors to the Site.
- (3) Health and safety precautions and procedures to be adhered to in order to ensure compliance with the Act, Regulations and Safety Specifications.
- (4) Regular monitoring procedures to be performed.
- (5) Regular liaison, consultation and review meetings with all parties.
- (6) Site security, welfare facilities and first aid.
- (7) Site rules and fire and emergency procedures.

Tenderers are to note that the Contractor is required to ensure that all sub-contractors or others engaged in the performance of the contract also comply with the above requirements.

The Tenderer shall also take into account the additional requirements stated in the Scope of Work when drawing up the Health and Safety Plan for the contract.

Details of the Health and Safety Plan shall be appended to this Schedule.

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.3.4 SPECIAL CONDITIONS OF TENDER

SPECIAL CONDITIONS OF TENDER
A. CONDITIONS APPLICABLE TO THE PROMOTION OF MUNICIPAL LOCAL AND SOCIO-ECONOMIC DEVELOPMENT
For the unskilled labour portion of this tender the Service Provider MUST employ 100% local labourers from Grabouw where upgrade is taking place . Contractor must comply with EPWP requirements for all unskilled labour and to supply the necessary documents to Theewaterskloof Municipality to register them.
Minimum of 30% of the tender amount must be allocated for sub-contracting , the Service Provider MUST use suppliers within in the Theewaterskloof Municipal Area. The 30% value will be strictly enforced by the Municipality and is therefore COMPULSORY TO MEET THIS CRITERIA . Consideration will be given to deviate from the said criteria with the necessary motivation that all avenues have been explored, this forms part of our Local Economic Development Plan. The service provider must submit substantive evidence and relevant information with its tender proposal. If the tenderer has problems sourcing Local Sub-contractors, Department LED will provide assistance in this regard.
All Pipe Laying Construction Material e.g. Sand shall be sourced from local suppliers in the Theewaterskloof area. When invoicing proof must be provided showing that the supplier was LOCAL(WAY BILLS ETC) .
If service provider will be hiring plant, machinery and equipment, it must be done locally.
B. CONDITIONS APPLICABLE AFTER CLOSING OF TENDER BUT BEFORE A SELECTED SERVICE PROVIDER IS ANNOUNCED (For information only)
Any additional information upon request must be submitted in writing within 48 hours of receipt.
C. CONDITIONS APPLICABLE AFTER AWARDING OF THE TENDER (For information only)
The service provider must provide the Municipality with a completed list of Local labourers used & Local Spending; with monthly claims. The aforesaid list must be updated and submitted together with the service providers progress report and monthly invoice, inclusive of the following details: a. Salary / wages spent on local employees versus total wages / salary budget at site b. Number of local employees employed versus per total workforce at site c. Amount spent on local suppliers versus budgeted Any amendments to the list requires prior approval from the Municipality.
The service provider must provide the Municipality with a certificate confirming payments made to the local EME sub-contractor, if applicable. This certificate must be updated and submitted together with the service providers progress report and invoice. Any changes in sub-contractors requires prior approval from the Municipality.

I HEREBY DECLARE THAT I COMPLY WITH ALL THE SPECIAL CONDITIONS OF TENDER AS SET OUT ABOVE.

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

T2.3.5 RATES FOR SPECIAL MATERIALS

Each material dealt with as a special material in terms of Clause 4 of the Contract Price Adjustment Schedule of the Conditions of Contract is stated in the list below. The rates and prices for the special materials shall be furnished by the Tenderer, which rates and prices shall not include VAT but shall include all other obligatory taxes and levies.

[illegible]

Indicate whether the material will be delivered in bulk or in containers.

Notes to Tenderer:

1. When called upon to do so, the Tenderer shall substantiate the above rates or prices with acceptable documentary evidence.
2. Refer to Sub-Clause 13.8 of the Contract Data: Conditions of Contract.

SIGNATURE:		NAME (PRINT):	
CAPACITY:		DATE:	
NAME OF FIRM:			

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

CONTRACT**C1 AGREEMENT AND CONTRACT DATA**

- C1.1 Form of Offer and Acceptance
- C1.2 Contract Data
- C1.3 Performance Security (Demand Guarantee) Pro Forma
- C1.4 Agreement in Terms of The Occupational Health And Safety Act (No. 85 Of 1993)
- C1.5 Certificate of Authority For Signatory To Agreement In Terms Of OHS (Act 85 Of 1993)
- C1.6 Acknowledgement of Procedures And Guides Of Working In The Vicinity Of Electrical Services

C1.1 FORM OF OFFER AND ACCEPTANCE
--

OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a Contract for the procurement of:

CONTRACT NO. ENG 16/2021/22: UPGRADING OF GRABOUW BULK WATER SERVICES: MECHANICAL AND ELECTRICAL SERVICES

The Tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the tenderer, deemed to be duly authorized, signing this apart 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 PRICE INCLUSIVE OF VALUE ADDED TAX (VAT) IS

.....

 Rand (in words);
 R (in figures),

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.

Signature(s)

Name(s)

Capacity
for the
Tenderer

(Name and address of organisation)

Name and
signature of
witness

Date

CIDB Registration No: _____

ACCEPTANCE

By signing this part of this 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 Agreements and contract data, (which includes this agreement)

Part C2 Pricing data

Part C3 Scope of work

Part C4 Site information

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above (including all Annexures).

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as 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.

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. 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 working days of the date of such receipt notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

Signature(s)

Name(s)

Capacity
for the
Employer

(Name and address of organisation)

Name and
signature of
witness

Date

SCHEDULE OF DEVIATIONS

Notes:

1. The extent of deviations from the tender documents issued by the employer prior to the tender closing date is limited to those permitted in terms of the conditions of tender.
2. A tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, become the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here.
4. Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract.

Subject _____
Details _____

Subject _____
Details _____

Subject _____
Details _____

Subject _____
Details _____

Subject _____
Details _____

Subject _____
Details _____

Subject _____
Details _____

By the duly authorised representatives signing this agreement, 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 changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

FOR THE TENDERER:

Signature(s)

Names

Capacity

.....
(Name and address of organization)

Name and
signature of
witness Date.....

FOR THE EMPLOYER:

Signature(s)

Names

Capacity

.....
(Name and address of organization)

Name and
signature of
witness Date.....

C1.2 CONTRACT DATA

1.2.1 Conditions of Contract

The Conditions of Contract for Construction for Building and Engineering Works designed by the Employer ("Red Book") 1999 as published by the International Federation of Consulting Engineers (FIDIC) are applicable to this Contract. Copies of these conditions of contract may be obtained from the South African Institution of Civil Engineering (Tel. 011 - 805 5947) or the South African Association of Consulting Engineers (Tel. 011 - 463 2022).

1.2.2 Appendix to Tender

Part 1: Contract Data Provided By the Employer

The following contract specific data are applicable to this Contract:

Clause / Sub-Clause Number	Item	Data / Wording
1.1.2.2 & 1.3	Employer's name and address	THEEWATERSKLOOF MUNICIPALITY 6 PLEIN STREET CALEDON 7230
1.1.2.4 & 1.3	Engineer's name and address	LUKHOZI CONSULTING ENGINEERS (PTY) LTD UNIT B17, 1st FLOOR CENTURY SQUARE CENTURY CITY 7441
1.1.3.3	Time for Completion	120 days. The time for completion of the works excludes all non-working days as stated in Clause 6.5 of the appendix to tender.
1.1.3.7	Defects Notification Period	365 days
1.3	Electronic Transmission Systems	Not applicable to this Contract
1.4	Governing Law	Republic of South Africa
1.4	Ruling Language	English
1.4	Language for Communications	English
2.1	Time for Access to the Site	Immediately after the Commencement Date, subject to the Contractor's compliance with OHS Act Construction Regulations and Environment Requirements as specified in the relevant Annexures to this Contract
4.2	Amount of Performance Security	10% of the Accepted Contract Amount, in South African Rands

Clause / Sub-Clause Number	Item	Data / Wording
4.8(g)(i)	Submission of Contractor's Health and Safety Plan	Within 14 days of date of Letter of Acceptance
6.5	Normal Working Hours	Any period between sunrise and sunset, except on a Sunday, statutory holidays and the year-end break commencing mid-December and ending early January as published by SAFCEC.
8.7 & 14.15 (b)	Delay damages for the Works	R 7 500 per calendar day or part thereof.
8.7	Maximum amount of delays damages	10 % of the Contract Price
13.5(b)	Percentage for adjustment of Provisional Sums	5%
13.6	Day-work Allowances	The maximum markup allowed for the relevant allowances are as follows: Remuneration of workmen and foremen plus 80%; Materials on site at cost plus 15%; Hiring of construction plant as agreed plus 15% of the total costs.
13.8	Adjustment for charges in cost, Tables of adjustment data	Not applicable.
13.8	Special Materials	As tendered and included in T2.3.5 of the Returnable Documents submitted by the Contractor. Steel pipes and reinforcement, only if required.
14.2	Advance Payment	Not permitted
14.3	Percentage of Retention Money	10%
14.3	Retention Money Guarantee	Not permitted
14.5	Plant and Materials on site	The percentage advance on materials not yet built into the Permanent Works is 100% .
14.15	Currencies of Payment	The South African Rand
14.3	Limit of Retention Money	5% of the Accepted Contract Amount
14.6	Minimum amount of Interim Payment Certificates	1% of the Accepted Contract Amount
18.1	Periods for submission of insurance: (a) Evidence of insurance (b) Relevant policies	Within 14 days of the date of Letter of Acceptance
18.3	Public Liability Insurance Limit of Indemnity	R20 million
20.2	Date by which the DAB shall be appointed.	28 days after Commencement Date
20..2	Composition of DAB	1 sole Member/adjudicator
20.3	Appointment (if not agreed) to be made by	Not applicable

Part 2: Contract Data completed by the Contractor

Sub-Clause	Item	Data
1.1.2.3 & 1.3	Contractor's name and address	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
1.1.3.3	Time for Completion of the Works	<p>.....(days)</p> <p>Not to exceed 120 days</p>

1.2.3 Particular Conditions

The Particular Conditions are:

Clause No	Description
Sub-Clause 1.1	Sub-Clause 1.1 - Definitions
1.1.1.1:	Delete and Replace Sub-Clause 1.1.1.1 with the following: "Contract" means the Form of Offer and Acceptance, Contract Data, these Conditions, the Specifications, the Drawings, the Schedules and the further documents (if any), which are listed in the Form of Offer and Acceptance, and further includes drawings and documents or parts thereof, which any of the aforesaid documents incorporate by reference.
1.1.1.2	Delete and Replace Sub-Clause 1.1.1.2 with the following: "Contract Agreement" means the document titled Form of Offer and Acceptance.
1.1.1.3	Delete and Replace Sub-Clause 1.1.1.3 with the following: "Letter of Acceptance" means that section of the Form of Offer and Acceptance called Acceptance.
1.1.1.4	Delete and Replace Sub-Clause 1.1.1.4 with the following: "Letter of Tender" means that section of the Form of Offer and Acceptance called Offer.
1.1.1.5	Delete and Replace Sub-Clause 1.1.1.5 with the following: "Specification" means that document entitled Scope of Work, as included in the Contract, and any additions and modifications to the Scope of Work in accordance with the Contract. Such document specifies the Works.
1.1.1.7	Delete and Replace Sub-Clause 1.1.1.7 with the following: "Schedules" means the document(s) entitled Tender Schedules, completed by the Contractor and submitted with his tender offer, as included in the Contract. Such document(s) may include the Bill of Quantities, data, lists and schedules of rates and/or prices.
1.1.1.8	Delete and Replace Sub-Clause 1.1.1.8 with the following:

Clause No	Description
	"Tender" means that section of the Form of Offer and Acceptance called Offer and all other documents which the Contractor submitted as Returnable Documents, as included in the Contract.
1.1.1.9	Delete and Replace Sub-Clause 1.1.1.9 with the following: "Appendix to Tender" means the completed section titled Appendix to Tender, included in this Contract Data.
1.1.2.2	Add the following to Sub Clause 1.1.2.2: "Employer" and "Client" shall be used interchangeably and shall be the Theewaterskloof Municipality
1.1.2.11	Add the following new Sub-Clause 1.1.2.11: "SMME" means small, medium and micro enterprises as defined in the Specifications, regarded as a sub contractor in terms of subclause 1.1.2.8 of the FIDIC Conditions of Contract for Construction 1999.
1.1.2.12	Add the following new Sub-Clause 1.1.2.12: "Mediator" means a person named in the Contract, or other person(s) appointed under Sub-Clause 20.2 (Appointment of the Mediator) or Sub-Clause 20.3 (Failure to agree on the Mediator)
1.1.6.9	Add the following to Sub-Clause 1.1.6.9 – Variation: "Work executed in terms of a Supplementary Agreement as defined in Sub-Clause 1.1.6.10 shall not be taken to be a variation under Clause 13, but to be a separate contract with an agreed new Scope of Works."
1.1.6.10	Add the following new Sub-Clause 1.1.6.10 – "Supplementary Agreement" "Supplementary Agreement" means a new contract between the Client and the Contractor for executing work, supplemental to the original Contract, which was not contemplated in the original Contract and is also not required for the proper completion of the original Contract.
Sub-Clause 1.2	Sub-Clause 1.2 – Interpretation Replace 1.2(d) and replace with: "(d) The expressions 'written', 'in writing', 'the giving of notice', 'giving consent', 'as instructed' or 'at the request of' means that hand-written, type-written, or printed communications have been given by one Party to the other so that a permanent record results. However, such notices, instructions, consents or requests are not deemed to have been delivered by virtue of their appearance in the minutes of meetings unless such minutes have been signed as a true record of the proceedings of the meeting. Verbal communications will not be legally binding unless reduced to or confirmed in writing." Add the following sub-sub-clause: "(e) definitions, as contained in the Occupational Health and Safety Act (Act 85 of 1993) and the Construction Regulations, 2014, have been applied to the Contract. These definitions have been applied for consistency but are interchangeable on an ad-hoc basis. In particular, the following definitions are applicable: (i) "Principal Contractor" and "the Principal Contractor" shall mean <u>a Client, as defined in Section 1 of the OHS Act</u> , who performs construction work and is appointed to be in overall control and management of a part or a whole of a construction site and the construction work. (ii) "Client" shall mean any person for whom construction work is performed. (iii) "Contractor" shall mean a client, as defined in Section 1 of the OHS Act, who performs construction work and includes Principal Contractors. (iv) In addition the definitions given above: "Principal Contractor" and "the Principal

Clause No	Description
(vi)	Contractor : Without further qualification, shall have the meaning assigned to “ Contractor ” and “ the Contractor ” in sub clause 1.1.2.3 of the FIDIC Conditions of Contract for Construction 1999.
(vii)	In addition the definitions given above: “ Client ” and “ the Client ”: Without further qualification, shall have the meaning assigned to “ Client ” and “ the Client ” in sub clause 1.1.2.2 of the FIDIC Conditions of Contract for Construction 1999. In addition the definitions given above: “ Contractor ” and “ the Contractor ”: Without further qualification, shall have the meaning assigned to “ Subcontractor ” and “ the Subcontractor ” in sub clause 1.1.2.8 of the FIDIC Conditions of Contract for Construction 1999.
Sub-Clause 1.5	Sub-Clause 1.5 - Priority of Documents Delete and Replace Sub-Clause 1.5 with the following: “The documents forming the Contract are to be taken as mutually explanatory of one another. For the purpose of interpretation, the priority of the documents shall be in accordance with the following sequence: (a) the Form of Offer and Acceptance; (b) the Appendix within the Contract Data; (c) the Particular Conditions within the Contract Data; (d) these General Conditions; (e) the Schedules; (f) the Scope of Work; and (g) the Drawings. If an ambiguity or discrepancy is found in the documents, the Engineer shall issue any necessary clarification or instruction. The onus is on the Contractor to bring any apparent discrepancy to the Engineer.”
Sub-Clause 1.6	Sub-Clause 1.6 – Contract Agreement Delete “ <i>within 28 days after the Contractor receives the Letter of Acceptance</i> ”, in the first line and replace with “on the date of issue of the Letter of Acceptance”.
Sub-Clause 1.8	Sub-Clause 1.8 – Care and Supply of Documents (i) In the second line of the first paragraph, replace “two copies” with “electronic copies on the BIM 360 Docs platform”. (ii) In the third line of the second paragraph, replace “six copies” with “electronic copies on a BIM 360 Docs platform”.
Sub-Clause 1.15	Add the following new Sub-Clause 1.15 Confidentiality: "Sub-Clause 1.15 – Confidentiality The Contractor shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out obligations under it or to comply with applicable Laws. The Contractor shall not publish or permit to be published, or disclose any particulars of the Works in any trade or technical paper or elsewhere without prior agreement of the Employer.”
Sub-Clause 2.3	Employer's Personnel (i) Delete “and the Employer's other Contractors” (ii) Add the following paragraph to this Sub-Clause 2.3: “The Employer shall ensure that the Employer's other Contractors (if any) on the Site are aware of the Principal Contractor's obligations in terms of Sub-Clauses 4.6, 4.8, and 4.18”.
Sub-Clause 2.4	Sub-Clause 2.4 – Client Financial Arrangements Delete this Sub-Clause.

Clause No	Description
Sub-Clause 3.1	<p>Sub-Clause 3.1 – Engineer’s Duties and Authority Add the following at the end of paragraph three: "The Engineer shall obtain the specific approval of the Client for the execution of the following functions or duties: (a) The issuing of a Supplementary Agreement in terms of Sub-Clause 1.1.6.10 (b) The award of claims in respect of extensions of time Sub-Clause 8.4 (c) The issuing of Variation Orders, in terms of Sub-Clause 13.3. (d) The award of claims in respect of additional costs.</p>
Sub-Clause 3.3	<p>Sub-Clause 3.3 – Instructions of The Engineer Add to the following paragraph to Sub-Clause 3.3: "Where the Engineer issues a written instruction that determines a reasonable date for the performance of a contractual obligation in terms of the Contract, and where the Principal Contractor fails to demonstrate compliance with the instruction, the following penalties will be imposed:</p> <ul style="list-style-type: none"> • If compliance is outstanding on the fifth day after the due date, an amount of R 5 000.00 is to be deducted from any amounts due to the Principal Contractor at the next payment date. • If compliance remains outstanding there-after, a penalty amount equal to double the previous amount is to be imposed for every five days that elapse. • The maximum penalty deduction for any outstanding instruction shall be R 150 000.00 and a suspension of the Works for 48 hours. <p>The imposition of a penalty for non-compliance shall not prejudice the rights of the Employer to other remedies, or relieve either party of any rights or obligations they may have in terms of the Contract."</p>
Sub-Clause 3.5	<p>Sub-Clause 3.5 – Determinations Delete the second paragraph and replace with: "The Engineer shall obtain the Employer’s specific approval to give notice to both Parties of each agreement and determination, with supporting particulars. Each party shall give effect to each agreement and determination unless and until revised under Clause 20 [Claims, Disputes and Arbitration]"</p>
Sub-Clause 4.2	<p>Sub-Clause 4.2 – Performance Security Replace paragraph two with the following: "The Contractor shall deliver the Performance Security to the Employer within 14 days of the date of issue of the Letter of Acceptance, with a copy to the Engineer. The Performance Security shall be issued by a Bank or Insurance Company registered or licensed to do business in the Republic of South Africa and having an Office or Banking Facility in the Republic of South Africa and shall be subject to approval by the Employer and shall be in the form prescribed in the project documents or in another form approved by the Client." Add the following to the end of Sub-Clause 4.2: "The above shall apply in respect of portions of work carried out by SMME’s, except that the Contractor shall assume the role of Employer in respect of requiring a Performance Security from the respective SMME’s. The conditions of reduction and return of the Performance Guarantee shall apply as detailed on Pro-Forma 1.3."</p>

Clause No	Description
Sub-Clause 4.8	<p>Sub-Clause 4.8 – Safety Procedures Add the following to the end of Sub-Clause 4.8(e): The Contractor and his designer shall accept full responsibility and liability for compliance with the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and the Construction Regulations, 2014, for the design of the Temporary Works (sub-clause 6,2 & 12,1) and those parts of the Permanent Works for which the Contractor is responsible to design.” For the purposes of this contract, a “competent person” in terms of sub-clause 1 (a) of the Construction Regulations shall be a person who is registered as a PrEng, PrTech Eng or PrTechni Eng with the Engineering Council of South Africa and who has the relevant training and experience to be able to design the component part of the permanent or temporary works as applicable.</p>
	<p>For the purposes of this Contract, “Temporary Works” as defined in the Construction Regulations shall include the following component parts;</p> <ol style="list-style-type: none"> 1. All Site Camp Structures 2. Hoarding and Barricading 3. Demolition Works (including blasting) 4. Securing excavations from the risk of collapse (shoring and other measures) 5. Motorised and non-motorised traffic accommodation 6. Permanent and temporary services relocations and bypasses (pipelines) 7. Staging, scaffolding and formwork 8. Tie ins to existing pipelines 9. Search for, expose, protect and backfill existing services 10. Dealing with ground and waste water 11. Contamination of ground water and the environment 12. Exposure to hazardous gases <p>The Contractor shall provide the following to the Engineer for retention by the Employer or his assignee in respect of all works designed by the Contractor:</p> <ol style="list-style-type: none"> 1. A Certificate of Stability of the Works signed by a registered Professional Engineer/ Technologist/Technician in the field of expertise appropriate to the nature of project element under consideration and confirming that all such works have been designed in terms of accordance with the appropriate codes of practice. 2. Design calculations should the Employer’s Agent request a copy thereof. 3. Engineering drawings and workshop details (both signed by the relevant professional), in order to allow the Engineer to compare the design with the specified requirements and to record any comments he may have with respect thereto. 4. As-Built” drawings in AutoCAD electronic format after completion of the Works. Notwithstanding the list of temporary works envisaged on this project, the Contractor shall be responsible for the design of All Temporary Works (including any temporary works required by the SMMEs (under the SMME packages) or any sub-contractors). <p>Should the Contractor propose any design, supply and installation for any part of the permanent works, 1 to 4 above shall also apply</p>

Clause No	Description
Sub- Clause 4.8	<p>Sub-Clause 4.8 – Safety Procedures Add the following to the end of Sub-Clause 4.8:</p> <p>"(f) The Client and the Contractor hereby agree, in terms of the provisions of Section 37(2) of the Occupational Health and Safety Amendment Act, 1993 (Act 85 of 1993), hereinafter referred to as the Act, that the following arrangements and procedures shall apply between them to ensure compliance by the Contractor with the provisions of the Act:</p> <p>(i) The "Principal" Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all relevant provisions of the Act and the Regulations promulgated in terms of the Act.</p> <p>(ii) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of the Act and Regulations on the Contractor will be fully complied with.</p> <p>(iii) The Contractor accepts sole liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and Regulations and expressly absolves the Client from himself being obliged to comply with any of the aforesaid duties, obligations and prohibitions, with the exception of such duties, obligations and prohibitions expressly assigned to the Client in terms of the Act and its associated Regulations.</p> <p>(iv) The Contractor agrees that any duly authorised officials of the Client shall be entitled, although not obliged, to take such steps as may be necessary to monitor that the Contractor has conformed to his undertakings as described in paragraphs (i) and (ii) above, which steps may include, but will not be limited to, the right to inspect any appropriate site or premises occupied by the Contractor, or any appropriate records or safety plans held by the Contractor.</p> <p>(v) The Contractor shall be obliged to report forthwith to the Client and Engineer any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and Regulations, pursuant to work performed in terms of this Contract, and shall, on written demand, provide full details in writing, to the Client and Engineer, of such investigation, complaint or criminal charge.</p>

Clause No	Description
	<p>Sub-Clause 4.8 – Safety Procedures</p> <p>(g) The Contractor shall furthermore, in compliance with Constructional Regulations 2014 to the Act:</p> <p>(i) Acquaint himself with the requirements of the Client's health and safety specification as laid down in regulation 5(1) of the Construction Regulation 2014, and prepare a suitably and sufficiently documented health and safety plan as contemplated in regulation 7(1) of the Construction Regulation 2014 for approval by the Client or his assigned agent. The Contractor's health and safety plan and risk assessment shall be submitted to the Client for approval within the time as stated in the Contract Data - Appendix to Tender and shall be implemented and maintained from the Commencement of the Works.</p> <p>(ii) The Client, or his assigned agent, reserves the right to conduct periodic audits, as contemplated in the Construction Regulations 2014, to ensure that the Contractor is compliant in respect of his obligations. Failure by the Contractor to comply with the requirements of these Regulations shall entitle the Engineer, at the request of the Client or his agent, to suspend all or any part of the Works, with no recourse whatsoever by the Contractor for any damages incurred as a result of such suspension, until such time that the Client or his agents are satisfied that the issues in which the Contractor has been in default have been rectified."</p>
Sub-Clause 4.15	<p>Sub-Clause 4.15– Access Route Add the following after the last paragraph: "The Contractor shall be re-imbursed for the cost of maintenance only to the extent as specified in the Specifications".</p>
Sub-Clause 4.18	<p>Sub-Clause 4.18 – Protection of the Environment In the second paragraph delete the full stop and add "and shall ensure compliance with all the environmental requirements indicated in the Environmental Specifications contained in the Scope of Works and relevant Annexures to the Contract. Environmental method statements shall be submitted to the Engineer for approval 14 days before the Contractor intends to commence with an activity requiring an Environmental Method Statement. The Contractor will not be permitted to commence construction works until such time that these method statements have been submitted and approved by the Engineer".</p>
Sub-Clause 4.19	<p>Sub-Clause 4.19 – Electricity, Water and Gas Delete "except as stated below" in the first line of paragraph one. Delete the second and third paragraphs.</p>
Sub-Clause 4.25	<p>Add new Sub-Clause 4.25 – Attendance on Nominated and / or Other Contractors "Sub-Clause 4.25 – Attendance on Nominated and / or Other Contractors The Principal Contractor shall provide General Attendance on nominated Contractors and other direct Contractors appointed by the Client including the Principal Contractor's domestic Contractors to carry out work on or adjacent to the site during the construction period. General Attendance shall, without in any way limiting the meaning and interpretation thereof, include the following services to be rendered by the Principal Contractor:</p> <ol style="list-style-type: none"> 1) Access to the site and to places where the work is to be carried out. 2) The provision of an area for office accommodation, temporary workshops and for the storage of plant and materials.

Clause No	Description
	<p>3) The use of the site temporary services such as telephone, water and power, subject to the payment by the Contractor or Direct Contractor for all his usage and his specific reticulation.</p> <p>4) Co-ordination of the work of the Contractor including the Principal Contractor's domestic Contractors or Direct Contractor within the programme, including any intermittent work required by the Principal Contractor to allow the Contractor or Direct Contractor access to carry out his work.</p> <p>Special attendance, such as unloading, storing, hoisting, placing in position, providing special power supplies, specific scaffolding requirements, provision of temporary casing and/or other specific protection of the works, special security and removal of rubbish will be detailed separately in each case where required."</p>
Sub-Clause 5.4	<p>Sub-Clause 5.4 – Evidence of Payments</p> <p><i>Add the following new paragraph:</i></p> <p>"Before issuing a Payment Certificate which includes an amount payable to a Small, Medium and Micro Enterprise (SMME) that is contracted to the Principal Contractor in a Domestic Contractor Relationship, the Engineer may request the Principal Contractor to supply evidence that such SMME has received all amounts due in accordance with previous payment certificates."</p>
Sub-Clause 6.5	<p>Sub-Clause 6.5 – Working Hours</p> <p><i>Delete the first sentence and replace with the following:</i></p> <p>"No work shall be carried out on site on Sundays or on any special non-working day stated in the Appendix to Tender or between sunset and sunrise on any day, unless:"</p>
Sub-Clause 6.7	<p>Sub-Clause 6.7 – Health and Safety</p> <p><i>Delete the first paragraph and replace with following:</i></p> <p>"The Contractor shall provide and maintain on the site adequate and suitable sanitary and first aid services (including the provision of access at all times of a person qualified to render medical first aid) and a supply of potable water for his personnel engaged on the Contract and, if necessary, similar facilities elsewhere for such personnel off the site."</p> <p><i>Add the following new paragraph:</i></p> <p>"The Contractor shall comply with the inspections and requirements of the Client's Safety Health and Environment (SHE) Officer on the Site."</p>
Sub-Clause 6.11	<p>Sub-Clause 6.11 – Disorderly Conduct</p> <p><i>Delete the full stop and add the following:</i></p> <p>"and shall indemnify and hold the Client and Engineer harmless against and from all damage, losses and expenses (including legal fees and expenses) resulting from any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel".</p>
Sub-Clause 8.1	<p>Sub-Clause 8.1 – Commencement of Work</p> <p>(i) <i>Replace paragraph one with</i> "The Commencement of Works shall be the lesser of: 28 days after the receipt by the Client of the Contractor's health and safety plan or 42 days after the date of delivery of the Letter of Acceptance."</p>

Clause No	Description
Sub-Clause 8.3	<p>Sub-Clause 8.3 – Programme Add the following after Sub-Clause 8.3(d) (ii):</p> <p>“(e) A baseline or target bar representing the initial agreed construction programme. The baseline will be frozen for the duration of the construction period, subject to agreed amendments, and will indicate the contractual completion date.</p> <p>(f) A current bar equivalent to the baseline upon commencement, but which will be subject to adjustment due to progress and other factors.</p> <p>(g) All milestone activities for all major events in the programme, including dependencies on factors external to the project, or which are to be arranged by the Engineer or Client.</p> <p>(h) All linkages between activities, to fairly represent the logic of construction. Start dates of activities should be determined by preceding activities as far as possible. Where start dates are determined by factors external to the project these are to be shown as milestones with imposed start dates and the source and reasons are to be documented.</p> <p>(i) Resourcing of major activities and equipment, where resourcing is critical to the duration.</p> <p>(j) A logical and reasonable Work Breakdown Structure for the grouping of activities.</p> <p>(k) The critical path of the programme. The critical path must be demonstrable in terms of good planning practice, and is not to be manipulated by constraints imposed on activities.</p> <p>(l) An earned value table and graph, derived from the programme, representing the projected value of work to be completed in each payment period”.</p> <p>(m) Production rates for all items.</p> <p>(n) In addition, the Contractor will be required to compile a Contract Risk Register which must be submitted together with the programme and cashflow for approval by the Engineer. The Contract Risk Register will be used as a management tool to monitor, measure, analyse, evaluate and review all project related risks. The Contract Risk Register will also act as an early warning for potential delays and disputes. The Contractor will be responsible for maintaining the Contract Risk Register the duration of the contract. The Contract Risk Register must be presented by the Contractor at each Site Progress Meeting, and updated monthly and when events arise which significantly impact the risk profile of the Contract. No additional payment will be made for this requirement and any costs that the Contractor deems fit must be included in the preliminary and general items of the Bills of Quantities”</p> <p>Any other information as specified in the document to be provided by the Contractor.”</p>
Sub-Clause 8.4	<p>Sub-Clause 8.4 – Extension of Time Add the following to Sub-Clause 8.4:</p> <p>“The Time for Completion shall include for delays which can be expected due to normal weather conditions (wind and rainfall) at the site of the Works for the duration of the Contract.</p> <p>To provide for these normal weather conditions the allowance to be made by the Contractor in his programme for actual and consequential weather delays is given in C3.4.12.9 of the specifications.</p> <p>If the Contractor has been prevented by these weather conditions from working on the critical path items of the Works, he shall notify the Engineer in writing. The submission shall be made within two calendar days of the resumption of work.</p>

Clause No	Description
	<p>The Engineer shall upon considering all the relevant factors determine the extension of time to be granted on the basis that an extension of time to the Contract will only be granted if the total number of days (over the full contract period) upon which work on the critical path items was prevented, exceeds the total number of days calculated in terms of the above allowance and considering the Time for Completion of the Works.</p> <p>Delays over and above these allowed for (the allowance being the sum of the days allowed for over the Time for Completion of the phase in question), whether actual or consequential due to such abnormal weather which may occur, will not automatically entitle the Contractor to an extension of time for the completion of the affected phase/s.</p> <p>Only under justifiable circumstances will such extension of time be granted. Such extension will be granted at the discretion of the Engineer who shall obtain the approval of the Client.</p> <p>Application for such extension of time shall be made in writing by the Contractor to the Engineer. The application shall set out in detail the particulars of such delays".</p>
Sub-Clause 8.7	<p>Sub-Clause 8.7 – Delay Damages After the second paragraph add the following new paragraph: "If a Taking Over Certificate has been issued for a part of the Works (other than a Section), the delay damages thereafter for completion of the remainder of the Works shall be reduced in accordance with the provisions of Sub-Clause 10.2".</p>
Sub-Clause 12.3	<p>Sub-Clause 12.3 – Evaluation Replace Sub-Clause 12.3(a)(i): "(a) (i) the measured quantity of the item is changed by more than 30% from the quantity of this item in the bill of quantities or other schedule" Replace Sub-Clause 12.3(a)(ii): "(a) (ii) this change in quantity multiplied by such specified rate for this item exceeds 5% of the Accepted Contract Amount."</p>
Sub-Clause 13.1	<p>Sub-Clause 13.1 – Right to Vary Replace the first line of the third paragraph with the following: "Each variation will include": <i>In Sub-Clause 13.1(a) delete the words in parenthesis and replace with "No change in the quantity of any work scheduled, where such change is not the result of a Variation Order in terms of this Sub-Clause but is the result of changes to the quantities stated in the Bill of Quantities, shall be deemed to be a Variation to which this Sub-Clause applies."</i> Add the following after Sub-Clause 13.1(f): "(g) an estimated cost for the variation".</p>
Sub-Clause 13.3	<p>Sub-Clause 13.3 – Variation Procedure Delete "as soon as practicable" in the first paragraph and replace with "within a period of 14 days or such extended time as agreed by the Parties".</p>
Sub-Clause 13.5	<p>Sub-Clause 13.5 – Provisional Sums Amend 13.5 (b) as follows, In the third line, delete the semi-colon between the words "otherwise" and "and" and insert "and including items for which a Prime Cost Sum has been provided in the Bill of Quantities".</p>

Clause No	Description
Sub-Clause 13.6	<p>Sub-Clause 13.6 – Day work</p> <p>Delete the second and third sentences in the first paragraph and replace with:</p> <p>“The following procedure shall apply”</p> <p>Add the following after the last paragraph of this Sub-Clause:</p> <p>“The work shall be valued in accordance with the Day work Schedule included in the Contract or, in the absence of a Day work Schedule or for items not included in the Day work Schedule the Contractor shall be paid the aggregate of</p> <ul style="list-style-type: none"> (i) the gross remuneration of the workmen and any of the foremen for the time they are actually engaged on the work concerned, (ii) the net cost of the materials actually used, (iii) the percentage allowances stated in the Appendix, which allowance shall be held to cover all charges for the Contractor's and Subcontractor's profits, timekeeping, clerical work, insurance, establishment, superintendence and the use of hand tools, and (iv) an amount in respect of Constructional Plant which shall be charged on a time basis at the rates stated in the Tender, failing which at rates to be agreed between the Contractor and the Engineer or, failing agreement, to be determined by the Engineer on the basis of ruling plant hire rates.
Sub-Clause 13.8	<p>Sub-Clause 13.8 – Adjustment for Change of Costs</p> <p>Delete this Sub-Clause and replace with the following:</p> <p>“The value of certificates issued in terms of Sub-Clause 14.6 (excluding the value of those special materials specified in the Forms to be Completed by Tenderers) shall be) fixed.</p> <ul style="list-style-type: none"> (1) The price of each “special material” specified in the Appendix to Tender shall be increased or decreased by the net amount of any variation incurred after the date of the tender on the basis set out in the Contract, provided that any claim for adjustment in terms hereof shall be substantiated by the submission of acceptable invoices and any other supporting documents which the Engineer considers necessary for that purpose, and provided also that no further adjustment be permitted to the price of any “special material” after the Time for Completion has expired unless such material forms part of any additional work or variation ordered to be carried out after that date. (2) For the purpose of Sub-Clause (1), “the net amount of any variation” in respect of a particular material referred to as a “special material” in terms of Sub-Clause 13.8 shall be calculated by multiplying the difference between the rate or price entered in the Contract by the Contractor for that material and the equivalent rate or price actually paid by the Contractor for the material by the quantity of the material in question.”.
Sub-Clause 14.3	<p>Sub-Clause 14.3 – Application for Interim Payment Certificates</p> <ul style="list-style-type: none"> (i) In the first line of the first paragraph delete “in six copies” with “ electronic copies on the BIM 360 Docs platform ” (ii) In the fourth and fifth lines of the first paragraph delete “which shall include the report on the progress during the month in accordance with Sub-Clause 4.21 (Progress Reports)”

Clause No	Description
Sub-Clause 14.7	Sub-Clause 14.7 – Payment <i>Delete paragraphs (a), (b), (c) and the final paragraph and replace with:</i> “(a) the amount certified in each interim Payment Certificate within 30 days from the date the Engineer certifies the Statement and supporting documents; and (b) The amount certified in the Final Payment Certificate within 30 days after the Employer receives this Payment Certificate.”
Sub-Clause 14.8	Sub-Clause 14.8 – Delayed Payment <i>Delete the second paragraph and replace with:</i> “These financing charges shall be at the rate as prescribed in terms of the Prescribed Rate of Interest Act No 55 of 1975.”
Sub-Clause 14.10	Sub-Clause 14.10 – Statement at Completion <i>In the first line of the first paragraph change “84 days” to “30 days” and in the second line of the first paragraph delete “six copies of” with “a single copy”.</i>
Sub-Clause 14.11	Sub-Clause 14.11 – Application for Final Payment Certificate <i>Change “56 days” to “30 days” and in the first paragraph delete “six copies of” with “a single copy”.</i>
Sub-Clause 17.3	Sub-Clause 17.3 – Employer’s Risk <i>Under (c), add the following:</i> “unless these risks are insurable with the South African Special Risk Insurance Association at the time of tendering and it is stipulated in the Appendix to Tender that the Contractor is to effect insurance against these risks”.
Sub-Clause 18.3	Sub-Clause 18.3 – Insurance Against Injury to Persons and Damage to Property <i>Amend the second paragraph as follows:</i> (i) <i>In the first line, after the work “amount”, insert “(if any)”</i> (ii) <i>Delete the last sentence.</i>
Sub-Clause 18.4	Sub-Clause 18.4 – Insurance for Contractor’s Personnel <i>Add the following paragraph:</i> “The Contractor shall provide proof that he has paid all contributions required in terms of the Compensation for Occupational Injuries and Diseases Act (Act No 130 of 1993)”.
Sub-Clause 19.5	Sub-Clause 19.5 – Force Majeure Affecting Subcontractors <i>Amend this Sub-Clause as follows:</i> (i) <i>Amend the title to read “19.5 Force Majeure Affecting Subcontractors and Suppliers”</i> (ii) <i>Add the following paragraph:</i> “In the event that a Contractor is prevented from performing any of his obligations under the Contract as a result of Force Majeure which prevented a Supplier from meeting its obligations to supply the Contractor or his Subcontractors the Contractor shall not be entitled to any relief under this Clause.”
Sub-Clause 20.1	Sub-Clause 20.1 – Contractor’s Claims (i) <i>In the fifth line of the first paragraph change “28 days” to “14 days”.</i> (ii) <i>In the first line of the second paragraph change “28 days” to “14 days”.</i> (iii) <i>Delete the ninth paragraph (beginning with “Within 42 days....”) and replace with the following:</i> “Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Engineer and approved by the Contractor, the Engineer shall obtain the

Clause No	Description
	Employer's specific approval and respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within such time."
Sub-Clause 20.2	<p>Replace Sub-Clause 20.2 heading with: "Sub-Clause 20.2 Appointment of Mediator" Delete the entire Sub-Clause 20.2 and substitute with the following: "Disputes shall be mediated by a Mediator in accordance with Sub-Clause 20.4 (Obtaining the Mediator's Opinion). The Parties shall jointly appoint a Mediator to resolve any dispute. If the Parties do not agree otherwise, the Mediator shall comprise of three persons. Where the dispute is submitted to Mediation, the following shall apply:</p> <p>20.2.1 The Parties shall agree on and appoint the Mediator within ten (10) working days of the date on which the dispute was declared. Whether or not the mediation resolves the dispute, the Parties shall bear their own costs concerning the mediation and share the costs of the Mediator and related cost equally.</p> <p>20.2.2 The Mediator shall agree the procedures, representation and dates for the mediation process with the Parties. The Mediator may meet the Parties together or individually to help reach a settlement.</p> <p>20.2.3 Where the Parties reach settlement of the dispute or any part thereof, the Mediator shall record such agreement and on signing thereof by the Parties, the agreement shall be final and binding."</p>
Sub-Clause 20.3	<p>Replace Sub-Clause 20.3 heading with: "Sub-Clause 20.3 Failure to Agree on the Mediator" Delete the entire Sub-Clause 20.3 and substitute with the following: "Should the Parties fail to agree on the appointment of the Mediator, the Chairman of the Association of Arbitrators (Southern Africa) shall appoint the Mediator on request of any of the Parties."</p>
Sub-Clause 20.4	<p>Replace Sub-Clause 20.4 heading with: "Sub-Clause 20.4 Obtaining the Mediator's Opinion" Amend Sub-Clause 20.4 as follows: <i>"In the first paragraph, 4th line, replace reference to "DAB for its decision" to read "Mediator for its opinion".</i> <i>Delete the second paragraph and replace with "For a 1 person mediation tribunal, the Mediator shall be deemed to have received such reference on the date when it is received by the chairman of the mediation tribunal.</i> <i>Amend the third paragraph, first and second sentences by replacing the references to "DAB" with references to "Mediator" and first sentence reference to "decision" to read "opinion".</i> <i>Amend the fourth paragraph, first sentence by replacing the references to "DAB" with references to "Mediator" and first and second sentence references to "decision" to read "opinion".</i> <i>Amend the fifth paragraph, first and second sentences by replacing the references to "DAB's" with a references to "Mediator's" and references to "decision" to read "opinion" and in the second sentence by replacing the reference to "DAB" with reference to "Mediator".</i></p>

Clause No	Description
	<i>Amend the sixth paragraph, second sentence by replacing the reference to "Dispute Adjudication Board's Decision" with the reference to "Mediator's Opinion" and reference to "Dispute Adjudication Board's" with the reference to "Mediator's". Amend the seventh paragraph, first sentence by replacing the references to "DAB" with references to "Mediator" and references to "decision" to read "opinion".</i>
Sub-Clause 20.6	<p>Amend Sub-Clause 20.6 as follows:</p> <p><i>In the first paragraph, first sentence, replace the reference to "DAB's" to read "Mediator's".</i></p> <p><i>Amend the second paragraph second sentence by replacing the reference to "DAB" with reference to "Mediator".</i></p> <p><i>Amend the third paragraph, first and second sentences, by replacing the references to "DAB" with references to "Mediator" and references to "decision" with references to "opinion".</i></p> <p><i>Amend the fourth paragraph, second sentence by replacing the reference to "DAB" with reference to "Mediator".</i></p>
Sub-Clause 20.7	<p>Replace Sub-Clause 20.7 heading with:</p> <p>"Sub-Clause 20.7 Failure to Comply with the Mediator's Opinion"</p> <p>Amend Sub-Clause 20.7 as follows:</p> <p><i>Amend the first paragraph (a) sentence by replacing the reference to "Dispute Adjudication Board's" with the reference to "Mediator's".</i></p> <p><i>Amend the first paragraph (b) sentence by replacing the reference to "DAB's" with reference to "Mediator's".</i></p> <p><i>Amend the second paragraph by replacing the reference to "Dispute Adjudication Board's" with the reference to "Mediator's".</i></p>
Sub-Clause 20.8	<p>Sub-Clause 2.8 – Expiry of Dispute Adjudication Board's Appointment</p> <p>Delete this Sub-Clause.</p>

C1.3 PERFORMANCE SECURITY (DEMAND GUARANTEE) (PRO FORMA)

Brief description of Contract

UPGRADING OF GRABOUW BULK WATER SERVICES PHASE 5.1: MECHANICAL AND ELECTRICAL SERVICES UPGRADES

Name and address of Beneficiary, Theewaterskloof Municipality, 6 Plein Street, Caledon, 7230

(whom the Contract defines as the Client).

We have been informed that (hereinafter called the "Principal") is your contractor under such Contract, which requires him to obtain a performance security.

At the request of the Principal, we (*name of bank*) hereby irrevocably undertake to pay you, the Beneficiary/Client, any sum or sums not exceeding in total the amount of (the "guaranteed amount", say:) upon receipt by us of your demand in writing and your written statement stating:

- (a) that the Principal is in breach of his obligation(s) under the Contract, and
- (b) the respect in which the Principal is in breach.

Following the receipt by us of an authenticated copy of the taking-over certificate for the whole of the works under clause 10 of the Main Contract, such guaranteed amount shall be reduced to 25% of the above guaranteed amount and we shall promptly notify you that we have received such certificate and have reduced the guaranteed amount accordingly.

Any demand for payment must contain your directors' signature(s) which must be authenticated by your bankers or by a notary public. The authenticated demand and statement must be received by us at this office on or before (*the date 70 days after the expected expiry of the Defects Notification Period for the Works*)..... (The "expiry date"), when this guarantee shall expire and shall be returned to us.

We have been informed that the Beneficiary may require the Principal to extend this guarantee if the performance certificate under the Contract has not been issued by the date 28 days prior to such expiry date. We undertake to pay you such guaranteed amount upon receipt by us, within such period of 28 days, of your demand in writing and your written statement that the performance certificate has not been issued, for reasons attributable to the Principal, and that this guarantee has not been extended.

This guarantee shall be governed by the laws of South Africa.

Date Signature(s)

C1.4 AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT (NO. 85 OF 1993)

HIS AGREEMENT made at

on this the day of in the year

between

(hereinafter called "the Client") of the one part, herein represented by

in his capacity as

and

(hereinafter called "the Mandatary") of the other part, herein represented by

.....

in his capacity as

WHEREAS the Client is desirous that certain works be constructed, viz **(UPGRADING OF GRABOUW BULK WATER SERVICES PHASE 5.1: MECHANICAL AND ELECTRICAL UPGRADES)** and has accepted a Tender by the Mandatary for the construction, completion and maintenance of such Works and whereas the Client and the Mandatary have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Mandatary with the provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993);

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. The Mandatary shall execute the work in accordance with the Contract Documents pertaining to this Contract.
2. This Agreement shall hold good from its Commencement Date, which shall be the date of a written notice from the Client or Engineer requiring him to commence the execution of the Works, to either
 - (a) the date of the Performance Certificate issued in terms of Sub-Clause 11.9 of the Conditions of Contract (FIDIC 1999), as contained in Contract Data of the Contract Documents pertaining to this Contract, or
 - (b) the date of termination of the Contract in terms of Clauses 15, 16 or 17 of the Conditions of Contract (FIDIC 1999).
3. The Mandatary declares himself to be conversant with the following:
 - (a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of The Act:

- (i) Section 8 : General duties of Clients to their employees;
 - (ii) Section 9 : General duties of Clients and self-employed persons to persons other than employees;
 - (iii) Section 37 : Acts or omissions by employees or mandatories, and
 - (iv) Sub-section 37(2) relating to the purpose and meaning of this Agreement.
- (b) The procedures and safety rules of the Client as pertaining to the Mandatary and to all his subcontractors.
4. In addition to the requirements of Sub-Clause 17.1 of the Conditions of Contract (FIDIC 1999) (as amended by Particular Conditions of Contract contained in the Contract Data of the Contract Documents pertaining to this Contract) and all relevant requirements of the above-mentioned documents, the Mandatary agrees to execute all the Works forming part of this Contract and to operate and utilise all machinery, plant and equipment in accordance with the Act.
5. The Mandatary is responsible for the compliance with the Act by all his subcontractors, whether or not selected and/or approved by the Client.
6. The Mandatary warrants that all his and his subcontractors' workmen are covered in terms of the Compensation for Occupational Injuries and Diseases Act, 1993 which cover shall remain in force whilst any such workmen are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Client upon signature of the agreement.
7. The Mandatary undertakes to ensure that he and/or subcontractors and/or their respective Clients will at all times comply with the following conditions:
- (a) The Mandatary shall assume the responsibility in terms of Section 16.1 of the Occupational Health and Safety Act. The Mandatary shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Client. If the Mandatary obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Client.
 - (b) All incidents referred to in the Occupational Health and Safety Act shall be reported by the Mandatary to the Department of Labour as well as to the Client. The Client will further be provided with copies of all written documentation relating to any incident.
 - (c) The Client hereby obtains an interest in the issue of any formal inquiry conducted in terms of section 32 of the Occupational Health and Safety Act into any incident involving the Mandatary and/or his employees and/or his subcontractors.

In witness thereof the parties hereto have set their signatures hereon in the presence of the subscribing witnesses:

SIGNED FOR AND ON BEHALF OF THE CLIENT:

WITNESS 1 2

NAME 1 2
(IN CAPITALS)SIGNED FOR AND ON BEHALF OF THE MANDATARY:

WITNESS 1 2

NAME 1 2
(IN CAPITALS)

C1.5 CERTIFICATE OF AUTHORITY FOR SIGNATORY TO AGREEMENT IN TERMS OF OHS (ACT 85 OF 1993)

The signatory for the company that is the Contractor in terms of the above-mentioned Contract and the Mandatary in terms of the above-mentioned Act shall confirm his or her authority thereto by attaching to this page a duly signed and dated copy of the relevant resolution of the Board of Directors.

An example is given below:

"By resolution of the Board of Directors passed at a meeting held on 20.....,

Mr/Ms whose signature

appears below, has been duly authorised to sign the AGREEMENT in terms of THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT 85 of 1993) on behalf of

.....

SIGNED ON BEHALF OF THE COMPANY :

IN HIS/HER CAPACITY AS :

DATE :

SIGNATURE OF SIGNATORY :

WITNESS: 1. 2.

NAME (in capitals): 1. 2. "

**C1.6 ACKNOWLEDGEMENT OF PROCEDURES AND GUIDES OF
WORKING IN THE VICINITY OF ELECTRICAL SERVICES**Acknowledgement

Receipt and Understanding
of Work Permit system Procedures
Affecting Existing Electrical Services

I / We acknowledge that I am / We are fully acquainted with the contents of this procedure document and accept them in all respects.

Name of Consultant: _____

Name of Contractor: _____

Discipline: _____

Responsible Person (Name Print): _____

Signature of Responsible Person
(Contractor)

Date

C2 PRICING DATA

C2.1 Pricing Instructions

C2.2 Bill of Quantities

C2.3 Summary of Bill of Quantities

C2.1 PRICING INSTRUCTIONS**C2.1.1 PREAMBLE TO THE BILL OF QUANTITIES**

- C2.1.1.1 The method of measurement published by the South African Bureau of Standards in Clause 8 of the Standardised Specifications for Civil Engineering Construction is applicable, subject to the variations and amendments contained in the section "Applicable SABS 1200 standardised specifications".
- C2.1.1.2 Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised Specification, or the Scope of Work, conflict with the terms of the Bill, the requirements of the Standardised or Scope of Work, as applicable, shall prevail.
- C2.1.1.3 A payment reference column is provided in the Bill of Quantities to assist the Tenderer when pricing this tender. Certain items may not have a payment reference and the onus is on the Tenderer to refer to the relevant specifications as stated above to ensure that the item is priced correctly. If in doubt the Tenderer shall preferably seek clarification or else qualify any assumptions made.
- C2.1.1.4 The clauses in a specification in which further information regarding the bill item can be obtained appear under "Payment" column in the Schedule. The reference clauses indicated are not necessarily the only sources of information in respect of bill items. Further information and specifications may be found elsewhere in the Contract documents. Standardised Specifications are identified by the letter or letters which follow SABS in the SABS 1200 series of specifications, e.g. G for SABS 1200 G.
- C2.1.1.5 Unless otherwise stated, items are measured nett in accordance with the drawings, and no allowance is made for waste.
- C2.1.1.6 The quantities set out in the Bill of Quantities are the estimated quantities of the Contract Works, but the Contractor will be required to undertake whatever quantities may be directed by the Employer's Agent from time to time. The Contract Price for the completed Contract shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.
- C2.1.1.7 Where Provisional sums or Prime Cost sums are provided for items in the Bill of Quantities, payment for the work done under such items will be made in accordance with Clause 13.5 of the Conditions of Contract for Construction (FIDIC 1999). The Employer reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

- C2.1.1.8 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 authorised in writing by the Employer before closure of tenders. Any unauthorised 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.
- C2.1.1.9 The Bills of Quantities must be completed by the insertion of rates / prices in accordance with the instruction described in the items above. As this Contract is a re-measurable Contract and not a Lump Sum Contract, a blank bill of quantities with only a lump sum amount will not be accepted.
- C2.1.1.10 The Bills of Quantities must be completed by the insertion of rates / prices in accordance with the instruction described in the items above. As this Contract is a re-measurable Contract and not a Lump Sum Contract, a blank bill of quantities with only a lump sum amount will not be accepted.
- C2.1.1.11 The prices and rates to be inserted in the Bill of Quantities are to be the full inclusive prices for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the tender is based, as well as overhead charges and profit. Reasonable prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.
- C2.1.1.12 Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered such items.
- C2.1.1.13 A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price is entered or where a word or phrase such as "included" or "provided elsewhere" will be accepted as a rate of nil (R0,00) having been entered against such items and covered by the other prices or rates in the Schedule. Any work executed to which such a pay item applies, shall be measured under the appropriate items in the Bill of Quantities and valued at a rate of nil (R0,00). The rate of nil shall be valid irrespective of any change in the quantities during the execution of the Contract.
- C2.1.1.14 Except where rates only are required, the Tenderer shall insert all amounts to be included in his total tendered price in the "Amount" column and show the corresponding total tendered price.
- C2.1.1.15 All prices or rates inserted in the Bill of Quantities shall EXCLUDE VAT. Provision has been made on the Summary Page, of the Bill of Quantities, for the addition of VAT.
- C2.1.1.16 Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry, and the alteration must be initialled by the tenderer.

C2.1.1.16 Arithmetical errors of responsive tenders will be corrected in terms of the Standard Conditions of Tender.

C2.1.1.17 The units of measurement described in the Schedule/Bill of Quantities are metric units. Abbreviations used in the Schedule/Bill of Quantities are as follows:

mm	=	millimetre	h	=	hour
m	=	metre	kg	=	kilogram
km	=	kilometre	t	=	ton (1 000 kg)
m ²	=	square metre	No.	=	number
m ² .pass	=	square metre-pass	sum	=	lump sum
ha	=	hectare	MN	=	MegaNewton
m ³	=	cubic metre	MN.m	=	MegaNewton-metre
m ³ .km	=	cubic metre-kilometre	P C sum	=	Prime Cost sum
ℓ	=	litre	Prov sum	=	Provisional sum
kℓ	=	kilolitre	%	=	per cent
MPa	=	Mega Pascal	kW	=	kilowatt

I HEREBY DECLARE THAT I WILL COMPLY WITH THE PRICING INSTRUCTIONS:

SIGNED BY THE TENDERER:

C2.2	BILL OF QUANTITIES
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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
A		<u>SECTION A : PRELIMINARY AND GENERAL</u>					
A1	SANS 1200 A	<u>SECTION A1: PRELIMINARY AND GENERAL</u>					
A1.2	8.3	FIXED-CHARGE ITEMS					
A1.2.1	8.3.1	Contractual Requirements	Sum	1.0			
	8.3.2	Establish Facilities on the Site :					
		a) Facilities for Engineer (SANS 1200 AB)					
A1.2.2	PSAB 3.1	Contract Name Boards (2 no.)	Sum	1.0		Rate Only	
A1.2.3	PSAB 3.2	Office: One room with furniture	Sum	1.0			
A1.2.4	PSAB 4.6	Survey Equipment	Sum	1.0			
A1.2.5	PSAB 5.6	Site Instruction Book	No.	1.0			
		b) Facilities for Contractor					
A1.2.6		Offices and storage sheds	Sum	1.0			
A1.2.7		Workshops	Sum	1.0			
A1.2.8		Ablution and latrine facilities	Sum	1.0			
A1.2.9		Tools and equipment	Sum	1.0			
A1.2.10		Water supplies, electric power and communications	Sum	1.0			
A1.2.11		Dealing with water (Subclause 5.5)	Sum	1.0			
A1.2.12		Access (Subclause 5.8)	Sum	1.0			
A1.2.13		Plant	Sum	1.0			
A1.2.14	8.3.3	Other fixed-charge obligations	Sum	1.0			
A1.2.15	8.3.4	Remove Engineer's and Contractor's Site establishment on completion	Sum	1.0			
A1.3	8.4	TIME-RELATED ITEMS					
A1.3.1	8.4.1	Contractual Requirements	Sum	1.0			
	8.4.2	Operate and maintain facilities on the Site:					
	8.4.2.1	a) Facilities for Engineer for duration of construction (SANS 1200 AB)					
A1.3.2	PSAB 3.1	Contract Name Boards (2 no.)	Sum	1.0		Rate Only	
A1.3.3	PSAB 3.2	Office: One room with furniture	Sum	1.0			
A1.3.4	PSAB 4.6	Survey Equipment	Sum	1.0			
A1.3.5	PSAB 5.6	Site Instruction Book	No.	1.0			
	8.4.2.2	b) Facilities for Contractor for duration of construction, except where otherwise stated					
Total Carried Forward							

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
A1.3.6		Offices and storage sheds	Sum	1.0			
A1.3.7		Workshops	Sum	1.0			
A1.3.8		Ablution and latrine facilities	Sum	1.0			
A1.3.9		Tools and equipment	Sum	1.0			
A1.3.10		Water supplies, electric power and communications	Sum	1.0			
A1.3.11		Dealing with water (Subclause 5.5)	Sum	1.0			
A1.3.12		Access (Subclause 5.8)	Sum	1.0			
A1.3.13		Plant	Sum	1.0			
A1.3.14	8.4.3	Supervision	Sum	1.0			
A1.3.15	8.4.4	Company and head office overhead costs	Sum	1.0			
A1.3.16	8.4.5	Other time-related obligations	Sum	1.0			
A1.4	8.5	SUMS STATED PROVISIONALLY BY ENGINEER					
A1.4.1		Allow For Cost of additional material testing to be undertaken at the request of he Engineer	Prov Sum	1.0			
A1.4.2		Overheads, charges and profit on item A1.4.1	%	15,000.0			
A1.4.3		Allow for - Electricity Supply Application/ Upgrade	Prov Sum	1.0			
A1.4.4		Overheads, charges and profit on item A1.4.3	%	50,000.0			
A1.4.5		Allow for- SCADA	Prov Sum	1.0			
A1.4.6		Overheads, charges and profit on item A1.4.5	%	650,000.0			
A1.5	8.7	DAYWORKS					
A1.5.1		Electrician	hours	80.0			
A1.5.2		Semi-skilled Labourer	hours	160.0			
A1.5.3		Unskilled Labourer	hours	360.0			
A1.5.4		Percentage adjustment to item A1.5.3 for labour	%	36,000.0			
A1.5.5		Materials	Sum	1.0			
A1.5.6		Percentage adjustment to item A1.5.5 for materials	%	50,000.0			
		Cost of transport and plant including for overheads, levies, fuel operators, insurance and supervision					
A1.5.7		One (1) ton LDV	km	4,600.0			
A1.5.8		Five (5) ton truck	km	960.0			
A1.5.9		Compactor	hours	10.0			
Total Carried Forward							

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
A2	SANS 1200 A	<u>SECTION A2: OCCUPATIONAL HEALTH AND SAFETY</u>					
		OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND THE CONSTRUCTION REGULATIONS, 2014 (H&S Requirements and Procedures)					
A2.1	PSA8.12	PART A - OHS ACT COMPLIANCE - HEALTH & SAFETY PLAN & FILE					
A2.1.1		Prepare and compile H&S plan as per the Site Specific Health and Safety Specifications (Scope of Work), OHS Act & Regulations	Sum	1.00			
A2.1.2		Changes and or amendments as may be required for approval of the Health & Safety Plan, and maintenance of Health & Safety Plan.	Sum	1.00			
A2.1.3		Allow for the preparation and compilation of a Site Specific Health and Safety File, and a Health and Safety Working File.	Sum	1.00			
A2.1.4		Changes and or amendments as may be required for ongoing maintenance of Health & Safety File, and Working File.	Sum	1.00			
A2.1.5		Stationary (printing, paper, files, dividers, laminating, etc.)	Sum	1.00			
A2.2	PSA8.12	PART B - OHS ACT COMPLIANCE - IMPLEMENTATION OF THE HEALTH & SAFETY PLAN					
		Personal Protective Clothing & Equipment					
A2.2.1		Foot protection (Steel toe cap, gum boots, etc.)	Sum	1.00			
A2.2.2		Clothing (overalls depicting Contractors company name / identification.)	Sum	1.00			
A2.2.3		Gloves (leather, PVC, latex, acid resistant, surgical, etc.)	Sum	1.00			
A2.2.4		"Head protection: hard-hats, colour coded – Supervisory (Red) Labour (Green) First aid (Blue) Sun shield, etc.)"	Sum	1.00			
A2.2.5		Ear protection (earplugs, earmuffs, etc.)	Sum	1.00			
A2.2.6		Eye protection (face shield, goggles, spectacles, etc.)	Sum	1.00			
A2.2.7		Air (dust masks, etc.)	Sum	1.00			
A2.2.8		Visibility (Luminous high visibility safety vests / jackets / bibs, head gear, etc.)	Sum	1.00			
A2.2.9		Thermal thermometer	Sum	1.00			
A2.2.10		Hand sanitizer and liquid soap	Sum	1.00			
A2.2.11		Covid-19 Awareness posters	Sum	1.00			
A2.2.12		Fall Risk / Fall Protection / Working at Heights	Sum	1.00			
A2.2.13		Life lines (anchors, connectors, steel wire rope, runner, span, design, certification, etc.)	Sum	1.00			
Total Carried Forward							

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
A2.2.14		Harness (double lanyard, retractable, reach, etc.)	Sum	1.00			
A2.2.15		Fall Protection and Recovery Plan (and recovery gear)	Sum	1.00			
A2.2.16		Portable ladders (A-frame, extendable, length, material, etc.)	Sum	1.00			
A2.2.17		Access scaffolding compliant with SANS 10085.	Sum	1.00			
		Barricading / Hoarding (Supply, install & removal)					
A2.2.18		Construction perimeter (fence, shade netting, corrugated iron, shutter board, etc.)	Sum	1.00			
A2.2.19		Trench and Manhole Excavations	Sum	1.00			
A2.2.20		Roads & Road reserves - Pre-warning (danger tape, orange "shark" netting, cones, delineators, temporary road signs etc.)	Sum	1.00			
		Health and Safety Control and Training					
A2.2.21		Provide a full time competent Construction Health and Safety Officer on site to assist in the control of all health and safety aspects on site.(CR 8(5)) The safety officer must be SACPCMP registered.	Sum	1.00			
A2.2.22		Induction Training (employees, visitors, subcontractors, local residence / home owners)	Sum	1.00			
A2.2.23		Induction / Identification cards	Sum	1.00			
A2.2.24		Formal training (trade specific, legal appointment related, client requirement, i.e. construction vehicle competency, fall protection plan developer, height work competency, first aiders, fire fighters, scaffolding erectors and inspectors etc)	Sum	1.00			
A2.2.25		Informal training (trade specific, DSTI's Tool Box Talks , competency declaration)	Sum	1.00			
A2.2.26		Emergency training (emergency response, evacuation drills, etc.)	Sum	1.00			
		Audits and Surveys					
A2.2.27		Legal compliance audits - OHS Act, Regulations, SSHSS, etc.(Availability of Principal Contractor resources & systems (offices, projectors, time, personnel, management, for monthly Agent audits etc.)	Sum	1.00			
A2.2.28		Internal Audits (H&S file / plan, activity based, etc.)	Sum	1.00			
A2.2.29		Third party Legal Compliance Verification audits / DoL	Sum	1.00			
A2.2.30		Sub-Contractor audits (internal)	Sum	1.00			
A2.2.31		Occupational Hygiene Survey (stressors: physical, chemical, biological, ergonomical, etc.)	Sum	1.00			
		Incident Investigation					
Total Carried Forward							

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
A2.2.32		Investigations of accidents / incidents	Sum	1.00			
A2.2.33		Provide reporting of incidents (preliminary and final)	Sum	1.00			
A2.2.34		Medical treatments	Sum	1.00			
A2.2.35		Corrective action (implementation, close out reporting, etc.)	Sum	1.00			
		Monthly Reports					
A2.2.36		Incident reports	Sum	1.00			
A2.2.37		Status on incident reports	Sum	1.00			
A2.2.38		Status on audit reports	Sum	1.00			
A2.2.39		Monthly statistical reports	Sum	1.00			
		Transportation					
A2.2.40		Transportation of employees (to and from site to accommodation, medical facilities, training facilities, etc.)	Sum	1.00			
		Signage, Information Display, Awareness					
A2.2.41		Construction (firefighting, general information, prohibitory, mandatory, warning, hazchem, photo luminescent, etc.) CWP number clearly dispalyed.	Sum	1.00			
A2.2.42		Roads (temporary, traffic control, associated with construction work within the road reserve etc.)	Sum	1.00			
A2.2.43		Health & Safety information display board in site office (Emergency evacuation flow diagram, emergency contact numbers, electrical, general, etc.)	Sum	1.00			
		Construction Vehicles, Mobile Plant and Roads					
A2.2.44		Equipment (stop blocks, traffic flags)	Sum	1.00			
A2.2.45		Rotating / strobe lights for construction vehicles and mobile plant	Sum	1.00			
A2.2.46		Facilities (wash bay, fuel bay, service bay)	Sum	1.00			
		Firefighting and Emergencies					
A2.2.47		Firefighting equipment (Fire extinguishers - dry powder, for all construction vehicles, site office and onsite)	Sum	1.00			
A2.2.48		Alarm signalling device (Hooter /Blow horn/ siren / bell /whistle etc.)	Sum	1.00			
		Medical and Emergencies					
A2.2.49		Medical fitness examinations and certificates	Sum	1.00			
A2.2.50		First aid treatment box (and refills, stretcher, medical waste drop box, etc.)	Sum	1.00			
A2.2.51		Substance abuse testing (breathalyser, etc.)	Sum	1.00			
Total Carried Forward							

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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
B		SECTION B: BUILDING ALTERATIONS					
B1	SANS 1200 C	SECTION B1: SITE CLEARANCE					
	8.2.7	Dismantle and remove pipelines (not incased in concrete)					
		uPVC pipes					
B1.1.1		Up to 110 mm diameter	m	5.00			
B1.1.2		From 110 mm to 250 mm diameter	m	5.00			
B1.1.3		From 250 mm to 450 mm diameter	m	5.0			
		Steel pipes					
B1.1.4		Up to 110 mm diameter	m	5.00			
B1.1.5		From 110 mm to 250 mm diameter	m	5.00			
		HDPE pipes					
B1.1.6		Up to 50 mm diameter	m	5.00			
B1.1.7		From 50 mm to 90 mm diameter	m	5.00			
		Asbestos pipes					
B1.1.8		Up to 110 mm diameter	m	5.00			
B1.1.9		From 110 mm to 250 mm diameter	m	5.00			
	PSC8.2.7	Dismantle and remove pipelines (incased in concrete)					
		uPVC pipes					
B1.1.10		Up to 110 mm diameter	m	5.00			
B1.1.11		From 110 mm to 250 mm diameter	m	5.00			
		Steel pipes					
B1.1.12		Up to 110 mm diameter	m	5.00			
B1.1.13		From 110 mm to 250 mm diameter	m	5.00			
		HDPE pipes					
B1.1.14		Up to 50 mm diameter	m	5.00			
B1.1.15		From 50 mm to 90 mm diameter	m	5.00			
		Asbestos pipes					
B1.1.16		Up to 110 mm diameter	m	5.00			
B1.1.17		From 110 mm to 250 mm diameter	m	5.00			
B1.1.18	8.2.8	Demolish and remove existing brick walls from existing structure and dispose off site	m ³	30			
Total Carried Forward							

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
B2		SECTION B2: STRUCTURAL					
	8.2	Formwork					
B2.1		Rough vertical plane	m ²	10.00			
B2.2		Rough vertical plane	m ²	10.00			
	8.2.5	Narrow widths:					
B2.3		Rough vertical up to 300 mm wide	m	10.00			
B2.4		Smooth vertical up to 300 mm wide	m	10.00			
	8.4	Concrete					
B2.5	8.4.2	Blinding layer 50 mm thick in 15 MPa/19 mm concrete	m ²	10.00			
		Strength concrete 25 MPa/19 mm					
B2.6		for floor slabs	m ³	5.0			
B2.7		for roof slab	m ³	5.0			
	8.4.3	Strength concrete: 20 MPa/19mm					
B2.8		Pedestals	m ³	5.0			
	SANS 1200 H 8.3.4	Supply and install complete, approved flooring:					
B2.9		40 x 40 x 6 SS316 angle bolted to wall	m	20.0			
B2.10		M8 SS316 150mm long chemical anchor complete	No.	40.0			
B2.11		SS316 steel grating with openings ± 30mm x 30mm, with a thickness of 35mm and with a safe working load of at least 250kg.	m ²	5.0			
B2.12		150 x 90 x 10 SS316 angle bolted to floor for kicker	m	20.0			
B2.13		M8 SS316 150mm long chemical anchor complete	No.	40.0			
B2.14		150 x 90 x 10 hot dipped galvanised mild steel angle bolted to floor for kicker	m	20.0			
B2.15		M8 SS316 150mm long chemical anchor complete	No.	40.0			
		Supply and install doors and louvres complete :					
B2.16		Type A, single 800mm wide steel louvred door	No.	1.0			
B2.17		Type C3, 2 x 800mm with louvre	No.	1.0			
	PSHA8.3.7	Crawl Beam:					
B2.18		Supply and install complete, 213 x 133 x 25kg/m I beam, 10m long, hot dipped galvanised mild steel suitable for 2 ton safe working load including 14 x m16 200mm long SS316 chemical anchors with rubber inserts	No.	1.0			
Total Carried Forward							

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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
C	C3.8	SECTION C: MECHANICAL INSTALLATIONS					
C1		SECTION C1: PIPE FITTING SCHEDULE					
		Stainless Steel Elbow Long Radius - Flanged:					
C1.1		150 mmø	No.	4.0			
C1.2		250 mmø	No.	5.0			
C1.3		300 mmø	No.	1.0			
C1.4		400 mmø	No.	3.0			
C1.5		50 mmø soldered	No.	7.0			
C1.6		150 mmø soldered	No.	1.0			
		400 mmø Stainless Steel Elbow Long Radius - Flanged					
C1.7		90 Deg	No.	2.0			
C1.8		45 Deg	No.	1.0			
		Stainless Steel Flange:					
C1.9		125 mmø	No.	4.0			
C1.10		150 mmø	No.	11.0			
C1.11		250 mmø	No.	7.0			
C1.12		300 mmø	No.	2.0			
C1.13		400 mmø	No.	23.0			
		Stainless Steel Equal Tee - Flanged - GI:					
C1.14		150 mmø	No.	2.0			
		Stainless Steel Reducing Tee - Flanged:					
C1.15		150 mmø-150 mmø-100 mmø	No.	1.0			
C1.16		150 mmø-150 mmø-150 mmø	No.	2.0			
C1.17		250 mmø-250 mmø-100 mmø	No.	4.0			
C1.18		400 mmø-400 mmø-250 mmø	No.	7.0			
C1.19		400 mmø-400 mmø-400 mmø	No.	1.0			
C1.20		150 mmø-100 mmø-150 mmø	No.	1.0			
		Stainless Steel Equal Tee:					
C1.21		400 mmø-400 mmø-400 mmø	No.	1.0			
		Stainless Steel Reducer - Flanged:					
C1.22		125 mmø-76 mmø	No.	2.0			
C1.23		150 mmø-64 mmø	No.	2.0			
Total Carried Forward							

Total Carried Forward To Summary

Total Carried Forward To Summary

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ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
D3		SECTION D3: CABLES					
		Supply and install PVC/SWA/PVC 600/1000V copper cable as per manufacturer's requirement.					
		SADDLED TO DUCT OF BRICK/WALL OR IN GROUND					
		All drilling, wall, plugs, saddles, screws, etc to be included .					
		FOUR CORE COPPER STEEL WIRE ARMOURED CABLE (RWBK)					
		4mm ²					
D3.1		Supply	m	60.0			
D3.2		Install	m	60.0			
		25mm ²					
D3.3		Supply	m	145.0			
D3.4		Install	m	145.0			
		95mm ²					
D3.5		Supply	m	135.0			
D3.6		Install	m	135.0			
		CABLE TERMINATIONS					
		Including cable gland, screw type earth tag, gland bracket, earth tail and fixing.					
		FOUR CORE COPPER STEEL WIRE ARMOURED CABLE (RWBK)					
		4mm ²					
D3.7		Supply	No.	4.0			
D3.8		Install	No.	4.0			
		25mm ²					
D3.9		Supply	No.	8.0			
D3.10		Install	No.	8.0			
		95mm ²					
D3.11		Supply	No.	6.0			
D3.12		Install	No.	6.0			
		EARTHING CONDUCTORS					
		COPPER EARTH					
Total Carried Forward							

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
		Black insulated copper earth conductors installed/strapped to the power cables (power cable measured elsewhere)					
		4mm²					
D3.13		Supply	m	60.0			
D3.14		Install	m	60.0			
		25mm²					
D3.15		Supply	m	145.0			
D3.16		Install	m	145.0			
		95mm²					
D3.17		Supply	m	45.0			
D3.18		Install	m	45.0			
		EARTHING TERMINATIONS					
		4mm²					
D3.19		Supply	No.	4.0			
D3.20		Install	No.	4.0			
		25mm²					
D3.21		Supply	No.	4.0			
D3.22		Install	No.	4.0			
		95mm²					
D3.23		Supply	No.	1.0			
D3.24		Install	No.	1.0			
		EARTHWORKS					
		TRENCH					
		Trenching, backfilling and compacting					
D3.25		600 (w) x 600 (d) mm	m	20.0			
		CABLE MARKER					
		Nylon rope connection to cable					
D3.26		Supply	m	45.0			
D3.27		Install	m	45.0			
		Red/white danger tape					
D3.28		Supply	m	45.0			
Total Carried Forward							

[illegible]

[illegible]

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
D5		SECTION D5: WIREWAYS					
		TRUNKING					
		Galvanised heavy duty trunking including bends. T-junctions, alignment pieces, conduct retainers, cover plates spring nuts, threaded rods, Unistrut (spaced/fixed intervals in accordance with SANS 10142), nuts, bolts, fixing materials etc, including support material, short lengths and fixed to and including fixing channels cast into concrete soffits or steel supports. Provide for suspension on threaded rods and Unistrut support frame.					
		P1000					
D5.1		Supply	m	20.0			
D5.2		Install	m	20.0			
		P1000 galvanised metal covers					
D5.3		Supply	m	20.0			
D5.4		Install	m	20.0			
		P1000 - 90 Degree bend					
D5.5		Supply	No.	6.0			
D5.6		Install	No.	6.0			
		P9000					
D5.7		Supply	m	10.0			
D5.8		Install	m	10.0			
		P9000 galvanised metal covers					
D5.9		Supply	m	10.0			
D5.10		Install	m	10.0			
		P9000 - 90 Degree bend					
D5.11		Supply	No.	2.0			
D5.12		Install	No.	2.0			
		P9000 - T-Junction					
D5.13		Supply	No.	1.0			
D5.14		Install	No.	1.0			
		PERFORATED CABLE TRAYS					
		Supply and install medium duty galvanised perforated cable tray complete with bends and accessories and 2-off threaded rod suspension assemblies at a minimum of 600mm per manufactured lengths and fixing interval in accordance SANS 10142					
Total Carried Forward							

[illegible]

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
D6		SECTION D6: LUMINAIRES					
		Luminaires shall include for lamp sources, suspension, fixing and connecting. All recessed fittings will be connected to an isolator or plugged into an 5A socket outlet. Refer to the Schedule of Luminaires for technical information					
		CORROSION PROOF					
		Type V2					
D6.1		Supply	No.	12.0			
D6.2		Install	No.	12.0			
		CONDUIT					
		PVC conduit fixed surface, cast in concrete or chased into brickwork including accessories					
		20mm diameter conduit					
D6.3		Supply	m	40.0			
D6.4		Install	m	40.0			
		100 X 50 Boxes					
D6.5		Supply	No.	1.0			
D6.6		Install	No.	1.0			
		100 x 100 boxes					
D6.7		Supply	No.	1.0			
D6.8		Install	No.	1.0			
		50mm Round box					
D6.9		Supply	No.	25.0			
D6.10		Install	No.	25.0			
		Galvanised conduit fixed surface, cast in concrete or chased into brickwork including accessories					
		20mm diameter conduit					
D6.11		Supply	m	40.0			
D6.12		Install	m	40.0			
		100 X 50 Boxes					
D6.13		Supply	No.	1.0			
D6.14		Install	No.	1.0			
		100 x 100 boxes					
Total Carried Forward							

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
D6.15		Supply	No.	1.0			
D6.16		Install	No.	1.0			
		50mm Round box					
D6.17		Supply	No.	25.0			
D6.18		Install	No.	25.0			
		LIGHT SWITCHES					
		Single lever one way					
D6.19		Supply	No.	1.0			
D6.20		Install	No.	1.0			
		Motion Detector					
D6.21		Supply	No.	1.0			
D6.22		Install	No.	1.0			
		CONDUCTORS					
		Supply and install PVC insulated conductors in conduits or trunking: (colours Red, White, Blue = Phase conductor, Black = Neutral conductor, Green/Yellow = Earth					
		2.5mm²					
D6.23		Supply	m	255.0			
D6.24		Install	m	255.0			
		LIGHTING REPORT					
D6.25		Light level output report	Sum	1.0			

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
D7		SECTION D7: POWER					
		SWITCHED SOCKET OUTLETS					
		Socket outlets including screwing to outlet boxes, cable termination and cover plates.					
		MOUNTED IN SURFACE OR RECESSED BACKBOX					
		Combination (SANS164-1 and 2) 16A Single pole switched socket outlet					
		Supply	No.	2.0			
D7.1		Install	No.	2.0			
D7.2		ISOLATORS					
		Isolators including screwing to outlet boxes, cable termination and cover plates.					
		LOCKABLE ROTARY ISOLATORS					
		80A Triple pole					
D7.3		Supply	No.	6.0			
D7.4		Install	No.	6.0			
		EMERGENCY STOP					
		80A Triple pole					
D7.5		Supply	No.	6.0			
D7.6		Install	No.	6.0			
		CONDUIT					
		PVC conduit fixed surface, cast in concrete or chased into brickwork including accessories					
		25mm diameter conduit					
D7.7		Supply	m	40.0			
D7.8		Install	m	40.0			
		100 X 50 Boxes					
D7.9		Supply	No.	1.0			
D7.10		Install	No.	1.0			
		100 x 100 boxes					
D7.11		Supply	No.	1.0			
D7.12		Install	No.	1.0			
		50mm Round box					
Total Carried Forward							

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
D7.13		Supply	No.	25.0			
D7.14		Install	No.	25.0			
		Galvanised conduit fixed surface, cast in concrete or chased into brickwork including accessories					
		25mm diameter conduit					
D7.15		Supply	m	40.0			
D7.16		Install	m	40.0			
		100 X 50 Boxes					
D7.17		Supply	No.	1.0			
D7.18		Install	No.	1.0			
		100 x 100 boxes					
D7.19		Supply	No.	1.0			
D7.20		Install	No.	1.0			
		50mm Round box					
D7.21		Supply	No.	25.0			
D7.22		Install	No.	25.0			
		CONDUCTORS					
		Supply and install PVC insulated conductors in conduits or trunking: (colours Red, White, Blue = Phase conductor, Black = Neutral conductor, Green/Yellow = Earth					
		2.5mm²					
D7.23		Supply	m	150.0			
D7.24		Install	m	150.0			
		4mm²					
D7.25		Supply	m	300.0			
D7.26		Install	m	300.0			
Total Carried Forward To Summary							

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
D8		SECTION D8: STANDBY GENERATOR					
		EQUIPMENT					
		100kVA generator					
D8.1		Supply	No.	1.0			
D8.2		Install	No.	1.0			
		200A Change-over with electrical and mechanical interlocking. Motorised circuit breakers in a IP54 weather proof 3CR12 enclosure					
D8.3		Supply	No.	1.0			
D8.4		Install	No.	1.0			
		Plinth and bunding					
D8.5		Supply	No.	1.0			
D8.6		Install	No.	1.0			
		2 000 Litre external fuel tank					
D8.7		Supply	No.	1.0			
D8.8		Install	No.	1.0			
		EARTHWORKS					
		TRENCH					
		Trenching, backfilling and compacting					
D8.9		600 (w) x 600 (d) mm	m	20.0			
		CABLE MARKER					
		Nylon rope connection to cable					
D8.10		Supply	m	45.0			
D8.11		Install	m	45.0			
		Red/white danger tape					
D8.12		Supply	m	45.0			
D8.13		Install	m	45.0			
		CABLES					
		INSTALLED IN THE GROUND					
		Including sand bedding, danger tape, backfilling, cable markers					
		FOUR CORE COPPER STEEL WIRE ARMoured CABLE (LNE)					
		95mm²					
Total Carried Forward							

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
D8.14		Supply	m	200.0			
D8.15		Install	m	200.0			
		CABLE TERMINATIONS					
		Including cable gland, screw type earth tag, gland bracket, earth tail and fixing.					
		FOUR CORE COPPER STEEL WIRE ARMoured CABLE (RWBN)					
		95mm²					
D8.16		Supply	No.	4.0			
D8.17		Install	No.	4.0			
		EARTHING CONDUCTORS					
		COPPER EARTH					
		Black insulated copper earth conductors installed/strapped to the power cables (power cable measured elsewhere)					
		95mm²					
D8.18		Supply	m	100.0			
D8.19		Install	m	100.0			
		EARTHING TERMINATIONS					
		95mm²					
D8.20		Supply	No.	2.0			
D8.21		Install	No.	2.0			
		COMMISSIONING OF INSTALLATION					
D8.22		Commissioning of installation together with Engineer and demonstrate operation	Sum	1.0			
D8.23		Manuals and record information	set	3.0			
D8.24		Noise level testing and report	No.	1.0			
Total Carried Forward To Summary							

[illegible]

C2.3 SUMMARY OF BILL OF QUANTITIES

Section	Description	Price
A	Preliminary And General	
A1	Preliminary And General	R
A2	Occupational Health And Safety	R
B	Building Alterations	
B1	Site Clearance	R
B2	Structural	R
B3	Reservoir Fencing	
C	Mechanical Installations	
C1	Pipe Fitting Schedule	R
C2	Pipe Schedule	R
C3	Pipe Valves	R
C4	Mechanical Equipment Schedule	R
D	Electrical Installations	
D1	Make Safe and Remove	R
D2	Distribution Boards	R
D3	Cables	R
D4	Earthing	R
D5	Wireways	R
D6	Luminaries	R
D7	Power	R
D8	Standby Generator	R
D9	Extra Services	R

SUBTOTAL OF PRICED ITEMS

R

PROVISIONAL ALLOWANCE FOR ESCALATION (6%)

R

PROVISIONAL ALLOWANCE FOR CONTINGENCIES (10%)

R

NET CONTRACT PRICE

R

VALUE ADDED TAX (15% of Net Contract Price)

R

CONTRACT SUM (CARRIED TO C1.1 FORM OF OFFER)**R**

C3 SCOPE OF WORK

- C3.1 Description of the Works
- C3.2 Engineering
- C3.3 Procurement
- C3.4 Construction
- C3.5 Management
- C3.6 Specifications for Civil Infrastructure
- C3.7 Specifications for Building Infrastructure
- C3.8 Specifications for Mechanical Equipment
- C3.9 Specifications for Electrical Equipment
- C3.10 Health and Safety Requirements and Procedures

C3.1 DESCRIPTION OF THE WORKS**C3.1.1 EMPLOYER'S OBJECTIVES**

The Employer's objectives are to provide upgrades to the Grabouw Bulk Water Supply System.

C3.1.2 OVERVIEW OF THE WORKS

Beginning in 2006, the Theewaterskloof Municipality embarked on a phased upgrading of the Grabouw Bulk Water Supply System. Four of the five phases have been completed. Phase 5 - which entails Mechanical and Electrical Upgrades of the existing Grabouw Water Treatment Works (Phase 5.1) and the construction of a dedicated Rising Main from the Grabouw Water Treatment Works to the Steenbras Reservoir (Phase 5.2) remains outstanding.

This contract is for the Mechanical and Electrical Upgrades (Phase 5.1) of the Grabouw Water Treatment Works.

C3.1.3 EXTENT OF THE WORKS

The contract comprises the following:

- Connections to existing pipelines and alterations to the existing pipe network configuration.
- Upgrade of the existing mechanical and electrical infrastructure for the pumping system for the bulk supply pipeline at the Grabouw Water Treatment Works including:
 - Installation of 6 new pumps, motors and associated fittings.
 - Installation of a new Motor Control Centre and associated electrical works.
 - Installation of backup power generation with for the pumping system.
 - Alterations to existing structures to accommodate upgraded equipment.

C3.1.4 LOCATION OF THE WORKS

Grabouw is located within the Theewaterskloof Municipality, approximately 80 km from Cape Town. The proposed works is at the existing Grabouw Water Treatment Works.

Refer to Annexure A for a Locality Plan.

C3.1.5 TEMPORARY WORKS

The Contractor will be required to design and build the temporary works including scaffolding and formwork. Refer to C4 Site Information.

C3.1.5.1 Other Services (i.e. Telkom, Electricity, etc.)

The Contractor shall ensure that the position of all existing services affected by the Works have been verified before construction works commences and should it be necessary to lower or relocate any service, the Contractor will be required to make the necessary arrangements with the relevant service provider and to advise the Engineer accordingly.

C3.1.5.2 Survey Beacons and Benchmarks

The Contractor shall be responsible for the preservation of all land survey, erf or other pegs, benchmarks and beacons. If damage or disturbance of any such pegs or beacons is caused by

the operations of the Contractor or his subcontractors, the pegs are to be replaced by a Registered Land Surveyor at the cost of the Contractor. Information regarding the position of all such pegs will be made available to the Contractor by the Engineer.

The Contractor is to ensure that no spoil is placed over erf pegs or benchmarks and that these are adequately protected for the full duration of the Contract.

Where disturbances of boundary pegs are unavoidable due to excavation or other operations adjacent to the pegs, the Contractor shall advise the Engineer or his Representative immediately, and agreement is to be reached that the disturbance of the peg is unavoidable and a strict record of such disturbed pegs is to be kept. Such pegs are to be replaced by a Registered Land Surveyor as described above and the Contractor is to submit proof of the cost of replacement of pegs. The Contractor will be reimbursed on a basis pro-rata to the total cost of peg replacement determined on completion of the Works.

C3.1.5.3 Protection of Existing Works

The Contractor shall take all necessary steps to ascertain the location of existing services before commencing any section of the works and shall exercise the greatest care when working in the vicinity of such services. No more than three weeks and not less than one week before commencing his operations in any area, the Contractor shall request in writing from the Engineer the latest available drawings showing the location of services already installed. The Contractor will also be responsible for contacting the various service providers, arranging a meeting and verifying all known as well as possible unknown services on site.

The Contractor shall take all necessary steps to protect any existing works whatsoever against damage which may arise as a result of his operations on Site. The Contractor shall bear the cost of the repair of damage to any service, the possible existence of which could reasonably have been ascertained by him in good time.

Where the Contractor is responsible for damage for which repairs must be carried out by the Employer or an outside Authority, the costs of these repairs will be recovered by means of a deduction from the Contractor's monthly Payment Certificate. The Employer will attend to the payment of monies due to outside authorities, should the Contractor not make direct payment, to the outside authorities, timeously.

C3.1.5.4 Tidying up of the Works

The Contractor shall take note that progressive and systematic finishing and tidying will form an essential part of this contract. On no account shall spoil, rubble, materials, equipment or unfinished operations be allowed to accumulate in such a manner as to unnecessarily be a hindrance to or impede the activities of other contractors or service providers. In the event of this occurring, the Employer shall have the right to withhold payment for as long as may be necessary in respect of the relevant works in the area(s) concerned.

Upon completion of the Works or any portion thereof, the ground, fences, gates and any structures that have been interfered with are to be carefully restored to their original condition and all rubbish, tools, tackle, plant and material must be removed so as to leave the Site in a clean and orderly condition. No additional payment shall be made for work set out above.

C3.2 ENGINEERING

C3.2.1 DESIGN SERVICES AND ACTIVITY MATRIX

The Employer is responsible for the design of the Permanent Works.

The Contractor is responsible for the design of the Temporary Works.

Permanent works include:

Concept, feasibility and overall process	Employer
Basic engineering and detail layout to tender stage	Employer

Final design for construction stage:

Civil Works	Employer
Structural Works	Employer
<i>Mechanical Equipment Installation (C3.8)</i>	<i>Contractor</i>
<i>Electrical Equipment Installation (C3.9)</i>	<i>Contractor</i>
Preparation of record drawings	Employer / Contractor

The Contractor is responsible for the design of the Temporary Works (refer to C3.1.5).

Temporary works include:

Site Establishment	Contractor
Formwork and scaffolding	Contractor

C3.2.2 EMPLOYER'S DESIGN

The entire Permanent Works have been designed by the Engineer.

C3.2.3 DESIGN BRIEF AND PROCEDURES

C3.2.3.1 Design Brief

The Contractor shall take all statutory requirements into consideration when designing the Electrical, Electronic and Mechanical components and sub-systems, refer to C3.8 and C3.9. The Contractor shall be required to provide detail drawings with a design certificate in respect of at least the following components and sub-assemblies:

- Generator engine, alternator, change-over panel
- MCC construction with schematic control and wiring diagrams.
- PLC/Telemetry interface and circuitry.
- Screens, pumps, motors, valves, actuators.
- Workshop manufacturing drawings of all piping, fittings and pipe specials.

The Contractor shall take all statutory requirements into consideration when designing the Works.

C3.2.3.2 Design Procedures

The Contractor shall take all statutory requirements, as well as the Health and Safety Specification into consideration when designing all Works.

C3.2.4 DRAWINGS

The drawings listed below are included on the attached CD to give an overview of the contract, refer to the contents page for the relevant annexure.

Drawing No	Description	Rev	Sheet Size
General Drawings			
1652-01-GEN-001	Grabouw Locality Plan	T0	A4
Fencing Drawings			
1652-01-FEN-500	Steenbras Reservoir Fence Layout Plan	T0	A0
Mechanical Drawings			
1652-01-MECH-201	Existing Pump Station Layout Schematic	T0	A1
1652-01-MECH-202	Mechanical Installation Ground Floor Layout	T0	A3
1652-01-MECH-203	Mechanical Installation Elevations	T0	A3
Electrical Drawings			
1652-01-ELEC-L001	Lighting Layout	T0	A3
1652-01-ELEC-P001	Power Layout	T0	A3
1652-01-ELEC-S001	Single Line Diagram (Pump Distribution Board)	T0	A3
1652-01-ELEC-W001	Wireway Layout	T0	A3

Additional construction drawings will be issued to the Contractor by the Engineer / Employer on the commencement date and from time to time as required.

C3.3 PROCUREMENT

C3.3.1 PREFERENTIAL PROCUREMENT PROCEDURES

The works shall be executed in accordance with the conditions attached to preferences granted in accordance with the Preferencing Schedule (**T2.1.14**, T2 Returnable Documents and Schedules)

C3.3.2 SUB-CONTRACTING

30% of the tender amount must be allocated for sub-contracting, the Service Provider MUST use suppliers within in the Theewaterskloof Municipal Area. **The 30% value will be strictly enforced by the Municipality and is therefore COMPULSARY TO MEET THIS CRITERIA. Consideration will be given to deviate from the said criteria with the necessary motivation that all avenues have been explored**, this forms part of our Local Economic Development Plan. The service provider must submit substantive evidence and relevant information with its tender proposal. If the tenderer has problems sourcing Local Sub-contractors, Department LED will provide assistance in this regard.

C3.3.3 EMPLOYMENT OF LOCAL COMMUNITY LABOUR

The maximum possible number of workers is to be employed from the labour database provided by the Employer of the currently unemployed persons in the local community of **Grabouw**.

Key personnel are defined as supervisors and skilled labourers without whom a specific task cannot be executed. As far as possible these people should impart their management and other skills to individuals within the local workforce who show a keen interest and display a willingness to learn.

A monthly report on employment of local labour in relation to other employees must be submitted for information of the Employer. **Refer to T2.3.4 – Special Conditions of Tender.**

C3.3.5 REPORTING

The Contractor shall prepare reports in line with SANS 1914, and submit with each monthly statement for payment, the following updated return :

- Sub-contract Expenditure Report
- Project Labour Report
- Targeted Labour Contract Participation Expenditure Report

The reporting above shall be signed and shared through the BIM 360 Docs platform.

The Project Labour Report must include details of all labour (including that of sub-contractors) that are employed from within the target area on this contract in the month in question.

C3.4 CONSTRUCTION

C3.4.1 WORKS SPECIFICATION

C3.4.1.1 Applicable SANS standards

The SABS 1200 Standardised Specifications for Civil Engineering Construction read in conjunction with the SABS 0120 Code of Practice for use with standardised specifications for Civil Engineering Construction and Contract Documents apply.

C3.4.1.2 Applicable national and international standards

The following Standardised Specifications for Civil Engineering Construction, as amended in the Scope of Work, form part of the Contract Documents:

SABS 1200 A	1986	General
SABS 1200 AA	1986	General (Small Works)
SABS 1200 AB	1986	Engineer's Office
SABS 1200 C	1980 (as amended 1982)	Site Clearance
SABS1200 G	1982	Concrete (Structural)
SABS1200 GA	1982	Concrete (Small Works)
SABS1200 H	1990	Structural Steelwork
SABS1200 HA	1990	Structural Steelwork (Small Works)
SABS1200 HC	1988	Corrosion Protection of Structural Steelwork

The term "project specifications" appearing in any of the SABS 1200 Standardised Specifications shall be replaced with the term "Scope of Work".

The variations and additions of the Standardised Specifications are provided in C3.6.

C3.4.1.3 Particular / Generic specifications

The following additional specifications included in this volume are applicable to this contract:

Section C3.7	:	Specifications for Building Infrastructure
Section C3.8	:	Specifications for Mechanical Equipment
Section C3.9	:	Specifications for Electrical Equipment
Section C3.10	:	Health and Safety Requirements and Procedures
Annexure C	:	Site Specific Health & Safety Specification
Annexure C	:	Site Specific Baseline Risk Assessment

C3.4.1.4 Certification by recognized bodies

Not applicable.

C3.4.1.5 Agrément certificates

Not applicable.

C3.4.2 PLANT AND MATERIALS**C3.4.2.1 Plant and materials supplied by the Employer**

The Employer will not provide plant or materials for this Contract.

C3.4.2.2 Materials, samples and shop drawings

Any material that shall comply with the requirements of a South African National Standard specification in terms of this Contract, shall bear the official SABS mark, should the material be available with such mark.

C3.4.3 CONSTRUCTION EQUIPMENT**C3.4.3.1 Requirements for equipment**

All equipment used on this Contract shall comply with the requirements of the Occupational Health and Safety Act (1993) and the Construction Regulations (2014).

C3.4.3.2 Equipment provided by the Employer

The Employer will not provide equipment for this Contract.

C3.4.4 EXISTING SERVICES

Refer to C3.1.5, C4.3 and PSA5.4.

C3.4.5 SITE ESTABLISHMENT**C3.4.5.1 Service and facilities provided by the Employer**

No services or facilities will be provided by the Employer.

C3.4.5.2 Facilities provided by the Contractor**C3.4.5.2.1 Water supply**

There is a municipal supply available which is subject to the normal regulations. The Contractor shall make his own arrangements, and pay all installation and consumption charges, for the supply of water required.

The flow of water might not always be enough for the Contractor's needs. The Employer does not guarantee the continuous and enough supply of water and no claims by the Contractor regarding a shortage of water will be considered.

C3.4.5.2.2 Power supply

There is no power available on site. The Contractor shall be responsible for providing on site, at his own cost, the power required.

The Contractor shall negotiate directly with the local power supply authority to arrange a power supply as he requires.

Any distribution network that the Contractor may require shall be carried out by himself at his own cost in accordance with the requirements and regulations of the local authority.

C3.4.5.2.3 Camps and depot

The Contractor may erect his site offices and storage depot within the boundaries of the area indicated by the Engineer.

The Contractor shall submit a general layout drawing to a scale of not less than 1:200 to the Engineer for approval before any work on the camp or offices is commenced.

No housing is available, and the Contractor shall make his own arrangements to house his employees and transport them to and from the Site. All arrangements for housing workmen shall be made in accordance with and subject to applicable regulations and requirements.

C3.4.5.2.4 Sanitary conditions

The Contractor shall supply chemical toilets for use by his workmen. The number of toilets shall be based on one toilet per fifteen personnel on site. Under no circumstances will the Contractor's staff be allowed to use public toilet facilities.

Unhygienic habits and other behaviour that may cause contamination of any part of the Works or the surrounding areas are strictly prohibited. The Contractor shall ensure that sanitary conditions prevail throughout the Site and that all his workmen are aware of, and comply with, this rule.

C3.4.5.2.5 Disposal sites

Unless instructed otherwise, the Contractor shall dispose all surplus material from the site at a Municipal Solid Waste Disposal Facility.

The Contractor shall inform the Employer's Agent in writing of any other site he proposes to use. Use of the alternative disposal site may only be used if approved by the Engineer in writing.

C3.4.5.3 Storage and laboratory facilities

Storage and laboratory facilities are not required.

C3.4.5.4 Other facilities and services

No other facilities or services are required.

C3.4.5.5 Vehicles and equipment

The Contractor shall provide for the use of the Engineer, maintain and service, as applicable, the following facilities as specified in SANS 1200AB and PSAB:

- two nameboards,
- one furnished office,
- one shared conference room,
- latrine and ablution facilities,
- a site instruction book,
- protective clothing, safety equipment, and medical facilities,
- laptop with software,
- cellphone A70 or similar with R 500 airtime monthly,
- 5G wifi router with 25 GB data monthly.

Unless specified otherwise, on completion of the Works these facilities shall revert to the Contractor who shall remove them from the site.

The term "use of the Engineer" will be deemed to include, as appropriate, use by the Engineer's staff and the Engineer's Representative and his staff.

C3.4.5.6 Advertising rights

Not applicable.

C3.4.5.7 Notice boards

The Contract notice board shall be manufactured, installed, maintained and removed in accordance with PSAB 3.1.

C3.4.6 SITE USAGE

Access to the site shall be restricted to the Contractor, Employer, Engineer and their personnel, agents or Subcontractors. The Contractor shall control entry to the site and shall report unauthorised entry to the Engineer.

C3.4.7 PERMITS AND WAY LEAVES

Way Leaves have been applied for from Eskom, Telkom, Theewaterskloof Municipality, and other service providers. The Contractor will be required to communicate with the above service providers while on site and obtain construction wayleaves, as and when required.

C3.4.8 ALTERATIONS, ADDITIONS, EXTENSIONS AND MODIFICATIONS TO EXISTING WORKS

The Contractor shall expose and survey the position and level of all structures and pipelines that will be connected to and shall provide this information to the Engineer before commencing with the works.

C3.4.9 INSPECTION OF ADJOINING PROPERTIES

The condition of the existing access road to the Grabouw Water Treatment Works and adjoining properties shall be assessed and recorded by video and/or photography before commencing construction.

C3.4.10 WATER FOR CONSTRUCTION PURPOSES

Refer to C3.4.5.2.1.

C3.4.11 SURVEY CONTROL AND SETTING OUT OF THE WORKS

Before commencement of work, the Contractor shall liaise with the Engineer to establish and verify the position and level of benchmarks, and the status of all boundary pegs in the Township. The Contractor shall record the exact position of all erf pegs on a marked-up print of the site.

On completion of the Contract, the pegs that have been unavoidably disturbed will be replaced by the Employer. Pegs which have, in the opinion of the Engineer, been disturbed due to the negligence of the Contractor, will be replaced at the Contractor's cost.

C3.4.12 FEATURES REQUIRING SPECIAL ATTENTION**C3.4.12.1 Health and Safety**

Refer to C3.10.

C3.4.12.2 Continuous operation of existing services

All existing services shall be maintained in operation, unless prior arrangements have been made with the relevant authority and written permission for an interruption of the service has been granted and adequate notice has been given to the affected residents.

C3.4.12.3 Sanitary conditions

Unhygienic habits and other behaviour that may cause contamination of any part of the Works or the surrounding areas are strictly prohibited. The Contractor shall ensure that sanitary conditions prevail throughout the Site and that all his workmen are aware of, and comply with, this rule.

C3.4.12.4 Neatness of the site

The general neatness and tidiness of the residential areas of Grabouw, are of concern.

The Works are in an environmentally sensitive area. The Contractor shall, therefore, on a day-to-day basis, keep the area of the Works in a condition acceptable to the Engineer.

C3.4.12.5 Temporary fences

The Contractor shall erect temporary fences where required for the execution of the Works, where shown on the drawings and in place of existing fences which have to be temporarily relocated.

All fences shall be maintained during construction.

Temporary fences shall be suitable for preventing stock on adjacent properties from wandering.

The cost of the erection, maintenance and removal of temporary fencing will be deemed to be covered by the rates for the establishment of facilities for the Contractor (Items A1.3 and A2.3).

C3.4.12.6 Dust control

The Contractor shall take preventative measures to control dust arising from the site. Such measures will include, but not be limited to, watering, placing tarpaulins on exposed areas, placing thatch grass on exposed areas, as appropriate, or instructed by the Engineer.

C3.4.12.7 Continuous operation of the existing works

Most of the construction works takes place at existing works (water treatment works and service reservoir). Other than for connection purposes these works must always remain in operation. The Contractor shall ensure that, wherever possible, the Employer's personnel have unhindered access to, and use of, all parts of the existing works always, as necessary.

The Contractor's operations shall also be carried out in such a way as to minimize the formation of dust and the fouling of water in the existing works.

The Contractor shall provide enough notice to the Engineer when he intends to interrupt the operations of the existing works in order to effect connections with the new works. Approval for such work will be given only when the timing of the work is suitable to the Employer.

C3.4.12.8 Connection to existing services

All connections to the existing water systems shall be undertaken in a manner and at times to be approved by the Engineer. It is anticipated that this work may have to be done at night to minimise inconvenience to users. No claims for additional payment will be considered in this regard.

C3.4.12.9 Community Liaison Officer

The Contractor shall employ a Community Liaison Officer (CLO) for the duration of construction. The function of the CLO is to represent the local community and to assist the Contractor, the Employer and the Engineer with their communication with the community and vice versa.

The Community Liaison Officer's duties will be:

- to be available on site daily during the normal working hours as stated in the Contract.
- to communicate daily with the Contractor and the Engineer to determine the labour requirements regarding numbers and skill, to identify possible labour disputes and to assist in their resolution.
- to attend all meetings in which the community and/or labour is present or is required to be represented. He/she will attend the first part of the monthly site meeting to report on the local community and labour involvement.
- to identify, screen and nominate labour from the community in conjunction with the PWC in accordance with the Contractor's requirements.
- to inform local labour of their conditions of temporary employment, to ensure their timeous availability and to inform local labourers timeously when they will be relieved.
- to attend disciplinary proceedings to ensure that hearings are fair and reasonable.
- to consult on all decisions regarding local problems and any matters of importance that, in any way, be of relevance to the Contract.
- to keep a daily written record of his/her interviews and community liaison.

The Contractor shall pay the CLO fortnightly, and will be paid by certification in the monthly certificates of payment. The CLO shall be paid at the prevailing minimum wage at the time of his appointment. The Contractor will be paid for his overheads and profit in a separate item in the Bill of Quantities.

C3.5 MANAGEMENT**C3.5.1 MANAGEMENT OF THE WORKS****C3.5.1.1 Applicable SANS and SABS standards**

As specified in Clause C3.4.

C3.5.1.2 Particular or Generic specifications

As specified in Clause C3.4.

C3.5.1.3 Planning and programming

The Contractor shall, in consultation with the Engineer and the relevant mechanical and electrical Contractor, draw up a detailed programme reflecting the completion of the Works including the installation of mechanical and electrical equipment and all work required in completing, testing and commissioning.

The Contractor's programme shall be submitted in electronic and hard copy format in bar chart format. In addition to the requirements of the FIDIC Red Book, the Contractor's programme shall show:

- the various activities on a time scale, including those of Subcontractors,
- the start date, completion date and programmed duration of each activity
- anticipated production rates in m/week, m3/day, etc
- critical path activities and their dependencies,
- key dates in respect of work to be carried out by others and information to be provided by the Engineer and/or others,

If any change to the critical path occurs, the Contractor shall as soon as practicable notify the Engineer in writing. The Contractor's programme and method statement will not be accepted as the basis for claims for additional compensation without due reference to all relevant associated factors.

The Contractor shall make allowance for the following when preparing his programme:

- expected weather conditions and their effects,
- known physical conditions or artificial obstructions,
- searching for, dealing with and carrying out alterations to the existing services,
- the accommodation of public access and traffic,
- the provision and implementation of the health and safety plan in terms of the Construction Regulations of the Occupational Health and Safety Act.
- the design, testing and approval of works,
- the reasonable requirements and programmes of the mechanical and electrical Contractors including but not limited to the preparation of detailed designs, shop drawings, acceptance hereof, lead times for purchases and delivery and installation of equipment, etc.

The Contractor shall review his progress every month and should progress lag behind the latest approved programme by more than 2 weeks, he shall submit a revised programme for approval, with a method statement indicating how he will make up the lost time. If, in the opinion of the Engineer, such revised programme will not make up the lost time, the Engineer will have the right

to instruct the Contractor to reorganize his resources and his work to ensure an acceptable programme. Claims for additional payment for costs incurred due to such reorganisation will not be accepted.

C3.5.1.4 Sequence of the works

The Contractor shall programme his work so that:

- The preparation and acceptance of the documentation required prior to access and possession of the site is granted as stipulated in the Contract Data.
- The preparation of designs and drawings in terms of C3.2.3.
- The trial operating period specified in C3.8.2.5.

C3.5.1.5 Software application for programming

The Contractor shall prepare the programme with proprietary software that uses the critical path method of network analysis and can display the programme in a bar chart format, amongst others. The software shall be compatible with Microsoft Project.

C3.5.1.6 Methods and procedures

The Works shall be executed in accordance with the Contract, and all relevant statutory requirements.

C3.5.1.7 Quality plans and control

Quality control shall be carried out in accordance with the requirements of the Standardised Specifications for Civil Engineering Construction, the Scope of Work and the FIDIC Red Book as amended in the Contract Data.

The Contractor shall provide the Engineer 48 hours notice when he requires the inspection/testing of parts of the Works. Failure to notify the Engineer or to provide adequate test results (including level control and setting out information) will be regarded as test results that do not comply with the specified requirements. Payment for such parts of the Works, and all subsequent parts of the Works that would be affected by such non-compliance will not be certified until adequate test results are provided.

C3.5.1.8 Health and Safety

Refer to C3.10.

C3.5.1.9 Environmental Management

Not applicable.

C3.5.1.10 Accommodation of traffic on public roads occupied by the Contractor

Refer to PSA 5.

C3.5.1.11 Other Contractors on site

Not applicable.

C3.5.1.12 Testing, completion, commissioning, and correction of defects

Quality control shall be carried out in accordance with the requirements of the Standardised Specifications for Civil Engineering Construction, the Scope of Work and the FIDIC Red Book as amended in the Contract Data.

C3.5.1.13 Recording of weather

Refer to the Contract Data.

C3.5.1.14 Format of communications

All contractual communications shall be in writing. Verbal instructions will only be regarded as instructions from the Engineer if confirmed in writing.

All storage, and issuing of contractual documentation, drawings, requests for information, inspections etc. shall be done on the BIM360 Documents platform. Access to the BIM360 Documents platform shall be provided by the Engineer at no cost. The Contractor shall be responsible for training and familiarising himself with the use of the BIM platform for execution on this Contract.

C3.5.1.15 Key personnel

Key personnel shall be on site full-time during working hours. Key personnel may only be substituted with a person who has equal or better qualifications and experience.

C3.5.1.16 Management meetings

Monthly site meetings will be held on site, in the Contractors site office. The dates of these meetings will be agreed at the Inaugural Meeting.

C3.5.1.17 Forms for contract administration

The Contractor and Engineer shall operate and maintain the contract administration procedures and documentation through the BIM 360 Documents platform.

The Employer shall operate and maintain their separate contract administration procedures and documentation but will have access to the BIM 360 Documents platform.

C3.5.1.18 Electronic payments

Payment of monthly certificates will be made by electronic transfer to the bank account stated on the Contractor's tax invoice.

C3.5.1.19 Daily records

The Contractor shall keep daily records of the activities on site, key milestones achieved, plant and labour, deliveries and removals of key materials and equipment, weather conditions, delays, dayworks and visitors, amongst others. These daily records shall be recorded on the BIM360 Document platform as a Daily Log.

C3.5.1.20 Bonds and guarantees

The Original Guarantee shall be lodged with the Employer or Engineer.

C3.5.1.21 Payment certificates

Payment certificates shall be in the format required by the Engineer. Payment certificates shall be submitted monthly, on a date to be agreed with the Engineer at the Inaugural meeting.

A cession of ownership, in the required format shall be submitted with each payment certificate when a claim is made for materials on site.

The Contractor shall provide the reports as specified in C3.3.5 with his monthly statement.

C3.5.1.22 Permits

Not applicable.

C3.5.1.23 Proof of compliance with the law

Refer to requirements of the Scope of Works and all relevant legislation.

C3.5.1.24 Insurance provided by the Employer

Refer to the Contract Data.

C3.6 SPECIFICATIONS FOR CIVIL INFRASTRUCTURE

The following variations and additions to the SABS1200 Standardised Specifications for Civil Engineering Construction apply to this Contract. The prefix "PS" denotes a reference to the Standardised specification. The letters and clause number following the prefix denote a reference to the specific clause in the specific Standardised specification.

An asterisk (*) placed next to the PS clause heading denotes the inclusion of an additional clause that does not appear in the Standardised specification.

The term "project specification" used in the Standardised Specification shall mean "Scope of Works".

PSA GENERAL (SABS 1200 A)**PSA 2 INTERPRETATIONS****PSA 2.3 Definitions and abbreviations**

"SABS" shall mean "SANS", except for references to the official SABS mark.

PSA 2.8 Items in Schedule of Quantities**PSA 2.8.1 Principle**

In the fourth line of Clause 2.8.1, after the word "specification", add: "or in the measurement and payment clause of the standard specification or Scope of Works".

PSA 3 MATERIALS**PSA 3.1 Quality**

Where applicable, materials shall bear an official standardization mark. Where it is specified that a material shall comply with the requirements of a SABS specification, the material shall bear the official SABS mark, unless the Contractor can prove that such material is not available with the mark.

PSA 4 PLANT**PSA 4.1 Silencing of plant**

Replace the reference to "Machinery and Occupational Safety Act, 1983 (Act No.6 of 1983) with "Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

PSA 4.2 Contractor's offices, stores and services

The Contractor's offices, buildings, sheds, stores and other facilities erected for the purposes of the contract shall be fenced off and shall be kept in a neat and tidy condition at all times.

No personnel may reside on the site, except for night-watchmen.

The Contractor shall provide one chemical toilet for every 15 workers, which shall be easily accessible to workers at all areas of the site and shall be effectively screened from public view. The Contractor shall strictly enforce the use of the toilets and shall ensure that the toilets are serviced/replaced on an acceptable, regular basis.

The Contractor shall provide a first aid cabinet fully equipped and maintained with at least the minimum contents as listed in the Annexure (Regulation 3) to the General Safety Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993). The Contractor shall also provide personal protective equipment and facilities as required by Regulation 2 of the General Safety Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

PSA 5 CONSTRUCTION**PSA 5.1 Survey****PSA 5.1.1 Setting out of the Works**

In addition to the requirements of Clause 5.1.1, the Contractor shall check the positions and levels of all setting out pegs and benchmarks before commencing any construction and advise the Engineer of any discrepancies.

PSA 5.2 Watching, Barricading and Lighting

The Contractor shall comply in all aspects with the requirements of the Occupational Health and Safety Act (Act 85 of 1993). Refer also to PSA5.10.

PSA 5.3 Protection of structures

Replace the reference to "Machinery and Occupational Safety Act, 1983 (Act No.6 of 1983) with "Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

PSA 5.4 Protection of overhead and underground services

Existing services are known to exist within the Water Treatment Works. The approximate position of known services is shown on the drawings according to the best information available. It is also likely that other services that are not shown on the drawings exist within the facility. Neither the employer nor the Engineer gives any warranty for the accuracy or completeness of the information provided.

***PSA 5.4.1 Locating existing services**

The Contractor shall locate the position of the control points of the services (valves, manholes, switches, etc) and shall have readily available the equipment necessary to shut-off and isolate any such service as well as spare parts in the event of potentially damaging the service, before commencing any excavation. The Contractor shall liaise with the relevant officials of the affected authorities or controlling bodies for the temporary suspension of any service during construction.

***PSA 5.4.2 Alterations and repair of existing services**

Unless specified otherwise by the Engineer, the Contractor shall not carry out alterations to services, or repairs of damaged services. Where any such alteration or repair become necessary, the Contractor shall immediately inform the Engineer, who will make arrangements for the alterations or repair to be carried out by the owner of the service or instruct the Contractor to make such arrangements.

***PSA 5.4.4 Disconnection procedure**

Before carrying out any work that involves the disconnection of a service to a property, the Contractor shall serve written notice on the resident/occupier and/or owner of every property, at least 3 working days before any temporary disconnection, advising the nature, time and duration of the disconnection.

***PSA 5.10 Drawings**

Construction drawings and additional detailed information will be made available to the Contractor as and when required by him. Tender drawings shall not be used for construction.

PSA 7 TESTING**PSA 7.2 Approved laboratories**

In addition to the approved laboratories stated in Clause 7.2, a testing laboratory certified by the South African National Accreditation Systems (SANAS) in respect of the nature and type of testing to be undertaken for the purposes of the Contract, will also be regarded as an approved laboratory.

PSA 8 MEASUREMENT AND PAYMENT

PSA 8.3.1 Contractual Requirements

Add to sub-clause 8.3.1 :

"In addition, the sum tendered shall cover all initial costs incurred in complying with the requirements of the Special Conditions of Contract.

PSA 8.3.2.1 Facilities for Engineer (Clauses 8.3.2.1 and 8.4.2.1)

The sums tendered shall cover the costs of providing and maintaining all the facilities as detailed in Clause 3.4.5.5 of the Scope of Works.

PSA 8.4.1 Contractual Requirements

Where the Engineer has awarded an extension of time, the Time-Related Items will be adjusted in accordance with the following formula:

$$\text{Sum of Tendered amounts for Time Related Items} \times \frac{\text{Extension of Time awarded by Engineer}}{\text{Tender contract period}}$$

For the purposes of applying this formula "Extension of Time" will exclude the Contractor's December/January close-down period, if applicable. The abovementioned adjustment of the payment for Time-Related Items shall be made in the Completion Payment Certificate and shall be the only payment for additional Time-Related costs irrespective of the actual period required to complete the Contract including its authorised extensions.

The Contractor will not be paid Time-Related Preliminary and General charges for any Special Non-Working Days, as stipulated in the Appendix, which shall be deemed to have been allowed for in his rates.

PSA 8.4.2 Adjusted Payment for Time-Related Items

The payment to the Contractor for Time-Related Items shall be adjusted in accordance with the following formula in the event of the Contract being extended by means of a variation order:

$$\text{Sum of Tendered amounts for Time Related Items} \times \frac{\text{Extension of Time authorised by variation order}}{\text{Tender contract period}}$$

*For the purposes of applying this formula "Extension of Time" will exclude the Contractor's December/January close-down period, if applicable.

The abovementioned adjustment of the payment for Time-Related Items shall be made in the Completion Payment Certificate and shall be the only payment for additional Time-Related costs irrespective of the actual period required to complete the Contract including its authorised extensions.

In the case of fixed price contracts, the amount by which the Time-Related Items is adjusted shall not be subject to the Contract Price Adjustment formula.

In the case of contracts subject to Contract Price Adjustment the amount by which the time-related items is adjusted shall be subject to the Contract Price Adjustment formula.

PSA 8.5 Sums stated provisionally by Engineer

Insert after the last sentence of Clause 8.5:

"Payment will be made on the basis of the sums actually paid for such work."

PSA 8.6 Prime cost items

Insert before the last sentence of Clause 8.6:

"Payment will be made on the basis of the sums actually paid for such goods or materials."

PSA 8.7 Daywork

Provisional items for Daywork are scheduled as follows:

Labour at hourly rates for skilled, semi-skilled and unskilled labourers.

Material as a Provisional Sum with a percentage allowance on the net cost.

The Contractor's own plant at hourly rates for various types. The rates for the Contractor's own plant shall be all inclusive, covering the cost of plant operators, consumable stores, fuel and maintenance.

Hired plant as a Provisional Sum with a percentage allowance on the net cost. The Contractor will be paid the actual net cost of plant hired by him for Daywork and in addition will be paid a percentage allowance on the net cost of such hire, which allowance will cover the Contractor's own overhead costs and profit.

PSA 8.8.1 Main access

The sum tendered shall cover the cost of constructing and maintaining the main access road and, unless the access road is specified to be handed over in good condition, the removal of the road and the reinstatement of the area on completion.

PSA 8.8.2 Dealing with traffic

A specific item has been included in the Schedule of Quantities to allow the Contractor to cover the costs of accommodating traffic on the adjacent roads at all times.

The sum shall cover the effect on the Contractor's programme, delay in the works, damage to or loss of a deviation, supply, erection and moving and re-erection of all necessary traffic signs, drums, barricades, the provision of flagmen and any other operation or equipment, plant or labour necessary.

Payment under this item will be made on a pro-rata basis to the duration of the contract.

PSA 8.8.4.1 Dealing with existing services

The cost of locating and exposing existing services by careful excavation will be held to be included in the rates for excavation.

Where it is necessary for the Contractor to locate and expose existing services that are not shown on the drawings, or where the existing service is found to be further than 3m from the position indicated on the drawings, the cost of locating and exposing such services will be measured by volume. The rate shall cover all costs of materials, labour and plant, including specialist detecting equipment, required to locate and expose the service.

PSA 8.8.4.2 Existing services

A Provisional Sum is included in the Schedule of Quantities for work on existing services by the relevant authorities.

The Contractor shall pay for work ordered by the Engineer and carried out by the relevant authorities, such as locating, protecting or diversion of existing services. The Contractor shall arrange with the relevant authority for invoices to be addressed to him. The Contractor will be paid in Item A5.1.1 upon submission of proof of payment of the relevant authority's invoice.

The Contractor's costs in connection with work carried out by service authorities will be measured and paid separately under Item A5.1.2 as a percentage of the actual amount paid, excluding VAT. The percentage shall cover the costs of all administrative and supervisory costs and profit, as well as the cost of the Contractor's liaison and aid to the authorities in locating and protecting the abovementioned services and any other costs resulting from the work of the authorities.

***PSA 8.9 Dealing with water**

The sums tendered shall cover all costs with regard to the preventive measures that must be taken with regard to water and the repair of damaged portions of the Works, including the control of surface water, precautions against flooding, drainage and removal of ground water in the trenches, the protection of the road prism for the proper execution of the Works.

PSA 8.10 Freehaul and overhaul *

Notwithstanding any clauses in the Standardized Specifications dealing with transport, freehaul and/or overhaul, no measurement or payment will be made for overhaul. All haulage will be regarded as freehaul and the cost thereof will be deemed to be covered by the rates for the provision or disposal of the applicable material.

PSA 8.11 Miscellaneous items *

The sum or rate for any item which refers to this clause shall cover the cost of all materials, labour and plant required to execute and complete the work as specified, described in the Bill of Quantities or shown on the drawing(s), including the Contractor's overheads and profit.

***PSA 8.12 Compliance with OHS Act and The Construction Regulations**

Unit: sum

The sums tendered shall cover all costs associated with compliance with all the requirements of the OHS Act and Regulations (including the Construction Regulations 2014) at all times for the full duration of the Contract.

PSAB ENGINEER'S OFFICE (SABS 1200 AB)**PSAB 3 MATERIALS****PSAB 3.1 Name boards**

The Contractor shall supply, erect and maintain two name boards in accordance with Clause 3.1, as shown on the Drawings. The details to be printed on the name board will be provided at commencement.

PSAB 3.2 Office building(s)

As an alternative to the building specified in Clause 3.2, the Contractor may supply a 6m x 2,5x 2,5m high marine container, specially converted for use as an office. If this type of office is supplied, it shall be protected by an elevated waterproof roof, constructed over the container, and approximately 300 mm above the top of the container.

In addition to the furnishings specified in Clause 3.2, the following facilities shall be provided for the office:

- 1 x plan cabinet (steel),
- 2 x 15 A power sockets,
- 1 x air conditioner for warm/cool air, with a cooling capacity of at least 2.0 kW.

PSAB 4 PLANT***PSAB 4.1 Telephone**

The Contractor shall provide an A70 or similar cellphone with R500 prepaid airtime and 25 GB 5G Data for the network provider agreed with the Engineer per month for the duration of construction.

***PSAB 4.3 Personal computer**

The Contractor shall provide, maintain and service, for the sole use of the Engineer, a laptop computer conforming to the following minimum specification:

- Pentium i5 or similar approved,
- 8.0 GB RAM,
- 256 GB solid state hard drive,
- 15 inch LCD monitor,
- Wireless optical keyboard and mouse,
- A purpose made laptop carry case and a cable lock,
- A4 laser printer,
- All cables, plugs and paper needed.

The computer shall be pre-loaded with Microsoft Windows 10 Pro, and Microsoft Project 2019.

***PSAB 4.5 Protective clothing**

The Contractor shall provide and replace all personal protective equipment that may be required by the Engineer, his site staff and his visitors.

***PSAB 4.7 Parking facilities**

The Contractor shall provide, erect and maintain a carport for two cars for the exclusive use of the Engineer's staff. The carport shall provide protection from all the elements and shall include a crushed stone hardstand to free draining slopes.

PSAB 5 CONSTRUCTION**PSAB 5.1 Name boards**

The name board(s) shall be erected within 14 days of the Commencement date in the positions directed by the Engineer. The Contractor shall submit the signwriter's proof of the name board to the Engineer for his approval before commencing the signwriting. Any damage to the name board shall be repaired within 14 days of a written instruction by the Engineer.

All name boards and Contractor's advertising and notice boards shall be removed prior to the issue of the Certificate of Completion.

***PSAB 5.6 Site instruction book**

The Contractor shall supply and maintain a carbon triplicate book as a site instruction book. This book shall be kept on Site and shall be accessible to both the Contractor and the Engineer at all times. It shall be used:

by the Contractor for providing the Engineer with any information regarding the construction of the Works which may be requested, and giving notification in writing of inspections, drawings, etc, required by the Contractor, and

by the Engineer for the purpose of writing day-to-day instructions and confirming any verbal information or instructions given to the Contractor.

One copy of each site note issued shall remain in the book.

PSAB 8 MEASUREMENT AND PAYMENT***PSAB 8.3 Telephone and data card**

The provisional sum provides for payment of the cost of calls and data that exceed R 500.00 per month.

***PSAB 8.5 Laptop computer**

The provision of the laptop computer will be paid by a lump sum.

The sum shall cover the cost of provision, installation and removal of the computer, all accessories and the necessary software.

Maintenance of the computer will be measured by the sum as a time related item.

The rate for the maintenance of the computer shall cover the cost of replacing the computer (new for old) on a one week basis.

PSC SITE CLEARANCE (SABS 1200 C)**PSC 3 MATERIALS****PSC 3.1 Disposal of material**

Delete the first two sentences of this clause and replace with:

“Debris arising from clearing and grubbing or from the demolition of structures on site shall be removed by the Contractor and disposed of at a Municipal approved tip site.

The rate tendered shall allow for any fees to be paid at the tip site.

PSC 5 CONSTRUCTION**PSC 5.1 Areas to be cleared and grubbed**

The Contractor shall ensure that the areas cleared and grubbed are kept to the minimum area necessary for the execution of the Works.

The Contractor shall clear and grub the area required for the Works, areas on which material will be stockpiled for later use and areas where material is to be dumped and spread, unless instructed otherwise by the Engineer.

PSC 5.6 Conservation of topsoil

Topsoil shall be removed from the cleared areas up to a depth of 150 mm (if available) and stockpiled on approved sites for later reuse. Until required for spreading, the stockpiles of topsoil material shall be stabilized by watering or other approved means.

PSC 8 MEASUREMENT AND PAYMENT**PSC 8.2.7 Dismantle and remove pipelines, etc**

In addition to the requirements of Clause 8.2.7, the rate shall cover the cost of locating the pipeline and any additional costs of excavation and backfilling not covered by other normal rates for excavation and backfilling under SABS 1200 DB.

PSC 8.2.8 Demolish and remove structures, etc

In addition to the requirements of Clause 8.2.8 the rate shall cover the cost of excavation and demolition of the scheduled unit, salvaging and delivery of metal fittings, complete removal of all rubble from the Site, and the supply of material for and backfilling of the voids so formed, including compaction, all to the satisfaction of the Engineer.

PSC 8.2.10 Removal and conservation of topsoil

The rate tendered for the removal of in situ topsoil shall, in addition to the items listed in Clause 8.2.10, also cover the cost of stabilizing, watering and protecting the stockpiles of topsoil.

PSGA CONCRETE (SMALL WORKS) (SABS 1200 GA)**PSGA 3 MATERIALS****PSGA 3.2 Cement****PSGA 3.2.1 Applicable specifications**

Notwithstanding Clause 3.2.1, the specification for cements shall be SABS EN 197.

Cement Grade CEM I 42,5N shall be used. Pulverised fly ash (PFA) shall comply with SABS1491-2.

PSGA 3.3 Water

Only potable water may be used for mixing concrete. Other clean water may be used for curing concrete.

PSGA 3.4 Aggregates

The maximum aggregate size shall be 19mm. Plums are not permitted.

PSGA 4 PLANT**PSGA 4.2 Mixing plant**

When the concrete is mixed on site, an approved rotary mixer, suitable in size for a batch containing cement in increments of one sack of 50kg, shall be used. The Contractor's method of batching of the ingredients shall be to the approval of the Engineer's Representative

PSGA 4.3 Vibrators

All concrete shall be vibrated.

PSGA 5 CONSTRUCTION**PSGA 5.1 Reinforcement****PSGA 5.1.3 Cover**

Notwithstanding Clause 5.1.3, the cover to reinforcement shall be as shown on the drawings and bending schedules, and shall not be less than 40mm.

PSGA 5.2 Formwork

A 20mm chamfer shall be formed on the edges of all exposed concrete.

PSGA 5.2.1 Classification of finishes

The finish to all exposed concrete shall be smooth. The finish to buried or backfilled concrete surfaces that are more than 500mm below finished ground level shall be rough.

PSGA 5.4 Concrete**PSGA 5.4.1.4 Prescribed mix concrete**

Prescribed mix concrete shall be mixed in the proportions as set out in Clause 8.4.1.

PSGA 5.4.1.5 Strength concrete

The concrete mix design for strength concrete must be prepared by an approved concrete laboratory or supplier and the results of actual test mixes must be submitted for approval together with 7-day and 28-day strength test results. The Contractor shall bear the costs of determining the proportions of the mix and making and testing cubes for this purpose. If the Contractor submits reliable test records of concrete made from the same materials and mix proportions which he proposes to use, then the Engineer may waive all or part of the strength tests required above to verify that the concrete mix design which the Contractor proposes to use is satisfactory.

No concrete shall be cast until the mix designs have been approved by the Engineer.

Any mix for use in the wall or floor of a water-retaining structure shall have a water/cement ratio not exceeding 0.5, shall contain not less than 325kg cement per cubic metre of concrete and the proportions of the various aggregates shall be such as to produce a density of at least 2,400kg/m³.

In order to facilitate increasing the workability of concrete in the fresh/plastic state, to ensure watertightness without increasing the water/cement ratio, the Engineer may approve the use of an additive. The workability of concrete shall be assessed by means of the slump test. The slump shall be between 30 and 40 mm.

PSGA 5.4.2 Batching

All strength concrete shall be weigh batched.

PSGA 5.4.7 Curing and protection

Concrete shall be wet cured with water by ponding such as to maintain it in a continuously wet condition. Where the surface to be cured is to receive further concrete, and wet curing cannot be achieved by ponding, the concrete shall be wet cured by continuous sprinkling/spraying.

As an alternative, at the Engineers discretion, curing may be carried out by the application of a curing compound. In this case, a white pigmented natural resin based liquid curing compound complying with ASTM C309 74 Type 2 Class B, may be used.

PSGA 5.4.8 Concrete surfaces

All unformed concrete surfaces shall be wood float finished, unless specified otherwise.

Where wood-floating is ordered or scheduled, the surface shall first be given a finish as specified in Clause 5.4.8.2 and, after the concrete has hardened sufficiently, it shall be wood-floated, either by hand or machine, only sufficiently to produce a uniform surface free from screeding marks.

Where steel-floating is specified or scheduled, the surface shall be wood floated except that, when the moisture film has disappeared and the concrete has hardened sufficiently to prevent laitance from being worked to the surface, the screeded surface shall be steel trowelled under firm pressure to produce a dense, smooth, uniform surface free from trowel marks.

Where broom-swept finish is specified, the surface shall be wood floated and thereafter swept transversely (to the direction of the roadway paving) with a stiff bristle broom to produce an approved non-skid finish.

PSGA 6 TOLERANCES**PSGA 6.4 Permissible deviations**

Degree of Accuracy II in Clause 6.4 shall apply.

PSGA 8 MEASUREMENT AND PAYMENT**PSGA 8.1.2 Reinforcement**

Notwithstanding the method of measurement for reinforcement specified in Clauses 8.1.2.1 and 8.1.2.2, reinforcement will be measured and paid as scheduled.

The unit of measurement for steel reinforcement will be the ton of reinforcement for each size bar. Clips, ties, separators, stools and other steel used for the positioning of reinforcement will not be measured unless shown on the bending schedules. The cost of such steel will be deemed to be included in the rates for reinforcing steel.

PSGA 8.1.3 Concrete

The rates for concrete shall also cover the use of dolomitic aggregate where prescribed, the cost of the preparation of design mixes by an approved laboratory, submission for approval by the Engineer, the cost of testing concrete, cost of non-designated joints, finishing of unformed surfaces as specified in PSGA 5.4.8.

PSHA STRUCTURAL STEELWORK (SUNDRY ITEMS) (SABS 1200 HA)**PSHA3 MATERIALS**

Where the words "Structural Steelwork" appear in the heading and in other relevant Clauses, amend to read "Aluminium, Stainless Steel and Structural Steel".

PSHA 3.1 Structural steel

Structural steelwork shall be Grade 300WA.

PSHA 3.4 Stainless steel*

All stainless steel items shall be Grade 316 material.

PSHA5 CONSTRUCTION**PSHA 5.2.11 Corrosion protection ***

The open grid flooring panels, ladders and screens shall be galvanized in accordance with the requirements of Subclause 5.9 of SABS 1200 HC.

PSHA 5.2.10 Protective treatment

All mild steel items not suited for hot-dip galvanizing shall receive the following treatment, unless otherwise scheduled, at the shop of an approved painting subcontractor.

All internal and external surfaces shall be blast cleaned to Swedish Standard SIS 05/59/00 Sa 2 1/2 with an anchor profile between 45 and 75 micrometres. The surface shall be moisture-free of soluble salts and airborne contaminants, and shall be painted with a twin pack polyamide cured high build epoxy coating to a minimum dry film thickness of 300 micrometres. The first coat of paint shall be applied within 2 hours of blast cleaning. The time period between subsequent coats shall be in accordance with the paint manufacturer's requirements.

***PSHA 5.2.11 Type M protection**

Steelwork shall be cleaned to Sa 2½ finish and, within four hours of final cleaning, be primed with alkyd resin-based primer and finished with two coats of gloss alkyd resin-based enamel paint. Primed steelwork shall be kept covered and protected until erected in its permanent position.

PSHA 5.3.7 Repairs to paint

Where site cutting and/or welding is required, the area for a distance of 50 mm on either side of the weld or cut shall be cleaned of all coatings, the cutting and/or welding carried out, the weld deslagged, all flux and weld spatter removed, the steelwork ground down to at least Sa 2 1/2 and painted as specified herein. On arrival on site, and both before and after erection, all items of steelwork shall be examined for damage to the paintwork, and damaged areas degreased, derusted and repaired. The damaged area shall be ground down to at least Sa 2½.

The surrounding paintwork which is still intact shall be feathered for a distance of 20 mm beyond the damaged area. The whole shall then be repainted as specified herein. Under no circumstances will the use of wire brushes be permitted for the removal of rust or other contaminants.

PSHA 8 MEASUREMENT AND PAYMENT**PSHA 8.3.6 Corrosion protection**

Notwithstanding the requirements of Subclause 8.3.6, corrosion protection (painting and galvanizing) will not be measured separately, the prices tendered for the steel items being held to include for the cost of corrosion protection as specified.

***PSHA 8.3.7 Penstocks**

Penstocks will be measured by number. The rate shall cover the cost of supply, delivery, corrosion protection, grouting in of anchor bolts and complete installation of penstocks with frames.

***PSHA 8.3.8 Grids**

Grids will be measured by number. The rate shall cover the cost of supply, delivery, corrosion protection, grouting in of anchor bolts and complete installation of grids.

***PSHA 8.3.9 Hand stops**

Hand stops will be measured by number. The tendered rate shall cover the cost of supply, delivery, corrosion protection and complete installation of gates and frames.

C3.7 SPECIFICATIONS FOR BUILDING INFRASTRUCTURE

Refer to C3.6.

C3.8 MECHANICAL WORKS SPECIFICATION

This part of the document covers the project specific technical requirements of the Mechanical Works.

C3.8.1 APPLICABLE STANDARDS

C3.8.1.1 Regulations, Codes and Specifications

The complete installation shall comply with the current editions of :

1. The Wiring of Premises Part 1: Low-voltage installations SANS 10142-1.
2. The Wiring of Premises Part 2: Medium-voltage installations above 1kV a.c. not exceeding 22kV a.c. and up to and including 3,000 kW installed capacity.
3. Occupational Health and Safety Act No. 85 of 1993
4. Regulations of Telkom
5. Local Municipal By-laws and Regulations
6. Local Fire Department Regulations
7. Protection against Lightning – Physical damage to structures and life hazard. SANS 10313.
8. The Specification within the Contract Document
9. All the sections and Drawings forming part of the Contract Document
10. The relevant NRS Specifications
11. Plant and Equipment Manufacturers Specifications
12. National Building Regulations - SANS 10400.
13. SANS 10061 Part 1 The installation of communal and single antenna systems for the reception of television and sound broadcast transmissions – VHF and UHF television and VHF sound antenna.
14. SANS 10061 Part 2 The installation of communal and single antenna systems for the reception of television and sound broadcast transmissions – Satellite antenna systems.
15. SANS 1252 Passive antennae for the reception of VHF and UHF television and VHF sound transmissions.
16. SANS 1611 The mechanical requirements for satellite television receiving antennas.
17. SANS 1238 Duct work
18. SANS 10103 The measurement and rating of environmental noise with respect to annoyance and to speech communication
19. SANS 1424 Filters for use in air-conditioning and general ventilation

C3.8.1.2 Relevant ISO and BS Standards

Not applicable.

C3.8.1.3 Particular / Generic Specifications

Not applicable

C3.8.1.4 Additional Specifications

Refer to C3.4.2.

C3.8.2 SCOPE OF WORK

C3.8.2.1 General

The scope of the works is briefly summarised as follows:

- Installation of four (4) Water pumps for the rising main to Steenbras reservoir in the pumpstation inclusive of associated valves, pipes etc.
- Installation of two(2) Water pumps for the rising main to Collinskop reservoir in the pumpstation inclusive of associated valves, pipes etc.
- Testing, Commissioning and Validation of the complete Electrical, Mechanical and Controls Installations.
- Provision of detailed “as-built” and operating and maintenance manuals.
- Certificate(s) of Compliance.
- 12 Month full maintenance and service plan and guarantee.

C3.8.2.2 Procedures and Method Statement

The schematic drawings in this document indicate broad design guidelines only. These diagrams shall be developed into comprehensive working drawings by the Contractor.

The Contractor shall submit to the Engineer for approval detailed fabrication (installation drawings) and work procedures and installation method statements based on the approved construction programme as prescribed in the Conditions of Contract.

C3.8.2.3 Notice for Testing and Inspection

The Contractor shall advise the Engineer at least 7 days in advance of any witnessing, inspections or testing.

C3.8.2.4 Tests on Completion

The complete installation shall be tested in conjunction with the Engineer who may prescribe any relevant and reasonable tests on the Generator, MCC, pumps, controls and telemetry systems and equipment.

All pump systems shall be performance tested in terms of ISO 9906 and witnessed by the Engineer for compliance with all design parameters including a minimum of 3 re-priming tests.

The Contractor shall provide all necessary test equipment, materials and tools and competent staff for the performance of the specified performance acceptance tests and shall submit for the approval of the Engineer certified copies of the calibration certificates for the test equipment.

Witnessing of testing shall not commence prior to confirmation from the Contractor that ALL systems have been pre-commissioned and checked for functionality, the control system and telemetry installation in particular.

C3.8.2.5 Trial Operation Period

When all tests have been successfully completed to the satisfaction of the Engineer, a Trial Operation Period shall start and shall consist of a continuous period of operation of 28 days free from trouble. All downtime and or time when performance is outside the required operating

parameters for any reason other than the Employers intervention shall be added to the Trial Operation Period.

During the Trial Operation Period, the Contractor shall carry out all necessary servicing and any adjustments required. The Employer's site staff will assist the Contractor in operating the plant during this period and at this time the Contractor shall train the Employer's operational staff in the starting, operating and stopping of the plant and the Employer's maintenance staff on the maintenance requirements and procedures.

Should the trial operating period provide evidence that the equipment is not performing reliably as intended, the Engineer will issue an instruction to abort the trial operation period and the Contractor and his suppliers shall be required to remedy the problem within 14 days.

Should the trial operation period provide evidence that a particular component or piece of equipment is unacceptable, the Engineer's assessment being final, the Contractor shall replace at his cost the unacceptable item(s) of plant, where after a further 28 day trial operating period will commence for monitoring of the replacement parts.

At the end of the Trial Operation Period the Contractor shall arrange for an acceptance inspection to be carried out together with the Engineer for the purpose of Practical Completion and preparation of a defects list.

C3.8.2.6 Detailed Design

The drawings included in this document represent a systems design defining the requirements of the Employer.

The Contractor shall be responsible for the detailed design, workshop drawings and wiring diagrams required for the manufacture and installation of the pumping systems including associated electric cabling, instrumentation and controls.

General arrangement and detailed installation drawings (plans and elevations) are also required which shall reflect any possible changes to the building structure and pipe trenches required to accommodate the contractor's equipment.

C3.8.2.7 Maintenance During the Guarantee Period

The contractual guarantee period on faulty equipment, materials and workmanship shall be twelve (12) months. The guarantee period on material, equipment and workmanship commences on the date of the works completion certificate issued by the Engineer and expires twelve (12) months later.

During the guarantee period, the Contractor shall be responsible for the complete maintenance and servicing of equipment and plant according to the suppliers/manufacturers specifications. Maintenance of the installation shall mean the regular servicing, lubrication, repairing, cleaning and adjustment of the installation as recommended by the manufacturers as well as the free of charge replacement of any defective components during the guarantee period.

A suitably qualified and trained person shall routinely and regularly examine and test the installation once every 3 months and shall also perform all the necessary maintenance tasks to ensure smooth and faultless operation. A quarterly report shall be submitted to the Engineer.

The Contractor shall immediately, on the day of first call-out, attend to breakdown/emergency calls. In the event of non-performance by the Contractor in this respect, the employer shall be entitled to make such other arrangements as are necessary, the cost of which shall be for the Contractor's account and deductible from any outstanding retention monies.

A logbook shall be kept and all servicing and repairs shall be recorded in this logbook with meticulous care. The logbook shall at all times be put at the disposal of the Engineer. The Contractor shall issue the logbook with full record of all services and repairs to the employer after the guarantee period has expired.

C3.8.3 PUMP CONTROL PHILOSOPHY

The pumping facility will be equipped with a total of six (6) pumps as indicated below:

1. Four (4) electrically driven immersible pumps in parallel to pump to Steenbras reservoir;
2. Two (2) electrically driven immersible pump to periodically pump to the Collinskop Reservoir;

C3.8.3.1 Main Pumps

The Main Pumps shall function as follows:

- Any two (2) of the four pumps (to supply to Steenbras) shall operate to achieve the design duties, they shall run at 6 starts per hour at no particular sequence e.g. Pump1&2, Pump 2&3 or Pump 4&3 or Pump 1&4 etc. When the demand in summer a total number of three (3) pumps should run to achieve a total duty of 210 l/s.
- Only one (1) pump will operate at a time to achieve the design duties for the Collinskop rising main.

C3.8.4 PUMP SETS

C3.8.4.1 General

C3.8.4.1.1 Description

The pumps shall be of the self-priming type equal in construction and performance to the duties as specified below.

C3.8.4.1.2 Performance

Each pump must have the necessary characteristics and be selected to perform satisfactorily within the following operating conditions:

Main Pump No 1:

Volume Flow (l/s)	: 70l/s
Total Dynamic Head (m)	: 49m

Main Pump No 2:

Volume Flow (l/s)	: 70l/s
Total Dynamic Head (m)	: 49m

Main Pump No 3:

Volume Flow (l/s)	: 70l/s
Total Dynamic Head (m)	: 49m

Main Pump No 4:

Volume Flow (l/s)	: 70l/s
Total Dynamic Head (m)	: 49m

C3.8.4.1.3 Construction

Casings shall be made from cast iron and able to withstand a maximum operating pressure of 1600 kPa. No internal coating is required.

Casings shall incorporate mounting feet sized to withstand the dynamic and static forces imposed on the pump casing when anchored or bolted down. A filler and drain port shall be supplied for ease of filling and draining the pump casing.

The pump shall be directly driven by means of flexible couplings equal to Fennerflex tyre type couplings.

A heavy-duty purpose-built steel base shall be provided the pump set. The pump and motor shall be fitted onto the base, suitably spaced to ensure easy maintenance to any component, with provisions made for adjustment of pump and motor alignment. Base frames shall be hot dipped galvanized and painted with a durable epoxy paint system.

The motors of the pumps should be immersible and have a cooling jacket.

C3.8.4.1.4 Pump Material Selection

Pump following construction materials are provided as a guideline of minimum material specifications:

Casing	:	Cast Iron (GG-25)
Casing wear ring	:	Ductile Iron / Cast Steel
Bearing housing	:	Cast Iron (GG-25)
Shaft	:	316 Stainless Steel
Impeller	:	Ductile Iron two-vane
Seal	:	Mechanical (Tungsten titanium carbide faces)
Bearings	:	Roller (open)

C3.8.4.1.5 Coatings

The pumps shall be prepared and painted externally with epoxy paint similar to Sigmaguard CSF to minimum 300micron thickness.

C3.8.4.1.6 Drive Couplings and Seals

Mechanical seals shall be provided.

Drive coupling shall be as specified of the flexible tyre type couplings rated to safely transfer the required torque to the pump shaft. The Contractor shall allow for a short stub shaft extension on the motor drive shaft to suite the flexible coupling and provide service space between the motor and pump.

A custom manufactured and painted 304 stainless steel coupling guard shall be provided.

C3.8.4.2 Performance Testing

The Contractor shall arrange and bear all costs associated with the performance testing of the new pump units at the SABS, excluding only possible travel and accommodation cost of the Engineer and the Employers representative(s) for the purposes of witnessing the tests. The Engineer shall be notified in writing of the scheduled pump test at least one (1) week prior to the day of testing. Abortive costs by the Engineer and the Employers representatives shall be for the account of the Contractor including witnessing of any repeat tests.

Pump performance shall be tested in accordance with ISO 9906 grade 1.

C3.8.4.3 Installation, Testing and Commissioning

The Contractor shall be responsible for all aspects of the installation of the new pumps including, but not limited to, the following:

- Off-loading of equipment and material and rigging into position
- Horizontal and Vertical laser alignment
- Fixing of anchor bolts in concrete base
- Grout and concrete finishing
- Drainage piping in 316 stainless steel
- Making provision for fitting of instrumentation (specified elsewhere)

The Contractor shall not commence with commissioning of the new pumps without the approval of the Engineer. The Contractor shall provide full details of his proposed commissioning schedule and procedures at least 7 days before commencing with commissioning in order to brief plant operating personnel and to make any arrangements for i.e. load shedding, water supply etc.

C3.8.4.4 Quality Control

The manufacturing, testing and installation of the pumps shall be carried out in accordance with detailed Quality Control Plan approved by the Engineer. The Engineer shall indicate any hold points for his inspection purposes.

C3.8.4.5 Manufacturer Warranty

Pumps shall carry a minimum 5-year limited warranty.

C3.8.5 PIPING, VALVES AND FITTINGS

This section references all piping, valves, fittings and actuators inside the new pump station building as indicated on the drawings. The pump suction and discharge side shall be fitted with pressure transducers and analogue pressure gauges.

The pipework installation includes basic piping, pipe specials, flanged and flexible couplings, valves, bolts and nuts, jointing materials and all other sundry and incidental items for the complete installation of the new pumps.

C3.8.5.1 Piping and Butt-Welded Fittings

Full details of piping, fittings and pipe specials are indicated on the drawings.

Steel butt welding pipe fittings shall be to ANSI B16.9, BS 1965 or BS 1640 of the same schedule as the pipework or heavier; as required by the Standard Specifications of Mechanical Works from the City of Cape Town (Section D20.5.2.6).

C3.8.5.2 Valves

All gate valves to be similar or equal to Insamcor or Bovako knife gate valves with fusion bonded epoxy coating to the valve body and stainless steel rising spindles. Apart from the valve body, all components ("top works") shall be manufactured from 304L or higher grade stainless steel. Suitable extension spindles shall also be provided in 304L grade as indicated on the drawings.

Knife gate valves shall have 316L stainless steel blades and shall be of the wafer type.

All check valves to be similar or equal to AVK swing check valves with external counterweight arm with fusion bonded epoxy coating finish.

All non-return valves shall be Flex check type that shall have a full flow body that is equal to nominal pipe diameter any point of the valve. The top access port shall be full size to allow for easy access to the disc for removal. The seating surface shall be at an angle of 45°, to minimise disc travel. The valve disc shall be cycle tested 1000000 times in accordance with ANSI/AWWA C508 and shall not show any signs of wear, creaking or distortion. The construction shall be as follows:

Part name	Material	ASTM Specification
Body (DN50 to DN 300)	Cast Iron	A126 Class B
Body (DN350 and above)	Ductile Iron	A536 65-45-12
Cover (DN50 to DN300)	Cast Iron	A126 Class B
Cover (DN 350 and above)	Ductile Iron	A536 65-45-12
Disc	Ductile Iron EPDM/NPR/Viton coated	A536 65-45-12
Gasket	NBR/EPDM/Viton	

Air valves shall be ARI or Vent-o-mat, appropriate for this type of installation, or equal approved.

C3.8.5.3 Flexible Couplings

Flexible couplings, including the flange adaptor type, shall be of the Viking-Johnson type, or equal approved, with removable locating plugs in lieu of centre registers. The minimum working pressure rating shall be 1,0MPa on the suction side and 1,6MPa on the delivery side.

All "flexible" pipe ends shall be restrained with full length stay bolts passing through and additional flange welded onto the pipe and the main bolting flange of the flexible coupling. All stay bolts, nuts and washers shall be hot dipped galvanized.

The lateral and angular alignment of pipes joined by flexible couplings shall be well within the tolerances limits specified by the manufacturer of the couplings.

Grooved pipe couplings shall be similar or equal to the Advanced Groove System style 77 standard coupling as manufactured by Messrs. Victaulic.

C3.8.5.4 Flanges, Bolts and Nuts

Flanges shall be manufactured from austenitic 316 stainless steel to SABS 1123 table 1000/3 or appropriate to the maximum working pressure to which they will be subjected. SANS 1123 and BS 4504 shall be used for all flanges to comply.

All bolts, nuts and washers shall be stainless steel 316.

It is the Contractors responsibility to ensure that the pipe flanges and the mating flanges of equipment and fittings are compatible as regards overall size and drilling schedule.

C3.8.5.5 Corrosion Protection of Pipes, Pipe Specials and Fabrications

All piping, pipe fittings, pipe specials, thrust plates and other fabrications (i.e. pedestals, brackets, etc.) supplied and installed shall be prepared and protected in accordance with the following specification:

- a) **Basic Preparation**
All fabrications shall be ground smooth and all sharp corners removed and edges rounded off neatly and evenly.
- b) **Internal and External Surfaces**
On completion of fabrication of the pipe sections, all piping, fittings, flanges and pipe specials shall be prepared and coated with Rilsan T Blue 7174 to minimum 300 micron dry film thickness. Coating processes and work procedures shall be strictly in accordance with the coating supplier's specifications.
The Contractor shall prepare and paint all concealed surfaces of thrust plates and pipe supports in accordance with the above specification before final installation.

C3.8.5.6 Tolerances

The tolerances to be observed in setting out and installing the pipework shall be in accordance with the best practice for this class of installation. Mating flanges when offered up to each other shall be accurately aligned in all directions to ensure that stresses are not induced in the pipelines when the bolts are tightened. The Contractor shall take additional precautions particularly in respect to the connections to the pumps.

C3.8.5.7 Weld Testing

All welded connections shall be tested, witnessed and certified by an independent approved inspection authority and by the by the Engineer's representative prior to coatings applied as follows: Dye penetrant tests to all welds in accordance with BS 4416 as a minimum and MPI as directed by the Engineer.

The Contractor shall allow for testing and any remedial action to correct defective welds.

C3.8.6 OPERATIONAL REQUIREMENTS

C3.8.6.1 Control Logic

This sewage pumps will be controlled by means of submersible pressure sensors:

The primary level sensor will be installed as part of the telemetry installation and will control the function of the pumps under normal operating conditions. The contractor must install and configure a backup level sensor connected to a programmable controller with LED indicator. This controller is to take over the control of the function of the pumps in the event that the telemetry system fails. The following specific requirements for the controllers shall apply:

- a) The unit shall be suitable to operate from a 24V DC supply.
- b) Tenderers must allow for a stainless steel sleeve along with brackets to house the sensor.

C3.8.6.2 Manual / Auto Selection

Allowance shall be made for auto/manual selection of the pump set. In AUTO mode, the pump set shall be under control of the level controller. In MANUAL mode, the pump sets shall be controlled by means of a spring-loaded push button to keep the pump sets running manually until the sump is empty. This push button shall be labelled as follows:

- Pump no. 1 : Pump manually
- Pump no. 2 : Pump manually
- Pump no. 3 : Pump manually
- Pump no. 4 : Pump manually
- Pump no. 5 : Pump manually
- Pump no. 6 : Pump manually
-

C3.8.6.3 Indication Instruments and Lights

Each pump motor shall be provided with the following instruments and indicating lights on the face plate of the cubicle:

- VSD Remote key pad
- One ammeter indicating motor heater current
- Power on light
- Running light
- Fault light
- One hour meter
- A lamp test facility is required for each motor cubicle
- E-stop trip light
- Fault reset button
- Temperature trip light

In addition to the above the face plate shall be fitted with the following:

- E-stop button
- Door interlock for the circuit breaker
- Auto / manual selector switch
- Spring loaded pump down button

C3.8.7 MOTOR CONTROL CENTRE (MCC) AND CONTROL PANELS

C3.8.7.1 General

The motor control centre shall be manufactured in accordance with Part C3.6.1 of this tender document. The MCC shall be designed to be extended as further phases are commissioned.

Tenderers' attention is drawn specifically to the items highlighted in the following paragraphs.

C3.8.7.2 Switchgear

The switchgear shall be suitably rated in terms of the prescribed voltage, current, frequency and fault current conditions.

C3.8.7.3 Electronic Variable Speed Drives

75kW Constant Torque Variable Speed Drives with remote keypad shall be fitted in the two pump control cubicles. The following equipment must be installed with the variable speed drive:

- Circuit breaker with door interlock handle.
- Input Reactor (2%)
- Isolation contactor
- High speed semiconductor fuses
- All the necessary relay logic for pump control

The VSD must be equipped with Modbus, RS232 communication module for interface with the telemetry system.

C3.8.7.4 Labels

The MCC shall be clearly and fully labelled in accordance with Part C3.6.1 of this specification by means of the plastic engraved nameboard type labels, black on white, which shall be attached by means of stainless steel machine screws and nuts as well as adhesive. Self-tapping screws and/or adhesive only are not acceptable.

C3.8.7.5 Sockets

Plug sockets shall be incorporated in the panel and will consist of standard 16 A/3 pin sockets for 220 V and 5 A/3 pin sockets for 32 V.

C3.8.7.6 Panel Metal

Notwithstanding the prescriptions in the General Technical Specification, the panel metal shall be 3CR12 steel of minimum thickness 1,6 mm.

C3.8.7.7 Finish

The distribution board shall be finished in a powder sprayed and baked coating. The colour of the board shall be electric orange.

C3.8.7.8 Metal Framework (Plinth)

A plinth of the MCC is required in accordance with detail drawings of this Specification.

C3.8.7.9 Circuit Breakers

The circuit breakers shall comply with the operation requirements indicated on the drawings and shall be equipped with locking facilities.

C3.8.7.10 Energy Meters and Current Transformers

One three-phase energy meter and current transformers (CT's) shall be installed as indicated on the schematic drawings.

C3.8.7.11 Indicating Instruments

Tenderers must allow for the provision of the following instruments on the incoming section of the Motor Control Centre (MCC):

- (a) One electronic panel meter similar or equal to the Circutor CVM NRG 96 panel meter. The unit must be equipped with an RS-485 communication line to connect to the telemetry system.

C3.8.7.12 Locking Devices For Circuit Breakers

All circuit breakers and isolators on the MCC must be equipped with suitable locking devices integrated into the front panel cover plates. These devices may comprise individual locking mechanisms or hinged cover plates over rows of circuit breakers, which can be padlocked as indicated on the detail drawings. (Three padlocks may be fitted to each circuit breaker handle)

C3.8.8 LIQUID LEVEL CONTROLLERS

To be read in conjunction with C3.7.20.

Supply and install one submersible pressure sensor and backup level controller per wet well bay. The primary level sensor will be installed as part of the telemetry installation and will control the function of the pumps under normal operating conditions. The contractor must install and configure a backup level sensor connected to a programmable controller with LED indicator. This controller is to take over the control of the function of the pumps in the event that the telemetry system fails.

The following specific requirements for the controller shall apply:

- a) The unit shall be suitable to operate from a 24V DC supply to ensure proper control of the standby (Diesel engine) pump during power failures.
- b) Tenderers must allow for a stainless steel sleeve along with brackets to house the sensor.
- c) Tenderers shall make allowance for a battery charger and batteries to operate the controller during mains failures. The batteries shall be rated such that the unit will remain fully operational for 24h during power failures.

C3.8.9 TELEMETRY SYSTEM

A provisional amount is included in the pricing schedules for the telemetry equipment. Tenderers must include this amount in their tenders and allow for any profit, attendance or handling charges. The telemetry outstation will be supplied and installed by others. Tenderers must allow for all interfaces with the telemetry system as per the latest approved I/O schedule from the client.

Tenderers must allow for a telemetry cubicle with blank back board of a minimum size of 600mm x 600mm.

The wiring between the MCC and telemetry cubicle will form part of the tenderers installation. Tenderers must allow for clearly marked terminals in the MCC to facilitate easy connections. The terminals must be grouped together in a logical fashion.

C3.8.10 ACTUATORS

C3.8.10.1 Actuator Selection

The available torque transmitted to a valve shaft through an electric or manual working actuator shall be rated to include a 25% safety factor in addition to the maximum working pressures and prevailing flow conditions.

The Contractor shall submit drawings and/or calculations used for specifying the valve torque at tendering stage.

C3.8.10.2 Representation

Actuators shall have Cape Town representation with comprehensive technical support, service and spares available.

C3.8.10.3 Duty Cycle

The Contractor shall specify the duration of an open/close cycle at tendering stage.

C3.8.10.4 Operation

Actuators shall have a function to hold the gate/disc in any fixed position for an extended period. It is preferred that the actuator be designed with a planetary gear system for reliable valve operation.

All valves shall be capable of being opened or closed under an unbalanced pressure equal to the nominal pressure.

C3.8.10.5 Power Supply

The actuator shall be designed to operate from a 400V three-phase 50Hz power supply only. The actuator shall be capable of operating at the rated duty with a $\pm 15\%$ variation of the applied voltage measure at the actuator.

The actuator shall be provided, completely equipped with the necessary auxiliary equipment to provide the low voltage power required by its control circuits.

The actuators shall have the correct phase rotation of the supply after the site wiring and connections have been made. Phase correction must take place automatically via the integral starter, not via a physical wiring change.

C3.8.10.6 Electric Motors

C3.8.10.6.1 Purpose Design

The motor shall have minimum duty rating of four consecutive complete cycles or a continuous duty of 15 minutes, whichever is the more onerous. The motor bearings shall be fitted with bearing temperature sensors.

C3.8.10.6.2 Gear driven actuators

The actuator shall be fitted with a low inertia high torque purpose designed electric motor, that can be removed and refitted without disturbing previous limit and torque settings.

C3.8.10.6.3 Motor Winding and Over-Temperature Protection

Insulation Class F shall be used on the windings and the winding temperature rise shall be designed for Class B.

Three temperature thermostat switches shall be embedded in the stator winding for rapid, accurate over-temperature protection of the motor windings.

C3.8.10.7 Actuator Mountings

The actuator shall be mounted directly onto the valve body or gearbox. Should a particular application require an adaptation device, any such device shall be a specific proprietary design for a particular type of valve. A comprehensive design of any such adaptation shall be submitted to the Engineer for approval.

The attachment of the actuator to the valve body shall be such that the actuator may be detached without disturbing the valve position.

The valve manufacturer shall ensure that there is no visible movement of the actuator on the mounting adapter or valve body when the actuator is in operation.

C3.8.10.8 Electric Actuator**C3.8.10.8.1 Actuator Controls****Integral Motor Starters**

Integral actuator control, whereby the entire actuator, motor and stop/start control, forward / reverse control and starter are integrally mounted in the actuator enclosure, is preferred.

In both cases, the reversing contactor starter shall be electrically and mechanically interlocked.

Integral Pushbutton Stations (on-board)

The actuator shall be provided with an integral selector switch station with the following features:

- Local/Off/Remote selector switch. This switch shall be pad-lockable in each position.
- Open/Stop/Close selector switch station. The Open and Close selector switch shall only operate when a local selection is made on the selector switch.
- LED local indication of the valve fully opened or closed status.

Integral Pushbutton Stations (remote control panel)

Each actuator shall be remote auto controlled via the telemetry system and the local manual control on the MCC. For this an auto/manual selector switch per actuator shall be provided on the MCC control cubicle. In manual mode, an Open/Close selector switch shall control the opening and closing of the valve.

Selector switch positions (manual or auto) shall be monitored via the telemetry and appropriate pilot light indicators shall provide visual indication of actuator status and position (Open/Close). A pilot indicating general fault shall also be provided.

All pilot lights shall be interlocked with the general lamp test as specified in the general technical specifications.

C3.8.10.8.2 Monitoring and Protection

The following monitoring and protection systems shall be provided.

Torque limit switches shall be provided to sense an overload condition in either clockwise or counter-clockwise operation to protect the valve and actuator. These torque switches shall be adjustable over the entire torque range specified for the actuator.

Travel limit switches shall be provided to stop the actuator at the required extremes of travel and shall be set to trip the actuator operation before the actuator torque limit switches are activated.

The positions of these travel limit switches shall be adjustable, permitting adjustment to the valve shaft travel. These limit switches shall remain synchronized with the valve shaft travel for both motor and hand powered actuator operation. Provision shall be made for protection against unauthorized tampering with these limit switches.

Potential free switch contacts for remote and local indication of:

- Travel limit – valve open/close
- Torque limit exceed
- Remote
- Local
- Actuator OK
- Actuator Failure

These switches shall have both normally open and normally closed contacts rated at 2 amperes, 250 volts.

3 Indicator lights shall be installed to indicate whether the actuator has tripped on either limited travel or excessive torque.

C3.8.10.8.3 Enclosures

The enclosure(s) housing the mechanical, electrical and electronic components of the actuator shall be rated to IP68 of SABS 1222. The Contractor shall provide documentary proof that this requirement is met.

Cable entry into the termination compartments of the actuators and control panels shall not impair the IP rating of the enclosure. A plug and socket or compact plug type termination should be used for once off termination, "harting plugs" should be used.

All cable glands shall be fitted with watertight UV stabilised plastic boots and shall be supplied with the actuator.

C3.8.10.8.4 Manual Operation**C3.8.10.8.4.1 General**

All valves shall have a manual backup operation in order to open/close the valve during emergency conditions.

Manual operation should be instantaneous, there should be no declutch mechanism to enable manual override.

It should be possible to remove the actuators hand wheel without interfering with its mechanical / electrical operation.

The position indicator shall remain synchronized with the actual valve position during manual operation.

C3.8.10.8.4.2 Manual Operation for Electrical Operated Valves

Closure of valves shall be through the clock-wise rotation of hand wheels. All valves shall be capable of being opened or closed under an unbalanced pressure equal to the Nominal Pressure. The effort required on hand wheels to open or close valves under these conditions shall not exceed 90N.

C3.8.11 FLOW METER

This specification covers the requirements for electromagnetic flow meters for use with potable and raw water, raw unscreened sewage, sludge and effluent in pipelines from DN 50 to DN 2 200 under working pressures ranging from about PN 2,5 to PN 40. It includes associated instruments. The specification is to be read with City of Cape Town's Standard Specifications for Mechanical Works, section D66 page 94.

C3.8.11.1 Performance specification

The electromagnetic flow meter shall be of the electromagnetic type, utilising pulsed DC excitation and shall be micro-processor based. It shall be capable of measuring flow rate in both directions, with two independent totalizers to give net flow for network management purposes.

There shall be separate isolated analogue (4 to 20 mA) and pulse outputs (voltage free) for forward and reverse flow. These outputs shall be fully configurable.

Electromagnetic flow meters shall be suitable for the accurate measurement of cold water and raw sewage and shall be capable of measuring the flow linearly at Reynolds number of 4 000 and above to within the accuracy specified in this Specification.

The calibration factor shall not be affected by change of liquid temperature between 4°C and 35°C or pressures between 10 kPa and 4 000 kPa or such higher pressure. The electromagnetic flow meter shall be correctly installed so that the pipeline on either side of the electromagnetic flow meter will flow 100% full at all times.

The downstream back pressure on the electromagnetic flow meters may, under certain circumstances, be as little as 5 kPa. Unless stated to the contrary in the Detail Sheets, the electromagnetic flow meter accuracy shall not be affected by cavitation.

C3.8.11.2 Stable zero

The electromagnetic flow meter shall offer a lifetime stable zero so that routine zeroing is not required. The electromagnetic flow meter shall automatically indicate zero flow under empty pipe sensor conditions.

C3.8.11.3 Quality standard

The electromagnetic flow meter shall be designed and manufactured in accordance with the ISO 9000 series of quality Standards. It shall also have a lay length to current ISO Standards for electromagnetic flow meters to facilitate interchangeability of product.

C3.8.11.4 Wetted materials

The wetted materials shall be compatible with, and suited for, the appropriate application. The liner shall be certified by an internationally recognized body such as WRC, AWWA or equal approved. Acceptable electrode materials are stainless steel (approved grade), Hastalloy C, Tantalum, or Titanium.

C3.8.11.5 Power supply

The power supply shall be 85 – 265 V AC, 4-400 Hz for mains powered devices or 11-40 V, DC for DC power devices, without the need for link setting or voltage selection. This shall permit the handling of dips and surges without disruption.

C3.8.11.6 Input impedance

The input impedance shall be 10¹⁵ ohms or greater so that electrode fouling does not affect signal integrity.

C3.8.11.7 Multiple diagnosis

Multiple diagnostic and self monitoring functions such as empty pipe detection, low/high flow, reverse flow, flow over range, etc., shall be standard features. Integral and dual output alarms shall be provided. Serial communications shall be standard features. It shall be possible to pre-commission the system using a configurator and verify all displays and outputs.

C3.8.11.8 Dual displays

Dual or three line alphanumeric back-lit displays shall indicate user defined flow rate and flow total units. The device shall incorporate a menu selection allowing range, units, alarm setting, etc., to be made from outside of the electronic housing.

It shall not be necessary to remove covers, panels or fasteners to make program or menu changes. The changes may be made from local keypads, remote configurators or PCs. Data shall be stored in non-volatile memory with a minimum retention of 10 years.

The flow rate indicators shall have 4 digits LCD display, with approximately 8 mm high characters, marked in 0,000 m³/s to 9,999 m³/s.

The flow meter shall indicate flow, flow direction, volume, totalizers, configuration and graph.

C3.8.11.9 Software

The electromagnetic flow meter software shall incorporate dual password features, to prevent inadvertent or fraudulent program or unit changes. The totalizer's function shall be user selectable (resettable or non-settable) by means of software programming.

C3.8.11.10 Housing

The electronics housing may be integral or remote, as specified in the Scope of Work, and may be safety certified to FM, CENELEC, CAS, SAA, or Gost Standards for international usage without the need for air purging. It shall be NEMA 4X / IP 65 or better with separate electronics and terminal areas for enhanced protection. The system shall conform to EMC Directive 89/336/EEC to 10 V /m, for electromagnetic radiation susceptibility standards (will shortly be adopted for ISO purposes).

C3.8.11.11 Environmental protection

The flow sensor shall be rated to IP 68 (NEMA 6), and shall be suited for indefinite submergence to a depth of 10 m. The sensor shall also be suitable for installation in underground pipelines without the need for a metering chamber, vault or pit, (i.e. capable of direct burial). The manufacturer shall, on request, provide evidence of satisfactory operation for a minimum period of 5 years in buried installations.

C3.8.11.12 Reference list

Manufacturers shall, on request, provide a reference list of DC electromagnetic flow meters, which have been supplied to major international projects and which have been in operation for at least 5 years.

C3.8.11.13 Guarantee

The electromagnetic flow meter shall be guaranteed against defective workmanship for a period of 3 years from the date of shipment.

C3.8.11.14 Battery system

Electromagnetic flow meters installed in gravity systems shall be designed for operating on a standby battery system (say 24 V) so that the electromagnetic flow meter will continue registering in the event of a failure of the normal 240 V, 50 Hz, single phase, AC power supply (see Clause 3.3).

C3.8.11.15 Marking

The electromagnetic flow meter shall be clearly and indelibly marked with the following information, either grouped or distributed on the casing, on an identification plate;

- i) name or trademark of the manufacturer;
- ii) metrological class, permissible continuous flow rate, and pressure rating;
- iii) year of manufacture and serial number;
- iv) maximum working pressure in kPa or PN;
- v) environmental protection, IP...

C3.8.11.16 Rated working pressure

The electromagnetic flow meter shall be capable of withstanding normal pressure of at least PN 10 and a field test pressure of at least 1,5 x PN.

C3.8.11.17 Pipe connection

- i) Flanged end connections shall comply with BS4504 for the PN corresponding to that of the electromagnetic flow meter. The electromagnetic flow meter design shall provide for a reasonable clearance behind the rear face of the flanges to allow access for installation and removal.
- ii) Stub ends shall be available on the electromagnetic flow meter where specified in the Scope of Work in the larger sizes, DN 600 and above, to permit direct welding where steel pipelines are laid.

C3.8.11.18 Remote reading

Where specified in the Scope of Work, the design of the electromagnetic flow meter shall be such that the totalizer and flow rate meter can be read remotely, making use of a solid-stat electronic transmitter incorporating a seal slot-sensing proximity switch or as approved. Signals shall be transmitted via a two-wire system suitable for a 4 – 20mA pulse/current output.

C3.8.11.19 Surge filter

The Contractor shall be responsible for ensuring that adequate provisions are made for filtering out any power system irregularities (surges, harmonics, etc.) which may in any way affect the proper operation of any component of the metering or recording instrument system.

C3.8.11.20 Condition monitor

The monitor shall automatically store all the measured values and calibration information its own database files for each electromagnetic flow meter, thus maintaining a calibration history log and making it easy to undertake long-term trend analysis. Detailed observation (verification about once every 2 years, or as specified in the Scope of Work), shall be able to give early warning of possible system failure, enabling the maintenance engineer to anticipate problems and take remedial action in advance.

Environmental protection : IP 65. Temperature range : 0° to 60°C.

Power supply : Internal rechargeable battery with at least 6 hours operation.

Recharge adapter : 90 –250 V. Housing : Aluminium transit case.

Because of the probable high cost of the condition monitor, the relevant software and a suitably programmed laptop PC, it is presumed by the Employer that this equipment, together with a technician who is familiar with the use of this equipment, will be available for hire from the manufacturer on request.

C3.8.12 OPERATING AND MAINTENANCE MANUAL

The Contractor shall prepare and supply manuals and drawings for the successful operation and maintenance of the installation. A draft of the manual shall be submitted prior to commissioning for approval. The draft shall then be corrected.

The Contractor shall revise any workshop drawings in accordance with the approval requirements of the Engineer.

In addition to the City of Cape Standard Specification for Mechanical Works one set shall be fixed to a wall in the pump station behind a perspex cover.

C3.8.13 PROGRAMME OF WORK

In carrying out installation, a definite programme of operation shall be observed by the Contractor, and such programme shall at all times be subject to the approval of the Engineer, and be in accordance with his requirements.

The Engineer may, from time to time, by order in writing, without in any way invalidating the contract or giving to the Contractor any claim for additional payment, require the Contractor to proceed with the execution of the works in such order as in his opinion may be necessary, and may alter the order and suspend any part of the work at such time and times as he may deem desirable.

When the work must of necessity be carried out in conjunction with the work of other Contractors or with that of the Employer, it shall be co-ordinated and arranged in such a manner so as to interfere as little as possible with the progress of such other work, and so as to offer every reasonable facility to other Contractors or to departmental employees of the Employer.

C3.9 SPECIFICATIONS FOR ELECTRICAL EQUIPMENT

C3.9.1 APPLICABLE GENERIC SPECIFICATIONS

The following standard specifications which form and addendum to this document shall be read in conjunction with this specification and shall apply accordingly:

- Section A1 General preambles
- Section A2 Regulations, codes and specifications
- Section A3 Painting and colour codes
- Section A4 Manuals
- Section C3 LV Cables
- Section C7 Distribution boards
- Section C12 Lighting installations
- Section C21 Earthing
- Section C22 Generator sets
- Section C23 Lightning protection

C3.9.2 SCOPE OF WORK

This section covers the electrical installation for the Works consisting of supply cables and switchgear, switchboards, control gear, distribution cables, lighting and small power points and all electrical equipment necessary to complete the installation in full working order.

Electric motors for the mechanical equipment (pumps, variable speed drives/soft starters, screens, communications, and telemetry, etc.) will be provided as part of a mechanical portion of this contract.

All equipment and work carried out must be in accordance with the particular specification unless stated otherwise in this project specification.

The scope of the electrical work includes the following:

- The existing distribution boards, cables, power outlets and luminaires to be removed and discarded.
- The kiosk outside the building to upgrade the existing switchgear and new cables installed to the replacement new distribution board.
- New electricity supplies, cables, emergency stops and isolator to be installed for the new pumps.
- There will be new luminaries and wireways installed.

As part of the electrical installation a new standby generator also to be installed complete with plinth and bunded wall in accordance with the relevant specification and local municipal by-laws.

C3.9.3 WORK BY OTHERS

The electrical work to be performed by others:

- Supply and install of the mechanical equipment as follow,
- Pumps
- Variable speed drives/soft starters
- Screens
- Communications and telemetry,
- Sleeves manholes and concrete plinths

C3.9.4 ELECTRICAL DISTRIBUTION

C3.9.4.1 Existing Infrastructure

- There is an existing 500kVA miniature substation located on the existing site.
- The kiosk feeding electricity supply to the existing distribution board is located next to the miniature substation.

C3.9.4.2 New Infrastructure

The following distribution installation is required:

- 3x 95mm² four core copper cable with separate black insulated 95mm² copper earth cable from kiosk to new pump distribution board.
- The large variable speed drives to be fed via four core 95mm² copper cable with separate black insulated 95mm² copper earth cable from new pump distribution board.
- The smaller variable speed drives to be fed via four core 25mm² copper cable with separate black insulated 25mm² copper earth cable from new pump distribution board.
- Each pump will be supplied by a lockable isolator and emergency stop.

C3.9.5 GENERATORS

The Electrical Contractor shall supply and install generator. The units shall comply with the detailed standby generator specification which forms part of this general electrical specification.

The standby generator shall be a 100kVA unit AMF, housed in a container with sound acoustics incorporated into the enclosure. The standby generator supplier shall supply inlet and exhaust louvres to the builder for inclusion in the construction of the building.

- The standby generator supplier shall provide the dimensions, inclusive of any openings required, as well as the mass of the unit to the Engineer to ensure the correct plinth is constructed.
- An external 2000 litre above ground tank shall be supplied and installed on a concrete plinth within a bunded area.

C3.9.6 MOTOR CONTROL PANELS

The Motor Control Panel shall in general:

- Comply with the relevant regulations and standards.
- Comply with the local municipality requirements as well as regulations and by-laws where applicable.
- Be of modular design with standard sized cubicles, mechanically separated from each other.
- Shall be manufactured from 3CR12 stainless steel appropriately powder coated.
- Be floor mounted unless small enough for surface wall mounting.
- Have access from front top and sides.
- Cable entry/exit top and bottom.
- Shall have a door/s covering the switchgear and provide a minimum ingress protection rating of 54. The door/s shall be provided with a window/s through which all indication can be seen without exposing the switchgear to possible damage due to the ingress of water.
- Be sufficiently ventilated to dissipate the internal heat generated. Where natural ventilation is insufficient, forced ventilation shall be provided.
- Have combined class one and two surge protection/arrestors fitted in accordance with Annexure L of SANS 10142-1.

The following compartments/tiers are required:

- Incomer from mains
- Incomer from generator
- Power quality and maximum demand/kilowatt hour meter for the main switch with communication function to integrate with the human machine interface.
- Compartment for each pump unit complete its associated switchgear, starters, controls, meters and indication
- Sub main section to reduce the prospective fault current rating from 36kA to 6/10kA.
- Busbars
- Ventilation

Refer also to single line diagram for switchgear and quantities. The electrical distribution boards are to be manufactured by a reputable company, with relevant experience in the manufacturing of electrical distribution boards, control panels, etc. Approval of the manufacturing company should be obtained from the Engineer prior to the placing of any orders/commencement of works.

Detailed wiring diagrams and shop (manufacturing) drawings of the proposed electrical distribution board is to be submitted to the Engineer for approval, prior to manufacture.

Approval of the wiring diagrams and shop (manufacturing) drawings by the Engineer does not remove any responsibility from the contractor to ensure the completeness and compliance of the distribution board.

The Contractor shall ensure that the respective electrical distribution boards are constructed to fit into the spaces provided, that sufficient space is allowed for the cable ends and termination thereof and that the board is provided with an architrave and a hinged lockable door. All electrical distribution boards shall have a protection rating of no less than IP54.

All gland plates, as well as top or side plates used for the termination of cables shall be easily removable to facilitate the drilling and punching of holes. Panels (fascia) and cover plates are to be fixed to the framework by means of "Quicklock" or other similar captive fasteners. Self-tapping

screws or dome nuts will not be accepted. Panels (fascia) and cover plates are to be fitted with chrome plated handles to facilitate removal.

The Panel door shall be fitted with a magnetic (reed) switch which shall activate the local and remote alarm when the door is opened. The alarm shall be muted via a push button on the panel fascia, whilst the alarm lights shall remain on until the door is closed.

Where applicable, the front panels of normal supply, standby power supply and uninterruptible power supply sections shall be painted in distinctive colours as follows:

- Electric orange non-essential supply
- Red essential supply
- UPS blue

Each pump set shall be provided with the facility for separate isolation of its electrical circuits in such a manner that it does not affect the operation of the other systems. Lockable circuit breakers are required for isolating the main supplies to each unit.

Suitable rated emergency stop buttons of the "lock off" type with an minimum IP65 ingress protection rating shall be fitted in an easily accessible position adjacent to each pump and within 1000mm of it.

- Each pump circuit breaker shall be of the motor curve (slow trip curve) circuit breaker type.
- For moulded case circuit breakers an electronic trip device to be included in the switchgear and set to slow trip curve for motors.

A running hour meter and maximum demand indicating ammeter shall be provided on each pump compartment with communication function to integrate with the human machine interface

The pump timers shall be housed in a separate compartment with the adjustable dials exposed for easy changing of the run times.

The pumps shall under no circumstances be able to be simultaneously started either manually, automatically or after a mains failure.

The control voltage shall be 24 volts. (DC), fuse or circuit breaker protected. A battery charger and a battery appropriately size to maintain the control circuit for a minimum of four (4) hours shall be provided.

Each starter panel shall be provided with a facility for isolating the control supply with the main supply in that panel.

C3.9.7 INDICATION AND CONTROL

All indicating lights shall be of the multi-LED type.

The common section of the control panel shall include the following selector switches:

- Test Mode / Manual Mode / Automatic Mode; and
- Pump selector for selecting the duty pump sets.
- Each pump control panel shall contain a buzzer to provide an audible alarm of a fault condition.

C3.9.8 MOTOR CONTROL

An existing human machine interface is on site, and it should be possible to control the starting and stopping of the pumps. The human machine interface and programming thereof will be done by others.

SEE SECTION C3.8 MECHANICAL SPECIFICATION FOR DETAILED PUMP PHILOSOPHY AND CONTROLS

C3.9.9 LIGHTING INSTALLATIONS

All luminaires shall comply fully with the specifications detailed herein.

The Contractor is to make allowance for the provision of sample luminaires for approval by the Engineer, prior to the placement of orders.

The appointed Contractor is to ensure that sufficient time is allowed for the approval process.

- Type V2 (with internal battery back-up for 30 minutes)

Equivalent to Lascon C10 34W LED, surface mounted 1200mm x 100mm LED luminaire Complete with mounting accessories. High colour rendering index CRI > 80. Colour temperature 4000K (3000K and 5000K on request. small colour tolerance - MacAdam 3. Tridonic LED module and driver. Self-extinguishing polycarbonate body. UV stabilised, self-extinguishing polycarbonate diffuser with photoengraved interior and smooth outer surface. Anti-tamper polycarbonate snap-lock latches (stainless steel on request). Hingeable gear tray. Minimum of five-year warranty. LED driver average rated life of minimum 100 000 hours and LED life of minimum 60 000 hours.

C3.9.10 EARTHING AND LIGHTNING PROTECTION

Refer to the standard specifications Section C21 and Section C23 for details on earthing and lightning protection.

The Electrical Contractor shall employ a specialist installer to undertake a risk assessment and to verify or modify the proposed design to suit the local conditions.

C3.9.11 DUMMY LOAD

The contractor shall allow for the supply and installation of a dummy load to prevent the generator from freewheeling when only one pump is running. The dummy load shall be rated at 50kW. The dummy load may be a resistive or inductive load. The dummy load shall be a single stage and will be automatically activated when only one pump is running and de-activated prior to the second pump starting.

The dummy load shall form an integral part of the enclosure. The dummy load shall be sufficiently ventilated to ensure that the heat of the dummy load does not cause any damage to any components of the installation.

The contractor shall install a suitable contactor, circuit breaker and controls for the dummy load in the changeover control panel.

C3.9.12 DATA TO BE SUPPLIED BY TENDERERS

Full particulars of the material and equipment offered shall be submitted at the time of tendering, and all information requested shall be completed and attached to Returnable Schedule. Any additional information shall be given in writing and all drawings, sketches, pamphlets, etc., shall be submitted with the tenders.

C3.9.13 PLANT DRAWINGS

Within as short a time as possible, but not exceeding one (1) month of the Commencement Date of the contract, the Contractor shall supply the Engineer, in triplicate, with fully dimensioned drawings of the plant and equipment ordered from him and of the position and sizes of all foundations, bolt holes, openings in walls or floors and other special features, affecting construction of the works, so that the Engineer can arrange for the necessary concrete work, foundations, bolt holes, openings for pipes, cable ducts, etc., for the proper erection and installation of the plant.

Any cutting or alteration of structural work arising from inadequate or incorrect dimensions and particulars afforded by the Contractor, or through late receipt of such particulars, will be arranged by the Engineer to be carried out as he thinks fit at the expense of the Contractor concerned under this contract.

C3.9.14 QUALITY OF MATERIAL AND ACCEPTANCE

Any material and/or workmanship which is found to be unsound, damaged or contrary to the specification, or which is found during the defect's liability period or during tests in situ to be defective, or in any way contrary to the specification due to causes within the Contractor's control and responsibility shall be rejected.

All material rejected by the Engineer shall be replaced or repaired by the Contractor at his own expense to the instructions and satisfaction of the Engineer.

C3.9.15 TIME OF DELIVERY AND COMPLETION

Tenderers are to state in the schedule of prices, the periods in which they undertake to effect complete delivery of all material under the contract from the date of placing the order. Tenderers are also to state the period in which they undertake to complete all erection, adjustment, putting into proper working order and testing of all plant and material after receipt of the order from the Engineer to commence erection or after the date of final delivery of material, whichever is later.

C3.9.16 MAINTENANCE DURING THE GUARANTEE PERIOD

The defects liability period on faulty equipment, materials and workmanship shall be twelve (12) months. The defects liability period on material, equipment and workmanship commences on the date that the Completion Certificate is issued by the Engineer and expires twelve (12) months later.

During the defects liability period, the Contractor shall be responsible for the complete maintenance and servicing of equipment and plant according to the suppliers/manufacturers specifications. Maintenance of the installation shall mean the regular servicing, lubrication, repairing, cleaning and adjustment of the installation as recommended by the manufacturers as well as the free of charge replacement of any defective components during the guarantee period.

A suitably qualified and trained person shall routinely and regularly examine and test the installation once every three (3) months and shall also perform all the necessary maintenance tasks to ensure smooth and faultless operation. A quarterly report shall be submitted to the Engineer.

The Contractor shall immediately, on the day of first call-out, attend to breakdown/emergency calls. In the event of non-performance by the Contractor in this respect, the employer shall be entitled to make such other arrangements as are necessary, the cost of which shall be for the Contractor's account and deductible from any outstanding retention monies.

A logbook shall be kept and all servicing and repairs shall be recorded in this logbook with meticulous care. The logbook shall at all times be put at the disposal of the Engineer. The Contractor shall issue the logbook with full record of all services and repairs to the employer after the guarantee period has expired.

C3.9.17 IMPORT PERMITS

No special import permits will be available for the importation of materials under this contract. Tenderers shall tender therefore on the understanding that if they are awarded the contract, the materials will be supplied ex local stocks or that importation will be affected from their own permit quota.

Tenderers are to bear in mind that preference will be given, other things being generally equal, to tenders offering material of local manufacture.

C3.9.18 OPERATING AND MAINTENANCE MANUAL

The Contractor shall prepare and supply manuals for the successful operation and maintenance of the installation. A draft of the manual shall be submitted prior to commissioning for approval. The draft shall then be corrected.

Refer to the standard specification Section A4 for the required layout of the O&M manuals

C3.9.19 PROGRAMME OF WORK

In carrying out installation, a definite programme of operation shall be observed by the Contractor, and such programme shall at all times be subject to the approval of the Engineer and be in accordance with his requirements.

The Engineer may, from time to time, by order in writing, without in any way invalidating the contract or giving to the Contractor any claim for additional payment, require the Contractor to proceed with the execution of the works in such order as in his opinion may be necessary, and may alter the order and suspend any part of the work at such time and times as he may deem desirable.

When the work must of necessity be carried out in conjunction with the work of other Contractors or with that of the Employer, it shall be co-ordinated and arranged in such a manner so as to interfere as little as possible with the progress of such other work, and so as to offer every reasonable facility to other Contractors or to departmental employees of the Employer.

C3.10 HEALTH AND SAFETY REQUIREMENTS AND PROCEDURES**C3.10.1 APPLICABLE SPECIFICATIONS**

The Contractor shall comply with the Occupational Health and Safety Act (Act No. 85 of 1993) (OHS Act) and the Construction Regulations, 2014 as amended. In addition, the Contractor shall comply with the Employer's Health and Safety Specification.

The following site-specific specifications shall apply:

- Annexure C : 1. Site Specific Baseline Risk Assessment
 2. Site Specific Health & Safety Specification

C3.10.2 GENERAL PROVISIONS

In terms of the provisions of Section 37(2) of the Occupational Health and Safety Amendment Act, 1993 (Act 85 of 1993) hereinafter referred to as the Act, the following arrangements and procedures shall apply between the Contractor and the Employer to ensure compliance by the Contractor with the provisions of the Act:

- (i) The Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all relevant provisions of the Act and the Regulations promulgated in terms of the Act.
- (ii) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of the Act and Regulations on the Contractor will be fully complied with.
- (iii) The Contractor accepts liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and Regulations.
- (iv) The Contractor agrees that any duly authorised officials of the Employer shall be entitled, although not obliged, to take such steps as may be necessary to monitor that the Contractor has conformed to his undertakings as described in paragraphs (i) and (ii) above, which steps may include, but will not be limited to, the right to inspect any appropriate site or premises occupied by the Contractor, or any appropriate records or safety plans held by the Contractor.
- (v) The Contractor shall be obliged to report forthwith to the Employer and Engineer any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and Regulations, pursuant to work performed in terms of this Contract, and shall, on written demand, provide full details in writing, to the Employer and Engineer, of such investigation, complaint or criminal charge.
- (vi) The Contractor shall furthermore, in compliance with Constructional Regulations 2014 to the Act acquaint himself with the requirements of the Employer's Health and Safety Specification, and prepare a suitably and sufficiently documented health and safety plan as contemplated the Construction Regulations 2014 for approval by the Employer or his assigned agent. The Contractor shall always be responsible for full compliance with the approved plan as well as with the Construction Regulations and no extension of time will be considered for delays due to non-compliance with the abovementioned plan or regulations.
- (vii) The Employer, or his assigned agent, reserves the right to conduct periodic audits, as contemplated in the Construction Regulations 2014, to monitor that the Contractor is compliant in respect of his obligations. Failure by the Contractor to comply with the requirements of these Regulations shall entitle the Engineer, at the request of the

Employer or his agent, to suspend all or any part of the Works, with no recourse whatsoever by the Contractor for any damages incurred as a result of such suspension, until such time that the Employer or his agents are satisfied that the issues in which the Contractor has been in default have been rectified.

- (viii) The proposed type of work, materials to be used and potential hazards likely to be encountered on this Contract are detailed in Volume 1 and 2, the Bill of Quantities, the Drawings, and in the Employers' Health and Safety Specification.
- (ix) The Contractor shall always ensure that his operations do not endanger any member of the public.

C3.10.3 PROTECTION OF THE PUBLIC

The Contractor shall always ensure that his operations do not endanger any member of the public. As the area is adjacent to a residential area the Contractor shall take special precautions to prevent public access to any danger areas on the Works, e.g. by temporary barricades and/or fencing.

C3.10.4 BARRICADES AND LIGHTING

The Contractor shall comply with the Occupational Health and Safety Act (1993), the Construction Regulations and the Employers Health and Safety specification provided in the Appendix.

C3.10.5 TRAFFIC CONTROL ON ROADS

Refer to PSA5.10.

C3.10.6 MEASURES AGAINST DISEASE AND EPIDEMICS

Refer to C3.4 and the Construction Regulations for sanitary requirements.

C3.10.7 AIDS AWARENESS

Refer to the Health and Safety Specifications

C4 SITE INFORMATION**C4.1 SCOPE**

The documentation included in this section describes the site as at the time of tender to enable the Tenderer to price his tender and to decide upon his method of working and programming. Only actual information about the physical conditions on the site and its surroundings has been included in this section, and the interpretation thereof is the responsibility of the Tenderer.

As the works are the alteration of an existing pump station for the purposes of this Contract, the Contractor will be deemed to have carried out his own investigations at tender stage, and fully acquainted himself with the site conditions, whether such investigations have been carried out or not.

C5 ANNEXURES

Annexure A	Locality Plan
Annexure B	Contract Name Board
Annexure C	1. Site Specific Baseline Risk Assessment 2. Site-Specific Health and Safety Specification
Annexure D	CD Containing: 1. Tender Drawings C3.2.4
Annexure E	Applicable Generic Specifications for Electrical Equipment

ANNEXURE A
LOCALITY PLAN

ANNEXURE B

CONTRACT NAME BOARD

ANNEXURE C

1. SITE SPECIFIC BASELINE RISK ASSESSMENT

2. SITE-SPECIFIC HEALTH AND SAFETY SPECIFICATION

ANNEXURE D**CD CONTAINING:****1. TENDER DRAWINGS INDEX**

Drawing No	Description	Rev	Sheet Size
General Drawings			
1652-01-GEN-001	Grabouw Locality Plan	T0	A4
Fencing Drawings			
1652-01-FEN-500	Steenbras Reservoir Fence Layout Plan	T0	A0
Mechanical Drawings			
1652-01-MECH-201	Existing Pump Station Layout Schematic	T0	A1
1652-01-MECH-202	Mechanical Installation Ground Floor Layout	T0	A3
1652-01-MECH-203	Mechanical Installation Elevations	T0	A3
Electrical Drawings			
1652-01-ELEC-L001	Lighting Layout	T0	A3
1652-01-ELEC-P001	Power Layout	T0	A3
1652-01-ELEC-S001	Single Line Diagram (Pump Distribution Board)	T0	A3
1652-01-ELEC-W001	Wireway Layout	T0	A3

ANNEXURE E

APPLICABLE GENERIC SPECIFICATIONS FOR ELECTRICAL EQUIPMENT