




# TENDER DOCUMENT

**TENDER NUMBER : ALMT02/2025**

## UPGRADING OF MANZANA WASTEWATER TREATMENT WORKS

ISSUED BY	PREPARED BY
<b>MUNICIPAL MANAGER</b>	<b>CLIENT REPRESENTATIVE</b>
 <b>CHIEF ALBERT LUTHULI LOCAL MUNICIPALITY</b> Private Bag X 719 CAROLINA 1185  Tel: 017 843 4000 Fax: 017 843 4001	 <b>MONDE CONSULTING ENGINEERS</b> 27 Hendrik Potgieter Street Mbombela 1200  Tel: 013 752 4616 Fax: 013 752 6166

**CIDB GRADING: 7CE or HIGHER**

REGISTERED NAME OF TENDERER: \_\_\_\_\_

TENDERED AMOUNT (INCL VAT): \_\_\_\_\_

**CLOSING DATE: 06 OCTOBER 2025 @12:00**

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## CHIEF ALBERT LUTHULI LOCAL MUNICIPALITY



**PART A: T1.1 TENDER NOTICE AND INVITATION TO TENDER**  
**UPGRADING OF MANZANA WASTEWATER TREATMENT WORKS**

**BID NO: ALMT02/2025**

The Municipality hereby invites reputable and well experienced service providers to submit tenders for the below-mentioned projects. The services providers must comply with the VAT Act. Tender documents will be available on e-tender, municipal website and also at Carolina Municipal Offices from 10 SEPTEMBER 2025 at cashiers point during office hours upon payment of a non-refundable printing fee of R 970,42 and can also be downloaded on the municipal website or e-tenders free of charge.

Ref No	Description	Valuation Criteria	Compulsory Briefing Session	CIDB Grading	Closing Date
ALMT02/2025	Upgrading of Manzana Wastewater Treatment Works	Functionality, the lowest acceptable tender will determine the Preferential point system to be used: 80/20 or 90/10	<b>16 September 2025 @11:30am</b> <b>Venue: SCM Boardroom, Carolina 1185</b>	7CE or Higher	06 October 2025 @ 12H00

Sealed envelopes must be addressed to: The Municipal Manager,  
Chief Albert Luthuli Municipality  
PO Box 24, CAROLINA, 1185

marked with the correct bid number or deposit it in the '**TENDER BOX**' situated at Chief Albert Luthuli Municipality Offices, 28 Church Street, CAROLINA, **no later than 12H00 on the specified closing date per tender.**

A preferential point system shall apply whereby this contract will be allocated to a bidder in accordance with the Preferential Procurement Regulation 2022 and as defined in the conditions of bid in the bid document, read in conjunction with the Preferential Procurement of Chief Albert Luthuli Municipality, where 80/90 points will be allocated in respect of price and 20/10 points in respect of the Chief Albert Luthuli Municipal objectives.

Chief Albert Luthuli Municipality reserves the right to accept and/or not to accept the lowest priced or any other tender. No late, telephonic, facsimile or e-mail tenders will be accepted.

According to the Municipality Supply Chain Regulations issued by the Minister of Finance in terms of Section 168 of the Municipal Finance Management Act, Act 56 of 2003, persons within the organs of the state, like Councillors, and other elected representatives, full time employees and other directors of the public and municipal entities are prohibited from being eligible to bid or be awarded a contract to provide any services to the municipality.

If you do not hear from the Municipality within 90 working days, please consider your tender unsuccessful.

*All administrative matters may be addressed to the Supply Chain Manager Mr. J Nkosi Tel no: 017 843 4025.*

Technical Enquiries: Email:	B. Thela <a href="mailto:BonganiT@albertluthuli.gov.za">BonganiT@albertluthuli.gov.za</a>	Employer:	Municipal Manager CHIEF ALBERT LUTHULI Municipality PO Box 24, CAROLINA, 1185 Website: <a href="http://www.albertluthuli.gov.za">www.albertluthuli.gov.za</a>
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**Mr. ME Thabethe (Pr.Tech.Eng)**  
**MUNICIPAL MANAGER**  
**05 September 2025**

**TENDER DATA**

## T1.2 TENDER DATA

The conditions of tender are those contained in the latest edition of SANS 10845-3, Construction Procurement – Part 3: Standard conditions of tender.

SANS 10845-3 makes several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the provisions of SANS 10845-3.

Each item of data given below is cross-referenced to the clause in SANS 10845-3 to which it mainly applies.

Sub-clause	Data
F.1.1	<p>The employer is Chief Albert Luthuli local Municipality</p> <p>Project Name: Upgrading of Manzana Wastewater Treatment Works</p> <p>Contract No: ALMT20/2025</p> <p>CIDB Grading: 7CE or Higher</p> <p>Client Name: The Municipal Manager, Chief Albert Luthuli Local Municipality</p>
F.1.2	<p>The Project Document issued by the employer consists of the following:</p> <p><b>The Bid</b></p> <p>Part T1: Tendering procedures:</p> <p style="padding-left: 20px;">T1.1 Tender notice and invitation to tender</p> <p style="padding-left: 20px;">T1.2 Tender Data</p> <p>Part T2: Returnable documents</p> <p style="padding-left: 20px;">T2.1 Forms Certificates and Schedules required for Evaluation</p> <p style="padding-left: 20px;">T2.2 Other Forms, certificates and Schedules that will be incorporated into the contract</p> <p style="padding-left: 20px;">T2.3 Returnable Schedules that will be incorporated into the Contract</p> <p style="padding-left: 20px;">T2.4 Other Schedules and Documents that will be Incorporated into the Contract</p> <p><b>THE CONTRACT</b></p> <p>Part C1: Agreements and Contract Data</p> <p style="padding-left: 20px;">C1.1 Safety Agreement</p> <p style="padding-left: 20px;">C1.2 Guarantee</p> <p style="padding-left: 20px;">C1.3 Agreement with Adjudicator</p> <p style="padding-left: 20px;">C1.4 Contract Data</p> <p>Part C2:Pricing Instruction and Summary of Bill of Quantities</p> <p style="padding-left: 20px;">C2.1 Pricing instructions</p> <p style="padding-left: 20px;">C2.2 Bill of Quantities and Summary of Bills of Quantities</p> <p>Part C3: <b>Scope of Work</b></p> <p style="padding-left: 20px;">C3.1 Description of Works</p>

Sub-clause	Data
	<p>C3.2 Engineering C3.3 Construction C3.4 Management</p> <p>Part C4: Site Information C4.1 Site Information C4.2 Locality Plan</p> <p>Part C5: Annexures C5.1 Proforma Documents C5.2 Guidelines for the implementation of labour intensive infrastructure projects under the expanded public works programme C5.3 Contract Drawings</p>
F.1.4	<p><b>The employer's agent</b></p> <p>Name: <b>Monde Consulting Engineers and Project Managers</b></p> <p>Physical Address: 27 Hendrik Potgieter Street, Nelspruit 1200</p> <p>Tel: 013 752 4616</p> <p>E-mail: admin@mondeconsulting.co.za</p>
F.2.1	<p><b>Eligibility</b></p> <p>Only those tenderers who satisfy the following eligibility criteria and who provide the required evidence in their tender submissions are eligible to submit tenders and have their tenders evaluated:</p> <p>Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, 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 7 CE 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"> <li>1. Every member of the joint venture is registered with the CIDB;</li> <li>2. The lead partner has a contractor grading designation in the 7 CE class of construction work; and</li> <li>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 an 7 CE class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations.</li> </ol> <p>The following tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to have their tenders evaluated:</p> <ol style="list-style-type: none"> <li>a) contractors who have 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) of 25(7A) of the Construction Industry Development</li> </ol>

Sub-clause	Data
	<p>Regulations, for an 7 CE class of construction work; and</p> <p>b) contractors registered as Potentially Emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above and who satisfy the following criteria:</p> <ol style="list-style-type: none"> <li>1) the employer is satisfied that such a contractor has the potential to develop and qualify to be registered in that higher grade as determined in accordance with the provisions of the CIDB Specification for Social and Economic Deliverables in Construction Works Contracts; and</li> <li>2) the employer agrees to provide the financial, management or other support that is considered appropriate to enable the contractor to successfully execute that contract.</li> </ol>
F.2.7	<p><b>Site Visit and Clarification Meetings</b></p> <p>The arrangements for a compulsory site inspection visit and clarification meeting are as stated in the Tender Notice and Invitation to Tender.</p> <p>Tenderers must sign the attendance list in the name of the tendering entity. Addenda will be issued and tenders will be received only from those tendering entities appearing on the attendance list.</p>
F.2.9	<p><b>Insurance</b></p> <p>No insurance cover will be provided by the Employer</p>
F.2.10	<p><b>Pricing the tender offer</b></p> <p>(a) Value Added Tax</p> <p>The Valued Added Tax (VAT) rate shall be 15% or as otherwise provided for by legislation.</p> <p>(b) The successful Tenderer shall be required to produce a VAT invoice that shall only be prepared once measurements and valuations for work done in terms of the contract offer have been agreed with the Employers agent and a certificate of payment issued.</p> <p>(c) Payment of VAT to non-VAT vendors shall be processed from the month in which the Tenderers liability with the South African Revenue Services is effective.</p>
F. 2.11	<p><b>Alterations to documents</b></p> <p>A Tender offer shall not be considered if alterations have been made to the forms of tender data or contract data (unless such alterations have been duly authenticated by the Tenderer) or if any particulars required therein have not been completed in all respects.</p>
F.2.12	<p><b>Alternative Tender Offer</b></p> <p>No alternative tender offers will be considered</p>

Sub-clause	Data
	<p>If a tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the employer's standards and requirements, the details of which may be obtained from the employer's agent.</p> <p>Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.</p> <p>Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements.</p> <p>The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the employer's costs in confirming the acceptability of the detailed design.</p>
F.2.13	<p><b>Submitting a Tender Offer</b></p> <p>Tender offers shall be submitted as an original only.</p> <p>Parts of each tender offer communicated on paper shall be submitted as original, plus 0 copies. Under no circumstances whatsoever may the tender forms be retyped or redrafted.</p>
F2.13.1	<p><b>Whole of Works</b></p> <p>The Tenderer may not make an offer for only part of the services as defined in the Scope of Work.</p>
F.2.13.5	<p>The employer's address for delivery of tender offers and identification details to be shown on each tender offer package are:</p> <p>Location of tender box: As mentioned on the tender advertisement.</p>
F.2.13. & F.3.5	<p>A two-envelope procedure will not be followed.</p>

F.2.15	<b>Closing time for submission of tender offers is: as advertised</b>
F.2.15	<b>Telephonic, telegraphic, telex facsimile or e-mailed tender offers will not be accepted.</b>
F.2.16	The tender offer validity period is 90 days from the closing date.
F.2.17	The total tender price shall be binding.
F.2.23	<p><b>Certificates</b></p> <p>The following certificates are to be provided with this tender:</p> <ul style="list-style-type: none"> <li>• Record of Addenda to Tender Documents <ul style="list-style-type: none"> <li><input type="checkbox"/> Proposed amendments and qualifications</li> <li><input type="checkbox"/> Preferencing Schedule: Broad Based Black Economic Empowerment Status</li> <li><input type="checkbox"/> Compulsory Declaration</li> <li><input type="checkbox"/> Municipal declaration and returnable documents</li> <li><input type="checkbox"/> Certificate of Attendance at a Tender Site Meeting</li> <li><input type="checkbox"/> Certificate of Authority of Joint Ventures/ Close corporations/ Partnership/ Company/ Sole proprietor (Certified Copies of the Identity Documents in the Case of sole proprietor)</li> <li><input type="checkbox"/> Registration Certificates of Entities – Joint Ventures/ Close corporations/ partnership/ Company/ Sole Proprietor</li> <li><input type="checkbox"/> Schedule of Tenderer’s Experience</li> <li><input type="checkbox"/> Schedule of Key Personnel (Together with complete CV as per attached template, with <b>certified</b> qualifications)</li> <li><input type="checkbox"/> Format of Curriculum Vitae (CV)</li> <li><input type="checkbox"/> Schedule of Sub-Contractors <ul style="list-style-type: none"> <li>• Schedule of plant and equipment</li> </ul> </li> <li><input type="checkbox"/> Copy of Workmen’s Compensation Registration Certificate (or proof of payment of contributions in terms of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993) <ul style="list-style-type: none"> <li>• Competence Achievement Schedule</li> </ul> </li> <li><input type="checkbox"/> BBEE Certificate / Sworn Affidavit</li> <li><input type="checkbox"/> Form of Intent (<b>project specific</b>) to offer a Performance Guarantee</li> <li><input type="checkbox"/> A copy of Tax Clearance Certificate issued by the South African Revenue Services and PIN valid for three 3 months</li> <li><input type="checkbox"/> Execution Program</li> <li><input type="checkbox"/> Contractor’s Health and Safety Declaration</li> <li><input type="checkbox"/> Contractor’s Safety Plan</li> <li><input type="checkbox"/> Proforma Notification form in terms of the Occupational Health and Safety Act 1993,</li> </ul> </li> </ul>

Construction Regulations, 2014.

Record of Addenda to Tender Documents

- Certificate of Authority of Joint Ventures/ Close corporations/ Partnership/ Company/ Sole proprietor (Certified Copies of the Identity Documents in the Case of sole proprietor)
- Registration Certificates of Entities – Joint Ventures/ Close corporations/ partnership/ Company/ Sole Proprietor
- Compulsory Enterprise Questionnaire
- Schedule of Tenderer's Experience (**Certified copies** of Appointment letters & completion certificates of similar projects)
- Schedule of Key Personnel
- Format of Curriculum Vitae (CV) and **certified copies** of qualifications
- Proposed Amendments, Qualifications and Alternatives
- Schedule of Sub-Contractors
- Schedule of plant and equipment
- Copy of Workmen's Compensation Registration Certificate (or proof of payment of contributions in terms of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993)
- An Original Tax Clearance Certificate issued by the South African Revenue Services
- BBBEE Certificate (**certified**)
- Contractor's health and safety declaration
- Profoma notification form in terms of the Occupational Health and Safety Act 1993, Construction Regulations, 2003
- Form of offer

**Important Note:**

Failure to provide the required particulars as per the above-listed certificates implies a non-responsive tender and may warrants rejection of the tender on account of non-compliance with the requirements of the Tender Data.

F.3.4

**Opening of tender submissions**

Tenders will be opened in public soon after closing time mentioned above and recording of received documents at the Tender office. Tenderers' names and total prices where practical will be read out.

F.3.9.1

**Arithmetical errors**

Check responsive tender offers for arithmetical errors, correcting them in the following manner:

- a) Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.

	<p>b) If bills of quantities (or schedule of quantities or schedule of rates) apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.</p> <p>c) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the 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.</p>
F3.13.1	<p>Tender offers will only be accepted on condition that:</p> <p>a) The tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation;</p> <p>b) The tenderer or any of its directors is not listed in 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; and</p> <p>c) The tenderer has not abused the Employers Supply Chain Management System or over the last five years failed to satisfactorily perform a contract for the employer and has been issued with a written notice to this effect.</p> <p>d) The tenderer is in good standing with SARS according to the Central Supplier Database</p> <p>e) The tenderer submits a letter of intent from an approved insurer undertaking to provide the Performance Bond</p> <p>f) The tenderer has completed the Compulsory Declaration 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> <p>g) the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer;</p> <p>h) the employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2003, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.</p>
F.3.14	Parts of each Bid offer communicated on paper shall be submitted as original.

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

**SUPPLY CHAIN MANAGEMENT**  
**EVALUATION PROCESS AND CRITERIA**

The following evaluation process and criteria will be used to evaluate all bids submitted:

**Standard Conditions of Bid**

**F.1 General**

**F.1.1 Actions**

The employer and each Bidder submitting a Bid offer shall comply with these conditions of Bid. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently.

**F.1.2 Bid Documents**

The documents issued by the employer for the purpose of a Bid offer are listed in the Bid data. This document in which are bound the Tendering Procedures, Returnable Documents, Agreements and Contract Data, Pricing Data and Scope of Work. Tenderers are reminded that irrespective of any other provision or requirement contained in this tender, the only mandatory required documents to be submitted with this tender are listed in Part T2 of the Returnable Documents.

**F.1.3 Interpretation**

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

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

**F.1.3.3** For the purposes of these conditions for the calling for expressions of interest, the following definitions apply:

- a) **Comparative offer** means the Bidder's financial offer after the factors of non-firm prices, all unconditional discounts and any other Bided parameters that will affect the value of the financial offer have been taken into consideration
- b) **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 Bid process; and
- c) **Fraudulent practice** means the misrepresentation of the facts in order to influence the Bid process or the award of a contract arising from a Bid offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels
- d) **Quality (functionality)** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.

**F.1.3.4** *The Tender documents have been drafted in English. The contract arising from the invitation of tender shall be interpreted and construed in English."*

**F.1.4 Communication and employer's agent**

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

#### **F.1.5 The employer's right to accept or reject any Bid offer**

**F.1.5.1** The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such cancellation and rejection.

The employer may subsequent to the cancellation or abandonment of a tender process or the rejection of all responsive tender offers re-issue a tender covering substantially the same scope of work.

#### **F.1.6. Evaluation and award of the tender.**

**F.1.6.1** The Chief Albert Luthuli Local Municipality reserves the right to accept the whole or any portion of a tender.

#### **F.2 Bidder's obligations**

##### **F.2.1 Eligibility**

Submit a Bid offer only if the Bidder complies with the criteria stated in the Bid data and the Bidder, or any of his principals, is not under any restriction to do business with employer.

##### **F.2.2 Cost of Bidding**

Accept that the employer will not compensate the Bidder for any costs incurred in the preparation and submission of a Bid offer, including attending interviews in the office of the employer or employer's agent and the costs of any testing necessary to demonstrate that aspects of the offer satisfy requirements.

##### **F.2.3 Check documents**

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

##### **F.2.4 Confidentiality and copyright of documents**

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

## F.2.5 Reference documents

Obtain, as necessary for submitting a Bid 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 Bid documents by reference.

## F.2.6 Acknowledge addenda

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

## F.2.7 Clarification meeting

Attend **compulsory clarification meeting** at which Bidders may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the Bid data. *Where applicable, details of the compulsory clarification meeting with a representative of the Employer are stated in the Tender Notice and Invitation to Tender. Confirmation of attendance will be recorded in the attendance register to be signed by all tenderers. Tender documents will not be made available at the clarification meeting.*

## F.2.8 Seek clarification

Request clarification of the Bid documents, if necessary, by notifying the employer *in writing* at least *seven* working days before the closing time stated in the Bid data.

## F.2.9 Insurance

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

## F.2.10 Pricing the Bid offer

**F.2.10.1** Include in the rates, prices, and the Bided total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful Bidder, such duties, taxes and levies being those applicable 14 days before the closing time stated in the Bid data.

**F.2.10.2** Show VAT payable by the employer separately as an addition to the Bided total of the prices.

**F.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.

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

**F.2.10.5** "If no offer is made for an item, a line must be drawn through the space in pen. All prices and details must be legible/readable to ensure the tender will be considered for adjudication."

**If no offer is made for a line item, whether it is struck through, or no rate was supplied for the line item, the rate for such an item will be taken as R0-00, and will be supplied, if required, at no charge.**

**F.2.11 Alterations to documents**

Not make any alterations or additions to the Bid documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the Bidder. All signatories to the Bid offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited.

*“In the event of a mistake having been made on the price schedule, it shall be crossed out in ink and be accompanied by an initial at each and every price alteration.”*

*If correction fluid has been used on any specific item price, such item will not be considered. Corrections in terms of price may not be made by means of correction fluid such as Tippex or similar product. No correction fluid may be used in a Price Schedule where prices are calculated to arrive at a total amount. If correction fluid has been used, the tender as a whole will not be considered.*

*The Municipality will reject the bid if corrections are not made in accordance with the above.”*

**F.2.12 Alternative Bid offers**

**F.2.12.1** Submit alternative Bid offers only if a main Bid offer, strictly in accordance with all the requirements of the Bid documents, is also submitted. The alternative Bid offer is to be submitted with the main Bid offer together with a schedule that compares the requirements of the Bid documents with the alternative requirements the Bidder proposes.

**F.2.12.2** Accept that an alternative Bid offer may be based only on the criteria stated in the Bid data or criteria otherwise acceptable to the employer.

**F.2.13 Submitting a Bid offer**

**F.2.13.1** Submit a Bid offer to provide the whole of the works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the Bid data.

**F.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 in black ink. *Each Tenderer is required to return the complete set of documents as listed in Part T2 with all the required information supplied and completed in all respects. Prior to submitting their tender document tenderers should make a copy thereof for record purposes No copies of any part of the submitted tender document will be made for the tenderers during the evaluation and adjudication processes.*

**F.2.13.3** Submit the parts of the Bid offer communicated on paper as an original plus the number of copies stated in the Bid 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.

**F.2.13.4** Sign the original and all copies of the Bid offer where required in terms of the Bid data. The employer will hold all authorized signatories liable on behalf of the Bidder. Signatories for Bidders 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 Bid offer.

*Only authorised signatories may sign the original and all copies of the tender offer where required in terms of F.2.13.3 In the case of a ONE-PERSON CONCERN submitting a tender, this shall be clearly stated. In case of a COMPANY submitting a tender, include a copy of a resolution by its board of directors authorising a director or other official of the company to sign the documents on behalf of the company. In the case of a CLOSE CORPORATION submitting a tender, include a copy of a resolution by its members authorising a member or other official of the corporation to sign the documents on each member's behalf. In the case of a PARTNERSHIP submitting a tender, all the partners shall sign the documents, unless one partner or a group of partners has been authorised to sign on behalf of each partner, in which case proof of such authorisation shall be included in the Tender.*

*In the case of a JOINT VENTURE/CONSORTIUM submitting a tender, include a resolution of each company of the Joint Venture together with a resolution by its members authorising a member of the Joint Venture to sign the documents on behalf of the Joint Venture.*

**F.2.13.5** Seal the original and each copy of the Bid 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 Bid data, as well as the Bidder's name and contact address.

*The identification details are:*

- ..... Correct tender reference no.
- ..... Correct Tender description
- ..... Correct closing time
- ..... Correct due date

*Each tender shall be enclosed in a sealed envelope, bearing the correct identification details and shall be placed in the tender box located in the foyer at Nkomazi local municipality offices.*

**F.2.13.6** A two-envelope procedure will **not** be followed in this contract.

Where a two-envelope system is required in terms of the Bid data, place and seal the returnable documents listed in the Bid 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 Bid data, as well as the Bidder's name and contact address.

**F.2.13.7** Seal the original Bid 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 Bid data.

**F.2.13.8** Accept that the employer shall not assume any responsibility for the misplacement or premature opening of the Bid offer if the outer package is not sealed and marked as stated.

**F.2.14** Information and data to be completed in all respects

Accept that Bid 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.

**F.2.15 Closing time**

**F.2.15.1** Ensure that the employer receives the Bid offer at the address specified in the Bid data not later than as stated in the Bid data. Proof of posting shall not be accepted as proof of delivery. The employer shall not accept Bid offers submitted by telegraph, telex, facsimile or e-mail, unless stated otherwise in the Bid data.

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

**F.2.16 Bid offer validity**

**F.2.16.1** Hold the Bid offer(s) valid for acceptance by the employer at any time during the validity period stated in the Bid data after the closing time stated in the Bid data. *The Tender Offer validity period is 90 days. If the tender validity expires on a Saturday, Sunday or public holiday, the Tender Offer shall remain valid and open for acceptance until the closure of business on the following working day.*

**F.2.16.2** If requested by the employer, consider extending the validity period stated in the Bid data for an agreed additional period.

**F.2.17 Clarification of Bid 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 resulting from the product of the unit rate and the quantity by the adjustment of certain line item totals. No change in the unit rate or prices or substance of the Tender Offer is sought, offered, or permitted.

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

**F.2.18 Provide other material**

**F.2.18.1** Provide, on request by the employer, any other material that has a bearing on the Bid offer, the Bidder'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 Bidder 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 Bid offer as non-responsive.

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

**F.2.19 Inspections, tests and analysis**

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

**F.2.20 Submit securities, bonds, policies, etc**

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.

**F.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.

**F.2.22 Return of other Bid documents**

If so instructed by the employer, return all retained Bid documents within 28 days after the expiry of the validity period stated in the Bid data.

**F.2.23 Certificates**

Include in the Bid submission or provide the employer with any certificates as stated in the Bid data. Refer to part T1 and part T2: Returnable Documents for a list of documents that are to be returned with the tender. *Tenderers are required to develop a booklet with a table of contents as per table stated in part T2 under T2.0 for all certificates and supporting documentation.*

**F.2.24 Canvassing and obtaining of additional information by tenderers**

Accept that no Tenderer shall make any attempt either directly or indirectly to canvass any of the Employer's officials or the Employer's agent in respect of his tender, after the opening of the tenders but prior to the Employer arriving at a decision thereon. No Tenderer shall make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of tenders.

**F.2.25 Prohibitions on awards to persons in service of the state**

*Accept that the Employer is prohibited to award a tender to a person - a) who is in the service of the state; or b) if that person is not a natural person, of which any director, manager, principal shareholder or stakeholder is a person in the service of the state; or c) a person who is an advisor or consultant contracted with the municipality or municipal entity.*

*In the service of the state" means to be – a) a member of - • any municipal council; • any provincial legislature; or • the National Assembly or the National Council of Provinces; b) a member of the board of directors of any municipal entity; c) an official of any municipality or municipal entity; d) an employee of any national or provincial department, national ore) provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999); f) a member of the accounting authority of any national or provincial public entity; or g) an employee of Parliament or a provincial legislature." In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in Section T2.2 must be completed.*

**F.2.26 Awards to close family members of persons in the service of the state.**

*Accept that the notes to the Employer's annual financial statements must disclose particulars of any award of more than R2000 to a person who is a spouse, child or parent of a person in the service of the state (defined in clause 2.25), or has been in the service of the state in the previous twelve months, including*

- a) The name of that person;*
- b) The capacity in which that person is in the service of the state; and*
- c) The amount of the award.*

*In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in part T2 – Returnable Documents must be completed in full and signed.*

**F.2.27 Tax Clearance Certificate**

In the case of a Joint Venture/Consortium the tax clearance certificate must be for the Joint Venture/Consortium or individual valid tax clearance certificates for all the members of the Joint Venture/Consortium

**F.3 The Employer's undertakings****F.3.1 Respond to clarification**

*Respond to a request for clarification received up to seven calendar days before the tender closing time stated in the tender data and notify all Tenderers who drew procurement documents.*

*The time and location for the tender submissions are stated in the Tender Notice and Invitation to Tender.*

**F.3.2 Issue Addenda**

If necessary, issue addenda that may amend or amplify the Bid documents to each Bidder during the period from the date of the Bid Notice until seven days before the Bid closing time stated in the Bid Data. If, as a result a Bidder applies for an extension to the closing time stated in the Bid Data, the Employer may grant such extension and, will then notify it to all Bidders who drew documents.

### **F.3.3 Return late Bid offers**

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

### **F.3.4 Opening of Bid submissions**

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

*The time and location for the tender submissions are stated in the Tender Notice and Invitation to Tender.*

**F.3.4.2** Announce at the opening held immediately after the opening of Bid submissions, at a venue indicated in the Bid data, the name of each Bidder whose Bid offer is opened, the total of his prices, preferences claimed and time for completion, if any, for the main Bid offer only.

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

### **F.3.5 Two-envelope system**

A two-envelope procedure will **not** be followed in this contract.

### **F.3.6 Non-disclosure**

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

### **F.3.7 Grounds for rejection and disqualification**

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

### **F.3.8 Test for responsiveness**

Determine, on opening and before detailed evaluation, whether each Bid offer properly received:

- a) Meets 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.

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

- Detrimentially affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- Change the Employer's or the Bidder's risks and responsibilities under the contract, or

- Affect the competitive position of other Bidders presenting responsive Bids, if it were to be rectified.

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

### F.3.9 Arithmetical errors

Check responsive Bid offers for arithmetical errors, correcting them in the following manner:

- Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.
- If a bill of quantities (or schedule of rates) apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as **quoted shall govern**, and the **unit rate** will be corrected.
- Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the Bidder's addition of prices, the total of the prices shall govern and the Bidder will be asked to revise selected item prices (and their rates if a bills of quantities applies) to achieve the Bided total of the prices.

Consider the rejection of a Bid offer if the Bidder does not correct or accept the correction of his arithmetical errors in the manner described above.

### F.3.10 Clarification of a Bid offer

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

### F.3.11 Evaluation of Bid offers

Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate it using the tender evaluation method that is indicated in the Tender Data and described below:

<b>Method 1: Financial offer</b>	<ol style="list-style-type: none"> <li>1) Rank tender offers from the most favorable to the least favorable comparative offer.</li> <li>2) Recommend the highest ranked tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.</li> </ol>
<b>Method 2: Financial offer and preferences</b>	<ol style="list-style-type: none"> <li>1) Score tender evaluation points for financial offer.</li> <li>2) Confirm that tenderers are eligible for the preferences claimed and if so, score tender evaluation points for preferencing.</li> <li>3) Calculate total tender evaluation points.</li> <li>4) Rank tender offers from the highest number of tender evaluation points to the lowest.</li> <li>5) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.</li> </ol>
<b>Method 3: Financial offer and quality</b>	<ol style="list-style-type: none"> <li>1) Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the Tender data.</li> <li>2) Score tender evaluation points for financial offer.</li> <li>3) Calculate total tender evaluation points.</li> <li>4) Rank tender offers from the highest number of tender evaluation points to the lowest.</li> <li>5) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.</li> </ol>
<b>Method 4: Financial offer, quality and preferences</b>	<ol style="list-style-type: none"> <li>1) Score quality, rejecting all tender offers that fail to score the minimum number of points for quality stated in the Tender data.</li> <li>2) Score tender evaluation points for financial offer.</li> <li>3) Confirm that tenderers are eligible for the preferences claimed, and if so, score tender evaluation points for preferencing.</li> <li>4) Calculate total tender evaluation points.</li> <li>5) Rank tender offers from the highest number of tender evaluation points to the lowest.</li> <li>6) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.</li> </ol>

Score financial offers, preferences and quality, as relevant, to two decimal places.

#### F.3.11.2 Scoring Financial Offers

Score the financial offers of remaining responsive tender offers using the following formula:

$N_{FO}$  =  $W_1 \times A$  where:

$N_{FO}$  = the number of tender evaluation points awarded for the financial offer.

$W_1$  = the maximum possible number of tender evaluation points awarded for the financial offer as stated in the Tender Data.

$A$  = a number calculated using either formulas 1 or 2 below as stated in the Tender Data.

Formula	Comparison aimed at achieving	Option 1	Option 2
1	Highest price or discount	$A = (1 + (P - P_m)) P_m$	$A = P / P_m$
2	Lowest price or percentage commission /	$A = (1 - (P - P_m))$	$A = P_m / P$

where:

$P_m$  = the comparative offer of the most favorable tender offer.

$P$  = the comparative offer of tender offer under consideration.

### F3.11.1 General

Apply the 80/20 Preference Point system where a maximum of (80/90) tender adjudication point be awarded for price and a maximum of (20/10) points for Municipal objectives. Refer to Part T2 – Returnable Documents.

#### Gate 0

Name of Document that must be submitted	Non-submission may result in disqualification?
Form of Offer	YES
Authority for signatory	YES
Original Tax Clearance Certificate	YES
COIDA	YES
Invitation to Bid	YES
Declaration of Interest – MBD 4	YES
Declaration of Bidder's Past Supply Chain Management Practices – MBD 8	YES
CIDB Grading	YES
Company Registration	Yes

**Gate 1****First stage – Evaluation of functionality:**

According to the MFMA Circular No. 53 of the Municipal Finance Act No. 56 of 2003. Bidders will firstly be evaluated on Functionality. Only those meeting the minimum Score for functionality will be evaluated on 3

Responsive tenders will firstly be evaluated on functionality. The minimum score for functionality is **70% (70 points)**, and a bidder who scores below this minimum shall be considered non-responsive and will not be evaluated further.

Functionality for responsive tender submitted is evaluated according to the predetermined criteria described below, considering, among other factors, the quality, reliability and technical capacity and ability of the tenderer.

**FUNCTIONALITY COMPETENCE ACHIEVEMENT SCHEDULES**

(I) **Functionality Points will be spread as follows (100 points maximum):**

**Note: None submission of requirements stated below will result in loss of points**

The quality criteria and maximum score in respect of each of the criteria are as follows:

### COMPETENCE ACHIEVEMENT SCHEDULES

**TABLE A1: EXPERIENCE, REPUTATION AND REFERENCES**

	TARGETED GOALS Name reference with contact details	TENDERED GOAL	POINTS Claimed by tenderer	ALLOCATED POINTS
1		5		
2		5		
3		5		
4		5		
	<b>SUB-TOTAL: Reputation and References</b>	<b>20</b>		

#### SCORING QUALITY FOR TABLE A1 ABOVE: (Maximum 20 Points)

- Experience on previous contracts of a project with a specific scope (water and waste water treatment works) and value completed over last ten (5) years.
- Reference details must be valid in order to ensure gathering of relevant information. Experience must be on the Construction of Concrete Water Retaining Structures.
- The tenderer must submit an appointment letter and completion certificate for each project and signed by Consultant, Client, and Contractor. **Projects must be completed within the period stipulated in the original appointment letter.**
- Points shall be allocated to tenderers who submit both the appointment, completion certificate and the reference letter for each project.
- Points shall be awarded as follows for each project completed with a traceable reference:

Required	Points allocation	Proof required.
4 x water treatment works or waste water treatment works, projects value above R 30 million or more	20 Points	Attach appointment letter and completion certificate per project submitted for evaluation. NB. All attached projects to be completed on time and on an extended period. Projects completed on an extended period applicant will be penalized by 5 points for each project.
3 x water treatment works or waste water treatment works, projects value above R 30 million or more	16 Points	
2 x water treatment works or waste water treatment works, projects value above R 30 million or more	12 Points	
1 x water treatment works or waste water treatment works, projects value above R 30 million or more	4 Points	
No water treatment works or waste water treatment works, projects value above R 30 million or more	0 points	

Note: Where appointed project values received from tenderers for consideration exceed the value stated above, a maximum of 4 points shall be awarded per project. Tenderers who do not submit at least one project shall be disqualified and not considered for further evaluation. To score the full 20 points, a minimum of 4 similar projects must be included.

**TABLE A2: FINANCIAL REFERENCES**

	TARGETED GOALS	TENDERED GOAL	POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
1	Bank rating of "C" or better (proof attached)	4		
2	Proof of guarantee/letter of intent from a registered financial institution to the value of 10% of the offer shall be submitted	6		
	<b>SUB-TOTAL: Financial references</b>	<b>10</b>		

**SCORING QUALITY FOR TABLE A2 ABOVE- (Maximum 10 Points)**

- Proof of Banking Details and Bank Rating Letter of "C" or better must be attached.
- Proof of guarantee/letter of intent from a registered financial institution to the value of 10% of the offer shall be submitted.

**Point Allocation:**

Failure to Submit Details	Disqualification
Bank Rating of D, E or F	Disqualification
Bank Rating C or better	4 points
Proof of Guarantee/Letter of intent	6 points

**A maximum of 10 points shall be allocated for Table A2.**

**Note: Bank rating and proof of guarantee must be attached. Tenderers who do not submit any of the above required documents shall be disqualified and shall not be considered further evaluation.**

**TABLE A3: SPECIFIC KNOWLEDGE**

	TARGETED GOALS	TENDERED GOAL	POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
1	Site agent trained in labour in intensive construction methods	4		

2	Contracts Manager	4		
3	Senior Foreman	4		
4	Quality control Officer	4		
5	Safety Officer	4		
	<b>SUB-TOTAL: Specific Knowledge</b>	<b>20</b>		

**SCORING QUALITY FOR TABLE A3 ABOVE - (Maximum 20 Points)**

**Key Staff**

- Site Agent – NQF 5 Labor Intensive Construction and National Diploma in Civil and minimum of 10 years' experience in the construction of bulk water and sewer pipelines, Wastewater treatment, reservoirs and pump stations to score the maximum points in this category.
- Contracts Manager – A BTech/ BSc /BEng qualification in Civil or Higher, minimum 10 years' experience in the construction of bulk water and sewer pipelines, water and wastewater treatment works, and pump stations.
- Senior Foreman – NQF 4 Labor Intensive Construction, minimum 10 years relevant experience in the Construction of Bulk Water and sewer Pipelines, Water and Wastewater Treatment Works, and Pump Stations to score the maximum points in this category.
- Quality Control Officer – N Dip Civil Engineering, minimum 10 years' experience in the construction of bulk water pipelines, water treatment works, and pump stations. to score the maximum points in this category.
- Safety Officer – Safety Management Training Course and registration with SACPCMP minimum 10 years or more relevant experience to score the maximum points in this category.

**Point Allocation:**

Personnel	15 Years' Experience or more	10 Years and more', Less than 15 Years' Experience	Less than 10 Years' Experience
Site Agent	4	4	0
Contracts' Manager	4	4	0
Senior Foreman	4	4	0

Quality Control Officer	4	4	0
Safety Officer	4	4	0

**Note: CV's and certified copies of qualifications must be attached in order to qualify for points Where CVs are attached with no certified copies of qualifications, no point will be awarded. A maximum of 4 points will be awarded for each relevant personnel and a maximum of 20 points can be awarded in this category.**

**TABLE A4: PLANT AND EQUIPMENT**

Minimum of two construction plant

	TARGETED GOALS	POINTS PER PLANT SUBMITTED	POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
1	2 TLB	3		
2	2 Tipper Truck 10m <sup>3</sup>	2		
3	2 Mechanical Vibrating Roller Man-Operated	2		
4	2 Tracked Excavator minimum 20t	3		
	<b>Sub-Total</b>	<b>10</b>		

Points are allocated for the availability of required plant and equipment for the project (proof of ownership to be attached or letter of intent from a hiring company must be attached). There will be no pro-rated points allocated for this section.

Where letters of intent from a hiring company are attached, they should:

- Be letters obtained prior to tender closing.
- Not be older than 1 month prior to closing of tender.
- Be signed and dated with the company stamp.

**Note: No points shall be allocated for unsigned letters which do not fulfil the above requirements.**

**TABLE A5: PROJECT EXECUTION PLAN**

	TARGETED GOALS	TENDERED GOAL	POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
1	Methodology	4		
2	Organogram	4		
3	Health and Safety Plan	4		
4	Storm Water Management Plan	4		
5	Programme	4		
	<b>Sub-Total</b>	<b>20</b>		

**SCORING QUALITY FOR TABLE A5 ABOVE - (Maximum 20 Points)**

Points are allocated for the Methodology, Organogram, Health and Safety Plan, Stormwater Management Plan and Programme, respectively.

Points will be allocated for each document listed in table 4 as per below:

Excellent	The method statement, organogram, stormwater management report, health and safety plan and programme are specifically tailored for the project objectives and requirements, and deals in detail with the critical construction aspects	4 points
Good	The method statement, organogram, stormwater management report, health and safety plan and programme are generally tailored for the project objectives and requirements, and deals with the construction aspects	3 points
Satisfactory	The method statement, organogram, stormwater management report, health and safety plan and programme are generic and has been tailored to meet the project objectives and requirements without dealing with construction aspects	2 points
Poor	The method statement, organogram, stormwater management report, health and safety plan and programme are poor and does not adequately identify / satisfy project objectives or requirements. The tenderer has misunderstood the scope of work and did not deal with construction aspects	1 point
No submission	The tenderer does not submit the Project Execution Plan	0 points

**Note: The Project Engineer will evaluate each of these submitted document and shall determine the quality based on the scoring criteria above. A maximum of 20 points will be awarded in this category.**

**TABLE A6: QUALITY ASSURANCE AND CONTROL PLAN**

	TARGETED GOALS	TENDERED GOAL	POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
1	Quality Plan Report	10		
	<b>Sub-Total</b>	<b>10</b>		

**SCORING QUALITY FOR TABLE A6 ABOVE - (Maximum 10 Points)**

Points are allocated as below:

Excellent	The quality assurance and control plan is specifically tailored for the project objectives and requirements, and deals in detail with the critical construction aspects	10 points
Good	The quality assurance and control plan is generally tailored for the project objectives and requirements, and deals with the construction aspects	8 points
Satisfactory	The quality assurance and control plan is generic and has been tailored to meet the project objectives and requirements without dealing with construction aspects	6 points
Poor	The quality assurance and control plan is poor and does not adequately identify / satisfy project objectives or requirements. The tenderer has misunderstood the scope of work and did not deal with construction aspects	2 points
No submission	The tenderer does not submit the quality control plan	0 points

**Note: The Project Engineer shall evaluate the submitted document and shall determine the quality based on the scoring criteria above. A maximum of 10 points will be awarded in this category.**

**TABLE A7: QUALITY MANAGEMENT SYSTEM**

	TARGETED GOALS	TENDERED GOAL	POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
1	Quality Management Report	10		
	<b>Sub-Total</b>	<b>10</b>		

**SCORING QUALITY FOR TABLE A7 ABOVE - (Maximum 10 Points)**

Points are allocated as below:

Excellent	The tenderer has submitted an ISO 9001 Accredited Quality Management System document.	10 points
Satisfactory	The tenderer has submitted a generic internal Quality Management Document which is not ISO Accredited.	6 points
No submission	The tenderer does not submit the Quality Management System document.	0 points

**Note: The Project Engineer will evaluate the submitted document and shall determine the quality based on the scoring criteria above. A maximum of 10 points will be awarded in this category.**

**TABLE A8: FUNCTIONALITY AND QUALITY SCORING TOTALS**

Scoring as per Tables A1 to A7 above.		Maximum Points to be Allocated	Points Claimed by Tenderer	Allocated Points
<b>Functionality and Quality</b>	Table A1	20		
	Table A2	10		
	Table A3	20		
	Table A4	10		
	Table A5	20		
	Table A6	10		
	Table A7	10		
	<b>Sub Total</b>	<b>100</b>		

The minimum number of evaluation points for quality is 70 points. Tenderers who score less than 70 points in this category will be deemed as non-responsive.

**F.3.11.2 Scoring Financial Offers**

All responsive tenders that qualify by meeting the minimum threshold for functionality are then evaluated on the basis of price and preferential in accordance with the Preferential Procurement Regulations 2011 (Government Gazette No. 34350 dated 8 June 2011). The points scored for functionality are not carried over or considered in the calculation of the financial and preferential evaluation.

All respective tenders that have achieved the minimum qualification score for the functionality and administrative compliance shall be evaluated further in terms of the preferential point system prescribed in regulation 5 and 6 Preferential Procurement Regulations 2011 i.e.

For tenders with rand value less than 50 million (80/20)

1. The following formula must be used to calculate the points for price in respect of tender with a rand value of less than R 50 000 000 (all applicable taxes included)

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

Where

P = Points scored for competitive price of tender or offer under consideration.

Pt = Comparative price or offer under consideration, and

Pmin = Comparative price or offer of lowest acceptable tender offer.

2. Points must be awarded to tenderer for preferential points in accordance with table below.

**For procurement transactions with rand value greater than R1 Million and up to R50 Million (Inclusive of all applicable taxes) the specific goals as listed in table 2 below are applicable:**

**All Acquisitions**

**Table 2**

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
1.	An EME or QSE or any entity which is at least 51% owned by <b>Historically Disadvantaged Individuals (HDI)</b>	10	<ul style="list-style-type: none"> <li>• ID Copy Or</li> <li>• SANAS Accredited BBBEE Certificate or sworn affidavit where applicable Or</li> <li>• CSD Report Or</li> <li>• CIPC (company registration)</li> </ul>
2.	<b>Located</b> in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area	2	<ul style="list-style-type: none"> <li>• ID Copy (Mandatory) Or</li> <li>• Office Municipal Rates Statement Or</li> <li>• Permission To Occupy from local chief in case of rural areas (PTO) Or</li> <li>• Lease Agreement</li> </ul>
3.	An EME or QSE or any entity which is at least 51% owned by <b>women</b>	4	<ul style="list-style-type: none"> <li>• ID Copy Or</li> <li>• CSD Report Or</li> <li>• CIPC (company registration)</li> </ul>
4.	An EME or QSE or any entity which is at least 51% owned by people with <b>disability</b>	2	<ul style="list-style-type: none"> <li>• ID Copy (Mandatory) Or</li> <li>• Medical Certificate Or</li> <li>• South African Social Security Agency (SASSA) registration Or</li> <li>• National Council for Persons with Physical Disability in South Africa registration (NCPDOSA) Or</li> <li>• CSD Report Or</li> <li>• CIPC (company registration)</li> </ul>

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
5.	An EME or QSE or any entity which is at least 51% owned by <b>youth</b> .	2	<ul style="list-style-type: none"> <li>• ID Copy Or</li> <li>• CSD Report Or</li> <li>• CIPC (company registration)</li> </ul>

1.1.1 For procurement transactions with rand value greater than R50 Million (Inclusive of all applicable taxes) the specific goals as listed in table 3 below are applicable

**All Acquisitions**

**Table 3**

Serial No	Specific Goals	Preference Points allocated out of 10	Documentation to be submitted by bidders to validate their claim for points
1.	An EME or QSE or any entity which is at least 51% owned by <b>Historically Disadvantaged Individuals (HDI)</b>	4	<ul style="list-style-type: none"> <li>• ID Copy Or</li> <li>• SANAS Accredited BBEE Certificate or sworn affidavit where applicable Or</li> <li>• CSD Report Or</li> <li>• CIPC (company registration)</li> </ul>
2.	<b>Located</b> in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area	2	<ul style="list-style-type: none"> <li>• ID Copy (Mandatory) Or</li> <li>• Office Municipal Rates Statement Or</li> <li>• Permission To Occupy from local chief in case of rural areas (PTO) Or</li> <li>• Lease Agreement</li> </ul>
3.	An EME or QSE or any entity which is at least 51% owned by <b>women</b>	2	<ul style="list-style-type: none"> <li>• ID Copy</li> <li>• CSD Report Or</li> <li>• CIPC (company registration)</li> </ul>
4.	<p>An EME or QSE or any entity which is at least 51% owned by people with <b>disability</b></p> <p style="text-align: center;">OR</p> <p>An EME or QSE or any entity which is at least 51% owned by <b>youth</b>.</p>	2	<ul style="list-style-type: none"> <li>• ID Copy (Mandatory) Or</li> <li>• Medical Certificate Or</li> <li>• South African Social Security Agency (SASSA) registration Or</li> <li>• National Council for Persons with Physical Disability in South Africa registration (NCPDPSA)</li> <li>• ID Copy</li> <li>• CSD Report Or</li> <li>• CIPC (company registration)</li> </ul>

3. The points scored by a tenderer in respect of municipal objectives contemplated in sub regulation (2) above shall be added to the points scored for price as calculated in accordance with sub regulation (1) above.

4. The contract shall be awarded to the tenderer who scores the highest total points.

**The following condition shall apply**

- I. Any discount offered unconditionally shall be taken into account when calculations comparative prices.
- II. Although discount offered conditionality shall not be taken into account for evaluation purposes, such discount shall be implemented when payments is effected (should the tender prove to be successful).
- III. Points scored shall be rounded off to the nearest 2 decimal places.

- IV. In the event that two or more tenders score equal total points, the successful tender must be the one scoring the highest number of preferential points for B-BBEE. However, when functionality is part of the evaluation process and two or more tenders have scored equal points including equal preferential points for B-BBEE, the successful tender must be the one scoring the highest score for functionality. Should two or more tenders be equal in all respects, the award shall be decided by drawing of lots.
- V. A trust, consortium or joint venture will qualify for points for B-BBEE status level as a legal entity, provided that the entity submits their joint B-BBEE status level certificate.
- VI. 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 separated tender.
- VII. 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.

#### **Tax clearance**

No tender may be awarded to any person whose tax matters have not been declared by the South African revenue services to be in order.

#### **F.3.11.3 Scoring Quality (functionality)**

Score quality in each of the categories stated in the Bid Data and calculate total score for quality.

ITEMS	POINTS
Company Experience	50
Financial Reference	15
Construction Team Key Personnel	25
Plant & Equipment	10

**F.3.12 Insurance provided by the employer**

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

**F.3.13 Acceptance of Bid offer**

**F.3.13.1** Accept Bid offer only if the Bidder satisfies the legal requirements stated in the Bid Data.

*Tender offers will only be accepted if:*

- a) The Tenderer is able to produce a original valid Tax Clearance Certificate issued by the South African Revenue Service;*
- b) The Tenderer is not in arrears for more than 3 months with municipal rates and taxes and municipal service charges;*
- c) 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, and*
- d) The Tenderer has not:*
  - 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.*
- e) It is considered that the performance of the services will not be compromised through any conflict of interest.*

**F.3.13.2** Notify the successful Bidder of the employer's acceptance of his Bid offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the Bid data, or agreed additional period. Providing the form of offer and acceptance does not contain any qualifying statements, it will constitute the formation of a contract between the employer and the successful Bidder as described in the form of offer and acceptance.

**F.3.14 Notice to unsuccessful Bidders**

After the successful Bidder has acknowledged the employer's notice of acceptance, the client may notify other Bidders that their Bid offers have not been accepted.

**F.3.15. Prepare contract documents**

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

- a) Addenda issued during the Bid period,
- b) Inclusion of some of the returnable documents,
- c) Other revisions agreed between the employer and the successful Bidder, and
- d) The schedule of deviations attached to the form of offer and acceptance, if any.

**F.3.16 Issue final contract**

Prepare and issue the final draft of contract documents to the successful Bidder for acceptance as soon as possible after the date of the employer's signing of the form of offer and acceptance (including the schedule of deviations, if any). Only those documents that the conditions of Bid require the Bidder to submit, after acceptance by the employer, shall be included.

**F.3.18 Provide copies of the contracts**

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

*One signed copy of contract shall be provided by the Employer to the successful Tenderer.*

## **RETURNABLE DOCUMENTS**

## PART T2 - RETURNABLE DOCUMENTS

### Notes:

The Tender Document must be submitted as a whole. All forms must be properly completed as required and the document **shall not be taken apart or altered in any way whatsoever.**

All forms must be duly completed in **black ink** as required and all required returnables must be submitted on a **booklet as stated in T2.0.**

The list of returnable documents, which consist of forms and schedules to be completed and company specific certificate and information pages to be attached, comprise the following:

### TABLE OF CONTENTS

- T2.1 Forms, Certificates and Schedules Required For Evaluation Of Tender Responsive**
- T2.2 Other Forms, Certificates And Schedules That Will Be Incorporated Into This Contract**
- T2.3 Documentation, Forms and Schedules Required For Tender Evaluation Purposes (Functionality Evaluation)**
- T2.4 Other Documentation, Forms and Schedules Required For Tender Evaluation Purposes**

**T2.0****TABLE OF CONTENTS FOR RETURNABLE CERTIFICATES AND SUPPORTING DOCUMENTATION**

**All tenders are required to develop a returnable schedule booklet with following table of content. No additional information will be required and therefore the tenderers will only utilize the table of content herein.** Tender Document must be submitted as a whole. All forms must be properly completed as required and the document **shall not be taken apart or altered in any way whatsoever**

Pg Nr.	Description	Submitted
1	Certificate of Authority for Signature	
2	Company Registration Certificate/ Agreements /	
3	Identity Documents	
4	Tax Clearance Certificate Requirements	
5	BBBEE Certificate	
6	Proof of registration with CIDB	
7	Proof of Workmen's Compensation Registration	
8	Schedule of Constructional Plant	
9	Schedule of Similar Previous Work Carried out By Bidder	
	Five Appointment letters	
	Five Completion Certificate	
10	Project Team	
	CV and qualifications for Contract Manager	
	CV and qualifications for Site Agent	
	CV and qualifications for Site Foreman	
11	Audited Financial statement	
	Financial statement 2023	
	Financial statement 2024	
	Financial statement 2025	

Tender Document must be submitted as a whole and the document shall not be taken apart or altered in any way whatsoever. Non compliance will be considered as non responsive.

**T2.1****FORMS, CERTIFICATES AND SCHEDULES REQUIRED for  
EVALUATION OF RESPONSIVENESS****TABLE OF CONTENT**

2.1.1. CERTIFICATE OF ATTENDANCE AT A TENDER SITE MEETING

2.1.2 CERTIFICATE OF AUTHORITY FOR SIGNATURE

2.1.3 REGISTRATION CERTIFICATES / AGREEMENT / IDENTITY DOCUMENTS

2.1.4 TAX CLEARANCE CERTIFICATE REQUIREMENTS

2.1.5 PROOF OF REGISTRATION WITH CIDB

2.1.6 PROOF OF WORKMEN`S COMPENSATION REGISTRATION

**2.1.1. CERTIFICATE OF ATTENDANCE AT A TENDER SITE MEETING**

This is to certify that (*Tenderer*)

.....

.....

(*address*).....

.....

was represented by the person(s) named below at the compulsory meeting held for all tenderers at the stated on the tender invitation.

I / We acknowledge that the purpose of the meeting was to acquaint myself / ourselves with the site of the works and / or matters incidental to doing the work specified in the tender documents in order for me / us to take account of everything necessary when compiling our rates and prices included in the tender.

**Particulars of person(s) attending the meeting:**

Name: .....

Signature:.....

Capacity: .....

Name: .....

Signature: .....

Capacity: .....

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

Name: .....

Signature: .....

Capacity: .....

Date and Time: .....

## 2.1.2 CERTIFICATE OF AUTHORITY FOR SIGNATURE

Indicate the status of the Tenderer by ticking the appropriate box hereunder. The Tenderer must complete the certificate set out below for the relevant category.

(I) COMPANY	(II) CLOSE CORPORATION	(III) PARTNERSHIP	(IV) JOINT VENTURE	(V) SOLE PROPRIETOR

### (I) Certificate For Company

I, ....., chairperson of the Board of Directors of .....

.....,

hereby confirm that by resolution of the Board (copy attached) taken on .....

20....., Mr/Ms ....., acting in the capacity of .....

....., was authorized to sign all documents in connection with the tender for Contract No. ALMT02/2025 and any contract resulting from it on behalf of the company.

**Chairman:** .....

**As Witnesses:** 1.....

2.....

**Date:** .....

**(II) Certificate For Close Corporation**

We, the undersigned, being the key members in the business trading as .....

.....

hereby authorize Mr/Ms ....., acting in the capacity of

....., to sign all documents in connection with the tender for Contract No. ALMT05/2024 and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

**Note : This certificate is to be completed and signed by all of the key members upon whom rests the direction of the affairs of the Close Corporation as a whole.**

**(III) Certificate For Partnership**

We, the undersigned, being the key partners in the business trading as, .....

.....,

hereby authorize Mr/Ms ..... ,acting in the capacity of

..... , to sign all documents in connection with the tender for Contract No. ALMT05/2024 and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

**Note : This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Partnership as a whole.**

**(IV) Certificate For Joint Venture**

This Returnable Schedule is to be completed by joint ventures.

We, the undersigned, are submitting this tender offer in Joint Venture and hereby

authorise Mr/Ms ....., authorised signatory of  
the

company

....., acting  
in the capacity of lead partner, to sign all documents in connection with the 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 :** *This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Joint Venture as a whole.*

**(V) Certificate For Sole Proprietor**

I, ....., hereby confirm that I am the sole owner of the  
Business  
trading ..... as  
.....

**Signature** of Sole owner: .....

As Witnesses:

Date:

1.....

2. ....

**FORM 13A AUTHORITY OF SIGNATORY**

**NOTE: AN AUTHORITY OF SIGNATORY FOR EACH PARTY IN A JOINT VENTURE IS ALSO REQUIRED.**

Details of person responsible for tender process:

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

Contact number : \_\_\_\_\_

Office address : \_\_\_\_\_

Signatories for close corporations and companies shall confirm their authority by attaching to this form a **duly signed and dated original or certified copy on the Company Letterhead** of the relevant resolution of their members or their board of directors, as the case may be, as well as a signed joint venture agreement.

---

# Pro-Forma

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

"By resolution of the board of directors passed on *(date)* .....

Mr .....

has been duly authorized to sign all documents in connection with the Tender for Contract Number .....and any Contract which may arise there from on behalf of .....

(BLOCK CAPITALS)

SIGNED ON BEHALF OF THE COMPANY.....

IN HIS CAPACITY AS .....

DATE .....

FULL NAMES OF SIGNATORY .....

### **2.1.3 REGISTRATION CERTIFICATES / AGREEMENT / IDENTITY DOCUMENTS**

Attach on the **booklet** Certified Copies Of Registration Certificates For Companies And Close Corporation And Certified Copies Of Indemnity Documents For Partnership And Sole Proprietors As Well As Signed Agreements And Power Of Attorney For Joint Venture/Consortium If Applicable

## 2.1.4 TAX CLEARANCE CERTIFICATE REQUIREMENTS

*Tax Clearance Certificate obtained from SARS to be inserted here.*

### IMPORTANT NOTES:

1. The following is an abstract from the Preferential Procurement Regulations 2001 promulgated with the Preferential Policy Framework Act No 5 of 2000:

#### **Tax clearance certificate**

16. No contract may be awarded to a person who has failed to submit an original Tax Clearance Certificate from the South African Revenue Service ("SARS") certifying the taxes of that person to be in order or that suitable arrangements have been made with SARS."

2. Before entering into a contract with a successful Tenderer, the Employer will confirm with the CIDB that the Tenderer's registration is active and the expiry date of the tax certificate

3. The ST 5.1 form, Application for Tax Clearance Certificate (in respect of tenders), must be **completed by the tenderer in every detail and submitted to the Receiver of Revenue** where the tenderer is registered for income tax purposes. The Receiver of Revenue will then furnish the tenderer with a Tax Clearance Certificate that will be valid for 12 months from date of issue. **This Tax Clearance Certificate must be submitted in the original with the tender, that is before the closing time and date of the tender.**

Each party to a Consortium / Joint Venture / Subcontractors must complete a separate Tax Clearance Certificate.

**Failure to submit an original and valid tax clearance certificate issued by SARS with your bid document at the time of closing will invalidate the tender**



## **TAX CLEARANCE CERTIFICATE**

***[attach on the booklet Tax Clearance Certificate obtained from SARS]***

### **2.1.5 PROOF OF REGISTRATION WITH CIDB**

The tenderer shall attach hereto the contractor's proof of registration with CIDB. CRS number also to be provided.

In the case of Consortium / Joint Venture tenders, each partner shall provide their own CIDB registration certificates

### **2.1.6 PROOF OF WORKMEN`S COMPENSATION REGISTRATION**

Tender shall attach on the booklet certified proof of workman`s compensation registration or proof of payment of contribution in terms of the compensation of occupational injuries and diseases (Act 4 of 2002).

**T2.2****OTHER FORMS, CERTIFICATES AND SCHEDULES THAT  
WILL BE INCORPORATED INTO THIS CONTRACT****TABLE OF CONTENT**

- 2.2.1 RECORD OF ADDENDUM TO TENDER DOCUMENTS
- 2.2.2 FORM OF REQUIRED INFORMATION
- 2.2.3 EXECUTION PROGRAMME
- 2.2.4 CONTRACTOR'S HEALTH AND SAFETY DECLARATION
- 2.2.5 CONTRACTOR'S SAFETY PLAN
- 2.2.6 PROFORMA NOTIFICATION FORM IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT 1993, CONSTRUCTION REGULATIONS, 2003
- 2.2.7 (a) MBD1 (TENDER NOTICE AND INVITATION TO TENDER)
- 2.2.7 (b) MBD 4 (DECLARATION OF INTEREST)
- 2.2.7 (c) MBD 5 (DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (VAT INCLUDED)
- 2.2.7 (d) MBD 6.1 (PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2011)
- 2.2.7 (e) MBD 6.2 (DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT)
- 2.2.7 (f) MBD 7.2 (DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT)
- 2.2.7 (g) MBD 8 (DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES)
- 2.2.7 (h) MBD 9 (CERTIFICATE OF INDEPENDENT BID DETERMINATION )
- 2.2.10 CERTIFICATE FOR MUNICIPAL SERVICES AND PAYMENTS
- 2.2.11 AUTHORIZATION FOR DEDUCTION OF OUTSTANDING AMOUNTS OWED TO COUNCIL
- 2.2.12 MDB 6.1 2.2.13 COMPANY INFORMATION FOR TENDERS GREATER THAN R10 MILLION
- 2.2.14 CLASSIFICATION OF BUSINESS
- 2.2.15 RECORD OF SERVICES PROVIDED TO ORGANS OF STATE
- 2.2.16 STATUS OF CONCERN SUBMITTING TENDER
- 2.2.17 CERTIFICATE OF INDEPENDENT BID DETERMINATION

## 2.2.1 RECORD OF ADDENDUM TO TENDER DOCUMENTS

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

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

SIGNATURE: .....DATE: .....  
*(of person authorised to sign on behalf of the Tenderer)*

## 2.2.2 FORM OF REQUIRED INFORMATION

THE FOLLOWING PARTICULARS MUST BE FURNISHED  
(FAILURE TO DO SO MAY RESULT IN YOUR TENDER BEING DISQUALIFIED)

NAME OF TENDERER

.....

POSTAL ADDRESS

.....

STREET ADDRESS

.....

.....

.....

TELEPHONE NUMBER CODE

.....NUMBER.....

CELLPHONE NUMBER

.....

FACSIMILE NUMBER CODE

.....NUMBER.....

VAT REGISTRATION NUMBER.....

HAS AN ORIGINAL AND VALID TAX CLEARANCE CERTIFICATE  
BEEN ATTACHED? (MBD 2)

YES/NO

HAS A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE  
BEEN SUBMITTED? (MBD 6.1)

YES/NO

IF YES, WHO WAS THE CERTIFICATE ISSUED BY?

AN ACCOUNTING OFFICER AS CONTEMPLATED IN THE CLOSE  
CORPORATIONACT (CCA)

A VERIFICATION AGENCY ACCREDITED BY THE SOUTH AFRICAN NATIONAL  
ACCREDITATION SYSTEM (SANAS)

A REGISTERED AUDITOR

(Tick applicable box)

(A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE MUST BE SUBMITTED IN  
ORDER TO QUALIFY FOR THE PREFERENCE POINTS FOR B-BBEE)

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE  
GOOD/SERVICES/WORKS OFFERED? YES/NO

(IF YES, ENCLOSE PROOF)

SIGNATURE OF TENDERER:.....DATE:.....

CAPACITY IN WHICH THIS TENDER IS SIGNED:.....

**2.2.3 EXECUTION PROGRAMME**

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

PROGRAMME														
ACTIVITY	WEEKS / MONTHS													

**[Note: The programme must be based on the completion time as specified in the Contract Data. No other completion time that may be indicated on this programme will be regarded as an alternative offer, unless it is listed in Table (b) of the Form hereafter and supported by a detailed statement to that effect, all as specified in the Tender Data]**

SIGNATURE:..... DATE: .....  
*(of person authorized to sign on behalf of the Tenderer)*

## 2.2.4 CONTRACTOR'S HEALTH AND SAFETY DECLARATION

In terms of Clause 4(4) of the OHS Act 1993 Construction Regulations 2003 (referred to as "the Regulations" hereafter), a Contractor may only be appointed to perform construction work if the Employer is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with the Occupational Health and Safety Act No 85 of 1993 and the OHS Act 1993 Construction Regulations 2003.

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

### Declaration by Tenderer

1. I, the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHS Act 1993 Construction Regulations 2003.
2. I hereby declare that my company has the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Employer's Health and Safety Specifications.
3. I hereby confirm that adequate provision has been made in my tendered rates and prices in the Bill of Quantities to cover the cost of all resources, actions, training and all health and safety measures envisaged in the OHS Act 1993 Construction Regulations 2003, including the cost of the specific items listed in the tables hereafter.

#### ***(Tables to be completed by Tenderer)***

TABLE 1: COST OF SAFETY PERSONNEL

PERSONNEL	COSTS AS ALLOWED IN TENDER	NOMINATED PERSON/S
Construction Supervisor		
Construction Safety Officer		
Health and Safety Representatives		
Health and Safety Committee		

TABLE 2: COST OF SAFETY EQUIPMENT

EQUIPMENT	STATE YES or NO	COST ALLOWED FOR IN TENDER
Hard hats		
Safety boots		
Harnesses		
Gas detectors		
Add items as per risk assessment:		

- 4. I hereby undertake, if my tender is accepted, to provide, before commencement of the works under the contract, a suitable and sufficiently documented Health and Safety Plan in accordance with Regulation 5(1) of the Construction Regulations, which plan shall be subject to approval by the Employer.
- 5. I confirm that copies of my company's approved Health and Safety Plan, the Employer's Safety Specifications as well as the OHS 1993 Construction Regulations 2003 will be provided on site and will at all times be available for inspection by the Contractor's personnel, the Employer's personnel, the Engineer and his Agents, visitors, and officials and inspectors of the Department of Labour.
- 6. I hereby confirm that I will be liable for any penalties that may be applied by the Employer in terms of the said Regulations (Regulation 30) for failure on the Contractor's part to comply with the provisions of the Act and the Regulations.
- 7. I agree that my failure to complete and execute this declaration to the satisfaction of the Employer will mean that I am unable to comply with the requirements of the OHS 1993 Construction Regulations 2003, and accept that my tender will be prejudiced and may be rejected at the discretion of the Employer.

SIGNATURE: ..... DATE: .....  
*(of person authorized to sign on behalf of the Tenderer)*

## **2.2.5 CONTRACTOR'S SAFETY PLAN**

***[The Tenderer shall submit separately before commencement of the works his Health and Safety Plan as required in terms of Regulation 5 of the Occupational Health and Safety Act 1993 Construction Regulations 2003, and referred to in T2.1]***

**2.2.6 PROFORMA NOTIFICATION FORM IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT1993, CONSTRUCTION REGULATIONS, 2003**

*[This form must be completed and forwarded, prior to commencement of work on site, by all Contractors that qualify in terms of Regulation 3 of the Construction Regulations 2003, to the office of the Department of Labour]*

1.

(a) Name and postal address of Contractor:

(b) Name of Contractor’s contact person:

Telephone number:

.....

2. Contractor’s workman’s compensation registration number:

.....

3. (a) Name and postal address of client:

.....

.....

.....

(b) Name of client’s contact person or agent:

.....

Telephone number: .....

4. (a) Name and postal address of designer(s) for the project: .....

(b) Name of designer's contact person:

.....

Telephone number:

.....

5. Name of Contractor’s construction supervisor on site appointed in terms of:

Regulation 6(1): .....

Telephone number:.....

1. Name/s of Contractor’s sub-ordinate supervisors on site appointed in terms of

regulation 6(2):

- .....
- 7. Exact physical address of the construction site or site office: .....
- 8. Nature of the construction work: .....
- 9. Expected commencement date: .....
- 10. Expected completion date: .....
- 11. Estimated maximum number of persons on the construction site:  
.....
- 12. Planned number of subcontractors on the construction site accountable to  
Contractor:.....
- 13. Name(s) of subcontractors already chosen: .....

SIGNED BY:

CONTRACTOR: .....

DATE: .....

CLIENT: .....

DATE:.....

**2.2.7(b) MBD 4 (DECLARATION OF INTEREST)**

THIS FORM MUST BE COMPLETED IN FULL AND SIGNED. FAILURE TO COMPLY WILL RESULT IN THE TENDER BEING DISQUALIFIED.(Refer to Clauses 2.25 and 2.26 in the Tender Data)

1. Is the employer/owner of the bidder in the service of the state? **YES / NO**  
(INDICATE)

If so, state particulars:

.....

2. If the provider is not a natural person, whether any of its directors, managers, principal shareholders or stakeholder is in the service of the state, or has been in the service of the state in the previous twelve months: **YES / NO**  
(INDICATE)

If so, state particulars:

.....

3. Whether a spouse, child or parent of the provider or of a director, manager, shareholder or stakeholder referred to in subparagraph 2 is in the service of the state, or has been in the service of the state in the previous twelve months: **YES / NO**  
(INDICATE)

If so, state particulars:

.....

4. Is an employer / owner of the bidder a person who is an advisor or consultant contracted with the municipality or municipal entity: **YES / NO**  
(INDICATE)

If so, state particulars:

.....

5. Are the Tenderer or any of the members of the tendering entity involved in another entity for this particular tender: **YES / NO**  
(INDICATE)

If so, state particulars:

.....

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

Person Authorized to sign Tender: .....

FULL NAME (BLOCK LETTERS): .....

SIGNATURE .....

DATE: .....

**2.2.7(c) MBD 5**

**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?

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. **YES / NO**

.....  
.....

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**

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**

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

.....  
Date

.....  
Position

.....

.....  
Name of Bidder

**2.2.7(d) MBD 6.1****(PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2011)**


---

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, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011.**

---

**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 **NOT** to exceed R50 000 000.00 (all applicable taxes included) and therefore the 80/20 system shall be applicable.

1.3. Preference points for this bid shall be awarded for:

(a) Price; and

(b) B-BBEE Status Level of Contribution.

1.3.1. The maximum points for this bid are allocated as follows:

Tenders < R50m

POINTS

**80 PRICE**

**20 MUNICIPAL OBJECTIVES**

1.3.2. Total points for Price and Municipal Objectives must not exceed 100

1.4. Failure on the part of a bidder to fill in and/or to sign this form and submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA) together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.5. 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

- 2.1 "all applicable taxes" includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;
- 2.2 "B-BBEE" means broad-based black economic empowerment as defined in section 1 of the Broad - Based Black Economic Empowerment Act;
- 2.3 "B-BBEE status level of contributor" means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- 2.4 "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 services, works or goods, through price quotations, advertised competitive bidding processes or proposals;
- 2.5 "Broad-Based Black Economic Empowerment Act" means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- 2.6 "comparative price" means the price after the factors of a non-firm price and all unconditional discounts that can be utilized have been taken into consideration;
- 2.7 "consortium or joint venture" 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;
- 2.8 "contract" means the agreement that results from the acceptance of a bid by an organ of state;
- 2.9 "EME" means any enterprise with an annual total revenue of R5 million or less.
- 2.10 "Firm price" means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the tendering costs of any service, for the execution of the contract;
- 2.11 "functionality" means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a bidder;
- 2.12 "non-firm prices" means all prices other than "firm" prices;
- 2.13 "person" includes a juristic person;
- 2.14 "rand value" means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;
- 2.15 "sub-contract" means the primary contractor's assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;
- 2.16 "total revenue" bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the Government Gazette on 9 February 2007;

- 2.17 "trust" means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- 2.18 "trustee" means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

### 3. ADJUDICATION USING A POINT SYSTEM

- 3.1 The bidder obtaining the highest number of total points will be awarded the contract.
- 3.2 Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts;.
- 3.3 Points scored must be rounded off to the nearest 2 decimal places.
- 3.4 In the event that two or more bids have scored equal total points, the successful bid must be the one scoring the highest number of preference points for B-BBEE.
- 3.5 However, when functionality is part of the evaluation process and two or more bids have scored equal points including equal preference points for B-BBEE, the successful bid must be the one scoring the highest score for functionality.
- 3.6 Should two or more bids be equal in all respects, the award shall be decided by the drawing of lots.

### 4. POINTS AWARDED FOR PRICE

#### 4.1 THE 80/20 POINT SYSTEMS

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

#### 80/20

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

Where

- $P_s$  = Points scored for comparative price of bid under consideration
- $P_t$  = Comparative price of bid under consideration
- $P_{\min}$  = Comparative price of lowest acceptable bid

## 5. Points awarded for Municipal objectives

5.1 In terms of Regulation 5 (2) and 6 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the Municipal Objective level of contribution in accordance with the table below:

Points must be awarded to tenderer for preferential points in accordance with table below.

For procurement transactions with rand value greater than R1 Million and up to R50 Million (Inclusive of all applicable taxes) the specific goals as listed in table 2 below are applicable:

### All Acquisitions

Table 2

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
1.	An EME or QSE or any entity which is at least 51% owned by Historically Disadvantaged Individuals (HDI)	10	<ul style="list-style-type: none"> <li>• ID Copy Or</li> <li>• SANAS Accredited BBEE Certificate or sworn affidavit where applicable Or</li> <li>• CSD Report Or</li> <li>• CIPC (company registration)</li> </ul>
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area	2	<ul style="list-style-type: none"> <li>• ID Copy (Mandatory) Or</li> <li>• Office Municipal Rates Statement</li> <li>• Or</li> <li>• Permission To Occupy from local chief in case of rural areas (PTO)</li> <li>• Or</li> <li>• Lease Agreement</li> </ul>
3.	An EME or QSE or any entity which is at least 51% owned by women	4	<ul style="list-style-type: none"> <li>• ID Copy Or</li> <li>• CSD Report Or</li> <li>• CIPC (company registration)</li> </ul>

Serial No	Specific Goals	Preference Points allocated out of 20	Documentation to be submitted by bidders to validate their claim for points
4.	An EME or QSE or any entity which is at least 51% owned by people with disability	2	<ul style="list-style-type: none"> <li>• ID Copy (Mandatory) Or</li> <li>• Medical Certificate Or</li> <li>• South African Social Security Agency (SASSA) registration Or</li> <li>• National Council for Persons with Physical Disability in South Africa registration (NCPDSA) Or</li> <li>• CSD Report Or</li> <li>• CIPC (company registration)</li> </ul>
5.	An EME or QSE or any entity which is at least 51% owned by youth.	2	<ul style="list-style-type: none"> <li>• ID Copy Or</li> <li>• CSD Report Or</li> <li>• CIPC (company registration)</li> </ul>

For procurement transactions with rand value greater than R50 Million (Inclusive of all applicable taxes) the specific goals as listed in table 3 below are applicable

### All Acquisitions

Table 3

Serial No	Specific Goals	Preference Points allocated out of 10	Documentation to be submitted by bidders to validate their claim for points
1.	An EME or QSE or any entity which is at least 51% owned by Historically Disadvantaged Individuals (HDI)	4	<ul style="list-style-type: none"> <li>• ID Copy Or</li> <li>• SANAS Accredited BBBEE Certificate or sworn affidavit where applicable Or</li> <li>• CSD Report Or</li> <li>• CIPC (company registration)</li> </ul>
2.	Located in a specific Local Municipality or District Municipality or Metro or Province area for work to be done or services to be rendered in that area	2	<ul style="list-style-type: none"> <li>• ID Copy (Mandatory) Or</li> <li>• Office Municipal Rates Statement</li> <li>• Or</li> </ul>

Serial No	Specific Goals	Preference Points allocated out of 10	Documentation to be submitted by bidders to validate their claim for points
			<ul style="list-style-type: none"> <li>• <b>Permission To Occupy from local chief in case of rural areas (PTO)</b></li> <li>• <b>Or</b></li> <li>• <b>Lease Agreement</b></li> </ul>
3.	<b>An EME or QSE or any entity which is at least 51% owned by women</b>	2	<ul style="list-style-type: none"> <li>• <b>ID Copy</b></li> <li>• <b>CSD Report Or</b></li> <li>• <b>CIPC (company registration)</b></li> </ul>
4.	<p><b>An EME or QSE or any entity which is at least 51% owned by people with disability</b></p> <p><b>OR</b></p> <p><b>An EME or QSE or any entity which is at least 51% owned by youth.</b></p>	2	<ul style="list-style-type: none"> <li>• <b>ID Copy (Mandatory) Or</b></li> <li>• <b>Medical Certificate Or</b></li> <li>• <b>South African Social Security Agency (SASSA) registration Or</b></li> <li>• <b>National Council for Persons with Physical Disability in South Africa registration (NCPDASA)</b></li> <li>• <b>ID Copy</b></li> <li>• <b>CSD Report Or</b></li> <li>• <b>CIPC (company registration)</b></li> </ul>

- 5.2 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.
- 5.3 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.
- 5.4 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.
- 5.5 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.

- 5.6 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.
- 5.7 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.
- 5.8 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.

## 6. BID DECLARATION

- 6.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:
- 6.2 B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.3.1.2 AND 4.1
- 6.3 B-BBEE Status Level of Contribution: ..... = .....(maximum of 10 or 20 points)

**(Points claimed in respect of paragraph 6.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA or an Accounting Officer as contemplated in the CCA).**

## 7. SUB-CONTRACTING

- 7.1 Will any portion of the contract be sub-contracted? **YES / NO**  
(delete which is not applicable)
- 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? **YES / NO**  
(delete which is not applicable)

**8. DECLARATION WITH REGARD TO COMPANY/FIRM**8.1 Name of 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?  
.....

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 contribution indicated in paragraph 7 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 paragraph 7, 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 contribution 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) restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from any organ of state for a period not exceeding 10 years, after the *audialterampartem* (hear the other side) rule has been applied; and
  - (e) forward the matter for criminal prosecution

WITNESSES:

.....

.....SIGNATURE(S) OF BIDDER(S)

DATE: .....

ADDRESS: .....

.....

.....

.....

**2.2.7(e) MBD 6.2****DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT**

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, 2011 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:201x.

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2011 (Regulation 9.(1) and 9.(3) make provision for the promotion of local production and content.
- 1.2. Regulation 9.(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Regulation 9.(3) prescribes that where there is no designated sector, a specific bidding condition may be included, that only locally produced services, works or goods or locally manufactured goods with a stipulated minimum threshold for local production and content, will be considered.
- 1.4. Where necessary, for bids referred to in paragraphs 1.2 and 1.3 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.
- 1.5. 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.
- 1.6. The local content (LC) as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286:201x as follows:

$$LC = 1 - \left[ \frac{x}{y} \right] \times 100$$

Where

x imported content

y bid price 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 the South African Reserve Bank (SARB) at 12:00 on the date, one week (7 calendar days) prior to the closing date of the bid as required in paragraph 4.1 below.

1.7. A bid will be disqualified if:

- the bidder fails to achieve the stipulated minimum threshold for local production and content indicated in paragraph 3 below; and.
- this declaration certificate is not submitted as part of the bid documentation.

2. Definitions

2.1. **“bid”** includes advertised competitive bids, written price quotations or proposals;

2.2. **“bid price”** price offered by the bidder, excluding value added tax (VAT);

2.3. **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;

2.4. **“designated sector”** means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;

2.5. **“duly sign”** means a Declaration Certificate for Local Content that has been signed by the 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).

2.6. **“imported content”** means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;

2.7. **“local content”** means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;

2.8. **“stipulated minimum threshold”** means that portion of local production and content as determined by the Department of Trade and Industry; and

2.9. **“sub-contract”** means the primary contractor’s assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.

3. **The stipulated minimum threshold(s) for local production and content for this bid is/are as follows:**

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
_____	_____ %
_____	_____ %
_____	_____ %

4. Does any portion of the services, works or goods offered have any imported content?

**YES / NO**

4.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.6 of the general conditions must be the rate(s) published by the SARB for the specific currency at 12:00 on the date, one week (7 calendar days) prior to the closing date of the bid.

The relevant rates of exchange information is accessible on [www.reservebank.co.za](http://www.reservebank.co.za).

Indicate the rate(s) of exchange against the appropriate currency in the table below:

<b>Currency</b>	<b>Rates of exchange</b>
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

**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 CHIEF ALBER LUTHULI LOCAL MUNICIPALITY**

NB 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.

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 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.
- (c) The local content has been calculated using the formula given in clause 3 of SATS 1286, the rates of exchange indicated in paragraph 4.1 above and the following figures:

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

If the bid is for more than one product, a schedule of the local content by product shall be attached.

- (d) I accept that the Procurement Authority / Municipality /Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286.
- (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, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Policy Framework Act

(PPPFA), 2000 (Act No. 5 of 2000).

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

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

**WITNESS No. 1** \_\_\_\_\_

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

**WITNESS No. 2** \_\_\_\_\_

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



Annex D

Imported Content Declaration - Supporting Schedule to Annex C

(D1) Tender No.		Note: VAT to be excluded from all calculations
(D2) Tender description:		
(D3) Designated Products:		
(D4) Tender Authority:		
(D5) Tendering Entity name:		
(D6) Tender Exchange Rate:	Pula <input type="text"/>	

EU  GBP

A. Exempted imported content

Tender item no's	Description of imported content	Local supplier	Overseas Supplier	Calculation of imported content						Summary	
				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 excl VAT	Tender Qty	Exempted imported value
(D7)	(D8)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)
										(D19) Total exempt imported value R 0	

This total must correspond with Annex C - C 21

B. Imported directly by the Tenderer

Tender item no's	Description of imported content	Unit of measure	Overseas Supplier	Calculation of imported content						Summary	
				Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Total imported value
(D20)	(D21)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)
										(D32) Total imported value by tenderer R 0	

C. Imported by a 3rd party and supplied to the Tenderer

Description of imported content	Unit of measure	Local supplier	Overseas Supplier	Calculation of imported content						Summary	
				Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Quantity imported	Total imported value
(D33)	(D34)	(D35)	(D36)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
										(D45) Total imported value by 3rd party R 0	

D. Other foreign currency payments

Type of payment	Local supplier making the payment	Overseas beneficiary	Calculation of foreign currency payments		Summary of payments
			Foreign currency value paid	Tender Rate of Exchange	
(D46)	(D47)	(D48)	(D49)	(D50)	(D51)
					(D52) Total of foreign currency payments declared by tenderer and/or 3rd party

(D53) Total of imported content & foreign currency payments - (D32), (D45) & (D52) above R 0

Signature of tenderer from Annex B

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

This total must correspond with Annex C - C 23



**2.2.7(f) MBD 7.2**

**CONTRACT FORM - RENDERING OF SERVICES**

**PART 2 (TO BE FILLED IN BY THE PURCHASER)**

1. I..... in my capacity  
as.....  
  
accept your bid under reference number .....dated.....for  
the rendering of services indicated hereunder and/or further specified in the  
annexure(s).
2. An official order indicating service delivery instructions is forthcoming.
3. I undertake to make payment for the services rendered in accordance with the terms  
and conditions of the contract, within 30 (thirty) days after receipt of an invoice.

DESCRIPTION OF SERVICE	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)

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

SIGNED AT ..... ON .....

NAME (PRINT) .....

SIGNATURE .....

OFFICIAL STAMP

WITNESSES

1 .....

2 .....

**2.2.7(g) MBD 8**

**(Declaration of Bidder's Past Supply Chain Management Practices)**

- 1 This Municipal Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The bid of any bidder may be rejected if that bidder, or any of its directors have:
  - a. abused the 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>Is the bidder or any of its directors listed on the National Treasury's database as companies or persons prohibited from doing business with the public sector?</p> <p>(Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the <i>audialterampartem</i> rule was applied).</p> <p><b>The Database of Restricted Suppliers now resides on the National Treasury's website(<a href="http://www.treasury.gov.za">www.treasury.gov.za</a>) and can be accessed by clicking on its link at the bottom of the home page</b></p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	If so, furnish particulars:		

4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?  <b>The Register for Tender Defaulters can be accessed on the National Treasury's website (<a href="http://www.treasury.gov.za">www.treasury.gov.za</a>) by clicking on its link at the bottom of the home page</b>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	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"/>
	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"/>
	If so, furnish particulars:		

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

.

Person Authorized to sign Tender: .....

FULL NAME (BLOCK LETTERS): .....

SIGNATURE .....

DATE : .....

## 2.2.10 Certificate for Municipal Services and Payments

**TO: MUNICIPAL MANAGER**

FROM: \_\_\_\_\_

(Name of Bidder) FURTHER DETAILS OF BIDDER(S);  
DIRECTORS/SHAREHOLDERS/PARTNERS, ETC.

Directors/ shareholders/ Partner	Physical address of the Business	Municipal Account No.	Physical residential address of the Director/ Shareholder/ Partner	Municipal Account No.

**NB: Please attach certified copy of ID document(s)**

\_\_\_\_\_  
**Signatory**

\_\_\_\_\_  
**Date**

**Witnesses**

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

**Full Names**

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Date**

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

**Full Names**

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Date**

## 2.2.11 Authorisation for Deduction of Outstanding Amounts Owed to Council

**TO: MUNICIPAL MANAGER,** \_\_\_\_\_

**FROM:** \_\_\_\_\_ (Name of the Bidder or Consortium)

I, \_\_\_\_\_ the undersigned, hereby authorise the

\_\_\_\_\_ **LOCAL MUNICIPALITY** to deduct the full amount outstanding by the business

organisation/Director/Shareholder/Partner, etc. from any payment due by us/me.

Signed at \_\_\_\_\_ Date \_\_\_\_\_ Month \_\_\_\_\_ 20 \_\_\_\_\_

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

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

Thus done and signed for and on behalf of the bidder/Contractor

\_\_\_\_\_  
**Signatory**

\_\_\_\_\_  
**Date**

### Witnesses

1. \_\_\_\_\_  
**Full Names**

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Date**

2. \_\_\_\_\_  
**Full Names**

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Date**

**2.2.7(h) MBD 9****CERTIFICATE OF INDEPENDENT BID DETERMINATION**

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

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

<sup>2</sup> Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete

<sup>3</sup> Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

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

7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
- a. prices;
  - b. geographical area where product or service will be rendered (market allocation)
  - c. methods, factors or formulas used to calculate prices;
  - d. the intention or decision to submit or not to submit, a bid;
  - e. the submission of a bid which does not meet the specifications and conditions of the bid; or
  - f. bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or any other applicable legislation.

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of Bidder

**DECLARATION**

I,THE UNDERSIGNED (NAME).....

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2.1 TO 2.11.1 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY ACT AGAINST ME IN TERMS OF PARAGRAPH 23 OF THE GENERAL CONDITIONS OF CONTRACT SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....

Signature

Date

.....

Position

Name of bidder

**2.2.13 COMPANY INFORMATION FOR TENDERS GREATER THAN R10 MILLION**

- 1. The tenderer is required by law to prepare annual financial statements for auditing and is therefore requested to provide audited annual financial statements:
  - for the past three years; or
  - since their establishment if established during the past three years. Indicate whether these have been included in the tender: **YES / NO**

- 2. Does the tenderer have any undisputed commitments for Municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days? **YES /NO**

If so, state particulars

\_\_\_\_\_

- 3. Has any contracts been awarded to the tenderer by an organ of state during the past five years? **YES / NO**

If so, state particulars

- 4. Has there been any material non-compliance or dispute concerning the execution of such contract? **YES / NO**

If so, state particulars

- 5. . Is any portion of the goods or services expected to be sourced out from outside the Republic? **YES / NO**

If so, state what portion and whether any portion of payment from the Municipality is expected to be transferred out of the Republic.

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.	
Person Authorized to sign Tender: .....	
FULL NAME (BLOCK LETTERS): .....	
SIGNATURE .....	
DATE : .....	

## CLASSIFICATION OF BUSINESS

Sector or subsector in accordance with the standard industrial classification	Size of class	The total full time equivalent of paid employees	Total turn over	Total gross asset value (fixed property ex-cluded)
<b>Mining and Quarrying</b>	medium	200	R39m	R23m
	Small	50	R10m	R6m
	Very small	20	R4m	R2m
	Micro	5	R0.20m	R0.10m
<b>Manufacturing</b>	medium	200	R51m	R19m
	Small	50	R13m	R5m
	Very small	20	R5m	R2m
	micro	5	R0.20m	R0.10M
<b>Electricity gas and water</b>	medium	200	R51m	R19m
	Small	50	R13m	R5m
	Very small	20	R5.10m	R1.90m
	micro	5	R0.20m	R0.10m
<b>Construction</b>	medium	200	R26m	R5m
	Small	50	R6m	R1m
	Very small	20	R3m	R0.50m
	micro	5	R0.20	R0.10m
<b>Retail and motor trade and repair services</b>	medium	200	R39m	R6m
	Small	50	R19M	RR3m
	Very small	20	R4m	R0.60m
	micro	5	R0.20	R0.10m
<b>Wholesale trade, commercial agents and allied services</b>	medium	200	R64m	R10m
	Small	50	R32m	R5m
	Very small	20	R6m	R0.60m
	micro	5	R0.20m	R0.10m
<b>Catering accommodation and other trade</b>	medium	200	R13m	R3m
	Small	50	R6m	R1m
	Very small	20	R5.10m	R1.90m
	micro	5	R0.20m	R0.10m
<b>Transport, storage and communications</b>	medium	200	R26m	R6m
	Small	50	R13m	R3m
	Very small	20	R3m	R0.60m
	micro	5	R0.20m	R0.10m
<b>Finance and business services</b>	medium	200	R26m	R5m
	Small	50	R13m	R3m
	Very small	20	R3m	R0.50m
	micro	5	R0.20m	R0.10m
<b>Community social and personal services</b>	medium	200	R13m	R6m
	Small	50	R6m	R3m
	Very small	20	R1m	R0.60m
	micro	5	R0.20	R0.10m
Sector or subsector in accordance with the standard industrial classification	Size of class	The total full time equivalent of paid employees	Total turn over	Total gross asset value (fixed property ex-cluded)

<b>Mining and Quarrying</b>	medium	200	R39m	R23m
	Small	50	R10m	R6m
	Very small	20	R4m	R2m
	Micro	5	R0.20m	R0.10m
<b>Manufacturing</b>	medium	200	R51m	R19m
	Small	50	R13m	R5m
	Very small	20	R5m	R2m
	micro	5	R0.20m	R0.10M
<b>Electricity gas and water</b>	medium	200	R51m	R19m
	Small	50	R13m	R5m
	Very small	20	R5.10m	R1.90m
	micro	5	R0.20m	R0.10m
<b>Construction</b>	medium	200	R26m	R5m
	Small	50	R6m	R1m
	Very small	20	R3m	R0.50m
	micro	5	R0.20	R0.10m
<b>Retail and motor trade and repair services</b>	medium	200	R39m	R6m
	Small	50	R19M	RR3m
	Very small	20	R4m	R0.60m
	micro	5	R0.20	R0.10m
<b>Wholesale trade, commercial agents and allied services</b>	medium	200	R64m	R10m
	Small	50	R32m	R5m
	Very small	20	R6m	R0.60m
	micro	5	R0.20m	R0.10m
<b>Catering accommodation and other trade</b>	medium	200	R13m	R3m
	Small	50	R6m	R1m
	Very small	20	R5.10m	R1.90m
	micro	5	R0.20m	R0.10m
<b>Transport, storage and communications</b>	medium	200	R26m	R6m
	Small	50	R13m	R3m
	Very small	20	R3m	R0.60m
	micro	5	R0.20m	R0.10m
<b>Finance and business services</b>	medium	200	R26m	R5m
	Small	50	R13m	R3m
	Very small	20	R3m	R0.50m
	micro	5	R0.20m	R0.10m
<b>Community social and personal services</b>	medium	200	R13m	R6m
	Small	50	R6m	R3m
	Very small	20	R1m	R0.60m
	micro	5	R0.20	R0.10m

1. THE SMALL BUSINESSES ARE DEFINED IN THE NATIONAL SMALL BUSINESS ACT, 1996 (ACT 102 OF 1996).

Sector or subsector in accordance with	Size of class	The total full time	Total turn over	Total gross asset
--	---------------	---------------------	-----------------	-------------------

the standard industrial classification		equivalent of paid employees		value (fixed property ex-cluded)
Agriculture	Medium	100	R5m	R5m
	Small	50	R3m	R3m
	Very small	10	R0.50m	R0.50m
	Micro	5	R0.20m	R0.10m

## 2. INFORMATION FURNISHED WITH REGARD TO THE CLASSIFICATION OF THE SMALL BUSINESSES

**a.** Indicate whether the company/entity is defined as a small, medium or micro enterprise by the National Small Business Act, 1996 (Act 102 of 1996). **YES / NO**

**b.** If the response to paragraph is **YES**, the following must be completed:

i. Sector/sub-sector in accordance with the Standard Industrial classification

\_\_\_\_\_

ii. Size or class

\_\_\_\_\_

iii. Total full-time equivalent of paid employees

\_\_\_\_\_

iv. Total annual turnover

\_\_\_\_\_

v. Total gross asset value (fixed property excluded)

\_\_\_\_\_

(A schedule indicating the different sectors is attached to this form.)

The tenderer should substantiate the information provided above by submitting the following documentation:

**c.** A letter from the tenderer's auditor or an affidavit from the South African Police Services confirming the correctness of the abovementioned information,

**d.** Company profile indicating the tenderer's staff compliment, and

**e.** 3 year financial statement or since their establishment if established during the past 3 years.

### 2.2.15 RECORD OF SERVICES PROVIDED TO ORGANS OF STATE

Respondents are required to complete this record in terms of the Supply Chain Management Regulations issued in terms of the Municipal Finance Management Act of 2003.

Include only those contracts where the respondent identified in the signature block below was directly contracted by the Employer. Respondents must not include services provided in terms of a sub-contract agreement.

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

Complete the record or attach the required information in the prescribed tabulation.

All services commenced or completed to an organ of state in the last five years

No	Organ of state, i.e. national or provincial department, public entity, municipality or municipal entity.	Title of contract for the service	Value of contract for service incl. VAT (Rand)	Date of completed (State current if not yet completed)
1				
2				
3				
4				
5				
6				
7				
8				

Attach additional pages if more space is required.

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

Person Authorized to sign Tender: .....

FULL NAME (BLOCK LETTERS): .....

SIGNATURE. ....

DATE: .....

## 2.2.16 STATUS OF CONCERN SUBMITTING TENDER

### 1. General

State whether the Respondent is a company, a closed corporation, a partnership, a sole practitioner or a joint venture:

(Mark the appropriate option below)

**Public Company**

**Private Company**

**Closed Corporation**

**Partnership**

**Sole Proprietary**

**Joint Venture**

**Co-operative**


### 2. Information To Be Provided

If the Tendering Entity is a:		Documentation to be submitted with the tender
1	Close Corporation, incorporated under the Close Corporation Act, 1984, Act 69 of 1984	CIPRO CK1 or CK2 (Copies of the founding statement) and list of members
2	Private Company incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 (including Companies incorporated under Art 53 (b))	Copies of: a) CIPRO CM 1 - Certificate of Incorporation b) CIPRO CM 29 – Contents of Register of Directors, Auditors and Officers c) Shareholders Certificates of all Members of the Company.
3	Private Company incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 in which any, or all, shares are held by another Close Corporation or company with, or without, share capital	Copies of documents referred to in 1 and/or 2 above in respect of all such Closed Corporations and/or Companies
4	Public Company incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 (including Companies incorporated under Art 21)	A signed statement of the Company's Secretary confirming that the Company is a public Company. Copy of CM 29
5	Sole Proprietary or a Partnership	Copy of the Identity Document of: a) such Sole Proprietary, or b) Each of the Partners in the Partnership Certified copy of the Partnership agreement
6	Co-operative	CIPRO CR2 - Copies of Company registration document. (The percentage of work to be done by each partner must clearly be indicated on Form RDB1 (or RDB2 as applicable) of the tender document: MBD6.1 Preference Points Claim Form in terms of the Preferential Procurement Regulations 2001)
7	Joint Venture	All the documents (as described above) as applicable to each partner in the JV as well as a copy of the Joint Venture agreement. (The percentage of work to be done by each partner of the joint venture must clearly be indicated in the Joint Venture Agreement

**Note:**

1.) If the shares are held in trust provide a copy of the Deed of Trust (only the front page and pages listing the trustees and beneficiaries are required) as well as the Letter of Authority as issued by the Master of the Supreme Court, wherein trustees have been duly appointed and authorised, must be provided

2.) Include a copy of the Certificate of Change of Name (CM9) if applicable.  
Registered For Vat Purposes In Terms Of The Value-Added Tax Act, (Act Nr. 89 of 1991)  
(Make an X in the appropriate space below)

Yes

No

REGISTRATION NO: \_\_\_\_\_

**FORM 10 INDEPENDENT BID DETERMINATION**

1. This Municipal Bidding Document (MBD) must form part of all bids<sup>1</sup> invited. 2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging)

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. Take all reasonable steps to prevent such abuse; b. Reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and c. Cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.

4. This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.

5. In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid.

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

<sup>2</sup> Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

**2.2.17 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 statement 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 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 authorised 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 authorised 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, based on their qualifications, abilities or experience; and
  - b. Could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and 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 form, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium<sup>3</sup> will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
  - a. Prices;
  - b. Geographical area where product or services will be rendered (market allocation);
  - c. Methods, factors or formulas used to calculate prices;
  - d. The intention or decision to submit or not to submit, a bid;
  - e. The submission of a bid which does not meet the specifications and conditions of the bid;
  - or f. Bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangement 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 to the awarding of the contract.

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practises 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 form conduction 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.

3 Joint venture of Consortium means an associations of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

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

Person Authorized to sign Tender: .....  
FULL NAME (BLOCK LETTERS): .....  
SIGNATURE .....  
DATE : .....

**T2.3****OTHER FORMS, CERTIFICATES AND SCHEDULES  
REQUIRED FOR TENDER EVALUATION PURPOSES  
(FUNCTIONALITY)****TABLE OF CONTENT**

2.3.1 SCHEDULE OF CONSTRUCTIONAL PLANT

2.3.2 SCHEDULE OF PREVIOUS WORK CARRIED OUT BY BIDDER

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2.3.8 PROPOSED AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES

**2.3.1 SCHEDULE OF CONSTRUCTIONAL PLANT**

(Refer to tender data – functionality competency schedule for claimable points)

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

(a) Details of plant/equipment that is **owned** and will be immediately available for this contract (attached certified proof of ownership.

Quantity	Description	Registration Number	VIN Number	capacity

(b) Details of plant/ equipment that are not owned and will be immediately available for this contract. List plant required

The following are lists of major items of relevant equipment that I/we will acquire **or hire for this contract** if my/our tender is accepted. (Attached certified copy of **letter of intent to lease** and the letter must state the **project name and list of plant to be hired**). Refer to tender data – functionality competency schedule)

Quantity	Description, size, capacity, etc.	Capacity

Attach additional pages if more space is required.

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

Attach additional pages if more space is required.

SIGNED ON BEHALF OF TENDERER: .....

### 2.3.2 SCHEDULE OF PREVIOUS WORK CARRIED OUT BY BIDDER (Refer to tender data – functionality competency schedule for claimable points)

Provide the following information on **SIMILAR previous experience**. Indicate comparable projects of similar or larger size. This information is material to the award of the Contract. **No points will be awarded if reference cannot be reached or if it refuses to supply information. Give at least two (2) names and telephone numbers and e-mail address per reference.** Only five similar scope projects are required for assessment of this project.

No	CLIENT				CONSULTING ENGINEER		VALUE OF WORK	YEAR OF COMPLETION	COMPLETION CERTIFICATE ISSUED (Yes or No)
	NAME	EMAIL	TEL	FAX	NAME	EMAIL			
1									
2									
3									
4									
5									

NOTE: In order for the Tenderer to claim points for Experience under Functionality for the above listed projects, the Tenderer must attach the following proof for each of the projects:

- **Certified copy of Appointment Letter, and Certified copy of Completion Certificate.**

### 2.3.3 SIZE OF ENTERPRISE AND CURRENT WORKLOAD

What was your turnover in the previous financial year? R\_\_\_\_\_

*Please attach the audited financial statement for the past 2 years*

What is the estimated turnover for your current financial year? R\_\_\_\_\_

#### Physical facilities:

Provide information on offices, factories, yards and warehouses occupied by your enterprise (attach details if the space provided is not enough)

Description	Address	Area (m <sup>2</sup> )

List your current contracts and obligations:

Description	Value (R)	Start date	Duration	Name of Client and contact person (name and tel)

**Do you have the capacity to supply the goods and services described in this bid, should the contract be awarded to you?**

.....

**2.3.4 STAFFING PROFILE** (Refer to tender data – functionality competency schedule for claimable points)

Provide information on the staff that you have available to execute this contract (attach a separate list if the space provided is insufficient)

Own staff: gender and race	Number of staff
Staff to be employed for the project: gender and race	Number of staff

**Note:**

**The site personnel will be required to be full time on site per contract**

**FORM 3.ii**      **PROPOSED KEY PERSONNEL**

The Bidder shall list below the key personnel (including first nominee and the second choice alternate), whom he proposes to employ on the contract should his bid be accepted, both at his headquarters and on the Site, to direct and for the execution of the work, together with their qualifications, experience, and positions held their **CVs of key personnel (NOT MORE THAN TWO PAGES) must be attached with certified qualification.** Tenderer to supply an organogram for the management of the contract and include curriculum vitae of key personnel. These curricula vitae shall provide evidence of relevant experience of the key staff in the organogram. The personnel included here shall be used on the project unless otherwise agreed by the Project Manager.

NAMES	QUALIFICATIONS	YEARS OF EXPERIENCE	PRESENT OCCUPATION	EMPLOYMENT STATUS (PERMANENT/CONTRACT)	CONTACT DETAILS







### 2.3.5 FINANCIAL STANDING/BANK RATING

(Refer to tender data – functionality competency schedule for claimable points)

**Tenderers must attach a letter of certified copy from the tenderers bank stating the tenderers financial standing/bank rating and the letter must not be more than 3 month older.**

The Tenderer is to provide the following details of his banker and bank account that he intends to use for the project:

Name of Account Holder: .....

Name of Bank: .....

Branch: .....

Account Number: .....

Type of Account: .....

Telephone Number: .....

Facsimile Number: .....

Name of contact person (at Bank):  
.....

**NB.**

**Failure by the Tenderer to provide the required bank details or certified bank rating with his tender, will lead to the conclusion that the Tenderer does not have the necessary financial resources at his disposal to complete the contract successfully within the specified time for completion.**

The Employer undertakes to treat the information thus obtained as confidential, strictly for the use of evaluation of the Tender submitted by the Tenderer.

SIGNATURE: \_\_\_\_\_

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

\_\_\_\_\_  
(Authorized Person)

**2.3.6 COMPULSORY ENTERPRISE QUESTIONNAIRE**

The following particulars must be furnished. In the case of a joint venture, **separate** enterprise questionnaires in respect of each partner must be completed and submitted.

**Section 1: Name of enterprise:** .....  
 .....

**Section 2: VAT registration number, if any:** .....  
 .....

**Section 3: CIDB registration number, if any:** .....  
 .....

**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 attach separate page if more than 3 partners

**Section 5: Particulars of companies and close corporations**

Company registration number .....  
 .....

Close corporation number .....  
 .....

Tax reference number .....  
 .....

**Section 6: Record in the 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, manager, 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

\*insert separate page if necessary

**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

\*insert separate page if necessary

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 the neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- iv) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and
- 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.

Signed

Date

Name

Position

*Enterprise name*

**2.3.7 SCHEDULE OF PROPOSED SUBCONTRACTORS**

We notify you that it is our intention to employ the following Subcontractors for work in this contract.

If we are awarded a 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.

We confirm that all Subcontractors who are contracted to construct a house are registered as home builders with the National Home Builders Registration Council.

	<b>Name and address of proposed Subcontractor</b>	<b>Nature and extent of work</b>	<b>Previous experience with Subcontractor.</b>

Signed

Date

Name

Position

Tenderer

### 2.3.8 PROPOSED AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES

*(This is not an invitation for amendments, deviations or alternatives but should the Tenderer desire to make any departures from the provisions of this contract he shall set out his proposals clearly hereunder. The Employer will not consider any amendment, alternative offers or discounts unless forms (a), (b) and (c) have been completed to the satisfaction of the Employer).*

I / We herewith propose the amendments, alternatives and discounts as set out in the tables below:

#### (a) AMENDMENTS

PAGE, CLAUSE OR ITEM NO	PROPOSED AMENDMENT

Notes: (1) Amendments to the General and Special Conditions of Contract are not acceptable;  
 (2) The Tenderer must give full details of all the financial implications of the amendments and qualifications in a covering letter attached to his tender.

#### (b) ALTERNATIVES

PROPOSED ALTERNATIVE	DESCRIPTION OF ALTERNATIVE

Notes: (1) Individual alternative items that do not justify an alternative tender, and an alternative offer for time for completion should be listed here.  
 (2) In the case of a major alternative to any part of the work, a separate Bill of Quantities, programme, etc, and a detailed statement setting out the salient features of the proposed alternatives must accompany the tender.  
 (3) Alternative tenders involving technical modifications to the design of the works and methods of construction shall be treated separately from the main tender offer.

(c) DISCOUNTS

ITEM ON WHICH DISCOUNT IS OFFERED	DESCRIPTION OF DISCOUNT OFFERED

**Note: The Tenderer must give full details of the discounts offered in a covering letter attached to his tender, failing which, the offer will be prejudiced.**

SIGNATURE: ..... DATE: .....  
(of person authorized to sign on behalf of the Tenderer)

**T2.4****OTHER FORMS, CERTIFICATES AND SCHEDULES REQUIRED  
FOR TENDER EVALUATION PURPOSES****TABLE OF CONTENT****2.4.1 COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND  
CONSTRUCTION REGULATIONS, 2003****2.4.2 COMPLIANCE WITH OHSA (ACT 85 OF 1993)****2.4.3 SCHEDULE OF LABOUR CONTENT****2.4.4 SCHEDULE OF LOCAL LABOUR CONTENT****2.4.5 EMPLOYMENT OF ABE's****2.4.6 GENERIC TRAINING****2.4.7 ENTREPRENEURIAL TRAINING****2.4.8 FORM OF INTENT TO PROVIDE A PERFORMANCE GUARANTEE**

#### 2.4.1 COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND CONSTRUCTION REGULATIONS, 2003

The tenderer shall attach to this Form evidence that he is registered and in good standing with a compensation insurer who is approved by Department of Labour in terms of section 80 of the Compensation for Injury and Disease Act (COID)(Act 130 of 1993).

The tenderer is required to disclose, by also attaching documentary evidence to this form, all inspections, investigations and their outcomes conducted by the Department of Labour into the conduct of the tenderer at any time during the 36 months preceding the date of this tender.

SIGNED ON BEHALF OF THE TENDERER: .....

**Note to tenderer:**

**Discovery that the tenderer has failed to make proper disclosure may result in CLIENT terminating a contract that flows from this tender on the ground that it has been rendered invalid by the tenderers misrepresentation.**

### 2.4.2 COMPLIANCE WITH OHSA (ACT 85 OF 1993)

Bidders are required to satisfy the Employer and the Engineer as to their ability and available resources to comply with the above by answering the following questions and providing the relevant information required below.

1. Is the Contractor familiar with the OHSA (ACT 85 of 1993) and its Regulations?	YES	/	NO
2. Who will prepare the Contractor's Health and Safety Plan? (Provide a copy of the person/s curriculum vitae/s or company profile).			
3. Does the Contractor have a health and safety policy? (If yes, provide a copy). How is this policy communicated to all employees?	YES	/	NO
4. Does the Contractor keep records of safety aspects of each construction site? If yes, what records are kept	YES	/	NO
5. Does the Contractor conduct monthly safety meetings? If yes, who is the chairperson of the meeting, and who attend these meetings?	YES	/	NO
6. Does the Contractor have a safety officer in his employment, responsible for the overall safety of his company? If yes, please explain his duties and provide a copy of his CV.	YES	/	NO
7. Does the Contractor have trained first aid employees? If yes, indicate, who.	YES	/	NO
8. Does the Contractor have a safety induction-training programme in place? (If yes, provide a copy)	YES	/	NO

**Signature of Bidder:** .....

**Date:** .....

**2.4.8 FORM OF INTENT TO PROVIDE A PERFORMANCE GUARANTEE**

**The Tenderer must attach hereto a letter from the bank or institution with whom he has made the necessary arrangements, to the effect that the said bank or institution will be prepared to provide the required performance guarantee when asked to do so.**

**PRO-FORMA FOR A PERFORMANCE GUARANTEE**

**PERFORMANCE GUARANTEE**

**Employer:** (Name and Address)

.....  
.....

**Contract No:** .....

(Contract title)

.....  
.

WHEREAS

.....

(hereinafter referred to as " the Employer") entered into, a Contract with

.....  
...

(hereinafter called "the Contactor") on the .....day of ..... 20...  
for the construction of (Contract Title)

.....  
...

at

.....  
...

AND WHEREAS it is provided by such Contract that the Contractor shall provide the Employer with security by way of a guarantee for the due and faithful fulfilment of such Contract by the Contractor;

AND WHEREAS ..... (hereinafter referred to as "the Guarantor") Has/have at the request of the Contractor, agreed to give such guarantee;

NOW THEREFORE WE,

.....

Do hereby guarantee and bind ourselves jointly and severally as Guarantor and Co-principal Debtors to the Employer under renunciation of the benefits of division and exclusion for the due and faithful performance by the Contractor of all the terms and conditions of the said Contract, subject to the following conditions:

- 1. The Employer shall, without reference and/or notice to us, have complete liberty of action to act in any manner authorized and/or contemplated by the terms of the said

Contract, and/or to agree to any modifications, variations, alterations, directions or extensions of the Completion Date of the Works under the said Contract, and that its rights under this guarantee shall in no way be prejudiced nor our liability hereunder be affected by reason of any steps which the Employer may take under such Contract, or of any modification, variation, alterations of the Completion Date which the Employer may make, give, concede or agree to under the said Contract.

- 2. This guarantee shall be limited to the payment of a sum of money
- 3. The Employer shall be entitled, without reference to us, to release any guarantee held by it, and to give time to or compound or make any other arrangement with the Contractor.

However, upon receipt by us of an authenticated copy of the Certificate of Completion in terms of the Contract, the amount of liability shall be reduced by 50%, which shall be in force until the issue of the Final Approval Certificate at expiry of the Defects Liability Period

- 4. This guarantee shall remain in full force and effect until the issue of the Certificate of Completion in terms of the Contract, unless we are advised in writing by the Employer before the issue of the said Certificate of his intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid or liquidated.

- 5. Our total liability hereunder shall not exceed the sum of

.....

..... (in words)

R ..... (in figures)

(10 % of the tender sum) which amount I/we agree to hold at your disposal.

- 6. The Guarantor reserves the right to withdraw from this guarantee by depositing the Guaranteed Sum with the beneficiary, whereupon the Guarantor's liability hereunder shall cease.

I/We declare that I/we, on behalf of the Guarantor, waive the legal exceptions available to a guarantor and undertake to pay the said amount or such portion thereof as may be demanded, immediately on receipt of a written demand from you.

A certificate under your hand shall be sufficient and satisfactory evidence as to the amount of the Guarantor's liability for the purpose of enabling provisional sentence or any similar relief to be obtained against the Guarantor.

This guarantee is neither negotiable nor transferable, and must be surrendered to the Guarantor in the event of the full amount of the Guarantee being paid to the Employer.

- 7.

8. I/We hereby choose our address for the serving of all notices for all purposes arising here from as

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

IN WITNESS WHEREOF this guarantee has been executed by us at .....

on this ..... day of ..... 20.....

As witnesses:

1 ..... Name	..... Signature
2 ..... Name	..... Signature

Duly authorized to sign on behalf of  
(Guarantor).....

.....  
....

Address

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

# CONTRACT

# THE CONTRACT

PART C1	AGREEMENT AND CONTRACT DATA
PART C2	PRICING DATA
PART C3	SCOPE OF WORKS
PART C4	SITE INFORMATION

## **PART C1: AGREEMENT AND CONTRACT DATA**

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**C1.1 SAFETY AGREEMENT**

**MEMORANDUM OF AGREEMENT CONCLUDED BY AND BETWEEN:**

**CHIEF ALBERT LUTHULI LOCAL MUNICIPALITY  
(HEREINAFTER REFERRED TO AS THE MUNICIPALITY)**

herein represented by \_\_\_\_\_

in his capacity as \_\_\_\_\_  
of the Municipality, he being duly authorised thereto

and

\_\_\_\_\_  
*(hereinafter referred to as the Mandatory)*

herein represented by \_\_\_\_\_

in his capacity as \_\_\_\_\_  
of the Mandatory, he being duly authorised thereto

**WHEREAS:**

1. The Municipality and the Mandatory entered into a written, alternatively oral agreement on the.....Day of .....20..... in terms of which the Mandatory undertook to carry out the following work for the Municipality , viz. (give a short description of the type of contract work to be done as well as the address where work will be done)

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
*(The said contract work is hereinafter referred to as the Work)*

2. The Occupational Health and Safety Act, Act 85 of 1993 as amended (hereinafter referred to as **the Act**) contains amongst others certain provisions with regard to the health and safety of people at work and in connection with the usage of plant and machinery, as well as the protection of other persons than persons at work against hazards to health and safety that originates from or in connection with the activities of persons at work.
3. Section 37(2) of the Act makes provision for the exclusion by the parties, by way of a written agreement, of supposition and accompanying liability of the Municipality as stipulated in section 37(1) of the Act.
4. The parties have reached consensus with regard to the terms and conditions to which they agree in terms of the provisions of section 37(2) of the Act.

**NOW THEREFORE THE PARTIES AGREE AS FOLLOWS****1.****WRITTEN AGREEMENT**

The parties herewith agree in terms of section 37(2) of the Act on the arrangements and procedures that must be followed to ensure compliance with the provisions of the Act by the Mandatory.

**2.****ACKNOWLEDGEMENT BY THE MANDATORY**

The mandatory acknowledge herewith that he is fully acquainted with the contents of the Act, as well as with all regulations and SABS codes of practice that have been made in terms of section 43 of the Act.

**3.****UNDERTAKING BY MANDATORY**

- (a) The Mandatory hereby undertakes and binds himself to the Municipality to ensure prompt and strict compliance with the provisions of the Act and the said regulations as well as with the provisions included in this Safety Agreement at all times during the execution of the Works
- (b) It is hereby recorded that the provisions of this Safety Agreement as set out hereinafter are in no way intended to restrict the duties of the Mandatory, nor to exempt the Mandatory from his obligation in accordance with the Act and the said regulations

**4.****PERSONAL PROTECTIVE EQUIPMENT**

- (a) It is compulsory to wear equipment for eye protection when working in an eye protection zone or where the Work requires eye protection.
- (b) It is compulsory to wear safety helmets when working in a safety helmet zone or where the Work requires safety helmets.
- (c) It is compulsory to wear hearing protection when working in a noise zone or where the Work requires hearing protection.
- (d) The wearing of other protective clothing and equipment as prescribed by the Occupational Health and Safety Officer of Chief Albert Luthuli Municipality is compulsory.
- (e) The Mandatory shall ensure that the statutory requirements are complied with at all times.

**5.****FENCING AND GENERAL MACHINERY PROTECTION**

No shield or fencing may be removed from or be moved at any machinery or installation without written permission.

**6.****SCAFFOLDING, LADDERS, TOOLS, ET CETERA**

The Mandatory without the written permission of the Municipality may use no equipment or tools that belong to the Municipality.

Except where agreed beforehand the Mandatory shall provide enough tools and equipment to enable him to complete the Works and the Mandatory shall provide all storerooms, offices and eating halls that he may need. The Mandatory will be responsible for all his material on site.

In special case where the Municipality may lend equipment, tools or materials to the Mandatory, the Mandatory will use such equipment, tools and/or materials at his own risk and the Mandatory herewith indemnifies the Municipality against any liability of whichever nature or from any cause whatsoever, whether direct or indirect, that may arise from such usage.

**7.****SERVICES AND WORKING METHODS**

The written permission of the Chief Executive/Town Clerk of the Municipality shall be obtained where any work which must be undertaken by the Mandatory is connected with a working process or machinery or any other service in connection therewith, or may possibly affect it, before he commences with such work.

Approval shall be obtained from the client Electrical Employer's Agent of the Municipality before any equipment is connected to the electrical supply of the Municipality All equipment shall be isolated before any equipment is connected to the electrical supply of the Municipality. It shall be isolated and be provided with earth leakage protection. Electrical machinery, portable electrical tools and portable lights must comply with the requirements of the applicable regulations.

Work permits must be issued in terms of the Occupational Health and Safety Act and Regulations when the nature of the work requires it. Permits must be issued by the relevant departmental head where necessary.

**8.****EXCAVATIONS**

Written permission for excavations shall be obtained from the Employer's Agent of the Municipality and the Mandatory shall make sure of the existence and position of electrical cables, discharge pipes, gas lines, water conduits, et cetera before he commences with any excavation work.

All excavations and obstructions and/or any openings in platforms or floors shall be enclosed in a safe way and warning notices shall be erected to ensure absolute safety. An adequate number of red or orange caution lights shall be provided when it is dark or should bad light prevail.

The area surrounding excavations shall be kept in a safe, orderly and tidy condition. No

loose material of whatever nature may be left in walkways or workplaces or be allowed to block walkways or workplaces.

Nobody may enter into any restricted area in which hazardous fumes or a shortage of oxygen exists without a permit giving permission to do so, issued by the head of the relevant department of the Municipality and until it has been certified safe for entrance by the Occupational Health and Safety Officer and the Health Inspector of the Municipality.

**9.**

**RESTRICTION TO WORKPLACE**

Employees of the Mandatory shall be restricted to their workplaces except when they have to leave their area for work purposes or when they visit toilets.

**10.**

**SUBCONTRACTORS**

The Mandatory shall ensure that all subcontractors receive a copy of this safety agreement and must ensure they comply with it.

**11.**

**OCCUPATIONAL HEALTH AND SAFETY OFFICER AND THE REPORTING OF ALL ACCIDENTS**

The Occupational Health and Safety Officer of the Municipality is available for consultation and he will make periodical visits to the workplace of the Mandatory. Any hazardous occurrence or incident to the employees of the Mandatory that results in absence from work for a period longer than three days shall be reported in writing to the Occupational Health and Safety Officer of the Municipality within forty eight hours as well as to the Department of Labour as specified by the Act. Every user, employer, occupier, builder or excavator must, under this Act, keep record of all accidents that occur.

In the case of an accident that results in loss of life, nobody may disturb the scene of the accident or any articles involved in the accident prior to the arrival of the Occupational Health and Safety Officer and the Inspector, unless it is to prevent another accident from happening or the prevention of loss of life or to remove corpses.

The Occupational Health and Safety Officer will issue contravention notices to the Mandatory or a sub-contractor when there is a noncompliance and will specify the time in which it must be rectified.

The Occupational Health and Safety Officer will issue work stop notices to the Mandatory or sub-contractor whenever he is of the opinion that the health and safety of any person at work is threatened or that the contravention notices are not adhered to.

**12.****FIRST AID**

Where five or more persons are employed at a workplace, the Mandatory shall provide and maintain an adequately equipped first-aid box that meets the following requirements.

- (a) Every first-aid box shall contain the minimum contents as prescribed by the Occupational Health and Safety Act.
- (b) Nothing except articles and equipment required for first-aid purposes may be kept in the first-aid box.
- (c) Each first-aid box shall be kept in a place readily accessible in case of an accident.

All first-aid boxes shall be placed under control of a responsible person except where five or less persons are at work. The responsible person must be in the possession of a valid first-aid certificate issued by one of the following organisations:

A notice indicating where the first-aid box is kept as well as the name of the person in charge, shall be affixed in a conspicuous place. The first-aid facilities of the Municipality may be used during emergencies.

**13.****FIRE PREVENTION MEASURES AND STORAGE OF FLAMMABLE MATERIAL**

The Fire department of the Municipality shall be notified before any welding, oxyacetylene welding, cutting, burning of paint or tar from floors or roofs is undertaken so that the necessary fire prevention measures can be arranged. All "NO SMOKING AND OPEN SURFACE FIRES/LIGHTS PROHIBITED" notices shall be adhered to. The Mandatory and his senior employee shall acquaint themselves and their fellow workers with the fire prevention measures of the Municipality, which will also include fire alarm notices and exits in case of fire, and they shall ensure that these rules are strictly complied with.

**14.****COMPLETION OF WORK**

Before the mandatory or his sub-contractors leaves the site they shall inform the Head of the relevant Department of the Municipality and obtain his/her written approval that the work has been completed satisfactory and that the site of the work is left in a good condition.

**15.****SALVAGED MATERIAL AND EQUIPMENT**

Any building demolished or equipment or materials that are salvaged whilst carrying out the work shall remain the property of the Municipality, unless the contract specifically provides otherwise.

**16.****BREAKING OF THESE RULES AND POOR CONDUCT**

The Mandatory is warned that no behaviour that causes danger to their own employees, to the employees of the Municipality or general public will be tolerated. The Occupational Health and Safety Officer of the Municipality reserves the right of the withdrawal of any employees of the Mandatory or Municipality from the premises in the case of any default or breach of the agreement and to order that the completion of the work be stayed, pending compliance with this agreement; alternatively to cancel the agreement referred to in par.2 in which event the Municipality will be entitled to appoint an alternative contractor to complete the work and recover the costs thereof from the mandatory, without prejudice to any alternative or additional right or action or remedy to the Municipality, to recover from the mandatory damages for the default or breach and the cancellation.

The senior employees of the Mandatory shall sign a note of acknowledgement of this safety agreement to certify that they have received the regulations as included herein and that they understand the regulations

**17.****INTOXICATION**

Nobody that is in a state of intoxication or that is in any other condition that causes or may cause his/her incapability to control him/herself or persons under his control may and shall not be permitted on the premises of the Municipality. The Occupational Health and Safety Officer of the Municipality reserves the right to the withdrawal of any employees of the Mandatory or Municipality from the premises in the case of any transgression of this nature.

**18.****CONFIDENTIALLY**

The Mandatory shall at all times treat data and information that have been made known to him or that he requires in connection with his work from the Municipality as confidential and he may not make unauthorised use thereof. He must also ensure that such data and information are not communicated to anybody else that is not an employee of the Mandatory without obtaining prior written approval from the Municipality and he must further ensure that such persons do in fact know that the said information is confidential and that they are obliged to treat it as such.

The Mandatory shall provide for adequate physical protection for any confidential documents, sketches, et cetera that he receives from the Municipality in connection with the work as well as for any copies thereof that he makes. He shall hand back all documents sketches and copies thereof to the Municipality upon completion of the work, or earlier, if so requested by the Municipality. The Mandatory shall inform the Municipality immediately should any such documents or sketches become lost.

**19.****INDEMNIFICATION BY THE MANDATORY**

The following conditions will be applicable to the Mandatory:

- (a) The Mandatory is liable and herewith indemnifies the Municipality irrevocably and in full against any claim for loss or damage to property or arising from death or injury of any person and any associated loss or damage suffered, and against all lawsuits, claims, demands, costs, expenses, and charges that may arise when the said occurrences are caused on purpose or through the negligence, violation of legal obligations or failure by the Mandatory or its employees.
- (b) Whenever any of the employees of the Municipality is busy with work to, or with the supply of material that will be used during the execution of the work by the Mandatory, or otherwise busy with work under the instruction and supervision of the Mandatory, in as far as they may be negligent or fail to do their duty, they will be regarded as employees of the Mandatory
- (c) All installations, equipment, hoisting-apparatus and other implements, scaffolding, ladders, material, et cetera that are borrowed from the Municipality by the Mandatory for usage during the execution of the work, will be used entirely at the risk of the Mandatory or employees of the Mandatory and the Mandatory herewith indemnifies the Municipality irrevocably and in full against any liability that may arise from such usage.

**20.****AMENDMENTS MUST BE IN WRITING**

The parties agree herewith that this safety agreement is the only safety agreement between them and that no amendment thereof will be valid unless it is in writing and signed by both parties.

**21****JURISDICTION AND LEGAL COSTS**

In the event of any legal action being instituted pertaining to the this agreement the party in default or breach will be liable for the other party's legal costs on the scale as between attorney and own client and the parties consent to the jurisdiction of the magistrate's court for purpose of any legal action being instituted.

**PARTICULARS OF THE MANDATORY**

Name (Mandatory) \_\_\_\_\_

C.E.O. (Section 16(1)) \_\_\_\_\_

ID NO \_\_\_\_\_

Designation \_\_\_\_\_

Name of Business \_\_\_\_\_

Address of Business \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Tel number (h) \_\_\_\_\_ (w) \_\_\_\_\_ e-mail \_\_\_\_\_

Number of employees employed \_\_\_\_\_

Registration number as allocated to the Mandatory by the Workman’s Compensation Commissioner

\_\_\_\_\_

Date allocated \_\_\_\_\_

Thus done and signed on this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

As witnesses:

\_\_\_\_\_ (Signature) \_\_\_\_\_ (Name in print)

\_\_\_\_\_ (Signature) \_\_\_\_\_ (Name in print)

\_\_\_\_\_ (Signature) \_\_\_\_\_ (Name in print)

**THE MANDATORY**

Thus done and signed on this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

As witnesses

\_\_\_\_\_ (Signature) \_\_\_\_\_ (Name in print)

\_\_\_\_\_ (Signature) \_\_\_\_\_ (Name in print)

\_\_\_\_\_ (Signature) \_\_\_\_\_ (Name in print)

**THE MUNICIPALITY**

Acknowledgement of receipt of the agreement:

---

**THE MANDATOR**

**C1.2 GUARANTEE**

**Form of Guarantee**

For use with the General Condition for Contract for Construction Works, Second Edition, 2010

**GUARANTOR DETAILS AND DEFINITIONS**

“Guarantor” means: .....

Physical address: .....

“Employer” means: .....

“Contractor” means: .....

“Employer’s Agent ” means:  
.....

“Works” means: .....

“Site” means: .....

“Contract ” means: The Agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.

“Contract Sum” means: The accepted amount inclusive of tax of R.....

Amount in words:.....

“Guaranteed Sum” means: The maximum aggregate amount of .....

Amount in words: .....

“Expiry Date” means: .....

**CONTRACT DETAILS**

Employer's Agent issues: Interim Payment Certificates, Final Payment Certificate and the Certificate Completion of the Works as defined in the Contract.

### **PERFORMANCE GUARANTEE**

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
2. The Guarantor's period of liability shall be from and including the date of issue of this Performance Guarantee and up to and including the Expiry Date or the date of issue by the Employer's Agent of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.

3. The Guarantor hereby acknowledges that:

any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a surety ship;

- 3.1 its obligation under this Performance Guarantee is restricted to the payment money.

4. Subject to the Guarantor's maximum liability refer to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:

- 4.1 A copy of first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent in an Interim or Final Payment Certificate has not been made in terms of Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;

- 4.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid;

- 4.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.

5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:

- 5.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 5; or

- 5.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 5; and

- 5.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or provisional/final sequestration and/or the provisional liquidation court order.

6. It is recorded that the aggregate amount of payments required to be made by Guarantor in

terms of 4 and 5 shall not exceed the Guarantor’s maximum liability in terms of 1.

- 7. Where the Guarantor has made payment in terms of 5, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer’s bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
- 8. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
- 9. Payment by the Guarantor in terms of 5 will only be made against the return of original Performance Guarantee by Employer.
- 10. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
- 11. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
- 12. This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
- 13. This Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.
- 14. Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate’s Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate’s Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate’s Court.

Signed at.....

Date.....

Guarantor’s signatory (1).....

Capacity.....

Guarantor’s signatory (2).....

Capacity.....

Witness signatory (1).....

Witness signatory (2).....

### C1.3 AGREEMENT WITH ADJUDICATOR

This agreement is made on the.....day of ..... 20.....between: the Employer  
*(name of company / organisation)*.....  
of *(address)*.....  
.....and the  
Contractor*(name of company / organisation)* .....  
of*(address)*.....  
.....(hereinafter called **the Parties**)

**and**

*(name)*.....  
of*(address)* .....  
.....  
(Hereinafter called **the Adjudicator**)

Disputes or differences may arise/have arisen\* between the Parties under a Contract dated.....

and known as Contract No.....

*(Contract title)*.....

and these disputes or differences shall be/have been\* referred to adjudication in accordance with the CIDB Adjudication Procedure, (hereinafter called "**the Procedure**") and the Adjudicator may be or has been requested to act. (\* *Delete as necessary*)

**IT IS NOW AGREED** as follows:

1. The rights and obligations of the Adjudicator and the Parties shall be as set out in the Procedure.
2. The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance with the Procedure.
3. The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses in accordance with the Procedure as set out in the Contract Data.
4. The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and shall endeavour to ensure that anyone acting on their behalf or through them will do likewise, save with the consent of the other Parties which consent shall not be unreasonably refused.

5. The Adjudicator shall inform the Parties if he intends to destroy the documents which have been sent to him in relation to the adjudication and he shall retain documents for a further period at the request of either Party.

**SIGNED BY:**

(Signature):..... (Signature):.....

(Signature):.....

**Name:** ..... **Name:** ..... **Name:** .....

who warrants that he/ she is who warrants that he/ she is the **Adjudicator** in the duly authorised to sign for and duly authorised to sign for presence on behalf of the **First Party** in and on behalf of the **Second** the presence of **Party** in the presence of

**Witness:** **Witness:** **Witness:**

(Signature)..... (Signature).....Signature).....

**Name:** ..... **Name:** ..... **Name:**.....

**Address:** ..... **Address:** ..... **Address:** .....

**Date:** ..... **Date:** ..... **Date:** .....

## C1.4 CONTRACT DATA

**C1.1 FORM OF OFFER AND ACCEPTANCE (Agreement)****OFFER****The TENDERER is to complete and sign the Form of Offer**

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

**PROJECT NAME: UPGRADING OF MANZANA WASTEWATER TREATMENT WORKS**

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

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

**THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS**

\_\_\_\_\_

\_\_\_\_\_ **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 organization)**

**Name and signature of witness** \_\_\_\_\_ **Date** \_\_\_\_\_

## ACCEPTANCE

### The EMPLOYER will complete and sign the form of Acceptance

By signing this part of the Form of Offer and Acceptance, **the Employer** identified below accepts the Tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the Tenderer's Offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the contract are contained in

Part 1 Agreement and Contract Data, (which includes this Agreement)

Part 2 Pricing Data

Part 3 Scope of Work

Part 4 Site Information

and drawings and documents or parts thereof, which may be incorporated by reference into Parts 1 to 4 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorized representative(s) of both parties.

The Tenderer shall within two weeks after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the employer's agent (whose details are given in the Contact Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data at, or just after, the date of this Agreement comes into effect. Failure to fulfill any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the Tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the Tenderer (now the Contractor) within five days after 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 binding contract between the parties,

**Signature(s)**

\_\_\_\_\_

**Name(s)**

\_\_\_\_\_

**Capacity**

\_\_\_\_\_

**For the Employer**

\_\_\_\_\_  
**(Name and address of organization)**

**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 arrangements and recorded here shall also be incorporated into the final draft of the Contract,

**1 Subject** \_\_\_\_\_

Details \_\_\_\_\_

**2 Subject** \_\_\_\_\_

Details \_\_\_\_\_

**3 Subject** \_\_\_\_\_

Details \_\_\_\_\_

**4 Subject** \_\_\_\_\_

Details \_\_\_\_\_

**5 Subject** \_\_\_\_\_

Details \_\_\_\_\_

**6 Subject** \_\_\_\_\_

Details \_\_\_\_\_

**7 Subject** \_\_\_\_\_

Details \_\_\_\_\_

**8 Subject** \_\_\_\_\_

Details \_\_\_\_\_

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

\_\_\_\_\_

**Name(s)**

\_\_\_\_\_

**Capacity**

\_\_\_\_\_

\_\_\_\_\_  
**(Name and address of organization)**

**Name and signature of witness**

\_\_\_\_\_

**Date**

\_\_\_\_\_

**For the Employer:**

**Signature(s)**

\_\_\_\_\_

**Name(s)**

\_\_\_\_\_

**Capacity**

\_\_\_\_\_

\_\_\_\_\_  
**(Name and address of organization)**

**Name and signature of witness**

\_\_\_\_\_

**Date**

\_\_\_\_\_

### C1.7.1 Contract Specific Data

The conditions of contract are the General Conditions of Contract for Construction Works (3<sup>rd</sup> Edition 2015) published by the South African Institute of Civil Employer's Agent ing, Private Bag X200, Halfway House, 1685, Tel 011 805 5947.

The General Conditions of Contract make several references to the Contract Data. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the General Conditions of Contract.

Where applicable, items of data given here below are cross-referenced to the sub clause in the General Conditions of Contract to which they apply.

## 1. AMPLIFICATIONS OF THE GENERAL CONDITIONS OF CONTRACT

### 2.1 Data Provided by the Employer

#### 2.1.1 Commencement Date (Clause 1.1.1.5)

The "Commencement Date" means the date on which the Contractor receives a Letter of Acceptance from the Employer. The instruction to commence with the works will not be issued later than 30 days from the date that the Agreement made in terms of the Form of Offer and Acceptance comes into effect and such instruction shall be subject to the submission by the Contractor, and approval by the Employer's Agent, of documentation required before commencement with Works execution, as set out in the Contract Data.

The required documentation required in terms of clause 5.3.1 shall be

- a. Occupational Health and Safety Plan – clause 4.3
- b. Initial Programme of works – clause 5.6.1
- c. Security - clause 6.2
- d. Insurance – clause 8.6
- e. Method of construction statements
- f. Quality and Process Control- clause 7.2

#### 2.1.2 Defects Liability Period (CL 1.1.1.13)

The Defects Liability Period is **12** calendar months calculated from the date of the Certificate of Completion.

#### 2.1.3 Due Completion Date (CL1.1.1.14)

This clause shall apply *mutatis mutandis* to any portion or phase of the Works that may be described in the Scope of Works or in the Contract Data, or agreed Subsequently between the Contractor and the Employer, and committed to writing.

The time for achieving Practical Completion is 12 months calculated from the Commencement Date. This period is to include 14 special non working days, for which no extension of time will be allowed.

#### 2.1.4 Employer (CL 1.1.1.15)

The Employer is: CHIEF ALBERT LUTHULI LOCAL MUNICIPALITY

#### 2.1.5 Employer's Agent (CL. 1.1.1.16)

'Employer's Agent ' means any Director, Associate or Professional Employer's Agent appointed by Chief Albert Luthuli Local Municipality to fulfil the functions of the Employer's Agent in terms of the Contract Data.

2.1.6 Pricing Strategy (CL 1.1.1.26)

The pricing strategy is the Re-measurement Contract,

2.1.7 Delivery of Notices (CL 1.2.1.2)

The Employer's Agent 's address for receipt of communications is:

Monde Consulting Engineers and Project Managers  
 Tell No: 013 752 4616  
 Fax : 013 752 6166  
 E-mail: info@mondeconsulting.co.za

The Employer's address for receipt of communications is:

Chief Albert Luthuli Local Municipality  
 Private Bag X719  
 Carolina  
 1185  
 Tel: +27 17 843 4000

2.1.8 Contractor's Copyright

Add the following new Clause 1.3.6:

The copyright in all documents, drawings and records (prepared by the Employer's Agent ) related in any manner to the Works shall vest in the Employer or the Employer's Agent or both (according to the dictates of the Contract that has been entered into by the Employer's Agent and the Employer for the Works), and the Contractor shall not furnish any information in connection with the Works to any person or organization without the prior approval of the Employer to this effect.

2.1.9 Specific Approval of the Employer Required (CL 3.1.3)

The Employer's Agent is required to obtain the specific approval of the Employer before executing any of the following functions or duties:

- 2.1.9.1 Nominating the Employer's Agent 's Representative in terms of CI 1.1.17
- 2.1.9.2 Delegation of Employer's Agent 's authority in terms of CI 3.2.4
- 2.1.9.3 The issuing of further drawings or instructions in terms of CI 5.9.1
- 2.1.9.4 The issuing of instructions for dealing with fossils and the like in terms of CI 4.7.1
- 2.1.9.5 Authorizing the Contractor to repair and make good excepted risks in terms of CI 8.2.2.2
- 2.1.9.6 The issuing of a variation order in terms of CI 6.3.1 Issuing of instructions to carry out work on a day work basis in terms of CI 6.4.1.4
- 2.1.9.8 Granting permission to work during non-working times in terms of CI 5.8.1.1
- 2.1.9.9 Suspend the progress of the works in terms of CI 5.11.1
- 2.1.9.10 The issuing of an instruction to accelerate progress in terms of CI 5.7.3
- 2.1.9.11 The reduction of a penalty for delay in terms of CI 5.13.2
- 2.1.9.12 The determination of additional or reduced costs arising from changes in legislation in terms of CI 6.8.4
- 2.1.9.13 The giving of a ruling on a contractor's claim in terms of CI 10.1.5
- 2.1.9.14 The agreeing of an extension to the 28 period in terms of CI 10.1.5.1
- 2.1.9.15 The inclusion of credits in the next payment certificate in terms of CI 10.1.5.2
- 2.1.9.16 The agreeing of the adjustment of the sums for general items in terms of CI 6.11

2.1.10 Contractor's Liability for Own Design Errors (CL 4.1.2)

Add the following to the clause:

The Contractor shall provide the following to the Employer's Agent for retention by the Employer or his assignee in respect of all works designed by the Contractor:

- 4.1.2.1 A Certificate of Stability of the Works signed by a registered Professional Employer's Agent confirming that all such works have been designed in accordance with the appropriate codes of practice.
- 4.1.2.2 Proof of registration and of adequate and current professional indemnity insurance cover held by the designer(s).
- 4.1.2.3 Design calculations should the Employer's Agent request a copy thereof.
- 4.1.2.4 Employer's Agent drawings and workshop details (both signed by the relevant professional Employer's Agent ), in order to allow the Employer's Agent to compare the design with the specified requirements and to record any comments he may have with respect thereto.
- 4.1.2.5 "As-Built" drawings in DXF electronic format after completion of the Works. The Contractor shall be responsible for the design of the Temporary Works.

2.1.11 Health and Safety Act

2.1.11.1 Contractor's Compliance (CL 4.3)

Add the following new Clause 4.3:

The Contract shall comply with the Occupational Health and Safety Specification prepared by the Employer in terms of the Construction Regulations, 2003 promulgated in terms of Section 43 of the Occupational Health and Safety Act (Act No. 85 of 1993)

2.1.11.2 Contractor's Liability as Mandatory (CL 4.3)

Add the following new Clause 4.3.4:

Notwithstanding any actions which the Employer may take, the Contractor accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and all its regulations, including the Construction Regulations, 2003, for which he is liable as mandatory. By entering into this Contract it shall be deemed that the parties have agreed in writing to the above provisions in terms of Section 37 (2) of the Act.

2.1.11.3 Contractor to Notify Employer (Cl 4.3)

Add the following new Clause 4.3.5:

The Employer retains an interest in all inquiries conducted under this Contract in terms of Section 31 and/or 32 of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and its Regulations following any incident involving the Contractor and/or Sub-contractor and/or their employees. The Contractor shall notify the Employer in writing of all investigations, complaints or criminal charges which may arise pursuant to work performed under this Contract in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and Regulations.

2.1.12 Commencement of the Works (CL 5.3.1)

The Contractor shall commence executing of the works within 14 days of the commencement date.

The documentation required before commencement with Works execution are:

- a) Approved Health and Safety Plan (refer to CL 4.3)
- b) Initial Programme (Refer to CL 5.6)
- c) Security (Refer to CL 6.2.1 and CL 6.2.3)
- d) Insurance (Refer to CL 8.6)

2.1.13 Time to Submit the Documentation (CL 5.3.2),

The time to submit the documentation after the Commencement Date is **14 days**.

2.1.14 Access Not Exclusive (CL 5.4.2)

The access and possession of the Site shall not be exclusive to the Contractor as other construction services might be executed concurrently by independent Contractors or bodies under separate Contracts entered into with the Employer. The other Works which will be in progress or come into operation during the progress or tenancy of this Contract are likely to include, but are not limited to the following: Modifications to pipelines and/or installation of pipeline fittings related to the borehole pumping system.

The Contractor shall ensure that neither his operations nor his employees shall interfere with or hinder the operations of the Employer or of other Contractors and he shall indemnify the Employer against all claims arising through default of this requirement. The Contractor shall hand over portions of the Site of Works (whether completed or not), or completed portions of Works, to these Contractors when required by the Employer. The Contractor shall cause no interference with or delays in the execution of these Contracts.

No discount or commission for the Contractor is allowed on these contracts and it will be assumed that he has fully allowed in the Contract Price for the presence of these contractors on Site. Any service rendered or assistance given by the Contractor to these contractors save as are contained in the Works Specifications,

shall be for their accounts only and the Employer shall in no way be responsible to the Contractor for any payments in this respect.

The Contractor shall protect all existing services and all work being carried out and structures being erected on the Site by other contractors. Any damage caused to these services or structures or any obstructions or hindrance caused to other contractors by the Contractor and claims arising there from, will be the sole responsibility of the Contractor.

Any repair work shall be carried out at the Contractor's expense, in conformity with the Works Specifications.

The same obligations shall be imposed on the Employer and on other Contractors in respect of the Works being executed under this Contract.

2.1.15 Non-working Days (CL 5.8.1)

a) The non-working days are Sundays.

b) The special non-working days are statutory public holidays and the year-end break commencing on 14 December ,ending 08 January of each year .

2.1.16 Penalty for Delay (CL 5.13.1)

The penalty for failure to complete the Works is 0.05% of the Contract Sum per calendar day.

2.1.17 Latent Defect Period (CL 5.16.3)

The latent defect period is 10 years

2.1.18 Contractor Failing to Select or Provide Security (CL 6.2.2)

Delete the entire contents of Clause 6.2.2 and replace with: "Failure to deliver an acceptable security as selected in the Contract Data within the stipulated period is a fundamental breach of Contract".

- 2.1.19 Day works (CL 6.5.1.2.3)  
The percentage allowance to cover overhead charges is 15 (fifteen) percent.
- 2.1.20 Contract Price Adjustment (CL 6.8.2 )  
No contract price adjustment is permitted on this contract
- 2.1.21 Variation in Cost of Special Materials (CL6.8.3)  
Price adjustments for variations in the costs of special materials are not permitted
- 2.1.22 Percentage Limit on Materials (CL 6.10.1.5)  
The percentage limit on Materials not yet built into the Permanent Works is 80 (eighty) per centum.
- 2.1.23 Retention Money (CL 6.10.3)  
The percentage retention on amounts due to the Contractor is 10% (ten percent).  
The limit of retention money is 5% (five percent) of the Contract Sum  
A Retention Money Guarantee may not be offered in lieu of the retention of money.
- 2.1.24 Variations Exceeding 15 per cent (CL 6.11)  
Delete "15% and replace it with "20%.
- 2.1.25 insurance of Materials Supplied by the Employer (CL 8.6.1.1.2)  
The insurance amount to cover the value of Plant and Materials, supplied by the Employer for incorporation in the Works and not included in the Contract Sum, is NIL.
- 2.1.26 insurance to Cover Professional Fees (CL 8.6.1.1.3)  
The insurance amount to cover professional fees, not included in the Contract Sum, payable in respect of the repair or reinstatement of damage to the Works, is NIL.
- 2.1.27 Liability insurance (CL 8.6.1.3)  
The limit of indemnity for liability insurance is R5, 000 000.00 per event, the number of events being unlimited.
- 2.1.28 Dispute Resolution (CL 10.5.2)  
Dispute resolution shall be referred to amicable settlement.
- 2.1.29 Disagreement with ad-hoc Adjudicator's Decision  
Add Clause 10.12
- Should either of the contracting parties disagree with any decision of the ad-hoc adjudicator, such matter shall be referred to litigation for court judgment.

**2.2** Data Provided by the Contractor

2.2.1 Contractor (CL 1.1.1.9)

The legal name of the Contractor

\_\_\_\_\_

\_\_\_\_\_

2.2.2 Delivery of Notices to the Contractor (CL 1.2)

The Contractor's address for receipt of communication is:

Postal: \_\_\_\_\_

\_\_\_\_\_

Telephone \_\_\_\_\_

Facsimile \_\_\_\_\_

E-mail: \_\_\_\_\_

**Important Note**

Paragraphs 2.2.1 and 2.2.2 here above, to be duly completed by the Bidder before submitting the Bid.

**2.3 CONTRACT DATA**  
**PART 2: DATA PROVIDED BY THE CONTRACTOR**

Clause 4.4.3: **Selection of Sub-Contractors**

The Tenderer shall list in page T.2.3.7 the Subcontractors and Suppliers whom he intends to appoint in respect of the various specialist items of work to be done or goods supplied on this contract. Alternatives may be mentioned.

The Tenderer shall state whether he intends to carry out any specialised work or supply of goods himself.

Acceptance of this tender shall not be construed as approval of all or any of the listed specialist Subcontractors or Suppliers. Should any of or all of the specialist Subcontractors or Suppliers not be approved subsequent to the acceptance of the tender, it shall in no way invalidate this tender, and the tendered unit rates for the various items of work shall remain final and binding, even in the event of a Subcontractor or Supplier not listed below being approved by the Employer.

The sub-contractors listed in page T.2.3.7 exclude the identified local emerging contractors who will be identified by the Employer.

Signed on behalf of Tenderer:

.....

### 3 ADDITIONAL SPECIAL CONDITIONS OF AMENDMENTS TO THE GENERAL CONDITIONS OF CONTRACT

These Special Conditions of Contract (SCC) form an integral part of the Contract. The Special Conditions shall amplify, modify or supersede, as the case may be, the General Conditions of Contract 2010 to the extent specified below, and shall take precedence and shall govern.

The clauses of the Special Conditions hereafter are numbered "SCC" followed in each case by the number of the applicable clause or sub clause in the General Conditions of Contract 2010, and the applicable heading, or (where a new special condition that has no relation to the existing clauses is introduced) by a number that follows after the last clause number in the General Conditions, and an appropriate heading.

#### **The variations to the General Conditions of Contract are:**

##### SCC 4.4.3

For conditions regarding selection of **LOCAL EMERGING SUB-CONTRACTORS** (LES Work), see additional clauses below.

#### **The additional clauses to the General Conditions of Contract are:**

##### **Local Emerging Sub-Contractors**

The Contractor shall promptly, and in any event within a reasonable time after the Commencement Date, sub-contract a portion of the Works to the value of ten (10) percent of the work specified in the Schedule of Works (excluding preliminary and general costs) ("the LES Work") to one or more of the local emerging sub-contractors notified by the Employer to the Contract ("the Local Emerging Sub-Contractors"), in strict accordance with, and subject to, the requirements set out in Paragraphs (i) to (x) of this Clause, as follows:

- (i) The Contractor shall select the Local Emerging Sub-Contractor(s) to whom he is to sub-contract the LES Work by means of a competitive bidding process conducted strictly in accordance with the CIDB Standard for Uniformity in Construction Procurement and Best Practice Guidelines January 2009, and in doing so shall exercise all reasonable endeavors to ensure as inclusive and equal a distribution of the LES Work as shall be practicable amongst all the Local Emerging Sub-Contractors, taking into account price, competency and capacity only.
- (ii) The Contractor shall, without reference to the Employer, taking into account only the competencies and capacity of each Local Emerging Sub-Contractor, be free to identify those components of the LES Work that he shall allocate to each Local Emerging Sub-Contractor.
- (iii) Subject to paragraphs (iv) and (vii) of this clause, in the event that the Contractor fails to sub-contract and/or allocate the required quantum of LES Work or any portion thereof in accordance with this clause, the Employer's Agent may either a) apply a penalty equal to 20% of the value of the shortfall,

or b) make a determination regarding the setting aside of the LES Work so as to prevent the shortfall.

- (iv) Subject to paragraph (vii) of this clause, and notwithstanding paragraph (iii) of this clause, in the event that the Contractor fails to sub-contract and/or allocate the required quantum of LES Work or any portion thereof in accordance with this clause by reason of his inability to reach agreement on price with one or more of the Local Emerging Sub-Contractor(s), the Employer's Agent may, in his absolute discretion, advise the Employer to allow an increase in the Contractor's rates to so as to facilitate successful price negotiation. In the event that the Employer refuses to authorize an increase to the Contractor's rates or, in the event that the authorized increase in rates fails to facilitate successful negotiation between the Contractor and the relevant Local Emerging Sub-Contractor(s), the Contractor shall be relieved of his obligation to sub-contract the relevant portion of LES Work, always subject to paragraph (vii) of this clause.
- (v) The rates to be applied by the Contractor in the sub-contracts with the Local Emerging Sub-Contractors for the LES Work shall at all times be based strictly on the rates applicable to the Contractor under the Contract, save for any adjustments allowed in terms of paragraph (iv) above.
- (vi) The Contractor shall apply the same rates to each Local Emerging Sub-Contractor in respect of each component of the LES Work, such that, in the event that more than one Local Emerging Sub-Contractor is successfully selected for a single component of the LES Work, the same rates shall apply to each of the selected Local Emerging Sub-Contractors in respect of the said single component.
- (vii) The Contractor shall not be under any obligation to employ a Local Emerging Sub-Contractor against whom the Contractor raises reasonable objection by written notice to the Employer's Agent as soon as practicable, with supporting particulars in writing. In the event of failure on the part of the Contractor to prove reasonable objection to the satisfaction of the Employer's Agent, the Employer's Agent's determination shall be final and binding.
- (viii) The Contractor shall be entitled to include within the Contract Price a maximum management fee of 20% in excess of the rates paid to the Local Emerging Sub-Contractors.
- (ix) When tendering the Contractor shall have exercised all reasonable care not to distort any rates in such a way as to hinder or preclude his obligations under this clause, and, in the event that the Employer's Agent determines the setting aside of the LES Work in terms of paragraph (iii) above, the Contractor shall be prevented from arguing that such LES Work is reserved not to be subcontracted.
- (x) The Contractor shall submit a priced copy of the final agreed version of each proposed sub-contract with a Local Emerging Sub-Contractor ("the Final Draft LES Sub-Contract") to the Employer prior to the execution of such sub-contract. In the event that the Employer, in consultation with the Employer's Agent, deems the price or any other term of any Final Draft LES Sub-Contract to be unduly onerous or unfair to the Local Emerging Sub-Contractor concerned, the Contractor shall modify the price and/or terms in accordance with the Employer's Agent's reasonable instructions.

In sub-contracting the LES Work, the Contractor shall be responsible for performing the LES Work as if he had not sub-contracted. The Contractor shall be liable for the

acts and omissions of the employees, sub-contractors and agents of the Local Emerging Sub-Contractors as if they were his own employees, sub-contractors and agents.

## **CONDITIONS OF CONTRACT FOR LABOUR-INTENSIVE CONSTRUCTION**

### **Payment for the labour-intensive component of the works**

Payment for works identified in the Scope of Work as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the scope of work.

Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.

### **Applicable labour laws**

The Ministerial Determination, Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice N° R63 of 25 January 2002 shall apply to works described in the scope of work as being labour intensive and which are undertaken by unskilled or semi-skilled workers, as reproduced below.

## **1 Introduction**

1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on a Special Public Works Programme (SPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a SPWP.

In this document –

“department” means any department of the State, implementing agent or contractor;

“employer” means any department, implementing agency or contractor that hires workers to work in elementary occupations on a SPWP;

“worker” means any person working in an elementary occupation on a SPWP;

“elementary occupation” means any occupation involving unskilled or semi-skilled work;

“management” means any person employed by a department or implementing agency to administer or execute an SPWP;

“task” means a fixed quantity of work;

“task-based work” means work in which a worker is paid a fixed rate for performing a task;

“task-rated worker” means a worker paid on the basis of the number of tasks completed;

“time-rated worker” means a worker paid on the basis of the length of time worked.

## **2 Terms of Work**

2.1 Workers on a SPWP are employed on a temporary basis.

2.2 A worker may NOT be employed for longer than 24 months in any five-year cycle on a SPWP.

2.3 Employment on a SPWP does not qualify as employment as a contributor for the purposes of the Unemployment Insurance Act 30 of 1966.

## **3 Normal Hours of Work**

3.1 An employer may not set tasks or hours of work that require a worker to work–

(a) more than forty hours in any week

(b) on more than five days in any week; and

(c) for more than eight hours on any day.

3.2 An employer and worker may agree that a worker will work four days per week.

The worker may then work up to ten hours per day.

3.3 A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker.

**4 Meal Breaks**

4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.

4.2 An employer and worker may agree on longer meal breaks.

4.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.

4.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

**5 Special Conditions for Security Guards**

5.1 A security guard may work up to 55 hours per week and up to eleven hours per day.

5.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

**6 Daily Rest Period**

Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

**7 Weekly Rest Period**

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

**8 Work on Sundays and Public Holidays**

8.1 A worker may only work on a Sunday or public holiday to perform emergency or security work.

8.2 Work on Sundays is paid at the ordinary rate of pay.

8.3 A task-rated worker who works on a public holiday must be paid –

(a) the worker's daily task rate, if the worker works for less than four hours;

(b) double the worker's daily task rate, if the worker works for more than four hours.

8.4 A time-rated worker who works on a public holiday must be paid –

(a) the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;

(b) double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.

**9 Sick Leave**

9.1 Only workers who work four or more days per week have the right to claim sick day in terms of this clause.

9.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.

9.3 A worker may accumulate a maximum of twelve days' sick leave in a year.

9.4 Accumulated sick-leave may not be transferred from one contract to another contract.

9.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.

9.6 An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.

9.7 An employer must pay a worker sick pay on the worker's usual payday.

9.8 Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is –

- absent from work for more than two consecutive days; or
- absent from work on more than two occasions in any eight-week period.

9.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.

9.10 A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

**10 Maternity Leave**

10.1 A worker may take up to four consecutive months' unpaid maternity leave.

10.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.

10.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.

10.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.

10.5 A worker may begin maternity leave –

(a) four weeks before the expected date of birth; or

(b) on an earlier date –

(i) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or

(ii) if agreed to between employer and worker; or

*(c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.*

*10.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.*

*10.7 A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months employment, unless the SPWP on which she was employed has ended.*

### **11 Family responsibility leave**

*11.1 Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances -*

*(a) when the employee's child is born;*

*(b) when the employee's child is sick;*

*(c) in the event of a death of –*

*the employee's spouse or life partner;*

*the employee's parent, adoptive parent, grandparent, child, adopted*

*child, grandchild or sibling.*

### **12 Statements of Conditions**

*12.1 An employer must give a worker a statement containing the following details at the start of employment –*

*(a) the employer's name and address and the name of the SPWP;*

*(b) the tasks or job that the worker is to perform; and*

*the period for which the worker is hired or, if this is not certain, the expected duration of the contract;*

*the worker's rate of pay and how this is to be calculated;*

*the training that the worker will receive during the SPWP.*

*12.2 An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.*

*12.3 An employer must supply each worker with a copy of these conditions of employment.*

### **13 Keeping Records**

*13.1 Every employer must keep a written record of at least the following –*

*(a) the worker's name and position;*

*(b) in the case of a task-rated worker, the number of tasks completed by the worker;*

*(c) in the case of a time-rated worker, the time worked by the worker;*

*(d) payments made to each worker*

13.2 The employer must keep this record for a period of at least three years after the completion of the SPWP.

**14 Payment**

14.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account.

14.2 A task-rated worker will only be paid for tasks that have been completed.

14.3 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.

14.4 A time-rated worker will be paid at the end of each month.

14.5 Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.

14.6 Payment in cash or by cheque must take place –

(a) at the workplace or at a place agreed to by the worker;

(b) during the worker's working hours or within fifteen minutes of the start or finish of work;

(c) in a sealed envelope which becomes the property of the worker.

14.7 An employer must give a worker the following information in writing –

(a) the period for which payment is made;

(b) the numbers of tasks completed or hours worked;

(c) the worker's earnings;

(d) any money deducted from the payment;

(e) the actual amount paid to the worker.

14.8 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it.

14.9 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

**15 Deductions**

15.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law

15.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.

15.3 An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.

15.4 An employer may not require or allow a worker to –

(a) repay any payment except an overpayment previously made by the employer by mistake;

*(b) state that the worker received a greater amount of money than the employer actually paid to the worker; or pay the employer or any other person for having been employed.*

**16 Health and Safety**

16.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.

16.2 A worker must –

(a) work in a way that does not endanger his/her health and safety or that of any other person;

(b) obey any health and safety instruction;

(c) obey all health and safety rules of the SPWP;

(d) use any personal protective equipment or clothing issued by the employer;

(e) report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

**17 Compensation for Injuries and Diseases**

17.1 It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on a SPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.

17.2 A worker must report any work-related injury or occupational disease to their employer or manager.

17.3 The employer must report the accident or disease to the Compensation Commissioner.

17.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months.

The employer will be refunded this amount by the Compensation Commissioner.

This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

**18 Terminations**

18.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.

18.2 A worker will not receive severance pay on termination.

18.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.

18.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

18.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

**19 Certificate of Service**

19.1 On termination of employment, a worker is entitled to a certificate stating –

- (a) the worker's full name;
  - (b) the name and address of the employer;
  - (c) the SPWP on which the worker worked;
  - (d) the work performed by the worker;
  - (e) any training received by the worker as part of the SPWP;
  - (f) the period for which the worker worked on the SPWP;
- any other information agreed on by the employer and worker.

---

**The additional clauses to the General Conditions of Contract are:**

Clause	Data
SCC5.12.2.2.1	A delay caused by inclement weather conditions will be regarded as a delay only if, in the opinion of the Employer's Agent, all progress on an item or items of work on the critical path of the working programme of the contractor has been brought to a halt. Delays on working days only (based on a five-day working week) will be taken into account for the extension of time, but the Contractor shall make provision in his programme of work for an expected delay of "n" working days caused by normal rainy weather, for which he will not receive any extension of time. Extension of time during working days will be granted to the degree to which actual delays, as defined above, exceed the number of "n" working days. The number of "n" working days will be calculated based on the Contract period and the expected number of working days lost as a result of normal rainfall between the contractual commencement and completion dates.

3.1 General

The following clauses add to, vary or otherwise amend the General Conditions of Contract:

3.1.1 Cession (CL 2.5.1)

Delete the words "without the written consent of the other".

3.1.2 Subcontracting (CL 4.4.1)

Delete the contents of Clause 4.4.1 and insert:

"The Contractor shall not subcontract more than 30 per centum of the value of the Contract."

3.1.3 The type of Security (CL 6.2.1)

The type of security required for the due performance of the Contract shall be restricted to one of the following:

Cash deposit of 10 (ten) per centum of the Contract Sum or

Performance Guarantee of 10 (ten) per centum of the Contract Sum, issued by a Commercial Bank registered in the Republic of South Africa,

Or Performance Guarantee of 10 (ten) per centum of the Contract Sum, issued by an insurance Company registered in terms of the Short-term Insurance Act (Act 53 of 1998).

Whenever a Joint Venture constitutes the contracting party (Contractor) to this Contract, the Performance Guarantee shall be issued on behalf of the Joint Venture.

The wording of the Performance Guarantee shall be in the form appended in C1.2

3.1.4 Programme (CL 5.6)

Add the following sub-clause 5.6.6 to Clause 5:

"Failure on the part of the Contractor to deliver to the Employer's Agent , the programme of the Works in terms of Clause 5.6.1 and 5.6.2 within the period stated in the Contract Data, shall be sufficient cause for the Employer's Agent to retain 25% of the value of the Fixed Charge and Value-related items in assessment of amounts due to the Contractor, until the Contractor has submitted aforementioned first Programme of the Works and Supporting Documents".

3.1.5 Contractor's Superintendence (CL 4.12)

Add the following sub-clause 4.12.4 to Clause 4.12:

"Where a form is included in the Appendix to the Contract Data for this purpose, the Tenderer shall fill in the name of the person he proposes to entrust with the post of Contractor's Site Agent on this Contract in the space provided therefore. Previous experience of this person on work of a similar nature during the past five (5) years is to be entered in the list.

The Contractor's Site Agent shall be on Site at all times when work is being performed. The person as approved of by the Employer's Agent in writing shall not be replaced or removed from Site without the written approval of the Employer's Agent ."

3.1.6 Insurances (CL 8.6)

3.1.6.1 Contractor to produce proof of payment

Delete sub-clause 8.6.6 and substitute with:

"The Contractor shall before commencement of the Works produce to the Employer's Agent :

8.6.6.1 The policies by which the insurances are affected,

8.6.6.2 Proof that due payment of all premiums there under, covering the full required period has been made, and

8.6.6.3 Proof of continuity of the policies for the required period.

Should, during the currency of the Contract, the required period of insurance be extended for any reason, the Contractor shall timeously extend (so as to maintain) the said insurances for the full extended duration.

The Employer's Agent shall be empowered to withhold all payment certificates until the Contractor has complied with his obligations in terms of this Clause 8.6."

## 3.1.6.2 Remedy of Contractor's failure to insure

Delete sub-clause 8.6.7 and substitute with:

"Failure on the part of the Contractor to effect and keep in force any of the insurances referred to in Clause 8.6.1 and its sub-clauses, is a fundamental breach of Contract, entitling the Employer to cancel the Contract by due notice in terms of Clause 9.2 and with specific reference to sub-clause 55.2.5, as amended, in the Special Conditions of Contract."

## 3.1.7 Variations (CL 6.3)

Omit the words "Provided that" under Clause 6.3.2 and omit Clause 6.3.2.1.

## 3.1.8 Suspension of the Works (CL 5.1 1)

Add the following sub-clause 5.1 1.4 to Clause 5.11:

"If the Contractor does not receive from the Employer the amount due under an Interim Payment Certificate within 28 days after expiry of the time stated in sub-clause 6.10.4 within which payment is to be made (except for deductions in accordance with sub-clauses 6.10.1.6 and 6.10.1.7), the Contractor may, after giving 14 days' notice to the Employer, suspend the progress of the Works.

The Contractor's action shall not prejudice his entitlements to a claim in terms of Clause 10.1 and to termination of the Contract in terms of Clause 9.3.

If the Contractor subsequently receives full payment of the amount due under such Interim Payment Certificate before giving a notice of termination of the Contract, the Contractor shall resume normal working as soon as is reasonably practicable."

## 3.1.9 Extension of time arising from Abnormal Rainfall (CL 5.12)

Add the following to sub-clause 5.12.2.2:

"The extension of time to be allowed due to abnormal rainfall shall be calculated separately for each calendar month or part thereof in accordance with the following formula:

$$V = (Nw - Nn) + \left( \frac{Rw - Rn}{X} \right)$$

V = Extension of time in calendar days for the calendar month under Consideration

Nw = Actual number of days during the calendar month on which a rainfall of **10** mm or more has been recorded

Nn = Average number of days for the calendar month on which a rainfall of **10** mm or more has been recorded, as derived from existing rainfall records

Rw = Actual recorded rainfall for the calendar month

Rn = Average rainfall for the calendar month, as derived from existing rainfall records

X = 20

The rainfall records which shall provisionally be accepted for calculation purposes are:

MONTH	Nn	Rn	MONTH	Nn	Rn
-------	----	----	-------	----	----

January	1,9	127,8	July	0,1	3,4
February	1,5	91,1	August	0,1	4,9
March	1,3	74,2	September	0,3	12,9
April	0,6	32,6	October	1,0	45,8
May	0,3	10,4	November	1,6	95,8
June	0,1	5,4	December	1,8	111,8
YEARLY AVERAGE					<b>616,1</b>

The factor (Nw - Nn) shall be considered to represent a fair allowance for days during which rainfall exceeds 10 mm and the factor (Rw - Rn)/x shall be considered to represent a fair allowance for those days when rainfall does not exceed 10mm but wet conditions prevent or disrupt work.

The total extension of time shall be the algebraic sum of all monthly totals for the contract period, but if the algebraic sum is negative the time for completion shall not be reduced due to subnormal rainfall. Extensions of time for a part of a month shall be calculated using pro rata values of Nn and Rn."

#### 3.1.10 Interim Payments (CL 6.10)

Add to the end of Clause 6.10.1 the following paragraph:

"The Contractor shall complete the 'Contractor's Monthly Report Schedule', which pro forma documentation is obtainable from the Employer's Agent . Pursuant to Sub-clause (I), these, duly signed by all concerned, together with the Contractor's statement and a VAT invoice in original format are to be submitted to the Employer's Agent . Issue by the Employer's Agent to the Employer and Contractor of any signed payment certificate is conditional to this information being fully endorsed, accurately and timeously submitted to the Employer's Agent ".

Add to the end of Clause 6.10.1.5 the following paragraph:

"All documentary evidence of such materials shall be unambiguous with respect to ownership having fully passed to the Contractor on or before the date of submittal of the Contractor's monthly statement.

Should the Contractor fail to supply unambiguous documentary evidence, he shall, prior to submittal of his monthly statement, deliver to the Employer a Guarantor Guarantee in the form contained in the Appendices to the Contract Data."

#### 3.1.1.1 Variations Exceeding 15 Per Cent (CL 6.1.1)

In sub-clause 50.1.3 omit the words "15 percent" and replace with "'20 percent"

### 3.1.12 Cancellation of the Contract (CL 54)

Alter the numbering of:

Clause 9.1.4 to 9.1.5,

Clause 9.1.5 to 9.1.6 and

insert the following new clause 9.1.4:

"The Employer shall be entitled to cancel the Contract, at any time for the Employer's convenience, by giving written notice of such cancellation to the Contractor. The Contractor termination shall take effect 28 days after the later of the dates which the Contractor receives this written notice or the Employer returns the Demand Guarantee. The Employer shall not cancel the Contract under this sub-clause in order to execute the Works himself or to arrange for the Works to be executed by another contractor. This restriction on the Employer shall lapse 18 months after the date of receipt by the Contractor of cancellation in terms of this sub-clause".

### 3.1.13 Termination by Employer (CL 9.2)

Delete the contents of Clause 9.2 and substitute with:

"9.2.1 The Employer may terminate the Contract by written notice to the Contractor if:

9.2.1.1 Sequestration of the Contractor's estate is ordered by a Court with due Jurisdiction, or

9.2.1.2 The Contractor publishes a notice of surrender or presents a petition for the surrender of his estate as insolvent, or makes a compromise with his creditors, or assigns in favour of his creditors, or agrees to carry out the Contract under the supervision of a committee representing his creditors, or (being a company) goes into liquidation, whether provisionally or finally (other than a voluntary liquidation for the purpose of amalgamation or reconstruction), or if the Contractor assigns the Contract without having first obtained the Employer's consent in writing, or if execution is levied on his goods, or

9.2.1.3 the Contractor, or anyone on his behalf, or in his employ, offers to any person in the employ of the Employer or the Employer's Agent, a gratuity or reward or commission, or

9.2.1.4 the Contractor furnished materially inaccurate information in his Tender, which had a bearing on the award of the Contract, or

9.2.1.5 the Contractor has abandoned the Contract.

9.2.2 If the Contractor:

9.2.2.1 Has failed to commence the Works in terms of Clause 5.3 hereof, or has suspended the progress of the Works for fourteen (14) days after receiving from the Employer's Agent written notice to proceed, or

9.2.2.2 Has failed to provide the Guarantee in terms of Clause 6.2 within the time stipulated in the Contract Data, or

9.2.2.3 Has failed to proceed with the Works with due diligence, or

9.2.2.4 Has failed to remove materials from the Site or to pull down and replace work within fourteen (14) days after receiving from the Employer's Agent written notice that the said materials or work have been condemned and rejected by the Employer's Agent in terms of these conditions, or

9.2.2.5 Is not executing the Works in accordance with the Contract, or is neglecting to carry out his obligations under the Contract, or

9.2.2.6 Has, to the detriment of good workmanship or in defiance of the Employer's Agent's instructions to the contrary, sublet any part of the Contract, or

9.2.2.7 Has assigned the Contract or any part thereof without the Employer's consent in writing, then the Employer may give the Contractor 14 days notice to rectify the default, and if the Contractor fails to rectify the default in said 14 days, then, without further notice, notify the Contractor in writing of the termination of the

Contract and expel the Contractor and order the Contractor to vacate the site within 24 hours of issue of the Notice of Termination and to hand the Site over to the Employer, and the Employer may then enter upon the Site and the Works without affecting the rights and powers conferred on the Employer or the Employer's Agent by the Contract and the Employer may himself complete the Works or may employ another contractor to complete the Works, and the Employer or such other contractor may use for such completion so much of the Construction Equipment. Temporary Works and materials brought onto the Site by the Contractor as the Employer may think proper, and the Employer may at any time sell any of the said Construction Equipment, Temporary Works and unused materials and apply the proceeds of sale towards payment of any sums that may be due or become due to the Employer by the Contractor under the Contract. In such circumstances the Contractor shall forthwith vacate the Site and shall not be entitled to remain on the Site on the grounds that he is entitled to do so on a right of retention until amounts due to him have been paid, neither will the Contractor be entitled to any further payments in terms of this Contract.

- 9.2.3** If the Contractor, having been given notice to rectify a default in terms of **55.2** above, rectifies said default, but later repeats the same or substantially the same default, then the Employer may notify the Contractor of the immediate termination of the Contract, and proceed as stated in the paragraph following the word "writing" in Clause 55.2.7 above.
- 9.2.4** Should the amounts the Employer must pay to complete the Works exceed the sum that would have been payable to the Contractor on due completion by him, then the Contractor shall upon demand pay to the Employer the difference, and it shall be deemed a debt due by the Contractor to the Employer and shall be recoverable accordingly. Provided that should the Contractor on demand not pay the amount of such excess to the Employer, such sum may be determined and deducted by the Employer from any sum due to or that may become due to the Contractor under this or any previous or subsequent contract between the Contractor and the Employer."

**3.1.14** Termination by Contractor (CL 9.3)

Add the following paragraph as Clause **9.3.5**:

"In addition to, or as an alternative to the rights to termination contained in this Clause **9.3**, the Contractor may notify the default to the Employer, with a copy to the Employer's Agent, and if the default is not rectified within 10 days the Contractor may suspend progress of the works until a date 7 days after the default is rectified. The Contractor shall be entitled to extension of time to the extent of delay caused by or resulting from such suspension, and to payment of additional costs caused by or resulting from the suspension. Such extension of time and additional costs shall be promptly ascertained by the Employer's Agent, who shall then grant the extension of time and include the additional costs in all future payment certificates. Such suspension, extension of time and/or payment of additional costs, shall not prejudice the Contractor's rights to cancel the contract."

**3.1.15** information in respect of Employees (CL 20.2)

The Contractor shall deliver to the Employer's Agent, on a monthly basis, a return in detail of supervisory staff and the number of categorized classes of labour employer each day for the said period by the Contractor for execution of the Contract. Such return shall be submitted by the seventh day of the month following the month to be reported.

**3.1.16** information in respect of Construction Equipment (CL 23.3)

The Contractor shall deliver to the Employer's Agent, on a monthly basis, a detailed inventory of Construction Equipment kept on Site, fill particulars given for each day of the month. Distinction shall be made between Owned Equipment and Hired Equipment as well as Equipment in working order and Equipment out of order. Such inventory shall be submitted by the seventh day of the month following the month to be reported.

**4 PRIORITY OF DOCUMENTS**

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) Amplifications of the General Conditions of Contract within the Contract Data.
- c) the General Conditions of Contract.
- d) the Specifications, Drawings, Schedules and other documents forming part of the Contract (in that order) contained in the Scope of Work and the Site Information.

If any ambiguity or discrepancy is found in the documents, the Employer's Agent shall issue any necessary clarification or instruction.

## **PART C2: PRICING DATA**

<b>PRICING INSTRUCTIONS .....</b>	<b>1</b>
<b>BILL OF QUANTITIES .....</b>	<b>4</b>
<b>SUMMARY OF BILL OF QUANTITIES .....</b>	
<b>CALCULATION OF TENDER SUM.....</b>	

**C2.1 PRICING INSTRUCTIONS**

- 1 For the purposes of this bill of quantities, the following words shall have the meanings hereby assigned to them:

Unit: The unit of measurement for each item of work as defined in the standard specifications or the project specifications.

Quantity: The number of units of work for each item.

Rate: The payment per unit of work for which the tenderer tenders to do the work.

Amount: The product of the quantity and the rate tendered for an item.

Lump Sum: An amount tendered for an item, the extent of which is described in the bill of quantities, the specifications or elsewhere, but of which the quantity of work is not measured in units.

- 2 This bill of quantities forms part of the contract documents and must be read in conjunction with all the other documents comprising the contract documents.

- 3 The quantities set out in the bill of quantities are only approximate quantities. The quantities of work finally accepted and certified for payment, and not the quantities given in the bill of quantities, will be used to determine payments to the contractor.

The validity of the contract shall in no way be affected by differences between the quantities in the bill of quantities and the quantities finally certified for payment. Work is valued at the rates or lump sums tendered

- 4 The tenderer shall fill in a rate or a lump sum for each item where provision is made for it even where no quantities are given. Items against which no rate or lump sum has been entered in the tender will not be paid for when the work is executed, as payment for such work will be regarded as being covered by other rates or lump sums in the bill of quantities. The tenderer shall fill in a rate against all items where the words "rate only" appears in the amount column. Although no work is foreseen under such item and no quantities are consequently given in the quantity column, the tendered rate shall apply should work under this item actually be required. Tenders should note the provisions of paragraph 12 of this preamble.

If the tender should group a number of items together and tender one lump sum for each group of items, this single tendered lump sum shall apply to that group of items and not to each individual item, or should he indicate that full compensation for any item has been included in the rate for another item, the rate for the item included in another item shall be deemed to be nil.

The tendered lump sums and rates shall be valid irrespective of any change in the quantities during the execution of the contract.

- 5 The amount of work or the quantities of material stated in the bill of quantities shall not be considered as restricting or extending the amount of work to be done or quantity of material to be supplied by the contractor.
- 6 The statement of quantities of material or the amount of work in the bill of quantities shall not be regarded as authorisation for the contractor to order material or to execute work. The contractor shall obtain the engineer's detailed instructions for all work before ordering any materials or executing work or making arrangements in this regard.
- 7 The short descriptions of the payment items in the bill of quantities are only given to identify the items and to provide specific details. Reference shall, inter alia, be made to the drawings, standard specifications, project specifications, general conditions of contract and special conditions of contract for more detailed information regarding the extent of work entailed under each item.
- 8 The provisions of clause of the general conditions of contract Second Edition 2012 shall apply to provisional sums and prime cost sums.
- 9 Subject to the conditions stated in paragraph 10 below, the rates and lump sums filled in by the tenderer in the bill of quantities shall be final and binding with regard to submitting the tender, and may not be adjusted should there be any mistakes in the extensions thereof and in the total sums appearing in the tender. Should there be any discrepancies between the tender sum and the correctly extended and totalled bill of quantities, the rates will be regarded as being correct, and the employer shall have the right to make adjustments to the tender sum to reconcile the tender sum with the total of the bill of quantities. In such an event the contractor will be consulted but, failing agreement between the parties, the decision of the employer shall be final and binding. Adjustment of the tender sum will take place prior to the signing of the contract. In their own interest tenderers must make doubly sure of the correctness of their tendered rates, the extensions and the tender sum.
- 10 A tender may be rejected if the unit rates or lump sums for some of the items in the bill of quantities are, in the opinion of the employer, unreasonable or out of proportion.

- 11 The units of measurement indicated in the bill of quantities are metric units

The following abbreviations are used in the bill of quantities:

mm	=	millimetre
m	=	metre
km	=	kilometre
km-pass	=	kilometre-pass
m <sup>2</sup>	=	square metre
m <sup>2</sup> -pass	=	square metre pass
ha	=	hectare
m <sup>3</sup>	=	cubic metre
m <sup>3</sup> km	=	cubic metre kilometre
l	=	litre
kl	=	kilolitre
kg	=	kilogram
t	=	ton (1000 kg)
No	=	number
mn	=	mega newton
mn-m	=	mega newton-metre
%	=	per cent
kW	=	kilowatt
Kn	=	kilo newton
PC sum	=	prime cost sum
Prov sum	=	provisional sum

- 12 All rates and sums of money quoted in the bill of quantities shall be in rands and whole cents. Fractions of a cent shall be discarded.

## **c2.2 BILL OF QUANTITIES**

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>1</b>	SANS 1200A	<b>SCHEDULE 1: PRELIMINARY &amp; GENERAL ITEMS</b>				
<b>1.1</b>	8.3 PSA 8.2.1	<b>FIXED-CHARGES AND VALUE RELATED ITEMS</b>				
1.1.1	8.3.1	Contractual Requirements	Sum	1		
1.1.2	8.3.2	<u>Establishment of Facilities on Site</u>				
		-				
1.1.2.1	8.3.2.1	<u>Facilities for the Engineer</u>				
1.1.2.1.1	PSAB 3.1	Name Boards	Sum	1		
1.1.2.1.2	PSAB 4.2	Survey Equipment	Sum	1		
		-				
1.1.2.2	8.3.2.2	<u>Facilities for the Contractor</u>				
1.1.2.2.1	PSA 4.2	Offices, storage sheds and fencing	Sum	1		
1.1.2.2.2	PSA 8.3	Portable Latrines	Sum	1		
1.1.2.2.3		Tools and equipment	Sum	1		
1.1.2.2.4		Water Supply, Electric Power and Communications	Sum	1		
1.1.2.2.5		Plant and Equipment	Sum	1		
1.1.2.2.6		Insurance cover to the value of tender	Sum	1		
1.1.2.2.7	8.3.4	Removal of Site Establishment	Sum	1		
1.1.3		<u>Occupational Health and Safety</u>				
		Compliance with the Occupational Health and Safety Act (Act 85 of 1993) and applicable regulations (Construction Regulations, 2003), and the Employers Health & Safety Specification bound into this document	Sum	1		
1.1.3.1		Risk assessment	Sum	1		
1.1.3.2		PPE for duration of contract	Sum	1		
<b>1.2</b>	8.4 PSA 8.2.2	<b>TIME-RELATED ITEMS</b>				
1.2.1	8.4.1	Contractual Requirements	Mnths	12		
1.2.2	8.4.2	<u>Operation and Maintain of Facilities on site for the Duration of the Construction</u>				
		-				
1.2.2.1	8.4.2.1 1200AB -	<u>a) Facilities for the Engineer</u>				
1.2.2.1.1	3.1	Office furniture	Mnths	12		
1.2.2.1.2		Name Board	Mnths	12		
1.2.2.1.3	PSA-4.2	Survey Equipment	Mnths	12		

1.2.2.2	8.4.2.2	<u>b) Facilities for Contractor</u>				
1.2.2.2.1	PSA-4.2	Offices and storage sheds	Mnths	12		
1.2.2.2.2		Ablution facilities	Mnths	12		
1.2.2.2.3		Tools and equipment	Mnths	12		
1.2.2.2.4	8.4.3	Water Supply	Mnths	12		
1.2.2.2.5		Supervision	Mnths	12		
1.2.2.2.6	8.4.4	Company and Head Office Overhead Costs for the Duration of the Construction	Mnths	12		
1.2.3		<u>Occupational Health and Safety</u>				
		Compliance with the Occupational Health and Safety Act (Act 85 of 1993) and applicable regulations (Construction Regulations, 2003), and the Employers Health & Safety Specification bound into this document	Mnths	12		
1.2.3.1						
1.2.3.2		Full time competent employee of the contract and construction supervisor / assistants for the duration of the contract	Mnths	12		
1.4	PSA 8.5	<b>SUMS STATED PROVISIONALLY BY THE ENGINEER</b>				
1.4.1		<u>Remuneration</u>				
1.4.1.1		CLO / LDO remuneration	P/Sum	1	151,200.00	151,200.00
1.4.1.2		Overheads, charges and profits on the above	%	151,200		
1.4.2		<u>Training</u>				
		Accredited and Approved training courses for selected local and other labourers including wages during training	P/Sum	1	120,000.00	120,000.00
1.4.2.1						
1.4.2.2		Overheads, charges and profits on the above	%	120,000		
1.4.3		<u>Existing Services</u>				
1.4.3.1		Locate and expose existing services	P/Sum	1	6,000.00	6,000.00
1.4.3.2		Relocating existing services	P/Sum	1	5,000.00	5,000.00
1.4.3.3		Repair damaged existing services not timeously pointed out	P/Sum	1	3,000.00	3,000.00
1.4.3.4		Overheads, charges and profits on the above	%	14,000		
1.5	PSA 8.6	<b>PRIME COST ITEMS</b>				
1.5.1		Materials used in the execution of Dayworks	P/Sum	1	50,000.00	50,000.00
1.5.2		Overheads, charges and profits on the above	%	50,000		
1.6		<b>DAYWORKS (PROVISIONAL)</b> (Dayworks to be executed ONLY on instruction by the Engineer)				

1.6.1	<u>Labour</u>				
1.6.1.1	Skilled	hr	10		
1.6.1.2	Semi-skilled	hr	10		
1.6.1.3	Un-skilled	hr	120		
	-				
1.6.2	<u>TLB's (Wet Rate) (specify model)</u>				
1.6.2.1	TLB's - Model .....	hr	20		
1.6.3	<u>Compactors (specify model)</u>				
1.6.3.1	Plate compactor - Model (.....)	hr	10		
1.6.3.2	Wacker - Model (.....)	hr	10		
1.6.4	<u>Waterpumps (specify capacity)</u>				
1.6.4.1	Medium - volume (.....) l/s	hr	30		
1.6.5	<u>Generators (specify KVA)</u>				
1.6.5.1	Medium capacity (12 KVA)	hr	20		
<b>SUB-TOTAL CARRIED FORWARD TO SUMMARY</b>					

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>2</b>		<b>SCHEDULE 2: BULK EARTHWORKS</b>				
<b>2.1</b>	SABS 1200C	<b>SITE CLEARANCE</b>				
2.1.1	8.2.1	<u>Clear and grub areas to:</u>				
2.1.1.1		Platform 1 (Inlet roads and drying beds)	m <sup>2</sup>	4,200		
2.1.1.2		Platform 2 (Clarifier & Bioreactor)	m <sup>2</sup>	5,200		
<b>2.2</b>	8.3.1	<b>EXCAVATION - BULK EXCAVATIONS</b>				
2.2.1	8.3.1	Excavate in all materials and <b>use for fill or embankments</b> compact to 90% of MAMDD				
2.2.1.1		Platform 1 (Incl. Inlet roads and drying beds)	m <sup>3</sup>	2,000		
2.2.1.2		Platform 2 (Incl. bioreactor & clarifier)	m <sup>3</sup>	300		
2.2.2		Excavate in all materials and <b>spoil to existing ponds</b>				
2.2.2.1		Platform 1	m <sup>3</sup>	900		
2.2.2.2		Platform 2	m <sup>3</sup>	13,500		
2.2.3		Excavate in all materials <b>to stockpile</b>				
2.2.3.1		Platform 1	m <sup>3</sup>	10		
2.2.3.2		Platform 2	m <sup>3</sup>	10		
2.2.2		Extra-over for items 2.2.1.1 and 2.2.1.2 in				
2.2.2.1		Intermediate excavation	m <sup>3</sup>	320		
2.2.2.2		Hard rock material and boulders	m <sup>3</sup>	60		
<b>2.3</b>		<b>TREATMENT OF IN SITU</b>				
2.3.1		In situ preparation and compaction of material to minimum of 90% of Mod AASHTO density				
2.3.1.1		Platform 1	m <sup>2</sup>	4,200		
2.3.1.2		Platform 2	m <sup>2</sup>	5,200		
<b>2.4</b>		<b>FILLING</b>				
2.4.1		<b>G7 fill material from stockpile</b> in layers of 150mm and compact to 90% of MAMDD to:				
2.4.1.1		Platform 1	m <sup>3</sup>	1,920		
2.4.1.2		Platform 2	m <sup>3</sup>	300		
2.4.1.4		Backfilling around structures	m <sup>3</sup>	200		
2.4.2		Extra over items 2.4.1 for obtaining material <b>from commercial sources</b>				
2.4.2.1		Platform 1	m <sup>3</sup>	20		
2.4.2.2		Platform 2	m <sup>3</sup>	30		
2.4.3		<b>Topsoiling from stockpile to:</b>				
2.4.3.1		Embankments and cut slopes	m <sup>3</sup>	100		
2.4.3.2		Designated stockpile areas (after shaping)	m <sup>3</sup>	80		

2.5	EXISTING EARTHWORKS REPAIRS				
2.5.1	Trimming existing emabnkemts and dispose of all surplus materials				
2.5.1.1	Stormwater Berm	m <sup>2</sup>	1,000		
2.5.2	Ponds	m <sup>2</sup>	10,000		
2.5.2	Desludge existing ponds and dispose of sludge material	m <sup>3</sup>	12,000		
<b>SUB-TOTAL CARRIED FORWARD TO SUMMARY</b>					

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>3</b>		<b>SCHEDULE 3: COLLECTOR CHAMBER, INLET WORKS, DUMP &amp; SKIP SLABS</b>				
<b>3.1</b>	8.3.1	<b>EXCAVATION</b>				
3.1.1	8.3.1	Excavation in all materials and dispose of surplus material for				
3.1.1.1		New Chamber	m <sup>3</sup>	36		
3.1.1.2		Collector Chamber	m <sup>3</sup>	5		
3.1.1.3		Inlet works	m <sup>3</sup>	63		
3.1.1.4		Truck Dump Slab	m <sup>3</sup>	12		
3.1.1.5		Skip slab	m <sup>3</sup>	12		
3.1.2		Extra-over for items 2.2.1.1 and 2.2.1.2 in				
3.1.2.1		Intermediate excavation	m <sup>3</sup>	26		
3.1.2.2		Hard rock material and boulders	m <sup>3</sup>	2		
3.1.3		Spread and level of surplus material to on-site areas	m <sup>3</sup>	90		
3.1.4		<u>Subsoil Drain</u>				
3.1.4.1		Supply and install 300x300mm subsoil drain including dia. 75mm subsurface slotted pipe with 19mm stone wrapped in U24 bidim	m	60		
<b>3.2</b>		<b>TREATMENT OF IN SITU</b>				
3.2.1		In situ preparation and compaction of material to minimum of 90% of Mod AASHTO density				
3.2.1.1		New Chamber	m <sup>2</sup>	9		
3.2.1.2		Collector Chamber	m <sup>2</sup>	3		
3.2.1.3		Inlet works	m <sup>2</sup>	41		
3.2.1.4		Truck Dump Slab	m <sup>2</sup>	25		
3.2.1.5		Skip slab	m <sup>2</sup>	25		
<b>3.3</b>		<b>FILLING</b>				
3.3.1		Earth filling obtained from excavations or other areas on site compacted in layers not exceeding 150mm to 93% Mod AASHTO to:				
3.3.1.1		New Chamber	m <sup>3</sup>	22		
3.3.1.2		Collector Chamber	m <sup>3</sup>	3		
3.3.1.3		Inlet works	m <sup>3</sup>	20		
3.3.1.4		Truck Dump Slab	m <sup>3</sup>	7		
3.3.1.5		Skip slab	m <sup>3</sup>	7		
3.3.1.6		Backfilling around structures	m <sup>3</sup>	12		
<b>3.4</b>		<b>STRENGTH CONCRETE 15Mpa</b>				
3.4.1		Blinding layer minimum 50mm thickness to				
3.4.1.1		New Chamber	m <sup>2</sup>	9		

3.4.1.2		Collector Chamber	m <sup>2</sup>	3	
3.4.1.3		Inlet works	m <sup>2</sup>	41	
3.4.1.4		Truck Dump Slab	m <sup>2</sup>	25	
3.4.1.5		Skip slab	m <sup>2</sup>	25	
<b>3.5</b>	SABS 1200G	<b>CONCRETE (STRUCTURAL) 35Mpa</b>			
3.5.1		New Chamber floor	m <sup>3</sup>	2	
3.5.2		New Chamber walls	m <sup>3</sup>	8	
3.5.3		Collector Chamber floor	m <sup>3</sup>	1	
3.5.4		Collector Chamber walls	m <sup>3</sup>	1	
3.5.5		Inlet works floor	m <sup>3</sup>	8	
3.5.6		Inlet works walls	m <sup>3</sup>	11	
3.5.7		Truck Dump Slab	m <sup>3</sup>	5	
3.5.8		Skip slab	m <sup>3</sup>	5	
<b>3.6</b>	8.2	<b>SCHEDULED FORMWORK ITEMS</b>			
3.6.1		<u>Rought vertical plane</u>			
3.6.1.1		New Chamber	m <sup>2</sup>	1	
3.6.1.2		Collector Chamber	m <sup>2</sup>	1	
3.6.1.3		Inlet works	m <sup>2</sup>	2	
3.6.1.4		Truck Dump Slab	m <sup>2</sup>	1	
3.6.1.5		Skip slab	m <sup>2</sup>	1	
3.6.2	8.2.2	<u>Smooth vertical plane to Walls</u>			
3.6.2.1		New Chamber	m <sup>2</sup>	16	
3.6.2.2		Collector Chamber	m <sup>2</sup>	5	
3.6.2.3		Inlet works	m <sup>2</sup>	144	
3.6.2.4		Truck Dump Slab	m <sup>2</sup>	5	
3.6.2.5		Skip slab	m <sup>2</sup>	5	
3.6.3	8.2.2	<u>Chamfers 40mm wide</u>			
3.6.2.1		New Chamber	m <sup>2</sup>	3	
3.6.2.2		Collector Chamber	m <sup>2</sup>	2	
3.6.2.3		Inlet works	m <sup>2</sup>	120	
3.6.2.4		Truck Dump Slab	m <sup>2</sup>	50	
3.6.2.5		Skip slab	m <sup>2</sup>	50	
3.6.3		<u>Box out holes or form voids</u>			
3.6.3.1		Large, rectangular 0.35 - 2.0 depths over and up to 0m to 2.0m <sup>2</sup>	No	4	
<b>2.9</b>		<b>REINFORCEMENT</b>			
2.9.1		<u>Mild steel bars</u>			
2.9.1.1		Diameter 8mm to 16mm	t	1.0	
2.9.2		<u>High tensile steel bars</u>			
2.9.2.1		Diameter 8mm to 16mm	t	5.0	
<b>2.10</b>		<b>UNFORMED SURFACE FINISHES</b>			
2.10.1		<u>Wood float finished to top of floors:</u>			

2.10.1.1		New Chamber	m <sup>2</sup>	9		
		Collector Chamber	m <sup>2</sup>	3		
		Inlet works	m <sup>2</sup>	41		
		Truck Dump Slab	m <sup>2</sup>	25		
		Skip slab	m <sup>2</sup>	25		
2.10.1.2		<u>Wood float finished to Top of walls</u>				
		Collector Chamber	m <sup>2</sup>	1		
		Inlet works	m <sup>2</sup>	18		
		Truck Dump Slab	m <sup>2</sup>	4		
		Skip slab	m <sup>2</sup>	4		
<b>2.11</b>		<b>JOINTS</b>				
2.11.1		Type 1 - Construction joint	m	20		
2.11.2		Type 2 - Expansion joint	m	10		
<b>2.12</b>		<b>SLUICE GATES</b>				
2.12.1	PS	Supply and install Stainless steel sluice gates 800 x 1200mm complete in frame	No	2		
2.12.2		Supply and install aluminium Penstocks 800 x 1200mm	No	8		
<b>2.13</b>		<b>MECHANICAL</b>				
2.13.1		Provisional amount for steel canopy	P/Sum	1	120,000.00	120,000.00
2.13.2		Provisional amount for Hot dipped galvanised basket 0.6 x 0.3 x 0.4 deep	P/Sum	1	12,000.00	12,000.00
2.13.3		Contractors mark-up on above item	%	132,000		0.00
2.13.4		Hot dipped galvanised coarse hand rake screen 40mm	No	2		
2.13.5		Hot dipped galvanised fine hand rake screen 25mm	No	2		
2.13.6		Supply and install complete Endress Hauser" ultrasonic flow level meter with display	No	1		
2.13.7		Galvanised steel walkway complete with mentis handrails	Sum	1		
2.13.8		Supply and install complete mechanicla screen	Sum	1		
<b>2.14</b>		<b>EXISTING INLET WORKS</b>				
2.14.1		Provisional amount for refurbishment of inlet structure	P/Sum	1	10,000.00	10,000.00
2.13.2		Provisional amount for refurbish of building	P/Sum	1	10,000.00	10,000.00
<b>2.15</b>		<b>EXISTING SLUDGE PONDS 1, 2 &amp; 3</b>				
2.15.1		Provisional amount for de-sludge of dams	P/Sum	1	20,000.00	20,000.00
2.16		<b>LABORATORY EQUIPMENT</b>				
2.16.1		Supply and deliver complete Greendrop test kit	No	1		
<b>SUB-TOTAL CARRIED FORWARD TO SUMMARY</b>						

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>4</b>		<b>SCHEDULE 4:</b>				
		<b>BIOREACTOR</b>				
<b>4.1</b>		<b>FILLING</b>				
		Earth filling obtained from excavations or other areas on site compacted in layers not exceeding 150mm to 93% Mod AASHTO to:				
4.1.1						
4.1.1.1		Under Base	m <sup>3</sup>	189		
4.1.1.2		Backfilling around structures	m <sup>3</sup>	95		
4.1.1.3		19mm No fines concrete	m <sup>3</sup>	12		
<b>4.2</b>		<b>SUBSURFACE DRAIN</b>				
		Supply and install 300x300mm subsoil drain including dia. 75mm subsurface slotted pipe with 19mm stone wrapped in U24 bidim				
4.2.1			m	140		
<b>4.3</b>		<b>STRENGTH CONCRETE 15Mpa</b>				
4.3.1		Blinding layer minimum 50mm thickness to				
4.3.1.1		Bioreactor	m <sup>2</sup>	945		
4.3.1.2		Control room	m <sup>2</sup>	24		
<b>4.4</b>	SABS 1200G	<b>CONCRETE (STRUCTURAL) 35Mpa</b>				
4.4.1		Bioreactor Base slab	m <sup>3</sup>	378		
4.4.2		Walls	m <sup>3</sup>	313		
4.4.3		Mass benching	m <sup>3</sup>	2		
4.4.4		Control room slab	m <sup>3</sup>	5		
<b>4.5</b>	8.2	<b>SCHEDULED FORMWORK ITEMS</b>				
4.5.1		<u>Rough vertical plane</u>				
4.5.1.1		Base	m <sup>2</sup>	473		
4.5.2	8.2.2	<u>Smooth vertical plane to</u>				
4.5.2.1		Walls	m <sup>2</sup>	1044		
4.5.2.2		Chamfer 40mm wide	m	390		
<b>4.6</b>		<b>BOX OUT HOLES OR FORM VOIDS</b>				
4.6.1		Large, rectangular 0.35 - 2.0 depths over and up to				
4.6.1.1		0m to 1.0m <sup>2</sup>	No	4		
<b>4.7</b>		<b>REINFORCEMENT</b>				
4.7.1		<u>Mild steel bars</u>				
4.7.1.1		Diameter 8mm to 16mm	t	15		
4.7.2		<u>High tensile steel bars</u>				

4.7.2.1	Diameter 8mm to 16mm	t	83		
<b>4.8</b>	<b>UNFORMED SURFACE FINISHES</b>				
4.8.1	<u>Wood float finished to:</u>				
4.8.1.1	Top of floor slabs	m <sup>2</sup>	945		
4.8.1.2	Top of walls	m <sup>2</sup>	60		
<b>4.9</b>	<b>JOINTS</b>				
4.9.1	Type 1 - Construction joint	m	220		
4.9.2	Type 2 - Expansion joint	m	140		
<b>4.10</b>	<b>PIPEWORK</b>				
4.10.1	Supply and insall dia. 400mm Steel puddle pipe	No	4		
<b>4.11</b>	<b>STRUCTURAL STEEL</b>				
4.11.1	Steel bridge frame 1.2 m width	m	80		
4.11.2	Grating	m <sup>2</sup>	160		
4.11.3	Handrailing	m	160		
4.11.4	Staircase 1.5m high	no	2		
<b>4.12</b>	<b>BUILDING WORK - CONTROL ROOM</b>				
4.12.1	<u>Face Brickwork</u>				
	Supply, cut, fit and build face brick in 9.5 MPa cement mortar in superstructure				
4.12.1.1	220mm wall	m <sup>2</sup>	84		
4.12.1.2	110mm wall	m <sup>2</sup>	6		
4.12.2	<u>Brickforce</u>				
	Supply and install brick force in 150mm wide strips				
4.12.2.1		m	280		
4.12.3	<u>Fabricated Lintels</u>				
	Pre-stressed precast concrete lintel 91,6mm wide not exceeding 3000mm long				
4.12.3.1		m	12		
4.12.4	<u>Doors and Frames</u>				
	40mm Framed ledged and braced batten double door 1810 x 2032mm including frame				
4.12.4.1		No	1		
	40mm Framed ledged and braced batten single door 810 x 2032mm including frame				
4.12.4.2		No	1		
4.12.5	<u>Window &amp; Glassing</u>				
	Square WINBLOK 600 X 600mm including Winvent (top hung) including glazing				
4.12.5.1		No	8		
	Square WINBLOK 600 X 600mm including Winvent fixed louvre				
4.12.5.2		No	8		
<b>4.13</b>	<b>MECHANICAL</b>				
4.13.1	Anoxic zone mixer 1.5 kw	No	4		
4.13.2	Anoxic zone mixer 11 kw	No	2		
4.13.3	Bioreactor 4 kw anaerobic mixer	No	4		
4.13.4	Bioreactor 22 kw anaerobic mixer	No	2		

4.13.5	Supply and install DO unit complete	No	1		
4.13.6	Endress Hauser" ultrasonic flow level meter with display	No	1		
4.13.7	Allow a provisional amount for steel pipework and valves	P/Sum	1	85,000.00	85,000.00
4.13.8	Contractors mark-up on above item	%	85,000		
4.13.9	Overflow weir v-notch 150mm	m	3		
<b>4.15</b>	<b>TESTING &amp; COMMISSIONING</b>				
4.15.1	Water tightness test (Seepage water from dams)	Sum	1		
4.15.2	Commissionaing of unit	Sum	1		
<b>SUB-TOTAL CARRIED FORWARD TO SUMMARY</b>					

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>5</b>		<b>SCHEDULE 5: CLARIFIERS (2 off)</b>				
<b>5.3</b>		<b>FILLING</b>				
		Earth filling obtained from excavations or other areas on site compacted in layers not exceeding 150mm to 93% Mod AASHTO to:				
5.3.1						
5.3.1.1		Under Base	m <sup>3</sup>	32		
5.3.1.2		Backfilling around structures	m <sup>3</sup>	62		
<b>5.4</b>		<b>SUBSURFACE DRAIN</b>				
		Supply and install 300x300mm subsoil drain including dia. 75mm subsurface slotted pipe with 19mm stone wrapped in U24 bidim				
5.4.1			m	120		
<b>5.5</b>		<b>STRENGTH CONCRETE 15Mpa</b>				
		Blinding layer minimum 50mm thickness to Clarifier 1 & 2				
5.5.1						
5.5.1.1			m <sup>2</sup>	12		
<b>5.6</b>	SABS 1200G	<b>CONCRETE (STRUCTURAL) 35Mpa</b>				
5.6.1		Base slab	m <sup>3</sup>	225		
5.6.2		Walls	m <sup>3</sup>	42		
5.6.3		Center Column	m <sup>3</sup>	14		
5.6.4		Overflow weir	m <sup>3</sup>	26		
<b>5.7</b>	8.2	<b>SCHEDULED FORMWORK ITEMS</b>				
		<u>Rought vertical plane</u>				
5.7.1						
5.7.1.1		Base	m <sup>2</sup>	64		
5.7.2	8.2.2	<u>Smooth vertical plane to</u>				
5.7.2.1		Walls	m <sup>2</sup>	616		
5.7.2.2		Center Column	m <sup>3</sup>	14		
5.7.2.3		Overflow weir	m <sup>3</sup>	264		
5.7.2.4		Chamfer 40mm wide	m	144		
<b>5.8</b>		<b>BOX OUT HOLES OR FORM VOIDS</b>				
		Large, rectangular 0.35 - 2.0 depths over and up to 0m to 1.0m <sup>2</sup>				
5.8.1						
5.8.1.1			No	4		
<b>5.90</b>		<b>REINFORCEMENT</b>				
		<u>Mild steel bars</u>				
5.9.1						
5.9.1.1		Diameter 8mm to 16mm	t	7		

5.9.2		<u>High tensile steel bars</u>					
5.9.2.1		Diameter 8mm to 16mm	t	40			
<b>5.10</b>		<b>UNFORMED SURFACE FINISHES</b>					
5.10.1		<u>Wood float finished to:</u>					
5.10.1.1		Top of floor slabs	m <sup>2</sup>	12			
5.10.1.2		Top of walls	m <sup>2</sup>	22			
<b>5.11</b>		<b>JOINTS</b>					
5.11.1		Type 1 - Construction joint	m	76			
5.11.2		Type 2 - Expansion joint	m	76			
<b>5.12</b>		<b>PIPEWORK</b>					
5.12.1		Supply and insall dia. 400mm Steel puddle pipe	No	2			
<b>5.14</b>		<b>MECHANICAL (2 off)</b>					
5.14.1		Peripherally driven bridge complete 14m	No	2			
5.14.2		Scum plate	m	76			
5.14.3		Adjustable V-notch weir 150mm	m	76			
5.14.4		Grating	m <sup>2</sup>	2.4			
5.14.5		Handrailing	m	4			
5.14.6		Allow a provisional amount for steel pipework and valves	P/Sum	1	85,000.00		85,000.00
5.14.7		Contractors mark-up on above item	%	85,000			
<b>5.16</b>		<b>TESTING &amp; COMMISSIONING</b>					
5.16.1		Water tightness test (Seepage water from dams)	No	2			
5.16.2		Commissionaing of unit	No Prov	2			
5.16.3		Provide water for testing structures for water tightness	Sum	1	500,000.00		500,000.00
<b>SUB-TOTAL CARRIED FORWARD TO SUMMARY</b>							

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>6</b>		<b>SCHEDULE 6: WAS / RAS / PUMP STATIONS</b>				
<b>6.1</b>		<b>FILLING</b>				
		Earth filling obtained from excavations or other areas on site compacted in layers not exceeding 150mm to 93% Mod AASHTO to:				
6.1.1						
6.1.1.1		Under Base slabs	m <sup>3</sup>	26		
6.1.1.2		Backfilling around structures	m <sup>3</sup>	40		
6.1.2		<b>SUBSURFACE DRAIN</b>				
6.1.2.1						
		Supply and install 300x300mm subsoil drain including dia. 75mm subsurface slotted pipe with 19mm stone wrapped in U24 bidim	m	80		
6.1.2.2						
<b>6.2</b>		<b>STRENGTH CONCRETE 15Mpa</b>				
6.2.1		Blinding layer minimum 50mm thickness to				
6.2.1.1		WAS pump station	m <sup>2</sup>	5		
6.2.1.2		RAS Pump Station	m <sup>2</sup>	5		
<b>6.3</b>	SABS 1200G	<b>CONCRETE (STRUCTURAL) 35Mpa</b>				
6.3.1		<u>RAS Pump Station</u>				
6.3.1.1		Floor slab	m <sup>3</sup>	17		
6.3.1.2		Walls	m <sup>3</sup>	46		
6.3.1.3		Roof Slab	m <sup>3</sup>	14		
6.3.2		<u>WAS Pump Station</u>				
6.3.2.1		Floor slab	m <sup>3</sup>	17		
6.3.2.2		Walls	m <sup>3</sup>	46		
6.3.2.3		Roof Slab	m <sup>3</sup>	14		
<b>6.4</b>	8.2	<b>SCHEDULED FORMWORK ITEMS</b>				
6.4.1	8.2.2	<u>Smooth vertical plane to Walls</u>				
6.4.1.1		RAS Pump Station	m <sup>2</sup>	308		
6.4.1.2		WAS Pump Station	m <sup>2</sup>	308		
6.4.2		<u>Horizontal smooth plane to</u>				
6.4.2.1		Soffits of pump station roofs	m <sup>2</sup>	92		
6.4.2.2		Chamfer 40mm wide	m	30		
<b>6.5</b>		<b>BOX OUT HOLES OR FORM VOIDS</b>				
6.5.1		Large, rectangular 0.35 - 2.0 depths over and up to				
6.5.1.1		0m to 1.0m <sup>2</sup>	No	6		

<b>6.6</b>	<b>REINFORCEMENT</b>			
6.6.1	<u>Mild steel bars</u>			
6.6.1.1	Diameter 8mm to 16mm	t	3.5	
6.6.2	<u>High tensile steel bars</u>			
6.6.2.1	Diameter 8mm to 16mm	t	18.5	
<b>6.7</b>	<b>UNFORMED SURFACE FINISHES</b>			
6.7.1	<u>Wood float finished to:</u>			
6.7.1.1	Top of floor slabs	m <sup>2</sup>	92	
6.7.1.2	Top of walls	m <sup>2</sup>	30	
<b>6.8</b>	<b>JOINTS</b>			
6.8.1	Type 1 - Construction joint	m	20	
6.8.2	Type 2 - Expansion joint	m	20	
<b>6.9</b>	<b>STRUCTURAL STEEL</b>			
6.9.1	Galvanised Steel profile IPE-AA 200	m	30	
6.9.2	PC 230 x 90	m	20	
<b>6.10</b>	<b>GRATING</b>			
6.10.1	Rectagrid	m <sup>2</sup>	20	
<b>6.11</b>	<b>HANDRAILS</b>			
6.11.1	Balustrade assemblies complete with end stops and install for Walkways and Stairs			
	1) Horizontal	m	22	
	2) At angle	m	24	
<b>6.12</b>	<b>BUILDING WORK</b>			
6.12.1	<u>Face Brickwork to RAS Pump Station</u>			
	Supply, cut, fit and build face brick in 9.5 MPa cement mortar in superstructure			
6.12.1.1	220mm wall	m <sup>2</sup>	120	
6.12.1.2	110mm wall	m <sup>2</sup>	12	
6.12.2	<u>Brickforce</u>			
6.12.2.1	Supply and install brick force in 150mm wide strips	m	200	
6.12.3	<u>Fabricated Lintels</u>			
6.12.3.1	Pre-stressed precast concrete lintel 91,6mm wide not exceeding 3000mm long	m	6	
6.12.4	<u>Doors and Frames</u>			
6.12.4.1	40mm Framed ledged and braced batten double door 1810 x 2032mm including frame	No	2	
6.12.4.2	40mm Framed ledged and braced batten single door 910 x 2032mm including frame	No	1	
6.12.5	<u>Window &amp; Glassing</u>			

6.12.5.1	Square WINBLOK 600 X 600mm including Winvent (top hung) including glazing	No	16		
	Square WINBLOK 600 X 600mm including Winvent fixed louvre	No	16		
<b>6.13</b>	<b>MECHANICAL</b>				
6.13.1	<u>RAS Pump Station</u>				
6.13.1.1	Gorman Rupp - Self priming pumps 5.5 Kw (25l/s @ 10m)	No	3		
6.13.1.2	Allow a provisional amount for pipe and valve Contractors mark-up on above item	P/sum %	1 85,000	85,000.00	85,000.00
6.13.2	<u>WAS Pump station</u>				
6.13.2.1	Gorman Rupp - Self priming pumps 7.5 Kw (20 l/s @ 15m)	No	3		
6.13.2.2	Allow a provisional amount for pipe and valve Contractors mark-up on above item	P/sum %	1 75,000	75,000.00	75,000.00
6.13.3	<u>Mixed Liquor Recycling Pump Station 1 &amp; 2</u>				
6.13.3.1	MLR Propeller mixing (95 l/s @10m)	No	2		
6.13.3.2	Allow a provisional amount for pipe and valve Contractors mark-up on above item	P/sum %	1 25,000	25,000.00	25,000.00
<b>6.14</b>	<b>TESTING &amp; COMMISSIONING</b>				
6.14.1	Water tightness test (Seepage water from dams)	No	2		
6.14.2	Commissioning of unit	No	2		
<b>SUB-TOTAL CARRIED FORWARD TO SUMMARY</b>					

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
7		<b>SCHEDULE 7: SLUDGE DRY BEDS</b>				
7.1		<b>FILLING</b>				
		Earth filling obtained from excavations or other areas on site compacted in layers not exceeding 150mm to 93% Mod AASHTO to:				
7.1.1						
7.1.1.1		Under Base slabs	m <sup>3</sup>	445		
7.1.1.2		Backfilling around structures	m <sup>3</sup>	150		
7.1.2		<b>SUBSURFACE DRAIN</b>				
7.1.2.1						
		Supply and install 300x300mm subsoil drain including dia. 75mm subsurface slotted pipe with 19mm stone wrapped in U24 bidim	m	72		
7.2		<b>STRENGTH CONCRETE 15Mpa</b>				
7.2.1		Blinding layer minimum 50mm thickness to				
7.2.1.1		Dry beds	m <sup>2</sup>	1485		
7.2.1.2		Chamber	m <sup>2</sup>	4		
7.2.1.3		Slab	m <sup>2</sup>	25		
7.3	SABS 1200G	<b>CONCRETE (STRUCTURAL) 35Mpa</b>				
7.3.1		<u>Dry beds</u>				
7.3.1.1		Floor slab	m <sup>3</sup>	225		
7.3.1.2		Walls	m <sup>3</sup>	150		
7.3.2		<u>Chamber</u>				
7.3.2.1		Floor slab	m <sup>3</sup>	1		
7.3.2.2		Walls	m <sup>3</sup>	2		
7.3.2.3		Roof Slab	m <sup>3</sup>	1		
7.3.2		<u>Slab</u>				
7.3.2.1		Floor slab	m <sup>3</sup>	4		
7.4	8.2	<b>SCHEDULED FORMWORK ITEMS</b>				
7.4.1	8.2.2	<u>Smooth vertical plane to Walls</u>				
7.4.1.1		Dry beds	m <sup>2</sup>	300		
7.4.1.2		Chamber	m <sup>2</sup>	12		
7.4.2		<u>Horizontal smooth plane to</u>				
7.4.2.1		Soffits of roofs	m <sup>2</sup>	4		
7.4.2.2		Chamfer 40mm wide	m	600		
7.5		<b>BOX OUT HOLES OR FORM VOIDS</b>				
7.5.1		Large, rectangular 0.35 - 2.0 depths over and up				

7.5.1.1	to 0m to 1.0m <sup>2</sup>	No	6		
<b>7.6</b>	<b>REINFORCEMENT</b>				
7.6.1	<u>Mild steel bars</u>				
7.6.1.1	Diameter 8mm to 16mm	t	0.2		
7.6.2	<u>High tensile steel bars</u>				
7.6.2.1	Diameter 8mm to 16mm	t	1.0		
7.6.3	<u>Mesh Ref 888</u>				
7.6.3.1	Dry beds	m2	1485.0		
<b>7.7</b>	<b>UNFORMED SURFACE FINISHES</b>				
7.7.1	<u>Wood float finished to:</u>				
7.7.1.1	Top of floor slabs	m <sup>2</sup>	1485		
7.7.1.2	Top of walls	m <sup>2</sup>	936		
<b>7.8</b>	<b>JOINTS</b>				
7.8.1	Type 1 - Construction joint	m	216		
7.8.2	Type 2 - Expansion joint	m	216		
<b>7.9</b>	<b>STRUCTURAL STEEL</b>				
7.9.1	Galvanised Steel profile IPE-AA 200	m	3		
7.9.2	PC 230 x 90	m	1		
<b>7.10</b>	<b>GRATING</b>				
7.10.1	Rectagrid	m <sup>2</sup>	6		
<b>7.11</b>	<b>HANDRAILS</b>				
	Balustrade assemblies complete with end stops and install for Walkways and Stairs				
7.11.1					
7.11.1.1	1) Horizontal	m	1		
7.11.1.2	2) At angle	m	1		
<b>7.12</b>	<b>MECHANICAL</b>				
7.12.1	<u>Dry beds</u>				
7.12.1.1	DN 150mm Isolation valves	No	6		
7.12.1.2	DN 150mm PVC pipe	m	120		
7.12.1.3	Handstops 0.4m x 0.6m	No	6		
<b>SUB-TOTAL CARRIED FORWARD TO SUMMARY</b>					

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>8</b>		<b>SECTION 8: OPERATIONS, ABLUTION &amp; GUARD HOUSE</b>				
<b>8.1</b>		<b>- EXCAVATION</b>				
8.1.1		Excavate in soft material for strip footings 600mm x 500mm deep	m	40		
8.1.2		Excavation for apron slab 0.7m X 0.1m deep	m	50		
<b>8.2</b>		<b>- CONCRETE</b>				
		<u>Strength concrete: Class 25 MPa/19mm concrete in</u>				
8.2.1		Strip footings	m3	6		
8.2.2		Base slab	m3	10		
8.2.3		Apron slab	m3	45		
<b>8.3</b>		<b>- FORMWORK</b>				
8.3.1		Formwork f	m2	20		
<b>8.4</b>		<b>REINFORCEMENT</b>				
8.4.1		High tensile steel bars Y12 to Y16	kg	80		
8.4.2		Mesh ref 888 in floor slab	m2	60		
<b>8.5</b>		<b>- JOINTS</b>				
8.5.1		Type 1 - Construction joint	m	10		
8.5.2		Type 2 - Expansion joint 15mm wide not exceeding 300mm in width	m	10		
<b>8.6</b>		<b>- UNFORMED SURFACE FINISHES</b>				
8.6.1		<u>Wood-floated finish</u>				
8.6.1.1		Ground Floor	m <sup>2</sup>	20		
<b>8.7</b>		<b>- WATERPROOFING</b>				
8.7.1		Gunplas Brickgrip" 375 micron dampproof in walls"	m	60		
8.7.2		Gunplas USB green "275 micron dampproof under surface beds"	m <sup>2</sup>	80		
<b>8.8</b>		<b>- BRICKWORK</b>				
8.8.1		<u>Stock Brickwork</u>				
		Supply, cut, fit and build brickwork in 7 MPa clay stock bricks in 9,5 MPa cement mortar in plastered walls				
8.8.1.1		Half brickwall (110mm)	m <sup>2</sup>	20		
8.8.1.2		One brickwall (220mm)	m <sup>2</sup>	60		
8.8.2		<u>Face Brickwork</u>				
		FBS, square rake jointed. Provide sample panel for architect approval. All brickwork to comply with SANS 10400.				

8.8.2.1	Semi Face brick skin	m <sup>2</sup>	80		
<b>8.9</b>	<b>TERMITE PROTECTION</b>				
8.9.1	SABS approved oilbased termite poison under floor	m <sup>2</sup>	80		
<b>8.10</b>	<b>Brickwork Reinforcement</b>				
8.10.1	Supply and install brickforce in 150mm wide strips	m	500		
<b>8.11</b>	<b>Fabricated Lintols</b>				
8.11.1	Prestressed precast concrete lintol 91,6mm wide not exceeding 3500mm long	No	9		
<b>8.12</b>	<b>WINDOW SILLS</b>				
8.12.1	Brick on edge and painted window cill	m	60		
<b>8.13</b>	<b>ROOF</b>				
	<i>The Contractor's prices for the following items must take account of and include for all of the obligations, requirements and specifications previously given in the Specifications to this Bill.</i>				
8.13.1	<u>Roof Trusses</u>				
8.13.1.1	Roof trusses with a mono pitch not exceeding 20 degrees complete with wallplates and purlins	m <sup>2</sup>	0		
8.13.1.2	Galvanised hoop irons 1.2m @ 1m c/c	No	0		
8.13.2	<u>Profile metal sheeting</u>				
8.13.3.1	0,58mm Chromadeck (Dark Dolphin) concealed fix SAF-Lock 700 Steel sheets including ridges, flashings as per Architects specification	m <sup>2</sup>	0		
8.13.3	<u>Insulation</u>				
8.13.3.1	4mm double foil sided alucushion FR (Code 1983) instaled onto roof trusses	m <sup>2</sup>	0		
8.13.4	<u>Facias and Rainwater</u>				
8.13.4.1	10 x 150mm fibre cement Facia	m	60		
8.13.4.2	75mm Chromadek gutter	m	60		
8.13.4.3	75mm x 50mm Chromadek downpipe	m	40		
<b>8.14</b>	<b>DOORS &amp; DOOR FRAME (As per finishing schedule)</b>				
	<i>All in accordance with Architects specifications</i>				
8.14.1	D1T	No	8		
8.14.2	D1S	No	12		
<b>8.15</b>	<b>WINDOWS (As per Architects finishing schedule)</b>				
	<i>All in accordance with Architects specifications</i>				
8.15.1	W1	No	4		
8.15.2	W2	No	6		
<b>8.16</b>	<b>CEILINGS &amp; CORNICES</b>				
	<i>All in accordance with Architects specifications</i>				
8.16.1	Board ceiling	m <sup>2</sup>	160		

<b>8.17</b>	<b>- IRONMONGERY</b>				
	Allow a provisional amount for the supply, store and fix of approved ironmongery to softwood, hardwood or pressed frames:	P/Sum	1		
8.17.1					
8.17.2	Contractors mark-up on item above	%	0.00		
	Supply and cast into floor finish:3mm x 40mm Hot dipped galvanised mild steel waterbar set in concrete floor	m	12		
8.17.3					
<b>8.18</b>	<b>- PLASTER</b>				
	<i>The Contractor's prices for the following items must take account of and include for all of the obligations, requirements and specifications previously given in the Specifications to this Bill.</i>				
8.18.1	Vertical brick surfaces	m <sup>2</sup>	420		
8.18.2	Narrow widths not exceeding 300mm wide	m <sup>2</sup>	80		
<b>8.19</b>	<b>- TILING</b>				
8.19.1	<u>Tiled Floors</u>				
	<i>Supply and fix the following tiles as per architects details with 3mm joints. Grout = TAL "Dove Grey". Provide tile movement joints to all room perimeters (to walls) and as shown on tile layout drawings.</i>				
8.19.1.1	Floor Tile 1 (Indoor) 600x600 porcelain tile, matt finish, (PC amount of R200/m <sup>2</sup> )	m <sup>2</sup>	420		
	Floor Tile 3 (Shower Mosaic) 300x300 sheets porcelain mosaic tile, A-grade, joints between sheets to match joints on sheet (PC amount of R140/m <sup>2</sup> )	m <sup>2</sup>	60		
8.19.1.2					
8.19.1.3	Tile movement joints to be 3mm PU joints.	m	40		
	Provide waterproofing behind the shower floor and walls, include membrane to all internal corners of walls & floor.	m <sup>2</sup>	60		
8.19.1.4					
8.19.2	<u>Tiled Floor Skirtings</u>				
	<i>All in accordance with Architects specifications</i>				
	100 mm high (total height to top of edge trim ) cut floor tile skirting (to match floor tile of room) with aluminium straight edge trim to top and external corners. 3mm joints. Note: no aluminium trim where wall tiles are used above skirting.	m	540		
8.19.2.1					
8.19.3	<u>Wall Tile 1 (General)</u>				
	Ceramic wall tile, TAL light grey grout, 3mm joints, (PC amount of R180/m <sup>2</sup> )	m <sup>2</sup>	140		
8.19.3.1					
8.19.3.2	Provide soft joints to all internal corners: grey PU joint.	m	80		
<b>8.20</b>	<b>- GLAZING</b>				
8.20.1	4mm Thick glass to areas not exceeding 1,5m <sup>2</sup>	m <sup>2</sup>	16		
8.20.2	6mm Thick glass to areas exceeding 1,5m <sup>2</sup>	m <sup>2</sup>	12		
8.20.3	Safety glass to all areas 0,5 m above FFL	m <sup>2</sup>	4		
<b>8.21</b>	<b>- PAINTING</b>				

		<i>All paint work (incl. surface preparation, primers, etc) to be completed as per paint manufacturer specifications to provide full paint guarantee. Provide sample paint-outs for client approval for all paint types &amp; colours</i>			
8.21.1		<u>W1A (Interior - Main Wall Colour)</u>			
8.21.1.1		Two Coats Plascon Professional Superior Low Sheen PEM 1000/TLS tint range. Colour to be confirmed.	m <sup>2</sup>	860	
8.21.2		- <u>W1B (Interior - Accent Wall Colours)</u>			
8.21.2.1		2 Coats Plascon Professional Superior Low Sheen PEM 1000/TLS tint range. Colour to be confirmed.	m <sup>2</sup>	420	
8.21.3		<u>W1C (Outdoor - Main Wall Colour)</u>			
8.21.3.1		2 Coats Plascon Professional Superior Low Sheen PEM 1000/TLS tint range. Colour to be confirmed.	m <sup>2</sup>	80	
8.21.4		- <u>CORNICES</u>			
8.21.4.1		CO1 (For Grid Ceilings) Pre-painted OWA white Shadowline Cornice to match ceiling grid.	m <sup>2</sup>	620	
8.21.5		- <u>STEEL DOOR FRAMES (internal &amp; external)</u>			
8.21.5.1		2x coats Plascon Water-Based Velvagro, Silky Sheen finish, on suitable primer, tinted range, colour to be confirmed.	m <sup>2</sup>	60	
8.21.6		- <u>INTERNAL FLUSH PANEL DOORS</u>			
8.21.6.1		2x coats Plascon Water-Based Velvagro, Silky Sheen finish, on suitable primer, colour to be confirmed.	m <sup>2</sup>	40	
8.21.7		- <u>STEEL ROOF, GUTTERS &amp; RWP</u>			
8.21.7.1		All 0,58 Chromadek, colour, Dark Dolphin.	m	80	
<b>8.22</b>		- <b>INTERNAL FINISHES</b> (All below finishes strickly to Architects specifications)			
8.22.2		<u>Formica tops</u>			
8.22.2.1		Formica lifeseal 30mm HPL to, post formed bullnose edge	m	82	
8.22.2.2		Adjustable steel legs	No	16	
8.22.2.3		Corner protectors as per Architects specification	m	16	
8.22.3		- <u>Joinery</u>			
8.22.3.1		Allow a provisional amount for kitchen cupboards including handles and drawer rails	P/Sum	1	
8.22.3.2		Contractors mark-up on above item	%	0.00	
<b>8.23</b>		<b>SANITARY SPECIFICATION</b> (All below to Architects specifications)			
8.23.1		Toilet complete	No	7	
8.23.2		Urinal complete	No	2	
8.23.3		Hand wash Basin with half pedestal complete with popup, waste piping and rubber P-Trap complete	No	7	

8.23.4	Basin tap for HWB 1	No	7		
8.23.5	Kitchen Sink complete	No	3		
8.23.6	Mixer tap for kitchen sink	No	5		
8.23.7	Shower stop taps	No	6		
8.23.8	Shower heads	No	6		
8.23.9	Shower outlets	No	6		
8.23.10	Stop valves and angle valves	No	6		
8.23.11	Washtrough	No	2		
8.23.12	Bib taps for washtrough	No	2		
8.23.13	Wall mounted soap dispensers - manual	No	4		
8.23.14	Shower door	No	2		
8.23.15	Lockers	No	8		
8.23.16	Electric hand dryer	No	2		
8.23.17	Toilet roll holder	No	7		
8.23.18	Allow a provisional amount for plumbing	P/Sum	1	65,000.00	65,000.00
8.23.19	Contractors markup and profit on above	%	65,000.00		
<b>8.24</b>	<b>HEATING AND COOLING OF BUILDING</b>				
8.24.1	<u>HVAC Systems</u>				
8.24.1.1	VRF Outdoor unit, 9kW Cooling Capacity	Ea	1		
8.24.1.2	Indoor units - midwall units of 2.5kW Cooling Capacity	Ea	3		
8.24.1.4	Refnet joints	Ea	1		
8.24.1.5	Mode Change Units	Ea	4		
8.24.2	<u>Refrigerant Piping will be copper piping of the following sizes and lengths</u>				
8.24.2.1	Diameter 15.88mm	m	40		
8.24.2.2	Diameter 12.7mm	m	25		
<b>8.25</b>	<b>CHLORINE CONTACT TANK</b>				
8.25.1	Provisional amount for contact tank	P/Sum	1	260,000.00	260,000.00
8.25.2	Allow a provisional amount for chlorine system	P/Sum	1	140,000.00	140,000.00
	<b>TOTAL OF SECTION 13 CARRIED TO SUMMARY</b>				

Item No	Payment Clause	Short Description	Unit	Quantity	Rate	Amount
<b>9</b>		<b>SECTION 9:</b>				
		<b>PIPEWORK</b>				
<b>9.1</b>		<b>WATER</b>				
<b>9.1.1</b>	SANS 1200 DB	<b>EARTHWORKS (PIPE TRENCHES)</b>				
	8.3.2	Excavate in all materials for trenches, backfill, compact and dispose of surplus material: Pipes over 125 mm dia up to 700 mm dia for depths:				
9.1.1.1		<u>Potable Water</u>				
9.1.1.1.1		Over 0 m up to 1,5 m	m	200		
9.1.2	8.3.2	<u>Extra over item 9.1 above for:</u>				
9.1.2.1		Intermediate material	m <sup>3</sup>	40		
9.1.2.2		Hard rock excavation	m <sup>3</sup>	20		
9.1.3		<u>Hand excavation where ordered by the Engineer:</u>				
9.1.3.1		Soft material	m <sup>3</sup>	100		
9.1.4	8.3.3	<u>Excavation ancillaries:</u>				
9.1.4.1	8.2.2-A	Backfill stabilized with 5% cement where directed by the Engineer	m <sup>3</sup>	50		
9.1.4.2	8.3.2 8.2.2 - A	Excavate and dispose of unsuitable material from trench bottom	m <sup>3</sup>	20		
9.1.5		<u>Make up deficiency in backfill material:</u>				
9.1.5.1		From other necessary excavations on Site	m <sup>3</sup>	20		
9.1.5.2		From temporary stockpile	m <sup>3</sup>	20		
9.1.5.3		By importation from commercial or off-site sources selected by the Contractor	m <sup>3</sup>	10		
9.1.5.4		Compaction of road crossings	m <sup>3</sup>	10		
<b>9.2</b>	SANS 1200 L	<b>MEDIUM-PRESSURE PIPELINES</b>				
	8.2.1	Supply, lay and bed as for flexible pipes, complete with butt welded joints:				
9.2.1		<u>PE100 HDPE PN12.5 pipes:</u>				
9.2.1.1		80 mm dia	m			
9.2.1.2		110 mm dia	m			
9.2.1.3		160 mm dia	m			
9.2.2		<u>PVC pipes</u>				
9.2.2.1		Diameter 110mm Class 9	m			
9.2.2.2		Diameter 160mm Class 9	m			

9.2.2.3		Diameter 200mm Class 9	m		
9.2.2.4		Diameter 350mm Class 9	m		
	8.2.2	Extra over for the supplying, laying, and bedding of HDPE specials complete with butt welded joints:			
		<u>45° bends: HDPE</u>			
		DN 80 mm Class 16	No	12	
		DN 110 mm Class 16	No	6	
		DN 160 mm Class 16	No	4	
		<u>45° bends: uPVC</u>			
		DN 75 mm Class 16	No	6	
		DN 110 mm Class 16	No	4	
		DN 160 mm Class 16	No	4	
		DN 200 mm Class 16	No	4	
		<u>90° bends: HDPE</u>			
		DN 80 mm Class 16	No	3	
		DN 110 mm Class 16	No	4	
		DN 160 mm Class 16	No	7	
		<u>90° bends: HDPE</u>			
		DN 75 mm Class 16	No	8	
		DN 110 mm Class 16	No	10	
		DN 160 mm Class 16	No	6	
		DN 200 mm Class 16	No	4	
		<u>Equal Tees: HDPE</u>			
		DN 80 mm	No	1	
		DN 110 mm	No	1	
		<u>Equal Tees: uPVC</u>			
		DN 75 mm	No	1	
		DN 110 mm	No	1	
		DN 160 mm	No	2	
		DN 200 mm	No	3	
		<u>Polypropylene saddles with stainless steel nuts and bolts, threaded for 1.5" elbow connection for:</u>			
		80 mm dia pipe	No	6	
		<u>End caps:</u>			
		110 mm dia	No	1	
		<u>Flanged adaptors:</u>			
		80 mm dia	No	8	
		110 mm dia	No	12	
		160 mm dia	No	12	
	8.2.3	<u>Extra over for supplying, fixing and bedding of flanged gate valves:</u>			
		80 mm dia	No	4	
		110 mm dia	No	4	

		160 mm dia	No	2		
	SANS 1200 L 8.2.11	<b>Anchor/thrust blocks complete</b>				
		<u>Concrete:</u> Class 25 MPa/19 mm including minimum steel reinforcement of 80 kg/m <sup>3</sup>	m <sup>3</sup>	6		
	8.2.12	<u>Concrete encasing:</u> Class 25 MPa/19 mm including minimum steel reinforcement of 80 kg/m <sup>3</sup>	m <sup>3</sup>	4		
	8.2.13	<b>Valve chambers etc:</b>				
		Valve chamber complete including all pipes, pipe fittings, flange connections, valve tee, valve unit, bedding and fixing of valve etc.	No	10		
	SANS 1200 LB	<b>BEDDING (PIPES)</b>				
		<u>Provision of bedding available from trench excavation</u>				
		Selected granular material	m <sup>3</sup>	80		
		Selected fill material	m <sup>3</sup>	55		
	8.2.2.1	<u>From other necessary excavations or temporary stockpile (Provisional):</u>				
		Selected granular material	m <sup>3</sup>	80		
		Selected fill material	m <sup>3</sup>	55		
	8.2.2.3	<u>From commercial sources:</u>				
		Selected granular material	m <sup>3</sup>	60		
		Selected fill material	m <sup>3</sup>	40		
	8.2.6-A	Extra over for bedding stabilized with 5% cement	m <sup>3</sup>	15		
	SANS 1200 LF	<b>BUILDING CONNECTIONS (WATER)</b>				
	8.2.2	Supply, lay and bed as for flexible pipes, and disinfect:				
		<u>PE 100 HDPE connections:</u>				
		50 mm dia PN 8 (Service water)	m	80		
	8.2.3	<u>Extra over for fittings complete with adaptors</u>				
		50 mm dia brass ball valves	No	10		
		<u>90 deg "Alprene" elbows (or similar approved):</u>				
		40 mm x 1.5" male offtake	No	6		
		50 mm x 1.5" male offtake	No	22		
		<u>90 deg "Alprene" standard elbow for:</u>				

		40 mm dia pipe	No	20	
		50 mm dia pipe	No	22	
		50 x 50 mm "Alprene" tee with compression fittings	No	11	
		40 mm x 2" "Alprene" flanged connector	No	11	
		50 mm HDPE/19 mm copper adaptor	No	22	
		40 mm HDPE/40 mm mild steel adaptor	No	6	
8.2.3		<b>Stand pipes:</b>			
		Supply and install stand pipes as per drawing including 19 mm copper piping, 90 deg bend, bronze tap with threaded bibond fixing plate, and fixing brackets on stirups fitted to:			
		Walls	No	6	
		<b>SEWER</b>			
SANS 1200 DB		<b>EARTHWORKS (PIPE TRENCHES)</b>			
8.3.2 8.2.2 - A		Excavate in all materials for trenches, backfill, compact and dispose of surplus material:			
		Pipes up to 300 mm dia for depths:			
		Up to 1,0m	m	86	
		Over 1,0 m up to 2,0 m	m	60	
		Over 2,0 m up to 3,0 m	m	40	
8.3.2		<u>Extra over above for:</u>			
		Intermediate material	m <sup>3</sup>	60	
8.2.2 - A		Hard rock excavation	m <sup>3</sup>	20	
8.3.3		<b>Excavation ancillaries:</b>			
8.3.3.1		<u>Make up deficiency in backfill material:</u>			
		From other necessary excavations on Site	m <sup>3</sup>	10	
		From temporary stockpile	m <sup>3</sup>	10	
		By importation from commercial or off-site sources selected by the Contractor	m <sup>3</sup>	40	
8.3.3.3		Compaction in road crossings to 100% MAMDD	m <sup>3</sup>	10	
SANS 1200 LB		<b>BEDDING FOR SEWER PIPES</b>			
8.2.1 - A		<u>Provision of bedding from trench excavations:</u>			
		Selected granular and fill material (including screening)	m <sup>3</sup>	80	
		<u>From other necessary excavations or temporary stockpile:</u>			
		Selected granular material	m <sup>3</sup>	20	
		Padding sand to specified bedding dimensions	m <sup>3</sup>	10	
8.2.2.3		<u>From commercial sources:</u>			

		Selected granular material	m <sup>3</sup>	30		
		Selected fill material	m <sup>3</sup>	15		
	SANS 1200 LD	<b>SEWER PIPES</b>				
	8.2.1	Supply, lay, joint, bed as for flexible pipes and test pipeline:				
		<u>uPVC Class 34 pipes</u>				
		110 mm dia	m	120		
		160 mm dia	m	60		
	8.2.2	Extra over for the supplying, laying, and bedding of specials complete with couplings:				
		110mm dia x 45° bend	No	7		
		160 mm dia end cap	No	2		
		110 x 100 mm dia Y-junction	No	5		
		110 x 110mm dia equal tee	No	2		
		110mm dia x 90° bend	No	1		
	SANS 1200 LD 8.2.3	Supply and install precast concrete manholes complete as shown on drawing, including all materials, excavations and disposal of surplus material:				
		Depth 1,0 m up to 1,5 m	No	1		
		Depth 1,5 m up to 2,0 m	No	1		
		Depth 2,0 m up to 2,5 m	No	1		
	8.2.7	<b>Encasing of pipes in concrete:</b> (Only where ordered by the engineer)				
	SANS 1200	<u>Concrete:</u>				
		Class 15MPa/19 concrete with minimum steel reinforcement of 80 kg/m <sup>3</sup>	m <sup>3</sup>	5		
		Marker posts	No	10		
		<b>CONNECTION INTO EXISTING PIPELINE</b>				
		Connect into existing pipe lines including all labour and materials to complete the connections				
		Dia. 315mm	No	1		
		<b>PRESSURE TEST (ENTIRE LINE)</b>				
		Pressure test the entire line	Sum	1		
		<b>TOTAL OF SECTION CARRIED TO SUMMARY</b>				

Item No	Payment Clause	Short Description	Unit	Quant	Rate	Amount
<b>10</b>		<b>SECTION 10: ROADS AND STORMWATER</b>				
<b>10.1</b>	SANS 1200 C	<b>SITE CLEARANCE</b>				
10.1.1	8.2.1	<u>Clear and grub areas to:</u>				
10.1.1.1		Access Road	m <sup>2</sup>	140		
<b>10.2</b>	SANS 1200 D	<b>EARTHWORKS - BULK EXCAVATIONS</b>				
	8.3.2	<b>Remove topsoil</b> to a nominal depth of 150mm and stockpile				
10.2.1	8.2.10	Access Road	m2	140		
10.2.2		<b>Excavate</b> in all materials and use <b>for fill</b> or embankments compacted to 93% of MAMDD				
10.2.2.1		Access Road	m3	21		
10.2.3		<b>Excavate</b> in all materials and <b>spoil</b> within freehaul of 2 km				
10.2.3.1		Access Road	m3	21		
10.2.4		<b>Excavate</b> in all materials <b>to stockpile</b>				
10.2.4.1		Access Road	m3	21		
<b>10.3</b>	SANS 1200 DM	<b>EARTHWORKS (ROADS, SUBGRADE)</b>				
10.3.1	8.3.3	<b>150mm layer Roadbed preparation</b> and compaction of material to Minimum of 90% of MAMDD				
10.3.1.1		Access Road	m2	120		
10.3.1.2		Internal Road	m2	2700		
10.3.2		<b>Extra over</b> for Three-pass roller compaction (as ordered by engineer):				
10.3.2.1		Vibratory roller	m2	120		
10.3.2.2		Grid Roller	m2	2700		
10.3.3	8.3.4	<b>G7 fill material from stockpile</b> and compact to 90% of MAMDD to:				
10.3.3.1	8.2.2 - A	Access Road	m3	21		
10.3.3.2		Internal Road	m3	475		
10.3.4	8.2.8 - A	<b>Extra over</b> items .... for obtaining material <b>from commercial sources</b>				
10.3.4.1		Access Road	m3	21		
10.3.4.2		Internal Road	m3	475		

10.3.5		<u>Final finishing and cleaning up of the Site of the Works</u>			
10.3.5.1	8.2.9 - A	Final finishing and cleaning up of the Site of the Works	Sum	1	
<b>10.4</b>	SANS 1200 ME	<b>SUBBASE</b>			
10.4.1	8.3.3	Construct the subbase course with material from commercial sources (G5) to a thickness of:			
10.4.1.1	8.2.2 - A	Internal Road	m3	21	
10.4.1.2		Access Road	m3	475	
<b>10.5</b>	SANS 1200 MF	<b>BASE</b>			
10.5.1	8.3.3	Construct base with material from commercial sources and compact:			
10.5.1.1	8.1.1 - A	Access Road (C4 layer 150 mm thick compacted to 97% MOD AASHTO maximum density)	m3	21	
		Internal Road (C4 layer 150 mm thick compacted to 97% MOD AASHTO maximum density)	m3	475	
<b>10.6</b>		<b>INTERLOCKING PAVERS</b>			
10.6.1		80mm 35 Mpa concrete interlocking pavers	m2	496	
10.6.2		20mm sand layer	m3	10	
<b>10.7</b>	SANS 1200 MK 8.2.1 - 8.1.1 - A	<b>KERBING AND CHANNELLING</b>			
		<i>Precast concrete kerbing:</i>			
10.7.1		<u>Barrier kerb: type (Fig. 3):</u>			
10.7.1.1		Radius up to 4 m	m	20	
10.7.1.2		Radius over 4 m up to 20 m	m	40	
10.7.1.3		Radius over 20 m and straight sections	m	932	
10.7.2	8.2.6	<u>Inlet, outlet, transition and similar structures:</u>			
10.7.2.1	8.2.6.1	Supply and install concrete bollards	No	4	
10.7.2.2	8.2.8	Cast in-situ kerbing and channeling (25MPa)	m3	20	
<b>10.8</b>	SANS 1200 MM	<b>ANCILLARY ROADWORKS</b>			
		<b>PERMANENT ROAD SIGNS</b>			
		<i>Sign faces with painted/galvanized background, with painted symbols, characters, legends and borders and with signboard constructed from:</i>			
10.8.1	8.3.1	<u>Aluminium sheet (2,0 mm thick), of area:</u>			
10.8.1.1		Up to 2 m <sup>2</sup>	m2	4	

10.8.2	8.3.2	<u>Provision and application of retro-reflective material:</u>			
10.8.2.1		Engineering grade retro-reflective background, characters, symbols, legend and borders	m2	6	
10.8.3	8.3.3	<u>Sign supports:</u>			
10.8.3.1		Steel tubing 100 mm dia galvanised, 2,4 m long	No	4	
10.8.4	8.3.4	<u>Excavation and backfilling and concreting for sign supports:</u>			
10.8.4.1		Backfill with soilcrete (1 cement:4 sand)	m3	3	
10.8.5	8.3.6	<u>Statutory signs, street names and the like, supplied and erected complete (610 mm):</u>			
10.8.5.1		STOP	No	2	
10.8.5.2		YIELD	No	2	
<b>10.9</b>		<b>ROAD MARKINGS</b>			
	8.4.1	<i>Proprietary brand road marking material applied at nominal rate of 0,42 litre/m<sup>2</sup>:</i>			
10.9.1		<u>White lines (broken or unbroken):</u>			
10.9.1.1		100 mm wide	m	360	
10.9.1.2		300 mm wide	m	20	
10.9.1.3		White characters and symbols	m2	4	
10.9.1.4		Yellow characters and symbols	m2	4	
10.9.1.5		Traffic island markings (any colour)	m2	6	
10.9.2	8.4.4	<u>Setting out and premarking:</u>			
10.9.2.1		Lines (excluding traffic island markings, characters and symbols)	m	360	
<b>10.10</b>		<b>EARTH RETAINING SYSTEMS</b>			
10.10.1	SANS 1200 D	Excavate and backfill to footings	m3	140	
10.10.2	Spec WL 8.1.2	<u>Construct dry-laid precast concrete block wall using Loffelstein blocks at 60°</u>			
10.10.2.1		L 500 blocks	m2	320	
10.10.2.2	8.1.3	Installation of geosynthetic reinforcement system to wall where ordered by the Engineer - Non woven filter fabric Grade 2	m2	320	
<b>10.11</b>	SANS 1200 DK	<b>GABION RETAINING STRUCTURE:</b>			
10.11.1	SANS 1200 D	<u>Excavation and backfilling:</u>			
10.11.1.1	8.3.3	Restricted excavation for gabions	m3	160	
10.11.1.2	8.3.9	Backfill to gabion wall, using G7 quality material from stockpile in 250mm layers, compacted to 93% MAMDD (100% for sand)	m2	220	

10.11.2		<u>200mm thick sand layer to Terramesh tie-backs compacted to 100% MAMDD, using material from:</u>				
10.11.2.1		Stockpile	m3	60		
10.11.2.2		Commercial sources	m3	20		
10.11.3	8.2.1	<u>Surface preparation for bedding of gabions:</u>				
10.11.3.1		Cavities filled with approved excavated material or rock	m3	220		
10.11.3.2		Cavities filled with grade 15 concrete	m3	20		
<b>10.12</b>	8.2.2	<b><u>Gabions:</u></b>				
10.12.1		Gabion boxes of coated galvanized wire 80 mm x 100 mm mesh; 2,4 mm dia wire:				
10.12.1.1		2 m x 1 m x 1 m boxes	m3	80		
10.12.1.2		1 m x 1 m x 1 m boxes	m3	60		
10.12.1.3		2m x 1 m x 0.5 m boxes	m3	40		
10.12.1.4		1 m x 1 m x 0.5 m boxes	m3	40		
10.12.1.5	8.2.4	Geofabric : Grade 2	m2	220		
		Terramesh tie-back mesh panels	m2	60		
<b>10.13</b>	SANS 1200 LE	<b>STORMWATER DRAINAGE</b>				
10.13.1	8.2.1	Supply and lay type SC Class 100D concrete pipes with spigot and socket joints, on Class C bedding:				
10.13.1.1		450 mm dia	m	178		
10.13.2	8.2.8	Supply and install brick side drain inlet structure complete as shown on drawing, including all materials, excavations and disposal of surplus material:				
10.13.2.1	8.2.8 c)	Depth 1,0 m up to 1,5 m	No	7		
10.13.3	8.2.8	Construct headwalls complete as shown on drawing, including all materials, excavations and disposal of surplus material:				
10.13.3.1		Type 1 & 2 headwall on pipes up to 450 mm dia	No	4		
		<b>TOTAL OF SECTION 10 CARRIED TO SUMMARY</b>				

Item No	Payment Clause	Short Description	Unit	Quant	Rate	Amount
<b>10</b>		<b>SECTION 10: ROADS AND STORMWATER</b>				
<b>10.1</b>	SANS 1200 C	<b>SITE CLEARANCE</b>				
10.1.1	8.2.1	<u>Clear and grub areas to:</u>				
10.1.1.1		Access Road	m <sup>2</sup>	140		
<b>10.2</b>	SANS 1200 D	<b>EARTHWORKS - BULK EXCAVATIONS</b>				
	8.3.2	<b>Remove topsoil</b> to a nominal depth of 150mm and stockpile				
10.2.1	8.2.10	Access Road	m2	140		
10.2.2		<b>Excavate</b> in all materials and use <b>for fill</b> or embankments compacted to 93% of MAMDD				
10.2.2.1		Access Road	m3	21		
10.2.3		<b>Excavate</b> in all materials and <b>spoil</b> within freehaul of 2 km				
10.2.3.1		Access Road	m3	21		
10.2.4		<b>Excavate</b> in all materials <b>to stockpile</b>				
10.2.4.1		Access Road	m3	21		
<b>10.3</b>	SANS 1200 DM	<b>EARTHWORKS (ROADS, SUBGRADE)</b>				
10.3.1	8.3.3	<b>150mm layer Roadbed preparation</b> and compaction of material to Minimum of 90% of MAMDD				
10.3.1.1		Access Road	m2	120		
10.3.1.2		Internal Road	m2	2700		
10.3.2		<b>Extra over</b> for Three-pass roller compaction (as ordered by engineer):				
10.3.2.1		Vibratory roller	m2	120		
10.3.2.2		Grid Roller	m2	2700		
10.3.3	8.3.4 8.2.2 - A	<b>G7 fill material from stockpile</b> and compact to 90% of MAMDD to:				
10.3.3.1		Access Road	m3	21		
10.3.3.2		Internal Road	m3	475		
10.3.4	8.2.8 - A	<b>Extra over</b> items .... for obtaining material <b>from commercial sources</b>				
10.3.4.1		Access Road	m3	21		
10.3.4.2		Internal Road	m3	475		

10.3.5		<u>Final finishing and cleaning up of the Site of the Works</u>			
10.3.5.1	8.2.9 - A	Final finishing and cleaning up of the Site of the Works	Sum	1	
<b>10.4</b>	SANS 1200 ME	<b>SUBBASE</b>			
10.4.1	8.3.3	Construct the subbase course with material from commercial sources (G5) to a thickness of:			
10.4.1.1	8.2.2 - A	Internal Road	m3	21	
10.4.1.2		Access Road	m3	475	
<b>10.5</b>	SANS 1200 MF	<b>BASE</b>			
10.5.1	8.3.3	Construct base with material from commercial sources and compact:			
10.5.1.1	8.1.1 - A	Access Road (C4 layer 150 mm thick compacted to 97% MOD AASHTO maximum density)	m3	21	
		Internal Road (C4 layer 150 mm thick compacted to 97% MOD AASHTO maximum density)	m3	475	
<b>10.6</b>		<b>INTERLOCKING PAVERS</b>			
10.6.1		80mm 35 Mpa concrete interlocking pavers	m2	496	
10.6.2		20mm sand layer	m3	10	
<b>10.7</b>	SANS 1200 MK 8.2.1 - 8.1.1 - A	<b>KERBING AND CHANNELLING</b>			
		<i>Precast concrete kerbing:</i>			
10.7.1		<u>Barrier kerb: type (Fig. 3):</u>			
10.7.1.1		Radius up to 4 m	m	20	
10.7.1.2		Radius over 4 m up to 20 m	m	40	
10.7.1.3		Radius over 20 m and straight sections	m	932	
10.7.2	8.2.6	<u>Inlet, outlet, transition and similar structures:</u>			
10.7.2.1	8.2.6.1	Supply and install concrete bollards	No	4	
10.7.2.2	8.2.8	Cast in-situ kerbing and channeling (25MPa)	m3	20	
<b>10.8</b>	SANS 1200 MM	<b>ANCILLARY ROADWORKS</b>			
		<b>PERMANENT ROAD SIGNS</b>			
		<i>Sign faces with painted/galvanized background, with painted symbols, characters, legends and borders and with signboard constructed from:</i>			
10.8.1	8.3.1	<u>Aluminium sheet (2,0 mm thick), of area:</u>			
10.8.1.1		Up to 2 m <sup>2</sup>	m2	4	

10.8.2	8.3.2	<u>Provision and application of retro-reflective material:</u>			
10.8.2.1		Engineering grade retro-reflective background, characters, symbols, legend and borders	m2	6	
10.8.3	8.3.3	<u>Sign supports:</u>			
10.8.3.1		Steel tubing 100 mm dia galvanised, 2,4 m long	No	4	
10.8.4	8.3.4	<u>Excavation and backfilling and concreting for sign supports:</u>			
10.8.4.1		Backfill with soilcrete (1 cement:4 sand)	m3	3	
10.8.5	8.3.6	<u>Statutory signs, street names and the like, supplied and erected complete (610 mm):</u>			
10.8.5.1		STOP	No	2	
10.8.5.2		YIELD	No	2	
<b>10.9</b>		<b>ROAD MARKINGS</b>			
	8.4.1	<i>Proprietary brand road marking material applied at nominal rate of 0,42 litre/m<sup>2</sup>:</i>			
10.9.1		<u>White lines (broken or unbroken):</u>			
10.9.1.1		100 mm wide	m	360	
10.9.1.2		300 mm wide	m	20	
10.9.1.3		White characters and symbols	m2	4	
10.9.1.4		Yellow characters and symbols	m2	4	
10.9.1.5		Traffic island markings (any colour)	m2	6	
10.9.2	8.4.4	<u>Setting out and premarking:</u>			
10.9.2.1		Lines (excluding traffic island markings, characters and symbols)	m	360	
<b>10.10</b>		<b>EARTH RETAINING SYSTEMS</b>			
10.10.1	SANS 1200 D	Excavate and backfill to footings	m3	140	
10.10.2	Spec WL 8.1.2	<u>Construct dry-laid precast concrete block wall using Loffelstein blocks at 60°</u>			
10.10.2.1		L 500 blocks	m2	320	
10.10.2.2	8.1.3	Installation of geosynthetic reinforcement system to wall where ordered by the Engineer - Non woven filter fabric Grade 2	m2	320	
<b>10.11</b>	SANS 1200 DK	<b>GABION RETAINING STRUCTURE:</b>			
10.11.1	SANS 1200 D	<u>Excavation and backfilling:</u>			
10.11.1.1	8.3.3	Restricted excavation for gabions	m3	160	
10.11.1.2	8.3.9	Backfill to gabion wall, using G7 quality material from stockpile in 250mm layers, compacted to 93% MAMDD (100% for sand)	m2	220	

10.11.2		<u>200mm thick sand layer to Terramesh tie-backs compacted to 100% MAMDD, using material from:</u>			
10.11.2.1		Stockpile	m3	60	
10.11.2.2		Commercial sources	m3	20	
10.11.3	8.2.1	<u>Surface preparation for bedding of gabions:</u>			
10.11.3.1		Cavities filled with approved excavated material or rock	m3	220	
10.11.3.2		Cavities filled with grade 15 concrete	m3	20	
<b>10.12</b>	8.2.2	<b><u>Gabions:</u></b>			
10.12.1		Gabion boxes of coated galvanized wire 80 mm x 100 mm mesh; 2,4 mm dia wire:			
10.12.1.1		2 m x 1 m x 1 m boxes	m3	80	
10.12.1.2		1 m x 1 m x 1 m boxes	m3	60	
10.12.1.3		2m x 1 m x 0.5 m boxes	m3	40	
10.12.1.4		1 m x 1 m x 0.5 m boxes	m3	40	
10.12.1.5	8.2.4	Geofabric : Grade 2	m2	220	
		Terramesh tie-back mesh panels	m2	60	
<b>10.13</b>	SANS 1200 LE	<b>STORMWATER DRAINAGE</b>			
10.13.1	8.2.1	Supply and lay type SC Class 100D concrete pipes with spigot and socket joints, on Class C bedding:			
10.13.1.1		450 mm dia	m	178	
10.13.2	8.2.8	Supply and install brick side drain inlet structure complete as shown on drawing, including all materials, excavations and disposal of surplus material:			
10.13.2.1	8.2.8 c)	Depth 1,0 m up to 1,5 m	No	7	
10.13.3	8.2.8	Construct headwalls complete as shown on drawing, including all materials, excavations and disposal of surplus material:			
10.13.3.1		Type 1 & 2 headwall on pipes up to 450 mm dia	No	4	
		<b>TOTAL OF SECTION 10 CARRIED TO SUMMARY</b>			

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>11</b>	<b>SCHEDULE 11: ELECTRICAL</b>				
<b>11.1</b>	<b>GENERAL REQUIREMENTS</b>				
11.1.1	Test and commission the entire installation	Sum	1		
11.1.2	"As-built" drawings	Sum	1		
11.1.3	Certificate of Compliance of the Works	Sum	1		
<b>11.2</b>	<b>DUCT TRENCHING</b>				
	Excavate in all materials for cable trenches, backfill, compact and dispose of surplus material for ducts up to 160mm dia. for depths:				
11.2.1	<u>2 No 110 mm dia ducts per trench:</u>				
11.2.1.1	0,5 m                      1,5 m	m	120		
11.2.2	<u>4 No 110 mm dia ducts per trench</u>				
11.2.2.1	0,5 m                      1,5 m	m	80		
11.2.3	<u>2 No 160 mm dia ducts per trench:</u>				
11.2.3.1	0,5 m                      1,5 m	m	80		
11.2.4	<u>4 No 160 mm dia ducts per trench</u>				
11.2.4.1	0,5 m                      1,5 m	m	60		
11.2.5	Extra-over for intermediate material	m <sup>3</sup>	60		
11.2.6	Danger tape - 400mm wide overlapping	m	340		
11.2.7	Excavate and dispose of unsuitable material from trench bottom	m <sup>3</sup>	10		
<b>11.3</b>	<b>CABLE DUCTS</b>				
	Supply, lay, bed and prove duct complete with ultra-violet resistant draw wire:				
11.3.1	<u>uPVC Class 34 Pipe:</u>				
11.3.1.1	110 mm dia	m	220		
11.3.1.2	160 mm dia	m	120		
<b>11.4</b>	<b>DRAW PITS / MANHOLES</b>				
11.4.1	Manhole Type A	No	4		
11.4.2	Manhole Type B	No	12		
<b>11.5</b>	<b>BEDDING</b>				
	Provision of bedding available from:				
11.5.1	<u>Trench excavation:</u>				

11.5.1.1	<b>Selected granular material</b>				
	Selected fill material	m <sup>3</sup>	41		
		m <sup>3</sup>	82		
11.5.4	Extra over items 12.5 for bedding stabilized with 5% cement	m <sup>3</sup>	20		
<b>11.6</b>	<b>DUCT MARKERS</b>				
11.6.1	Kerb markers (E cut into kerb)	No	30		
<b>11.7</b>	<b>ELECTRICAL WORK - BUILDINGS</b>				
11.7.1	<u>Inlet Works</u>				
	Allow a provisional amount for DB	P/Sum	1	14,200.00	14,200.00
	Allow a provisional amount for low voltage electrical	P/Sum	1	18,000.00	18,000.00
	Allow a provisional amount for cabling	P/Sum	1	12,000.00	12,000.00
	Contractors mark-up on above item	%	59240		
	Excavate 600m deep, bed and backfill for electrical cables	m	120		
11.7.2	<u>Bioreactor</u>				
	Allow a provisional amount for MCC's	P/Sum	1	691,200.00	691,200.00
	Allow a provisional amount for low voltage electrical	P/Sum	1	32,000.00	32,000.00
	Allow a provisional amount for new cabling	P/Sum	1	30,000.00	30,000.00
	Contractors mark-up on above item	%	753,200		
	Excavate 600m deep, bed and backfill for electrical cables	m	140		
11.7.3	<u>Clarifiers x 2</u>				
	Allow a provisional amount for cabling	P/Sum	1	32,000.00	32,000.00
	Allow a provisional amount for low voltage electrical	P/Sum	1	18,000.00	18,000.00
	Contractors mark-up on above item	%	50,000		
	Excavate 600m deep, bed and backfill for electrical cables	m	140		
11.7.4	<u>WAS / RAS Pump Stations</u>				
11.7.4.1	Allow a provisional amount for cabling	P/Sum	1	48,000.00	48,000.00
11.7.4.2	Allow a provisional amount for low voltage electrical	P/Sum	1	36,000.00	36,000.00
11.7.4.3	Contractors mark-up on above item	%	84,000		
11.7.4.4	Excavate 600m deep, bed and backfill for electrical cables	m	180		
11.7.5	<u>Operational building</u>				
11.7.5.1	Allow a provisional amount for cabling	P/Sum	1	18,000.00	18,000.00
11.7.5.2	Allow a provisional amount for low voltage electrical	P/Sum	1	26,000.00	26,000.00
11.7.5.3	Contractors mark-up on above item	%	44,000		
11.7.5.4	Excavate 600m deep, bed and backfill for electrical cables	m	20		
11.7.5.5	Chase into wall, install 20mm pvc sleeve and make good	m	40		
11.7.6	<u>Ablution building</u>				

11.7.6.1	Allow a provisional amount for cabling	P/Sum	1	20,000.00	20,000.00
11.7.6.2	Allow a provisional amount for low voltage electrical	P/Sum	1	24,000.00	24,000.00
11.7.6.3	Contractors mark-up on above item	%	44,000		
11.7.6.4	Excavate 600m deep, bed and backfill for electrical cables	m	20		
	Chase into wall, install 20mm pvc sleeve and make good	m	60		
11.7.7	<u>Guard House</u>				
11.7.7.1	Allow a provisional amount for cabling	P/Sum	1	14,000.00	14,000.00
11.7.7.2	Allow a provisional amount for low voltage electrical	P/Sum	1	16,000.00	16,000.00
11.7.7.3	Contractors mark-up on above item	%	30,000		
11.7.7.4	Excavate 600m deep, bed and backfill for electrical cables	m	20		
11.7.7.5	Chase into wall, install 20mm pvc sleeve and make good	m	30		
<b>11.8</b>	<b>STANDBY GENERATOR</b>				
11.8.1	- Generator set 315 KVA	No	1		
11.8.2	Cabling	m	200		
<b>11.9</b>	<b>SITE &amp; ROADS LIGHTING</b>				
11.9.1	- Street Lights fitted to existing poles (type	No	12		
<b>TOTAL OF SECTION 11 CARRIED TO SUMMARY</b>					

SECTION	ITEM	AMOUNT	
Section 1	Preliminary & General Items		
Section 2	Bulk Earthworks	R	-
Section 3	Collector Chamber, Inlet works, Dump & Skip slabs	R	-
Section 4	Bioreactor	R	-
Section 5	Clarifiers (2 off)	R	-
Section 6	WAS /RAS Pump Stations	R	-
Section 7	Sludge Dry Beds	R	-
Section 8	Operations, Ablution & Guard House	R	-
Section 9	Water and Sewer	R	-
Section 10	Roads	R	-
Section 11	Electrical	R	-
	Sub-Total	R	-
	Contingencies (10%)	R	-
	Sub-Total	R	-
	15% VAT	R	-
	<b>NET TOTAL CARRIED TO FORM OF OFFER</b>	<b>R</b>	<b>-</b>

## PART C3: SCOPE OF WORK



## SCOPE OF WORK

<b>PART C3: SCOPE of WORK</b>
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<b><u>SECTION</u></b>	<b><u>DESCRIPTION</u></b>
<b>C3.1</b>	<b>DESCRIPTION OF WORKS</b>
C3.1.1	Employer's objectives
C3.1.2	Overview of the Works
C3.1.3	Extent of Works
C3.1.4	Location of the Works
C3.1.5	Temporary Works
<b>C3.2</b>	<b>EMPLOYER'S AGENT ING</b>
C3.2.1	Design
C3.2.2	Employer's Design
C3.2.3	Contractor's Design
C3.2.4	Tender Drawings
C3.2.5	Design procedure
<b>C3.3</b>	<b>SUBCONTRACTING</b>
<b>C3.4</b>	<b>CONSTRUCTION</b>
C3.4.1	Works specifications
C3.4.2	Site establishment
C3.4.3	Plant & Materials
C3.4.4	Construction equipment
C3.4.5	Existing Services
C3.4.6	Variations and additions to SABS 1200 Standardized specifications and particular specifications

**C3.5 MANAGEMENT OF THE WORKS**

C3.5.1 Generic Specification

**C3.6 HEALTH AND SAFETY**

C3.6.1 Health and Safety requirements and procedures

C3.6.2 Protection of the Public

C3.6.3 Barricades and lighting

C3.6.4 Traffic control on roads

**STATUS**

In the event of any discrepancy between the Scope of Works and a part or parts of the SABS 1200 Standardized Specifications, the Bill of Quantities or the Drawings, the Project Specifications shall take precedence and prevail in the Contract.

<b>C3.1: DESCRIPTION of WORKS</b>
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**C3.1 DESCRIPTION OF WORKS****C3.1.1 Employer's objectives**

The Employers objective is to upgrade the Emanzana WWTW from a pond system to a full conventional plant with a maximum design capacity of 1.4 MI/d.

**C3.1.2 Overview of the works**

The project entails the construction of new concrete infrastructure i.e. Bulk earthworks, Inlet works, Bioreactor, Clarifier, WAS and RAS pump stations, chlorine contact tanks, Sludge Dry beds, Roads and stormwater, operational building as well as maintenance items and repairs to the existing sludge ponds. The Contractor will be responsible for the supply and installation of all materials for the complete installation and commissioning as to ensure a working project.

**C3.1.3 Extent of the works**

The scope of the Works is further summarised as follows:

- Contractor's site establishment, maintenance thereof and removal after completion.
- Bulk earthworks
- Internal Roads, paving and stormwater control.
- 1 x New Inlet works.
- 1 x New Bioreactor
- 2 x New Clarifier.
- 6 x Sludge Dry beds
- 1 x RAS Pump station
- 1 x WAS Pump station
- 1 x Chlorine contact tank
- Completion of the new operational buildings.

- All electrical work in the new building, including all new luminaires, socket outlets and earthing.
- Interconnecting pipework
- Rehabilitate and finish-off site and surrounds and clean off all excess materials.
- Dealing with a nominated CLO and local Project Steering Committee regarding social aspects and local labour recruitment.

**C3.1.4 Location of the works**

The Emanzana WWTW is located just outside Badplaas, approximately 1.4 km on the R541 to Eerstehoek, under jurisdiction of the Chief Albert Luthuli Municipality.

**C3.1.5 Temporary works**

The following items shall generally form the majority of temporary works required under this Contract, however, shall not be limited to such, and might be expanded or changed by the Employer's Agent should circumstances on site validate such decisions.

These works will be as follows:

- Clearing site and surroundings to create accessible working areas as required
- Provide temporary fencing around Contractor's camp site and Contractor's site office
- Provide Contractor's Camp site and Contractor's site office
- Provide site and administrative personnel, including security staff etc as required
- Setting out of the works by the contractor
- Monitor and report levels as construction progresses
- Manage all site staff, CLO and local labourers, plant, equipment, and materials etc
- Manage all required quality control procedures as specified and as instructed by Employer's Agent
- Provide all personnel, equipment, clothing, accessories etc. to adhere to the OHS Act
- Attend official Site Meetings scheduled and chaired by the Employer's Agent and managed sufficient additional meetings on site with all personnel and CLO to ensure compliance with the OHS Act and to ensure progress on site according to the accepted Construction programme.

**C3.2 EMPLOYER'S AGENT****C3.2.1 DESIGN**

(a) The Employer is responsible for the design of the Permanent Works as reflected in the Contract Documents unless otherwise stated.

- (b) The Contractor is responsible for the design of the Temporary Works and their compatibility with the permanent Works.
  
- (c) The Contractor shall supply all details necessary to assist the Employer's Agent in the compilation of the as-built drawings.

**C3.2.2 EMPLOYER'S DESIGN**

The Employer is responsible for the design of the entire upgrade, including all peripheral repair and site works.

**C3.2.3 CONTRACTOR'S DESIGN**

Where contractor is to supply the design of designated parts of the permanent Works or temporary Works, he shall supply full working drawings supported by a professional Employer's Agent 's design certificate.

**C3.2.4 DRAWINGS**

The Contractor shall use only the dimensions stated in figures on the Drawings in setting out the Works, and dimensions shall not be scaled from the Drawings, unless required by the Employer's Agent . The Employer's Agent will, on the request of the Contractor in accordance with the provisions of the Conditions of Contract, provide such dimensions as may have been omitted from the Drawings.

The Contractor shall ensure that accurate as-built records are kept of all infrastructure installed or relocated during the contract. The position of pipe bends, junction boxes, duct ends, and all other underground infrastructure shall be given by either co-ordinates or stake value and offset. Where necessary, levels shall also be given. A marked-up set of drawings shall also be kept and updated by the Contractor. This information shall be supplied to the Employer's Agent 's Representative on a regular basis.

All information in possession of the Contractor, required by the Employer's Agent and/or the Employer's Agent 's Representative to complete the as built/record drawings, must be submitted to the Employer's Agent 's Representative before a Certificate of Completion will be issued.

The Drawings prepared by the Employed for the permanent Works are listed and bound at the back of this volume. The Employer reserves the right to issue amended and/or additional drawings during the Contract.

**TENDER DRAWINGS:**

The following drawings/documents are bound in Section C4 and shall form part of the tender documentation.

	<u>GENERAL</u>	
11364-000-001	Drawing List	Plan
11364-000-002	Sign Board	Details
11364-004-001	Site Development Plan	Layout
11364-004-002	Survey Plan	Layout
11364-004-003	Hydraulic Profile	Layout
11364-004-004	Process	Layout
	<u>CIVIL</u>	-
11364-150-001	Earthworks	Layout
11364-400-001	Truck dump slab/Skip slab and manhole	Layout and Sections
11364-400-002	Inlet works	Layout and Sections
11364-400-002	Inlet works	Details
11364-400-003	Bioreactor	Layout and Sections
11364-400-003	Bioreactor	Sections & Details
11364-400-004	Clarifier	Layout and Sections
11364-400-004	Clarifier	Sections & Details
11364-400-005	Sludge Dry Bed and slab	Layout and Sections
11364-400-006	Chlorine Contact Tank	Sections & Details
11364-400-007	Operator Building	Layout and details
11364-400-008	Guard House	Layout and details
11364-400-009	Staff Quarters	Layout and details
11364-400-010	Control Room	Layout, Sections & Details

11364-400-011	Main Line Division Chamber	Layout, Sections & Details
11364-400-012	Collector Chamber	Layout and Sections
11364-400-013	WAS Pump station	Layout and Sections
11364-400-014	WAS Pump station	Sections & Details
11364-400-015	RAS Pump station	Layout and Sections
11364-400-016	RAS Pump station	Sections & Details

### **C3.2.5 DESIGN PROCEDURES**

New and existing infrastructure will be considered under this contract.

### **C3.3 Subcontracting**

All subcontractors to be approved by the Employer's Agent .

**C3.4 CONSTRUCTION****C3.4.1 VARIATIONS AND ADDITIONS TO SABS 1200 STANDARDIZED SPECIFICATIONS AND PARTICULAR SPECIFICATIONS**

Although not bound in nor issued with this document, the following standard specifications shall form part of the contract and notwithstanding the provision of sub-clause 2.2 of SABS, the editions specified below shall apply:

SABS 1200 A	:	General
SABS 1200	:	Employer's Agent s Office
SABS 1200 C	:	Site clearance
SABS 1200 D	:	Earthworks
SABS 1200 DB	:	Earthworks (Pipe Trenches)
SABS 1200 GA	:	Concrete (small works)
SABS 1200 G	:	Concrete (Structural)
SABS 1200 L	:	Medium Pressure Pipelines
SABS 1200 LB	:	Bedding (Pipes)

In addition, the following particular specification that is bound into this document shall apply.

Specification PS L	:	Medium pressure pipelines
Specification PS PB	:	Building work
Specification PS SL	:	Steel pipes
Specification PS G	:	Concrete (Structural)

The following variations and additions to the SABS 1200 Standardized Specifications referred to above apply to this Contract. The prefix PS indicates an amendment to SABS 1200. The letters and numbers following these prefixes respectively indicate the

relevant Standardized Specification and clause numbers in SABS 1200 to which the variation or addition thereto applies.

**PS Project specification: CIVIL AND STRUCTURAL**

**PSA SANS 1200 A: GENERAL**

**PSA 1 SCOPE**

*REPLACE THE CONTENTS OF SUBCLAUSE 1.1, INCLUDING THE NOTES, WITH THE FOLLOWING:*

"1.1 This specification covers requirements, principles and responsibilities of a general nature which are generally applicable to civil Employer's Agent ing construction and building works contracts, as well as the requirements for the Contractor's establishment on the Site."

**PSA 2 INTERPRETATIONS**

**PSA 2.3 DEFINITIONS**

*IN THE OPENING PHRASE BETWEEN THE WORDS "specification" AND "the following", INSERT THE WORDS "the definitions given in the Conditions of Contract and".*

(a) General

*ADD THE FOLLOWING DEFINITIONS:*

'General Conditions' and 'Conditions of Contract': The General Conditions of Contract specified for use with this Contract, together with the Contract Data (GCC 2015, 3<sup>rd</sup> Edition) as applicable.

'Specified': As specified in the Standardized Specifications, the Drawings, or the Project Specifications. 'Specifications' shall have the corresponding meaning."

(b) Measurement and payment

*REPLACE THE DEFINITIONS FOR*

"Fixed charge", "Time-related charge"

*AND*

"Value-related charge"

*WITH THE FOLLOWING:*

'Fixed charge': A charge that is not subject to adjustment on account of variations in the value of the Contract Price or the time allowed in the Contract for the completion of the work.

'Time-related charge': A charge, the amount of which varies in accordance with the Time for Completion of the Works, adjusted in accordance with the provisions of the Contract.

'Value-related charge': A charge, the amount of which varies pro rata with the final value of the measured work executed and valued in accordance with the provisions of the Contract.' "

**PSA 3     MATERIALS**

**PSA 3.1    QUALITY**

*ADD THE FOLLOWING AT THE END OF SUBCLAUSE 3.1:*

"All manufactured materials supplied shall be new materials unless the contrary is specified. All materials specified to be in accordance with SABS Specifications shall bear the SABS mark, where such a mark is available for the type of product."

**PSA 4     PLANT**

**PSA 4.1    SILENCING OF PLANT**

*REPLACE THE CONTENTS OF SUBCLAUSE 4.1 WITH THE FOLLOWING:*

"The Contractor's attention is drawn to the applicable regulations pertaining to noise and hearing conservation, framed under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) as amended. The Contractor shall at all times and at his own cost, be responsible for implementing all necessary steps to ensure full compliance with such regulations, including but not restricted to the provision and use of suitable and effective silencing devices for pneumatic tools and other plant which would otherwise cause a noise level in excess of that specified in the said regulations. Where appropriate, the Contractor shall further, by means of temporary barriers, effectively isolate the source of such noise to comply with the said regulations."

**PSA 4.2 CONTRACTOR'S OFFICES, STORES AND SERVICES**

*ADD THE FOLLOWING PARAGRAPH BEFORE THE EXISTING FIRST PARAGRAPH IN SUBCLAUSE 4.2:*

"The Contractor's buildings, sheds and other facilities erected or utilized on the Site for the purposes of the Contract shall be fenced off and shall contain all offices, stores, workshops, testing laboratories, toilet facilities, etc. as may be required by the Contractor. The facilities shall always be kept in a neat and orderly condition.

No personnel may reside on the Site. Only night-watchmen may be on the Site after hours."

*DELETE*

"and first-aid services"

*IN THE SECOND PARAGRAPH OF SUBCLAUSE 4.2 AND ADD THE FOLLOWING:*

"The Contractor shall provide on the Site and near the actual locations where the work is being executed, one portable toilet per 10 workmen, which toilets shall be effectively screened from public view and their use enforced. Such toilets shall be relocated from time to time as the location of the work being executed changes, to ensure that easy

access to the toilets is maintained. The Contractor shall, where applicable, make all necessary arrangements and pay for the removal of night soil."

**PSA 5      CONSTRUCTION**

**PSA 5.1    SURVEY**

**PSA 5.1.2 Preservation and replacement of survey beacons and pegs subject to the Land Survey Act**

*DELETE THE WORDS*

"in the vicinity of boundaries"

*IN THE SECOND SENTENCE OF SUBCLAUSE 5.1.2 AND REPLACE THE WORDS*

"under the direction of"

*IN THE SAME SENTENCE WITH*

"in consultation and liaison with".

*ADD THE FOLLOWING AFTER THE SECOND SENTENCE OF SUBCLAUSE 5.1.2:*

"The Contractor and the Employer's Agent shall record on the said list, their concurrence or disagreement (as the case may be) regarding the completeness and accuracy of the details recorded therein."

*REPLACE THE THIRD SENTENCE OF SUBCLAUSE 5.1.2 WITH THE FOLLOWING:*

"At the completion of the Contract, the Contractor shall expose all pegs that were listed at the commencement of the construction as being in order and the Contractor shall arrange with a registered Land Surveyor for the checking of the positions of all such pegs and the replacement of those that the Land Surveyor's check reveals have become disturbed or damaged. The Contractor shall, as a precedent to the issue of the Certificate of Completion, provide to the Employer's Agent , a certificate from the

registered land surveyor, certifying that all the pegs listed at the commencement of construction in accordance with the provisions of this clause, have been checked and that those found to have been disturbed, damaged or destroyed have been replaced in their correct positions, all in accordance with the provisions of the said Act.

The costs of all checking, replacement, and certification as aforesaid shall be entirely for the Contractor's account. This, with the provision always that the Contractor shall not be held liable for the cost of replacement of pegs which:

- (a) Cannot reasonably be re-established in their original positions by reason of the finished dimensions of the permanent works, and
- (b) the Contractor can prove beyond reasonable doubt to the satisfaction of the Employer's Agent, were disturbed, damaged or destroyed by others beyond his control."

**PSA 5.3 PROTECTION OF EXISTING STRUCTURES**

*REPLACE*

"Machinery and Occupational Safety Act, 1983 (Act No 6 of 1983)"

*WITH*

"Occupational Health and Safety Act, 1993 (Act No 85 of 1993), as amended,"

*AND INSERT THE FOLLOWING AFTER "(Act No. 27 of 1956)":*

"as amended".

**PSA 5.4 PROTECTION OF OVERHEAD AND UNDERGROUND SERVICES**

*REPLACE THE HEADING AND THE CONTENTS OF SUBCLAUSE 5.4 WITH THE FOLLOWING:*

**"PSA 5.4 LOCATION AND PROTECTION OF EXISTING SERVICES**

**PSA 5.4.1 Location of existing services**

Before commencing with any work in an area, the Contractor shall ascertain the presence and actual position of all services, which can reasonably be expected by an experienced and competent contractor to be present on, under, over or within the Site.

Without in any way limiting his liability in terms of the Conditions of Contract in relation to damage to property and interference with services, the Contractor shall, in collaboration with the Employer's Agent, obtain the most up-to-date plans as are available, showing the positions of services existing in the area where he intends to work. Neither the Employer nor the Employer's Agent offers any warranty as to the accuracy or completeness of such plans and because services can often not be reliably located from plans, the Contractor shall ascertain the actual location of services depicted on such plans by means of careful inspection of the Site.

Thereafter, the Contractor shall, using appropriate methodologies, carefully expose the services at such positions as are agreed to by the Employer's Agent, for the purposes of verifying the exact location and position of the services. Where the exposure of existing services involves excavation to expose underground services, the further requirements of sub-clauses 4.4 and 5.1.2.2 of SANS 1200 D (as amended) shall apply.

The aforesaid procedure shall also be followed in respect of services not shown on the plans, but which may reasonably be anticipated by an experienced Contractor to be present or potentially present on the site.

All services, the positions of which have been determined as aforesaid at the critical points, shall henceforth be designated as 'known services' and their positions shall be indicated by the Contractor on a separate set of drawings, a copy of which shall be furnished to the Employer's Agent without delay.

As soon as any service which has not been identified and located as described above is encountered on, under, over or within the site, it shall henceforth be deemed to be a known service and the aforesaid provisions pertaining to locating, verifying and

recording its position on the balance of the site shall apply. The Contractor shall notify the Employer's Agent immediately when any such service is encountered or discovered on the Site.

Whilst he is in possession of the Site, the Contractor shall be liable for all loss of or damage as may occur to

- (a) known services, anywhere along the entire lengths of their routes, as may reasonably be deduced from the actual locations at which their positions were verified as aforesaid, due cognizance being taken of such deviations in line and level which may reasonably be anticipated, and
- (b) any other service which ought reasonably to have been a known service in accordance with the provisions of this clause,

The Contractor shall also be liable for consequential damage regarding (a) and (b), whether caused directly by the Contractor's operations or by the lack of proper protection.

No separate payment will be made to the Contractor in respect of his costs of providing, holding available on the Site and utilizing the said detecting and testing equipment, nor for any costs incurred in preparing and submitting to the Employer's Agent the Drawings as aforesaid. These costs shall be deemed included in the Contractor's other tendered rates and prices included in the Contract.

Payment to the Contractor in respect of exposing services at the positions agreed by the Employer's Agent and as described above will be made under the payment items (if any) as may be provided for in the respective sections of the specifications pertaining to the type of work involved.

#### **PSA 5.4.2 Protection during construction**

The Contractor shall take all reasonable precautions and arrange its operations in such a manner as to prevent damage occurring to all known services during the period which the Contractor has occupation and/or possession of the Site.

Services left exposed shall be suitably protected from damage and in such a manner as will eliminate any danger arising therefrom to the public and/or workmen, all in accordance with the requirements of the prevailing legislation and related regulations.

Unless otherwise instructed by the Employer's Agent , no services shall be left exposed after its exact position has been determined and all excavations carried out for the purpose of exposing underground services shall be promptly backfilled and compacted. In roadways, the requirements of sub-clause 5.9 of SANS 1200 DB should be observed. In other areas compaction is to be to 93% modified AASHTO density.

### **PSA 5.4.3 Alterations and repairs to existing services**

Unless the contrary is clearly specified in the Contract or ordered by the Employer's Agent , the Contractor shall not carry out alterations to existing services. When any such alterations become necessary, the Contractor shall promptly inform the Employer's Agent , who will either decide for such work to be executed by the owner of the service or instruct the Contractor to make such arrangements himself.

Should damage occur to any existing services, the Contractor shall immediately inform the Employer's Agent , or when this is not possible, the relevant authority, and obtain instructions as to who should carry out repairs. In urgent cases, the Contractor shall take appropriate steps to minimize damage to and interruption of the service. No repairs of telecommunication cables or electric power lines and cables shall be attempted by the Contractor.

### **PSA 5.7 SAFETY**

*REPLACE THE CONTENTS OF SUBCLAUSE 5.7 WITH THE FOLLOWING:*

"Pursuant to the provisions of the Conditions of Contract, and without in any way limiting the Contractor's obligations thereunder, the Contractor shall at his own expense (except only where specific provision (if any) is made in the Contract for the reimbursement to the Contractor in respect of particular items), provide the following:

- (a) Provide to its Employees on the site of the works, all safety materials, clothing and equipment necessary to ensure full compliance with the provisions of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) as amended (hereinafter referred to as the Act) at all times, and shall institute appropriate and effective measures to ensure the proper usage of such safety materials, clothing and equipment at all times;
- (b) Provide, install, and maintain all barricades, safety signage and other measures to ensure the safety of workmen and all persons in, on and around the site, as well as the public
- (c) Implement on the site of the works, such procedures and systems and keep all records as may always be required to ensure compliance with the requirements of the Act
- (d) Implement all necessary measures to ensure compliance with the Act by all subcontractors engaged by the Contractor and their employees engaged on the works
- (e) Full compliance with all other requirements pertaining to safety as may be specified in the Contract.

The Employer and the Employer's Agent shall be entitled, although not obliged, to make such inspections on the site as they shall deem appropriate, for the purpose of verifying the Contractor's compliance with the requirements of the Act. For this purpose, the Contractor shall grant full access to the site of all parts of the site and shall co-operate fully in such inspections and shall make available for inspection all such documents and records as the Employer's and/or Employer's Agent's representative may reasonably require.

Where any such investigations reveal, or where it comes to the Employer's Agent's attention that the Contractor is in any way in breach of the requirements of the Act or is failing to comply with the provisions of this clause, the Employer's Agent shall, in accordance with the provisions of Clause 5.11 (GCC 2015 3<sup>rd</sup> edition) of the Conditions of Contract, be entitled to suspend progress on the works or any part thereof until such time as the Contractor has demonstrated to the satisfaction of the Employer's Agent, that such breach has been rectified.

The Contractor shall have no grounds for a claim against the Employer for extension of time and/or additional costs if the progress on the works or any part thereof is suspended by the Employer's Agent in terms of this clause, and the Contractor shall remain fully liable in respect of the payment of penalties for late completion in accordance with the provisions of clause 5.13.1 (GCC 2010) of the Conditions of Contract should the Contractor fail to complete the Works on or before the specified due completion date in consequence of the suspension.

Persistent and repeated breach by the Contractor of the requirements of the Act and/or this clause shall constitute grounds for the Employer's Agent to act in terms of clause 9.2 (GCC 2010) and for the Employer to terminate the Contract in accordance with the further provisions of the said clause 9.2 (GCC 2010)

***ADD THE FOLLOWING SUBCLAUSE TO CLAUSE 5:***

**"PSA 5.9 SITE MEETINGS**

The Contractor or his authorized agent will be required to attend regular site meetings, which shall normally be held once a month on dates and at times determined by the Employer's Agent , but in any case, whenever reasonably required by the Employer's Agent . Unless otherwise indicated in the Contract or instructed by the Employer's Agent , such meetings shall be held at the Contractor's offices on the site. At such monthly meetings, matters such as general progress on the works, quality of work, problems, claims, payments, and safety shall be discussed, but not matters concerning the day-to-day running of the Contract.

**PSA 6 TOLERANCES**

***ADD THE FOLLOWING SUBCLAUSE TO CLAUSE 6:***

**"PSA 6.4 USE OF TOLERANCES**

No guarantee is given that the full specified tolerances will be available independently of each other, and the Contractor is cautioned that the liberal or full use of any one or more of the tolerances may deprive him of the full or any use of tolerances relating to other aspects of the work.

Except where the contrary is specified, or when clearly not applicable, all quantities for measurement and payment shall be determined from the 'authorized' dimensions. These are specified dimensions or those shown on the Drawings or, if changed, as finally prescribed by the Employer's Agent, without any allowance for the specified tolerances. Except if otherwise specified, all measurements for determining quantities for payment will be based on the 'authorized' dimensions.

If the work is constructed in accordance with the 'authorized' dimensions plus or minus the tolerances allowed, the calculation of quantities will be based on the 'authorized' dimensions, regardless of the actual dimensions to which the work has been constructed.

When the work is not constructed in accordance with the 'authorized' dimensions plus or minus the tolerances allowed, the Employer's Agent may nevertheless, at his sole discretion, accept the work for payment. In such cases no payment shall be made for quantities of work or material in excess of those calculated for the 'authorized' dimensions, and where the actual dimensions are less than the 'authorized' dimensions minus the tolerance allowed, quantities for payment shall be calculated based on the actual dimensions as constructed."

## **PSA 7     TESTING**

### **PSA 7.1   PRINCIPLES**

### **PSA 7.2   APPROVED LABORATORIES**

*REPLACE THE CONTENTS OF SUBCLAUSE 7.2 WITH THE FOLLOWING:*

"Unless otherwise specified in the relevant specification or elsewhere in the Project Specification, the following shall be deemed to be approved laboratories in which

design work, or testing required in terms of a specification for the purposes of acceptance by the Employer's Agent of the quality of materials used and/or workmanship achieved, may be carried out:

- (a) Any 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
- (b) Any testing laboratory owned, managed, or operated by the Employer or the Employer's Agent
- (c) Any testing laboratory established and operated on the Site by or on behalf of the Employer or the Employer's Agent .
- (d) Any other laboratory that the Employer's Agent approves in his absolute discretion."

## **PSA 8 MEASUREMENT AND PAYMENT**

### **PSA 8.1 MEASUREMENT**

#### **PSA 8.1.1 Method of measurement, all sections of the Schedule**

*DELETE THE WORDS*

" and South West Africa".

#### **PSA 8.1.2 Preliminary and General item or section**

##### **PSA 8.1.2.1 Contents**

*REPLACE THE LAST SENTENCE OF SUBCLAUSE 8.1.2.1(b) WITH THE FOLLOWING:*

"Separate items will be scheduled to cover the fixed, value-related and time-related components of the Contractor's preliminary and general costs."

**PSA 8.1.2.2 Tendered sums**

*REPLACE THE CONTENTS OF THIS SUBCLAUSE WITH THE FOLLOWING:*

"Except only where specific provision is made in the Specifications and/or the Schedule of Quantities for separate compensation for any of these items, the Contractor's tendered sums under items 8.3 and 8.4 shall collectively cover all charges for:

risks, costs, and obligations in terms of the Conditions of Contract and of this standardized specification

head-office and site overheads and supervision

profit and financing costs

expenses of a general nature not specifically related to any item or items of the permanent or temporary work

providing such facilities on site as may be required by the Contractor for the proper performance of the Contract and for its personnel, including, but without limitation, providing offices, storage facilities, workshops, ablutions, services such as water, electricity, sewage and rubbish disposal, access roads and all other facilities required, as well as for the maintenance and removal on completion of the works of these facilities and cleaning-up of the site of the Contractor's establishment and reinstatement to not less than its original condition, and

providing the facilities for the Employer's Agent and his staff as specified in the Contract and their removal from the site on completion of the Contract."

**PSA 8.2 PAYMENT****PSA 8.2.1 Fixed-charge and value-related items**

*REPLACE THE CONTENTS OF SUBCLAUSE 8.2.1 WITH THE FOLLOWING:*

**PSA 8.2.1.1 Fixed-Charge Items**

"Payment of fixed charges in respect of item 8.3.1 will be made as follows:

- a) Payment under this item will be paid as a pro-rata % of the approved phase allocation in relation to the total tender sum.
- b) Pro-rata payment will further be subjected to the following:
  - (i) EIGHTY PER CENT (80%) of the sum tendered will be paid when the facilities have been provided and approved.
  - (b) The remaining TWENTY PER CENT (20%) will be paid when the works have been completed, the facilities have been removed and the site of the Contractor's establishment has been cleared and cleaned to the satisfaction of the Employer's Agent .

No adjustment will be made to the sum tendered in respect of item 8.3.1 should the value of the works finally executed or the time for completion vary in any way from that specified in the Contract.

**PSA 8.2.2 Time-related items**

*REPLACE THE CONTENTS OF SUBCLAUSE 8.2.2 WITH THE FOLLOWING:*

"Subject to the provisions of sub clause 8.2.3 and 8.2.4, payment under item 8.4.1 (time-related item) will be made monthly in equal amounts, calculated by dividing the sum tendered for the item by the tendered Contract period in months, provided always that the total of the monthly amounts so paid for the item is not out of proportion to the value of the progress of the Works as a whole."

**PSA 8.5 SUMS STATED PROVISIONALLY BY THE EMPLOYER'S AGENT**

*REPLACE THE CONTENTS OF SUBCLAUSE 8.5 WITH THE FOLLOWING:*

**"PSA 8.5.1 Works executed by the Contractor**

**Unit: Prov Sum**

The Contractor will be reimbursed in substitution of the Provisional Sums (if any) allowed for in the Schedule of Quantities for work to be executed by the Contractor, in the amounts determined in accordance with the provisions of Clause 6.6 (GCC 2015).

## **PSA 8.6 PRIME COST ITEMS**

*REPLACE SUBCLAUSE 8.6 WITH THE FOLLOWING:*

### **"PSA 8.6 PRIME COST SUMS**

(a) Description of item to which Prime Cost Sum applies	Unit: PC Sum
(b) Charge required by Contractor on sub-item (a) above	Unit: %

Sub items (a) and (b) will be provided in the Schedule of Quantities for each different item to which a Prime Cost Sum applies.

The Contractor shall be reimbursed under sub item(s) (a) in substitution of the respective Prime Cost Sums included in the Contract, the actual price(s) paid or payable by him in respect of the goods, materials or services supplied, but excluding any charges for the Contractor's labour, profit, carriage, establishment or other charges related to such goods, services or materials.

The Contractor shall be paid under sub-item (b), the respective percentage, as stated by the Contractor in his tender, of the amount certified by the Employer's Agent for payment under the related sub-item (a). The percentages tendered by the Contractor for each respective sub-item (b) included in the Schedule of Quantities shall be deemed to be in full and final compensation to the Contractor in respect of any charge by the Contractor for labour, carriage profit, establishment and for any other charges related to the goods, services or materials supplied under the related sub-item (a).

If the Contractor shall have omitted within his tender to insert a tendered percentage under sub item (b), or tendered a zero percentage, the Contractor's tendered rate for

sub item (b) shall be deemed to be zero and the Contractor shall not be entitled to any payment under sub item (b).

Note in connection with additional tests required by the Employer's Agent :

When a PC sum is included in the Schedule of Quantities for additional tests required by the Employer's Agent , the Contractor shall be responsible for both the cost of normal testing as described in the Project Specifications and for the cost of any additional test that indicates that the specifications have not been complied with."

**ADD THE FOLLOWING SUBCLAUSE:**

**"PSA 8.10 COMPLIANCE WITH OHS ACT AND REGULATIONS**

**Unit: sum**

The tendered sum shall include full compensation to the Contractor for compliance with all the requirements of the OHS Act and Regulations (including the Construction Regulations as per Gazette 10113 of 7/02/2014) at all times for the full duration of the Contract, as described in C3.10. This sum will be paid to the Contractor in equal monthly amounts subject to proper/substantial compliance."

**PSAB SANS 1200 AB: EMPLOYER'S AGENT 'S OFFICE****PSAB 3 MATERIALS****PSAB 3.1 NAMEBOARDS**

*REPLACE THE FIRST SENTENCE OF SUBCLAUSE 3.1 OF SABS 1200 AB WITH THE FOLLOWING:*

"The Contractor shall supply and erect at locations approved by the Employer's Agent , the number of contract name boards as specified, which, unless otherwise specified in the Contract, shall comply with the recommendations for the standard board of the South African Association of Consulting Employer's Agent s with regard to size, painting, decorating and detail, and the requirements described hereunder."

**PSAB 3.2 office buildings**

*REPLACE THE CONTENTS OF SUBCLAUSE 3.2 WITH THE FOLLOWING:*

"The contractor shall provide and furnish 1 office for the use of the Employer's Agent . The office shall consist of one room with a floor area of at least 12m<sup>2</sup> and ceiling height of 2.5m. The office shall be well ventilated and shall be internally furnished with the following:

- One office desk of 1,8 x 1,0 minimum with lockable drawers.
- Two upholstered office chairs.
- One plan table of 3m x 1,0m 1,0 m high covered with melamine.
- One three drawer lockable steel filing cabinet.
- Acceptable lighting

***Add the following subclause***

**PSAB 3.2.1 parking facilities**

The contractor shall provide 2 covered carports. Carport to be permanent steel fixtures and covered with IBR roof system.”

#### **PSAB 4 PLANT**

*Add the following subclause*

##### **PSAB 4.2 SURVEY EQUIPMENT**

The Contractor shall provide on-site and make available for the exclusive use of the Employer’s Agent and his staff, survey equipment i.e Dumpy level with tripod and staff. All survey equipment provided by the Contractor shall be in good condition, properly calibrated and fit for the purpose. The survey equipment provided by the Contractor shall be for the exclusive use of the Employer’s Agent and his staff, for the purposes of the Contract.”

#### **PSAB 5 CONSTRUCTION**

*Add the following subclause*

##### **PSAB 5.6 SURVEY EQUIPMENT**

All survey equipment provided by the Contractor shall always be kept calibrated and fully serviced by the Contractor. The Contractor shall have any defective equipment repaired or replaced at his own cost within 12 hours after notification by the Employer’s Agent 's staff. Where required by the Employer’s Agent , the Contractor shall, at his own cost, promptly arrange for the recalibration of survey equipment provided.”

**PSC SANS 1200 C: SITE CLEARANCE****PSC 3 MATERIALS****PSC 3.1 DISPOSAL OF MATERIAL**

*ADD THE FOLLOWING:*

"The Contractor shall obtain his own licensed dumping sites for the disposal of material and all transport costs shall be included in the rates for earthworks and site clearance, including the items listed under SANS 1200D, DB and LB."

**PSC 5 CONSTRUCTION****PSC 5.1 AREAS TO BE CLEARED AND GRUBBED**

*ADD THE FOLLOWING:*

"Pipeline routes shall be cleared to a width of 1.5 m on both sides of the pipeline center line. Route pegs or markers shall not be destroyed or damaged during clearing operations." (Where applicable).

**PSC 5.2 CUTTING OF TREES****PSC 5.2.3 Preservation of trees****PSC 5.2.3.2 Individual trees**

*REPLACE THE LAST SENTENCE WITH THE FOLLOWING:*

"An amount of R 10,000.00 will be deducted from moneys due to the Contractor as a penalty for every tree that is damaged or removed unnecessarily."

**PSC 5.5 RECLEARING OF VEGETATION**

*ADD THE FOLLOWING:*

"When areas have to be re-cleared on the written instructions of the Employer's Agent , such re-clearing shall be carried out at the Contractor's own cost and the Contractor is therefore advised not to clear the areas too soon."

**PSC 8      MEASUREMENT AND PAYMENT****PSC 8.2    PAYMENT****ADD THE FOLLOWING:****PSC 8.2.11 Take down and re-erect existing fences****Unit: m**

The rate shall cover the cost of taking down the fences, coiling wire, sorting, stacking and guarding all materials, the cost of loading, transporting and off-loading such materials, the cost of re-erecting the fence in its original position using the dismantled material, the cost of temporary bracing of the fencing sections not taken down and the cost of appurtenant materials that may be required to restore the fence to its original condition before dismantling.

**PSC 8.2.12 Moving and stacking pipes****Unit: Sum**

The stacking of the pipes must be done according to the pipe manufacturer's requirements or as per the method statement provided by the contractor and approved by the Employer's Agent . The stacking sites will be fenced and provided with a double leaf gate. The stacking area must be prepared by clearing of vegetation and compaction of the in-situ material (to 90% Mod AASHTO density).

The rate shall cover the cost of loading, transporting, and stacking of the pipes, preparation of the stacking area and fencing of the stacking area as well as adherence to the Health and Safety specifications

**PSD SANS 1200 D: EARTHWORKS**

**PSD 3 MATERIALS**

**PSD 3.1 CLASSIFICATION FOR EXCAVATION PURPOSES**

**PSD 3.1.2 Classes of Excavation**

Replace sub clause 3.1.2 a) with the following

3.1.2 a) Soft Excavation

All material excavated shall be classified as soft excavation, except if it can be classisified as Hard rock excavation in terms of c), Boulder excavation Class A in terms of d) or Boulder excavation Class B in terms of e) below.

Delete subclause 3.1.2 b) Intermediate excavation

**PSD 3.2 CLASSIFICATION FOR PLACING PURPOSES**

**PSD 3.2.2 Material Suitable for Replacing Over break in Excavations for Foundations.**

*ADD THE FOLLOWING:*

“Where over break occurs under foundations or other elements placed on the ground it shall be replaced with mass concrete class 20 MPa/19mm. Replacing over break will be done at the Contractor’s expense.”

**PSD 4 PLANT**

**PSD 4.4 DETECTORS**

*REPLACE THE CONTENTS OF SUBCLAUSE 4.4 WITH THE FOLLOWING:*

"The Contractor shall, for the purposes of detecting and locating underground services in accordance with the provisions of sub clause 5.4 of SANS 1200 A and sub clause 5.1.2 of SANS 1200 D, at his own cost, provide and use detecting equipment which is suitable for the detection of underground cables and pipes."

**PSD 5     CONSTRUCTION**

**PSD 5.1    PRECAUTIONS**

**PSD 5.1.1   Safety**

**PSD 5.1.1.1   Barricading and lighting**

*REPLACE:*

"Machinery and Occupational Safety Act, 1983 (Act 6 of 1983)" WITH "Mine Health and Safety Act, 1993 (Act No 29 of 1996) as amended".

**PSD 5.1.1.2   Safeguarding of excavations**

*REPLACE:*

"Machinery and Occupational Safety Act" WITH " Mine Health and Safety Act, 1993 (Act No 29 of 1996) as amended)".

**PSD 5.1.2   Existing services**

**PSD 5.1.2.2   Detection, location, and exposure**

*REPLACE THE CONTENTS OF SUBCLAUSE 5.1.2.2 WITH THE FOLLOWING:*

"The exposure by the Contractor of underground services, as required in terms of sub clause 5.4 of SABS 1200 A (as amended) shall be carried out by careful hand excavation at such positions and to such dimensions as are agreed to by the Employer's Agent .

Unless otherwise instructed or agreed by the Employer's Agent , no service shall be left exposed after its exact position has been determined and all excavations carried out for the purposes of exposing underground services shall be promptly backfilled and compacted to the following densities:

- (a) In roadways: 95% Mod AASHTO density; and
- (b) In all other areas: 93% Mod AASHTO density.

Where hand excavations to expose underground services must be carried out in roadways, the Contractor shall reinstate the road layer works in accordance with the provisions of sub clause 5.9 of SANS 1200 DB.

Payment in respect of exposing the services by means of hand excavation as described above, will be made in accordance with sub clause PSD 8.3.8.1.

Payment in respect of reinstating layer works in roadways will be made in accordance with sub clause 8.3.6.1 of SANS 1200 DB (as amended)."

**PSD 5.1.2.3 Protection of cables**

*REPLACE SUBCLAUSE 5.1.2.3 WITH THE FOLLOWING:*

**PSD 5.1.2.3 Protection of cables during construction**

Further to the requirements of sub clause 5.4.2 of SANS 1200 A (as amended), major excavating equipment and other plant shall not be operated dangerously close to known services. Where necessary, excavation near known services shall be carefully carried out with suitable hand tools, excluding picks wherever their use could damage the services. No additional payment will apply to such more difficult work.

Should any service not being a known service be discovered or encountered during the course of the Contract, the Contractor shall, in addition to complying with the requirements of sub clause 5.4.2 of SANS 1200 A (as amended), immediately notify the Employer's Agent thereof and implement such measures as will prevent damage of such service or, if it was damaged in the course of discovery, will prevent and minimize the occurrence of any further damage occurring."

**PSD 5.2 Methods and Procedures****PSD 5.2.2 Excavation****PSD 5.2.2.1 Excavation for general earthworks and for structures**

*ADD THE FOLLOWING TO PARAGRAPH (b):*

"When the nature of the material precludes the above procedure, additional excavations shall be carried out to provide working space for the erection of formwork. In general, payment will be made for excavating a working width of 600 mm, but the Contractor may excavate a greater working width at no additional cost to the Employer."

*REPLACE THE FIRST SENTENCE OF PARAGRAPH (e) WITH THE FOLLOWING:*

"Where excavations have been carried below the authorized levels, the Contractor shall backfill such excavations to the correct level with approved gravel compacted to 93% of modified AASHTO density or to the density of the surrounding material, whichever is the higher density. This will be done at the expense of the Contractor.

Where excavations for structures have been carried out in hard material, the Employer's Agent may direct that over-excavation be backfilled with weak concrete if there is a danger of settlement or differential settlement of the foundations.

Where the sides of excavations against which concrete is to be cast have been over-excavated or have collapsed partially, the Contractor shall re-trim the excavations if necessary and, unless other remedial measures are agreed to by the Employer's Agent, shall cast the concrete for the structure, including the additional concrete that may be required as a result of the over-excavation or partial collapse. The cost of the additional concrete or remedial measures shall be for the Contractor's account."

#### **PSD 5.2.5 Transport for Earthworks**

##### **PSD 5.2.5.1 Free haul**

*DELETE THE CONTENTS OF THIS CLAUSE AND REPLACE IT WITH THE FOLLOWING:*

"The free haul distance for the project is 2km."

##### **PSD 5.2.5.2 Overhaul**

*DELETE THE CONTENTS OF THIS CLAUSE AND REPLACE IT WITH THE FOLLOWING:*

"Overhaul distance shall be as specified in the BOQ."

**PSD 6.1 Tolerances**

*ADD THE FOLLOWING:*

"All works shall be finished to a degree of accuracy II."

**PSD 6.2 Moisture content and density**

The permissible deviation from OMC and density shall, accept where otherwise specified, be to a degree of accuracy II.

**PSD 8 MEASUREMENT AND PAYMENT**

**PSD 8.3 Scheduled Items**

**PSD 8.3.8 Existing Services**

**PSD 8.3.8.1 Location**

*REPLACE ITEM 8.3.8.1 WITH THE FOLLOWING:*

"8.3.8.1 Hand excavation for locating and exposing existing services:

(a) In roadways..... Unit: m<sup>3</sup>

(b) In all other areas..... Unit: m<sup>3</sup>

The unit of measurement shall be the cubic meter of material excavated, measured in place according to the authorized or actual dimensions of the excavation, whichever is the lesser.

The tendered rates shall cover the cost of excavating in all materials by means of hand tools within authorized dimensions and at locations approved by the Employer's Agent in accordance with the requirements of sub clause PSA 5.4.1 for all precautionary measures necessary to protect the services from damage during excavation and backfilling, and for subsequent backfilling and compacting. Compaction of material in all areas except in roadways shall be to 90% of the modified AASHTO density.

The tendered rate for hand excavation in roadways shall include compensation for compacting excavated or selected backfill material to 93% of modified AASHTO density. Reinstating layer works and surfacing shall be measured and paid for in terms of SABS 1200 DB.

The tendered rates shall also include for keeping excavations safe, for dealing with surface and subsurface water, for removing surplus excavated material from the site, for transporting all material within the free-haul distance, and for supplying adequate supervision during both excavation and backfilling operations."

**PSLDB SANS 1200 DB: EARTHWORKS - PIPE TRENCHES****PSDB 3 MATERIALS****PSDB 3.5 BACKFILL MATERIALS**

*In paragraph (a) insert "and (c)"*

*after "(b)" in the first line.*

*Renumber paragraph (b) as "(c)" and insert the following new paragraph (b):*

(b) In the particular area subject to road traffic which lies between lines 2,0m beyond edge of roadway and 1,0m beyond back of kerb for barrier kerbs, hereinafter referred to as "areas under roadways", the material used for backfill shall be one of the following:

- (i) A sub-base quality material conforming to the requirements of SANS 1200ME compacted in 150mm layers to 95% Mod. AASHTO density.
- (ii) An approved selected granular material compacted in 150mm layers to 93% Mod. AASHTO density.

Amend paragraph (c) by the insertion after the word "traffic" of the words "other than under roadways". Add "The materials specified herein shall be used for backfill under paved sidewalks and in other areas ordered by the Employer's Agent ."

Under roadways and at depths exceeding 3 meters the maximum trench width below the crown of the pipe shall not exceed the minimum specified by more than 20%. Should these widths be exceeded the Contractor shall at his own cost provide a higher class bedding than that called for to give the equivalent structural strength and where this is not practicable take such other measures to the approval of the Employer's Agent as are necessary to attain this result."

**PSDB 3.7 Selection**

*REPLACE THE WORDS "if he so wishes" IN THE FIRST LINE OF THE SECOND PARAGRAPH WITH THE WORDS "at his own cost".*

**PSDB-4 PLANT**

**PSDB 4.1 Excavation Equipment**

*Amend "50%" to read "20%"*

**PSDB 5.1 PRECAUTIONS**

**PSDB 5.1.2 Storm water, Seepage and Dewatering of Excavations**

**PSDB 5.1.2.2 Special Water Hazards**

*Add the following:*

"No specific items will be scheduled for special water hazards; the Contractor shall include for dealing with all water in his tendered rates for earthworks."

**"PSDB 5.1.3 Accommodation of traffic and access to properties**

*REPLACE THE SEMICOLON AND THE WORD "and"*

*AT THE END OF SUBCLAUSE 5.1.3(a) WITH A FULL STOP AND REPLACE ITEM (b) WITH THE FOLLOWING:*

"(b) Where necessary to achieve compliance by the Contractor with his obligations in terms of the Project Specifications to provide and maintain pedestrian and vehicular access to properties affected by the works, the Contractor shall construct and

maintain to the satisfaction of the Employer's Agent , such temporary access roads around, and/or steel or timber bridges over excavations in roads, pavements, entrances or accesses to properties.

Temporary pedestrian access bridges shall be at least 1,2 m wide and temporary access bridges for vehicles shall be at least 3,6 m wide. All temporary access bridges shall be fitted with handrails as well as protective mesh fencing on both sides.

On completion of the work, the Contractor shall dismantle and remove all such temporary constructions and reinstate these areas to their former condition.

Except only where the Employer's Agent has included in the Schedule of Quantities, particular payment items specifically therefor, the Contractor will not be paid directly for the construction and maintenance of temporary access roads and/or the provision and maintenance of bridges as aforementioned, and the costs thereof shall be deemed included in the Contractor's tendered rates for excavation."

***ADD THE FOLLOWING NEW SUBCLAUSES TO SUBCLAUSE 5.1:***

**PSDB 5.1.5 Removal of existing pipelines**

Where existing pipes must be removed, they shall be carefully opened by machine excavation to 300 mm above the pipes after which the whole pipe shall be fully exposed by means of hand excavation. The excavation width shall comply with sub clause 8.2.3.

The pipes shall be removed from the trench in a manner approved by the Employer's Agent and brought to the surface for inspection by the Employer's Agent .

Pipes that are declared suitable for reuse and pipes declared unfit for reuse shall be dealt with in an applicable manner described in the specifications, or on the Drawings or on the Employer's Agent 's instructions, as relevant."

**PSDB 5.1.6 Maximum length of open trench**

The Contractor shall plan his operations in such a manner that the length of trench excavation remaining open shall be restricted to the absolute minimum. Unless otherwise permitted by the Employer's Agent in writing the total length of open trench shall not exceed three hundred (300) meters.

Regardless of any approval or permission granted by the Employer's Agent, the Contractor shall comply with any restrictions on length of trench contained in his insurance policy.

**PSDB 5.4 Excavation**

*ADD THE FOLLOWING:*

"Except where otherwise specified, trenches shall be of such a depth that the minimum cover over the pipes shall be 1000 mm except at stream-crossings where the minimum cover shall be 2 000 mm."

**PSDB 5.5 TRENCH BOTTOM**

*Extend the sub-clause to include the following:*

- (a) On completion of excavation, before the bottom is trimmed or bedding is placed, the bottom of the trench in suitable material shall be so compacted that the density of the upper 100mm thick layer of material is 90% of modified AASHTO density.
- (b) Should the nature of the material be such that the specified density cannot be achieved the bottom of the trench shall be over-excavated, the bottom of the over-excavation compacted, and the excavated material replaced and compacted; the depths of over-excavation, which shall be agreed with the Employer's Agent, shall be such that the specified density is attained at the bottom of the trench.
- (c) Where, in the opinion of the Employer's Agent, the trench bottom is unacceptably wet or unstable due to the presence of ground water (but not due to negligence on the part of the Contractor) the Employer's Agent will order the Contractor to over-

excavate the trench and refill with 19mm stone complying with the relevant requirements of SANS 1083.”

## **PSDB 5.6 BACKFILLING**

### **PSDB 5.6.3 Disposal of soft excavated material**

Surplus and unsuitable material shall be disposed of in designated spoil areas or utilized as fill, as directed by the Employer’s Agent .

### **PSDB 5.6.8 Transport for earthworks for pipe trenches.**

*REPLACE THE CLAUSE WITH THE FOLLOWING:*

“All material obtained from the trench, from the site or from the borrow pits for use as backfill or bedding, will be considered to be transported within the free haul distances, irrespective of the distance hauled, as well as any spoil of hard material to an approved spoil site. ”

## **PSDB 7 TESTING**

### **PSDB 7.2 Taking and testing of samples**

#### ***Additional clause after subclause 7.1***

"In terms of sub clause 7.2 of SANS 1200 D, the Contractor shall carry out sufficient tests to satisfy himself about the consistency of materials place around and over pipes. He shall make provision for this in his Quality Assurance Programme. Should it be found that insufficient tests are being taken to prove the above, due to for example inconsistencies, the Employer’s Agent may instruct additional tests to be taken at the Contractor’s expense. These tests shall be deemed to be separate from the tests instructed under Clause 7.1.”

**PSDB 8 MEASUREMENT AND PAYMENT****PSDB 8.3 SCHEDULED ITEMS****PSDB 8.3.2 Excavate in all materials for trenches, backfill, compact, and dispose of surplus material (Clause 8.3.2(a))****ADD THE FOLLOWING CLAUSES:**

The attention of the Contractor is drawn to clauses 5.2, 8.1 and 8.2 of SANS 1200DB in relation to the basic principles of quantity calculation and measurement and payment for excavation, backfilling and compaction in the pipe trenches.

The unit of measurement shall be the volume (m<sup>3</sup>) of material excavated, backfilled and compacted (inclusive of surplus disposal), measured on the neat lines of the drawings, as specified in SANS 1200DB clauses 5.2, 8.1 and 8.2.

The rate for this item shall include all costs for lateral support. Lateral support will not be measured and paid separately for this Contract. The Tendered rate shall make allowances for any deviation in the total volume of excavated and compacted material resulting from the trench profile produced using the Contractor's proposed method of construction, as compared to that illustrated on the drawings.

**PSDB 8.3.3 Excavation ancillaries****PSDB 8.3.3.3 Compaction in Road Reserves**

*Delete the heading and substitute:*

Compaction in areas subject to road traffic

(a) under roadways to 95% MOD AASHTO

Unit: m<sup>3</sup>

(b) elsewhere 93% MOD AASHTO

Unit m<sup>3</sup>

**PSDB 8.3.4 Particular Items**

**PSDB 8.3.4.a Shore trench opposite structure or service**

*ADD THE FOLLOWING:*

“It will be the Contractor’s responsibility to ensure the safety and stability of all trenches. Payment for shoring, should it be necessary, shall be deemed to be included in the rates tendered for trench excavation.”

**PSG SANS 1200 G: CONCRETE (STRUCTURAL)**

**PSG 3 MATERIALS**

**PSG 3.2 CEMENT**

*ADD THE FOLLOWING:*

“Where reference is made in this specification or the standard specifications to the cement specifications, e.g. SABS 471: Portland cement and rapid hardening Portland cement, it shall be replaced with the new specification: SABS ENV 197-1 "Cement composition, specifications and conformity criteria Part 1: Common cements.”

**PSG 3.2.2 Alternative types of cement**

*REPLACE THE CONTENTS OF THIS SUBCLAUSE WITH THE FOLLOWING:*

"Only CEM I 42,5 (Portland cement) or CEM II/A-V 42,5 (Portland fly ash cement) according to (SANS 50197-1), may be used. The maximum cement extender percentages, which will be considered unless otherwise noted, are as follows:

Foundations	30%
Structure	30%
Surface beds (unreinforced)	10%

Should the Contractor wish to use any other type of cement, he shall obtain the Employer’s Agent 's prior written approval."

**PSG 3.2.3 Storage of cement**

*ADD THE FOLLOWING:*

"Cement shall not be stored for longer than 12 weeks without the Employer's Agent 's permission."

### **PSG 3.4 AGGREGATES**

#### **PSG 3.4.1 Applicable specification**

*ADD THE FOLLOWING:*

"Aggregates to have a maximum absorption of 3% as measured in accordance with BS 812: part2: 1975"

#### **PSG 3.4.3 Storage of aggregates**

*ADD THE FOLLOWING:*

"When aggregates of different chloride content are stored on the site, their use in the various classes of concrete shall be strictly controlled."

***ADD THE FOLLOWING SUB-SUBCLAUSE:***

#### **PSG 3.4.4 Aggregate of dolomitic origin**

"Aggregates for structural concrete shall be of dolomitic origin. The quantity of insoluble matter in respect of concrete made with aggregates of dolomitic origin, determined according to the method described in SANS 677, Appendix C, shall not be more than 15%"

#### **PSG-3.5.1 Approval of admixtures required**

No admixtures or aeration agents may be used without the prior written approval of the Employer's Agent . Admixtures which have a retarding effect on the rate of hydration of the cement may not be used when the concrete temperature is below 20°C. A retarding

admixture shall be used if temperatures of concrete mixes using cements of strength class 42.5R or 42.5 are between 20 to 30 °C or where the ambient temperature is between 20 to 30 °C.”

**PSG 4 PLANT**

**PSG 4.5 FORMWORK**

**PSG 4.5.1 Design**

*ADD THE FOLLOWING:*

"All formwork or scaffolding required for any part of the Works shall be designed by the Approved Specialist Contractor, and before commencing with the erection of any formwork or scaffolding, the Contractor shall submit the methods he proposes to use to the Employer’s Agent for approval. The Employer’s Agent has the authority to order alterations to the design or the sizes of any part of the formwork or scaffolding. The Contractor shall check the safety and suitability of all such alterations. The fact that the Employer’s Agent has approved or altered any part of the formwork of scaffolding shall not be construed as relieving the Contractor of his responsibility about the strength and stability of the formwork or scaffolding."

**PSG 4.5.2 Finish**

*CHANGE THIS SUB-CLAUSE AS FOLLOWS:*

The quality of finish on the final concrete surfaces shall be as follows:

- (a) All visible concrete and up to 150 mm beneath ground level: Smooth
- (b) All concrete covered by soil: Rough

**PSG 4.5.3 Ties**

***ADD THE FOLLOWING:***

"No plugs, bolts, ties or clamps of any description used to hold the formwork will be allowed to project into or through the concrete unless expressly approved by the Employer's Agent .

Only approved tie-rods consisting of solid rods (that remain embedded in the concrete) and with removable ends shall be used to hold the formwork of the walls. The removable tie-rod ends shall facilitate removal without damage to the concrete, and no permanently embedded parts of such tie-rods shall have less than 50 mm of cover to the finished concrete surface.

The cavities left in the concrete when the tie-rod end cones are removed shall be soundly caulked with a cement mortar to which an approved shrinkage-reducing agent has been added, and shall be neatly finished to a smooth surface uniform with that of the surrounding concrete.

The cost of supplying special tie-rods as well as the filling of cavities left by the tie-rod cones shall be included in the rates tendered for formwork under the appropriate pay items.

On no account shall formwork be secured to reinforcing bars."

**PSG 5     CONSTRUCTION****PSG 5.1   REINFORCEMENT****PSG 5.1.2 Fixing*****ADD THE FOLLOWING:***

"The Employer's Agent will inspect the reinforcing after it has been fixed in place, the formwork has been cleaned, cover blocks have been positioned, and before concreting commences.

Should the reinforcement be supported by the joint filler, the filler shall be covered with a hard surface on the side to be concreted. The hard surface shall be sufficiently resilient to ensure that the joint and surfaces will be without defects.

Welding of reinforcing steel will not be permitted."

### **PSG 5.1.3 Cover**

*ADD THE FOLLOWING:*

"The distance between pipes cast into the concrete and the reinforcing steel shall nowhere be less than

(a) 40 mm or

(b) 5 mm plus the maximum size of the coarse aggregate, whichever is the largest.

(c) the cover specified on the Drawings."

### **PSG 5.2 FORMWORK**

#### **PSG 5.2.1 Classification of finishes**

(c) Special

*ADD THE FOLLOWING:*

"This finish is obtained by first giving the surface a smooth finish with the joints between formwork panels forming an approved regular pattern suitable for the appearance of the structure. All projections shall then be removed, irregularities repaired and the surface rubbed or otherwise treated until it is smooth with an even texture, appearance and colour.

If the finish of exposed surfaces does not comply with the requirements for uniformity of the texture and appearance, the Contractor shall, when instructed to do so by the Employer's Agent , rub down the exposed surfaces of the entire structure or any part

thereof as specified below, entirely at his own cost. All repairs must be completed before the rubbing commences.

The surface shall be saturated with water for at least one hour. The initial rubbing of the face shall be carried out with a medium coarse carborundum stone together with a small amount of mortar of the same cement/sand ratio as the concrete being repaired. Rubbing shall continue until all form marks, projections and irregularities have been removed and a uniform surface has been obtained. The paste produced by the rubbing shall be kept in place. The final rubbing shall be carried out with a fine carborundum stone and water. This rubbing shall continue until the entire surface has a smooth, even texture and is uniform in colour. The surface shall subsequently be washed with a brush to remove surplus paste and powder."

#### **PSG 5.2.2 Preparation for formwork**

*ADD THE FOLLOWING:*

"Construction joints shall be positioned as shown on the Drawings."

#### **PSG 5.2.5 Removal of formwork**

*ADD THE FOLLOWING SUBCLAUSE:*

PSG 5.2.5.6 The Contractor shall make provision for the continued support of beams and slabs while the formwork is being removed and/or for back propping of beams and slabs."

#### **PSG 5.3 HOLES, CHASES AND FIXING BLOCKS**

*ADD THE FOLLOWING:*

"Cover blocks for reinforcing and fixtures may be placed into the concrete provided that neither the strength nor any other desirable characteristic (such as the appearance) of the concrete section is affected or impaired in the opinion of the Employer's Agent .

The holes or cavities left by ferrule heads in the concrete shall be filled with an approved non-shrink grout applied strictly in accordance with the manufacturer's specifications."

#### **PSG 5.4 PIPES AND CONDUITS**

##### *ADD THE FOLLOWING:*

"All pipes passing through concrete floors, walls or slabs shall be cast into a concrete member simultaneously with the casting of the member. Openings for pipes shall only be left in concrete members when so directed by the Employer's Agent or when shown on the Drawings. Pipes shall be installed in such openings according to the details shown on the Drawings. The pipes shall be sit firmly in position on line and level and have formwork fixed around them.

If water tightness is a requirement where pipes are casted into walls, floors and slabs, the Contractor shall ensure water tightness where smooth-surfaced pipes are used by using an approved method such as tape wrapping the pipes prior to casting in. The cost of such method will be deemed to be included in the rates.

Pipes and specials to be set in concrete as shown on the drawings and listed in the Schedule of Quantities shall have all surfaces in contact with the concrete freed from all coatings and thoroughly scraped and cleaned. The pipes shall be sit firmly in position on line and level and have formwork fixed around them.

Where the pipe or special is supplied by others, the Contractor shall provide a box-out in the wall and cast the unit in at a later stage. When constructing such as box-outs, reinforcement shall not be cut, but shall run through the opening. Reinforcement shall be cut and/or bent out at a later stage to suite the items being cast in. After installation of the item the remaining reinforcement shall be bent back in position.

Where entry holes for pipes/specials have been provided in the walls, the Contractor shall be responsible for the concreting in of such pipes/specials regardless of whether or not these have been supplied by him.

Before commencing with the positioning in holes of any pipes/specials, the Civil Contractor shall:

Remove all formwork and boxing remaining in the holes;

Make any alterations required to the position and shape of the holes and cut reinforcement to suit the item, as directed by the Employer's Agent ; and thoroughly scabble and cement slush the sides of the holes so as to obtain a satisfactory bond surface for the new concrete and treat the surface as specified in Sub-clause 5.5.7.

Immediately prior to concreting being carried out by the placing of mortar and concrete around the pipes, the surface of the existing concrete shall be saturated with water. All surplus water shall be removed and the surface covered with a layer, approximately 12mm thick, of mortar made of the same mix as the concrete in which the pipe/specials are to be placed.

The concrete ingredients shall be mixed and placed as dry as possible to obtain a dense, waterproof concrete. The concrete shall be carefully worked around the puddle flange, if any, and the pipe barrel or body of the special, and shall be vibrated in layers so as to obviate a falling away from pipe/special surfaces of the concrete already placed. The whole shall, when set, form a dense, homogeneous and waterproof mass."

## **PSG 5.5 CONCRETE**

### **PSG 5.5.1 Quality**

#### **PSG 5.5.1.5 Durability**

*REPLACE THE CONTENTS OF THIS SUBCLAUSE WITH THE FOLLOWING:*

"Mix proportions are specified as follows:

- Minimum cement content should be 325kg/m<sup>3</sup> for grade 35MPa concrete.

- A maximum water/cement ratio of 0.55 should be adhered to, except when OPC and pulverized fuel ash is used, the water cement ration should be 0.50.
- For reinforced concrete, the cement content should not exceed either 400kg/m<sup>3</sup> of OPC or cement containing G.G.B.S. Or 450kg/m<sup>3</sup> where cement containing P.f.a is used."

#### **PSG 5.5.1.7 Strength concrete**

##### *ADD THE FOLLOWING:*

"The concrete mixes shall be designed by the Portland Cement Institute or a similar approved laboratory.

##### *Additional Clause after 5.5.1.7*

#### **PSG 5.5.1.8 Bleeding**

The concrete shall be proportioned with suitable materials so that total bleeding does not exceed 0,3mm/cm<sup>2</sup> as measured by ASTM C232-92."

#### **PSG 5.5.3 Mixing**

##### **PSG 5.5.3.2 Ready-mixed concrete**

##### *ADD THE FOLLOWING:*

"Ready-mixed concrete may be used on the Site. The Contractor shall take samples for testing from every load delivered to the Site."

#### **PSG 5.5.5 Placing**

##### *ADD THE FOLLOWING:*

"Concreting of the wall between horizontal construction joints shall be carried out in both directions from a point on the wall in order to close the gap with fresh concrete."

### **PSG 5.5.6 Compaction**

*CHANGE THIS SUB-CLAUSE AS FOLLOWS:*

**PSG 5.5.6.3** Only mechanical vibrations will be allowed for compaction unless the Employer's Agent approves in writing any other method."

### **PSG 5.5.7 Construction joints**

*REPLACE THE CONTENTS OF THIS CLAUSE WITH THE FOLLOWING:*

"No construction joints other than those indicated on the drawings will be permitted without the written approval of the Employer's Agent . In all cases the proposed method of forming the joint shall be discussed and agreed with the Employer's Agent ."

### **PSG 5.5.8 Curing and protection**

*ADD THE FOLLOWING TO SUB CLAUSE (e):*

"Only water-based curing compounds shall be allowed. Concrete will not be paid for unless properly cured and proof of curing is continuously visible on site."

*ADD THE FOLLOWING NEW SUB CLAUSE (f):*

"Where curing by retention of formwork is used as the only method of curing the concrete, it must be left in place for the minimum period specified in clause 5.5.8 but in no instance shall it be less than 7 days. The materials used for formwork shall consider properties such as thermal insulation and moisture absorption when assessing the suitability of the material, to the approval of the Employer's Agent ."

If impermeable curing membranes are to be used as a curing method, they shall be installed at the same time as formwork is removed and no portion of a concrete surface may be left unprotected for a period more than 2 hours. If the surface is an unformed finish e.g. top of deck slab, then the surface must be protected immediately by appropriate methods approved by the Employer's Agent after it is finished, without damage to that surface, since it is vulnerable to plastic shrinkage cracking due to high rates of evaporation while the concrete is still in a plastic state. Plastic shrinkage and settlement shall not be permitted on any of the structural elements since it compromises the durability of the concrete."

*ADD THE FOLLOWING NEW SUB CLAUSE (g):*

"Inlet channels to settling tanks require a granolithic finish on mass concrete infill as per design drawings. Granolithic screed shall consist of: Cement – 1 part; Sand – 1.25 part; Coarse aggregate – 2 parts. The coarse aggregate shall consist of granite or other approved chips, which shall pass a 10mm sieve and be retained on a 5mm sieve. The cement/water ration of the mix shall be at least 2,0 mass."

#### **PSG 5.5.9 Adverse weather conditions**

##### ***ADD A NEW SUB CLAUSE 5.5.9.4:***

"The temperature of concrete delivered to site shall be within the range 10° C to 30° C. Concrete which has a temperature outside of this range shall not be placed in the structure.

The rate of hydration of the cement in the concrete shall be such that the concrete can be placed and properly compacted within 2 hours after the addition of water to the mix ingredients. The initial set of the concrete shall not be unduly delayed due to inappropriateness of admixtures or cement type, which could promote bleeding."

#### **PSG 5.5.10 Concrete surfaces**

"Wood-floated finish

Where wood floating is specified or scheduled, the surface shall first be given a finish as specified in sub-clause 5.5.10.1 of SABS 1200 G and, after the concrete has hardened sufficiently, it shall be floated to a uniform surface free of trowel marks. The screed surface shall either be wood-floated, by hand or machine, only sufficiently to produce a uniform surface free from screed marks.

NOTE: A degree of Accuracy II is required for wood-floated surfaces.

#### Steel-floated finish

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

**NOTE: A degree of Accuracy II is required for steel-floated surfaces”**

#### **ADD THE FOLLOWING SUBCLAUSES:**

##### **"PSG 5.5.16 Applied loads**

“No crushed-stone covering, or any other loads shall be placed on roofs and / or slabs of structures where shown on drawings before the concrete has attained its design strength, unless approved supports are provided.”

##### **PSG 5.5.17 Pipes and conduits**

All pipes passing through concrete floors, walls or slabs shall be cast into the concrete member simultaneously with the casting of the member. Openings for pipes shall only be left in the concrete members when so directed by the Employer’s Agent or when shown on the Drawings. Pipes shall be installed in such openings according to the details shown on the Drawings. The cost of such method will be deemed to be included in the rates tendered for.

**PSG 5.5.18 Soilcrete**

Where soilcrete is specified for filling under floor slabs, the soilcrete shall comply with the requirements of sub clause 3.5(d) of section 1200 DB as amended and shall be placed as specified in the sub clause.

**PSG-5.5.20 Plasterwork**

Plasterwork shall consist of a single coat, comprising one application of a 1:6 cement:sand mixture with a wood float finish. The thickness of the plaster shall be between 13 and 20 mm. All plaster shall be finished smooth, shall be plumb and corners shall be rounded and square."

**PSG 6 TOLERANCES****PSG 6.2 PERMISSIBLE DEVIATIONS****PSG 6.2.3 Specified permissible deviations*****ADD THE FOLLOWING:***

"Degree-of-accuracy II is applicable.

Every specified permissible deviation is binding. The cumulative effect of permissible deviations will not be considered. The maximum permissible vertical deviation is subject to the other permissible deviations."

**REPLACE SUBCLAUSE 6.2.3(d)(5) WITH THE FOLLOWING:**

"Vertically, per metre of height  
subject to a maximum of

Permissible deviation		
Degree of accuracy		
III	II	I
mm	mm	mm
5	3	2
50	30	10

**PSG 7 TESTS**

**PSG 7.1 FACILITIES AND FREQUENCY OF SAMPLING**

**PSG 7.1.1 Facilities**

**ADD THE FOLLOWING:**

"The Contractor shall provide sufficient storage capacity for the concrete cubes and shall test the cubes by means of an approved, calibrated cube testing press installed on Site in a manner approved by the Employer’s Agent , or shall arrange to have them tested by an approved laboratory.

The cost of all testing, including the cost of sampling, storage and transport of samples shall be included in the rates tendered for concrete work."

**PSG 7.2 water tightness testing**

**ADD THE FOLLOWING:**

"Water for testing shall be taken from the Employer’s water connection and pipes of a suitable size shall be provided by the Contractor to allow filling of the structures within a period of four days. The cost of water for the testing of water tightness will be for the

Contractor's account. Prior to the filling of structures, the Contractor shall seal all pipes and openings below the top water level.

The structure to be tested shall be filled with water and shall remain full for a period of seven days, sufficient water being added. The water level shall then be recorded, and the structure allowed standing for a further seven days without the addition of water. At the end of this period, the level shall again be recorded. If the difference in level, less the drop in level due to evaporation, is less than 10mm during the second period of seven days, the structure shall be considered watertight.

The evaporation shall be measured by recording the mean drop in level due to evaporation of water in three flat dishes floating in the water.

In the event of appreciable leakage being evident at any stage of the filling or testing, or in the event of the Employer's Agent considering the final degree of water tightness to be unsatisfactory, the Contractor when ordered by the Employer's Agent, shall discontinue such filling or testing and shall, at his own expense, take steps immediately to rectify the leakage, and to make the work thoroughly sound to the complete satisfaction of the Employer's Agent and all such work of rectification shall be continued assiduously until a satisfactory test is obtained, which shall prove to the Employer's Agent that a sufficient degree of water tightness has been obtained.

No structure will be considered complete until it has been proved watertight in terms of the requirements of this clause.

Throughout the test and afterwards, whilst emptying the tank, the water level in the under-drainage sump shall be kept below the level of the tank floor.

When emptying the structure, the rate of flow shall be controlled such that the water level in the structure does not drop faster than 100mm per hour.

Payment for water tightness testing will be made under the specified items for each structure in the Schedule of Quantities. The sum tendered shall include for the cost of

filling and emptying the structure, for sealing pipes and openings and for taking all measurements.

### **PSG 7.3 ACCEPTANCE CRITERIA FOR STRENGTH CONCRETE**

#### ***ADD THE FOLLOWING:***

"Test results obtained from the supplier of ready-mixed concrete will not be accepted for evaluation in terms of sub clause 7.3, but samples for testing shall be taken of such concrete at the point of placing."

**PSL SANS 1200 L: MEDIUM PRESSURE PIPELINE****PSL 1 SCOPE**

All water pipelines in this contract shall be deemed to be medium pressure pipelines.

**PSL 2 MATERIALS (Sub-clause 3.1)****PSL 2.1 APPLICABLE STANDARDS**

The latest revisions of the following standard specifications shall apply:

- SANS 144 - Single Door Reflux Valves
- SANS 191 - Cast Steel Gate Valves
- SANS 192 - Cast Steel Single Door Reflux Valves
- SANS 664 - Cast Iron valves for waterworks and Heavy Industrial applications.
- SANS 5155 - Cast Iron and Carbon Steel Butterfly Valves
- SANS 1123 - Steel flanges for pipes (Back of flanges spot faced)

**PSL 2.2.2 MATERIALS**

Cast Iron and Resilient Gate Valves shall be manufactured from iron or cast steel depending on the specific working pressure.

Spindles shall be manufactured of high-grade stainless steel.

**PSL 2.2.3 MARKING OF VALVES**

The design pressure in Mega Pascal (MPa) shall be engraved on the side of the valve where it is legible. Valves shall be marked with the item number of the schedules when delivered to site.

#### **PSL 2.2.4 HANDWHEELS AND CLOSURE**

Where hand wheels are specified edges shall be machined to a smooth surface. Wording "OPEN" and "CLOSE" will be casted into hand wheels. Valves will close clockwise except where it is otherwise specified. Spindles will be of the non-rising type.

#### **PSL 2.2.5 PROTECTION OF VALVES**

Valves shall be painted externally with a zinc chromate primer according to SANS 679 Type 1. (Dry film thickness of 50 mnc) After installation damaged primer shall be made good with compatible primer in accordance with valve supplier's specifications.

Subsequently to making good of the primer the valve shall be painted with two layers of alkyd-based enamel according to SANS 630 Grade 1 (dry film thickness of 250 micro meter per layer) to match the colour of adjoining pipe work.

#### **PSL 2.2.6 HANDLING, DELIVERY, AND INSTALLATION**

All valves and related items shall be handled with the necessary care throughout all processes of manufacture, testing, delivery, and installation. Valves shall be handled solely with slings that will cause no damage. The inlet and escape orifices of air valves and special valves shall be effectively sealed after manufacture until completion of installation and this sealing shall be examined regularly to ensure that it is still effective.

Valves shall be effectively supported, packed, or fastened down for transporting and care taken to avoid valves knocking together during transport. Valves shall be stored in a safe place above ground and shall be protected against the ingress of foreign matter.

**PSL 2.3 Fittings**

Generally, fittings are to be manufactured in uPVC or cast iron as applicable. Fittings shall be compatible in respect of working and test pressure to those of the pipelines. All necessary fittings and adaptors to suit the water mains must be provided and fitted.

**PSL 3 CONSTRUCTION****PSL 3.1 Test pressure (Sub-clause 7.3.1)**

All pipes must have a minimum working pressure of 1600 kPa. Test pressure for field testing shall be 1,25 times the working pressure. All pressure testing shall be performed in accordance with SANS 1200L, Claus 7.3 "Standard Hydraulic pipe test".

**PSL 3.2 Laying of continuous flexible pipes**

HDPE continuous flexible piping of external diameter less than or equal to 90 mm, in soil trenches less than 1,5 m deep, shall be laid down in whole lengths, jointed only at fittings or specials. These pipes shall be laid in the centre of the trench, bedded and backfilling shall then be done with selected granular material and selected fill material to the height and standard specified for flexible pipe beddings. In case of pipes laid in trenches in rock, the pipe shall be laid on a layer of 75 mm thick selected granular material; backfilling shall then proceed as described above.

The minimum base width shall be 300 mm.

The depth of excavation for pipes from existing ground level shall in general be not less than 800 mm, except at connections at the water mains.

**PSL 3.3 Anchor / thrust blocks and pedestals (Sub-clause 5.5)**

Dimensions at all anchor / thrust blocks shall be supplied by the Employer's Agent as and when required. The Contractor shall request such information not less than 7 (seven) calendar days in advance.

**PSL 4      MEASUREMENT AND PAYMENT**

**PSL 4.1      Supply, lay and bedding of pipelines complete with couplings (sub-clauses 8.2.1, 8.2.2 and 8.2.3)**

Notwithstanding the provision of sub-clause 8.2.4, 8.2.6 and 8.2.7, separate items will not be scheduled for the cutting of the pipe. The supply and fixing of the extra couplings, supply and installing joints with machined collars and special couplings, and the encasing of joints will therefore be deemed to be included in the rates tendered for the relevant items.

**PSSL PARTICULAR SPECIFICATION SL: STEEL PIPES**

**PS SL        STEEL PIPES, SPECIALS AND FITTINGS**

**PS SL 1    SCOPE**

This specification covers the manufacture, corrosion protection, delivery, erection, installation, making good of corrosion protection as well as over-coating as may be required, site-testing and commissioning of steel pipes, specials and fittings mostly for the conveyance of water, but also for air, at normal ambient temperatures between 5°C and +70°C.

Standards referred to in the Specification are listed in the Annexure to this Specification.

**PS SL 1.1 Manufacture of steel pipes**

Steel pipes with normal bore up to 150mm diameter shall be manufactured to conform to all the requirements of SANS 62 whereas steel piping of larger diameter shall be manufactured to conform to all the requirements of SANS 719, all as may be amplified or amended below.

The requirements regarding pipe sizes and grades, wall thickness, pipe lengths and pipe and requirements are specified in the Pipe Schedule and / or stated in the Schedule of Quantities.

The following minimum wall thickness shall apply:

External Diameter (mm)    Minimum wall thickness (mm)

168 – 406

4,5mm

419 – 508	5,9mm
570 – 864	6,0mm

With regard to Sub-clause 4.2.2.1 in SANS 719 the Contractor shall, before commencing with pipe manufacture, satisfy the Employer's Agent that the welding methods to be used in the pipe manufacture are adequate by:

- a. The preparation of a weld sample employing precisely the same welding process, equipment and artisans by which the pipe shall be manufactured.
- b. The preparation and destructive testing of the sample in (a) above, as laid down in Clause 7.2 of SANS 719.

The results of the tests on the test pieces shall comply with the requirements of Clause 7.2 of SANS 719 in all aspects.

Such destructive testing shall be carried out for each grade of steel and for each thickness of steel in that grade.

With regard to sub-clause 4.2.2.2 and 4.2.2.3 in SANS 719 the height of the inner weld reinforcement shall not exceed 1mm.

### **PS SL 1.2 Manufacture of pipe specials**

Only pipe conforming to the requirements of Clause PSL 1.3.1 above may be used for the manufacture of pipe specials.

For pipes of nominal bore, up to 150mm diameter T-pieces shall be heavy class pipe only, with the same wall thickness for both main and branch pipes. The manufacturing process and quality requirements are as specified in the relevant section of BS 806 (Section 3).

Dimensions and joint types for pipe specials are specified in the Pipe Schedule and / or stated in the Schedule of Quantities.

Welding shall be done by a welder holding a valid competence certificate (Grade 1) in terms of SANS 044 – Part V. Butt-welded joints shall conform to the requirements for welding for pipes under Clause PSL 1.3.1 above, and the Contractor shall prove all butt and fillet welded joints to be crack-free by carrying out dye penetrate tests, following the procedure laid down in BS 4416.

If at all practicable, pipe specials shall be subjected to hydraulic pressure tests as specified for pipe under Clause 1.3.1 above. Where this is not feasible, butt-welds must be subjected to radiographic inspection over their full length, with inspection procedure and acceptability limits for defects as specified in API 1104, keeping a record of all weld inspection and repair.

Where working pressures allow the use of malleable cast iron fittings for nominal bore up to 150mm diameter, these shall conform to the requirements of SANS 509.

**PS SL 1.3 Pipe flanges, bolts and jointing****PSSL 1.3.1 Material and dimensions for flanges**

The requirements for the materials and dimensions for flanges are in all respects as specified in SANS 1123.

A raised joint face shall be provided on all flanges of pressure rating higher than 2,5 MPa unless otherwise agreed to by the Employer's Agent or as stated in the Schedule of Quantities, and the backs of cast or forged flanges shall be machined.

The machined surfaces of flanges shall be covered immediately after machining by a temporary rust preventative film of a suitable type as specified in BS 1133 (Section 6).

All flanges shall be drilled to SANS 1123 (Table 1600/3) or to the class as stated in the Schedule of Quantities.

**PSSL 1.3.2 Welding on of flanges**

The procedure for the welding-on of flanges, shall comply with the requirements of BS 806 (Section 3).

The proficiency of the welder and the quality requirements for the weld are the same as those specified in Clause PSL 1.3.2 above.

As a rule, the bolt holes in flanges for pipe specials shall not be on the vertical centre line.

When so specified in the Schedule of Quantities, flanged pipes shall be hydraulically tested after the welding-on of the flanges to a test pressure of 1,5 times the pressure rating of the respective flange.

### **PSSL 1.3.3****Bolts**

Materials and dimensional requirements of bolts and nuts are specified in SANS 135 or 136. The Contractor shall correspondingly prescribe these requirements when ordering.

The threaded length shall be adequate to allow two full threads to protrude beyond the nut after the latter is fully tightened.

Each bolt shall be fitted with a nut and steel washer and bolts, nuts and washers shall be cadmium plated in accordance with and to a thickness specified for Class A in BS 1706.

Unless otherwise indicated in the Pipe Schedule, the number of bolts to be supplied shall be determined on the basis that each flange is to be supplied with half the number of bolts required for that flange.

### **PSSL 1.3.4****Jointing**

Insertion for flanges shall be of compressed fibre jointing and shall have a uniform thickness between 1,5mm and 3mm and the material shall comply with BS 2815 for the specific pressure rating.

### **PSSL 1.3.5****Pipe joints and coupling other than flanges**

Pipe ends shall be prepared for the type of jointing and coupling as specified in the Pipe Schedule and/or stated in the Schedule of Quantities with the requirements for and preparations as specified in SANS 62 and 719 as applicable.

Standard couplings and flange adapters shall be of the VIKING JOHNSON type or equivalent and all loose bolts with nuts and washers shall be cadmium plated in accordance with and to a thickness specified for Class A in BS 1706 and shall be lined and coated as specified in Clause PSL 1.2.6 below.

#### **PSSL 1.3.5.1 Butt weld joints**

At butt weld joints the internal protection shall be done in accordance with the following:

- Mix a styrene-butadiene copolymer latex (SBR) (Nitro bond or Duratex or similar) with water (1:1 ratio) and add Ordinary Portland Cement to form a slurry. Apply a coat of slurry to the steel and wet cement-mortar surface.
- Mix a SBR with water (1:3 ratio) and add to a cement/sand mix (1:1,5 ratio) to form a cement-mortar and apply while the slurry is still wet.

#### **PSSL 1.3.5.2 Spigot and socket joints**

At spigot and socket pipe ends the internal protection shall be done in accordance with the following:

- Prior to the joining of the pipes the edges of the cement-mortar lining and the steel surface shall be coated with slurry. Mix a bonding agent (Surfacrete from Samson or similar) with water (2:1 ratio) to form a slurry.  
The surface of the cement-mortar must be wet when it is coated with slurry.
- Mix the slurry with an expansive cementitious grout (Standard Bedding grout from Samson or similar). While the slurry is still wet the grout shall be troweled to the edge of the cement-mortar lining in the socket.

- Push the spigot into the socket and tack weld. The excess grout that has been squeezed out of the joint shall then be removed from the pipe and the joint shall be smoothed with a scraper. Complete the welding before any movement at the joint is allowed and while the grout is still wet.
- The joint shall be welded at low amps and with thin rods to reduce the temperature of the steel at the grout.

The Contractor shall do tests to determine the optimum jointing procedure.

### **PSSL 1.3.6 Lining and coating of steel pipes, specials and fittings**

Corrosion protection onto the inside of pipework

#### Pipework with diameters up to 150mm (Type A)

Hot dip galvanized in accordance with Sub-clause 3.9.2.1

#### Pipework with diameters greater than 150mm (Type B)

All pipes, specials and fittings, including couplings and flange adaptors, shall be fully lined and coated by COPON 2300 with a minimum of three coats to a minimum total dry film thickness of 250 micro meters on a steel surface that has been prepared by sandblasting to Grade SA 2.5 as specified in SIS 055900, with a delay of not more than four hours between sandblasting and the application of the first paint coat.

Successive paint coats shall be of different colours, and the colour of the final coat shall be approved by the Employer's Agent prior to painting. Over-coating time between the applications of successive coats shall not exceed 24 hours.

### Corrosion protection onto the outside of pipework - Exposed pipework (Type C)

The surface should be prepared by sandblasting to Grade SA 2.5 as specified in SIS 055900, with a delay of not more than four hours between sandblasting and the application of the primer.

Primer: one coat zinc chromate plus one coat universal undercoat with dry film thickness of minimum 15 microns.

Thereafter two finishing coats of gloss enamel structural paint of approved manufacture of different colours to a total film thickness of 38 microns per coat.

The colour of the final coats shall be in accordance with SANS 1091.

### Pipework with diameters greater than 150mm (Type D)

All pipes, specials and fittings, including couplings and flange adaptors, shall be fully lined and coated by COPON 2300 with a minimum of three coats to a minimum total dry film thickness of 250 micrometres on a steel surface that has been prepared by sandblasting to Grade SA 2.5 as specified in SIS 055900, with a delay of not more than four hours between sandblasting and the application of the first paint coat.

Successive paint coats shall be of different colours, and the colour of the final coat shall be approved by the Employer's Agent prior to painting. Over-coating time between the applications of successive coats shall not exceed 24 hours.

## **PS SL 1.3.6.1 Tape wrapping**

### External steel pipe coating and wrapping specification

A Denso Corroklad 750 tape or equivalent should be applied to the external surface of the 250mm diameter steel pipeline.

The tape consists essentially of a specially formulated polyethylene film laminated to a pressure sensitive, non-hardening thermoplastic adhesive. The adhesive layer is generally one and half times thicker than the polyethylene film.

The composite wrapping system provides a durable impact and cut resistant rock shield for normal and rugged service conditions.

### Technical Data

The following information pertains to the Corroklad 750 tape:

- The base layer is made of polyethylene and is 0,3mm thick.
- The adhesive layer consists of rubber modified bitumen and is 0,45mm thick.
- The product thickness is 0,75mm.
- The tape has a minimum tensile strength of 15 MPa.
- The minimum elongation at failure is 300%.
- The adhesive and peel strength of the tape at 25°C is 2,2N/mm and 1,65N/mm respectively.
- The minimum electric strength of the tape is 25 kV.
- Cathodic disbondment by ASTM G8 Method B is 425mm<sup>2</sup>.
- The service temperature of the tape is –10°C to 65°C.

### Application Procedure

Corroklad tape can be successfully wrapped by hand (maximum tape width 100mm) and by machine. The general application is detailed below.

### Surface Preparation

- All dirt, loose rust/mill scale and grease must be removed from the pipe surface.
- The minimum surface preparation acceptable for tape wrapping with Corroklad is ST2 (Swedish Standard SIS 055900-1967, Mechanical wire brushing).

### Priming the Pipe Surface

- The primer to be used is Denso Primer D or equivalent Polymer Bitumen Solution, and is to be applied by means of a medium pressure cop gun.
- The primer may be thinned for application with white spirits or toluene.
- The primer should nominally cover 9m<sup>2</sup> litre.
- The minimum drying period at 20°C is 20 minutes.
- The flash point occurs above 23°C.
- If the pipes are prepared and primed off site, it may be necessary to apply a second coat of primer on site in order to rejuvenate the first application. This is only required if the pipe is being wrapped on site.
- The primer should be dust free prior to the application of the tape wrap system. Should the primer be contaminated, the surface must be re-primed.
- The primer should be allowed to dry for approximately 30 minutes at 20°C to 25°C prior to the application of the tape system.

#### Tape Application

- The Corroklad tape or equivalent should be spirally wrapped onto the primed pipe, utilizing a 55% overlap.  
55% Overlap will ensure a minimum of two layers of tape at any point.
- Ensure that a constant web tension of 10 to 15kg/100mm is maintained during wrapping.
- At no time is the shrinkage of the total width of tape to exceed 2%.

#### Pipe Handling

- Non-metallic slings are to be utilized when handling the wrapped pipe sections or pipe, in order to ensure that no mechanical damage occurs to the tape.

### **PSSL 1.3.6.2 Making good and over-coating of steel pipes, specials and fittings**

After erection, all damage to the COPON coatings shall be made good strictly in accordance with the paint supplier's detail specification. Prior to making good, a copy of these specifications shall be submitted to the Employer's Agent .

Subsequent to the repair of COPON painted areas, all exposed pipework, as listed in the Schedule of Quantities, shall be cleaned of dirt, oil and such substances. These exposed pipe surfaces shall then be over-coated with two coats of polyurethane paint

compatible with the COPON coating and in accordance with the paint supplier's detail specification including abrasion as may be necessary.

A copy of this specification shall be submitted to the Employer's Agent as referred to above. The colours of the final coats shall be in accordance with SANS 1091 as follows:

Clear water pipes :            B10 Brilliant green

### **PS SL 1.3.7 Handling, delivery and installation**

All pipes, pipe specials and fittings shall be handled throughout the processes of manufacturing, corrosion protection, delivery and installation with all care necessary to prevent any damage.

After the corrosion protection of the outside of pipes and specials has been carried out, these items must be handled only by means of straps that will in no way damage the protection.

After completion of corrosion protection at the place of manufacture, all pipe ends shall be effectively closed off by at least a sheet of plastic held fast to the pipe and by binding wire.

This seal shall be checked specifically during delivery and after off-loading on site to confirm that it is still fully effective and shall immediately be repaired or replaced if damaged. Should there be the slightest danger of the ingress of foreign matter into the pipework during installation, the ends shall be kept sealed off all the time.

Pipes shall be supported during traveling on shaped and padded cradles while pipe specials shall be adequately supported and separated from each other to prevent any damage.

At the delivery points on site, pipes, pipe specials and fittings shall be supported by plastic sandbags of sufficient strength, such that the under sides of the pipes and pipe

specials are at least 200mm off the ground. The number and positioning of supports under the pipes shall be such as to prevent any undue pipe deflection.

Bolts, nuts, washers and jointing, shall be packed in strong metal or wooden containers with effective lids, with each different sizes of bolts grouped separately in hessian bags all clearly labelled as to their contents.

Pipe work shall be securely clamped in its final position by means of galvanized fittings.

#### **PS SL 1.4 FLEXIBLE COUPLINGS AT STRUCTURES**

Flexible couplings shall be provided at the point where pipelines enter all structures.

#### **PS SL 2 CONSTRUCTION**

##### **PS SL 2.1 COVER OF PIPELINES (Sub-clause 5.1.4.2)**

Water mains shall be laid to have a minimum cover of 1,0m outside the site of the works and 0,8m inside the site of the works.

##### **PS SL 2.2 BREAK INTO MAIN**

The Contractor shall break into and connect up to the existing water pipeline after all the work on the water main has been completed and tested. The Contractor shall arrange in cooperation with the local authority for the emptying of pipes and canal, excavations, etc. complete as required for the connection.

#### **PS SL 3 TESTING**

##### **PS SL 3.1 TEST PRESSURE (Sub-clause 7.3.1)**

All pipes must have a working pressure as indicated on drawings. Test pressure for field-testing shall be for steel pipes 1,25 times working pressure and for FC pipes 1,5 times working pressure.

In general the Contractor shall keep in mind that the existing water supply system shall remain in sure during the construction period. All new-old pipe connections, etc. shall only be allowed in off peak times.

### **PS SL 3.2 TESTING OF PIPE LINES (Sub-clause 7.3.1.2)**

The complete pipeline shall be tested in consecutive sections.

The Contractor shall be responsible for providing temporary valves, end caps, blank flanges or other isolating devices to complete the hydraulic testing.

For field test pressure see PSL 3.1.

The acceptance test shall be carried out as described in Sub-clause 7.3.

### **PS SL 4 MEASUREMENT AND PAYMENT**

The unit of measurement for payment for the manufacture, corrosion protection and final over-coating as may be required, delivery, installation of pipes, site-testing and commissioning of pipes, pipe specials and fittings conforming with this Specification shall be either the lump sum or the unit of length or the number of items, all as stated in the Schedule of Quantities with differentiation between pipe sizes, classes and end preparation as stated in the Schedule of Quantities.

#### **PS SL 4.1 VALVES AND SPECIALS**

The rates tendered and paid for valves and fittings must include the cost of the provision of an approved coating and the cost of any additional couplings other than those listed in the Schedule of Quantities to connect to the water mains.

All adapters and distance pieces required for the extension to the specified level and length as shown on the drawings for air and scour valves must be included in the rates for the units.

**PS SL 4.2 ANCHORS / THRUST BLOCKS (Sub-clause 8.2.11)**

The cost of any formwork and excavation required shall be included in the rate for concrete.

### **PS SL 4.3 FLEXIBLE COUPLINGS AT STRUCTURES**

The cost of providing couplings, cutting pieces, etc. shall be allowed for in the rate tendered for pipe work.

Where the Contractor decides to use additional short collar couplings for convenience, he shall allow for the cost of such couplings in the rates tendered for pipe work.

### **PS SL 4.4 VALVES**

The unit of measurement for payment for the manufacture, delivery, installation, setting, site-testing and commissioning of valves and related items conforming to this Specification shall be either the lump sum or the number of items, all as stated in the Schedule of Quantities with differentiation between valve types, sized and classes as stated in the Schedule of Quantities.

**PSLB SANS 1200 LB: BEDDING (PIPES)**

**PSLB 3 MATERIALS**

**PSLB 3.2 Selected Fill Material**

*In the first line delete*

"PI not exceeding 6"

*and substitute*

"PI not exceeding 12".

**PSLB 3.4 Selection**

**PSLB 3.4.1 Suitable Material available from Trench Excavation**

*REPLACE THE WORDS*

"(but is not required)"

*IN THE FIFTH LINE WITH THE WORDS*

"(at his own cost)".

**PSLB 5 CONSTRUCTION**

**PSLB 5.1 General**

**PSLB 5.1.3 Placing**

**Add the following to sub-clause 5.1.3.4:**

Backfilling up to 300 mm above the top of the pipe shall be carried out immediately the pipes have been laid, and shall be completed before the acceptance test is carried out except at joints which shall be left exposed until the pipeline has been satisfactorily tested.

**PSLB 8 MEASUREMENT AND PAYMENT****PSLB 8.1 Principles****PSLB 8.1.3 Volume of bedding materials****ADD THE FOLLOWING:**

“By means of the clarification of the specification, the volume displaced by the pipe will not be paid for.”

**PSLB 8.1.5 Disposal of displaced material****REPLACE THE CONTENTS OF THIS SUBCLAUSE WITH THE FOLLOWING:**

"Material displaced by the pipeline and by imported material from sources other than trench excavation, shall be disposed of at an approved site furnished by the Contractor. No haulage is payable for such material."

**PSLB 8.2 Scheduled Items****PSLB 8.2.2.2 Supply of bedding by importation from Borrow Pits****ADD THE FOLLOWING:**

“The tendered rates shall also cover the costs of sufficient tests to ensure that material to specification is selected and for the selection process itself, inclusive of sieving the material.”

- **PS EL Project specification: ELECTRICAL AND ELECTRONIC**

**PSEL1. INTRODUCTION**

1.1The Project Specifications provides an indication of the specific project requirements for the electrical Employer's Agent ing services associated with the expanding of the Emanzana Waste Water Treatment Works.

1.2The Project Specification shall be read in conjunction with all technical specifications, schedules and bills of quantities as referred to and/or bound in this document.

**PSEL2. SCOPE OF WORK**

2.1The works covers the supply, delivery to site, storage onsite when required and installation and maintenance of all material and equipment required for the electrical installation of the treatment plant. The installation consists of the following:

- (a)Install all electrical work in the new building, including all new luminaires, socket outlets etc.
- (b)Install an HVAC system in the building.
- (c)Install earthing on the new building.

**PSEL 3. QUALITY**

Adequate and effective quality control standards will be adhered to. The Employer's Agent will have the right to inspect equipment at any time.

**PSEL 4. COMMISSIONING AND ACCEPTANCE**

The commissioning of specialized equipment must be performed by an approved or accredited person or by the supplier itself.

All procedures as specified by the suppliers will be always adhered to. The safety protection procedures must be fully commissioned and approved before any standard tests and commissioning of running equipment is performed.

A competent appointed person will be allocated by the contractor to accompany the Employer's Agent / Client during all inspections / commissioning / tests. The time and dates of such functions will be agreed to by all parties well in advance.

#### 4.1 Acceptance

The "Handing Over Certificate" will only be issued by the Employer's Agent upon acceptance of test results. The "Defects Liability Period" commences on the date of the issuing of the "Handing over Certificate".

#### 4.2 Test Equipment

All equipment used shall have valid calibrated test certificates.

### **PSEL5. AS BUILT DRAWINGS**

On completion of the works the Contractor shall provide the Employer's Agent / Client with a complete set of "as built" drawings in the format the Employer's Agent specified. The drawings will indicate all cable positions and exact installation of equipment.

### **PSEL6. OPERATIONS AND MAINTENANCE**

The contractor shall provide manuals to the Employer's Agent / Client. The documentation shall provide and include details on items such as:

- Technical details of the equipment
- Operating instructions
- Fault finding procedures
- Maintenance procedures
- Safety procedures

**PSEL7. BUILDING ELECTRICAL WORK**

All electrical work shall comply with SANS 0142-1:2009 (South African National Standard – The wiring of premises.)

**PSEL8. DISTRIBUTION BOARDS**

The new distribution board in the building will make provision for a normal power section as well as a stand-by power section. The normal power will be fed from the minisub. A new circuit breaker will be installed in the minisub to supply the building.

Similarly, a new circuit breaker will also be installed in the generator panel which will feed the stand-by section of the distribution board.

Only the control room, dedicated socket outlets in the laboratory and emergency lights will be powered from the stand-by board.

**PSEL9. WIRING OF CIRCUITS**

A neutral conductor equal in size as the phase conductors shall be used. The earth wire one size smaller than the phase conductor wire must be installed and shall be insulated, unless otherwise indicated.

Cable lugs shall be used at all cable terminations. The lugs shall be crimped.

**PSEL10. CABLES**

The contractor shall supply and install all necessary cables with insulated earth wire as specified in the Cable Schedule. All cables will be SABS approved. The contractor is responsible for the making off and connecting of all cables. All cable routes will be indicated on the "As built" drawings. Concrete cable route marker shall be used as specified. Cable trays, ladders and galvanized conduit shall be used for installing cables inside the new building.

**PSEL11. LIGHTING AND SMALL POWER**

The contractor shall supply and install the luminaires with all fittings and lamps required in the new buildings. A photocell with a bypass switch and contactor circuit shall be used. Switched socket outlets will also be installed. Dedicated luminaires and socket outlets will be fed from the stand-by board. This will particularly apply to the laboratory and the control room.

**PSEL12. EXCAVATIONS**

The LV cables must be installed at a depth of 800mm. There are existing services in the area and the contractor must take care when cable trenches are being excavated. It is the contractor's responsibility to trace existing cable routes (by means of electronic detection) and indicate the routes on the marked-up drawings. Any damage to the existing services will be for the contractor's accounts.

**PSEL13. CONDUIT**

In the case where conduits will be used at the pump stations it must be chased pvc, including all accessories. All conduit used in the building shall be installed in walls, floors and ceilings.

**PSEL14. MOTOR CONTROL CENTRES****14.1.1.1 NEW RECYCLE PUMP MCC**

The recycle pump MCC (control box) shall be suitable for outdoor use and shall be mounted on two galvanised steel poles near the recycle pump. The pump size is 5kW, 3-Phase 400V and will be controlled by a DOL starter and two float switches in the sump.

**PSEL15. CABLE LADDER AND TRAYS**

Cable ladder and cable tray must be of heavy-duty type and must be installed in the positions indicated on the design drawings. All cable ladders and trays must be constructed from mild steel and must be hot dipped galvanise to SANS 121.

**Spb PARTICULAR SPECIFICATION PB: BUILDING WORK****PS PB1 SCOPE**

This section covers the various construction activities associated with buildings which form part of certain civil projects.

Building work shall be carried out in accordance with the National Building Regulations and the information contained in this section.

Work appurtenant to the erection of buildings such as earthworks, concrete work, structural steelwork, etc. shall be carried out as specified in the appropriate sections of these specifications and will be measured and paid for under those sections.

**PS PB3 MATERIALS****PS PB3.1 BRICKWORK AND PLASTER WORK****(a) Bricks**

- Bricks shall comply with SABS 227 and shall be classified according to their intended use as defined below.
- Employer's Agent ing bricks in both the face and stock categories shall be durable and selected for their uniformity of dimension, with a minimum average strength of 49 MPa. These bricks shall be of clay and shall be pressed or wire cut and free from cracks, chips or defects.
- Face bricks shall not require any further decorative treatment and shall be selected for their uniformity of dimension, colour, and texture, with a minimum average compressive strength of 28 MPa. These bricks shall be of clay and shall be pressed or wire cut and free from chips, cracks, stones or other defects. Water absorption

shall not exceed 2%. Special care shall be taken in the loading, stacking, and handling of face bricks, as no damaged bricks may be used.

- Stock bricks shall be suitable for general building work and shall have a minimum compressive strength of 7 MPa. Special stock bricks shall have a minimum compressive strength of 17 MPa.
- The water absorption of stock bricks shall not exceed 10%.
- Satisfactory proof of the load-bearing capacity of the bricks offered shall be submitted before deliveries are made to the Site.
- Air bricks shall be well-burnt terracotta and shall be free from cracks and blemishes and lined with copper mosquito gauze.
- Three samples of each type of brick shall be submitted to the Employer's Agent for approval. All subsequent deliveries shall be of a standard equal to or better than that of the approved samples.

#### **(b) Cement**

Cement shall comply with the requirements of SABS 471 and shall be stored under cover. The use of Portland blast-furnace cement (PBFC) which complies with the requirements of SABS 626 will only be allowed if so, specified in the Project Specifications.

#### **(c) Aggregate**

- **Fine aggregate shall be naturally occurring sand or shall consist of crushed rock or gravel, and shall be hard, clean, and free from adherent coatings or other deleterious matter.**

- **Sand for plaster and mortar shall comply with the requirements of SABS 1090, whereas the aggregates for normal and granolithic floor screeds shall comply with the requirements of BS 1199 and BS 1201 respectively.**

**(d) Water**

**Water shall be clean and free from clay, silt, oil, acid, alkali, organic or other matter which would impair the required strength and durability of the mortar, plaster, or floor screed.**

**(e) Wall ties**

**Wall ties shall be of the galvanized, crimped, single-wire type with a 3,5 diameter, and shall comply with the requirements of SABS 28.**

**(f) Damp-proof sheeting**

Damp-proof sheeting shall comply with SABS 248, type FV for fibre felt, or SABS 952, type B for embossed polyethylene sheeting.

**PS PB3.2 IRONMONGERY****(a) Door locks and handles**

- All door locks shall comply with the requirements of SANS 4 and shall be of approved manufacture and pattern. All locks shall be supplied with two keys. Keys shall be distinctly numbered with consecutive numbers and each key shall be stamped with the same number as that of the lock which it controls. No two locks in anyone building may have the same key.
- External doors shall be fitted with four-lever heavy-duty mortice locks, which shall be master-keyed.
- All locks shall be properly installed, and, after completion, striker plates shall be adjusted, and the locks serviced.
- Door handles shall be of cast zinc of approved manufacture and pattern.

**(b) Miscellaneous fittings**

- All retaining devices for doors and windows as well as fittings such as coat hooks, retaining hooks, etc. shall be of solid brass. All fittings shall be secured by screws or set screws of the same material and finish as the fitting.
- Fittings to be fixed to plastered walls, masonry or floors shall be fixed direct by means of patent plastic or fibre plugs fitted into drilled holes.

- Doorstops shall be provided at every door and shall be 40 mm diameter rubber stops.

**PS PB3.3 GLAZING****(a)Glass**

- Glass shall comply with the requirements of CKS 55. The quality of all window glass shall be such that surface deterioration will not develop after glazing.
- All glass shall be free from bubbles, waviness, scratches, stains, or other imperfections.
- Unless otherwise specified, sheet glass for glazing shall be flat-drawn clear glass of ordinary
- glazing quality and of the thicknesses indicated below.
- For panes not exceeding 0.75 m in area 3 mm
- For panes exceeding 0.75 m but not exceeding 1,5 m in area 4 mm
- 

**(b)Putty**

- All putty shall comply with the requirements of SABS 680.
- Putty shall not be too hard or soft or caked when used and shall dry evenly without crazing or cracking.
- Defective putty shall be cut out and replaced by the Contractor at his own expense, and any broken glass shall also be so replaced and putty so repainted.

**PS PB3.5 ROOF SHEETING AND ACCESSORIES****(a) Roof sheeting**

(i) Galvanized-steel sheeting

Galvanized-steel sheeting shall have a minimum un-galvanized thickness of 0,5 mm and shall be of the profile as scheduled or shown on the Drawings. The sheeting shall comply with the requirements of an approved manufacturer's specification. The galvanizing shall comply with the relevant requirements of SABS 934 for class Z 600 coating and shall have been passivated.

**(b)Fasteners**

Fasteners and washers shall comply with the requirements of SABS 1273, shall be durable, and shall be protected against corrosion to a standard at least equal to the standard of corrosion protection of the sheeting material with which they are to be used. Fasteners to be used with fibre-cement sheeting shall be hot-dip galvanized fasteners.

Bolts and rivets used with galvanized sheeting shall be at least 4 mm in diameter, and those used with fibre cement sheeting, at least 6 mm in diameter.

Self-tapping screws and blind rivets may be used for side-stitching and as fasteners for ridging, flashings, etc.

**(d)Sealants**

Sealants shall comply with the requirements of SABS 110, SABS 1254 or SABS 1305 as applicable or with the sheeting manufacturer's recommendations as approved by the Employer's Agent .

**PS PB3.8 PAINT**

To be in accordance with the detail specification requirements.

**PS PB5      CONSTRUCTION****PS PB5.1      BRICKWORK AND PLASTER WORK****PS PB5.1.1      CONSTRUCTION OF BRICKWORK****(a) Cement mortar**

Cement mortar unless otherwise specified, will consist of 1 part of Portland cement to 4 parts of sand by volume for normal brickwork and 1 part of Portland cement to 3 parts of sand by volume for reinforced brickwork. The ingredients for cement mortar shall be measured in proper gauge boxes on a boarded platform and thoroughly mixed. Alternatively, mixing may be by means of an approved mechanical batch mixer. Only when the dry ingredients have been thoroughly mixed, and a mixture of uniform colour has been obtained may the water be added in sufficient quantity to obtain mortar with the required consistency.

Cement mortar shall be used within two hours of adding water to the mix and shall not be used after two hours or if it has begun to set. Mortar shall be turned over frequently until it is used to prevent it from setting.

**(b) Brickwork**

- Dimensions of all the brickwork shall be set out and built as shown on the Drawings. Bricks shall be kept wet before laying and the top of brickwork shall be wetted before any further bricks are laid. Bricks shall be well buttered with mortar before being laid and all joints shall be thoroughly flushed up as the work proceeds. All joints to faced brickwork shall be neatly made and key drawn with a 6 mm key.

- Brickwork shall be carried up in a uniform manner with no portion being raised more than 1 m above an adjacent portion. All perpend, quoins, etc. shall be kept strictly true and square and the whole properly bonded together.
- Brickwork shall be built in stretcher bond or English bond as shown on the Drawings and bats shall not be used except where required for the bond. All joints shall be 10 mm wide, and four courses shall measure 340 mm.
- Brickwork for cavity walls and solid walls built in stretcher bond shall be tied with wall ties placed not more than one metre apart in every third course and shall be staggered vertically or as otherwise specified in the Project Specifications. At openings, the ties shall be positioned not more than 300 mm apart along the periphery of the opening and 150 mm from the opening.
- Face brickwork shall be kept perfectly clean and rubbing down of the brickworks shall not be allowed. Scaffold boards shall be turned back during heavy rain to avoid splashing. Soiled brickwork shall be cleaned at the Contractor's expense, and the cleaning method shall be approved by the Employer's Agent .

#### **(c) Reinforced brickwork**

- Brickwork over door and window openings shall be reinforced with steel rods, welded, or expanded mesh, etc. Reinforcement shall be placed in each course of brickwork for a minimum of 4 courses or as shown on the Drawings. Reinforced brickwork shall continue at least 300 mm on each side of the openings.
- Brick lintels shall be built upon rigid temporary supports left in position for not less than 7 days after brick-laying. Pre-stressed concrete lintels may be used where approved by the Employer's Agent .

#### **(d) Key for plaster**

Joints of all brickwork receiving plaster shall be raked out, or the brick surfaces shall otherwise be prepared with acrylic slurry or any other approved bonding agent.

**(e) Damp-proofing**

A damp-proof course shall be laid over the full width of all the walls at a minimum height of 150 mm above the final ground level or wherever else it may be required, and it shall be lapped for at least 150 mm at angles and joints. A damp-proof course shall also be laid and stepped up under all external sills.

**(f) General**

Rough and fair cutting shall be performed as required, and the brickwork shall be fitted around any steel work. Face brickwork shall be carefully cut and fitted to suit fittings.

Chases shall be left or formed for edges of concrete floors, staircases, etc. Chases shall also be provided wherever they may be required for pipes, conduits, switch boxes, distribution boards, and the like. Joints shall be raked out for flashings.

**PS PB5.1.2 PLASTER WORK**

**(a) A plastered finish may consist of a combination of one or more of the following:**

(i) A single coat or first coat, comprising of one application ratio of 1:6 cement: sand mixture with a wood or steel-float finish.

If a first coat, the plaster shall be wood-floated and then scratched, raked, or otherwise roughened to provide a mechanical key for the second coat, which shall be applied within 24 hours. Should it be impossible to apply the second coat within 24 hours, the first coat shall be kept moist until the second coat is applied.

(ii) A second coat comprising one application of a 1:6 cement-sand mixture with a wood-float finish.

(iii) A finishing coat comprising a 1:1½ gypsum: sand mixture with a steel-float finish.

**(b) Thickness**

The total thickness of the plaster finish shall be 10 mm minimum and 20 mm maximum.

**(c) Workmanship**

All plaster work shall be finished smooth and ready to receive paint. Plaster shall be flush with the faces of all switches and plug boxes, the interiors of which shall be kept free from plaster. Plastered surfaces shall be plumb and jambs and reveals shall be formed square.

The plasterer shall cut out and make good all cracks, blisters and other defects and leave the plaster work, on completion, in a state which is acceptable to the Employer's Agent .

**PS PB5.2 INSTALLATION OF DOORS AND WINDOWS**

- All built-in door and window frames shall be set straight, plumb, and level, and shall operate to the satisfaction of the Employer's Agent after fixing has been completed.
- Fittings shall be either removed, or wrapped and protected from damage, until all rough trades have been completed.

**PS PB5.3 GLAZING**

- Glass shall be cut in panes to suit all glazed openings with sufficient clearance all round to prevent cracking by expansion, contraction, or vibration.

- In all cases the glass shall be well bedded and back-puttied and installed as specified in SANS Code of Practice 0137.
- All putty shall be carefully trimmed, cleaned off and neatly finished off straight with smooth surfaces and sharp mitres. A paint primer shall be applied as soon as the putty has dried out sufficiently to prevent shrinkage cracks from forming.
- The entire glazing operation shall be cleaned before the premises are handed over for occupation.

**PS PB5.4.2 JOINERY WORK****(a) Scope of work**

Joinery work shall consist of the manufacture, delivery to the Site, and fixing in the buildings, of all joinery shown on the Drawings. Except where a special finish is specified, the Contractor shall have all stairs, landings, doors, shelves, and other joinery work cleaned and scrubbed down and shall leave all his work in a good order to the satisfaction of the Employer's Agent .

**(b) Dimensions**

- All "wrought" timber shall be sawn, planed, drilled, or otherwise machined or worked to the correct sizes and shapes shown on the Drawings.
- Reasonable tolerance shall be provided at all connections between joinery works and the building structure to compensate adequately for any irregularities, settlements, or any other movements.

**(c) Fabrication**

- The joiner shall perform all the necessary mortising, tenoning, grooving, matching, tonguing, housing, rebating and all the other works necessary for correct jointing. He shall also provide all metal plates, screws, nails and other fixings that may be necessary for doing the specified joinery work properly.

**(d) Joints**

- Where joints are not specifically indicated, they shall be the recognised forms of joints for each position. The joints shall be so made as to comply with part 2 of BS 1186.

**(e) Doors and frames**

- Door frames, linings, panel doors, framed, ledged and braced doors, flush doors, sliding doors, etc. shall be supplied or made by the joiner and shall be installed, fitted or hung as detailed on the Drawings.
- All timber shall be "wrought" and prepared for oiling, staining, varnishing, or painting.

**(f) Skirting's, cornices, etc.**

- Skirting's, cornices, etc. shall not be installed until after the wall coverings have been applied, the flooring laid and ceilings installed, unless otherwise specified.

**(g) In situ joinery**



- In situ joinery work shall not be executed until after all floor, wall and ceiling surfaces have been formed or constructed, unless otherwise instructed.


**(h) Ceilings**


- Ceilings shall consist of plaster board or fibre-cement panels as shown on the Drawings and shall be nailed to the bracing or suspended from the roof structure. The panels shall be separated by exposed tees and insulated with a 50 mm thick fibreglass wool blanket as shown on the Drawings.


**PSAR PROJECT SPECIFICATIONS: ARCHITECTS FINISHES**

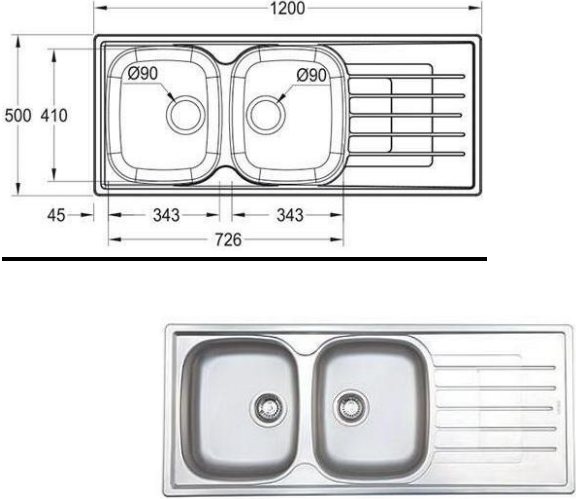
**PSAR1 SANITARY SPECIFICATION**

<p><u>TOILET</u> (4X TOTAL)</p> <p><u>GROHE BAU WALL-HUNG WC GRO-39427000 COMPLETE WITH SOFT CLOSE SEAT GRO-39493000</u></p> <p><u>GROHE GRO-37153000 FLUSH VALVE FOR WC WITH GROHE SKATE SINGLE FIT WALLPLATE GRO-38445SD0, STAINLESS STEEL.</u></p> <p><u>NOTE: CHECK WATER PRESSURE ON SITE BEFORE ORDER TO ENSURE COMPATIBILITY WITH FLUSH VALVE.</u></p> <p><u>PARAPLEGIC TOILET</u></p> <p><u>AS ABOVE, BUT INSTALLATION HEIGHT OF PAN AND WALL PLATE TO SANS 10400S REQUIREMENT FOR DISABLED.</u></p>	
<p><u>URINAL</u> (1<sup>ST</sup> FLOOR MALE, GROUND FLOOR MALE,</p>	

<p><u>2X TOTAL)</u></p> <p><u>GROHE BAU URINAL, CONCEALED INLET GRO-39438000, WITH GROHE URINAL TRAP WITH HORIZONTAL OUTLET GRO-39732000 AND INLET CONNECTING SET GRO-37044000</u></p> <p><u>GROHE RAPIDO U ROUGH-IN GRO- FLUSH VALVE FOR URINAL WITH GROHE STAINLESS STEEL NOVA COSMOPOLITAN WALLPLATE GRO-38804000SDO</u></p> <p><u>NOTE: CHECK WATER PRESSURE ON SITE BEFORE ORDER TO ENSURE COMPATIBILITY WITH FLUSH VALVE.</u></p>	 A blue Grohe urinal assembly consisting of a square wallplate with a urinal trap and a horizontal outlet pipe.
<p><u>HAND WASH BASIN 1</u></p> <p><u>(1<sup>ST</sup> FLOOR MALE &amp; FEMALE, GROUND FLOOR MALE)</u></p> <p><u>COBRA SHELTER COBCSHBAWH2-6DT01 WALL MOUNTED BASIN, WHITE, WITH OVERFLOW, COBRA SLOTTED POP-UP WASTE COB-FWACBS01-0GT01</u></p>	 A white wall-mounted hand wash basin with a square shape and a central drain. Next to it is a black and chrome Cobra slotted pop-up waste drain.


<p><u>WALL MOUNT WITH HALF PEDESTAL, RUBBER P-TRAP</u></p>	
<p><u>HALF PEDESTAL FOR HAND WASH BASIN 1 (1<sup>ST</sup> FLOOR MALE &amp; FEMALE, GROUND FLOOR MALE)</u></p> <p><u>COBRA WELCOME ROUND SEMI-PEDESTAL COBCWLPERD2-6DT01 TO SUIT COBRA SHELTER BASIN, WHITE.</u></p>	
<p><u>BASIN TAP FOR HAND WASH BASIN 1 (1<sup>ST</sup> FLOOR MALE &amp; FEMALE, 2 OFF TOTAL)</u></p> <p><u>COBRA CARINA MIXER COB-FBN2D1CK- 0GT01</u></p> <hr/> <p><u>INCLUDE ANGLE VALVES &amp; FLEXI PIPES</u></p>	



<p><u>BASIN TAP FOR HAND WASH BASIN 1</u>  <u>(GROUND FLOOR MALE)</u></p> <p><u>COBRA CARINA PILLAR TAP 214-CA15</u></p> <p><u>COLD WATER ONLY</u></p> <hr/> <p><u>INCLUDE ANGLE VALVE &amp; FLEXI PIPE</u></p>	
<p><u>DISABLED HAND WASH BASIN</u>  <u>(GROUND FLOOR FEMALE / DISABLED)</u></p> <p><u>COBRA WALL MOUNT SHELTER BASIN WITH</u>  <u>OVERFLOW, COBRA SLOTTED</u>  <u>POP-UP WASTE</u></p> <p><u>INCLUDE CHROME BOTTLE TRAP (BRASS</u>  <u>BODY) WITH CHROME TAIL PIPE</u></p>	
<p><u>BASIN TAP FOR DISABLED HAND WASH</u>  <u>BASIN</u>  <u>(GROUND FLOOR FEMALE / DISABLED)</u></p> <p><u>COBRA COB-FEAPILEA-4FT01 MEDICAL</u></p>	

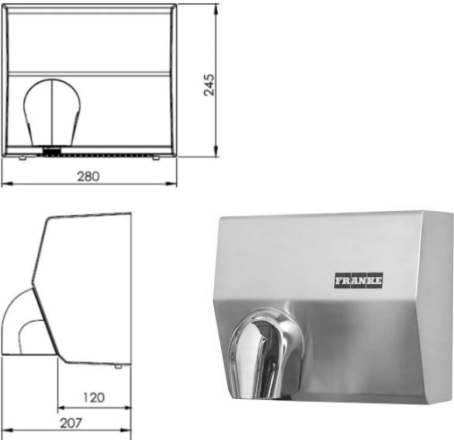

<p><u>ELBOW-ACTION PILLAR TAP</u></p> <p><u>COLD WATER ONLY</u></p> <p><u>INCLUDE ANGLE VALVE &amp; FLEXI PIPE</u></p>	
<p><u>KITCHEN SINK</u> <u>(TEA KITCHEN)</u></p> <p><u>FRANKE CASCADE S/STEEL DROP-IN SINK</u> <u>IN GRANITE TOP</u></p> <p><u>SIZE: 1200 X 500MM</u></p> <p><u>PRODUCT CODE: CDX 621-120</u></p> <p><u>90MM BASKET STRAINER WASTES</u></p> <p><u>SPAZIO 2 PLUMBING KIT OR SIMILAR.</u></p>	

<p><u>MIXER TAP FOR KITCHEN SINK</u></p> <p><u>(TEA KITCHEN)</u></p> <p><u>COBRA STELLA SINK MIXER COB-FSK2W2ST-0GT01 WALL-TYPE</u></p>	
<p><u>SHOWER STOP TAPS</u></p> <p><u>COBRA CARINA UNDERTILE STOP TAPS</u></p> <p><u>OB-FSTAF2CK-0GT01</u></p> <p><u>4X FOR SHOWERS (HOT &amp; COLD)</u></p> <p><u>2X FOR CLEANERS ROOM (HOT &amp; COLD)</u></p>	
<p><u>SHOWER HEAD</u></p> <p><u>(2 OFF TOTAL)</u></p> <p><u>COBRA VANDALPROOF SHOWER HEAD</u></p> <p><u>COB-KP2-6</u></p>	

<p><u>SHOWER OUTLET</u> (2 OFF TOTAL)</p> <p><u>COBRA SHOWER OUTLET &amp; BRASS TRAP</u> <u>COB-FSWTR140-7FT01</u></p>	
<p><u>STOP VALVES &amp; ANGLE VALVES</u></p> <p><u>PROVIDE COBRA COB-832-10 ANGLE VALVES WITH FLEXI PIPES FOR ALL DECK MOUNT / PILLAR TAPS, FOR EASE OF MAINTENANCE</u></p> <p><u>PROVIDE STOP VALVES FOR EACH BANK OF FITTINGS</u> <u>AND FOR SUPPLY TO EACH SECTION OF BUILDING</u></p>	
<p><u>WASHTROUGH</u> (CLEANERS ROOM)</p> <p><u>KWIKOT LAUNDRY SERIES DROP IN WASHTROUGH – SINGLE TROUGH W/RIB</u></p>	

<p><u>90MM BASKET STRAINER WASTE, RUBBER P-TRAP</u></p> <p><u>HOT AND COLD WATER</u></p>	
<p><u>WASHTROUGH &amp; DRIP SINK BIB TAPS</u></p> <p><u>CLEANERS ROOM (X2) AND CLEANING CUPBOARD (X1)</u></p> <p><u>COBRA STELLA BIB TAP COB-FBBAE1ST-0GT01</u></p>	
<p><u>WALL MOUNTED SOAP DISPENSERS – MANUAL</u></p> <p><u>(4X IN TOTAL)</u></p> <p><u>SOAP TYPE LIQUID GEL</u></p> <p><u>FILL VOLUME 1.25 LITER</u></p> <p><u>DIMENSIONS 140 X 235 X 140 MM</u></p> <p><u>FINISH: GRADE 430 STAINLESS STEEL, GAUGE 1MM</u></p>	

<p><u>SHOWER DOOR</u></p> <p><u>(FIRST FLOOR MALE &amp; FEMALE 1X EACH)</u></p> <p><u>CTM CRYSTALTECH NATURAL OBSCURE</u> <u>ADJUSTABLE ALUMINIUM PIVOT</u> <u>SHOWER DOOR - CTE802N - 800-</u> <u>1020 X 1850MM</u></p> <p><u>CHECK MINIMUM OPENING WIDTH</u> <u>REQUIREMENTS. ENSURE</u> <u>SUFFICIENT SPACE AFTER</u> <u>TILING.</u></p>	
<p><u>LOCKERS</u></p> <p><u>(FIRST FLOOR MALE &amp; FEMALE 4X EACH)</u></p> <p><u>SINGLE DOOR HEAVY DUTY STEEL LOCKER</u> <u>1800X300X450. TOP SHELF</u> <u>OPENING, HANGRAIL BELOW,</u> <u>STAPLE FOR PADLOCK. 16KG.</u> <u>COLOUR = HAMMERTONE GREY.</u></p> <p><u>FROM PREMIUMSTEEL.CO.ZA</u></p> <p><u>BOLTED TO WALL 150 ABOVE FINISHED</u> <u>FLOOR LEVEL</u></p>	

<p><u>ELECTRIC HAND DRIER</u></p> <p><u>(FIRST FLOOR MALE &amp; FEMALE, GROUND FLOOR MALE &amp; FEMALE / DISABLED. 4X TOTAL)</u></p> <p><u>FRANKE SENSOR OPERATED HAND DRYER, HF2400HD</u></p> <p><u>SUPPLY ISOLATOR SWITCH AT 2,1M DIRECTLY ABOVE DRIER</u></p> <p><u>UNDERSIDE OF AIR NOZZLE AT 1,2 AFFL</u></p>	
<p><u>TOILET ROLL HOLDER</u></p> <p><u>(FIRST FLOOR MALE &amp; FEMALE, GROUND FLOOR MALE &amp; FEMALE / DISABLED. 4X TOTAL)</u></p> <p><u>VOLKEM TICRA 3-ROLL TOILET ROLL HOLDER. STAINLESS STEEL. CODE PHTIC08</u></p>	

**GENERAL SANITARY & PLUMBING NOTES:**

1. PROVIDE INLINE STRAINERS TO ALL WATER LINES SERVING GEYSERS, TAPS, FLUSH VALVES, ETC. (ONE STRAINER PER BUILDING). PROVIDE INLINE STRAINER FOR SITE WATER SUPPLY. PROVIDE SHUT OFF VALVES

EITHER SIDE OF ALL STRAINERS FOR MAINTAINANCE/CLEANING PURPOSES.

2. ALL WATER SUPPLY LINES TO BE FLUSHED CLEAN OF CONSTRUCTION DEBRIS PRIOR TO FITTING INSTALLATION AND AFTER.
3. HOT & COLD-WATER SUPPLY TO MIXER FITTINGS TO BE BALANCED.
4. WATER & SEWER INSTALLATIONS TO COMPLY WITH SANS 10400 PART P, SANS 10252-1, SANS 10252-2 & SANS 10254.
4. ALL FITTINGS / MATERIALS TO BE INSTALLED STRICTLY TO MANUFACTURER'S SPECIFICATIONS TO ENSURE FULL PRODUCT GUARANTEES.

## INTERNAL FINISHES

### SCREEDS - NEW SCREED

- Clean concrete base surface, chip if necessary and remove all dust.
- Prepare concrete base surface with suitable bonding agent to manufacturer instructions.
- Lay screed in panels in as large as possible in one operation.
- Surface texture & preparation to suit final floor covering (tiles / carpet / flowcrete).
- Screed ratio: 1 part cement to 3,5 parts sand.

### F1: TILED FLOORS

#### FLOOR TILE 1 (INDOOR)

600x600 porcelain tile, matt finish, PC amount of R300/m<sup>2</sup>

### FLOOR TILE 2 (SHOWER MOSAIC)

300x300 sheets porcelain mosaic tile, A-grade, joints between sheets to match joints on sheet PC amount of R900/m<sup>2</sup>

### FLOOR TILE NOTES

3mm joints. Grout = TAL "Dove Grey".

Provide tile movement joints to all room perimeters (to walls) and as shown on tile layout drawings.

Tile movement joints to be 3mm PU joints.

Provide waterproofing behind to shower floor and walls, include membrane to all internal corners of walls & floor.

### TILED FLOOR SKIRTINGS

100 or 150 high (total height to top of edge trim – refer to drawings for individual heights) cut floor tile skirting (to match floor tile of room) with aluminium straight edge trim to top and external corners. 3mm joints. Note: no aluminium trim where wall tiles are used above skirting.

### W1: PAINTED WALLS

#### W1A (INTERIOR - MAIN WALL COLOUR)

2 Coats Plascon Professional Superior Low Sheen PEM 1000/TLS tint range. Colour to be confirmed.

#### W1B (INTERIOR - ACCENT WALL COLOUR)

2 Coats Plascon Professional Superior Low Sheen PEM 1000/TLS tint range. Colour to be confirmed.

#### W1C (OUTDOOR – MAIN WALL COLOUR)

Two Coats Plascon Professional Superior Low Sheen PEM 1000/TLS tint range.  
Colour to be confirmed.

#### W1D (OUTDOOR – ACCENT WALL COLOUR)

Two Coats Plascon Professional Superior Low Sheen PEM 1000/TLS tint range.  
Colour to be confirmed.

#### PAINT NOTES

All paint work (incl. surface preparation, plaster primer, etc.) to be completed as per paint manufacturer specifications to provide full paint guarantee.

Provide sample paint-outs for client approval for all paint types & colours

#### W2: TILED WALLS

##### WALL TILE 1 (General)

Ceramic wall tile, TAL light grey grout, 3mm joints, PC amount of R200/m<sup>2</sup>

#### WALL TILE NOTES

Complete surface preparation & installation as per tile manufacturer's specification.

Provide soft joints to all internal corners: grey PU joint.

See detail room layouts for height of wall tiling.

#### CORNICES

##### CO1 (FOR GRID CEILINGS)

Pre-painted OWA white Shadow line Cornice to match ceiling grid.

Use where grid ceiling stops to vertical surface e.g. wall / bulkhead.



## CEILINGS

### C1 (GRID CEILING)

Pre-painted OWA System S3 white suspended ceiling grid with 600x1200 "OWA Constellation" acoustic ceiling panels, square edge. All installed to OWA specification.

### C2 (LAMBDABOARD CEILING)

80 Lambda board ceiling fixed to suitable timber or metal battens at 900¢ max, drywall tape joints, plaster key & plaster skimmed over entire surface (white mineral side), painted with 2 coats Plascon Super Acrylic Polvin Interior / Exterior, colour white, on suitable primer.

Consult with Rigi foam for full installation specification.

Contact Lyle Jeffery [lyle@rigifoam.co.za](mailto:lyle@rigifoam.co.za) 071 688 2681.

## PAINT SPECIFICATION & COLOURS (EXCL. WALLS)

### STEEL DOOR FRAMES (internal & external)

2x coats Plascon Water-Based Velva Glo, Silky Sheen finish, on suitable primer, tinted range, colour to be confirmed.

### EXTERNAL GENERAL STEELWORK (if applicable)

2x coats Plascon NuRoof on suitable primer, colour "Atmosphere Grey" TRP 200

### POWDERCOATED ALUMINIUM WINDOWS & DOORS

Interpon LL259P "Matt Dark Umber Grey"

### INTERNAL FLUSH PANEL DOORS

2x coats Plascon Water-Based Velvagio, Silky Sheen finish, on suitable primer, colour to be confirmed.

**STEEL ROOF, GUTTERS & RWP**

All 0,58 Chromadek, colour, Dark Dolphin.

**NOTES**

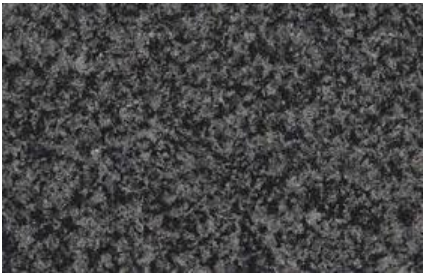
All paint work (incl. surface preparation, primers, etc) to be completed as per paint manufacturer specifications to provide full paint guarantee.





Provide sample paint-outs for client approval for all paint types & colours

Painted steel:

All prepared with red-oxide primer and painted Plascon NuRoof colour “Atmosphere Grey”

**INTERNAL FINISHES SPECIFICATION**

<p><u>GRANITE TOPS</u> <u>(BREAK ROOM KITCHENETTE AND CLEANERS ROOM)</u>  <u>30MM POLISHED RUSTENBURG,</u> <u>20MM THICK MATCHING SPLASHBACKS</u></p>	
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<p><u>JOINERY</u> <u>(BREAK ROOM KITCHENETTE)</u></p> <p><u>ALL VISIBLE FACES (DRAWERS, CUPBOARDS, OPEN SHELVES &amp; SIDES):</u> <u>16MM MELAWOOD, 2MM PVC EDGING TO MATCH,</u> <u>COLOUR = "COIMBRA" OR SIMILAR TO JOINERY HANDLES</u></p>	
<p><u>(BREAK ROOM KITCHENETTE)</u></p> <p><u>FOR CUPBOARDS &amp; DRAWERS:</u> <u>96MM STAINLESS STEEL BARREL HANDLE</u></p>	
<p><u>FORMICA TOPS</u> <u>(CONTROL ROOM)</u></p> <p><u>FORMICA LIFESEAL 30MM HPL TOP, POST FORMED BULLNOSE EDGE</u></p> <p><u>COLOUR = BLACK SLATE (TEXTURED RANGE)</u></p>	
<p><u>ADJUSTABLE STEEL LEGS</u> <u>(CONTROL ROOM AND CLEANERS ROOM)</u></p> <p><u>80Ø ADJUSTABLE BRUSHED S/STEEL SUPPORT LEG</u> <u>HEIGHT TO SUIT INDIVIDUAL TOP HEIGHT</u></p>	

CORNER PROTECTORS

(WHERE SHOWN ON DRAWINGS)

50x50 STAINLESS STEEL MILL CORNER  
PROTECTOR, FROM KIRK,  
GLUED WITH SUITABLE GLUE  
WITH BOTTOM TO FLOOR,  
CODE SKU: SCPO500.N



### **C3.5 MANAGEMENT OF THE WORKS**

#### **C3.5.1 GENERIC SPECIFICATIONS**

The SABS 1200 Standardized Specifications listed in 4.1.1 are applicable.

*The provisions of these Specifications take precedence over the provisions of any part of SABS 2001 that is applicable to the contract. The variations and additions to these specifications are described in the section Applicable SABS 1200 Standardized Specifications (Section C3.4: Construction)*

### **C3.6 HEALTH AND SAFETY**

The following particular and generic specifications are applicable to this contract.

(1) Occupational Health & Safety

#### **C3.6.1 HEALTH AND SAFETY REQUIREMENTS AND PROCEDURES**

C3.6.1.1 Framework for an occupational health and safety plan

C3.6.1.1.1 Introduction

The Principal Contractor must demonstrate to the Employer that it has a suitable and sufficiently documented Occupational Health and Safety plan as well as the necessary competencies, experience, and resources to perform the construction work safely. The Principal Contractor could be required to submit the following documentation for perusal and verification by the Employer:

- Management structure.
- Quality plan.
- Human resources plan.
- Registered workplace skills plan.

- “Letter of good standing” from the Compensation Commissioner or licensed compensation insurer.
- Proof of Induction and other training of employees.
- Example copy minutes of previous Occupational Health and Safety Committee meetings and copies of Incident Investigation reports.

The following specifications are supplied as a guide only. The Employer’s Health and Safety Agent may amend and/or expand on the specifications by means of an addendum to Tender or after the award of the Contract.

#### C3.6.1.1.2 OH&S plan at tender stage

Tenderers shall submit an OH&S plan with their tender document. This shall be a preliminary plan that may be expanded on and finalised after the award of the contract. The OH&S Plan should be based on the following principles:

- A proper risk assessment of the construction work.
- Pro-active identification of potential hazards and unsafe working conditions.
- Informing and/or training of employees in hazards and risk areas.
- Provision of a safe-working environment and safety equipment.
- Ensuring the safety of sub-contractors through their safety plans.
- Monitoring the health and safety on the construction works on a regular basis.
- Using competent safety officers.

#### C3.6.2 Contents of an occupational health and safety plan

##### C3.6.2.1 Occupational Health and Safety Management Programme

- Management of Occupational Health and Safety risks.
- Occupational Health and Safety structures and appointments.
- Programme of Occupational Health and Safety inspections.
- Occupational Health and Safety Representatives.
- Occupational Health and Safety committee.

##### C3.6.2.1.1 Communication and management of the work

- Management structure and responsibilities.
- Details of the construction supervision and his appointed assistants.
- Details of the Construction Safety Officer.
- Occupational Health and Safety goals for the project and arrangements for monitoring and review of Occupational Health and Safety performance.
- Arrangements for:
  - Regular liaison between parties on site.
  - Consultation with the workforce.
  - The exchange of design information between the Employer, designers, supervisors and contractors on site.
  - Handling design changes during the project.
  - Selection and control of contractors.
  - The exchange of Occupational Health and Safety information between all contractors.
  - Security.
  - Site induction and onsite training.
  - Facilities and first-aid.
  - The reporting and investigation of accidents and incidents.
  - The production and approval of risk assessments and method statements.
  - Site OH&S rules.
  - Fire and emergency procedures.
  - Reporting to the Employer i.e., results of Occupational Health and Safety inspections, incident and incident investigations and committee meetings.
  - Reporting of incidents to the Department of Labour and Compensation insurer where appropriate.

#### C6.2.1.2 Arrangements for controlling significant site risks

The following are some examples of the arrangements for controlling the most significant site risks:

#### C3.6.2.1.3 Safety risks

- Services, including temporary electrical installations.
- Preventing employees from falling into excavations, from trucks etc.
- Work with, on or near fragile materials.
- Control of lifting operations.

- The maintenance of plant and equipment.
- Traffic routes and segregation of vehicles and pedestrians.
- Traffic control during pipeline crossing of existing roads.
- Handling and storage of hazardous materials.
- Dealing with existing unstable structures/land.
- Working in confined spaces.
- Working at elevated heights (> 3,0 m).
- Other significant safety risks as and when identified.
- Working in excavations to a depth of 7,0 metres.

#### C3.6.2.1.4 Health risks

- Working environment.
- Handling, storage and use of hazardous chemical substances.
- Dust containing cement, silica and other hazardous substances.
- Dealing with contaminated land or material.
- Manual handling.
- Reducing noise and vibration.
- Provision of adequate lighting.
- Ventilation considerations.
- Extreme heat and cold temperature considerations.
- Dealing with HIV/Aids and other illnesses.
- Provision of and maintaining ablution and eating facilities.
- Other significant health risks as and when identified.

#### C3.6.2.1.5 Special risks

- Contractors are to take note of the special risks that may be encountered during the project and to include these special risks in the OH&S plan.

#### C3.6.2.1.6 Working environment

- Rotating machinery (and pumps if required).
- Electrical infrastructure not indicated on "As Built" drawings.
- Electrical storms during summer months.
- Traffic control during pipeline crossings of existing roads.

#### C3.6.2.1.7 Installation work

- Use of electricity may be hazardous in wet conditions.
- Working space may be limited.
- Lifting and placing of heavy equipment, pipes and manhole rings and covers.

#### C3.6.2.1.8 Preparation of an occupational health and safety operational reference file/manual

The Principal Contractor shall open and maintain an OH&S file for the duration of the contract. On completion of the contract the Principal Contractor shall hand the OH&S file to the Employer.

#### C3.6.2.1.9 Following is some of the requirements to be addressed

- Layout, format, and content requirements.
- Arrangement for the collection and gathering of information.
- Storage and archiving of all the information.
- Copy to the Client at completion of project.
- Appointment of a health and safety officer in writing.

#### C3.6.2.1.10 Contents of an OH&S file/manual

- OH&S Policy.
- Notice of new project.
- Site start-up.
- Security measures.
- Written designations and appointments.
- Arrangements with contractors / mandatory's
- OH&S rules and procedures.
- Induction.
- OH&S training.
- OH&S promotion.
- OH&S representatives.
- OH&S committees.
- Workplace facilities e.g. ablutions, sheltered eating areas etc.
- Protective equipment.

- Workplace inspections and audits.
- Investigation and reporting of incidents/accidents.
- Mechanical safeguarding.
- Electrical safeguarding.
- Safeguarding against trench excavations with depths ranging between 2 to 7 metres.
- Safeguarding against hazardous substances.
- Lifting machinery and equipment.
- Construction vehicles and mobile plant.
- Welding, heating, and flame cutting.
- Protection of the environment affected by construction activities.
- Keeping of records in terms of the OH&S Act (85 of 1993).
- General details of construction methods and materials used.
- Details of equipment and maintenance facilities within the structures.
- Maintenance requirements and procedures for structures / equipment / plant.
- Manuals produced by suppliers and specialist contractors, including operating and maintenance procedures and schedules for plant and equipment.
- Details of the location and nature of utilities and services, including emergency and fire-fighting systems.

### **Construction Regulations, 2003**

The Contractor shall be required to comply with the Occupational Health and Safety Act, 1993: Construction Regulations, 2003 (the regulations) as promulgated in Government Gazette No 25207 and Regulation Gazette No 7721 of 18 July 2003. (Not included in this Volume). Non-compliance with these regulations, in any way whatsoever, will be adequate reason for suspending the Works.

The proposed type of work, materials to be used and potential hazards likely to be encountered on this Contract are detailed in the Project Specifications, Schedule of Quantity and Drawings, as well as in the Employers' health and safety specifications (regulation 4(1)) of the Construction Regulations 2003, which are bound in the Contract document

The Contractor shall in terms of regulation 5(1) provide a comprehensive health and safety plan detailing his proposed compliance with the regulations, for approval by the Employer.

The Contractor shall always be responsible for full compliance with the approved plan as well as the Construction Regulations and no extension of time will be considered for delays due to non-compliance with the abovementioned plan or regulations.

Payment items are included in the Schedule of Quantities to cover the Contractor's cost for compliance with the OHS Act and the abovementioned regulations.

### **C3.6.2 PROTECTION OF THE PUBLIC**

The contractor shall always ensure that his operations do not endanger any member of the public.

### **C3.6.3 BARRICADES AND LIGHTING**

All excavation must be marked with drum, reflecting tape and warning signs to satisfaction of the Employer's Agent and OHS appointed official.

**PART C4     SITE INFORMATION**

**NATURE OF GROUND AND SUBSOIL CONDITIONS**

*Subsoil Investigation*

- (a) A Geotechnical Investigation was conducted and will be made available at construction stage,
  
- (b) The site has some trees to be cut off,
  
- (c) It is the contractor's responsibility to supply and deliver all material that comply with the minimum standard as well as for the building and maintaining of access roads to the works on site, haul areas or dumping site. No additional payment will be applicable to the above mentioned other than the relevant items in the schedule of quantities.
  
- (e)        There are existing services present underground such as sewer, water line and electrical cable that need to be taken care off. It is the Contractors responsibility to ensure that those services are not damaged.

Should the services be damaged, it will be fixed at the contractor's expense.

**PART C4: SITE INFORMATION**

TENDER NO: ALTM 02/2025

UPGRADING OF MANZANA WASTEWATER TREATMENT WORKS

**TENDER DRAWINGS**

	<b><u>GENERAL</u></b>	
11364-000-001	Drawing List	Plan
11364-000-002	Sign Board	Details
11364-004-001	Site Development Plan	Layout
11364-004-002	Survey Plan	Layout
11364-004-003	Hydraulic Profile	Layout
11364-004-004	Process	Layout

	<b><u>CIVIL</u></b>	
		-
11364-150-001	Earthworks	Layout
11364-400-001	Truck dump slab/Skip slab and manhole	Layout and Sections
11364-400-002	Inlet works	Layout and Sections
11364-400-002	Inlet works	Details
11364-400-003	Bioreactor	Layout and Sections
11364-400-003	Bioreactor	Sections & Details
11364-400-004	Clarifier	Layout and Sections
11364-400-004	Clarifier	Sections & Details
11364-400-005	Sludge Dry Bed and slab	Layout and Sections
11364-400-006	Chlorine Contact Tank	Sections & Details
11364-400-007	Operator Building	Layout and details
11364-400-008	Guard House	Layout and details
11364-400-009	Staff Quarters	Layout and details
11364-400-010	Control Room	Layout, Sections & Details

## PART C4: SITE INFORMATION

TENDER NO: ALTM 02/2025

UPGRADING OF MANZANA WASTEWATER TREATMENT WORKS

<b>11364-400-011</b>	<b>Main Line Division Chamber</b>	<b>Layout, Sections &amp; Details</b>
<b>11364-400-012</b>	<b>Collector Chamber</b>	<b>Layout and Sections</b>
<b>11364-400-013</b>	<b>WAS Pump station</b>	<b>Layout and Sections</b>
<b>11364-400-014</b>	<b>WAS Pump station</b>	<b>Sections &amp; Details</b>
<b>11364-400-015</b>	<b>RAS Pump station</b>	<b>Layout and Sections</b>
<b>11364-400-016</b>	<b>RAS Pump station</b>	<b>Sections &amp; Details</b>

## **PART C4: SITE INFORMATION**

TENDER NO: ALTM 02/2025

UPGRADING OF MANZANA WASTEWATER TREATMENT WORKS



## **PART 7:**

## **SITE INFORMATION**

## **PART C4: SITE INFORMATION**

*TENDER NO: ALTM 02/2025*

*UPGRADING OF MANZANA WASTEWATER TREATMENT WORKS*

### **C4.1 SITE INFORMATION**

#### **GENERAL**

This section describes the site at the time of tender to enable the tenderer to price his tender and to decide upon his method of working and programming and risks.

#### **CONTENTS**

**SI1 Site location**

**SI2 Climatic Condition**

## PART C4: SITE INFORMATION

TENDER NO: ALTM 02/2025

UPGRADING OF MANZANA WASTEWATER TREATMENT WORKS

### SI 1 Project Location

The project is located at Badplaas / eManzana village.

Details of the project location are displayed in the table and figure below.

<b>Village</b>	Badplaas / eManzana
<b>Province</b>	Mpumalanga Province
<b>District</b>	Gert Sibande District Municipality
<b>Locality</b>	Chief Albert Luthuli Local Municipality
<b>Co-ordinates</b>	S 25°57'33"
	E 30°35'18"

### SI 2 Climatic Conditions

The Project is located in an area with highveld Climatic Conditions and hence temperatures are moderate in summer and cold in winter.

## PART C4: SITE INFORMATION

TENDER NO: ALTM 02/2025

UPGRADING OF MANZANA WASTEWATER TREATMENT WORKS

### C4.2 LOCALITY PLAN:

