

# ROADS & TRANSPORT DEPARTMENT



## TRANSPORT INFRASTRUCTURE DESIGN & CONSTRUCTION DIVISION

**TENDER REFERENCE: RTD 11-2025/26**

**TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF  
PEGASUS STORMWATER CANAL IN EQUESTRIA FOR A PERIOD OF 12 MONTHS**

### VOLUME 1

**A Tender for Category 7CE or higher CIDB registered Contractors**

<b>ISSUED BY:</b>	<b>PREPARED BY:</b>
<b>The Divisional Head: Supply Chain Management Division PO Box 1409 PRETORIA 0001  Tel: 012 358-0343</b>	<b>The Divisional Head Transport Infrastructure Design &amp; Construction Division PO Box 1409 PRETORIA 0001  Tel: 012 358-3768</b>

Registered Name of Tenderer:	
Trading Name of Tenderer:	
Registration No. of Entity:	CoT Vendor No:
CIDB CRS Number (s):	CSD Number (s):
Contact Person:	
Tel. No:	E-Mail Address:
Cell No:	Fax No:

**DESCRIPTION**

**COLOUR**

**PORTION 1: TENDER**

**PART T1 TENDERING PROCEDURES**

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Pink  
Pink

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Yellow

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Yellow  
Yellow  
White  
White  
White  
White  
White

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Blue  
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Blue  
Blue  
Blue  
Blue

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Green  
Green

# PORTION 1: TENDER

## PART T1: TENDER PROCEDURES

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## **T1.1 TENDER NOTICE AND INVITATION TO TENDER**

**RTD11-2025/26**

**CITY OF TSHWANE  
ROADS AND TRANSPORT DEPARTMENT**

### **TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF PEGASUS CANAL IN EQUESTRIA FOR A PERIOD OF 12 MONTHS**

Tenders are hereby invited for the above tender.

Tenderers should have a CIDB contractor grading designation of **7CE** or higher.

The tender documents will be available on the City of Tshwane and national treasury official website ([www.tshwane.gov.za](http://www.tshwane.gov.za)) or [www.etenders.gov.za](http://www.etenders.gov.za)

Tenders will be evaluated based on the **80/20** Preference Point System will be applied to this tender.

A **COMPULSORY BRIEFING MEETING** with a representative of the Employer will take place at Tshwane Leadership and Management Academy Auditorium, 11 Staatsartillerie Road, Pretoria West **at 10h00 on the 5<sup>th</sup> of February 2026**.

The lowest or any tender will not necessarily be accepted, and the Municipality reserves the right to accept any tender as a whole or in part or no tender.

Tenders must remain valid for a period of **90 days** after the closing date for the submission of tenders, during which period a tender may not be amended or withdrawn and may be accepted at any time by the Municipality.

The closing time for receipt of tenders is **10h00 on the 27<sup>th</sup> of February 2026**. Tenders will be received on the closing date and time shown, must be enclosed in sealed envelopes bearing the applicable tender heading and reference number, as well as the closing time and due date, and must be addressed to the Divisional Head, Supply Chain Management, P O Box 1401, Pretoria, 0001 and must be submitted in the tender box situated at **Tshwane House, 320 Madiba Street, Pretoria, 0002**. Tenders will be opened at the latter address at the time indicated.

Only bidders registered on the central supplier database (CSD) and with a CSD number will be considered for this tender, as this is a requirement from the National Treasury.

“Note: Bidders are required to submit electronic copies of the bid by memory stick/USB flash drive together with the hard copy of the Bid/Proposals”.

<b><u>ENQUIRIES:</u></b>	Employers Agent:	<b>Mr. Godfrey Msiza</b>
	Tel (Office):	<b>012 358 7734</b>
	E-Mail:	<b>godfreyms@tshwane.gov.za</b>

## T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in **Annexure C of Standard for Uniformity in Engineering and Construction Works Contracts (Board Notice 423 Government Gazette No 42622 of 8 August 2019)**, bound into Section T1.2

The Standard Conditions of Tender makes several references to the Tender Data. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender to which it mainly applies.

CLAUSE NUMBER		TENDER DATA
C.1.1	Actions	The Employer is <b>City of Tshwane Metropolitan Municipality</b>
C.1.2	Tender Documents	<p><u>Volume 1: Tender Document</u></p> <p><b>THE TENDER</b></p> <p><b>Part T1: Tendering Procedures</b></p> <p>T1.1 – Tender Notice and Invitation to Tender</p> <p>T1.2 – Tender data</p> <p>T1.3 – Standard Conditions of Tender</p> <p><b>Part T2: Returnable documents</b></p> <p>T2.1 – List of returnable documents</p> <p>T2.2 – Returnable schedules</p> <p><b>THE CONTRACT</b></p> <p><b>Part C1: Agreements and contract data</b></p> <p>C1.1 – Form of offer and acceptance</p> <p>C1.2 – Contract data</p> <p>C1.3 – Form of guarantee</p> <p>C1.4 – Guarantee (Cash deposit)</p> <p>C1.5 – Health and safety agreement</p> <p>C1.6 - Application for a permit to Department of labour to do construction work</p> <p>C1.7 – Adjudicators contract</p> <p><b>Part C3: Scope of work</b></p> <p>C3 – Scope of work</p> <p><b>Part C4: Site information</b></p> <p>C4 – Site information</p> <p><u>Volume 2: Tender Drawings</u></p>
C.1.3	Interpretation	<b>Add</b> the following new clause:
C.1.3.4		<i>The tender documents have been drafted in English. The contract arising from the invitation to tender shall be interpreted and construed in English</i>
C.1.4	Communication and Employer's Agent	<p>Agent: <b>Tango's Consultants (Pty) Ltd</b></p> <p>Address: <b>402 WEST AVENUE FERNDALE 2194</b></p> <p>Tel: <b>087 700 9200</b></p> <p>E-Mail: <a href="mailto:admin@tangosgroup.co.za">admin@tangosgroup.co.za</a></p>

CLAUSE NUMBER	TENDER DATA
C.2.1 Eligibility	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 for a <b>7CE or higher</b> class of construction work, are eligible to submit tenders.
	<p>Joint Ventures are eligible to submit tenders provided that:</p> <ol style="list-style-type: none"> <li>every member of a joint venture is registered with the CIDB within 21 days of the closing date of tenderers;</li> <li>the lead partner has a contractor grading designation in the <b>6CE or higher</b> class of construction work; and</li> <li>The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor designation in accordance with the sum tendered for a <b>7CE or higher</b> 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>
C.2.2 Cost of Tendering	The employer <b>will not</b> compensate the tenderer for any costs incurred in attending interviews or making any submissions in the office of the employer.
C.2.5 Reference Documents	<p><b>Add the following:</b></p> <p>Unless specified otherwise in this document, the following standards and conditions of contract will be applicable under this Contract:</p> <ul style="list-style-type: none"> <li>The document <b><i>“Standard Specifications for Municipal Civil Engineering Works”, Third Edition, 2005</i></b> issued by the Divisional Head: Roads and Stormwater of the City of Tshwane. This document is obtainable free of charge on the website <a href="http://www.tshwane.gov.za">www.tshwane.gov.za</a>.</li> <li>The latest print version as current at 30 days before close of tenders of the document <b><i>“General Conditions of Contract for Construction Works 3rd Edition, 2015”</i></b> including corrections thereto as current at 30 days before close of tenders, as published by the <i>South African Institution of Civil Engineering</i>.</li> </ul> <p>The document may be purchased in hard copy from the <i>South African Institution of Civil Engineering</i> or may be purchased online as an electronic reference document in PDF format by following the relevant links on <a href="http://www.saice.org.za">www.saice.org.za</a>. The corrections may be downloaded from the SAICE website <a href="http://www.saice.org.za">www.saice.org.za</a>.</p>
C.2.7 Briefing meeting	<p>The arrangements for a <b>compulsory</b> briefing meeting are as stated in the tender notice and invitation to tender</p> <p>Confirmation of attendance will be recorded on site in the attendance register to be signed by all tenderers. Addenda will be issued to and tenders received from those tendering entities appearing on the attendance register.</p> <p>Tender documents will be made available in the City of Tshwane website(<a href="http://www.tshwane.gov.za">www.tshwane.gov.za</a>).</p>
C.2.8 Seek clarification	<p><b>Replace</b> the clause with the following:</p> <p><i>Request clarification of the tender documents, if necessary, by notifying the employer at least <b>7 (seven) working days</b> before the closing time stated in the tender data.</i></p>
C.2.9 Insurance	<b>Add</b> the following to the clause

CLAUSE NUMBER		TENDER DATA
		<i>Accept that the submission of a tender shall be construed as an acknowledgement by the tenderer that he is satisfied with, where applicable, the insurance cover the Employer will affect under the contract.</i>
C.2.12	Alternative offers	Alternative tender offers will <b><u>not</u></b> be considered.
C.2.13	Submitting a tender offer	<ul style="list-style-type: none"> <li>• The tender offer <b><u>shall be completed in non-erasable black ink</u></b></li> <li>• Any entry made by the tenderer in the document which the tenderer desires to change, <b><u>shall not be erased or painted out.</u></b> A line shall be drawn through the incorrect entry and the correct entry shall be written above in <b><u>non-erasable black ink</u></b> and the <b><u>full signature</u></b> of the tenderer shall be placed next to the correction.</li> </ul>
C.2.13.2		<p><b><u>Replace</u></b> the contents of the clause with the following:</p> <p><i>Return all volumes of the tender document to the Employer after completion of the relevant sections of each volume in their entirety, either electronically (if they were issued in electronic format) or by writing in black ink.</i></p> <p><i>All volumes are to be left intact in original format and no pages shall be removed or re-arranged</i></p>
C.2.13.3		<p>Parts of each tender offer communicated on paper shall be submitted as <b>an original, plus a scanned copy in PDF format on a Memory stick/flash disc (USB).</b></p> <p><b>In addition to the hard copy submission, each tenderer is required to submit a scanned copy of the <u>fully completed and signed</u> tender submission document.</b></p> <p><b>This is to be on a flash disc (USB) attached to the original tender submission documents, adequately identifiable as belonging to the tenderer, be in PDF format scanned, and be in full colour.</b></p>
C.2.13.4		<p><b><u>Add</u></b> the following to the clause</p> <p><i>Only authorised signatories may sign the original and all copies of the tender offer where required.</i></p> <p><i>In the case of a <b>ONE-PERSON CONCERN</b> submitting a tender, this shall be clearly stated.</i></p> <p><i>In the case of a <b>COMPANY</b> submitting a tender, include a copy of a <b><u>resolution by its board of directors</u></b> authorising a director or other official of the company to sign the documents on behalf of the company.</i></p> <p><i>In the case of a <b>CLOSE CORPORATION</b> submitting a tender, include a copy of a <b><u>resolution by its members</u></b> authorising a member or other official of the corporation to sign the documents on each member's behalf.</i></p> <p><i>In the case of a <b>PARTNERSHIP</b> submitting a tender, <b><u>all the partners</u></b> 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 <b><u>proof of such authorisation</u></b> shall be included in the Tender.</i></p> <p><i>In the case of a <b>JOINT VENTURE/CONSORTIUM</b> submitting a tender, include <b><u>a resolution of each company</u></b> of the joint venture together with a <b><u>resolution by its members</u></b> authorising a member of the joint venture to sign the documents on behalf of the joint venture.</i></p>

CLAUSE NUMBER	TENDER DATA
	<b><u>Accept that failure to submit proof of authorisation to sign the tender shall result in the tender offer being regarded as non-responsive.</u></b>
C.2.13.5	<p>The identification details are:</p> <p>Tender/Reference: <b>RTD 11 2025/26</b></p> <p>Tender Description: <b>Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months</b></p> <p>Closing Time: <b>10:00</b></p> <p>Closing Date: <b>27 February 2026</b></p> <p>Each tender shall be enclosed in a sealed envelope, bearing the correct identification details and shall be submitted (HAND DELIVERED) at:</p> <p><b>Supply Chain Management Tshwane House 320 Madiba Street Pretoria CBD 0002</b></p> <p>Please note that the tender box is open 24 hours. Please ensure that all required compliance documents are included upon submission as no additional documents will be requested from bidders after closing.</p> <p><b>BIDDERS MUST PLEASE ENSURE THAT THEY SIGN THE SUBMISSION REGISTER UPON HANDING IN THE DOCUMENTS.</b></p>
C.2.13.9	<b>Telephonic, telegraphic, telex, facsimile or e-mailed offers will <u>not</u> be accepted</b>
C.2.13.10	<p><b>Add</b> the following sub- clause C.2.13.10:</p> <p><i>Accept that all conditions, which are printed or written upon any stationery used by the Tenderer for the purpose of or in connection with the submission of a tender offer for this Contract, which are in conflict with the conditions laid down in this document shall be waived, renounced and abandoned.</i></p>
C.2.14 Information and data to be completed in all respects	<p><b>Add</b> the following to the clause:</p> <p><i>The Tenderer is required to enter information in the following sections of the document:</i></p> <p>Section T2.2 : Returnable Schedules  Section C1.1 : Form of Offer and Acceptance  Section C1.2 : Contract Data (Part 2)  Section C2.2 : Pricing Schedule</p> <p><i>The above sections shall be signed by the Tenderer (and witnesses where required). Individual pages should only be initialled by the successful Tenderer and by the witnesses after acceptance by the Employer of the Tender Offer.</i></p> <p><i>The Tenderer shall complete and sign the Form of Offer prior to the submission of a Tender Offer.</i></p>



CLAUSE NUMBER	TENDER DATA
	<p><i>The Schedule of Deviations (if applicable) shall be signed by the successful Tenderer after acceptance by the Employer of the Tender Offer.</i></p> <p><i>Accept that failure on the part of the Tenderer to submit any one of the Returnable Documents listed in Part T2 – Returnable Documents within the period stipulated, shall be just cause for the Employer to consider the tender offer as being regarded as non-responsive.</i></p> <p><i>Accept that the Employer shall in the evaluation of tender offers take due account of the Tenderer's past performance in the execution of similar engineering works of comparable magnitude, and the degree to which he possesses the necessary technical, financial and other resources to enable him to complete the Works successfully within the contract period. Satisfy the Employer and the Engineer as to his ability to perform and complete the Works timeously, safely and with satisfactory quality, and furnish details in Part T2 – Returnable Documents.</i></p> <p><i>Accept that submitting inferior and inadequate information relating to health and safety (as required in clause 2.23) shall be regarded as justifiable and compelling reasons not to accept the Tender Offer of the Tenderer scoring the highest number of tender evaluation points.</i></p>
C.2.15 Closing time	The closing time for submission of tender offers is stated in the tender notice and invitation to tender.
C.2.16 Tender offer validity	<p>The tender offer validity period is <b>90 days</b>.</p> <p><b>Add</b> the following new clause</p> <p><i>If the tender validity period expires on a Saturday, Sunday or public holiday, the tender offer shall remain valid and open for acceptance until closure of business on the following working day.</i></p>
C.2.16.5	<p><b>Add</b> the following new clause:</p> <p><i>Accept that should the Tenderer unilaterally withdraw his tender during the tender validity period, the Employer shall, without prejudice to any other rights he may have, be entitled to accept any less favourable tender for the Works from those received, or to call for fresh tenders, or to otherwise arrange for execution of the Works, and the Tenderer shall pay on demand any additional expense incurred by the Employer on account of the adoption of the said courses, as well as either the difference in cost between the tender withdrawn (as corrected in terms of clause 3.9 of the Conditions of Tender) and any less favourable tender accepted by the Employer, or the difference between the tender withdrawn (as corrected) and the cost of execution of the Works by the Employer as well as any other amounts the Employer may have to pay to have the Works completed</i></p>
C.2.18 Provide other material	The tenderer shall, when requested by the employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements.
C.2.19 Inspections, tests and analysis	<p><b>Add</b> the following at the end of the clause:</p> <p><i>....or upon written request.</i></p>
C.2.20 Submit securities,	The tenderer is required to submit with his tender a letter of intent from an approved insurer undertaking to provide the performance bond to the format included in <b>Section C1.3</b> of Part C1 Agreements and Contract Data of this document.

CLAUSE NUMBER	TENDER DATA
bonds, policies, etc.	
C.2.23 Certificates	Refer to <b>Part T2</b> of this procurement document for a list of the documents that are to be returned with the tender.
C.2.24 <i>Conditions Associated with the Granting of Preferences</i>	<p><b>Add</b> the following new clause</p> <p><i>The Tenderer, undertakes to:</i></p> <ol style="list-style-type: none"> <li><i>engage one or more Targeted Enterprises / Targeted Labour in accordance with the provisions of the SANS 1914 as varied in the Procurement Section of the Scope of Works;</i></li> <li><i>deliver to the Employer, within 5 working days of being requested in writing to do so, a Targeted Enterprise Declaration Affidavit in respect of all Targeted Enterprises engaged at prime contract level to satisfy Contract Participation Goal requirements;</i></li> <li><i>accept the sanctions set out in the Scope of Works should such conditions be breached.</i></li> </ol>
2.25 <i>Canvassing and obtaining of additional information by tenderers</i>	<p><b>Add</b> the following new clause</p> <p><i>The Tenderer shall not make any attempt either directly or indirectly to canvass any of the Employers' 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.</i></p> <p><i>The Tenderer shall not make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of tenders.</i></p>
C2.26 <i>Prohibitions on awards to persons in service of the state</i>	<p><b>Add</b> the following new clause</p> <p><i>The Employer is prohibited to award a tender to a person -</i></p> <ol style="list-style-type: none"> <li><i>who is in the service of the state; or</i></li> <li><i>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</i></li> <li><i>a person who is an advisor or consultant contracted with the municipality or municipal entity.</i></li> </ol> <p><b><i>In the service of the state means to be -</i></b></p> <ol style="list-style-type: none"> <li><i>a member of:-</i> <ul style="list-style-type: none"> <li><i>any municipal council;</i></li> <li><i>any provincial legislature; or</i></li> <li><i>the National Assembly or the National Council of Provinces;</i></li> </ul> </li> <li><i>a member of the board of directors of any municipal entity;</i></li> <li><i>an official of any municipality or municipal entity;</i></li> <li><i>an employee of any national or provincial department;</i></li> <li><i>provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);</i></li> <li><i>a member of the accounting authority of any national or provincial public entity; or</i></li> <li><i>an employee of Parliament or a provincial legislature.</i></li> </ol> <p><i>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 of this procurement document must be completed.</i></p>
C2.27	<b>Add</b> the following new clause

CLAUSE NUMBER	TENDER DATA
<p><i>Awards to close family members of persons in the service of the state</i></p>	<p><i>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 F2.25), or has been in the service of the state in the previous twelve months, including -</i></p> <ul style="list-style-type: none"> <li><i>a) the name of that person;</i></li> <li><i>b) the capacity in which that person is in the service of the state; and</i></li> <li><i>c) the amount of the award.</i></li> </ul> <p><i>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 of this procurement document must be completed.</i></p>
<p>C2.28      <i>Vendor registration</i></p>	<p><b>Add</b> the following new clause</p> <p><i>The contractor will be required registering as a supplier/ service provider on the City of Tshwane's vendor register before any payment can be done.</i></p> <p><i>If the tenderer is already registered as a vendor, it is required to record the vendor number in space provided on the cover page of this Tender document.</i></p> <p><i>Vendor registration documents are available from the Procurement Advice Centre or can be downloaded from</i></p> <p><i>All parties of a joint venture or consortium submitting a tender shall comply with the requirements of this</i>  <a href="http://www.tshwane.gov.za/business/supplychain/vendor">http://www.tshwane.gov.za/business/supplychain/vendor</a> <i>registration clause.</i></p>
<p>C2.29      <i>Tax</i></p>	<p><b>Add</b> the following new clause</p> <p><b><i>National Treasury SCM Instruction no. 7 of 2017/18 clause 4 application during SCM Processes state that:</i></b></p> <p><i>The designated official(s) must verify the tenderer's tax compliance status prior to the finalisation of the award of the tender or price quotation.</i></p> <p><i>Where the recommended tenderer is not tax compliant, the tenderer should be notified of their non- compliant status and the tenderer must be requested to submit to the municipality or municipal entity, within 7 working days, written proof from South African Revenue Services of their tax compliance status or proof from SARS that they have made an arrangement to meet their outstanding tax obligations. The proof of tax compliance status submitted by the tenderer to the municipality or municipal entity must be verified via the Central Supplier Database or eFiling</i></p> <p><i>Accept that the tenderer will be rejected if such tenderer fails to provide proof of tax compliance status in terms of clause 4.2 of National Treasury SCM Instruction no. 7 of 2017/18</i></p>
<p>C.3.1      <i>Respond to requests from the tenderer</i></p> <p>C.3.1.1</p>	<p><i>The employer will respond to requests for clarification up to 7 (seven) working days before the tender closing time.</i></p>

CLAUSE NUMBER	TENDER DATA
C.3.4 Opening of tender submissions	Upon request tenders will be opened immediately after the closing time for tenders. Bidders are also requested to refer to the City's website where their closing register will be published.
C.3.8 Test for responsiveness  C.3.8.2	<p><b>Add</b> the following to the sub-clause:</p> <p>Failure on the part of the Tenderer to submit a tender offer as stipulated in clause C2.13 prior to the closing time as stipulated in clause C2.15 shall be just cause for the Employer to consider the tender offer as being non-responsive.</p> <p>Failure on the part of the Tenderer to submit any one of the returnable documents or certificates listed in clause C2.23 within the period stipulated shall be just cause for the Employer to consider the tender offer as being non-responsive.</p>
C.3.9 Arithmetical errors, omissions and discrepancies	<p>Replace the contents of the clause with the following:</p> <p>Check responsive tender offers for arithmetical errors, correcting them in the following manner:</p> <ul style="list-style-type: none"> <li>a) If a bill of quantities (or schedule of quantities or schedule of rates) applies and there is an error in the line-item total resulting from the product of the unit rate and the quantity, the unit rate shall govern and the line-item total shall be corrected.</li> <li>b) Where there is an error in the total of the prices, either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the corrected total of the prices shall govern.</li> <li>c) Where there is a discrepancy between the amount indicated in the Tenderer's tender offer and the corrected amount obtained after completing the above steps, the corrected amount shall govern.</li> </ul> <p>Notify a tenderer upon written request received after the closing date of tenders of all arithmetical errors made by that particular tenderer.</p>
C.3.11 Evaluation of tender offers	<p><b>Add</b> the following new clause:</p> <p><b>Stages of Evaluation.</b></p> <p>The following stages of evaluation will be applicable for this tender</p> <p>Stage 1: Administrative Compliance  Stage 2: Mandatory Requirements  Stage 3: Preference Points System 80/20</p> <p><b>1.1 STAGE 1: ADMINISTRATIVE COMPLIANCE</b></p> <p>All the bids will be evaluated against the administrative responsiveness requirements as set out in the list of returnable documents.</p>

CLAUSE NUMBER	TENDER DATA		
	<b>Compulsory Returnable Documentation (Submission of these are compulsory)</b>	<b>Submitted (YES or NO)</b>	<b>Checklist (Guide for Bidder and the Bid Evaluation Committee)</b>
	a) To enable The City to verify the bidder's tax compliance status, the bidder must provide; <ul style="list-style-type: none"> <li>• Tax compliance status PIN.</li> <li>or</li> <li>• Central Supplier Database (CSD)</li> </ul>		Tax status must be compliant before the award.
	b) A copy of their Central Supplier Database (CSD) registration; or indicate their Master Registration Number / CSD Number;		CSD must be valid.
	c) Confirmation that the bidding company's municipal service charges, rates and taxes are up to date: Original or copy of Municipal Account Statement of the Bidder (bidding company) not older than 3 months and account must not be in arrears for more than ninety (90) days; or ,signed lease agreement or In case of bidders located in informal settlement, rural areas or areas where they are not required to pay Rates and Taxes a letter from the local councillor confirming they are operating in that area		Was a Municipal Account Statement, or signed lease agreement or letter from the local councillor provided for the bidding company? The name and / or addresses of the bidder's statement correspond with CIPC document, Address on CSD or Company profile? Are municipal service charges, rates and taxes up to date (i.e. not in arrears for more than 90 days?
	d) In addition to the above, confirmation that all the bidding company's owners / members / directors / major shareholders municipal service charges, rates and taxes are up to date: • Original or copy of Municipal Account Statement of all the South African based owners / members / directors / major shareholders not older than 3 months and the account/s may not be in arrears for more than ninety (90) days; or a signed lease agreement of owners / members / directors / major shareholders or In case of bidders located in informal settlement, rural areas or areas where they are not required to pay Rates and Taxes a letter from the local councillor confirming they are residing in that area		Was a Municipal Account Statement, or signed lease agreement or letter from the local councillor provided for the company's owners / members / directors / major shareholders? Are municipal service charges, rates and taxes up to date (i.e. not in arrears for more than 90 days?
	e) Duly Signed and completed MBD forms (MBD 1, 4, 5, 8 and 9) The		All documents fully completed (i.e. no blank

CLAUSE NUMBER	TENDER DATA		
	<p>person signing the bid documentation must be authorized to sign on behalf of the bidder. Where the signatory is not a Director / Member / Owner / Shareholder of the company, an official letter of authorization or delegation of authority should be submitted with the bid document.</p> <p><b>NB: Bidders must ensure that the directors, trustees, managers, principal shareholders, or stakeholders of this company, declare any interest in any other related companies or business, whether or not they are bidding for this contract. <u>See Question 3.14 of MBD 4. Failure to declare interest will result in a disqualification</u></b></p>		<p>spaces), All documents fully signed by (any director / member / trustee as indicated on the CIPC document, alternatively a delegation of authority would be required, Documents completed in black ink (i.e. no "Tippex" corrections, no pencil, no other colour ink, or <b>non-submission of the MBD forms</b>, will not be considered)</p>
	<p>f) Audited Financial Statements for the most recent three (3) years or Audited Financial Statements from date of existence for companies less than three years old.</p> <p><b>NB:</b> The bidder must submit signed audited annual financial statements for the most recent three years, or if established for a shorter period, submit audited annual financial statements from date of establishment.</p> <p>If the bidder is not required by law to prepare signed annual financial statements for auditing purposes, then the bidder must submit proof that the bidder is not required by law to prepare audited financial statements.</p>		<p>Applicable for tenders above R10m in conjunction with MBD 5)</p> <p>Are Audited financial statements provided (Audited financials must be signed by auditor) Or proof that the bidder is not required by law to prepare audited financial statements.</p>
	<p>g) Joint Ventures (JV) – (Only applicable when the bidder tenders as a joint venture) Where the bidder bids as a joint venture (JV), the required or relevant documents as per (a) to (f) above must be provided for all JV parties. In addition to the above the bidder must submit a Joint Venture (JV) agreement signed by the relevant parties.</p> <p><b>NB:</b> It is a condition of this bid that the successful bidder will continue with the same Joint Venture (JV) for the duration of the contract unless</p>		<p>If applicable. JV agreement provided? JV agreement complete and relevant? Agreement signed by all parties? All required documents as per (i.e. a to f) must be provided for all partners of the JV.</p>

CLAUSE NUMBER	TENDER DATA												
	prior approval is obtained from the City.												
	h) Bidder attended a compulsory briefing session where applicable		A compulsory briefing register must be signed by the bidder.  <b>Bidders will be disqualified should they fail to attend compulsory briefing session</b>										
	i) Pricing schedule (All items must be quoted for in pricing schedule and if not, all items are quoted the bidder will be disqualified). Unless the tender is awarded per item or per section where the bidder only quoted the items or sections, they are interested in.		Incomplete pricing schedule results in totals being incomparable. Bidder must be disqualified.  <b>Bidder will be disqualified should they make corrections on the price schedule without attaching a signature or initialising thereto.</b>  <b>Bidder will be disqualified should they use tippex/ correction ink, on the price schedule.</b>										
	<b>1.2 MANDATORY REQUIREMENTS</b>												
	The following information is mandatory, failure to provide any of them, will render the bidder disqualified:												
	<table><tr><th>Mandatory criteria</th><th>Supporting evidence</th></tr><tr><td>CIDB Grading of 7CE or higher.</td><td>Valid CIDB grading certificate</td></tr><tr><td>Company's Experience</td><td>The tendering company must have experience of at least two successfully completed roads and stormwater systems project with the largest of these projects valued at a minimum of R 9 million <b>(attach appointment letters and completion certificates as proof).</b></td></tr><tr><td>Performance Guarantee</td><td>Letter of intent – performance guarantee</td></tr><tr><td>Construction Manager - The Construction Manager must have a minimum qualification of a National</td><td>Curriculum vitae and certified copy of qualification</td></tr></table>	Mandatory criteria	Supporting evidence	CIDB Grading of 7CE or higher.	Valid CIDB grading certificate	Company's Experience	The tendering company must have experience of at least two successfully completed roads and stormwater systems project with the largest of these projects valued at a minimum of R 9 million <b>(attach appointment letters and completion certificates as proof).</b>	Performance Guarantee	Letter of intent – performance guarantee	Construction Manager - The Construction Manager must have a minimum qualification of a National	Curriculum vitae and certified copy of qualification		
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CLAUSE NUMBER	TENDER DATA				
	<table border="1"> <tr> <td data-bbox="520 288 1011 398">Diploma in Civil Engineering or higher qualification coupled with a minimum 5 years' experience.</td><td data-bbox="1011 288 1444 398"></td></tr> <tr> <td data-bbox="520 398 1011 600">Health and Safety Officer must be registered with the South African Council for Project and Construction Management Professions (SACPCMP) as a Construction Health and Safety Officer (CHSO).</td><td data-bbox="1011 398 1444 600">Certified copy of SACPCMP Registration Certificate</td></tr> </table>	Diploma in Civil Engineering or higher qualification coupled with a minimum 5 years' experience.		Health and Safety Officer must be registered with the South African Council for Project and Construction Management Professions (SACPCMP) as a Construction Health and Safety Officer (CHSO).	Certified copy of SACPCMP Registration Certificate
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Health and Safety Officer must be registered with the South African Council for Project and Construction Management Professions (SACPCMP) as a Construction Health and Safety Officer (CHSO).	Certified copy of SACPCMP Registration Certificate				
	<p><b>1.3 PREFERENCE POINT SYSTEM</b></p> <p>The preferential point system used will be the 80/20 points system in terms of the Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000) Regulations 2022</p> <ul style="list-style-type: none"> <li>• 80 points for price</li> <li>• 20 points for specific goals</li> </ul> <p><b>Add</b> the following new clause:</p> <p><b><i>The 80/20 preference point system for acquisition of services, works or goods up to Rand value of R50 million:</i></b></p> <p><i>The following formula must be used to calculate the points for price in respect of tenders with a Rand value below R50 million (all applicable taxes included):</i></p> $P_s = 80 \times \left[ 1 - \left( \frac{P_t - P_{min}}{P_{min}} \right) \right]$ <p><i>Where</i></p> <p><math>P_s</math> = Points scored for comparative price of tender or offer under consideration;</p> <p><math>P_t</math> = Comparative price of tender or offer under consideration; and</p> <p><math>P_{min}</math> = Comparative price of lowest acceptable tender or offer.</p> <ul style="list-style-type: none"> <li>• A maximum of 20 points may be awarded to a tenderer for the specific goal specified for the tender.</li> <li>• The points scored for the specific goal must be added to the points scored for price and the total must be rounded off to the nearest two decimal places.</li> <li>• Subject to section 2(1)(f) of the Act, the contract must be awarded to the tenderer scoring the highest points.</li> </ul> <p>20 points for Specific goals (service provider to submit the certified copy of the specific goals). Refer to Table 1 below:</p>				



CLAUSE NUMBER	TENDER DATA		
	<b>Specific goals</b>  BB-BEE score of companies <ul style="list-style-type: none"> <li>• Level 1</li> <li>• Level 2</li> <li>• Level 3</li> <li>• Level 4</li> <li>• Level 5</li> <li>• Level 6</li> <li>• Level 7</li> <li>• Level 8</li> <li>• Non-compliant</li> </ul>	<b>80/20 preference point system</b>  <ul style="list-style-type: none"> <li>• 8 Points</li> <li>• 7 Points</li> <li>• 6 Points</li> <li>• 5 Points</li> <li>• 4 Points</li> <li>• 3 Points</li> <li>• 2 Points</li> <li>• 1 Point</li> <li>• 0 Points</li> </ul>	<b>Proof of specific goals to be submitted</b>  Valid Certified copy of BBBEE certificate. Sworn Affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate.  Valid Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate  Certified copy of Identity Document/s <b>and</b> proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)  Medical Certificate with doctor's details (Practice Number, Physical Address, and contact numbers) and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)  Certified copy of Identity Document/s <b>and</b> proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)  Municipal Account statement/Lease agreement.
	EME and/ or QSE	2 Points	
	At least 51% of Women-owned companies	2 Points	
	At least 51% owned companies by People with disability	2 Points	
	At least 51% owned companies by Youth	2 Point	
	Local Economic Participation <ul style="list-style-type: none"> <li>• City of Tshwane</li> <li>• Gauteng</li> <li>• National</li> </ul>	4 Points 2 Points 1 Point	

CLAUSE NUMBER		TENDER DATA			
		<table><tr><td></td><td></td><td></td></tr></table>			
C.3.13	Acceptance of Tender Offer	<p>Tender offers will only be accepted if:</p> <ul style="list-style-type: none"><li>a.) the tenderer has complied in full with all the eligibility criteria</li><li>b.) the tenderer is able to provide proof of tax compliance status in terms of clause 4.2 of National Treasury SCM Instruction no.7 of 2017/18</li><li>c.) the tenderer submits a letter of intent from an approved insurer undertaking to provide the Performance Bond to the format included in Section C1.3 of this procurement document;</li><li>d.) the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation.</li><li>e.) the tenderer is not in arrears for more than 3 months with municipal rates and taxes and municipal service charges;</li><li>f.) 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;</li><li>g.) the tenderer has not:<ul style="list-style-type: none"><li>i) abused the Employer’s Supply Chain Management System; or</li><li>ii) failed to perform on any previous contract and has been given a written notice to this effect.</li></ul></li><li>h.) the tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer’s ability to perform the contract in the best interests of the employer or potentially compromise the tender process and persons in the employ of the state are permitted to submit tenders or participate in the contract;</li><li>i.) the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer;</li><li>j.) 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.</li></ul>			
C.3.17	Copies of Contract	<p><b>One</b> signed copy of contract shall be provided by the Employer to the successful Tenderer.</p>			

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## **C.1 General**

### **C.1.1 Actions**

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

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

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

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

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

### **C.1.2 Tender Documents**

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

### **C.1.3 Interpretation**

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

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

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

a) **conflict of interest** means any situation which:

- i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially;
- ii) an individual or organisation is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
- iii) incompatibility or contradictory interests exist between an employee and the organisation which employs that employee.

b) **comparative offer** means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration;

c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the Employer or his staff or agents in the tender process;

- d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the Employer, including collusive practices intended to establish prices at artificial levels;

#### **C.1.4 Communication and Employer's agent**

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

#### **C.1.5 Cancellation and re-invitation of tenders**

##### **C.1.5.1** An organ of state may, prior to the award of the tender, cancel the tender if-

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

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

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

#### **C.1.6 Procurement procedures**

##### **C.1.6.1 General**

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

##### **C.1.6.2 Competitive negotiation procedure**

###### **C.1.6.2.1** Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of C.3.4, the Employer shall announce only the names of the tenderers who make a submission. The requirements of C.3.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

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

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

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

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

**C.1.6.3 Proposal procedure using the two stage-system**

**C.1.6.3.1 Option 1**

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

**C.1.6.3.2 Option 2**

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

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

**C.2 Tenderer's obligations**

**C.2.1 Eligibility**

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

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

**C.2.2 Cost of tendering**

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

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

**C.2.3 Check documents**

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

**C.2.4 Confidentiality and copyright of documents**

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

**C.2.5 Reference documents**

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

**C.2.6 Acknowledge addenda**

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

**C.2.7 Clarification meeting**

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

**C.2.8 Seek clarification**

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

**C.2.9 Insurance**

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

**C.2.10 Pricing the tender offer**

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

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

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

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

**C.2.11 Alterations to documents**

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

**C.2.12 Alternative tender offers**

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



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

**C.2.12.3** An alternative tender offer may only be considered in the event that the main tender is the winning tender.

**C.2.13 Submitting a tender offer**

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

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

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

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

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

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

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

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

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

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

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

**C.2.15 Closing time**

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

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

**C.2.16 Tender offer validity**

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

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

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

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

**C.2.17 Clarification of tender offer after submission**

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

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

**C.2.18 Provide other material**

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

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

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

**C.2.19 Inspections, test and analysis**

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

**C.2.20 Submit securities, bonds and policies**

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

**C.2.21 Check final draft**

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

**C.2.22 Return of other tender documents**

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

**C.2.23 Certificates**

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

**C.3 The Employer's undertakings**

**C.3.1 Respond to requests from the tenderer**

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

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

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

**C.3.2 Issue addenda**

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

**C.3.3 Return late tender offers**

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

**C.3.4 Opening of tender submissions**

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

**C.3.4.2** Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices.

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

**C.3.5 Two-envelope system**

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

**C.3.5.2** Evaluate functionality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the functionality evaluation more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the technical proposals and the total price.

**C.3.6 Non-disclosure**

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

**C.3.7 Grounds for rejection and disqualification**

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

**C.3.8 Test for responsiveness**

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

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

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

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

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

**C.3.9 Arithmetical errors, omissions and discrepancies**

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

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

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

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

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

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

Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of the arithmetical error in the manner described above.

### **C.3.10 Clarification of a tender offer**

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

### **C.3.11 Evaluation of tender offers**

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

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

The CIDB Standard Conditions of Tender are based on a procurement system that satisfies the following system requirements:	
Requirement	Qualitative interpretation of goal
Fair	The process of offer and acceptance is conducted impartially without bias, providing simultaneous and timely access to participating parties to the same information.

Equitable	Terms and conditions for performing the work do not unfairly prejudice the interests of the parties.
Transparent	The only grounds for not awarding a contract to a tenderer who satisfies all requirements are restrictions from doing business with the employer, lack of capability or capacity, legal impediments and conflicts of interest.
Competitive	The system provides for appropriate levels of competition to ensure cost effective and best value outcomes.
Cost effective	The processes, procedures and methods are standardized with sufficient flexibility to attain best value outcomes in respect of quality, timing and price, and least resources to effectively manage and control procurement processes.

**The activities associated with evaluating tender offers are as follows:**

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

#### **C.3.11.1 General**

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

#### **C.3.12 Insurance provided by the Employer**

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

#### **C.3.13 Acceptance of tender offer**

Accept the tender offer, if in the opinion of the Employer, it does not present any unacceptable commercial risk and only if the tenderer:

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the Employer's procurement,
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,
- c) has the legal capacity to enter into the contract,
- d) is not insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act, 2008, bankrupt or being wound up, has his affairs administered by a court or a

judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,

- e) complies with the legal requirements, if any, stated in the tender data, and
- f) is able, in the opinion of the Employer, to perform the contract free of conflicts of interest.

**C.3.14 Prepare contract documents**

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

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

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

**C.3.15 Complete adjudicator's contract**

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

**C.3.16 Registration of the award**

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

**C.3.16.2** After the successful tenderer has been notified of the Employer's acceptance of the tender, notify other tenderers that their tender offers have not been accepted.

**C.3.17 Provide copies of the contracts**

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

**C.3.18 Provide written reasons for actions taken**

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

## T2.1 LIST OF RETURNABLE DOCUMENTS

### RD.A MANDATORY RETURNABLE DOCUMENTS

**Note:** *Failure to submit, fully complete and sign the applicable documents and submit all required attachments will result in the tender offer being disqualified from further consideration*

Document Name	Reference	Confirmation of Document Included (Tenders may use this column to confirm documents have been completed and included in the tender)
Compulsory Enterprise Questionnaire	Form RD.A.1	
<b>MBD 4:</b> Declaration of interest in tender of persons in service of state	Form RD.A.2	
<b>MBD 8:</b> Declaration of tenderer's past supply chain management practises	Form RD.A.3	
<b>MBD 9:</b> Certificate of independent tender determination	Form RD.A.4	
Certificate of authority of signatory	Form RD.A.5	
Certificate of authority of signatory for joint ventures and consortia	Form RD.A.6	
Proof of registration in terms of the South African Council for the Project and Construction Management Professions	Form RD.A.7	

### RD.B RETURNABLE DOCUMENTS REQUIRED FOR PREFERENTIAL PROCUREMENT EVALUATION PURPOSES

**Note:** *Failure to submit, fully complete and sign the applicable documents and submit all required attachments will result in the tender offer being awarded 0 (zero) preference points*

Document Name	Reference	Confirmation of Document Included (Tenders may use this column to confirm documents have been completed and included in the tender)
Valid B-BBEE Status Level of Contributor Certificate	Form RD.B.1	
<b>MBD 6.1:</b> Preference points claim form in terms of the Preferential Procurement Regulations, 2022	Form RD.B.2	
B-BBEE Exempted Micro Enterprise – Sworn Affidavit	Form RD.B.3	
Promotion of local enterprises (Local Economic Participation)	Form RD.B.4	
Certified copy of Identity Document/s proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)	Form RD.B.5	
Medical Certificate with doctor's details (Practice Number, Physical Address and contact numbers) proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)	Form RD.B.6	

### RD.C ADDITIONAL RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES



Part T2: Returnable Documents

Document Name	Reference	Confirmation of Document Included (Tenders may use this column to confirm documents have been completed and included in the tender)
Proof of registration on CSD with National Treasury	RD.C.1	
<b>MBD 5:</b> Declaration for procurement above R10 million (all applicable taxes included)	RD.C.2	
Proof of Registration with CIDB	RD.C.3	
Compliance with OHSA (Act 85 of 1993)	RD.C.4	
Record of services provided to organs of state	RD.C.5	
Schedule of plant and equipment	RD.C.6	
Status of concern submitting tender	RD.C.8	
Classification of business	RD.C.9	
Letter of intent to provide a performance bond	RD.C.10	

**RD.D OTHER DOCUMENTS THAT WILL FORM PART OF THE CONTRACT**

Document Name	Reference	Confirmation of Document Included (Tenders may use this column to confirm documents have been completed and included in the tender)
Record of addenda to tender documents	RD.D.1	
Mandatory requirements (key Personnel)	RD.D.2	
Curriculum vitae of key personnel	RD.D.3	
Company's experience	RD.D.4	
Form of offer and acceptance	Section C1.1	
Data provided by the contractor	Section C1.2	

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**FORM RD.A.1 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: CSD number:**

**Section 5: 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 6: Particulars of companies and close corporations**

Company registration number:

Close corporation number:

Tax reference number:

**Section 7: MBD4 issued by National Treasury must be completed for each tender and be attached as a tender requirement.**

**Section 9: MBD8 issued by National Treasury must be completed for each tender and be attached as a tender requirement.**

**Section 10: MBD9 issued by National Treasury must be completed for each tender and be attached as a tender requirement.**

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

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

Signed:		Date:	
Name:		Position	
Enterprise Name:			

**FORM RD.A.2 MBD 4: DECLARATION OF INTEREST**

Part T2: Returnable Documents

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

**3. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

3.1 Full name of bidder or his/her representative:

---

3.2 Identity Number:

---

3.3 Position occupied in Company:  
(director, trustee, shareholder<sup>2</sup>)

---

3.4 Company Registration Number:

---

3.5 Tax Reference Number:

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3.6 VAT Registration Number:

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

3.8 Are you presently in the service of the state?

YES	NO
-----	----

If yes, furnish particulars

---

<sup>1</sup> MSCM Regulations: "in the service of the state" means to be –

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

<sup>2</sup> Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.

Part T2: Returnable Documents

3.9 Have you been in the service of the state for the past twelve months?

YES	NO
-----	----

If yes, furnish particulars

\_\_\_\_\_

3.10 Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid?

YES	NO
-----	----

If yes, furnish particulars

\_\_\_\_\_

3.11 Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid?

YES	NO
-----	----

If yes, furnish particulars

\_\_\_\_\_

3.12 Are any of the company's directors, trustees, managers, principal shareholders or stakeholders in service of the state?

YES	NO
-----	----

If yes, furnish particulars

\_\_\_\_\_

3.13 Are any spouse, child or parent of the company's directors' trustees, managers, principal shareholders or stakeholders in service of the state?

YES	NO
-----	----

If yes, furnish particulars

\_\_\_\_\_

3.14 Do you or any of the directors, trustees, managers, principal shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract?

YES	NO
-----	----

If yes, furnish particulars

\_\_\_\_\_

Part T2: Returnable Documents

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

Full Name	Identity Number	State Employee Number

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 the tender:

Full name (in BLOCK letters): \_\_\_\_\_

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

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

Part T2: Returnable Documents

**FORM RD.A.3 MBD 8: DECLARATION OF TENDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTISES**

1. This municipal tender document must form part of all tenders 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 tender of any tenderer may be rejected if that tenderer, or any of its directors have:
  - a. abused the municipality's/municipal entity's supply management system or committed any improper conduct in relation to such system;
  - b. been convicted for fraud or corruption during the past five years;
  - c. wilfully neglected, reneged on or failed to comply with any government, Municipal or other public sector contract during the past five years; or
  - d. been listed in the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act, 2004 (Act 12 of 2004).
4. In order to give effect to the above, the following questionnaire must be completed and submitted with the tender:

Item	Question	Response	
4.1	Is the tenderer, any of its directors listed on the National Treasurer's database as a company or persons prohibited from doing business with the public sector? <b>(Companies for persons who are listed on this database were informed in writing of this restriction by the National Treasury after the <i>audi alteram partem</i> rule was applied)</b>	YES	NO
	If so, furnish particulars:		
4.2	Is the tenderer 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, 2004 (Act 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	NO
	If so, furnish particulars:		
4.3	Was the tenderer or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	YES	NO
	If so, furnish particulars:		

Part T2: Returnable Documents

Item	Question	Response	
4.4	Does the tenderer or any of its directors owe any municipal rates and taxes or municipal charges to the municipality/municipal entity, or to any other municipality/municipal entity, that is in arrears for more than three months?	YES	NO
	If so, furnish particulars:		
4.5	Was any contract between the tenderer and the municipality/municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	YES	NO
	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.

I accept that, in addition to cancellation of a contract, action may be taken against me should this declaration prove to be false.

Person authorized to sign the tender:

Full name (in BLOCK letters): \_\_\_\_\_

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

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



**FORM RD.A.4 MBD 9: CERTIFICATION OF INDEPENDENT TENDER DETERMINATION**

1. This Municipal Bidding Document (MBD) must form part of all bids <sup>3</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 tendering (or bid rigging<sup>4</sup>). Collusive tendering is a *per 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 tender of any tenderer if that tenderer 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 tendering process or the execution of the contract.
4. This will serve as a certificate of declaration that would be used by institutions to ensure that, when tenders are considered, reasonable steps are taken to prevent any form of tender-rigging.
5. In order to give effect to the above, the attached Certificate of Tender Determination must be completed and submitted with the tender.

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<sup>3</sup> Includes price quotations, advertised competitive bids, limited bids and proposals.

<sup>4</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.

**CERTIFICATE OF INDEPENDENT TENDER DETERMINATION**

I, the undersigned, in submitting the accompanying tender:

**RTD 11-2025/2026 Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months**

in response to the invitation for the tender made by

**City of Tshwane Metropolitan Municipality**

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 tenderer)

1. I have read and understand the contents of this certificate;
2. I understand that the accompanying tender will be disqualified if this certificate is found not to be true and complete in every aspect;
3. I am authorised by the tenderer to sign this certificate, and to submit the accompanying tender, on behalf of the tenderer;
4. Each person whose signature appears on the accompanying tender has been authorised by the tenderer to determine the terms of, and to sign, the tender, on behalf of the tenderer;
5. For the purposes of this Certificate and the accompanying tender, I understand that the word “competitor”<sup>5</sup> shall include any individual or organization, other than the tenderer, whether or not affiliated with the tenderer who:
  - a. Has been requested to submit a tender in response to this tender invitation, based on their qualifications, abilities or experience; and
  - b. Could potentially submit a tender in response to this tender invitation, based on their qualifications, abilities or experience; and provides the same goods and services as the tenderer and/or is in the same line of business as the tenderer.
6. The tenderer has arrived at the accompanying tender independently form, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium<sup>5</sup> will not be construed as collusive tendering.
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 tender;
  - e. The submission of a tender which does not meet the specifications and conditions of the tender; or
  - f. Tendering with the intention not to win the tender.

---

<sup>5</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.

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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 tender invitation relates.
9. The terms of the accompanying tender have not been, and will not be, disclosed by the tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender 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 tenders and contracts, tenders 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.

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 the tender:

Full name (in BLOCK letters): \_\_\_\_\_

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

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

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**FORM RD.A.5 CERTIFICATE OF AUTHORITY OF SIGNATORY**

**RESOLUTION** of the a meeting of the \*Board of Directors/Members/Partners of

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

Held at: \_\_\_\_\_ (place)

On: \_\_\_\_\_ (date)

**RESOLVED** that:

1. The enterprise submits a tender to the Tshwane Metro Municipality in respect of the following project:

Tender Number:	<b>RTD 11-2025/2026</b>
Tender Description:	<b>Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months</b>

2. \*Mr/Ms:

in \*his/her capacity as

and who will sign as follow:

Proof signature	Proof signature
-----------------	-----------------

be, and is hereby authorised to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender for the enterprise mentioned above

NAME	CAPACITY	SIGNATURE

Note:  1. *Delete which is not applicable. 2. IMPORTANT: This resolution <u>must</u> be signed by all the directors/members/ partners of the tendering enterprise. 3. Should the number of directors/members/partners exceed the space available above, additional names and signatures must be supplied on a separate page.	Enterprise stamp
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**FORM RD.A.6 CERTIFICATE OF AUTHORITY OF SIGNATORY FOR JOINT VENTURES AND CONSORTIA**

\*Joint venture/consortium name: \_\_\_\_\_

We, the undersigned, are submitting this tender in a \*joint venture/consortium and hereby authorise \*Mr/Ms  
\_\_\_\_\_ authorised signatory of the enterprise  
\_\_\_\_\_ acting in the capacity of lead partner

to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender for the \*joint venture/consortium mentioned above.

Registered name of enterprise	Registration number	% of contract value	Address	Duly authorised signatory	Mark with (x) for lead partner

**Note:**

1. \*Delete which is not applicable.
2. IMPORTANT: This resolution must be signed by all the parties of the joint venture/consortium and every duly authorised signatory for each party to the joint venture/consortium must complete a Form RD.C.15.
3. Should the number of directors/members/partners exceed the space available above, additional names and signatures must be supplied on a separate page.



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**FORM RD.B.1      VALID B-BBEE STATUS LEVEL OF CONTRIBUTOR CERTIFICATE**

Submit 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).

NOTE:

1. Attach original copy of B-BBEE Verification Certificate to this page.
2. In the case of a joint venture / consortium parties must each attach original copy of their B-BBEE Verification Certificates.

**FORM RD.B.2 MBD 6.1: PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022**

**NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022**

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**1. GENERAL CONDITIONS**

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 **To be completed by the organ of state**

a) The applicable preference point system for this tender is the 80/20 preference point system.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 **To be completed by the organ of state:**

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
TOTAL POINTS FOR PRICE AND SPECIFIC GOALS	100

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

**2. DEFINITIONS**

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process



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or any other method envisaged in legislation;

- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

### 3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

#### 3.1. POINTS AWARDED FOR PRICE

##### 3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

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

80/20	or	90/10
$P_s = 80 \left( 1 - \frac{P_t - P_{min}}{P_{min}} \right)$	or	$P_s = 90 \left( 1 - \frac{P_t - P_{min}}{P_{min}} \right)$

Where

- $P_s$  = Points scored for price of tender under consideration
- $P_t$  = Price of tender under consideration
- $P_{min}$  = Price of lowest acceptable tender

#### 3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

##### 3.2.1. POINTS AWARDED FOR PRICE

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

80/20	or	90/10
$P_s = 80 \left( 1 + \frac{P_t - P_{max}}{P_{max}} \right)$	or	$P_s = 90 \left( 1 + \frac{P_t - P_{max}}{P_{max}} \right)$

Where

- $P_s$  = Points scored for price of tender under consideration

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Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

#### 4. POINTS AWARDED FOR SPECIFIC GOALS

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

**Table 1: Specific goals for the tender and points claimed are indicated per the table below.**

***(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.***

***Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)***

Specific goals	80/20 preference point system	Number of points claimed (80/20 system) (To be completed by the tenderer)
BB-BEE score of companies <ul style="list-style-type: none"> <li>• Level 1</li> <li>• Level 2</li> <li>• Level 3</li> <li>• Level 4</li> <li>• Level 5</li> <li>• Level 6</li> <li>• Level 7</li> <li>• Level 8</li> <li>• Non-compliant</li> </ul>	<ul style="list-style-type: none"> <li>• 8 Points</li> <li>• 7 Points</li> <li>• 6 Points</li> <li>• 5 Points</li> <li>• 4 Points</li> <li>• 3 Points</li> <li>• 2 Points</li> <li>• 1 Point</li> <li>• 0 Points</li> </ul>	
EME and/ or QSE	2 Points	
At least 51% of Women-owned companies	2 Points	

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Specific goals	80/20 preference point system	Number of points claimed (80/20 system) (To be completed by the tenderer)
At least 51% owned companies by People with disability	2 Points	
At least 51% owned companies by Youth	2 Point	
Local Economic Participation <ul style="list-style-type: none"> <li>City of Tshwane</li> <li>Gauteng</li> <li>National</li> </ul>	4 Points 2 Points 1 Point	

**N.B** For points to be allocated as per above the tenderers will be required to submit proof of documentation as evidence for claims made. Any tenderer that does not submit evidence as stated in the bid document to claim applicable points will be allocated zero points.

**DECLARATION WITH REGARD TO COMPANY/FIRM**

4.3. Name of company/firm.....

4.4. Company registration number: .....

4.5. TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company
- ☐ State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/firm for the preference(s) shown and I 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;

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- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
  - (a) disqualify the person from the tendering process;
  - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
  - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
  - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
  - (e) forward the matter for criminal prosecution, if deemed necessary.

.....	
<b>SIGNATURE(S) OF TENDERER(S)</b>	
<b>SURNAME AND NAME:</b>	.....
<b>DATE:</b>	.....
<b>ADDRESS:</b>	.....
	.....
	.....
	.....

Contract: RTD 11 2025/26 Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part T2: Returnable Documents

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## **FORM RD.B.2 VALID B-BBEE STATUS LEVEL OF CONTRIBUTOR CERTIFICATE**

Submit 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).

### NOTE:

1. Attach original copy of B-BBEE Verification Certificate to this page.
2. In the case of a joint venture / consortium parties must each attach original copy of their B-BBEE Verification Certificates.

Part T2: Returnable Documents

**FORM RD.B.3 B-BBEE EXEMPTED MICRO ENTERPRISE – SWORN AFFIDAVIT**

I, the undersigned

<b>Full Name &amp; Surname</b>																
<b>Identity Number</b>							-					-			-	

Hereby declare under oath as follow:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.
2. I am a member / director / owner of the following enterprise and am duly authorised to act on its behalf.

<b>Enterprise Name</b>	
<b>Trading Name</b>	
<b>Registration Number</b>	
<b>Enterprise Address</b>	

3. I hereby declare under oath that:

- The enterprise is \_\_\_\_\_ % black owned;
- The enterprise is \_\_\_\_\_ % black woman owned;
- Based on the audited management accounts and other information available on the \_\_\_\_\_ financial year, the income did not exceed R 10,000,000 (ten million rands);
- Please confirm on the below the B-BBEE level contributor, by ticking the applicable box.

100% Black owned	<b>Level One</b> (135% B-BBEE procurement recognition)	
More than 51% Black owned	<b>Level Two</b> (125% B-BBEE procurement recognition)	
Less than 51% Black owned	<b>Level Four</b> (100% B-BBEE procurement recognition)	

4. The entity is an empowering supplier in terms of the dti Codes of Good Practice
5. I know and understand the contents of the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.
6. The sworn affidavit will be valid for a period of 12 (twelve) month from the date signed by the commissioner.

<b>Deponent Signature:</b>	<b>Date:</b>
     <b>Commissioner of oaths</b> <b>(Signature and stamp)</b>	

Part T2: Returnable Documents

**FORM RD.B.4 PROMOTION OF LOCAL ENTERPRISES**

The City of Tshwane has mandated the promotion of local enterprises. To comply with this the tenderer must provide proof of the type of business unit and whether the unit resides within the Tshwane and will be scored as follow:

**80/20 preference point system applies:**

	Promotion of local enterprises
No Response (score 0)	The tenderer did not respond or comply with this evaluation schedule. A score of 0 will also be awarded for any misrepresentation made in this regard,
Satisfactory (score 1)	The tenderer operates a head office or fully staffed office or his sole office outside the boundaries of Gauteng Province. (I.e. no business unit or office resides within the boundaries of Tshwane Metropolitan Municipality)
Good (score 2)	The tenderer's office resides within the boundaries of Gauteng Province. (I.e. no business unit or office resides within the boundaries of Tshwane Metropolitan Municipality)
Very good (score 4)	The tenderer's office resides within the boundaries of the Tshwane Metropolitan Municipality.

Municipal Rates & Taxes not older than three months from tender advertisement date or Valid Lease Agreement should be attached as evidence.

(If necessary the tenderer will be requested to present the office / business unit to officials of the City)

The undersigned, who warrants that he / she is duly authorized 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 the tender:

Full name (in BLOCK letters):

Signature:

Date:

Part T2: Returnable Documents

**FORM RD.B.5 At least 51% Women owned companies and At least 51% owned companies by Youth**

The City of Tshwane has mandate for the promotion At least 51% Women owned companies and At least 51% owned companies by youth. To comply with this the tenderer must provide Certified copy of Identity Document/s that proof that company is 51% owned by Women or youth

	Promotion At least 51% Women owned companies and At least 51% owned companies by youth
No Response (score 0)	The tenderer did not respond or comply with this evaluation schedule. A score of 0 will also be awarded for any misrepresentation made in this regard,
Good (score 1)	Certified copy of Identity Document/s that proof that company is 51% owned by Women
Good (score 2)	Certified copy of Identity Document/s that proof that company is 51% owned by youth

(If necessary the tenderer will be requested to present the office / business unit to officials of the City)

The undersigned, who warrants that he / she is duly authorized 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 the tender:**

Full name (in BLOCK letters):

Signature:

Date:



Part T2: Returnable Documents

**FORM RD.B.6 At least 51% owned companies by People with disability**

The City of Tshwane has mandate for the promotion of At least 51% owned companies by People with disability. To comply with this the tenderer must provide Medical Certificate with doctor's details (Practice Number, Physical Address and contact numbers that proof that company is 51% owned by People with disability

	Promotion of At least 51% owned companies by People with disability
No Response (score 0)	The tenderer did not respond or comply with this evaluation schedule. A score of 0 will also be awarded for any misrepresentation made in this regard,
Good (score 2)	Medical Certificate with doctor's details (Practice Number, Physical Address and contact numbers

(If necessary the tenderer will be requested to present the office / business unit to officials of the City)

The undersigned, who warrants that he / she is duly authorized 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 the tender:**

Full name (in BLOCK letters):

Signature:

Date:

Part T2: Returnable Documents

**FORM RD.C.1 PROOF OF REGISTRATION ON CSD WITH NATIONAL TREASURY**

1. Attach original or certified copy of CSD registration certificate to this page.
2. In the case of a joint venture / consortium (excluding consulting engineering partners) the joint venture / consortium must attach original or certified copy of their CSD registration certificate to this page.

Part T2: Returnable Documents

**FORM RD.C.2 MBD 5: DECLARATION FOR PROCUREMENT ABOVE R10 MILLION**

1. The tenderer is required by law to prepare annual financial statements for auditing their audited annual financial statements:

- i) for the past three years; or  
ii) Since the 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 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 outside 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.

I accept that the state may act against me should this declaration prove to be false.

Person authorized to sign the tender:

Full name (in BLOCK letters):

---

Signature:

---

Date:

Part T2: Returnable Documents

**FORM RD.C.3 PROOF OF REGISTRATION WITH THE CIDB**

1. Attach original or certified copy of CIDB registration certificate to this page.
2. In the case of a joint venture / consortium (excluding consulting engineering partners) parties must each attach original or certified copy of their CIDB registration certificate.

Firm	CRS Number	CIDB Grading	Lead Partner (Indicate with X)
<b>Combined CIDB Grading for Joint Venture / Consortium:</b>			

(Calculator is available at <https://registers.cidb.org.za/common/jvcalc.asp> )

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 the tender:

Full name (in BLOCK letters): \_\_\_\_\_

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

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

Part T2: Returnable Documents

**FORM RD.C.4 COMPLIANCE WITH OHSA (ACT 85 OF 1993)**

Tenderers 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.

(Tick applicable box)

1. Are your company familiar with the OHSA (ACT 85 of 1993) and its Regulations?	<b>YES</b>	<b>NO</b>
2. Who will prepare your company's Health and Safety Plan? Provide a copy of the person/s curriculum vitae/s or company profile.		
3. Do your company have a health and safety policy? If <b>YES</b> provide a copy.	<b>YES</b>	<b>NO</b>
4. How is this policy communicated to your employees? Provide supporting documentation.	<b>YES</b>	<b>NO</b>
5. Do your company keep record of safety aspects of each site where work is performed? If <b>YES</b> what records are kept?	<b>YES</b>	<b>NO</b>
6. Do your company conduct monthly safety meetings? If <b>YES</b> , who is the chairperson of the meeting, and attend these meetings?	<b>YES</b>	<b>NO</b>
7. Do your company have a safety officer in its employment, responsible for overall safety of your company? If <b>YES</b> , explain his duties and provide a copy of his CV	<b>YES</b>	<b>NO</b>
8. Do your company have trained first aid employees? If <b>YES</b> , indicate who.	<b>YES</b>	<b>NO</b>
9. Do your company have a safety induction training programme in place? If <b>YES</b> , provide a copy.	<b>YES</b>	<b>NO</b>
10. Does your company conduct medical surveillance for its employees?	<b>YES</b>	<b>NO</b>

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 the tender:

Full name (in BLOCK letters): \_\_\_\_\_

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

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

Part T2: Returnable Documents

**FORM RD.C.5 RECORD OF SERVICES PROVIDED TO ORGANS OF STATE**

Tenderers 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 tenderer identified in the signature block below was directly contracted by the employer. Tenderers 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 tenderer formed part of that joint venture, indicate in the column entitled "Title of the contract for the service" that 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 tender.

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				
	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 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 the tender:

Full name (in BLOCK letters):

Signature:

Date:

Part T2: Returnable Documents

**FORM RD.C.6 SCHEDULE OF PLANT AND EQUIPMENT**

The following are lists of the major items of relevant equipment that I/we presently own/lease and will have available for this contract or will hire/acquire for this contract as proof of the requirements for Clause F.3.13 b) of the Conditions of Tender

Major equipment owned/leased that is immediately available for the execution of the works	
Quantity	Description, size, capacity etc.

(Attach additional pages if more space is required)

Major equipment that will be hired or acquired for the execution of the works	
Quantity	Description, size, capacity etc.

(Attach additional pages if more space is required)

Part T2: Returnable Documents

**FORM RD.C.8 STATUS OF CONCERN SUBMITTING TENDER**

1. General

State whether the tenderer is a company, a closed corporation, a partnership, a sole practitioner, a joint venture/consortium or a co-operative

Public Company

Private Company

Closed Corporation

Partnership

Sole Proprietary

Joint Venture / Consortium

Co-operative

(Mark the appropriate option)


2. Information to be provided

If the Tendering Entity is a:		Documentation to be submitted with the tender
1	<u>Closed Corporation</u> , incorporated under the Close Corporation Act, 1984, Act 69 of 1984	CIPRO CK1 or CK2 (Certified copies of the founding statement) and list of members
2	<u>Private Company</u> incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 (Including Companies incorporated under Art 53 (b))	Certified 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, plus a signed statement of the Company's Auditor, certifying each Member's ownership/shareholding percentage relative to the total.
3	<u>Private Company</u> incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 in which any, or all, <u>shares are held by another</u> Closed Corporation or company with, or without, share capital.	Certified copies of documents referred to in 1 and/or 2 above in respect of all such Closed Corporations and/or Companies
4	<u>Public Company</u> 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.
5	<u>Sole Proprietary</u> or a <u>Partnership</u>	Certified 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.



Part T2: Returnable Documents

If the Tendering Entity is a:		Documentation to be submitted with the tender
6	<u>Co-operative</u>	CIPRO CR2 - Certified copies of Company registration document.
7	<u>Joint Venture / Consortium</u>	All the documents (as described above) as applicable to each partner in the joint venture / consortium as well as a certified copy of the joint venture / consortium 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
2. Include a certified copy of the Certificate of Change of Name (CM9) if applicable.

3. Registered for VAT proposes in terms of the Value-Added Tax Act (89 of 1991)

Yes

☐

No

☐

(Make an X in the appropriate space)

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

Part T2: Returnable Documents

**FORM RD.C.9 CLASSIFICATION OF BUSINESS**

1. The Small Businesses are defined in the National Small Business Act, 1996 (Act 102 of 1996).

2. Information furnished with regard to the classification of Small businesses

(b.) Indicate whether the company/entity is defined as a small, medium or micro enterprise by the National Small Business Act.

YES	NO
-----	----

(Tick appropriate box)

(c.) If the response to 2.(a.) 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.)

(d.) The tenderer should substantiate the information provided by submitting the following documentation:

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

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

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

Part T2: Returnable Documents

## SCHEDULE OF SECTORS

SIZE OF CLASS	THE TOTAL FULL-TIME EQUIVALENT OF PAID EMPLOYEES	TOTAL TURNOVER	TOTAL GROSS ASSET VALUE (FIXED PROPERTY EXCLUDED)
<b>AGRICULTURE</b>			
Medium	100	R 5 mil	R 5 mil
Small	50	R 3 mil	R 3 mil
Very Small	10	R 500 000	R 500 000
Micro	5	R 200 000	R 100 000
<b>MINING AND QUARRYING</b>			
Medium	200	R 39 mil	R 23 mil
Small	50	R 10 mil	R 6 mil
Very Small	20	R 4 mil	R 2 mil
Micro	5	R 200 000	R 100 000
<b>MANUFACTURING</b>			
Medium	200	R 51 mil	R 19 mil
Small	50	R 13 mil	R 5 mil
Very Small	20	R 5 mil	R 2 mil
Micro	5	R 200 000	R 100 000
<b>ELECTRICITY, GAS &amp; WATER</b>			
Medium	200	R 51 mil	R 19 mil
Small	50	R 13 mil	R 5 mil
Very Small	20	R 5.1 mil	R 1.9 mil
Micro	5	R 200 000	R 100 000
<b>CONSTRUCTION</b>			
Medium	200	R 26 mil	R 5 mil
Small	50	R 6 mil	R 1 mil
Very Small	20	R 3	R 500 000
Micro	5	R 200 000	R 100 000
<b>RETAIL AND MOTOR TRADE &amp; REPAIR SERVICES</b>			
Medium	200	R 39 mil	R 6 mil
Small	50	R 19 mil	R 3 mil
Very Small	20	R 4 mil	R 600 000
Micro	5	R 200 000	R 100 000
<b>WHOLESALE TRADE, COMMERCIAL AGENTS AND ALLIED SERVICES</b>			
Medium	200	R 64 mil	R 10 mil
Small	50	R 32 mil	R 5 mil
Very Small	20	R 6 mil	R 600 000
Micro	5	R 200 000	R 100 000
<b>CATERING, ACCOMMODATION AND OTHER TRADE</b>			
Medium	200	R 13 mil	R 3 mil
Small	50	R 6 mil	R 1 mil
Very Small	20	R 5.1 mil	R 1.9 mil
Micro	5	R 200 000	R 100 000
<b>TRANSPORT, STORAGE &amp; COMMUNICATIONS</b>			
Medium	200	R 26 mil	R 6 mil
Small	50	R 13 mil	R 3 mil
Very Small	20	R 3 mil	R 600 000
Micro	5	R 200 000	R 100 000
<b>FINANCE &amp; BUSINESS SERVICES</b>			
Medium	200	R 26 mil	R 5 mil
Small	50	R 13 mil	R 3 mil
Very Small	20	R 3 mil	R 500 000
Micro	5	R 200 000	R 100 000
<b>COMMUNITY, SOCIAL AND PERSONAL SERVICES</b>			
Medium	200	R 13 mil	R 6 mil
Small	50	R 6 mil	R 3 mil
Very Small	20	R 1mil	R 600 000
Micro	5	R 200 000	R 100 000

**FORM RD.C.10 LETTER OF INTENT TO PROVIDE A PERFORMANCE BOND**

It is hereby agreed that a Performance Bond drafted exactly as set out in the attached examples (See Section C1.3: Form of Guarantee) will be provided by the Surety named below:

Name of Surety (Bank or Insurer)

Address:

Signed:

Name:

Capacity:

On behalf of Tenderer (name of  
tenderer)

Date:

**CONFIRMED BY** Surety's Authorised representative

Signature(s):

Name (print):

Capacity

On behalf of Surety (Bank or Insurer)

Date:

**Note:** Refer to the Annexure to **C1.3 Form of Guarantee** for the List of Institutions from who Contract/Deposit Guarantees will be accepted.

Part T2: Returnable Documents

**FORM RD.D.1 RECORD OF ADDENDA TO TENDER DOCUMENTS**

We confirm that the following communications received from the Employer before submission of this tender, amending or amplifying the tender documents, have been taken in account in this tender offer:

	DATE	REFERENCE	TITLE
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

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 the tender:

Full name (in BLOCK letters): \_\_\_\_\_

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

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

Part T2: Returnable Documents

**FORM RD.D.2 KEY PERSONNEL**

The tenderer shall list in the table below the key personnel to be engaged for this project.

Refer to clause C.2.1 of Part T1: Eligibility (mandatory requirements)

**Note:** Form RD.D.3 must be complete for each person listed below.

	NAME	PROFESSIONAL REGISTRATION CATEGORY	Number of years post registration experience
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

(Attach additional pages if more space is required)

Part T2: Returnable Documents

**FORM RD.D.3 CURRICULUM VITAE OF KEY PERSONNEL**

**Note:** This form should be completed for each key person listed in Form RD.D.2( attach a comprehensive C.V, and proof of Registration).

<b>Name:</b>	<b>Date of birth:</b>
<b>Profession:</b>	<b>Nationality:</b>
<b>Qualifications:</b>	
<b>Professional membership:</b>	
<b>Number of years post registration experience:</b>	
<b>Name of employer (firm):</b>	
<b>Current position:</b>	<b>Years with firm:</b>
<b>Employment record:</b> (list in chronological order starting with earliest work experience)	
<b>Experience records pertinent to project scope:</b>	
<b>Certification:</b>	
I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications, and my experience.	
_____	_____
(Signature of person named in schedule)	Date:

Part T2: Returnable Documents

**FORM RD.D.4 COMPANY EXPERIENCE**

The tendering company must have experience of at least two successfully completed roads and stormwater systems project with the largest of these projects valued at a minimum of R 9 million (**attach appointment letters and completion certificates as proof**).

Refer to clause C.3.11 of Part T1: Evaluation of tender offers (mandatory requirements)



## C1.1 FORM OF OFFER AND ACCEPTANCE

STAMP

### OFFER

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

#### **RTD 11-2025/2026: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months**

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

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

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

R (in figures)

(in words)

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the conditions of contract identified in the Contract Data.

#### **FOR AND ON BEHALF OF THE TENDERER:**

NAME:

(In BLOCK letters)

CAPACITY:

(Of authorized agent)

SIGNATURE:

(Of authorized agent)

SIGNED at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_

WITNESSES:

(Full name in BLOCK letters and signature)

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

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

## ACCEPTANCE

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

The terms of the contract, are contained in:

Part C1 Agreements and Contract Data

Part C2 Pricing Data

Part C3 Scope of Work

Part C4 Site Information

and drawings and documents or parts thereof, which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable 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 Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The Tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the Contract Data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

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

### **FOR AND ON BEHALF OF THE EMPLOYER:**

NAME:

(In BLOCK letters)

---

CAPACITY:

(Of authorized agent)

---

SIGNATURE:

(Of authorized agent)

---

SIGNED at

\_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_

WITNESSES:

(Full name in BLOCK letters and signature)

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

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

## SCHEDULE OF DEVIATIONS

### Notes:

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

4.1 Subject: \_\_\_\_\_  
\_\_\_\_\_  
Details: \_\_\_\_\_  
\_\_\_\_\_

4.2 Subject: \_\_\_\_\_  
\_\_\_\_\_  
Details: \_\_\_\_\_  
\_\_\_\_\_

4.3 Subject: \_\_\_\_\_  
\_\_\_\_\_  
Details: \_\_\_\_\_  
\_\_\_\_\_

4.4 Subject: \_\_\_\_\_  
\_\_\_\_\_  
Details: \_\_\_\_\_  
\_\_\_\_\_

4.5 Subject: \_\_\_\_\_  
\_\_\_\_\_  
Details: \_\_\_\_\_  
\_\_\_\_\_

Part C1: Agreement and Contract Data

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

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

**FOR AND ON BEHALF OF THE TENDERER:**

NAME:

(In BLOCK letters)

\_\_\_\_\_

CAPACITY:

(Of authorized agent)

\_\_\_\_\_

SIGNATURE:

(Of authorized agent)

\_\_\_\_\_

SIGNED at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_

WITNESSES:

(Full name in BLOCK letters and signature)

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

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

**FOR AND ON BEHALF OF THE EMPLOYER:**

NAME:

(In BLOCK letters)

\_\_\_\_\_

CAPACITY:

(Of authorized agent)

\_\_\_\_\_

SIGNATURE:

(Of authorized agent)

\_\_\_\_\_

SIGNED at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_

WITNESSES:

(Full name in BLOCK letters and signature)

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

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

Part C1: Agreement and Contract Data

---

## CONFIRMATION OF RECEIPT

The Tenderer, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) today the \_\_\_\_\_ (day) of \_\_\_\_\_ (month) \_\_\_\_\_ (year) at \_\_\_\_\_ (place).

### **FOR AND ON BEHALF OF THE CONTRACTOR:**

NAME:

(In BLOCK letters)

---

CAPACITY:

(Of authorized agent)

---

SIGNATURE:

(Of authorized agent)

---

SIGNED at

\_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_

WITNESSES:

(Full name in BLOCK letters and signature)

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

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

**C1.2 CONTRACT DATA**

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#### **C.1.2.1 GENERAL CONDITIONS OF CONTRACT**

The general conditions of contract applicable to this contract shall be **General Conditions of Contract for Construction Works, Third Edition (2015)** of the South African Institution of Civil Engineering (SAICE), read together with the Variations and Additions to the Conditions of Contract as well as the Data provided by Employer.

Tenderers, contractors and subcontractors shall obtain their own copies of the document **General Conditions of Contract for Construction Works, Third Edition (2015)** for tendering purposes and for use for the duration of the contract from the Secretary of the South African Institution of Civil Engineering, Private Bag X200, Halfway House, Midrand, 1685 and shall bear all expenses in this regard:

South African Institution of Civil Engineering (SAICE)

Telephone: 011 80505947 / 48 / 53

E-Mail: [civilinfo@saice.org.za](mailto:civilinfo@saice.org.za)

Web: [www.saice.org.za](http://www.saice.org.za)

## C1.2.2 VARIATIONS AND ADDITIONS TO THE CONDITIONS OF CONTRACT

The following variations and additions to the **General Conditions of Contract for Construction Works, Third Edition (2015)**, shall apply to this contract:

CLAUSE / SUB-CLAUSE	DESCRIPTION	VARIATION / ADDITION
1.1.1	Definitions	<p><b>1.1.1.3 Certificate of Completion</b></p> <p><b>Add</b> the following to the clause:</p> <p><i>Unless specified otherwise in the Contract Data, separate Certificates of Completion will not be issued for portions or phases of the Works.</i></p> <p><b>1.1.1.24 Practical Completion</b></p> <p><b>Add</b> the following to the clause:</p> <p><i>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 in writing.</i></p> <p><b>Add</b> the following new clause:</p> <p><b>1.1.1.35 Construction Work Permit</b></p> <p><i>Construction Work Permit” means a statutory permit as defined in the Construction Regulations 2014.</i></p>
1.2.1	Delivery of notices	<p><b>Add</b> the following to the clause:</p> <p><b>1.2.1.3</b> <i>Sent by facsimile, electronic or any like communication irrespective of time of transmission;</i></p> <p><b>1.2.1.4</b> <i>posted to the Contractor’s address, and delivered by the postal authorities; or</i></p> <p><b>1.2.1.5</b> <i>delivered by a courier service or messenger, and signed for by the recipient or his representative.</i></p>
1.2.3	Authority representatives of	<p><b>Add</b> the following to the clause:</p> <p><b>1.2.3.1</b> <i>The Employer has authorised the <b>Divisional Head: Transport Infrastructure Design &amp; Construction</b> to act on his behalf in respect of this Contract, save for such duties or functions:</i></p> <p><b>1.2.3.1.1</b> <i>which other holders of office ex officio execute on behalf of the Employer; or</i></p> <p><b>1.2.3.1.2</b> <i>for which the <b>Divisional Head: Transport Infrastructure Design &amp; Construction</b> has no authority and the Employer’s approval is required before execution thereof.</i></p>
2.4.1	Ambiguity or Discrepancy	<p><b>Delete</b> the contents of the clause and insert the following:</p>



		<p><i>The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence, listed from highest to lowest priority:</i></p> <ul style="list-style-type: none"> <li><i>a) Form of Offer and Acceptance</i></li> <li><i>b) Contract Data</i></li> <li><i>c) General Conditions of Contract</i></li> <li><i>d) Drawings</i></li> <li><i>e) Scope of Work</i></li> <li><i>f) Standard Specifications</i></li> <li><i>g) Bill of Quantities</i></li> <li><i>h) any other documents forming part of the Contract</i></li> </ul> <p><i>Upon finding any ambiguity in, or discrepancy between, or otherwise any error in the documents, the Contractor shall forthwith advise the Employer's Agent thereof before applying an interpretation in accordance with the above priority. If, after applying the above priority, an ambiguity in, or discrepancy between, or otherwise any remaining error in the documents remains, the Employer's Agent shall provide the necessary clarification or instruction.</i></p>
3.2.3	Specific approval of the Employer required	<p><b><u>Replace</u></b> clause 3.2.3 with the following:</p> <p><i>In addition to the functions or duties set out in the Contract Data under Data Provided By The Employer, the Employer's Agent is required to obtain the specific prior approval of the Employer for:</i></p> <ul style="list-style-type: none"> <li><i>3.2.3.1 certification of expenditure that exceeds the Contract Price in terms of Clause 1.1.1.10;</i></li> <li><i>3.2.3.2 issuing of an order to suspend the progress of the Works in terms of Clause 5.11.2, the extra cost resulting from which order is to be borne by the Employer or the effect of which is liable to give rise to a claim by the Contractor for an extension of time under Clause 5.12 of these conditions;</i></li> <li><i>3.2.3.3 issuing of an instruction or order to vary the nature or quantity of the Works in terms of Clause 6.3, the estimated effect of which will be to increase the Contract Price by an amount exceeding R100 000, the evaluation of all variation orders in terms of Clause 6.4 and the adjustment of the sum(s) tendered for General Items in terms of Clause 6.11; or</i></li> <li><i>3.2.3.4 approval of any claim submitted by the Contractor in terms of Clause 10.1.</i></li> </ul>
4.1.2	Contractor's liability for own design errors	<p><b><u>Add</u></b> the following to the clause:</p> <p><i>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:</i></p>

		<p>4.1.2.1 <i>A Certificate of Stability of the Works signed by a registered Professional Engineer confirming that all such works have been designed in accordance with the appropriate codes of practice.</i></p> <p>4.1.2.2 <i>Proof of registration and of adequate and current professional indemnity insurance cover held by the designer(s).</i></p> <p>4.1.2.3 <i>Design calculations should the Employer's Agent request a copy thereof.</i></p> <p>4.1.2.4 <i>Engineering drawings and workshop details (both signed by the relevant professional engineer), 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.</i></p> <p>4.1.2.5 <i>"As-Built" drawings in DXF electronic format after completion of the Works.</i></p> <p><i>The Contractor shall be responsible for the design of the Temporary Works.</i></p>
4.3	Legal Provisions	<p><b>Add</b> the following new sub-clause:</p> <p>4.3.3 <i>Wages and conditions of work:</i></p> <p>i. <i>For conventional construction works the Basic Conditions of Employment Act of 1997 (Act No 75 of 1997) shall apply and the minimum employment conditions which will apply shall be guided by the Bargaining Council for the Civil Engineering Industry Collective Agreement as published from time to time.</i></p> <p>ii. <i>Basic Conditions of Employment Act of 1997 (Act No 75 of 1997) as per Government Notice 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.</i></p> <p><b>Add</b> the following new sub-clause:</p> <p>4.3.4 <i>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, 2014, 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. The Contractor shall sign the Occupational Health and Safety Agreement for Contract Work in the City of Tshwane Metropolitan Municipality included in section C1.5.</i></p> <p><b>Add</b> the following new sub-clause:</p> <p>4.3.5 <i>The Employer retains an interest in all inquiries conducted under this Contract in terms of Section 31 and/or 32 of the Occupational Health</i></p>

		<p><i>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.</i></p>
		<p><b>Add</b> the following new sub-clause:</p> <p><b>4.3.6 Contractor's Designer</b></p> <p><i>The Contractor and his designer shall accept full responsibility and liability to comply with the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and the Construction Regulations, 2014 for the design of the Temporary Works and those part of the Permanent Works which the Contractor is responsible to design in terms of the Contract</i></p>
		<p><b>Add</b> the following new sub-clause:</p> <p><b>4.3.7 Construction Work Permit</b></p> <p><i>Unless duly exempted or otherwise duly agreed with the Contractor, the Employer shall forthwith, where a Construction Work Permit in terms of Regulation 3(1) of the Construction Regulations 2014 is required to be obtained by the Employer without derogation from the Employer's duties, the Employer or his duly appointed Construction Health and Safety Agent in terms of Regulation 5(6) or otherwise, upon the Construction Work Permit becoming available, issue it to the Employer's Agent, who, in turn, shall forthwith issue it to the Contractor.</i></p> <p><i>Notwithstanding anything stipulated to the contrary in these Conditions, the Contractor shall not be entitled to any claim or extension of time arising from any delay in obtaining a Construction Work Permit which has been duly applied for, unless such delay exceeds 84 consecutive days.</i></p>
5.3.3	Time to instruct the commencement of the works	<b>Replace</b> both periods of "7 days" in Clause 5.3.3 with "14 days".
5.6.1	Programme of works	<p><b>Add</b> the following to the clause:</p> <p><i>The Contractor shall have regard for the phases and sub-phases (if applicable) for the Works, which shall also be the order in which the Permanent Works shall be constructed, unless otherwise agreed between the parties and committed to writing. If phased construction is applicable, the phases and sub-phases will be described in the Scope of Works and/or will be indicated on the Phasing Plan which forms part of the Drawings.</i></p>
5.7.1	Rate of progress	<p><b>Delete</b> the last paragraph of the clause and replace with the following:</p> <p><i>No instruction by the Employer's Agent to the Contractor to improve his rate of progress in this regard will qualify for additional compensation, unless the instruction explicitly states that the Contractor is entitled to additional</i></p>

		<i>compensation and cites the amount of such compensation or the basis upon which it is to be determined.</i>
5.9.2	Further drawings and instructions	<p><b>Add</b> the following to the clause:</p> <p><i>All instructions shall be in writing</i></p>
5.12	Extension of time for Practical Completion	<p><b>Add</b> the following new sub-clause</p> <p><b>5.12.5 Critical path provision</b></p> <p><i>A delay in so far as extension of time is concerned, will be regarded as a delay only if, on a claim by the Contractor in accordance with the General Conditions of Contract, the Employer's Agent rules that all progress on an item or items of work on the critical path of the approved programme for the execution of the Works by the Contractor, has been brought to a halt. Delays on normal working days only, based on a working week, of five normal working days, will be taken in account for the extension of time.</i></p> <p><b>Add</b> the following new sub-clause</p> <p><b>5.12.6 Extension of time due to abnormal rainfall</b></p> <p><i>Extension of time due to abnormal rainfall shall be determined by means of Method 1, if rainfall records and/or values derived from rainfall records are supplied in the Scope of Work, otherwise Method 2 shall apply.</i></p> <p><b><u>Method 1: Rainfall formula method</u></b></p> <p><i>The rainfall records and/or values derived from rainfall records from a suitable rainfall station near the Site, which are supplied in the Project Specifications, shall be considered suitable for the determination of extension of time due to abnormal rainfall in accordance with this method.</i></p> <p><i>Extension of time arising from abnormal rainfall, shall be calculated separately for each calendar month or part thereof for the full period of completion of the Contract, including any extension thereof, in accordance with the rainfall formula given below:</i></p> $V = (N_w - N_n) + \frac{(R_w - R_n)}{X}$ <p><i>If <math>V</math> is negative and its absolute value exceeds <math>N_n</math>, then <math>V</math> shall be equal to minus <math>N_n</math>.</i></p> <p><i>If <math>V</math> is positive and greater than the number of calendar days in the calendar month under consideration, <math>V</math> shall be taken as equal to the number of calendar days in the relevant calendar month.</i></p> <p><i>The symbols shall have the following meaning:</i></p>

		<p> <math>V</math> = Extension of time in calendar days in respect of the calendar month under consideration  <math>N_w</math> = Actual number of days during the calendar month on which a rainfall of <math>Y</math> mm or more has been recorded.  <math>R_w</math> = Actual rainfall in mm for the calendar month under consideration.  <math>N_n</math> = Average number of days as derived from existing rainfall records, on which a rainfall of <math>Y</math> mm or more has been recorded for the calendar month. Rainfall records and/or the derived values of <math>N_n</math> will be provided in the Specifications.  <math>R_n</math> = Average rainfall in mm for the calendar month, as derived from existing rainfall records. Rainfall records and/or the derived values of <math>R_n</math> will be provided in the Project Specifications.  <math>X</math> = 20 unless otherwise provided in the Project Specifications  <math>Y</math> = 10 unless otherwise provided in the Project Specifications </p> <p>The total extension of time shall be the algebraic sum of the monthly totals for the period under consideration. However, if the grand total is negative the time for completion shall not be reduced on account of abnormal rainfall. Extension of time for parts of a month shall be calculated by pro rata values of <math>N_n</math> and <math>R_n</math> being used.</p> <p>The factor <math>(N_w - N_n)</math> shall be considered to represent a fair allowance for variations from the average number of days during which rainfall exceeds <math>Y</math> mm and wet conditions prevented or disrupted work.</p> <p>The factor <math>\frac{(R_w - R_n)}{X}</math> shall be considered to represent a fair allowance for variations from the allowance for variations from the average number of days when wet conditions further to that allowed for the factor <math>(N_w - N_n)</math>, prevented or disrupted work during the calendar month.</p> <p>Accurate rain gauging shall be taken at a suitable point on Site and the Contractor shall, at his own expense, take all necessary precautions to ensure that the rain gauges cannot be interfered with.</p> <p>This formula does not take into account further on concurrent delays which could be caused by other abnormal climatic conditions such as floods, which have to be determined separately in accordance with Sub-Clause (5.12.5 Critical Path Provision) hereof.</p> <p><u>Method 2: Expected delay method</u></p> <p>The Contractor shall make provision in his programme for the execution of the Works, for an expected delay of "n" normal working days (based on a working week of five normal working days) due to normal rainfall, for which he will not receive any extension of time.</p>
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		<p><i>Unless otherwise provided in the Project Specifications, the value of "n" shall be taken as equal to the tendered time for completion of the Works in months, rounded off to an integer.</i></p> <p><i>Extension of time during normal working days will be granted to the degree to which actual delays as determined in accordance with Sub-Clause (5.12.5 Critical Path Provision) hereof, exceed the number of "n" normal working days.</i></p> <p><i>The value of "n" does not take into account further or concurrent delays which are caused by other abnormal climatic conditions such as floods, which have to be determined separately in accordance with Sub-Clause (5.12.5 Critical Path Provision) hereof.</i></p>
6.1	Payment to Contractor	<p><b>Add</b> the following new sub-clause:</p> <p>6.1.2 <i>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 of his obligations either in contract or in delict.</i></p> <p><b>Add</b> the following new sub-clause:</p> <p>6.1.3 <i>The Contractor's payment invoices shall be accompanied by labour information for the corresponding period in a format specified by the employer. If the Contractor chooses to delay submitting payment invoices, labour returns shall still be submitted as per frequency and timeframe stipulated by the employer. The Contractors invoices shall not be paid until all pending labour information has been submitted.</i></p> <p><b>Add</b> the following new sub-clause:</p> <p>6.1.4 <i>The Contractor shall be paid at Pretoria in the currency of the Republic of South Africa only at the Office of the Chief Financial Officer of the CITY OF TSHWANE, unless otherwise stated in the Data provided by Employer.</i></p>
6.2	Security	<p><b>Add</b> the following new sub-clause:</p> <p>6.2.4 <i>As an alternative to a performance guarantee, the Contractor may deposit with the Employer a cash amount in a sum equal to the amount stated in the Data provided by Employer. All the provisions in respect of the guarantee apply mutatis mutandis to the cash deposit accept that the amount deposited will be repaid to the Contractor within 30 (txaw2xde d34crv c3hirty) days after the issue of the Certificate or Certificates of Completion in respect of the whole of the permanent works.</i></p>
8.6	Insurances	<p><b>Replace</b> clause 8.6 with the following:</p> <p><b>8.6 Insurances</b></p>

		<p><b>8.6.1</b> <i>Without limiting the Contractor's/Sub-contractor's obligation in terms of the Contract, the Employer will effect and maintain for the duration of the Contract until the issuing of the Final Approval Certificate, the following insurances in the name of the Contractor (including all Subcontractors whether nominated or otherwise):</i></p> <p><b>8.6.1.1</b> <i>The Employer's insurer will indemnify the Contractor/Sub-contractor against physical loss of or damage to any part of the Property Insured not exceeding the maximum contract value or the final contract value estimated at inception including free issue materials were applicable as stated in the Contract Data:</i></p> <ul style="list-style-type: none"> <li><i>a. Whilst in transit including loading and unloading whilst temporarily stored at any premises and route to or from the Contract Site within the Territorial Limits;</i></li> <li><i>b. From the time of unloading, dismantling or preparation at the Contract Site and thereafter until the Property Insured has been officially accepted by the Employer and becomes his responsibility by means of a notice of completion certificate or similar evidence of legal transfer of risk;</i></li> <li><i>c. During the contractual defects liability or Maintenance Period which shall not exceed the period reflected in the Schedule but only so far as the Contractors and/or Sub-Contractors may be liable for such loss or damage under the defects liability or maintenance condition/s of the Insured Contract;</i></li> <li><i>d. Removal of debris;</i></li> <li><i>e. Surrounding property</i></li> <li><i>f. Work away;</i></li> <li><i>g. Off-site storage</i></li> <li><i>h. Temporary repairs;</i></li> <li><i>i. Contribution clause – marine;</i></li> <li><i>j. Escalation during Contract Period;</i></li> <li><i>k. Post loss escalation;</i></li> <li><i>l. Automatic reinstatement;</i></li> <li><i>m. Principals maintenance;</i></li> <li><i>n. Property taken over;</i></li> <li><i>o. Beneficial occupation;</i></li> <li><i>p. Escalation due to currency fluctuation;</i></li> <li><i>q. Manufacturers guarantees</i></li> </ul> <p><b>8.6.1.2</b> <i>The Employer's insurer will indemnify the Contractor/Sub-contractor against all sums for which the Contractor/Sub-contractor shall become legally liable towards third party claimants to pay for and in consequence of:</i></p> <ul style="list-style-type: none"> <li><i>a. Accidental death of or bodily injury to or illness or disease contracted by any person (excluding employees of the Contractor/Subcontractor);</i></li> <li><i>b. Accidental physical loss or damage to tangible property occurring during the Period of Insurance and arising out of or in connection with the performance of the Insured Contract at the Contract Site as defined in the Schedule. The minimum limit of indemnity for any one event is R10-million in respect of contracts with a contract value of up to R50-million (excluding VAT).</i></li> </ul>
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		<p><b>8.6.2 Insurance premium payable</b></p> <p><i>The Employer will pay the insurance premium for the works damage and public liability insurance cover. The insurance premium will be calculated based on the approved Capital Budget per financial year and the insurance premium will be charged out to the relevant departments by the Section: Insurance and Risk Management.</i></p> <p><b>8.6.3 Additional insurance by the Employer</b></p> <p><i>The Employer shall be free to effect at his own cost any additional insurance, which he deems necessary in own interest to cover loss or damage not insured in terms of the insurance policies of Sub-Clause 8.6.1.1 of this Clause.</i></p> <p><b>8.6.4 Additional insurance by the Contractor / Subcontractor</b></p> <p><i>The Contractor and Sub-contractor shall be free to effect and maintain at their own cost any additional insurance which the Contractor/Subcontractor deem necessary to cover damage, loss or injury not insured in terms of the insurance effected by the Employer's insurer. The cost of the additional insurance will be for the account of the Contractor/Subcontractor.</i></p> <p><b>8.6.5 Contractor satisfied with insurance</b></p> <p><i>The submission of a tender shall be construed as acknowledgement by the Contractor that he is satisfied with the insurance cover affected by the Employer.</i></p> <p><b>8.6.6 Contractor to observe conditions</b></p> <p><i>The Contractor shall give all notices and observe all conditions and requirements imposed by the relevant insurance policies, which shall be binding on the Contractor.</i></p> <p><b>8.6.7 Contractor to insure</b></p> <p><i>The Contractor/Sub-contractor must obtain for the duration of the contract until the issuing of the Final Approval Certificate, the following insurance policies at an insurance company within 14 (fourteen) days of the notification of acceptance of the tender and must pay all premiums and supply proof thereof to the relevant Employer's Agent, 30 (thirty) days before the inception of the contract, that the policies have been taken out and that all premiums have been paid:</i></p> <ul style="list-style-type: none"> <li><i>a. All Risk Insurance cover with regard to all Plant and Materials and Equipment, owned, leased or hired by the Contractor that are used in the execution of the contract for the full replacement value thereof.</i></li> <li><i>b. Motor Vehicle and Liability Insurance cover indicating the registration numbers of the vehicles owned, leased or hired by the Contractor that are used in the execution of the contract to the amount of at least R10-million per claim with the number of claims unlimited.</i></li> </ul>
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		<p>c. <i>SASRIA cover for motor vehicles and Plant and Materials and Equipment owned, leased or hired by the Contractor that are used in the execution of the contract for the full replacement value thereof.</i></p> <p>d. <i>In respect of Plant and Materials and Equipment and Motor Vehicles brought onto the Site by or on behalf of Subcontractors, the Contractor shall be deemed to have complied with the provisions of this Sub-Clause by ensuring that such Subcontractors have similarly insured such Plant and Materials and Equipment and Motor Vehicles.</i></p> <p>e. <i>Proof must also be submitted that the Contractor complies with the conditions of the following legislation:</i></p> <ul style="list-style-type: none"> <li>- <i>Compensation for Occupational Injuries and disease, 1993</i></li> <li>- <i>Unemployment Insurance Act, 1996</i></li> <li>- <i>The Contractor shall in respect of the Site of the contract works appoint in writing a Section 16 appointee to meet the requirements of the Health and Safety Act, No 85 of 1993 as amended.</i></li> </ul> <p>8.6.8 <i>The Employer's Agent involved must furnish the required insurance documentation 30 (thirty) days before the inception of the contract to the Section: Insurance and Risk Management.</i></p> <p>8.6.9 <i>Reporting of incidents</i></p> <p><i>In the event of an occurrence, which is likely to give rise to a claim under the insurance policy affected by the Employer, the Contractor / Subcontractors and Employer's Agent will adhere to the following procedures:</i></p> <p>a. <i>In addition to any statutory obligations and/or requirements contained in the General Conditions of Contract, the Contractor shall notify the Employer and the Employer's Agent of every occurrence within 48 (forty-eight) hours giving the circumstances, nature and an estimate of the loss or damage.</i></p> <p>b. <i>The Employer's Agent will be responsible to complete and submit the relevant claim documentation for each incident within 30 (thirty) days after the incident occurred to the Section: Insurance and Risk Management. Should the incident be reported by the Employer's Agent more than 30 (thirty) days after the incident occurred to the Section: Insurance and Risk Management, the claim will only be considered if the claim documentation is accompanied by a letter from the relevant Strategic Executive Director motivating the reason(s) for the late reporting of the incident, but the Employer's Agent must take note the Insurer might repudiate the loss if it is found that the insurers rights have been compromised as a result of the late reporting.</i></p> <p>c. <i>The following documentation must be included with the claim documentation:</i></p>
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		<p>- <i>Photos of damages caused or suffered as proof or substantiation of the claims.</i></p> <p>d. <i>In the event of Insured Property being damaged during the Contract Works beyond economical repair, the property must be safeguarded and be handed over to the Employer's insurer for salvage.</i></p> <p>e. <i>The Section: Insurance and Risk Management will inform the Employer's insurer of the incident. The Contractor/Subcontractor shall afford all reasonable access to the Site to the Employer, the Employer's Agent, the Employer's insurers and/or representatives for the purpose of assessment of any loss or damage.</i></p> <p><b>8.6.10 Reporting of catastrophic incidents</b></p> <p><i>In the event of an occurrence, which is likely to give rise to a claim, under the insurance policy effected by the Employer, with an estimated loss or damage of more than R250 000,00, the Contractor and the Employer's Agent will adhere to the following procedures:</i></p> <p>a. <i>In addition to any statutory obligations and/or requirements contained in the General Conditions of Contract, the Contractor shall notify the Employer and the Employer's Agent of every occurrence within 24 (twenty-four) hours giving the circumstances, nature and an estimate of the loss or damage.</i></p> <p>b. <i>The Employer's Agent must notify the Section: Insurance and Risk Management on the same day that the Contractor/Sub-contractor has notified the Employer's Agent of the incident.</i></p> <p>c. <i>The Section: Insurance and Risk Management will notify the Employer's insurer of the incident. The Contractor/Sub-contractor shall afford all reasonable access to the Site to the Employer, the Employer's Agent, the Employer's insurers and/or representatives for the purpose of assessment of any loss or damage.</i></p> <p>d. <i>The Employer's Agent will be responsible to complete and submit the relevant claim documentation for each incident within 30 (thirty) days after the incident occurred to the Section: Insurance and Risk Management. Should the incident be reported by the Employer's Agent more than 30 (thirty) days after the incident occurred to the Section: Insurance and Risk Management, the claim will only be considered if the claim documentation is accompanied by a letter from the relevant Strategic Executive Officer motivating the reason(s) for the late reporting of the incident. Should the relevant claim documentation not be submitted within 30 (thirty) days, the claim will be repudiated.</i></p> <p><b>8.6.11 Reporting of crime related incidents</b></p> <p><i>All crime related incidents, losses or shortages irrespective of the value, must be reported within 24 (twenty-four) hours by the person who was involved or who has discovered the incident to the nearest</i></p>
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		<p><i>South African Police Services (SAPS) station. The name of the Police Station, Investigation Officer and the Case number must be obtained and stated on the Contractor Claim Form. Should the incident not be reported to the SAPS, the claim will be repudiated.</i></p> <p><b>8.6.12 Claim documentation</b></p> <p><i>The Employer's Agent must obtain all relevant information from the Contractor/Sub-contractor and complete the Contractor Claim Form, included in this report as Annexure B that is available on the Intranet. The project number must be stated on the Contractor Claim Form.</i></p> <p><i>The Employer's Agent must submit with the Contractor Claim Form a detailed cost sheet indicating the estimate of the loss or damage.</i></p> <p><i>Any misrepresentation, misdescription or non-disclosure of material facts, at the option of the insurers, can result in claims submitted being declared null and void.</i></p> <p><b>8.6.13 Authorization of claim forms</b></p> <p><i>It is imperative that a formally delegated official or his nominee of the Employer should authorize the Contractor Claim forms as proof of the appropriate authorization, verification and approval of claims submitted. The Divisional Head must provide an authorization letter to the Section: Insurance and Risk Management stating the names and the specimen signatures of the delegated official or his nominee within 30 (thirty) days from approval of this report by Council. Should the delegated official or his nominee not sign the relevant claim form, the claim will be repudiated as this may lead to inappropriate independent verification of the validity of claims, thereby increasing the risk of insurance fraud and consequent reputation damage to the Employer.</i></p> <p><b>8.6.14 Contractor to pay deductibles</b></p> <p><i>Any claim in terms of the insurance affected by the Employer shall be subject to the Contractor being responsible for the payment of the amount stated in the Annexure to the Policies as being the deductible (first amount payable or Excess) as defined in the Certificate of Insurance issued by the Employer's insurer in terms of the Policy.</i></p> <p><b>8.6.15 Settlement of claims</b></p> <p><i>All incidents reported to the Section: Insurance and Risk Management in respect of an occurrence, which is likely to give rise to a claim will be forwarded to the Employer's insurer who will take the necessary actions for the settlement of any such claims.</i></p> <p><i>The Contractor <u>shall negotiate</u> for the settlement of claims with the Employer or the Employer's insurer through the Section: Insurance and Risk Management. The Employer's Chief Financial Officer will authorize all settlements of claims.</i></p> <p><i>Should action for the settlement of any such claim to the satisfaction of the Employer's Agent not be taken by the Contractor/sub-</i></p>
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Part C1: Agreement and Contract Data

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		<p><i>contractor within 30 (thirty) days after receipt of such claim by the Contractor/sub-contractor, the Employer or the Employer's insurer may settle any such claim, after giving the Contractor notice of its intention to do so; provided that no such claim shall be settled by the Employer or the Employer's insurer without first consulting the Contractor/sub-contractor.</i></p> <p><i>The foregoing provisions of this Sub-Clause shall apply mutatis mutandis to any such claim received by the Contractor directly.</i></p>
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### C1.2.3 DATA PROVIDED BY THE EMPLOYER

CLAUSE/OPTION		DATA																							
1.1.1.13	The Defects Liability period is:	12 (twelve) months from the date of the Certificate of Completion.																							
1.1.1.14	The time for achieving Practical Completion is:	Completion Date is 12 months from Commencement Date																							
1.1.1.15	The name of the Employer is:	City of Tshwane Metropolitan Municipality.																							
1.1.1.26	The Pricing Strategy is:	Re-measurement Contract																							
1.2.1.2	The address of the Employer is:	Physical Address:	Capitol Towers North, 225 Madiba (Vermeulen) Street, Pretoria																						
		Postal Address:	P.O. Box 1409 PRETORIA 0001																						
1.1.1.16	The name of the Employer's Agent is:	Tango's Consultants (Pty) Ltd																							
1.2.1.2	The address of the Employer's Agent is:	Physical Address:	402 WEST AVENUE FERNDAL 2194																						
		Postal Address:	P.O. BOX 1422 SUNDOWNER 2161																						
		E-Mail Address:	admin@tangosgroup.co.za																						
3.1.3		<ul style="list-style-type: none"><li>• The Employer's Agent is required to obtain approval of the Employer:<ul style="list-style-type: none"><li>▪ for expenditure on the Contract to exceed the Contract Price;</li><li>▪ prior to the execution of any of the following duties of functions:</li></ul></li></ul> <table><tr><th>CLAUSE</th><th>DUTY/FUNCTION</th></tr><tr><td>3.2.1</td><td>Nomination of person as Employer's Agent's Representative</td></tr><tr><td>3.3.4</td><td>Authorization to Employer's Agent's Representative or any other person</td></tr><tr><td>4.10.1</td><td>Approval to use the Site for any other purpose such as housing</td></tr><tr><td>5.3.1</td><td>Delivery of the written notice to commence the execution of the works</td></tr><tr><td>5.6.3</td><td>Approval of programme of construction</td></tr><tr><td>5.7.2</td><td>Permission to carry out work by day and by night</td></tr><tr><td>5.8.1.1</td><td>Approval to work on special non-working days and between sunset and sunrise</td></tr><tr><td>5.9.7</td><td>Approval of Contractor's designs</td></tr><tr><td>5.11</td><td>Suspension of progress of the Works</td></tr><tr><td>5.13.2</td><td>Reduction of penalty for delay</td></tr></table>		CLAUSE	DUTY/FUNCTION	3.2.1	Nomination of person as Employer's Agent's Representative	3.3.4	Authorization to Employer's Agent's Representative or any other person	4.10.1	Approval to use the Site for any other purpose such as housing	5.3.1	Delivery of the written notice to commence the execution of the works	5.6.3	Approval of programme of construction	5.7.2	Permission to carry out work by day and by night	5.8.1.1	Approval to work on special non-working days and between sunset and sunrise	5.9.7	Approval of Contractor's designs	5.11	Suspension of progress of the Works	5.13.2	Reduction of penalty for delay
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5.13.2	Reduction of penalty for delay																								

CLAUSE/OPTION		DATA	
		5.14.2	The issue of a Certificate of Practical Completion
		5.14.4	The issue of a Certificate of Completion
		5.16.1	The issue of a Final Approval Certificate
		6.3.1	Variation Orders in respect of variations which are not small
		6.6	Instruction to expend on Provisional and Prime Cost Sums
		6.11	Adjustment of Preliminary and General allowances
		7.8.1	Order to execute work of repair, etc. during the Defects Liability Period
		7.8.2	Determination of value of repair work
		8.2.2.2	Order to repair and make good damage arising from any excepted risk
5.3.1	The documentation required before commencement with Works execution are:	<ul style="list-style-type: none"> <li>• Health and Safety Plan (Refer to Clause 4.3)</li> <li>• Initial programme (Refer to Clause 5.6)</li> <li>• Security (Refer to Clause 6.2)</li> <li>• Proof that all contributions required in terms of the provisions of the Workman's Compensation Act (Act no 30 of 1941) as amended in 1993, 2002 have been paid (Refer to Cause 4.3.2)</li> <li>• A certified copy of Unemployment Insurance Certificate, Act of 1996 (Refer to Clause 4.3.2)</li> </ul>	
5.3.2	The time to submit the documentation required from the Commencement Date is:	<b>14 days</b>	
5.8.1	The non-working days are:	Sundays	
	The special non-working days are:	<ul style="list-style-type: none"> <li>• Annual builders holiday</li> <li>• Statutory public holidays</li> </ul>	
5.13.1	The penalty for failing to complete the works is:	<b>The penalty will be R5000/day.</b>	
5.14.1	Requirements for achieving Practical Completion	<ul style="list-style-type: none"> <li>• Layer works, Surfacing, Pre-marking, Road signs</li> <li>• All storm water systems, inlets, outlets, junction boxes and manholes must be completed.</li> </ul>	
5.16.3	The latent defect period is:	<b>10 (ten) Years</b>	
6.1.3	Labour returns:	Labour returns will be submitted <b>monthly</b> .	
6.2.1	Type of security for due performance:	<ul style="list-style-type: none"> <li>• Fixed Performance Guarantee from approved financial institution or Cash Deposit.</li> <li>• The forms for the Guarantees are to contain the wording of the pro forma document included as <b>C1.3</b> or <b>C1.4</b> contained herein.</li> </ul>	
	Liability of performance guarantee/cash deposit	The liability of the guarantee shall be for <b>10 (ten) %</b> of the Contract Sum, excluding contingencies and VAT.	
6.2.2	Retention money guarantee	<b>Not permitted</b>	

CLAUSE/OPTION		DATA																		
6.8.2	Adjustment in rates and/or prices	<ul style="list-style-type: none"> <li>The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values: <table border="1"> <thead> <tr> <th>Coefficient</th><th>Description</th><th>Value</th></tr> </thead> <tbody> <tr> <td><i>x</i></td><td>Portion not subject to adjustment</td><td><b>0.10</b></td></tr> <tr> <td><i>a</i></td><td>Labour</td><td><b>0.21</b></td></tr> <tr> <td><i>b</i></td><td>Civil Engineering Plant</td><td><b>0.27</b></td></tr> <tr> <td><i>c</i></td><td>Civil Engineering Materials</td><td><b>0.42</b></td></tr> <tr> <td><i>d</i></td><td>Fuel</td><td><b>0.10</b></td></tr> </tbody> </table> <p>(Coefficients a, b, c and d must sum to one)</p> </li> <li>The area nearest the Site is <b>Gauteng</b>.</li> <li>The base month is <b>the month and year prior to the closing of the tender</b>.</li> </ul>	Coefficient	Description	Value	<i>x</i>	Portion not subject to adjustment	<b>0.10</b>	<i>a</i>	Labour	<b>0.21</b>	<i>b</i>	Civil Engineering Plant	<b>0.27</b>	<i>c</i>	Civil Engineering Materials	<b>0.42</b>	<i>d</i>	Fuel	<b>0.10</b>
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<i>c</i>	Civil Engineering Materials	<b>0.42</b>																		
<i>d</i>	Fuel	<b>0.10</b>																		
6.8.3	Price adjustment for variations in the cost of special materials	<b>Allowed</b>																		
6.10.1.5	The percentage on materials not yet built into the Permanent Works is:	<b>80% (Eighty percent)</b>																		
6.10.3	Percentage retention is:	<b>10% (ten percent) of the value of works, excluding contingencies and VAT</b>																		
	The limit of retention money is:	<b>5% (five percent) of Contract Sum, excluding contingencies and VAT.</b>																		
8.6	Insurance of the Works and Public Liability Insurance	<p>The Employer shall arrange this insurance.</p> <p>A copy of the policy and the list of excesses may be obtained from</p> <p><b>Contractors All Risk and Liability Insurance</b>  Ms. Morongwa Mokoena (Tel: 012 358 1126) (<a href="mailto:morongwam@tshwane.gov.za">morongwam@tshwane.gov.za</a>)  Mrs Ronett Marlow-Reid (Tel: 012 358 1131) (<a href="mailto:ronettm@tshwane.gov.za">ronettm@tshwane.gov.za</a>)  Mr Lawrence Matjila (Tel: 012 358 1374) (<a href="mailto:lawrencem@tshwane.gov.za">lawrencem@tshwane.gov.za</a>)</p>																		
	The value of plant and materials supplied by the Employer to be included in the insurance sum is:	<b>R 0 (zero)</b>																		
	Responsibility for payment of deductibles in respect of Insurance of Works as well as Public Liability Insurance:	Deductibles are the responsibility of the Contractor																		
	Construction Plant:	Contractor to insure. Policy to be approved by Employer																		
10.5	Determination of disputes	<b>Ad-hoc</b> Adjudication Board																		
10.5.3	Number of Adjudication Board members to be appointed:	<b>One</b>																		

Part C1: Agreement and Contract Data

CLAUSE/OPTION		DATA
10.6	Disagreement with Adjudication Board's decision, refer matters to:	Court proceedings



#### C1.2.4 DATA PROVIDED BY THE CONTRACTOR

CLAUSE/OPTION		DATA		
1.1.1.9	The name of the Contractor is:			
1.2.1.2	The address of the Contract is:	• Physical Address:		
		• Postal Address:		
		• Fax to E-Mail:		
		• E-Mail Address:		
6.2.1	The security to be provided by the Contractor shall be one of the following:	Type of Security	Contractor's choice (Indicate "Yes" or "No")	
		Performance guarantee (10% (ten percent) of the Contract Sum, excluding contingencies ad VAT)		
		Cash deposit (10% (ten percent) of the Contract Sum, excluding contingencies and VAT)		
6.5.1.2.3	The percentage allowance to cover profits and overhead charges for dayworks is:	<p>_____ %. (Maximum of <b>15%</b> will be allowed)</p> <p><i>(In the case of the Contractor not providing a percentage the percentage as per the General Conditions of Contract will prevail)</i></p>		
6.8.3	Price adjustments for variations in the cost of special materials	The variation in cost of special materials is:		
		Type of material	Unit	Base Rate or Price
		Bitumen		
		Steel		

## C1.3 PERFORMANCE GUARANTEE

### C1.3 PERFORMANCE GUARANTEE

WHEREAS

**The City of Tshwane Metropolitan Municipality**

(hereinafter referred to as the "Council"),

enters into a Contract (No \_\_\_\_\_) with

\_\_\_\_\_  
(hereinafter referred to as the "Contractor")

for \_\_\_\_\_

AND WHEREAS in terms of the General Conditions of the Contract the Contractor is required to furnish an acceptable independent guarantee for the due and proper fulfilment by him of all his duties and obligations in terms of the said contract.

NOW THEREFORE we the undersigned \_\_\_\_\_  
\_\_\_\_\_ (full names of authorized agent(s))

and acting in my/our capacity as \_\_\_\_\_

and \_\_\_\_\_

and as such duly authorized thereto, do hereby bind the said \_\_\_\_\_

(hereinafter referred to as the "Guarantor") as surety and co-principal Debtor in solidum for the sum of

R \_\_\_\_\_ (\_\_\_\_\_)

for the due and proper fulfilment by the Contractor of all or any of his duties and obligations in terms of the said Contract. The guarantee shall not be interpreted as accessory to the contract between Council and the Contractor. The Guarantor further undertakes, in the event of the Contractor failing duly and properly to fulfil any of his duties and obligations in terms of the said Contract, or if the Contractor is placed under provisional liquidation or in the event of termination of the Contract by the Council in terms of the General Conditions of Contract, to pay to the Council the said sum of

R \_\_\_\_\_ (\_\_\_\_\_)

or such portion thereof as may be required by the Council, immediately upon receiving written demand from the Council which written demand shall be addressed to the Guarantor at (domicilium address)

The Guarantor further hereby renounces the benefits of the legal exceptions:

Exceptio non numerate pecuniae

Exception non causa debiti

*Beneficium de duobus vel pluribus reis debendi*

*Beneficium ordinis deu excussionis*

*Beneficium divisionis*

and all other defence which could be pleaded against the validity of this guarantee, with the meaning and effect of which it declares itself to be fully acquainted.

This undertaking shall remain in full force and effect up to and including the date of issue of the Certificate of Completion, as provided for in the General Conditions of Contract, unless the Guarantor is advised in writing by the Council 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. Notwithstanding the aforesaid, the Council may at its' sole discretion elect to have the amount provided for under this guarantee, paid out directly to it in the case of breach of contract by the Contractor by giving the Guarantor written notice to that effect, notwithstanding the fact that the Council may decide not to institute any further legal action against the Contractor.

This document is not negotiable or transferable.

**FOR AND ON BEHALF OF THE BANKER/INSURER:**

BANKER/INSURER:

NAME: \_\_\_\_\_  
(in BLOCK letters)

CAPACITY: \_\_\_\_\_  
(of authorized agent)

SIGNATURE: \_\_\_\_\_  
(of authorized agent)

SIGNED at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_

WITNESSES:

(Full name in BLOCK letters and signature)

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

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

Contract: RTD11-2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

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## C1.4 CASH DEPOSIT GUARANTEE

Contract:	Contract RTD11-2025/2026
Description of Contract:	Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria For a Period of 12 Months
Employer:	<b>CITY OF TSHWANE METROPOLITAN MUNICIPALITY</b>
Contractor:	

I/We, the undersigned, deposit herewith <sup>1</sup>cash / a bank certified cheque, in the amount of

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---

as surety for the due performance of the Contract by the abovementioned Contractor, and for all losses, damages and expenses that may be suffered or incurred by the Employer as a result of non-performance of the Contract by the Contractor.

The amount thus deposited shall at the sole discretion of the above Employer be utilised and appropriated in the manner it deems fit which shall include but not be limited to the set off of claims upon occurrence of any one or more of the following events:

- (a) the Contractor being placed under provisional liquidation or committing any one or more of the acts of insolvency as provided for in the Insolvency Act, 1936 (Act 24 of 1936);
- (b) failure to comply with the conditions of the contract by the contractor; or
- (c) if the contract is terminated.

A letter received from the Employer stating that any one or more of the aforementioned has occurred shall be sufficient notice to effect appropriation of such deposit. A certificate under the hand of the Employer's Agent as defined under the contract described above reflecting the amount of damages shall for all purposes be deemed to be sufficient to proof to do a set off of claims

The deposit shall, subject to the above, be returned to the Contractor on the issue of the Completion Certificate in terms of the Contract, unless the Employer has utilised and / or appropriated the monies as provided for above.

---

<sup>1</sup> Delete which is not applicable

Contract: RTD11-2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

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**FOR AND ON BEHALF OF THE CONTRACTOR:**

NAME:

(in BLOCK letters)

---

CAPACITY:

(of authorized agent)

---

SIGNATURE:

(of authorized agent)

---

SIGNED at

---

on this

---

day of

---

WITNESSES:

(Full name in BLOCK letters and signature)

1.

---

2.

---

## C1.5 HEALTH AND SAFETY AGREEMENT

Article of Agreement in terms of Section 37(2) of the Occupational Safety Act, 1993 between

**CITY OF TSHWANE**  
(Hereinafter referred to as the "EMPLOYER")

AND

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

Herein represented by \_\_\_\_\_ in his/her capacity as \_\_\_\_\_ duly authorised by  
virtue of a resolution dated \_\_\_\_\_, attached hereto Annexure A, of the said  
\_\_\_\_\_ (herein after referred to as the "CONTRACTOR")

WHEREAS the CONTRACTOR is the mandatory of the EMPLOYER as contemplated in an agreement in respect of

**RTD11-2025/2026: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a Period of 12 Months**

AND WHEREAS section 37 of the Occupational Health and Safety act, 1993 (Act 85 of 1993), hereinafter referred to as the "ACT"), imposes certain powers and duties upon the EMPLOYER.

AND WHEREAS the parties have agreed to enter into an agreement in terms of section 37(2) of the ACT.

NOW THEREFORE the parties agree as follows:

- (a) The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.
- (b) The CONTRACTOR undertakes that all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations will be fully complied with. Provided that should the EMPLOYER prescribe certain arrangements and procedures, that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.
- (c) The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedure, if any, imposed by the ACT and Regulations and the EMPLOYER expressly absolves the EMPLOYER from itself being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedure as the case may be.
- (d) The CONTRACTOR agrees that any duly authorised officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has complied with the undertakings as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR, or to inspect

Contract: RTD11-2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

any appropriate records held by the CONTRACTOR or to take such steps it may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.

- (e) The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER any investigations, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such an investigation, complaint or criminal charge as the case may be

**FOR AND ON BEHALF OF THE CONTRACTOR:**

NAME:

(in BLOCK letters)

CAPACITY:

(of authorized agent)

SIGNATURE:

(of authorized agent)

SIGNED at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_

WITNESSES:

(Full name in BLOCK letters and signature)

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

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

**FOR AND ON BEHALF OF THE EMPLOYER:**

NAME:

(in BLOCK letters)

CAPACITY:

(of authorized agent)

SIGNATURE:

(of authorized agent)

SIGNED at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_

WITNESSES:

(Full name in BLOCK letters and signature)

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

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

---

## **C1.6 APPLICATION FOR A PERMIT TO DEPARTMENT OF LABOUR TO DO CONSTRUCTION WORK**

### **Annexure 1**

**Occupational Health and Safety Act, 1993  
(Regulation 3(2) of the Construction Regulations, 2014)**

### **APPLICATION FOR A PERMIT TO DO CONSTRUCTION WORK**

This application must be submitted with the following documents:

- a) Health and Safety specification
- b) Health and Safety plan
- c) Baseline risk assessment.

**1. Name, postal address and telephone numbers of the client**

---

---

**2. Details of the agent**

(a) Title, Surname and initials:

---

(b) Identity number / Passport number:

---

(c) Registration number with SACPCMP:

---

(d) Office Tel. Number and/or Mobile number:

---

(e) Postal address:

---

---

**3. Name, postal address and telephone numbers of the principal contractor**

---

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---

**4. Name, postal address and telephone numbers of the designer of the project**

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**5. Name, Postal address and telephone numbers of the following persons**

(a) Construction Manager:

---

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(b) Construction Health and Safety Officer

---

---

(c) Construction Health and Safety Officer

---

---

**6. Exact physical address of the construction and site office**

---

---

**7. Nature of construction work**

---

---

**8. Expected commencement date**

---

**9. Expected completion date**

---

**10. Estimated maximum number of persons on the construction site:**

---

**11. Planned number of contractors on the construction site accountable to the principal contractor:**

---

**12 Names(s) of contractors appointed**

---

---

---

**18. Signature of Client / Client's Agent**

---

### 19. Signature of the Principal Contractor

FOR OFFICE USE ONLY					
Authorization / Unique No.	LABOUR CENTRE	OFFICE APPROVAL STAMP			
<b>13. Date of application:</b> _____					
<b>14. Submitted documents prescribed in Construction Regulation 5(4).</b> (Please tick ✓)					
CR 5(1)(a)		CR 5(1)(b)		CR 5(1); (C-S)	
<b>15. Result of the application.</b> (Please tick ✓)					
		<b>Approved</b>		<b>Declined</b>	
<b>16. Reason for declining the application</b>					
<b>17 Signature of the Supervisor:</b> _____					
<b>18 Signature of revoking officer / inspector:</b> _____					

## C1.7 ADJUDICATOR'S AGREEMENT

This agreement is made on the \_\_\_\_\_ day of \_\_\_\_\_ between:

\_\_\_\_\_ (name of company / organisation)

of \_\_\_\_\_

\_\_\_\_\_ (address) and

\_\_\_\_\_ (name of company / organisation)

of \_\_\_\_\_

\_\_\_\_\_ (address) (the

Parties) and

\_\_\_\_\_ (name of Adjudicator)

of \_\_\_\_\_

\_\_\_\_\_ (address) (the

Adjudicator).

Disputes or differences may arise/have arisen<sup>1</sup> between the Parties under a Contract dated \_\_\_\_\_ and known as \_\_\_\_\_

and these disputes or differences shall be/have been<sup>2</sup> 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.

**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.

---

<sup>1</sup> Delete as necessary

<sup>2</sup> Delete as necessary

Contract: RTD11-2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

SIGNED by:

Name:

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

Witness

Name:

Address:

Date:

SIGNED by:

Name:

who warrants that he / she is duly authorised to sign for and behalf of the second Party in the presence of

Witness:

Name

Address:

Date:

SIGNED by:

Name:

the Adjudicator in the presence of

Witness:

Name:

Address:

Date:

#### Contract Data

1	The Adjudicator shall be paid at the hourly rate of R _____ in respect of all time spent upon, or in connection with, the adjudication including time spent travelling.
2	The Adjudicator shall be reimbursed in respect of all disbursements properly made including, but not restricted to: (a) Printing, reproduction and purchase of documents, drawings, maps, records and photographs. (b) Telegrams, telex, faxes, and telephone calls. (c) Postage and similar delivery charges. (d) Travelling, hotel expenses and other similar disbursements. (e) Room charges. (f) Charges for legal or technical advice obtained in accordance with the Procedure.
3	The Adjudicator shall be paid an appointment fee of R _____. This fee shall become payable in equal amounts by each Party within 14 days of the appointment of the Adjudicator, subject to an Invoice being provided. This fee will be deducted from the final statement of any sums which shall become payable under item 1 and/or item 2 of the Contract Data. If the final statement is less than the appointment fee the balance shall be refunded to the Parties.
4	The Adjudicator is/is not <sup>1</sup> currently registered for VAT.
5	Where the Adjudicator is registered for VAT, it shall be charged additionally in accordance with the rates current at the date of invoice.
6	All payments, other than the appointment fee (item 3) shall become due 7 days after receipt of invoice, thereafter interest shall be payable at 5% per annum above the Reserve Bank base rate for every day the amount remains outstanding.

<sup>1</sup> Delete as necessary

Contract: RTD11-2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

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## **PART C2: PRICING DATA**

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## C2.1 PRICING INSTRUCTIONS

### 1. General

- 1.1 This section provides the tenderer with guidelines and requirements with regard to the completion of the Price Schedule. The Schedule **shall be completed by hand in black ink** and the tenderer is referred to the Tender Specifications in regard to the correction of errors.
- 1.2 The Price Schedule shall be read with all the documents which form part of this Contract.
- 1.3 The following words shall have the meanings hereby assigned to them:
- Unit: The unit of measurement for each item of work in terms of the Specifications and the Project Specifications.
- Quantity: The number of units of work for each item.
- Rate: The payment per unit of work at 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 Price Schedule, the Specifications and the Project Specifications, but the quantity of work of which is not measured in any units.
- 1.4 Reference shall be made to the General and Special Conditions of Contract regarding Provisional and Prime Costs Sums.
- 1.5 Work reserved for Labour Intensive construction methods will be numbered with a prefix “LI” in the Price Schedule to distinguish them from the conventional construction works. Such work shall be constructed using local labour who is temporarily employed in terms of the project specification.

### 2. Pay Items

- 2.1 Descriptions in the Price Schedule are abbreviated and comply generally with those in the Standard Specifications. The measurement and payment clause of each Standard Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standard Specification, or the Scope of Work, conflict with the terms of the Price Schedule, the requirements of the Standard Specification or Scope of Work, as applicable, shall prevail.
- 2.2 The item numbers appearing in the Price Schedule refer to the corresponding item number in the standard specifications or as amended in the Scope of Work. In the latter case, the item number is prefixed with the letter “B”. The same applies to new clauses added to the standard specifications. The prefix “LI” is simply highlighting that the item is to be done using labour intensive methods.
- 2.3 Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
- 2.4 The quantities set out in the Price Schedule are the estimated quantities of the Works, but the Contractor will be required to undertake whatever quantities may be directed by the Engineer from time to time. The Contract Price for the completed contract shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.

- 2.5 The units of measurement described in the Price Schedule are metric units. Abbreviations used in the Price Schedule are as follows:

mm	=	Millimetre	h	=	per hour
m	=	Metre	kg	=	kilogram
km	=	Kilometre	t	=	ton (metric = 1000kg)
m <sup>2</sup>	=	square metre	no	=	number
m <sup>2</sup> .pass	=	square metre pass	sum	=	sum
ha	=	Hectare	MN	=	mega newton
m <sup>3</sup>	=	cubic meter	MN.m	=	mega newton metre
m <sup>3</sup> .km	=	cubic meter kilometre	PC sum	=	prime cost sum
ℓ	=	Litre	prov sum	=	provisional sum
kℓ	=	Kilolitre	%	=	percent
MPa	=	mega pascal	kW	=	kilowatt
V	=	Volt	KVA	=	kilo volt ampere
A	=	Ampere	R/only	=	rate only
month	=	per month	pe	=	per establishment
day	=	per day	pm	=	per person per month
pd	=	per person per day	p	=	per person
ph	=	per person per hour			

### 3. Rates

- 3.1 The prices and rates to be inserted in the Price Schedule are to be full inclusive prices for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the tender is based, as well as overhead charges and profit. Reasonable prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.

- 3.2 **A price or rate is to be entered against each item in the Price Schedule, whether the quantities are stated or not.**

**An item against which no price is entered or where a word or phrase such as “included” or “provided elsewhere” will be accepted as a rate of nil (R0,00) having been entered against such items and covered by the other prices or rates in the Schedule.**

**Any work executed to which such a pay item applies, shall be measured under the appropriate items in the Price Schedule and valued at a rate of nil (R0,00). The rate of nil shall be valid irrespective of any change in the quantities during the execution of the Contract.**

- 3.3 The Tenderer shall fill in a rate against all items where the words “rate only” appears in the amount column. The intention is that, 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 be actually required.
- 3.4 Except where rates only are required, the Tenderer shall insert all amounts to be included in his total tendered price in the “Amount” column and show the corresponding total tendered price.



- 3.5 The tenderer shall not group together a number of items and tender one rate for such group of items.
- 3.6 The tenderers shall be requested to supply three (3) quotations on each provisional sums items provided as and when needed. The service provider will be required to provide a minimum of three (3) quotations every time he is allocated work depending on the available budget and scope thereof. The approved quotation will be taken as a lump sum for that specific period only and paid for according to the CTMM Standard Specifications for Civil Engineering works 2005 or as specified in terms of a "B" item.
- 3.7 All rates and sums of money quoted in the Price Schedule shall be in rands and whole cents. Fractions of a cent shall be discarded.
- 3.8 All prices and rates entered in the Price Schedule must be **excluding VAT**. VAT will be added last on the summary page of the Price Schedule.
- 3.9 Should excessively high unit prices be tendered, such prices may be of sufficient importance to warrant rejection of a tender by the Employer.

**4. Corrections of entries made by tenderer**

Any entry made by the Tenderer in the Price Schedule, forms, etc., which the tenderer desires to change, **shall not be erased or painted out. A line shall be drawn through the incorrect entry and the correct entry shall be hand written above in black ink and the full signature of the Tenderer shall be placed next to the correction.**

## **C2.2 PRICING SCHEDULE**

### **C2.2 PRICING SCHEDULE**

#### **SERIES 0 GENERAL**

SECTION 001	GENERAL REQUIREMENTS AND CHARGES
SECTION 002	ENGINEER'S ACCOMMODATION
SECTION 003	TRAINING

#### **SERIES 1 ANCILLARY WORK**

SECTION 101	SITE CLEARING AND GRUBBING
SECTION 102	ACCOMMODATION OF TRAFFIC
SECTION 104	LANDSCAPING
SECTION 106	SERVICE DUCTS
SECTION 107	DAYWORKS

#### **SERIES 2 EARTHWORKS**

SECTION 202	TRENCH EXCAVATION
SECTION 203	MASS EARTHWORKS

#### **SERIES 3 SEWER**

SECTION 302	SEWER NETWORK
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#### **SERIES 4 WATER**

SECTION 402	WATER NETWORK
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#### **SERIES 5 DRAINAGE AND EROSION PROTECTION**

SECTION 501	SUBSURFACE DRAINS AND DRAINAGE BLANKETS
SECTION 502	PREFABRICATED CULVERTS, STORMWATER
SECTION 503	KERBING AND CHANNELLING
SECTION 505	EROSION PROTECTION

#### **SERIES 6 ROADS AND PARKING AREAS**

SECTION 601	GRAVEL PAVEMENT LAYERS
SECTION 602	CRUSHED-STONE PAVEMENT LAYERS
SECTION 603	UNPAVED AREAS
SECTION 604	STABILISATION
SECTION 605	PRIME COAT
SECTION 606	ASPHALT BASE AND SURFACING
SECTION 608	ROAD AND SURFACING REHABILITATION
SECTION 612	TRAFFIC SIGNS
SECTION 613	TRAFFIC MARKINGS

#### **SERIES 9 QUALITY CONTROL**

SECTION 903	TESTING
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 0</b>	<b>GENERAL</b>				
<b>Section 001</b>	<b>General Requirements and Charges</b>				
<b>001.01</b>	<b>Preliminary and General Charges:</b>				
001.01.01	Fixed charges	Lump sum	1		
001.01.02	Time-related charges	Months	12		
<b>001.03</b>	<b>Excavate by hand to expose existing services and backfill</b>	m <sup>3</sup>	25		
<b>001.04</b>	<b>Compliance with the Occupational Health and Safety Act and applicable regulations</b>				
001.04.01	Provision of a Health and Safety Plan	Lump sum	1		
001.04.02	Provision of a Health and Safety File	Lump sum	1		
001.04.03	Provision of construction supervisors-				
001.04.03.02	Full time	Month	12		
001.04.04	Provision of a safety officer-				
001.04.04.02	Full time	Month	12		
001.04.05	Health and safety training	Prov Sum	1		
<b>TOTAL CARRIED FORWARD</b>					
Signature of person authorised to sign the tender:				Date	

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
001.04.06	Provision of personal protective clothing and equipment	Lump sum	1		
B001.04.07	Provision of safety fences, signs and barricades	Lump sum	1		
001.05	Community liaison officer				
001.05.01	Task Level 5 notch 1 (B1-1).	Month	12		
001.05.02	Percentage on item 001.05.01 for charges and profit	%			
001.06	Contract Notice Board (See Drawing STD-001)	no	4		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 0</b>	<b>GENERAL</b>				
<b>Section 002</b>	<b>Engineer's Accommodation</b>				
<b>002.01</b>	<b>Services</b>				
B002.01.01	Services for offices and laboratories	Month	12		
<b>002.02</b>	<b>Treatment and maintenance of areas surrounding offices and laboratories</b>	Month	12		
<b>002.03</b>	<b>Office and laboratory accommodation</b>				
002.03.01	Provision of office and laboratory accommodation, including fittings, furniture and equipment and car ports, as specified	Lump sum	1		
<b>002.04</b>	<b>Provision of survey equipment and assistants</b>				
002.04.01	Dumpy level	days	30		
<b>TOTAL CARRIED TO SUMMARY</b>					

Signature of person authorised to sign the tender:	Date

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 1</b>	<b>ANCILLARY WORK</b>				
<b>Section 101</b>	<b>Site Clearing and Grubbing</b>				
<b>101.01</b>	<b>Clearing and grubbing</b>				
101.01.01	Areas	m <sup>2</sup>	13 600		
101.01.02	Strips	m	100		
<b>101.02</b>	<b>Cutting and removing large trees with a girth -</b>				
101.02.01	exceeding 1m and up to and including 2m	no	15		
101.02.02	exceeding 2m and up to and including 3m	no	10		
101.02.03	exceeding 3m and up to and including 4m	no	1		
<b>101.03</b>	<b>Grubbing and the removal of the stumps and roots of large trees with girth -</b>				
101.03.01	exceeding 1m and up to and including 2m	no	1		
101.03.02	exceeding 2m and up to and including 3m	no	1		
101.03.03	exceeding 3m and up to and including 4m	no	1		
<b>101.04</b>	<b>Re-clearing of areas (only on the written instructions of the Engineer)</b>				
101.04.02	Areas not classified as strips	m <sup>2</sup>	75		
<b>TOTAL CARRIED FORWARD</b>					

Signature of person authorised to sign the tender:

Date

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
101.05	Removal and disposal of specific elements				
101.05.01	Concrete kerbing / kerbing combinations	m	200		
101.05.02	Concrete or brick elements (reinforced or unreinforced)				
101.05.02.01	230mm brickwork	m <sup>2</sup>	10		
101.05.02.02	115mm brickwork	m <sup>2</sup>	10		
101.05.02.04	Concrete elements (unreinforced)	m <sup>3</sup>	10		
101.05.02.05	Concrete elements (reinforced)	m <sup>2</sup>	10		
101.05.03	Asphalt surfacing	m <sup>2</sup>	10		
101.05.04	Interlocking / non-interlocking paving blocks	m <sup>2</sup>	10		
101.05.05	Sewer Pipeline	m	10		
101.05.06	Armorflex blocks	m <sup>2</sup>	10		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 1</b>	<b>ANCILLARY WORK</b>				
<b>Section 102:</b>	<b>Accommodation of Traffic</b>				
<b>102.01</b>	<b>Accommodation of traffic and maintenance of bypasses</b>	m <sup>2</sup>	600,00		
<b>102.07</b>	<b>Existing roads used as bypasses</b>	m <sup>2</sup>	100,00		
<b>102.08</b>	<b>Maintenance of surfacing of pavement layers of bitumen-surfaced bypasses and existing bitumen-surfaced roads used as bypasses</b>	m <sup>2</sup>	150,00		
<b>102.12</b>	<b>Provision of temporary bridges for maintaining access to properties</b>				
102.12.01	Temporary pedestrian bridges	no	2,00		
102.12.02	Temporary vehicular bridges	no	2,00		
<b>102.14</b>	<b>Temporary traffic-control facilities</b>				
102.14.01	Flagmen	pd	1 200		
102.14.02	Portable Stop and Go signs	no	4		
102.14.03	Amber flashing lights	no	6		
102.14.04	Road signs, TR-series, 1200mm in diameter or 900mm x 675mm if rectangular	no	4		
102.14.05	Road signs, TW-series, 1524mm sides	no	5		
102.14.06	Road signs, TG-series	m <sup>2</sup>	5		
102.14.07	Danger plates and delineators	no	85		
102.14.08	Moveable barricade / road sign combination	no	4		
<b>TOTAL CARRIED FORWARD</b>					

Signature of person authorised to sign the tender:

Date



Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
102.14.09	Traffic cones	no	50		
102.14.10	Plastic New Jersey barrier	no	50		
<b>102.15</b>	<b>Re-use or removal of traffic-control facilities</b>				
102.15.01	Amber flicker lights	no	2		
102.15.02	Road signs, TR and TW series	no	2		
102.15.03	Road signs, TG-series	no	2		
102.15.04	Danger plates and delineators	no	50		
102.15.05	Plastic New Jersey barrier	no	10		
<b>102.16</b>	<b>Obliteration of bypasses</b>	m <sup>2</sup>	1 000		
TOTAL CARRIED TO SUMMARY					
Signature of person authorised to sign the tender:				Date	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 1</b>	<b>ANCILLARY WORK</b>				
<b>Section 103</b>	<b>Overhaul</b>				
103.01	Overhaul on material hauled outside the defined free-haul boundaries  (Free-haul boundaries will be defined as 1km outside the indicated site boundaries)	m <sup>3</sup> .km	76 954		
<b>TOTAL CARRIED TO SUMMARY</b>					

Signature of person authorised to sign the tender:	Date

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 1</b>	<b>ANCILLARY WORK</b>				
<b>Section 104</b>	<b>Landscaping and Grassing</b>				
<b>104.01</b>	<b>Trimming</b>				
104.01.01	Machine trimming	m <sup>2</sup>	6 168		
104.01.02	Hand trimming	m <sup>2</sup>	100		
<b>104.02</b>	<b>Use of machines for trimming or shaping (alternative to sub item 104.01.01)</b>				
104.02.01	Bulldozer	h	30		
104.02.02	Motor grader	h	30		
<b>104.03</b>	<b>Preparing areas for grassing and ground covers</b>				
104.03.01	Scarifying	ha	6		
104.03.02	Top soiling on the Site with -				
104.03.02.01	Topsoil obtained from the Site or borrow areas provided by the Employer	m <sup>3</sup>	20		
104.03.02.02	Topsoil provided by the Contractor from other sources (including all haul)	m <sup>3</sup>	15		
104.03.04	Supplying and applying chemical fertilizers				
104.03.04.02	Superphosphate	t	1		
104.03.04.04	2:3:2 (22)	t	1		
<b>TOTAL CARRIED FORWARD</b>					

Signature of person authorised to sign the tender:

Date

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
104.03.05	Stockpiling of topsoil	m <sup>3</sup>	450		
104.04	Grassing				
104.03.04	Hydro seeding				
104.03.04.01	Providing approved seed mixture for hydro seeding	kg	3		
104.03.04.02	Hydro seeding	ha	1		
104.06	Anti-erosion compounds such as organic adhesives or bio-degradable covering material	kg	3		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 1</b>	<b>ANCILLARY WORK</b>				
<b>Series 106</b>	<b>Service Ducts</b>				
<b>106.01</b>	<b>Bedding and backfilling up to 300mm above pipes</b>				
106.01.01	Using selected excavated material	m <sup>3</sup>	100		
106.01.02	Using imported selected material	m <sup>3</sup>	150		
106.01.05	Using stabilized material	m <sup>3</sup>	200		
<b>106.02</b>	<b>The casting of in situ concrete in bedding and the encasing of pipes (Class 20/19 concrete)</b>	m <sup>3</sup>	100		
<b>106.03</b>	<b>Soilcrete</b>	m <sup>3</sup>	200		
<b>106.04</b>	<b>Service duct pipes</b>				
106.04.01	Ordinary pipes				
106.04.01.01	uPVC 110 similar approved	m	100		
106.04.03	Pipe fittings				
106.04.03.01	uPVC110 pipes or similar approved	no	100		
106.04.03.01	end plug for uPVC110 pipes or similar approved	no	100		
106.04.03.01	spacer module for uPVC110 pipes or similar approved	no	100		
<b>106.05</b>	<b>Duct markers</b>	no	100		
<b>106.06</b>	<b>Extra over item 106.01 and 106.03 for using material obtained from sources provided by the Contractor</b>	m <sup>3</sup>	100		
<b>TOTAL CARRIED TO SUMMARY</b>					

Signature of person authorised to sign the tender:

Date

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 1</b>	<b>ANCILLARY WORK</b>				
<b>Series B107</b>	<b>Dayworks</b>				
<b>B107.01</b>	<b>Labour during normal working hours</b>				
B107.01.01	Unskilled labour	h	100		
B107.01.02	Semi-skilled labour	h	100		
B107.01.03	Skilled labour	h	20		
<b>B107.02</b>	<b>Extra-over item B107.02 for charges and overheads</b>				
B107.02.01	Unskilled labour	%			
B107.02.02	Semi-skilled labour	%			
B107.02.03	Skilled labour	%			
<b>B107.03</b>	<b>Construction Plant</b>				
B107.03.01	Tipper trucks				
B107.03.01.01	6m <sup>3</sup> capacity	h	20		
B107.03.01.02	10m <sup>3</sup> capacity	h	20		
B107.03.02	Backhoe loaders (Mass 7 - 8 ton)	h	20		
B107.03.03	Bulldozer (Mass 20 - 25 ton, Power 135 - 165 kW)	h	20		
B107.03.04	Tracked Excavator (Mass 18 - 22 ton, Power 70 - 105 kW)	h	10		
B107.03.05	Generator (15kVA)	h	10		
B107.03.06	Grader (Mass 16 - 20 ton)	h	20		
B107.03.07	Wheel Loader (Mass 10 - 13 ton)	h	10		
<b>TOTAL CARRIED FORWARD</b>					

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

Signature of person authorised to sign the tender:	Date
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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
B107.03.08	Milling machine (W350 or equivalent)	h	12		
B107.03.09	Rollers				
B107.03.09.01	Pneumatic Roller (14 - 21 ton)	h	12		
B107.03.09.02	Single drum vibratory padfoot roller (7 - 10 ton)	h	12		
B107.03.09.03	Single drum vibratory padfoot roller (10 - 14 ton)	h	12		
B107.03.09.04	Single drum vibratory smooth roller (7 - 10 ton)	h	12		
B107.03.09.05	Single drum vibratory smooth roller (10 - 14 ton)	h	12		
B107.03.09.10	Pedestrian roller (500 - 550kg, width 390mm)	h	12		
B107.03.09.11	Pedestrian roller (1000 - 1500kg, width 900mm)	h	12		
B107.03.10	Compressor (185 cfm) including 2 drills and hoses	h	6		
B107.03.11	Concrete Mixer (250 litre)	h	6		
B107.03.12	Cranes				
B107.03.12.01	Capacity 50 ton	h	12		
B107.03.12.02	Capacity 100 ton	h	12		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date
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ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
B107.03.13	Pumps				
B107.03.13.01	Electric submersible (50mm)	day	8		
B107.03.13.02	Diesel centrifugal (50mm)	day	8		
B107.03.13.03	Diesel centrifugal (100mm)	day	8		
B107.03.13.04	Petrol centrifugal (50mm)	day	8		
B107.03.13.04	Petrol centrifugal (100)	day	8		
B107.04	Transport of Construction Plant				
B107.04.01	Flatbed truck (2 - 4 ton)	km	50		
B107.04.02	Lowbed (30 - 40 ton)	km	50		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 2	EARTHWORKS				
Section 201	General				
201.01	Excess overburden at borrow pits provided by the Employer	m <sup>3</sup>	200		
201.02	Temporary stockpiling of material	m <sup>3</sup>	300		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 2</b>	<b>EARTHWORKS</b>				
<b>Section 202</b>	<b>Trenching</b>				
<b>202.01</b>	<b>Trench excavation</b>				
202.01.01	Up to 1,0m wide				
202.01.01.01	Up to 1,0m deep	m <sup>3</sup>	149		
202.01.01.02	Over 1,0m deep and up to 1,5m deep	m <sup>3</sup>	22		
<b>202.02</b>	<b>Extra over items 202.01, 202.03 and 202.09 for excavating in -</b>				
202.02.01	Intermediate material	m <sup>3</sup>	15		
202.02.02	Hard material	m <sup>3</sup>	22		
<b>202.03</b>	<b>Excavations outside the normal trench profile</b>	m <sup>3</sup>	20		
<b>202.04</b>	<b>Hand excavation (extra over item 202.01)</b>	m <sup>3</sup>	45		
<b>TOTAL CARRIED FORWARD</b>					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
202.06	The backfilling of trenches with material obtained from excavations	m <sup>3</sup>	74		
202.07	Extra over items 202.06 and 202.13 for using backfill material obtained -				
202.07.02	From sources provided by the contractor	m <sup>3</sup>	67		
202.10	Removal of spoil material -				
202.10.01	To positions indicated on the Drawings or by the Engineer	m <sup>3</sup>	74		
202.10.02	To dumping areas to be provided by Contractor	m <sup>3</sup>	74		
202.12	Extra over item 202.06 for additional compaction of backfill to 93% of modified AASHTO density in road reserves	m <sup>3</sup>	100		
202.13	Backfilling trenches with soilcrete	m <sup>3</sup>	74		
202.15	Reinstatement of bitumen surfaced roads	m <sup>2</sup>	100		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:

Date

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 2</b>	<b>EARTHWORKS</b>				
<b>Section 203</b>	<b>Mass Earthworks</b>				
<b>203.01</b>	<b>Excavation and borrow to fill</b>				
203.01.01	Compaction to 90% of modified AASHTO density	m <sup>3</sup>	4 610		
<b>203.02</b>	<b>Extra over item 203.01 for excavating in -</b>				
203.02.01	Intermediate material	m <sup>3</sup>	691		
203.02.02	Hard material	m <sup>3</sup>	461		
203.02.03	Boulder material class A	m <sup>3</sup>	230		
203.02.04	Boulder material class B	m <sup>3</sup>	230		
<b>203.03</b>	<b>Excavate and spoil of -</b>				
203.03.01	Soft material	m <sup>3</sup>	10 993		
<b>203.04</b>	<b>Removal of oversize material</b>	m <sup>3</sup>	10 993		
<b>203.05</b>	<b>Variations in compactive effort (applicable to sub item 203.01.03 and item 203.07)</b>				
203.05.01	Vibratory rollers	m <sup>2</sup> .pass	500		
203.05.02	Impact rollers	m <sup>2</sup> .pass	500		
<b>TOTAL CARRIED TO SUMMARY</b>					

Signature of person authorised to sign the tender:

Date

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
302	Sewers				
302.01	Supplying, laying and jointing of sewer pipes irrespective of depth or width of trench:				
302.01.01	For uPVC, Class 34 (160mm, push socket connection)	m	200		
302.02	Constructing of pipe beddings				
302.02.01	Class B bedding				
302.02.01.01	160mm diameter	m	200		
302.09	Construction of manholes, up to 1,0 m deep				
302.09.01	For sewers 300 mm in diameter and smaller				
302.09.01.01	(Type of manhole stated)	No.	2		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 5</b>	<b>DRAINAGE AND EROSION PROTECTION</b>				
<b>Section 502</b>	<b>Prefabricated Culverts and Stormwater Sewers</b>				
<b>502.01</b>	<b>Backfilling with selected excavated material compacted to -</b>				
502.01.01	90% of modified AASHTO density	m <sup>3</sup>	325		
502.01.02	93% of modified AASHTO density	m <sup>3</sup>	255		
502.01.03	95% of modified AASHTO density	m <sup>3</sup>	2100		
<b>502.06</b>	<b>Supplying and laying portal and rectangular culverts</b>				
	Complete with precast invert slab (rectangular culvert)				
502.06.01					
502.06.01.01	2400 mm x 1500 mm (slab 260 mm, D25/30-XC4-20)	m	60		
502.06.01.01	3000 mm x 1200 mm (slab 320 mm, D25/30-XC4-20)	m	40		
502.06.01.01	3000 mm x 1500 mm (slab 320 mm, D25/30-XC4-20)	m	60		
<b>TOTAL CARRIED FORWARD</b>					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
502.10	Cast in situ concrete				
502.10.02	In invert slabs for portal or rectangular culverts, including formwork to provide class F1 surface finish and class U2 surface finish for unformed surfaces				
502.10.02.01	Class 15/10	m <sup>3</sup>	300		
502.10.02.02	Class 30/20	m <sup>3</sup>	500		
502.10.04	<b>Formwork for concrete under item 502.10.02 above</b>				
502.10.04.01	Class F1 surface finish	m <sup>2</sup>	100		
502.10.04.02	Class F2 surface finish	m <sup>2</sup>	150		
502.13	<b>Welded-steel fabric</b>				
502.13.01	SMF 617	kg	5		
502.13.02	SMF 311	kg	5		
502.14	<b>Reinforcement</b>				
502.14.02	High-yield-stress steel				
502.14.02.01	Y10	Ton	1		
502.14.02.02	Y12	Ton	1		
502.14.02.03	Y16	Ton	1		
502.14.02.04	Y20	Ton	1		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 5	DRAINAGE AND EROSION PROTECTION				
Section 503	Kerbing and Channelling				
503.02	Concrete kerbing-channelling combination (See drawing STD007 - Sheet 1)				
503.02.01	Mountable kerb (Fig. 8C) with concrete channel	m	400		
503.02.02	Barrier kerb (Fig. 12) with concrete channel	m	600		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
503.03.04	Semi-vertical kerb (Fig. 7) to 500mm sloping kerb	no	100		
503.01.05	Extra over Items 503.03.01, 503.03.02, 503.03.03, 503.04.04 for variations in concrete volume due to variations in standard dimensions	m <sup>3</sup>	5		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 5</b>	<b>EROSION PROTECTION</b>				
<b>Section 505</b>	<b>DRAINAGE AND EROSION PROTECTION</b>				
<b>505.01</b>	<b>Foundation trench excavation and backfilling</b>				
505.01.02	In all other classes of material	m <sup>3</sup>	400		
505.02	Surface preparation for the bedding of gabions	m <sup>2</sup>	1 350		
505.03	Gabions				
505.03.01	Gabion boxes (2 x 1 X 0,5 using 2,7mm wire diameter and 80mm x 100mm mesh)	m <sup>3</sup>	100		
505.03.02	Gabion boxes (3 x 1 X 0,5 using 2,7mm wire diameter and 80mm x 100mm mesh)	m <sup>3</sup>	200		
505.03.03	Gabion boxes (1 x 1 X 1 using 2,7mm wire diameter and 80mm x 100mm mesh)	m <sup>3</sup>	300		
505.03.04	Gabion boxes (1,5 x 1 X 1 using 2,7mm wire diameter and 80mm x 100mm mesh)	m <sup>3</sup>			
505.03.05	Gabion boxes (2,0 x 1 X 1 using 2,7mm wire diameter and 80mm x 100mm mesh)	m <sup>3</sup>	700,0		
505.03.06	Gabion Reno Mattress (6 x 2 X 0,3 using 2,7mm wire diameter and 80mm x 100mm mesh)	m <sup>3</sup>	600,0		
505.04	Extra over item 505.03 for supplying gabions with PVC-coated wire (Thickness of 2mm PVC coating stated)	m <sup>3</sup>	1 600,0		
505.05	Filter fabric for gabions and riprap (Synthetic Fibre, Grade 2)	m <sup>2</sup>	1 300		
505.09	Concrete pitching				
505.09.02	Interlocking precast concrete block pitching (Armourflex 205 EROSION CONTROL BLOCK WITH TWO OVAL OPENINGS & TWO ROPE DUCTS • SIZE - 340 mm. LONG x 294 mm. WIDE x 115 mm. 0,022m3/m2 voids filling material)	m <sup>2</sup>	400		
<b>TOTAL CARRIED TO SUMMARY</b>					

Signature of person authorised to sign the tender:

Date

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 6</b>	<b>ROADS AND PARKING AREAS</b>				
<b>Section 601</b>	<b>Gravel Pavement Layers</b>				
<b>601.02</b>	<b>Gravel layers constructed from material obtained from borrow pits</b>				
601.02.01	Subgrade				
601.02.01.02	Compacted to 95% of modified AASHTO density	m <sup>3</sup>	350		
<b>601.03</b>	<b>Gravel layers constructed from material obtained from excavations</b>				
601.03.01	Subgrade				
601.03.01.01	Compacted to 90% of modified AASHTO density	m <sup>3</sup>	250		
601.03.02	Subbase				
601.03.02.01	Compacted to 95% of modified AASHTO density	m <sup>3</sup>	150		
601.03.03	Base				
601.03.02.02	Compacted to 98% of modified AASHTO density	m <sup>3</sup>	100		
<b>601.04</b>	<b>Extra over item 601.03 for obtaining material from</b>				
601.04.01	Intermediate excavations	m <sup>3</sup>	120		
<b>601.06</b>	<b>Extra over Item 601.02 for borrow material from sources to be supplied by the Contractor</b>				
601.06.01	G5 material compacted to 95% of modified AASHTO Density	m <sup>3</sup>	80		
601.06.03.01	Compacted to 98% of modified AASHTO density	m <sup>3</sup>	160		
<b>TOTAL CARRIED TO SUMMARY</b>					

Signature of person authorised to sign the tender:

Date

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 6</b>	<b>ROADS AND PARKING AREAS</b>				
<b>Section 604</b>	<b>Stabilization</b>				
<b>604.01</b>	<b>Chemical stabilization extra over unstabilized compacted layers</b>				
604.01.01	Subbase	m <sup>3</sup>	1000		
604.01.02	Base	m <sup>3</sup>	1200		
<b>604.02</b>	<b>Chemical stabilizing agent</b>				
604.02.01	Cement	t	1		
<b>604.03</b>	<b>Mechanical modification, extra over untreated layer</b>	m <sup>3</sup>	500		
<b>TOTAL CARRIED TO SUMMARY</b>					

Signature of person authorised to sign the tender:	Date

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 6</b>	<b>ROADS AND PARKING AREAS</b>				
<b>Section 605</b>	<b>Prime Coat</b>				
<b>605.01</b>	<b>Prime coat</b>				
605.01.04	Invert bitumen emulsion which complies with SANS 1260 (MSP 1)	ℓ	100		
<b>605.02</b>	<b>Aggregate for blinding</b>	m <sup>2</sup>	1 200		
<b>TOTAL CARRIED TO SUMMARY</b>					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 6</b>	<b>ROADS AND PARKING AREAS</b>				
<b>Section 606</b>	<b>Asphalt Base and Surfacing</b>				
<b>606.02</b>	<b>Asphalt surfacing</b>				
606.02.01	40mm Continuously graded (medium)	t	400		
<b>606.05</b>	<b>Tack coat of 30% stable grade emulsion</b>	ℓ	4 320		
<b>606.09</b>	<b>100 mm cores in asphalt paving</b>	No.	6		
<b>TOTAL CARRIED TO SUMMARY</b>					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
Section 609	Segmented Paving				
609.01	Construction of segmental block paving made from -				
609.01.01	60mm Type S-A, Class 25 (Grey in Colour)	m <sup>2</sup>	250		
609.01.03	60mm Type S-A, Class 25 (Terrecota in Colour)	m <sup>2</sup>	300		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date
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Part C2: Pricing Data

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>Section 613</b>	<b>Traffic Marking</b>				
<b>613.01</b>	<b><u>Road-marking paint</u></b>				
613.01.06	- Kerb markings (any colour)	m <sup>2</sup>	100,5		
<b>613.02</b>	<b><u>Retro-reflective road-marking paint</u></b>				
613.02.01	- White lines (broken or unbroken) 100 mm wide	km	0,2		
613.02.02	Yellow lines (broken or unbroken) 100 mm wide	km	0,2		
613.02.03	White lettering and symbols	m <sup>2</sup>	20,0		
613.02.04	Yellow lettering and symbols	m <sup>2</sup>	10,0		
613.02.05	Traffic-island markings (any colour)	m <sup>2</sup>	10,0		
613.02.06	Reflective tape	m <sup>2</sup>	10,0		
<b>613.04</b>	<b><u>Variation in the rate of application</u></b>				
613.04.01	- White paint	ℓ	20,0		
613.04.02	Yellow paint	ℓ	20,0		
613.04.03	Glass beads	kg	50,0		
<b>613.06</b>	Setting out and the premarking of lines (excluding traffic-island markings, lettering and symbols)	km	0,4		
<b>TOTAL CARRIED TO SUMMARY</b>					

Signature of person authorised to sign the tender:

Date

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>Series 702</b>	<b>FALSEWORK, FORMWORK AND CONCRETE FINISH</b>				
702.01	Formwork Class F1 surface finish to:				
702.01.01	Single-surface formwork				
702.01.01.03	Plane, vertical	m <sup>2</sup>	4003		
702.02	Formwork, class F2 surface finish				
702.02.01	Single-surface formwork				
702.02.01.03	Plane, vertical	m <sup>2</sup>	129		
	Provision of designs and drawings of falsework and formwork by an ECSA registered Professional Engineer or Technologist (for the whole culvert)	L/sum	1		
Total Carried Forward To Summary					

Signature of person authorised to sign the tender:

Date

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>Series 703 :</b>	<b>STEEL REINFORCEMENT FOR STRUCTURES</b>				
703.03	Welded steel fabric for -				
703.03.01	Apron slab and cut off walls				
703.03.01.01	SMF 888	kg	1		
703.03.02	Concrete Barriers and Parapets and End blocks				
703.03.01.01	SMF 888	kg	1		
703.04	Reinforcement for - (Base and walls of the stormwater concrete canal)				
703.04.02	High-yield-stress steel	t	93		
Total Carried Forward To Summary					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>Series 704</b>	<b>Concrete</b>				
<b>704.01</b>	<b>Cast in situ concrete:</b>				
704.01.02	Durability Concrete (Class D): Wingwall footings and walls (D25/30-XC4-20)	m <sup>3</sup>	100,00		
704.01.03	Durability Concrete (Class D): Apron slab and cut off walls (D25/30-XC4-20)	m <sup>3</sup>	100,00		
704.01.04	Cast in situ stormwater concrete canal	m <sup>3</sup>	2318,45		
<b>C13.8.16</b>	<b>Perforated drainage pipes:</b>				
C13.8.16.1	M65 Netlon drainage pipe wrapped in Kaymat U34 or similar approved	m	1400,00		
Total Carried Forward To Summary					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>Series 706</b>	<b>JOINTS IN STRUCTURES</b>				
<b>706.02</b>	<b>Installation of Proprietary expansion Joints</b>				
706.02.01	(a) J1 complete as shown on drawings	m	200,00		
706.02.02	(b) J2 complete as shown on drawings	m	200,00		
<b>706.04</b>	<b>Sealing joints with:</b>				
706.04.01	(a) 10mm x 10mm Silicon sealant	m	200,00		
706.04.02	(b) 40mm Deep x 15mm Silicon sealant	m	200,00		
Total Carried Forward To Summary					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>SERIES 9</b>	<b>QUALITY CONTROL</b>				
<b>Section 903</b>	<b>Testing</b>				
<b>903.01</b>	<b>Provision of testing equipment</b>				
903.01.03	150mm x 150mm x150mm concrete-cube moulds	no	20		
903.03	Special tests on concrete and asphalt				
903.03.01	Compressive-strength tests on concrete cubes	no	60		
<b>903.06</b>	<b>Special tests requested by the Engineer:</b>				
903.06.01	Employer's contribution to concrete durability tests:				
903.06.01	(a) Tests for water sorptivity	PC sum	1,00		
903.06.01.01	(i) Handling costs and profit in respect of item C20.1.2.1(a)	%			
903.06.02	(b) Tests for oxygen permeability	PC sum	1,00		
903.06.02.01	(i) Handling costs and profit in respect of item C20.1.2.1(b)	%			
903.06.03	(c) Tests for chloride conductivity	PC sum	1,00		
903.06.03.01	(i) Handling costs and profit in respect of item C20.1.2.1(c)	%			
903.06.04	(d) Tests for concrete cover	PC sum	1,00		
903.06.04.01	(i) Handling costs and profit in respect of item C20.1.2.1(d)	%			
Total Carried Forward To Summary					

Signature of person authorised to sign the tender:	Date
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Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

#### SUMMARY OF PRICING SCHEDULE

SECTION	DESCRIPTION	AMOUNT
<b>SERIES 0</b>	<b>GENERAL</b>	
001	General Requirements and Charges	R -
002	Engineers Accommodation	R -
<b>SERIES 1</b>	<b>ANCILLARY WORK</b>	
101	Site Clearing and Grubbing	R -
102	Accommodation of Traffic	R -
103	Overhaul	R -
104	Landscaping and Grassing	R -
106	Service Ducts	R -
107	Dayworks	R -
<b>SERIES 2</b>	<b>EARTHWORKS</b>	
201	General	R -
202	Trenching	R -
203	Mass Earthworks	R -
<b>SERIES 3</b>	<b>SEWERS</b>	
302	Construction	R -
<b>SERIES 5</b>	<b>DRAINAGE AND EROSION PROTECTION</b>	
502	Prefabricated Culverts and Stormwater Drainage	R -
503	Kerbing and Channelling	R -
505	Drainage and Erosion Protection	R -
<b>SERIES 6</b>	<b>ROADS AND PARKING AREAS</b>	
601	Gravel Pavement Layers	R -
604	Stabilisation	R -
605	Prime Coat	R -
606	Asphalt Base and Surfacing	R -
609	Construction of Segmental Block Paving	R -
612	Traffic Signs	R -
613	Traffic Markings	R -
<b>SERIES 7</b>	<b>STRUCTURES</b>	
701	Foundations for Structures	R -
702	FALSEWORK, FORMWORK AND CONCRETE FINISH	R -
703	STEEL REINFORCEMENT FOR STRUCTURES	R -
704	Concrete	R -
706	Joints in Structures	R -
<b>SERIES 9</b>	<b>QUALITY CONTROL</b>	
903	Testing	R -

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C2: Pricing Data

TOTAL SCHEDULE OF PRICES	R	-
TOTAL OF SCHEDULED PRICES	R	-
Add 10% for contingencies	R	-
SUBTOTAL	R	-
Add 15% VAT	R	-
CONTRACT PRICE CARRIED FORWARD TO FORM OF OFFER	R	-

Signature of person authorised to sign the tender:	Date
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**PART C3: SCOPE OF WORK**

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C3.1 DESCRIPTION OF THE WORKS

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C3.1.3 Extent of the works .....113

### **C3.1.1 Employer's objectives**

The objective of this project is to upgrade the Pegasus Canal in Equestria, eastern Tshwane, to effectively manage stormwater, mitigate flooding, and prevent erosion-related damage to properties and infrastructure. The project aims to provide a technically sound, cost-effective, and environmentally compliant solution that safeguards lives, protects community assets, and supports the long-term stormwater management vision of the City of Tshwane. This includes assessing the canal's condition, identifying practical engineering interventions, and proposing a phased upgrade strategy that balances immediate risk mitigation with sustainable, long-term improvements.

The Employer's objective is furthermore to create temporary local job opportunities as well as opportunities for local enterprises. The project will be subject to a 30% subcontracting target to BE subcontractors, of which 80% need to come from the local community.

### **C3.1.2 Overview of the works**

The scope of works comprises of the following:

- Construction of a 7-metre-wide reinforced concrete open canal with a total length of 700 metres.
- Construction of two bridge culvert systems along Griffith Avenue and Furrow Road.
- Construction and rehabilitation of embankments along canal route.
- Construction of Stormwater pipelines and outlet structures.

The Scope of Works is explained in more detail in the following sections. Specific engineering details of the works are included in Section C3.2: Engineering.

### **C3.1.3 Extent of the works**

#### *C3.1.3.1 Preparation & Ancillary Works*

- a) The establishment on site, including the provision of facilities for the engineer
- b) The supply of plant, labour, tools, equipment and materials necessary to complete the work.
- c) Setting out of the Works by means of benchmarks provided by the Employer.
- d) Before any works can commence the contractor must relocate/protect all existing services and associated infrastructure.
- e) Accommodation of traffic during the construction stage, includes the erection of temporary road signs, STOP/GO controls, other traffic control devices and the provision of access to residents and businesses adjacent to the road.

#### *C3.1.3.2 Scope of Works*

- **Upgrading of Pegasus Stormwater Canal in Equestria**
  - Construction of a 7-metre-wide reinforced concrete stormwater open canal with a total length of 700 metres.
  - Construction of two bridge culvert systems along Griffith Avenue and Furrow Road.
  - Construction and Rehabilitation of embankments along canal route
  - Construction/Upgrading of stormwater pipelines and outlet structures
  - New sloped kerbs on both edges of Griffith Avenue and Furrow Road.

- Rehabilitation of Griffith Avenue and Furrow Road on the affected portions.
- Construction of the sewer pipeline crossing over the proposed stormwater canal

#### *C3.1.3.3 Relocation/ protection of Services*

This contract includes certain work relating to the relocation and/or protection of all other existing services that may be affected by the construction of the works.

The following affected services have been identified:

- Water reticulation pipes (Main Contractor's responsibility).
- Electrical (Eskom and/or municipal electrical department).
- Telkom (Telkom responsibility)
- Fibre optic Cable (Relevant specialist subcontractor which will be determined on site is responsible)
- Unknown Services (Responsibility to be determined on site)

It is anticipated that this portion of the work will be executed by specialist subcontractors provided by the various service providers.

#### *C3.1.3.4 Traffic Signalization*

No traffic signalization will be applicable in this Contract.

#### *C3.1.3.5 Landscaping*

Topsoil removed for construction purposes need to be preserved during the contract period and reinstated upon completion. Additional areas to be identified by the Engineer will be provided with new topsoiling and all such areas require grassing.

#### *C3.1.3.6 Quality Control*

Quality control on the site shall comprise the contractor's quality system in conjunction with the engineer's quality system and procedures, which will be agreed upon on the commencement of the contract.

#### *C3.1.3.7 Wayleaves*

The Engineer has obtained City of Tshwane wayleave approval for the design. In the event of any revisions, updates or new wayleaves being required, the contractor shall be responsible for obtaining a new City of Tshwane wayleave.

#### *C3.1.3.8 Geotechnical Information*

A Materials Investigation and Utilization Reporting containing results of the test pit profiles and laboratory testing can be made available to the successful tenderer on request. It is the contractor's responsibility to ensure that all material used on site is tested and meets all the requirements as stated in the design and by the engineer.

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C3: Scope of Work

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**C3.2 ENGINEERING**

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### C3.2.1 Employer's design

The employer is responsible for the design of the permanent works as reflected in the Contract Documents unless otherwise stated. It is the responsibility of the Contractor to design the temporary works and ensure their compatibility with the permanent works. The Contractor shall supply all the details necessary to assist the Engineer in compilation of the as- built drawings.

### C3.2.2 Drawings

The tender drawings for the Upgrading of a Stormwater Canal in Pegasus – Phase 3 are as listed below:

DRAWING NO.	DESCRIPTION OF DRAWING
<b>DESIGN DRAWINGS</b>	
PART A: GENERAL	
C2503 - 000	DRAWING LIST
C2503 - 001	LOCALITY LAYOUT PLAN
C2503 - 002	SITE LAYOUT PLAN
C2503 - 003	STORMWATER LAYOUT PLAN
C2503 - 004	CATCHMENT AREA LAYOUT
PART B: STORMWATER LAYOUT PLANS AND LONGSECTIONS	
C2503 - 010	SW CHANNEL PLAN AND LONGITUDINAL PROFILE CHAINAGE 0 – 563.98
PART C: STORMWATER CROSS SECTIONS	
C2503 - 020	SW CHANNEL CROSS-SECTIONS CHAINAGE 0 – 563.98
PART D: ROADS/ BRIDGE/ CULVERT STRUCTURES	
C2503 - 032	TYPICAL CROSS SECTIONS & PAVEMENT DESIGN - GRIFFITH AVE.
C2503 - 033	PORTAL CULVERT 1 CONCRETE DETAILS SHEET 1
C2503 - 040	TYPICAL CROSS SECTIONS & PAVEMENT DESIGN - FURROW RD.
C2503 - 041	PORTAL CULVERT 2 CONCRETE DETAILS SHEET 1
C2503 - 046	STORMWATER OUTLET STRUCTURE

The Principal Contractor will receive 3 sets of construction drawings, of which 1 set shall be designated for as-built records and updated by the Principal Contractor on a daily basis. The latter shall be:

- Made available to the Engineer or his/her duly authorised representative within 24 hours on request.
- Submitted to the Engineer with the completion of each project

The information contained in the drawings, relating to the position, material and size of the existing services, may not be 100% accurate, subject to site measurement and verification.

## C3.3 PROCUREMENT

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### **C3.3.1 Preferential procurement procedures**

#### **C3.3.1.1 Requirements**

The City of Tshwane has a mandate and responsibility to fight poverty, build clean, healthy, safe and sustainable communities. To achieve this, the City adopted an Integrated Poverty Reduction and Community Development Strategy which requires all departments to cooperate and contribute towards poverty reduction through employing EPWP participants on projects. Therefore, the Roads and Stormwater Division is committed to utilize participants that are registered on the Central Database on all projects. The aim is to ensure commitment by each contractor on a project to utilize 100% of its personnel of the EPWP Central Database in order to enhance poverty alleviation and the uplifting of participants.

The successful contractor appointed will have to request labour from the EPWP Office that will do a random selection from the Central Database. Fifty percent of all personnel on a project must be appointed from the Central Database provided by the EPWP Office. The idea is to place beneficiaries in the correct or appropriate project roles/occupations to help them achieve income capacity and/or to equip them through skills development. The contractor must provide data about the number of beneficiaries required, qualifications, type of placement/occupation and gender before the project starts. The successful contractor appointed must accommodate students that are in need of practical training or in-service training. One student per annum must be trained on this contract. The minimum wage as per Sectoral Determination: Civil Engineering Sector published in the Government Gazette will be payable for students.

#### **C3.3.1.1.1 Employment of unskilled and semi-skilled labour in Labour Intensive Construction works**

##### **1. Requirements for the sourcing and engagement of labour**

1.1 Unskilled and semi-skilled labour require for the execution of all labour-intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.

1.2 The guideline pay rate will be as set by the CIDB/ SAFCEC Gazetted rates

1.3 Tasks by the Contractor must be such that:

- (a) the average worker completes 5 tasks per week in 40 hours or less; and
- (b) the weakest worker completes 5 tasks per week in 55 hours or less.

1.4 The Contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 1.3.

#### **C3.3.1.1.2 Appointment of Community Liaison Officer (CLO)**

1. After selection of the PSC, at the same meeting indicated under item C3.3.6.1.3, residents and stakeholders in attendance are to vote for poll of three (3) potential CLO's coming from the community concerned.
2. In the event that a PSC is not constituted by public meeting, or cannot proceed with its work, as contemplated by section 6.1.3.5 of the Framework, the appointed PSC will nominate potential CLOs.
3. It is from this pool that the contractor, after interviewing the three (3) nominees and consultation with the PSC appoints the CLO.



4. Administrative processes for appointment of Community Liaison Officers.

- Minutes and an attendance register must be kept as evidence of the proceedings of the election meeting.
- The office of the speaker must submit the results (minutes) and attendance registrar of the community liaison officer election meeting to the chairperson of the PSC, the contractor and the Expanded Public Works Programme (EPWP) Division.
- The elected CLO will be appointed by the contractor for the duration of the project and also be remunerated by the contractor. Where the CLO is no longer available and another is appointed, the existing CLO shall cease to receive remuneration.
- An employment agreement containing the general terms and conditions of the contract, will be issued to the CLO and must be signed by the CLO before commencement of duties.
- A CLO will be appointed from the ward in which the project is executed.
- The CLO's will be remunerated according to the entry level basic salary of an Administrator Officer position of the City of Tshwane (Task Level 5 notch 1 (B1-1)). No benefits will be applicable.

5. The CLO must have the following attributes: -

- have credibility and standing in the community.
- have a strong personality.
- be able to be firm and decisive.
- be able to facilitate in disputes.
- be able to handle conflict.
- be able to keep minutes and records in a proper and orderly way.
- have a knowledge of labour laws and industrial relations (training will be provided where necessary).
- be objective and impartial.
- be fair.

C3.3.1.2 Resource standard pertaining to targeted procurement

The Contractor shall deliver the following deliverables in terms of the relevant SANS 1914 and the associated specification data:

C3.3.1.2.1 Provide business opportunities for targeted enterprises in terms of **SANS 1914-4**

**1. General**

Targeted enterprises shall be engaged in the performance of the contract in accordance with the requirements of SANS 1914-4 as amended in 2

**2. Amendments to SANS 1914-4**

**2.1** Replace the existing definitions with the following:

**contract participation goal (CPG)**

value of supplies, services and works for which the contractor contracts targeted enterprises exclusive of any value added tax or sales tax which the law requires the employer to pay to the

contractor, expressed as a percentage of the contract amount associated with the targeting strategy that is identified in the specification data

2.2 Add the following definitions:

**contract amount**

**1) targeting strategy A**

financial value of the contract at the time of the award of the contract, exclusive of all allowances and any value added tax or sales tax which the law requires the employer to pay to the contractor

**2) targeting strategy B**

financial value of the contract upon completion of all contractual obligations, exclusive of any value added tax or sales tax which the law requires the employer to pay to the contractor

**targeting strategy A**

a strategy which:

- a) links the granting of a preference by the employer in the evaluation of tender offers in return for the tendering of a contract participation goal or an undertaking to attain a specified contract participation goal at the time that tenders are evaluated; or
- b) requires a contractor to achieve a minimum specified goal in the performance of a contract; or
- c) involves both a) and b)

**targeting strategy B**

a strategy which:

- a) links the payment of an incentive bonus to a contractor for the attainment of a specified contract participation goal; or
- b) requires the contractor to record and report on the quantum of work generated for targeted labour

2.3 Replace clauses 3.11 and 3.12 with the following:

**3.1.1** The contractor shall engage targeted enterprises directly or indirectly in the performance of the contract to the extent that the total monetary value of such engagements exclusive of any value added tax or sales tax required by law, is sufficient to achieve the contract participation goal provided for in the specification data.

**3.1.2** The contractor shall, in the case of targeting strategy A, submit details of his plan to achieve the contract participation goal to the employer's representative on the contract participation goal implementation plan form contained in annex C, within five working days of being instructed to do so. If no such instructions are given, these plans shall be submitted before the submission of the first claim for payment.

2.4 Replace 3.2.2 with the following:

**3.2.2** Contractors shall submit completed targeted enterprise declaration affidavits and, where targeting strategy A applies, letters of undertaking to act as sub-consultants, subcontractors

suppliers, manufacturers or service providers (see annex D), in respect of each and every targeted enterprise and targeted partner whose contribution shall be counted towards the contract participation goal. These documents shall, unless otherwise stated in the specification data, be submitted to the employer's representative before the submission of the first claim for payment.

2.5 Replace 4.1 with the following:

**4.1** The contractor shall enter into written contractual agreements with all the targeted enterprises and targeted partners cited in the contract participation goal implementation plan and shall, as soon as is practicable, furnish the employer's representative with copies of such agreements and the written acceptances thereof. The contract to be performed by the targeted enterprises and targeted partners shall, in the case of targeting strategy A, thereafter neither be reduced in scope, nor terminated without the prior written approval of the employer's representative, which shall not be unreasonably withheld or delayed.

2.6 Replace 4.2.1 with the following:

**4.2.1** Where targeting strategy A applies and in the event that, through no fault of the contractor, a contracted targeted enterprise is found to be:

- a) unable to perform, or to perform on time;
- b) unable to produce acceptable work;
- c) unwilling to perform work required; or
- d) not fit to perform the service;

the contractor shall notify the employer's representative of the apparent necessity to reduce or terminate such a targeted enterprise's contract, citing the reasons therefor.

2.7 Replace 4.3 with the following:

Where, in the case of targeting strategy A, an enterprise under contract was initially considered to be a targeted enterprise but is later discovered not to be so, or is found not to be creditable towards contract participation goals, the employer may consider a partial waiver of the contractor's obligations towards the achievement of the contract participation goal in respect of such a targeted enterprise, should the contractor satisfactorily demonstrate that he was justified in believing the enterprise to be a targeted enterprise and that eligibility standards were not violated.

2.8 Replace 6 with the following:

In the event that, and where targeting strategy A applies, the contractor fails to substantiate that any failure to achieve the contract participation goal was due to

- a) quantitative underruns,
- b) the elimination of items contracted to targeted enterprises, or
- c) any other reason beyond the contractor's control which may be acceptable to the employer,

the sanctions provided for in the contract shall apply.

2.9 Delete "net amount" in definitions and replace "net amount" with "contract amount" wherever it appears in the text.

C3.3.1.2.2 Employment of unskilled and semi-skilled labour in Labour Intensive Construction works in terms of SANS 1914-5

**1. General**

Targeted labour shall be engaged in the performance of the contract in accordance with the requirements of SANS 1914-5 as amended in 2

**2. Amendments pertaining to SANS 1914-5**

2.1 Replace the existing definitions with the following:

**contract participation goal (CPG)**

amount equal to the sum of the wages and allowances for which the contractor contracts to engage targeted labour exclusive of any value added tax or sales tax required by law, expressed as a percentage of the contract amount associated with the targeting strategy that is defined in the specification data

**targeted labour:** Unemployed persons who are employed as local labour on a work package.

2.2 Add the following definitions:

**contract amount**

**1) targeting strategy A**

financial value of the contract at the time of the award of the contract, exclusive of all allowances and any value added tax or sales tax which the law requires the employer to pay to the contractor

**2) targeting strategy B**

financial value of the contract upon completion of all contractual obligations, exclusive of any value added tax or sales tax which the law requires the employer to pay to the contractor

**targeting strategy A**

a strategy which:

- a) links the granting of a preference by the employer in the evaluation of tender offers in return for the tendering of a contract participation goal or an undertaking to attain a specified contract participation goal at the time that tenders are evaluated; or
- b) requires a contractor to achieve a minimum specified goal in the performance of a contract; or
- c) involves both a) and b)

**targeting strategy B**

a strategy which:

- a) links the payment of an incentive bonus to a contractor for the attainment of a specified contract participation goal; or
- b) requires the contractor to record and report on the quantum of work generated for targeted labour

2.3 Terms and conditions for the engagement of targeted labour

Further to the provisions of Clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

2.4 The schedule referred to in Clause 5.2 of SANS 1914-5 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of formal trainings provided to targeted labour.

2.5 Replace 6 with the following:

In the event that, and where targeting strategy A applies, the contractor fails to substantiate that any failure to achieve the contract participation goal was due to

- a) quantitative underruns,
- b) the elimination of items contracted to targeted enterprises, or
- c) any other reason beyond the contractor's control which may be acceptable to the employer,

the sanctions provided for in the contract shall apply.

3. Training of targeted labour

- 3.1 The Contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health and safety.
- 3.2 The cost of the formal training of targeted labour must be included on the total of the Prices.
- 3.3 The Contractor shall do nothing to dissuade targeted labour from participating in training programmes and shall take all reasonable steps to ensure that each beneficiary is provided with two days of formal training for every 22 days worked.
- 3.4 An allowance equal to 100 % of the task rate or daily rate shall be paid by the contractor to workers who attend formal training, in terms of 3.3 above.
- 3.5 Proof of compliance with the requirements of 3.2 to 3.4 must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

**C3.3.2 Subcontracting**

C3.3.2.1 Scope of mandatory subcontract works

The contractor is to identify and present to the Engineer the works to be subcontracted. The following shall be subcontracted to the local subcontractors:

- Removal and reinstatement of Paving
- Establishment of the Contractor's base camp or depot
- Site Clearance
- Selected trench excavations
- Pipe laying smaller than 200 diameters (service ducts)
- Erection of traffic signs and Markings
- Traffic calming measures
- Bedding
- Construction of Manholes and junction boxes
- Construction of kerb inlet, and outlet structures

- Paving for walkways
- Laying of Edge beams and kerbing

### C3.3.2.2 **PREFERRED SUBCONTRACTORS/SUPPLIERS**

#### Section 47 of the SCM Policy SUB-CONTRACTING

When subcontracting:

The City shall obligate main contractors or service providers to engage targeted enterprises in the performance of their contracts incorporating resource specifications.

- (1) The appointed service provider must source competent and capable service providers and where applicable be registered with the relevant body and submit a list of sub-contractors for approval to the City of Tshwane.
- (2) Sub-contracting entity should have at least equal B-BBEE level status and /or specific goals or higher than the main contractor.
- (3) Minimum of 30% will be sub-contracted for this tender.
- (4) Local economic participation should be given priority when making a list of potential subcontractors available

• City of Tshwane Participants with specific attention for the region in which the contract is to be executed should be given priority and the below competent and capable designated groups should be prioritized.

- a) An EME or QSE
- b) An EME or QSE which is at least 51% Black Owned
- c) An EME or QSE which is at least 51% Owned by Black youth
- d) An EME or QSE which is at least 51% Black Women Owned
- e) An EME or QSE which is at least 51% owned by black people with disabilities
- f) An EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships
- g) A cooperative which is at least 51% owned by black people
- h) An EME or QSE which is at least 51% owned by black people who are military veterans; or
- i) More than one of the categories referred to in paragraphs (a) to (h).

Should subcontractors within Tshwane not be identified, the appointed service provider can extend the list of subcontractors to:

- Gauteng Participants
- National participants

(5) In relation to a designated sector a contractor must not be allowed to 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 if the appointed Service Provider scored points for Local Content and Production.

.C3.3.2.3.2 The contractor shall without delay to enter into a written contract with the successful tendering subcontractor based on their accepted tender submission.

C3.3.2.3.3 The contractor shall remain responsible for providing the subcontracted portion of the works as if the work had not been subcontracted.

## C3.4 CONSTRUCTION

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### **C3.4.1 Works specifications**

#### **C3.4.1.1 Applicable standards**

The applicable Standard Specifications shall be the document **Standard Specifications for Municipal Civil Engineering Works, Third Edition 2005**, issued by the Employer.

Tenderers, Contractors and Subcontractors shall obtain their own copies of the document **Standard Specifications for Municipal Civil Engineering Works, Third Edition 2005**, for tendering purposes and for use for the duration of the Contract from the Procurement Advice Centre, Tshwane House, 320 Madiba Street, Pretoria and shall bear all expenses in this regard. Also freely available in electronic (pdf) format at:

[http://www.tshwane.gov.za/documents/tenders/CTMM\\_Civil\\_Specification\\_2005.zip](http://www.tshwane.gov.za/documents/tenders/CTMM_Civil_Specification_2005.zip)

The **Standard Specifications for Municipal Civil Engineering Works, Third Edition 2005** have been written to cover all types of municipal civil engineering works and it may therefore cover work not applicable to this contract.

#### **C3.4.1.2 Applicable national and international standards**

Will be specified per work package

#### **C3.4.1.3 Particular/generic specifications**

##### **C3.4.1.3.1 Generic Labour Specification**

### **01 Scope**

This specification establishes general requirements for activities which are to be executed by hand involving the following:

- a) trenches having a depth of less than 1.5 metres
- b) stormwater drainage
- c) low-volume roads
- d) sidewalks and non-motorised transport infrastructure
- e) water and sanitation

### **02 Precedence**

Where this specification is in conflict with any other standard or specification referred to in the Scope of Works to this Contract, the requirements of this specification shall prevail.

### **03 Hand excavate-able material**

Hand excavate-able material is material:

- a) granular materials:
  - i) whose consistency when profiled may in terms of table 1 be classified as very loose, loose, medium dens, or dense; or
  - ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a Dynamic Cone Penetrometer (DCP) is required to penetrate 100mm;
- b) cohesive materials:



- i) whose consistency when profiled may in terms of Table 1 be classified as very soft, soft, firm, stiff and stiff / very stiff; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a Dynamic Cone Penetrometer (DCP) is required to penetrate 100mm;

**NOTE:**

- 1) A boulder, a cobble and gravel is material with a particle size greater than 200mm, between 60 and 200mm.
- 2) A Dynamic Cone Penetrometer (DCP) is an instrument used to measure the in-situ shear resistance of a soil comprising a drop weight of approximately 10 kg which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle of 60° with respect to the horizontal) into the material being used.

**Table 1: Consistency of materials when profiled**

04	GRANULAR MATERIALS		COHESIVE MATERIALS	
	CONSISTENCY	DESCRIPTION	CONSISTENCY	DESCRIPTION
	Very loose	Crumbles very easily when scraped with a geological pick	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle
	Loose	Small resistance to penetration by sharp end of a geological pick	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 30-40mm; can be moulded by fingers with some pressure
	Medium dense	Considerable resistance to penetration by sharp end of a geological pick	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade
	Dense	Very high resistance to penetration by the sharp end of geological pick; requires many blows for excavation	Stiff	Can be indented by thumb-nail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers
	Very dense	High resistance to repeated blows of a geological pick	Very stiff	Indented by thumb-nail with difficulty; slight indentation produced by blow of a geological pick point

**Trench excavation**

All hand excavate-able material in trenches having a depth of less than 1.5 metres shall be excavated by hand.

**05 Compaction of backfilling to trenches (areas not subject to traffic)**

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 100mm. Each layer shall be compacted using hand tampers.

- a) to 90% Proctor density;
- b) such that in excess of 5 blows of a Dynamic Cone Penetrometer (DCP) is required to penetrate 100mm of the backfill, provided that backfill does not comprise more than 10% gravel of size less than 10mm and contains no isolated boulders, or
- c) such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP.

#### **06 Excavation**

All hand excavate-able material including topsoil classified as hand excavate-able shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand. Any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

#### **07 Clearing and grubbing**

Grass and bushes shall be cleared by hand.

#### **08 Shaping**

All shaping shall be undertaken by hand.

#### **09 Loading**

All loading shall be done by hand. Haulage equipment should be selected in a manner that allows loading by hand to the greatest extent possible.

#### **10 Haul**

Excavation material shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

#### **11 Offloading**

All material, however transported, is to be off-loaded by hand, unless tipper-trucks are utilized for haulage.

#### **12 Spreading**

All material shall be spread by hand.

#### **13 Compaction**

Small areas may be compacted by hand provided that the specified compaction is achieved. Appropriate rollers should be used where higher (than can be achieved by hand) levels of compaction are required or for large areas.

#### **14 Grassing**

All grassing shall be undertaken by sprigging, sodding, or seeding by hand.

#### **15 Stone pitching and rubble concrete masonry**

All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, must be collected, loaded, off loaded and placed by hand.

Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

Grout shall be mixed and placed by hand.

## 16 Manufactured Elements

Elements manufactured or designed by the Contractor, such as manhole rings and cover slabs, pre-cast concrete planks and pipes, masonry unit and edge beams shall not individually, have a mass of more than 320kg. Where the mass of an element exceeds 55kg, consideration should be given to the size of the element relative to its total mass related to the number of workers who would be needed to lift such mass.

C3.4.1.4 Labour Intensive Competencies of Supervisory and Management Staff

C3.4.1.5 Required performance characteristics on Traffic Markings

The following characteristics will be considered as indicative of the satisfactory performance of the traffic marking and should be read in conjunction with Section 613: Traffic Markings

### 01 Durability

Durability shall be indicated by the Traffic Wear Index determined in accordance with SABS 1248: 1995, Determination of traffic wear index.

### 02 Night-time visibility

Night-time retro-reflection shall be measured during normal working hours with a portable retro-reflectometer provided by the contractor in accordance with Method 1261: 1998. No separate payment shall be made for the retro-reflectometer as well as the tests.

Permanent traffic markings shall comply with the relevant levels of performance during the functional performance as indicated in Table 7.2, Vol 1, Chapter 7 of the SADC RTSM with amendments on the Coefficient of Retro-reflection.

TABLE 7.2

FACTOR	NEW MATERIALS (Tested within one month of application)			USED MATERIALS (Tested after twelve months of application)		
	WHITE	YELLOW	RED	WHITE	YELLOW	RED
$\chi^{(1)}$  Colour	0,305	0,494	0,660	0,305	0,481	0,655
	0,335	0,470	0,610	0,350	0,444	0,579
	0,325	0,493	0,638	0,340	0,494	0,606
	0,295	0,522	0,690	0,295	0,054	0,690
$\gamma^{(1)}$	0,315	0,505	0,340	0,315	0,518	0,345
	0,345	0,480	0,340	0,360	0,476	0,341
	0,355	0,457	0,312	0,370	0,426	0,314
	0,325	0,477	0,310	0,325	0,454	0,310
Luminance Factor	0,6	0,4	+0,08	0,45	0,3	+0,06
<b>Coefficient of Retro reflection (millicandelas/lux/m<sup>2</sup>)</b>	<b>200</b>	<b>135</b>	<b>50</b>	<b>140</b>	<b>90</b>	<b>20</b>
Skid Resistance BPN <sup>(2)</sup>	50	50		50		

**Note:** All new surfaces shall be painted with 1.2mm thermoplastic paint

### 03 Materials

Plastic traffic marking material: Hot-melt plastic traffic marking material shall comply with the requirements of BS 3262. The binder shall be plasticized synthetic resin and the material shall be reflectorized by mixing at least 20% by mass Class A beads in accordance with BS 6088.

### 04 Colour

Colours to be used shall be bright white, yellow, red or black. The colour of the yellow paint should match colour Number D269 golden yellow of CKS 279 (colour B49 given in SABS 1091). The colour of red shall be as stated in Table 7.2 above.

### 05 Protection

After the paint has been applied, the traffic markings shall be protected against damage by traffic or other causes. The Contractor shall be responsible for the erection, placing and removal of warning boards, flags, cones and barricades as recommended in Vol2, Chapter 13 of the SADC RTSM. The Contractor shall be responsible for the placing of extra cones to prevent vehicles from crossing over wet paint. Should the wet paint be carried over the road surface or paint spillage takes place during the traffic marking operation such redundant paint shall be sandblasted. Black paint shall never be applied as a corrective measure to redundant traffic markings unless approved by the Engineer as a temporary measure. These traffic markings shall then be sandblasted as a final corrective measure.

### 06 Quality Control

The Contractor shall execute quality control of the traffic markings in accordance with a quality control plan approved by the employer. The quality control plan shall be based on a minimum level of assessment on at least 10 sets of 5 readings per 1km section of a road as indicated by the Engineer to determine the night-time visibility of each type of marking. The contractor shall provide the Engineer with the results of the Contractor's process quality control during the traffic marking process. The cost of such process quality control shall be borne by the Contractor.

Should it be clear that the traffic markings would not meet the required level of performance at any of the inspection dates; the Contractor may use his discretion to apply appropriate remedial actions to rectify the shortcomings after getting approval from the Engineer.

#### C3.4.2 Plant and materials

##### C3.4.2.1 Plant and materials supplied by the employer

The Employer will **not** supply any plant and / or materials.

##### C3.4.2.2 Materials, samples and shop drawings

###### C3.4.2.2.1 Road Construction Materials

No borrow pits are provided. Where material cannot be obtained from cut on the works, the Contractor will be responsible to obtain the material required for the fill, sub-grade and pavement layers from commercial sources.

###### C3.4.2.2.2 Aggregate for Concrete

The crushed stone and aggregate to be used in the base, surfacing and concrete must be approved by the Engineer before it may be used.

###### C3.4.2.2.3 Water for Concrete and Construction Purposes

No natural water from rivers, streams, boreholes, pans, dams or irrigation canals shall be used for concrete, stabilised layers or compaction purposes. Only suitably purified (drinking quality) water shall be used.

The contractor must make adequate provision in his tender for all negotiations and procurement of water for construction activities and all related costs will be deemed to be included in his tendered rates.

**C3.4.2.2.4 Spoil Material**

The contractor shall make his own arrangements for the provision of a suitable place off the site for the disposal of material obtained from excavations, demolition, clearing and grubbing the demolition of boundary walls, brick work, foundation excavations, etc. The rates in the schedule of quantities shall include all costs or fees payable to cover the disposal at the dumping site. The rates must allow for haul as no haul will be payable.

**C3.4.2.2.5 Cement for concrete**

The cement used for the construction of culverts, foundations and bridge structures as well as for stabilisation must be approved by the engineer prior to construction.

**C3.4.3 Construction equipment**

**C3.4.3.1 Requirements for equipment**

The construction methods adopted and plant and equipment used shall be at the discretion of the Contractor, provided always that the construction methods adopted and Plant used by the Contractor are appropriate in respect to the nature of the Works to be executed and the standards to be achieved in the Contract.

**C3.4.3.2 Equipment provided by the Employer**

The Employer will **not** provide any equipment.

**C3.4.4 Existing services**

**C3.4.4.1 Location of services**

The Employer's Agent will be responsible to obtain the necessary permissions and way leave approvals from the relevant Service Owners. The Contractor shall locate and establish the actual position of any services on Site as indicated on the wayleaves before starting the construction.

Payment will not be made for any inconvenience caused to the Contractor in regard to any services crossing the Site or any authority working on any such service, nor will any delays caused by such works be accepted as a basis for claiming an extension of time for completing the works. All communications with owners of services and their work teams must take place in conjunction with the engineer or his representative.

**C3.4.4.2 Treatment of existing services**

As per the Engineer's Instructions.

**C3.4.4.3 Use of detection equipment for the location of underground services**

Equipment to be used at the direction of the Engineer

**C3.4.4.4 Damage to services**

All services damaged by the Contractor shall be reported directly to relevant institution and will be rectified with immediate effect. No separate payment will be made to the Contractor for services damaged and repaired by him/her.

**C3.4.4.5 Reinstatement of services and structures damaged during construction**

The Engineer will determine the requirements and reinstatement procedures for the notification and repair of damage to services, penalties applicable to the damage of services.

**C3.4.5 Site establishment**

**C3.4.5.1 Services and facilities provided by the employer.**

The employer will not provide any services and / or facilities

**C3.4.5.2 Facilities provided by the contractor**

**C3.4.5.2.1 Contractor's Camp site**

The contractor shall be provided with a suitable site for his camp and for accommodating the work force. The choice of the site for the establishment of the camp, offices and the layout thereof, shall be approved.

The camp site shall be cleared and grubbed and properly fenced with a security fence around the perimeter. The Contractor is to provide his own security at the camp or on the site if required, at his own expense.

After completion of the contract, the Contractor shall remove all his temporary buildings, plant and equipment. The site shall be made good and be left in a neat and tidy condition before a certificate of completion shall be issued.

**C3.4.5.2.2 Water Supply**

The Contractor shall make his own arrangement for potable and construction water. No natural water from rivers, streams, boreholes, pans, dams or irrigation canals shall be used for concrete or stabilised layers. Only drinking quality purified water shall be used. The Contractor must make adequate provision in his tender for all negotiations and procurement of water for construction activities and all related costs will be deemed to be included in his tendered rates.

**C3.4.5.2.3 Power Supply**

The Contractor shall make his own arrangements.

**C3.4.5.2.4 Ablution Facilities**

The Contractor shall, at each construction area, provide sufficient portable chemical latrine units. The latrine units shall be serviced daily and kept in a hygienic and orderly state to the approval of the engineer. No separate payment shall be made for this requirement and the costs thereof shall be deemed to be included in the rates billed for the contractor's time-related obligations.

**C3.4.5.2.5 Cellular Telephone**

It is a requirement of the contract that the contractor shall equip his site agent(s) with a cellular telephone to allow for effective communication between the contractor's supervisory personnel and the engineer's

supervisory staff. All costs associated with the provision of cellular telephones for the contractor's personnel shall be deemed to be included in rates billed for time-related charges.

**C3.4.5.2.6 Site Facilities required by the Engineer**

One site office of approximately 36m<sup>2</sup> complete with sufficient lighting and power points. Two desks, ten chairs, one conference table and two steel filing cabinets.

The engineer does not require housing or laboratory facilities.

**C3.4.5.3 Storage and laboratory facilities**

The Engineer will order the Contractor to provide as needed.

**C3.4.5.4 Other facilities and services**

None.

**C3.4.5.5 Vehicles and equipment**

The Engineer will order the Contractor to provide as needed.

**C3.4.5.6 Advertising rights**

Not applicable.

**C3.4.5.7 Notice boards**

Two notice boards will be supplied by the Contractor which will be erected at the construction site as per instruction of the Engineer.

**C3.4.6 Site usage**

Not applicable.

**C3.4.7 Permits and way leaves**

The Engineer will be responsible for the initial application of permits and wayleaves after which the contractor will be responsible for maintaining and renewing of permits and wayleaves.

**C3.4.8 Alterations, additions, extensions and modifications to existing works**

To be carried out with the instruction from the Engineer.

**C3.4.9 Inspection of adjoining properties**

Adjacent buildings and properties will be inspected before commencing with the works that have the potential to damage surrounding buildings and property on the instruction of the Engineer and according to his requirements.

**C3.4.10 Water for construction purposes**

No natural water from rivers, streams, boreholes, pans, dams or irrigation canals shall be used for concrete or stabilised layers. Only drinking quality purified water shall be used. The Contractor must make adequate provision in his tender for all negotiations and procurement of water for construction activities and all related costs will be deemed to be included in his tendered rates.

**C3.4.11 Survey control and setting out of the works**

Survey controls requirements and the setting out of the works will be determined by the Engineer and will be site specific.



## **C3.5 MANAGEMENT**

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**C3.5.1 Management of the works**

C3.5.1.1 Applicable SANS 1921 standards

SANS 1921-1 to 1921-6

C3.5.1.2 Particular / generic specifications

C3.5.1.2.1 Corrections and amendments to the Standard Specifications

CLAUSE / ITEM		CORRECTION
<b>Series 6: Roads and Parking Areas</b>		
<b>Section 602: Crushed-stone Pavement Layers</b>		
<b>08 MEASUREMENT AND PAYMENT</b>		
<b>Item</b>		
<b>601.06</b>	<b>Extra over Item 601.02 for borrow material from sources to be supplied by the Contractor</b>	Replace item numbers with:
<del>614.02.01</del>	(Layer and type material indicated)	<i>601.06.01</i>
<del>614.02.02</del>	Etc. for other layers and type of material	<i>601.06.02</i>
<b>602.02</b>	<b>Crushed-stone subbase constructed with material from</b>	
602.02.01	Commercial sources	Replace item description with:
602.02.01.02	<del>G2 material compacted to 100% of apparent density</del>	<i>G2 material compacted to 100% of modified AASHTO density</i>

C3.5.1.2.2 Variations and Additions to the Standard Specifications

The following references from, and variations and additions to the Standard Specifications will be valid for this Contract.

The clauses and pay items in this portion of the Particular Specifications are numbered "B" followed by a number corresponding to the number of the relevant clause or pay item in the Standard Specifications. New clauses and pay items not covered by clauses or pay items in the Standard Specifications, if included here, are also designated "B" followed by a number. These numbers follow on the last clause or pay item number used in the relevant section of the Standard Specifications.

Amendments to the following Sections of the City of Tshwane Standard Specifications Municipal Civil Engineering Works

## **CONTENTS**

### **SERIES 0:**

#### **GENERAL**

SECTION 001:	GENERAL REQUIREMENTS AND CHARGES
SECTION 002:	ENGINEER'S ACCOMMODATION
SECTION 003:	TRAINING

### **SERIES 1:**

#### **ANCILLARY WORKS**

SECTION 101:	SITE CLEARING AND GRUBBING
SECTION 102:	ACCOMMODATION OF TRAFFIC
SECTION 104:	LANDSCAPING
SECTION 106:	SERVICE DUCTS
SECTION B107:	DAYWORKS

### **SERIES 2:**

#### **EARTHWORKS**

SECTION 201:	GENERAL
SECTION 202:	TRENCHING
SECTION 203:	MASS EARTHWORKS

### **SERIES 5:**

#### **DRAINAGE AND EROSION PROTECTION**

SECTION 502:	PREFABRICATED CULVERTS AND STORMWATER SEWERS
SECTION 503:	KERBING AND CHANNELLING

### **SERIES 6:**

#### **ROADS AND PARKING AREAS**

SECTION 601:	GRAVEL PAVEMENT LAYERS
SECTION 602:	CRUSHED-STONE PAVEMENT LAYERS
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SECTION 606:	ASPHALT BASE AND SURFACING
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SECTION 615:	BREAKING UP OF EXISTING PAVEMENT LAYERS

### **SERIES 9:**

#### **QUALITY CONTROL**

SECTION 903:	TESTING
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## SERIES 0: GENERAL

### SECTION 001: GENERAL REQUIREMENTS AND CHARGES

#### 29 CONTRACTOR'S ESTABLISHMENT OF SITE

#### 31 MEASUREMENT AND PAYMENT

#### Item 001.05: Community liaison officer

Replace pay item 001.05 Community liaison officer with the following:

Item		Unit
<b>B001.05</b>	<b>Community Liaison Officer</b>	
B001.05.01	Task Level 5 notch 1 (B1-1).	month (month)
B001.05.02	Percentage on item B001.05.01 for charges and profit	percentage (%)

The sums tendered shall include full compensation for the appointment of a community liaison officer.

Payment shall be made in monthly instalments, upon proof of payment to the Community Liaison Officer.

In the event of the construction period exceeding the tendered completion period and no extension of time been granted, the Contractor shall still pay the Community Liaison Officer the specified remuneration, but shall not be reimbursed therefor.

Item	Unit
01.01 Preliminary and general charges	

Add the following to paragraph (d) of the payment description:

"All cost incurred to comply with the OHS Act by the independent OH&S Officer."

001.06	Occupational Health and Safety Officer
--------	--

Add the following item: Prov Sum

"The specification of this item shall be identical to that of Item 001.05."

001.06.01	Occupational Health and Safety Officer expenses	Prov Sum
001.06.02	Percentage on item B001.06.01 for charges and profit	%

Item	Unit
------	------

B001.07 Relocation and protection of existing services

B001.07.01 Prime Cost Sum for the protection, removal, realignment and replacement of utility services

(1) Telkom Services prime cost (PC) sum

(2) Electrical Services	prime cost (PC) sum
(3) Water and Sanitation Services	prime cost (PC) sum
(4) Neotel Services	prime cost (PC) sum
(5) Other Services	prime cost (PC) sum

B001.07.02 Handling cost and profit in respect of sub-item B001.07.01 percentage (%)

The prime cost item shall be paid in accordance with the provisions of the General Conditions. The tendered percentage is a percentage of the amount actually spent under the prime-cost item, which shall include full compensation for the profit in connection with providing the specified service.

Item	Unit
------	------

Add the following item:

B001.08	Contract Notice Board	No
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The unit of measurement shall be the number of Contract Notice Boards fully installed as per drawing STD-001 sheet 1. The tendered rate shall include the supply of the notice board and all elements to install the sign within the road reserve, excavation of holes for the posts, installing and backfilling the posts, installing the notice board. Upon completion the notice board will be removed by the Contractor and disposed of.

Item	Unit
------	------

Add the following item:

B001.09.01	Provisional sum for the temporary demolishing and reconstruction of private structures and/ or compensation	
B001.09.01	Costs incurred for crossing private property	Prov Sum
B001.09.02	Percentage on item B001.09.01 for charges and profit	%

## SERIES 0: GENERAL

### SECTION 002: ENGINEER'S ACCOMODATION

#### 02 OFFICE AND LABORATORY ACCOMODATION

Item	Unit	
B002.03.01	Provision of offices	Lump Sum

Add the following to the item:

The engineer's accommodation consists of site offices only, the laboratory will use commercial off-site facilities.

The engineer's office to consist of following:

- 1 no. office space minimum 15m2
- Airconditioning

- 2 no. office desks with drawers
- 4 no. swivel office chairs
- 1 no. printer table
- 2 no. filing cabinets (steel type with 4 drawers)
- 1 no. whiteboard, magnetic 1200x900mm, incl. markers and magnets
- 1 no. fridge 200 litre min.
- 1 no. kettle 1.8 litre min.

Boardroom facilities to consist of following:

- 1 no. office space minimum 15m2
- Airconditioning
- 1 no. boardroom table seating 12 persons minimum
- 12 no. chairs
- 1 no. whiteboard, magnetic 1200x900mm, incl. markers and magnets

The engineer's office, boardroom and contractor's offices must be all in the same location.

#### **SERIES 0: GENERAL**

##### **SECTION 003: TECHNICAL TRAINING**

Add the following item:

B003.01	Accredited Technical Skills training of labour - seconded labour	Prov Sum
B003.02	Percentage on item B003.01 for charges and profit	%
B003.03	Accredited Technical Skills training of labour non- seconded labour	Prov Sum
B003.04	Percentage on item B003.03 for charges and profit	%

#### **SERIES 1 : ANCILLARY WORK**

##### **SECTION 102 : ACCOMMODATION OF TRAFFIC**

##### **16 MEASUREMENT AND PAYMENT**

Item	Unit
B102.01 Accommodation of traffic	lump sum

Delete the remainder of the payment item and *replace* with:

The tendered lump sum shall include full compensation for all measures needed to be taken to accommodate traffic on public streets and access to properties, except for items measured separately in Section 102. E.g. additional cost for working in half width, temporary backfill of trenches, protecting finished layer works, provide temporary access to properties, provide temporary footways etc.

The payment will be made in monthly instalments.

Item	Unit
B102.14.01 Flagmen	lump sum

Add to the remainder of the payment item:

A minimum of 2 flag-persons must be present at all work areas where vehicles and or pedestrians can be obstructed by the works.

**SERIES 1 : ANCILLARY WORK**

**SECTION 103: OVERHAUL**

**02 DEFINITIONS**

02.03 Free- haul boundaries and free-haul areas.

“All haul shall be regarded as free haul.”

**SERIES 1 : ANCILLARY WORK**

**SECTION 107: DAYWORKS**

This part of the Project Specifications deals with the provision for Dayworks in the Schedule of Quantities. Rates for Dayworks shall be entered in Section 107 of the Schedule of Quantities in accordance with the following specifications.

**01 SCOPE**

Certain work may be carried out using rates tendered in the daywork schedule. A schedule of personnel, plant and equipment which may be necessary to perform work on a daywork basis is included in the schedule of quantities. No work will be paid for as Dayworks without the written instruction or approval of the Engineer.

**02 TYPE OR WORK**

The Engineer may order daywork in certain cases where it is necessary to vary or to extend the works due to new or unforeseen circumstances to such an extent that the tendered rates for specific items of work are no longer applicable, or where no suitable combination of tendered rates can be used to pay for such work.

As a general rule, applicable rates for additional work items will be agreed between the Contractor and the Engineer. Dayworks will only be used in exceptional circumstances.

**03 MATERIALS**

Materials for use in works carried out under Daywork shall be purchased by the Contractor who shall also arrange for delivery to site, and shall be responsible for any other requirements associated with specific materials. A Provisional Sum has been allowed in Section 107 for Daywork materials. The Contractor shall enter a tendered percentage in the schedule to cover his handling costs and profit, as per other provisional and prime cost sums in this Contract.

Materials shall be paid for using the method described in the Pricing Data. No contract price adjustment will be applicable to materials.

The Contractor shall submit proof of ownership for any materials used in Dayworks with his dayworks claim to the Engineer. Further, if specific materials are required for Dayworks, quotations will be called for as per General Conditions of Contract.

**04 CONSTRUCTION PLANT HIRE**

Where daywork is ordered, the tendered rates for plant hire in Section 107 shall be used in calculating the payment due for any plant required to execute the daywork.

The tendered rates for each item of constructional plant shall include for all operating costs associated with the said item of plant. Such costs are deemed to include fuel, re-fuelling costs, lubrication and routine servicing / maintenance, breakdowns and spares, all overhead costs and profit, site management costs and administration costs. The tendered rates shall also include the plant operator and the general supervision of the plant while it is engaged in the dayworks.

#### 05 SALARIES AND WAGES OF WORKMEN

The salaries and wages of workmen executing daywork shall be paid for using the tendered rates in Section 107. The tendered rates shall include for all costs associated with the employment of personnel, including salaries, wages, allowances, workmen's compensation, medical aid and pension contributions, government levies and taxes, training costs and any costs associated with living on the site. The tendered rates shall also include for the transportation of the workmen to the site of the dayworks.

All overhead costs, administration costs, site management costs and the Contractor's profit are deemed to be covered by the Dayworks rates and no additions or mark ups will be made to the tendered rates. The tendered rates shall also include any hand tools normally associated with the workmen's job description e.g. picks, shovels, hammers, saws, spirit levels, etc. The tendered rate for labourers shall also include for the casual supervision by a gang boss or foreman. Only when specifically called for by the Engineer, will payment be made for the use of a gang boss or foreman supervising on a continuous basis.

#### 06 MEASUREMENT AND PAYMENT

The following principles shall also apply to the measurement and payment of Dayworks.

The unit of measurement for plant shall be the number of vibroclock hours worked and each item of plant shall be fitted with a vibroclock, the cost of which shall be included in the rates. Excessive non-productive time when the engine is idling will not be paid for. Where there is ambiguity between the flywheel horsepower and mass of the machine, the flywheel horsepower shall govern the measurement category. Where width and mass are specified, mass shall govern the measurement category.

The Contractor's attention is drawn to the requirements of Sub-clauses 6.5.3 and 6.5.4 of the General Condition of Contract 2015 3rd Edition with regard to the submission of Dayworks claims.



## **SERIES 2: EARTHWORKS**

### **SECTION 201 : GENERAL**

#### **06 SURPLUS MATERIAL**

*Add the following:*

“The Employer does not provide spoil sites and it shall be the responsibility of the Contractor to find the necessary spoil sites.”

*Amend paragraph 3 as follows:*

“The disposal of any surplus material produced by excavations for trenches, volume taken up by imported selected bedding and backfill material, soilcrete, pipes, culverts and related structures such as manholes, value boxes, etc., shall be deemed to be included in the rates tendered for trench excavation, selected backfilling and related structures. Material from trench excavations unsuitable for backfilling including oversized material shall also be regarded as surplus material and the cost for disposal shall be included in the rates for trench excavation and selected backfilling.”

#### **07 STOCKPILING OF MATERIALS**

*Delete the 1<sup>st</sup> and 2<sup>nd</sup> paragraphs of this sub clause and replace with the following:*

“Excavated pavement material intended for reprocessing but which cannot be reprocessed in place or, in the opinion of the engineer, cannot be windrowed next to the excavation, nor placed in position directly at any other place, shall be transported to approved stockpiles with the written permission of the engineer.

The stockpile site shall be cleaned, and all loose stones, vegetation and other materials which may cause contamination shall be removed. The site shall be graded smooth with an adequate slope to ensure proper drainage of water. Where so instructed by the engineer, the surface shall be watered and compacted to a depth of at least 150 mm to a density of 90% of modified AASHTO density. The compacted surface shall be firm without any loose patches.

Stockpile sites shall be sufficiently large to allow the placing of stockpile of different types of material or types of recovered asphalt without the stockpiles overlapping or the limits of the prepared site being exceeded. The enlargement of the stockpile site after the stockpiles have already been placed will not be permitted without the approval of the engineer.

Stockpiles of milled material shall be shaped in a manner which will limit segregation to a minimum. The stockpiling of asphalt shall be done in a manner that will limit consolidation to a minimum.

## **SERIES 2: EARTHWORKS**

### **SECTION 202: TRENCHING**

#### **02 GENERAL**

*Add the following to paragraph 2:*

“The width of clearing and grubbing for trenches shall be three times the authorized width of the trench or the width listed under pay item 101.01.”

*Add the following to the last paragraph:*

"All trenching for this project will be regarded as trenching in built-up areas"

### 03 CLASSIFICATION OF MATERIALS EXCAVATED

*Amend* the classification as follows:

- **Hard Material**  
Material that cannot be efficiently removed without blasting or without wedging and splitting with pneumatic tools as well as boulders exceeding 0,15m<sup>3</sup>.
- **Soft Material**  
Material that is not classified as hard materials will all be regarded as soft excavation.
- **Intermediate Material**  
No intermediate material classification will be applicable to trenching.

### 04 EXCAVATION

#### 04.02 Hand excavations

*Add* the following:

"The payment for hand excavation authorized by the Engineer excludes the hand excavation listed under pay item 202.03."

### 09 PREPARATION OF TRENCH BOTTOMS

*Add* the following to the fourth paragraph:

"The additional cost for the 150mm selected gravel bedding in hard material over and above the cost for the 100mm bedding for class 'B' bedding shall not be paid for separately but shall be included in the rates for hard excavation."

### 11 DEALING WITH WATER

*Add* the following to the second paragraph:

"Where instructed by the Engineer, the subsurface drain shall be constructed only with 19mm crushed stone or a perforated PVC pipe surrounded by crushed stone. Pipe diameter as per the Engineer's instruction."

### 12 SOILCRETE

*Add* the following requirement:

"The material quality of the gravel – soil used for soilcrete shall comply to G6 – material according to TRH 14 or better underneath road surfaces or G7 elsewhere. The requirement of a maximum plasticity index not exceeding 10 however remains."

### 13 BACKFILLING

*Delete* the following in the first paragraph:

"200mm in the case of water pipes"

### 14 TRENCHES WITHIN ROAD RESERVES

*Add* the following requirement to the eleventh paragraph:

"The selected material for the top three 150mm stabilized layers shall be at least material of G5 – TRH 14

quality.”

Add the following paragraph:

“The contractor shall install and maintain approved 1,0m minimum high orange plastic safety net barriers alongside both sides of open trenches. Where 1m high existing fences or walls protect the open trenches the safety net barriers may be omitted at that side. Include the cost for this in the rates for trench excavation.”

## 16 MEASUREMENT AND PAYMENT

Amend the following pay items as follows:

Item	Unit
<b>202.02</b>	<b>Extra over items 202.01, 202.03, 202.04 and 202.09 for excavating in</b>

Omit intermediate material.

Item	Unit
<b>202.03</b>	<b>Excavations and backfill outside the normal trench profile</b>
	cubic metre (m <sup>3</sup> )

Amend the first paragraph as follows:

“The unit of measurement shall be the cubic metre of material excavated in soft material irrespective of the depth, if necessary, by hand, outside the normal trench profile for manholes, catch pits, valve chambers, thrust blocks, house connections, etc, as well as for removing unsuitable material from trench floors as specified in sub-clause 04.03 of this section.”

Item	Unit
<b>202.10</b>	<b>Removal of spoil material</b>

Tenderer to take note of project specification 201.06. No separate payment will be made for the removal of spoil material as listed in project specification 201.06. Payment under this item shall only be made for the removal of spoil material other than material listed in project specification 201.06 and is subject to written instruction by the Engineer.

Add the following pay items:

Item	Unit
<b>B202.16</b>	<b>Reinstatement of concrete pavements in driveways</b>
	square metre (m <sup>2</sup> )

The unit of measure shall be the square metre (m<sup>2</sup>) of concrete in driveways (125mm minimum thickness) class 25/19. The tendered rate shall include full compensation for placing and compacting the concrete slab on top of compacted selected layer to 93% mod. AASHTO with F2 finishing, including formworks, construction joints, etc. to reinstate the driveway.

Item	Unit
<b>B202.17</b>	<b>Reinstatement of segmented paving in driveways</b>
	square metre (m <sup>2</sup> )

The unit of measure shall be the square metre (m<sup>2</sup>) of segmented block paving reinstated. The tendered rate shall include full compensation for placing and compacting the segmented paving blocks on top of

compacted selected layer to 93% mod. AASHTO and 30mm sand layer, using materials removed from the existing driveway, including concrete edging where required to reinstate the driveway. Paving blocks damaged by the Contractor must be replaced with same materials.

Item	Unit
<b>B202.18</b> <b>Extra-over item 202.01, 202.06 for working inside a private property</b>	metre (m)

The unit of measure shall be the metre (m) of private properties (excluding School property) to be crossed for the installation of new pipe networks. The tendered rate shall include full compensation for all additional costs the Contractor faces while working in a private property versus in the road reserve."

## **SERIES 2: EARTHWORKS**

### **SECTION 203: MASS EARTHWORKS**

#### **04 CLASSIFICATION OF EXCAVATED MATERIAL**

##### **04.01 Classes of materials**

*Add* to the paragraph as follows:

"No intermediate materials will be measured for this Contract. All intermediate materials will be classified as Soft."

#### **12 CONSTRUCTION TOLERANCES**

##### **12.01 Level**

*Amend* the paragraph as follows:

"The level tolerances referred to in subclause 05.01 of section 902 shall be as follows for fill:

H90	=	±22mm
Hmax	=	±30 mm"

## **SERIES 4: WATER RETICULATION AND WATER MAINS**

### **SECTION 402 : CONSTRUCTION**

#### **16 MEASUREMENT AND PAYMENT**

*Add* the following pay item:

Item	Unit
<b>402.11</b> <b>Miscellaneous Items</b>	
402.11.01 Connect to existing reticulation	number (No)

The rate for this item will include the connection to and switch over to new system, inclusive of all costs for labour, equipment, notification, coordination, work after hours and scouring, complete and operational.

Item	Unit
402.11.02 Relocate existing water connections and meters (No)	number

The rate for this item will include the removal and replacement of existing water connections and meters to individual plots, including all work and liaison with owners and municipality, on main line with nominal diameter as indicated."

**SERIES 5: DRAINAGE AND EROSION PROTECTION**

**SECTION 502 : PREFABRICATED CULVERTS AND STORMWATER SEWERS**

**05 EXCAVATION**

**05.02 Width of excavation.**

*Omit* the third paragraph and refer to project specification 202.04.01 for the relevant requirements.

**SERIES 6: ROADS AND PARKING AREAS**

**SECTION 601: GRAVEL PAVEMENT LAYERS**

**02 DEFINITIONS**

*Replace* the contents of this Clause B02 with the following:

"For the purpose of this section in particular and these Specifications in general, the following words and expressions shall have the meanings hereby assigned to them, except where the context otherwise requires:

(a) Subgrade

The layer or layers of gravel material of specified dimensions on top of the fill or embankment and below the sub base. The material may include construction-bed material compacted in situ. (Construction bed is defined in section 203.)

(b) Selected

The layer of material of specified dimensions on top of the subgrade and below the sub base.

(c) Sub base

The layer of material of specified dimensions on top of the selected and below the base and, where applicable, below the shoulders.

(d) Base

A layer of material of specified dimensions constructed on top of the sub base or, in the absence thereof, on top of the subgrade."

**05 CONSTRUCTION TOLERANCES**

**05.01 Level**

*Amend* the paragraph as follows:

"The level tolerances referred to in sub clause 05.01 of section 902 shall be as follows:

	<b>Subgrade</b>	<b>SelectedSub base</b>	<b>Base</b>
H <sub>90</sub>	±22 mm ±20 mm ±15 mm		±10 mm
H <sub>max</sub>	±30 mm ±25 mm ±20 mm		±12 mm"

### **05.03 Thickness**

*Amend* the paragraph as follows:

“The thickness tolerances referred to in subclause 05.02 of section 902 shall be as follows:

	<b>Subgrade</b>	<b>Selected</b>	<b>Sub base</b>	<b>Base</b>
D <sub>90</sub>	30 mm	25 mm	18 mm	12 mm
D <sub>max</sub>	40 mm	30 mm	24 mm	15 mm
D <sub>average</sub>	10 mm	8 mm	5 mm	5 mm”

### **B07 MEASUREMENT AND PAYMENT**

*Delete* the word “borrow pit” from Item 601.02 and replace with “Commercial Sources”.

*Replace* “Subgrade” from Item 601.02.01 with “Selected Subgrade”

*Delete* fourth paragraph under Item 601.02.

*Delete* the word “excavations” from Item 601.03 and replace with “excavations and/or stockpile”.

### **SERIES 6: ROADS AND PARKING AREAS**

#### **SECTION 602: CRUSHED STONE PAVEMENT LAYERS**

##### **B602.02.01 General**

*Delete* second paragraph and add the following:

“The aggregate shall not contain more than 0, 1% by mass of unwanted material such as wood, coal or similar organic material.

Aggregates containing mica, such as granite, gneiss, mica schist, pegmatite, sandstone shall not contain more than 2% by mass of free mica, especially muscovite, when assessed by visually separating the particles or more than 4% by volume when assessed by means of microscopic slides. Aggregate containing easily detectable quantities (more than 1%) of olivine serpentine and sulphide minerals such as pyrites and marcasite, must be considered with caution, and may warrant additional evaluation to the satisfaction of the Engineer.”

### **SERIES 6: ROADS AND PARKING AREAS**

#### **SECTION 604: STABILIZATION**

##### **B02 MATERIALS**

##### **B02.01 Chemical stabilizing agents**

##### **(b) Cement**

*Add* the following:

“Cement shall comply with the relevant requirements of EN 197.

The use of strength classes greater than 32.5 MPa (CEM II) shall not be permitted."

Add the following sub clause:

#### **"B02.04 Materials Requirements**

The following table specifies the requirements for chemically stabilized layers.

Requirements for Chemically Stabilized Layers

<b>Classification</b>	<b>C1</b>	<b>C2</b>	<b>C3</b>	<b>C4</b>
Material before treatment	At least G2 quality	At least G4 quality	At least G5 quality	At least G6 quality
PI after treatment	Non-plastic	Non-plastic	6 max. *(1)	6 max. *(1)
UCS (MPa) *(2)	6 min.	4 min.	1,5 min.	0,75 min.
ITS (kPa) *(3)	-	-	250 min.	200 min.
WDD (% loss)	5 max.	0 max.	20 max.	30 max.

Note \* (1) for materials derived from the basic crystalline rock group, the Plasticity Index after stabilisation shall be non-plastic.

\* (2) Unconfined Compressive Strength @ 100% Mod AASHTO density

\* (3) Indirect tensile Strength @ 100% Mod AASHTO density

\* (4) Wet/Dry Durability according to Method B 8110"

B03 CHEMICAL STABILIZATION

#### **B03.08 Construction limitations**

Add the following after the third paragraph:

"No stabilisation shall be done with falling air temperatures when the air temperature falls to below 7°C or during rising air temperatures, when the air temperature is below 3°C."

In Table 604/1, *delete* "10 hours" for CEM I, CEM II, CEM III or cement-slag / lime-slag and *replace* with the following:

"6 hours".

B07 MEASUREMENT AND PAYMENT

**"Item  
Unit**

B604.02.01 Cement

t (ton)

Add the following after "Cement"; CEM II B-V 32.5 N.

B3502 CHEMICAL STABILIZATION

B03.01 Preparing the layer

Add the following:

"Certain sections will require pre-pulverising before the stabilizing agent is added. The layer shall be mixed (prior to stabilizing) to the depth as indicated on the drawings and shaped and lightly compacted before the stabilizing agent is spread."

**B03.02 Applying the stabilizing agent**

*Add the following to this sub clause:*

"The minimum rate of application shall be 2.08% and the nominal rate is 2.5% by mass per mass of the specified stabilizing agent such that a G5 material will meet the requirements for a C3 quality material as specified after stabilization. The Engineer may order an increased rate of application. The spreading of stabilizing agent shall be done by placing sacks along the road and spreading by hand using rubber squeegees. Sacks which have become damaged or wet shall not be used and such sacks shall be replaced at the Contractor's cost."

**B03.03 Mixing in the stabilizing agent**

*Add the following:*

"The Contractor shall prepare a trial section for each type of material without any extra payment to demonstrate his proposed mixing process before extensive mixing commences.

After approval has been obtained, the mixing process and equipment shall remain unaltered unless otherwise instructed by the Engineer.

The fact that the Engineer has approved the mixing process shall not relieve the Contractor of his obligations in respect of the mixing specified elsewhere in the Specifications. It will serve only as a guideline to ensure that the specified mixing requirements can actually be met."

**B03.08 Construction limitations**

*In Table 604/1, delete "8 hours for ordinary Portland cements and cement blends" and replace with "6 hours".*

*Add the following:*

"No stabilization shall be carried out during falling temperatures when the ambient air temperature falls below 7 °C or during rising temperatures when the ambient air temperature is below 3 °C.

The surface temperature of a compacted stabilized layer should not fall below 1 °C during the first three days after stabilization. The Contractor shall refrain from stabilizing when such temperatures become probable. When a sudden unforeseen temperature drop to a level below this limit occurs, the stabilized layer shall be covered with the next layer as soon as possible.

No spreading of stabilizing agent shall be done if wind speed exceeds 6m/s.

Moisture content tests shall not be undertaken more than one day in advance of in-situ stabilization operations. Care shall be taken to ensure that samples are representative of the in-situ material. Checks shall be conducted when wet weather occurs between initial testing and work commencing on any section.

The Contractor shall make allowance for these requirements in his construction programme, and no claims in this connection will be considered."

**SERIES 6: ROADS AND PARKING AREAS**

**SECTION B605: PRIME COAT**



## B04 Weather limitations

Add the following bullet after bullet number 4:

“When the moisture content of the upper 50mm of the layer is higher than 50% of the optimum moisture content determined according to TMH 1, Method A7.”

## SERIES 6: ROADS AND PARKING AREAS SECTION B606: ASPHALT BASE AND SURFACING

## B01 SCOPE

Add the following:

"The construction of continuously graded asphalt containing crushed aggregates and filler coated with a mixture of bituminous binder"

## B02 MATERIALS B02.01 Bituminous binders

The modified binder to be used on this project shall be A-P1.

The homogeneous modified binder shall be manufactured according to the guidelines contained in “Technical Guideline: The use of Modified Bituminous Binders in Road Construction (TG 1-2001): Asphalt Academy”. The base bitumen shall conform to SANS 307. The type as well as percentage of modifier is not prescribed, however the contractor shall indicate in the Schedule of Quantities what polymer he shall be using. The properties of the homogeneous modified binder shall comply with the relevant requirements for binder class A-P1 as listed in table 606/6.

Table 606/6: Properties of elastomer-modified binder for hot-mix asphalt

Property	Unit	Test Method	
			A-E2
<b>Before ageing</b>			
Softening point <sup>2</sup>	°C	MB-17	65-85
Elastic recovery @ 15°C	%	MB-4	> 60
Dynamic viscosity @ 165°C	Pa.s	MB-18	≤0,6
Storage stability @ 180°C <sup>1</sup>	°C	MB-6	≤ 5
Flash point	°C	ASTM D92	≥ 230
<b>After ageing (RTFOT)</b>			
Mass change	%	MB-3	≤ 1,0
Softening point (min)	°C	MB-17	63
Elastic recovery @ 15°C	%	MB-4	> 50

<sup>1</sup> Certain base bitumens, when used in the production of modified binders, are prone to cause segregation of the modified binder. The Storage Stability test result should be interpreted as an indicator of the compatibility of the base bitumen and the modifier used. In cases where compliance limits are not met, proposals of site agitation procedures of the binder to prevent segregation shall be submitted to the client for consideration. In all cases, whenever there is any reason to believe that the composition of the base bitumen has changed, the test shall be repeated to ensure compliance or to determine the need for measures to prevent segregation.

<sup>2</sup> The prescribed test method is based on not using stirrers although it has been reported that the use of stirrers has shown no difference in test results. For referencing purposes no stirrers should be used.

## B02.02 Aggregates

*Add the following paragraph to the introductory description:*

"Asphalt mixes shall be manufactures using different individual single size coarse aggregates fractions and crushed fine aggregates blended to conform to the specified grading requirements. The use of natural sands shall only be permitted if approved by the engineer and shall be limited to a maximum of 5% for continuously graded mixes. All aggregate in excess of 4, 75 mm shall consist of individual nominal single sized aggregate. For stone mastic asphalt mixes all aggregate fractions in excess of 2, 36 shall consist of individual single size fractions. Contractors shall note that commercial suppliers may not be able to supply all the required single size aggregates, in which instance arrangements will have to be made for additional onsite screening. No additional payment shall be made for screening aggregate. The use of run of crusher type materials shall not be permitted."

(e) Absorption

***Add the following sentence***

"In addition, the total binder absorption of the combined coarse and fine aggregate blend shall not exceed 0,5%"

(h) Grading

"The grading limits for the combined aggregate grading for the asphalt base shall be as specified in table 606/1: Continuously graded 26,5mm maximum.

The grading limits for the combined aggregate grading for the asphalt surfacing shall be as specified in table 606/2: Continuously graded medium grade.

#### **B02.03      Fillers**

*Add the following after the last paragraph:*

**"For tender purposes the active filler shall be hydrated lime"**

#### **B02.04      General**

*Add the following after the second paragraph:*

"Sufficient aggregate for a minimum of 3 days production shall be separately stockpiled and tested for conformance and uniformity prior to use. The test results shall be presented to the engineer"

### B03 COMPOSITION OF ASPHALT BASE AND SURFACING

Replace the sixth paragraph with the following:

“The design of the asphalt mixes shall be in accordance with “Interim Guidelines for The Design of Hot-Mix Asphalt in South Africa” (2001 and 2005). The mix properties and requirements shall be as specified in the project specifications”

Add the following: “The base and surfacing layers shall comply with the requirements in Table B606/8

**Table B606/8: ASPHALT MIX REQUIREMENTS: BASE & SURFACING**

Property	Continuously graded base mixes	Continuously graded surfacing mixes
Marshall Stability (kN)	8 – 18	8 – 18
Marshall Flow (mm)	2 – 6	2 – 6
Stability /Flow (kN/mm)	>2,5	> 2,5
VMA (%)	> 14	> 15
VFB (%)	65 – 75	65 – 75
Air voids (%)	4 – 6	4 – 6
Indirect tensile strength @ 25°C (kPa)	> 1000	> 1000
Dynamic Creep Modules @ 40°C (MPa)	> 20	> 20
Modified Lottmann* (TSR)	> 0,7	> 0, 8
Air permeability @ 7% voids (cm <sup>2</sup> )	< 1 x 10 <sup>-8</sup>	< 1 x 10 <sup>-8</sup>
Binder film thickness (microns)	5,5 – 8,0	5,5 – 8,0
Filler bitumen ratio	1 –1,5	1 – 1,5
Rutting (MMLS) 100k repetitions 7% voids,dry,50°C, 7200 rep/hr 2.7 kN Load	< 1.5 mm	< 1.5 mm
Voids in Mix after 300g gyration	< 2.0%	< 2.0%

### B07 PRODUCING AND TRANSPORTING THE MIXTURE

#### B07.02 Production of the mixture

(b) Using drum-type mixer plants:

Add the following:

“Pre blending of aggregate fractions shall not be permitted and the contractor shall ensure that sufficient cold-feed bins are installed to accommodate each individual aggregate fraction, including the filler.”

#### B07.04 Transporting the mixture

Add the following paragraph:

"Special precautions shall be taken by the contractor to ensure that the temperature of the total mass of asphalt does not decrease by more than 10°C from point of dispatch to the point where it is to be paved. The use of the thermal blankets is obligatory.

The contractor shall ensure that trucks used to haul asphalt are not overloaded and the legal axle loads are not exceeded. Before any asphalt can be transported, the contractor must provide the engineer with the certified carrying capacity of each truck intended for the purpose of transporting the mix. The contractor shall provide the engineer with a weighbridge ticket before discharging into the paver hopper.

**ANY** truck that is overloaded shall not be allowed to discharge its load and shall return to the depot/batching plant for adjustment of the load. In addition, a penalty shall be applied for the overload."

Add the following sub clause:

**"07.04 Approval of asphalt mixture**

Before any asphalt is placed on the road, the engineer shall approve the mix design. The approval process shall be as follows:

The contractor shall prepare and submit a laboratory design mix with test results at four different bitumen contents. The design mix shall be submitted on the prescribed form D3 of TMH 10: "Instruction for the Completion of As-Built Materials Data Sheets" with all the necessary test results completed. In addition, the proposed asphalt mixture shall be subjected to gyratory testing. The proposed asphalt mix gradation will be subjected to verification through the "Bailey Method" (Volumetric analysis). All the expenses in preparing and submitting the laboratory design mix shall be to the contractor's cost.

Samples of all aggregate and bitumen shall be submitted with the laboratory design mix to enable the engineer to carry out check design testing as necessary. The above design and aggregate shall be submitted to the engineer at least six weeks before it is intended to commence with any asphalt production.

After approval is obtained for the laboratory design mix, a plant mix at 3 varying binder contents of approximately 5 to 10 tons each shall be produced. The purpose of the plant mix is for the contractor to prove that the laboratory design mix can be produced successfully. The engineer shall conduct the necessary testing on the plant mix. The plant mix shall not be placed on the road. During the production of the plant mix, the engineer shall be afforded the opportunity to inspect the asphalt plant.

After the plant mix is approved, permission shall be given for laying a trial section at varying binder contents in accordance with the requirements of paragraph 12 of the specifications. The engineer may require that the mix be further assessed through coring and/or by means of CSIR Wheel Tracking or MMLS testing, the cost of which will be borne by the Employer. Mass production of asphalt shall only commence after approval of the trial section, which should be given within a maximum of 14 days.

The engineer may instruct the contractor at any time to halt his paving process and to review the whole or part of the above process should a change of aggregate or binder properties occur, a change in binder supplier occurs, the specified asphalt requirements not being met and/or a consistent asphalt mixture not be produced."

**B08 SPREADING THE MIXTURE**

Add the following:

**"The laying of the open graded asphalt grouted with a mortar of bitumen, filler and stabilizing fibres**

Before laying the open graded asphalt, the existing asphalt surface where the open graded asphalt mix is

to be paved shall be thoroughly cleaned of all foreign material and broomed free of dust and remedial works to repair base damage shall be completed. A bitumen emulsion tack coat shall be sprayed.

The open graded asphalt shall be spread and finished in a continuous operation with an asphalt-paving machine. Handwork shall be minimized. Compaction shall be done with a static smooth roller of 3.5 to 4 tonnes. Water with soap shall be used as lubricant if required (oil shall not be allowed). Where handwork is necessary, a hand roller or a vibrating plate shall be used to reach the desired surface evenness. Working at joints shall be carefully accomplished to prevent different in thickness at either side of the joint.

The laying temperature for the mortar shall be 5 degrees Celsius minimum and the temperature of the open graded asphalt shall not be higher than 35 degrees Celsius. The open graded asphalt shall be completely filled with the mortar. The consumption of the mortar shall be regularly controlled."

## **B15 TESTING**

### **B15.05 The coring of asphalt layers**

*Add the following:*

"Cores shall only be drilled, when the road temperature is 20°C or less. Core holes shall be filled with hot mix asphalt and compacted, all within 24 hours of the core being drilled. Coring shall be carried out within 48 hours after the paving has been completed and supplied to the engineer. The test results of cores shall be submitted to the engineer within 24 hours after coring.

Notwithstanding the coring and testing requirements of asphalt surfacing, cores will be taken along every 300m of joint length at the location specified by the Engineer. The cost of such coring, extraction of cores and repair of the core holes shall be borne by the Contractor and shall be deemed to be included within his tendered rate under Item 606.02.01."

### **B15.03 Process control**

*Add the following:*

Notwithstanding the requirements of Table 606/5 the Contractor shall ensure that the following tests are carried out at frequencies at least equal to those specified below or as agreed by the Engineer or site:

Table 606/6

Test		Min. Frequency
a)	Stability and Flow (TMH 1, Method C2)	3/day
b)	Voids (TMH 1, Method C3)	3/day
c)	Maximum theoretical density (TMH 1, Method C4)	3/day
d)	Binder content and Grading (TMH 1, Method C7)	3/day
e)	Density of paved asphalt (Cores)	3/day

The Engineer shall have the right to withhold payment for asphalt work until test results for that work are received and the work is approved."

## **SERIES 9: QUALITY CONTROL**

### **SECTION B903: TESTING**

#### **13. Measurement and Payment**

##### **Item**

##### **Unit**

#### **903.06 Other special tests requested by the Engineer**

903.06.01 Cost of testing prime cost sum (PC sum)

903.06.02 Charge on prime cost sum percentage (%)

Payment for special tests as requested by the Engineer in terms of clause 12 will be made in accordance with the provisions of the General Conditions of Contract. Payment will not be made for any special test should the test indicate that the Specifications have not been compiled with

## **B08 PROCESS CONTROL BY THE CONTRACTOR**

### **B903.08.01 The sampling and testing of soils, gravels and crushed stone in fills and pavement layers**

(b) Maximum dry density (MDD) and optimum moisture content (OMC)

Add the following to this sub clause:

“The preparation of the stabilised for Modified AASTHO compaction testing shall be in accordance with the requirements of TMH 1, Method A16T and the compaction thereof to TMH 1, Method A7.”

#### **C3.5.1.3 Planning and Programming**

The Contractor shall submit within the period stated in the Contract Data a suitable and realistic construction programme for the consideration of the Engineer. This shall be done individually for each of the work packages identified within the limits of this tender.

The programme shall be in the form of a Gantt chart and shall include the following details:

- A work breakdown structure, identifying the major activity groups.
- For each activity group further details shall be provided with regard to the scheduled start and end dates of individual activities.
- The linkages between activities shall be clearly indicated and the logical network upon which the programme is based shall be separately submitted to the engineer if requested. Any constraints shall be classified as being time-related or resource-related.
- The critical path(s) shall be clearly indicated and floats on non-critical activities shall be shown.
- The Contractor shall indicate the working hours per day, night, week and month allowed for in the programme.
- Where relevant the Contractor shall state the production rates for key activities, e.g. earthworks, etc.
- The dates when, in order to construct the Works in accordance with his programme, the Contractor will need materials and other things to be provided by the Employer.
- For each activity, a statement of how the Contractor plans to do the work identifying the principal equipment and other resources which he plans to use.
- The execution of the work must be programmed in such a manner as to limit disruption to passing traffic and residents to a minimum.

Together with the programme as detailed above the Contractor shall submit to the Engineer a cash flow projection, indicating projected monthly invoice amounts. This have to be done for each of the work packages identified within the limits of the tender. The cash flow projection shall be updated at monthly intervals to reflect actual payments to date and anticipated further payments.

The programme will be reviewed at the monthly site meetings at which the Contractor shall provide sufficient detail that will allow the comparison of completed work per activity that has fallen behind. The updated programme shall be submitted to the Engineer at least two days prior to the monthly meetings.

If the programme has to be revised by reason of the Contractor falling behind his programme, he shall produce a revised programme showing how he intends to regain lost time in order to ensure completion of the Works within the time for completion as defined in Clause 42 of the General Conditions of Contract or any granted extension of time. Any proposal to increase the tempo of work must be accompanied by positive steps to increase production by providing more labour and plant on site, or by using the available labour and plant on site, or by using the available labour and plant in a more efficient manner.

Failure on the part of the Contractor to submit the programme or to work according to the programme or revised programmes shall be sufficient reason for the Engineer to take steps as provided in Clause 55 of the General Conditions of Contract.

The approval by the Engineer of any programme shall have no contractual significance other than that the Engineer will be satisfied that the work is carried out according to such programme and that the Contractor undertakes to carry out the work in accordance with the programme. It shall not limit the right of the Engineer to instruct the Contractor to vary the programme if required by circumstances. The Contractor is also referred to Clause 12 of the General Conditions of Contract when drawing up his programme.

C3.5.1.4 Sequence of the works

The sequence of the works will be work package specific and will be evaluated by the Engineer as such.

C3.5.1.5 Software application for programming

Any software used for planning and programming must be fully compatible with Windows XP (Service Pack 3) operating system and Microsoft Project 2003.

C3.5.1.6 Methods and procedures

The methods and procedures of the works will be work package specific and will be provide by the Engineer as such.

C3.5.1.7 Quality plans and control

The quality plan and control of the works will be work package specific and will be provide by the Engineer as such.

C3.5.1.12 Recording of weather

The Contractor shall erect an effective rainfall gauge on the site of the works and record the daily rainfall figures in the site diary. The site diary shall be handed to the Employer's representative for his signature no later than 10 days after rain that is considered to justify an extension of time occurs.

Extension of time due to abnormal rainfall shall be determined by means of Method 1, where rainfall records and/or values derived from rainfall records are supplied in the Scope of Work, otherwise Method 2 shall apply. Method 1 and 2 are defined and described in the Contract Data.

In the case where Method 2 applies the following is applicable:

- Extension of time resulting from abnormal rainfall or other forms of inclement weather for items on the critical path of the programme shall be calculated according to the requirements of Method 2 (Critical-path method). The value of "n" working days per calendar month as specified in this clause shall be two (2) working days. If no abnormal rainfall or other inclement weather periods occur during a specific calendar month (or months), the n-values as specified shall not be taken as accumulating over the contract period. If the n-days allowed for in the programme of work are not taken up by standing time due to abnormal rainfall or inclement weather conditions, they will fall away and will not be considered in extension of time claims which may arise later during the contract period.

- A working day, or portion thereof, shall be considered as lost when the engineer agrees that no work could have been undertaken on any item falling within the critical path. The contract extension of time arising from inclement weather shall be agreed upon between the engineer's and the contractor's representatives. The days upon shall be recorded in the minutes of the monthly site meetings.

Extension of time due to abnormal rainfall for the purposes of this contract shall be determined by means of Method 1. The rainfall records at Rainfall Station, Pretoria University Proefplaas 05134651 for the period 1960 to 2004 reproduced in the accompanying table and the monthly averages, Rn and Nn, for this period, shall for the purpose of this Contract be taken as normal rainfall.

MONTH	Rn	Nn	MONTH	Rn	Nn
January	118.6	3.7	July	2.2	0.0
February	89.6	2.7	August	5.0	0.1
March	86.0	2.6	September	18.2	0.6
April	50.4	1.5	October	71.3	2.2
May	14.0	0.4	November	103.4	3.9
June	7.3	0.2	December	115.5	4.0
			<b>TOTAL</b>	<b>696.7</b>	<b>22.3</b>

Records of rain days will be recorded in the minutes of the monthly site meeting.

#### C3.5.1.13 Format of communications

The Engineer will set standards specific to the work package for communications.

#### C3.5.1.14 Key personnel

A schedule of key personnel / schedule of contact particulars of key personnel will be requested by the Engineer with the commencement of a specific work package.

#### C3.5.1.15 Management meetings

##### C3.5.1.15.1 Community participation

Community participation consists of engagement of Project Steering Committees (PSC). A PSC will be established for the town by the Ward Councillor. The functions of the PSC will be to:

- Assist in monitoring the work package.
- Ensure that the community provide assistance to the contractor to ensure that he can execute the contract in accordance with the specifications and within time.
- Encourage the community to participate in the Labour-Intensive construction.
- Identify skills, skilled personnel and suppliers in the towns.

The PSC will not have the power to:

- Give any instructions to the contractor, except through the engineer.
- Become involved in the daily operations of the contractor or interfere with the contract works.



A monthly meeting will be held with the PSC to discuss relevant matters. The site agent and resident engineer will attend the meetings. The contractor will have to report on progress, deviations from the programme, financial matters community related aspects, general problems and co-operation at the meeting. The PSC members will not receive any remuneration for attending, and they must provide their own transport.

**C3.5.1.16 Forms of contract administration**

Contract administration pro-formas will be as provided by the Engineer

**C3.5.1.17 Electronic payments**

Will be as per City of Tshwane's standards.

**C3.5.1.18 Daily records**

The requirements for daily records of resources (people and equipment employed) / site diaries in respect of work performed on the site and where such documents are to be held will be provided by the Engineer.

**C3.5.1.19 Bonds and guarantees**

Will be as specified in the Contract Data

**C3.5.1.20 Payment certificates**

Will be carried out as per General Conditions of Contract for Construction Works, Third Edition (2015).

**C3.5.1.21 Permits**

Not applicable.

**C3.5.1.22 Proof of compliance with law**

Not applicable.

**C3.5.1.23 Insurance provided by the employer**

A copy of the policy and the list of excesses may be obtained from

Contractors All Risk and Liability Insurance:  
Mrs Morongwa Mokoena  
Tel No: (012) 358 1126  
Email: [MorongwaM@Tshwane.gov.za](mailto:MorongwaM@Tshwane.gov.za)  
Red Brick Building  
2<sup>nd</sup> Floor, Room 205  
Eskia Mphahlele Drive

**C3.5.2 Environmental Specification**

**C.3.5.A.1 Introduction**

This Environmental Specification is an important component of the Environmental Management Programme (EMP) for the construction of 3.0 km of internal roads, walkways, and stormwater systems. It outlines the environmental management measures required to mitigate impacts and ensure compliance with legislative and municipal requirements.

#### **C.3.5.A.2 Objectives**

- Ensure environmental compliance during construction activities.
- Minimize negative Environmental impacts.
- Promote sustainable Construction practices.
- Align construction activities with the City of Tshwane Municipality's environmental and planning standards.

#### **C.3.5.A.3 Roles and Responsibilities**

- Project Engineer: Ensure adherence to this specification and oversee Contractor compliance.
- Environmental Control Officer (ECO): Conduct monthly audits, monitor compliance, and provide guidance on environmental issues.
- Contractor: Implement and comply with all environmental requirements and instructions issued by the ECO or Project Engineer.

#### **C.3.5.A.4 Environmental Management Measures**

##### **C.3.5.A.4.1. Pre-Construction Phase**

- Develop a Contractor's Environmental Management Plan (CEMP) to be approved by the ECO.
- Conduct environmental awareness training for all personnel involved in the project.
- Clearly demarcate and protect sensitive environmental areas.
- Ensure that necessary permits and approvals are obtained prior to construction.

##### **C.3.5.A.4.2 Construction Phase**

###### Stormwater Management:

- Prevent sedimentation of stormwater systems by using silt traps.
- Ensure all stormwater discharges are clean and free of pollutants.

###### Erosion Control:

- Stabilize disturbed areas promptly.
- Use temporary erosion control measures (e.g., geo-textiles or straw bales) where required.

###### Dust Management:

- Implement regular water spraying on unpaved surfaces to reduce dust.
- Cover stockpiles to prevent wind erosion.

###### Waste Management:

- Segregate and dispose of construction waste appropriately.
- Recycle materials where feasible.

###### Noise Control:

- Limit construction activities to designated working hours.
- Use silencers or noise-dampening equipment for machinery.

###### Vegetation Management:

- Avoid unnecessary removal of vegetation.
- Rehabilitate cleared areas with indigenous vegetation post-construction.

##### **C.3.5.A.4.3 Post-Construction Phase**

- Rehabilitate all disturbed areas to pre-construction conditions or better.
- Remove all construction equipment, debris, and temporary facilities from the site.

- Conduct a final environmental audit to ensure compliance and address outstanding issues.

#### **C.3.5.A.5 Compliance and Monitoring**

- Monthly environmental monitoring and auditing by the ECO.
- Submission of monthly environmental compliance reports to the project team.
- Immediate reporting and resolution of non-compliance incidents.
- 

#### **C.3.5.A.6 Penalties**

- Non-compliance with environmental specifications may result in penalties as stipulated in the contract / Environmental Management Programme. The contractor will be responsible for all costs associated with remediation of environmental damages caused by their activities.



**ANNEXURES**  
**ANNEXURE C.3.5.4.A Health and Safety Specification**

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## 1. INTRODUCTION, PROBLEM STATEMENT AND OBJECTIVES OF THE PROJECT

The site comprises the grass-lined open channel, commonly referred to as the Pegasus Canal, situated between Furrow Road and Griffiths Avenue in Equestria, City of Tshwane. This section of the canal has been identified as a priority intervention zone due to repeated flooding incidents and significant erosion damage affecting both private and municipal infrastructure. The existing drainage system was determined to be inadequate for safely conveying stormwater discharged from the surrounding areas; therefore, an upgrade to the canal and the two culvert systems along Griffith Avenue and Furrow Road was deemed necessary.

The Employer's objective is furthermore to create temporary local job opportunities as well as opportunities for local enterprises. The project will be subject to a 30% subcontracting target to BE subcontractors, of which 80% need to come from the local community.

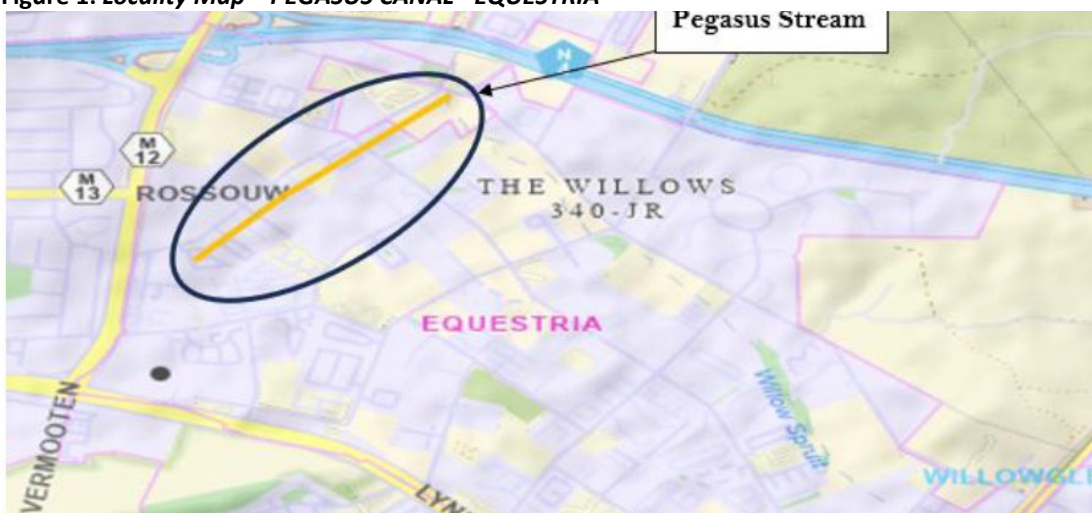
## 2. DESCRIPTION OF THE SITE

The proposed works are located in the eastern part of the City of Tshwane under Region 6, in Equestria. The canal is a major stormwater system that drains areas between the Bronberg mountain, parts of Die Wilgers and Equestria.

The topography of the area is gently sloping in a north easterly direction toward a watercourse to the North-East of the scope area.

Locality map is shown in Figure 1 below.

**Figure 1: Locality Map – PEGASUS CANAL - EQUESTRIA**



## 3. PROJECT SCOPE OVERVIEW AND PURPOSE OF THE SHE SPEC

### Project Scope overview

In summary the project tasks entail (but not limited) to the following:

- Site establishment
- Setting out of works



- Accommodation of traffic
- Excavation of trenches
- Construction of bedding
- Construction of reinforced stormwater open canal
- Installation of precast culverts along the two road crossings
- Installation of stormwater sewers including construction of inlet, outlet structures and junction boxes
- Backfilling
- Structures and appurtenant to stormwater systems (inlets, junction boxes and manholes)
- Quality control
- Maintenance of the work during the construction and subsequent liability periods
- And other related civil works

#### **Purpose of the Site-Specific Health and Safety Specification**

This health and safety specification aims to inculcate a positive safety culture in the project and outlines the working behaviours and safe work practices that must be implemented and complied with by, the Principal Contractor, Contractors, Consultants, Visitors and Suppliers, that will be undertaking activities associated with the UPGRADING OF PEGASUS STORMWATER CANAL IN EQUESTRIA. The Site-Specific Health and Safety Specification has been developed in accordance with the requirements of Occupational Health and Safety Act 85 of 1993 and related Regulations, the Construction Regulation of 2014, and as partial fulfilment of the Construction Regulation 5(1)(b) as well as any other applicable legislation.

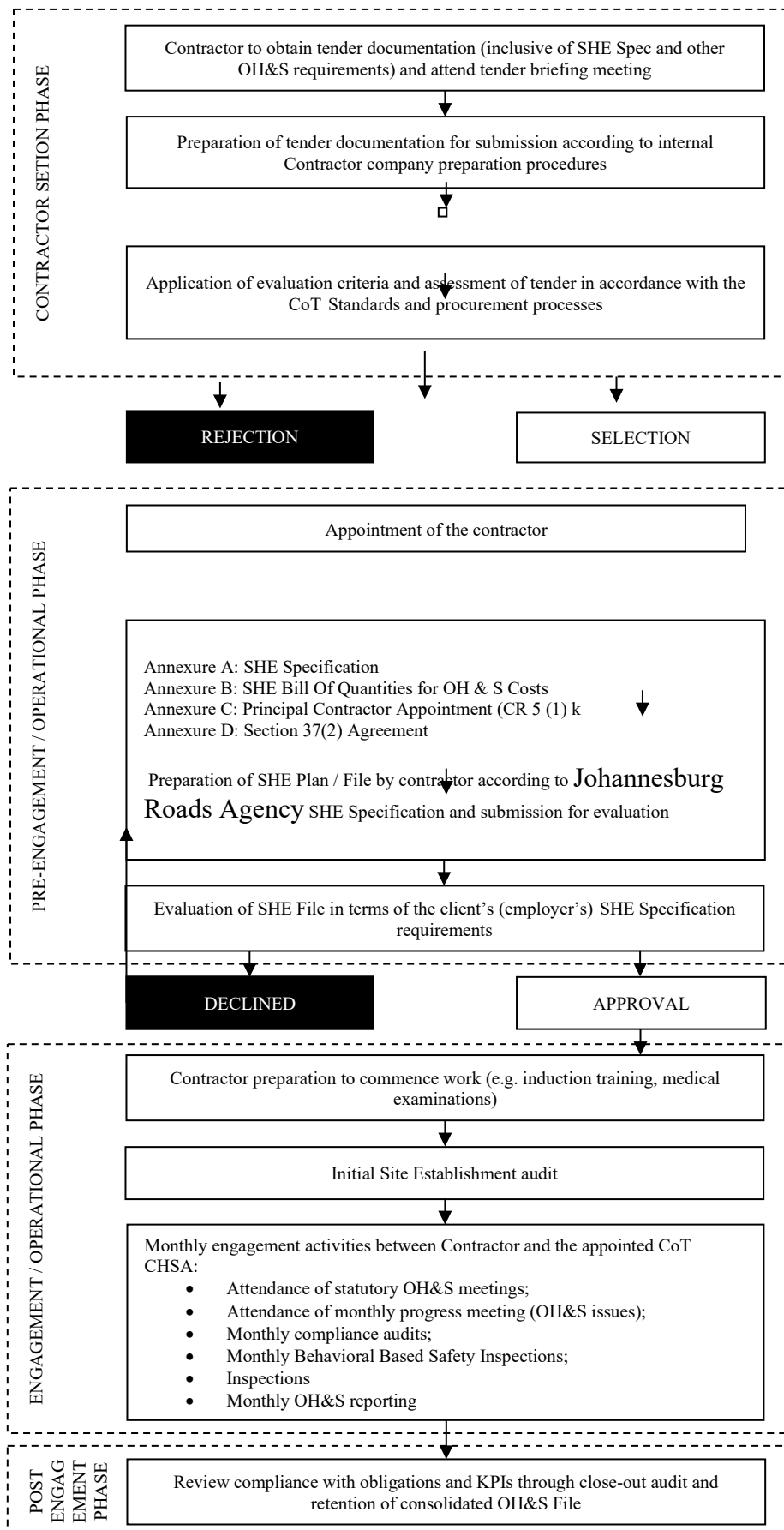
The appointed Principal Contractor and other contractors must identify all requirements applicable to their scope of works and address these accordingly in their Contractor 's Site Specific Health and Safety Management Plan. It is the Principal Contractor 's responsibility to ensure that all other sub-contractors comply fully with all legal requirements as well as the requirements of this Specification.

This Site-Specific Health and Safety Specification will be reviewed and updated periodically as and when necessary to address and / or include:

- Changes in legislation;
- As per Client requirements;
- Change in scope of work
- Construction Design review must consequently be followed by review of the Baseline Risk Assessment for the project and the SSHSS;
- Lessons learnt from incidents.

#### **4. CONTRACTOR SELECTION, ENGAGEMENT AND MANAGEMENT PROCESS OVERVIEW**

**Figure 2: Contractor selection, engagement and management process overview**



## 4.1

## DEFINITIONS

### **The Act**

Means, unless the context indicates otherwise, the Occupational Health and Safety Act, 85 of 1993 and Construction Regulations 2014 promulgated there under, (OHSA).

### **Acceptable Risk**

A risk that has been reduced to a level that can be tolerated having regard for the applicable legal requirements and the Health and Safety Policy adopted for the project.

### **Agent**

Means in terms of Construction Regulations, 2014, 'a competent person who acts as a representative for a client'.

### **ALARP (As Low as Reasonably Practicable)**

The concept of weighing a risk against the sacrifice needed to implement the measures necessary to avoid the risk. With respect to health and safety, it is assumed that the measures should be implemented unless it can be shown that the sacrifice is grossly disproportionate to the benefit.

### **Applicant (Permit to Work)**

A person requesting permission to perform work for which a Permit to Work is required. Applicants must be authorised (in writing) to receive (or accept) Permits to Work and must be competent to do so by virtue of their training, experience and knowledge of the area or plant in which the work is to be performed.

### **Authorised Person (Permit to Work)**

A person (typically a Project employee or an employee of the client) who has been authorised (in writing) by the nominated project management representative to issue Permits to Work within the scope of his designation. A person may only be appointed to issue Permits to Work if he has undergone training and has been assessed and found competent in systems, plant and equipment operation within the scope of his designation.

### **Barricade**

A temporary structure that is erected as a physical barrier to prevent persons from inadvertently coming into contact with an identified hazard.

### **Battering**

Sloping the sides of an excavation to a predetermined angle (usually less than the natural angle of repose) to ensure stability.

### **Benching**

The creation of a series of steps in the sides of an excavation to prevent collapse.

### **Client**

Means any person for whom construction work is being performed.

### **Consequence**

The outcome of an event expressed qualitatively or quantitatively.

### **Contractor**

An employer performing construction work, or providing related or supporting services, on a project site.

### **Competent Person**

A person who has in respect of the work or task to be performed the required knowledge, training, experience and as per OHS Act, 1993 (Act 85 of 1993) and CR 2014.

### **Construction Manager**

Means a competent person responsible for the management of the physical construction processes and the coordination, administration and management of resources on a construction site.

### **Construction Supervisor**

A competent person responsible for supervising construction activities on a construction site.

### **Excavation**

Any man-made cut, cavity, pit, trench, or depression in the earth's surface formed by removing rock, sand, soil or other material using tools, machinery, and / or explosives. Tunnels, caissons and cofferdams are specifically excluded and are not addressed in this standard.

### **First-Aid Injury (FA)**

A first-aid injury is any one-time treatment and any follow up visit for observation of minor scratches, cuts, burns, splinters and the like which do not normally require medical care. Such treatment is considered to be first aid even if administered or supervised by a medical practitioner.

### **Hazard**

A source of potential harm in terms of human injury or ill health, or a combination of these.

### **Hierarchy of Controls**

A sequence of control measures, arranged in order of decreasing effectiveness, used to eliminate or minimise exposure to workplace health and safety hazards:

- Elimination – Completely removing a hazard or risk scenario from the workplace.
- Substitution – Replacing an activity, process or substance with a less hazardous alternative.
- Isolation (Engineering) Controls – Isolating a hazard from persons through the provision of mechanical aids, barriers, machine guarding, interlocks, extraction, ventilation or insulation.
- Administrative Controls – Establishing appropriate policies, procedures and work practices to reduce the exposure of persons to a hazard. This may include the provision of specific training and supervision.
- Personal Protective Equipment – Providing suitable and properly maintained PPE to cover and protect persons from a hazard (i.e. Prevent contact with the hazard).

**Health and safety by Design-** this is the process of managing health and safety risks throughout the lifecycle of structures, plant, substance or other products.

### **Incident**

An event (or a continuous or repetitive series of events) that results or has the potential to result in a negative impact on people (employees, contractors and visitors), the environment, operational integrity, assets, community, process, product, legal liability and / or reputation.

### **Likelihood**

A description of probability or frequency, in relation to the chance that an event will occur.

### **Lost Time Injury (LTI)**

Any occurrence that resulted in a permanent disability or time lost from work of one day/shift or more. If an employee is injured and cannot return to work in the next shift (will ordinarily miss one whole shift), and the department brings the employee in to only receive treatment by the Supervisor/ Return to Work Coordinator in that shift, this is still considered an LTI.

Lost Time Injury Frequency Rate (LTIFR) - Number of LTI's multiplied by 1 million or 200,000 and divided by labour hours worked.

### **Light Vehicle**

A vehicle that:

- Can be licensed and registered for use on a public road;
- Has four or more wheels, and seats a maximum of 12 adults (including the driver);
- Requires the driver to hold only a standard civil driving licence; and
- Does not exceed 4.5 tonnes gross vehicle mass (GVM), which is the maximum loaded mass of the motor vehicle as specified by:

- ◆ The vehicle's manufacturer; or
- ◆ An approved and accredited automotive engineer, if the vehicle has been modified to the extent that the manufacturer's specification is no longer appropriate.

Examples of light vehicles include passenger cars, four-wheel drive vehicles, sports utility vehicles (suvs), pick-ups, minibuses, and light trucks.

Any vehicle falling outside of this definition must be considered mobile equipment.

### **Mobile Equipment**

A vehicle (wheeled or tracked) that generally requires:

- The driver to hold a specific state or civil license; or
- The operator to hold a nationally recognized certificate of competency.

Examples of mobile equipment include, but are not limited to, dump trucks, water trucks, graders, dozers, loaders, excavators, forklifts, tractors, back-actors, bobcats, mobile cranes, tele- handlers, drill rigs, buses and road-going trucks.

### **Near-Miss**

An incident that has occurred that did not result in any injuries, illnesses, environmental or property damage but had the potential to cause an injury, illness, environmental or property damage.

### **Personal Lock**

A single lock with one unique key controlled by the owner. Used for personal protection.

### **Regulation**

In the context of this guideline, \_Regulation(s) 'refers to the Construction Regulations, 2014 required by Section 43 of the Occupational Health and Safety Act 85 of 1993, published under Government Notice R 84 in Government Gazette 37305 of February 2014.

### **Risk**

A combination of the likelihood of an occurrence of a hazardous event or exposure and the severity of injury or ill health that can be caused by the event or exposure.

### **Risk Assessment**

A process of evaluating the risk arising from a hazard, taking into account the adequacy of any existing control measures, and deciding on whether or not the risk is acceptable.

### **Risk Management**

The systematic application of management policies, processes and procedures to identifying hazards, analysing and evaluating the associated risks, determining whether the risks are acceptable, and controlling and monitoring the risks on an ongoing basis.

### **Abbreviations**

CR – Construction Regulations  
CHSA- Construction Health and Safety Agent  
CIDB- Construction Industry Development Board  
CHSO- Construction Health and Safety Officer  
DSTI - Daily Safety Task Instruction  
DoL- Department of Employment and Labour  
LTI- Lost Time Injury  
HIRA - Hazard Identification and Risk Assessment  
IMS - Integrated Management System  
MS - Management System  
OHS Act - Occupational Health and Safety Act  
SSHSS- Site Specific Health and Safety Specification  
SHE- Safety, Health and Environment  
PTO – Planned Task Observation  
PM- Project Manager

VFL - Visible Felt Leadership

OHS - Occupational Health and Safety

VCT - Voluntary Counselling and Testing

SACPCMP - The South African Council for Project and Construction Management Professions, here in refer to as the registrar of Health and Safety Professionals

## **5. LEGAL REQUIREMENTS**

*Execution of project tasks must be in line with relevant applicable legislation throughout the project lifecycle, applicable standards and specifications and code of practice must be adhered to by the Principal Contractor and other contractors on the project. The Principal Contractor must compile a legal register that must also include applicable standards and specifications, code of practice including applicable municipal by-laws. The Principal Contractor must demonstrate SHE legal compliance throughout the project lifecycle.*

### **5.1 GENERAL ADMINISTRATIVE REGULATIONS (GAR) REQUIREMENTS**

602.02.02	Copy of the Act (OHS Act)
602.02.03	Health and Safety Representative
602.02.04	Health and Safety Committee
602.02.05	Reporting of Incidents and Occupational Diseases
602.02.06	Recording and Investigation of incidents
602.02.07	Registration in terms of the COID Act
602.02.08	Health and Safety File

#### **5.1.1 Copy of the Act (Reg. No. 4 of GAR)**

The contractor shall retain the copy of the OHS Act and the relevant regulations on site all the times, where there are more than five people on site.

Basic Conditions of Employment Act, Employment Equity Act and the General Machinery Regulations must also be available on site. The Principal Contractor must ensure that these are communicated to the construction personnel and an attendance register must be completed to certify this.

#### **5.1.2 Designation of Health and Safety Representatives (Reg. No. 6 of GAR)**

The team of employees on site must have a health and safety representative deployed on the project site(s). A Health and Safety Representative must be elected and appointed. Taking into consideration the number of employees deployed, the geographical area in which the work is taking place, the different work disciplines, and the shift pattern (if applicable), the contractor must ensure that an adequate number of Health and Safety Representatives (at a minimum ratio of one Health and Safety Representative per 50 employees) are elected and appointed to effectively represent all site personnel as required by the OHS Act 85 of 1993, section 17 - 18.

Each Health and Safety Representative must attend an accredited training course for health and safety representatives. The cost of this training shall be for the contractor's account.

The contractor must make the necessary allowances for the Health and Safety Representatives to carry out their duties as specified in the applicable legislation.

The contractor must ensure that the nominated and appointed SHE Rep is easily identifiable; this can be achieved through ensuring that the SHE Rep has a badge or sticker on his / her helmet (written) SHE Rep.

Without derogating from the aforementioned, the principal contractor / contractor shall ensure that the provisions of OHSACT 17-20 and General Administrative Regulations, 2003 (hereinafter GAR) 5 to 7 are implemented and adhered to.

#### **5.1.3 Health and Safety Committee (Reg. No. 5 of GAR)**

The Principal Contractor/Contractor shall convene a health and safety committee meeting monthly. All members required to be in attendance shall be notified of such meeting by means of a formal agenda which must be made available to the Safety Agent / Project Manager upon request. Items on the agenda include but not limited to the following:

- Opening and welcome
- Members present, apologies and absent
- Minutes of previous meeting
- Matters arising from the previous meeting
- SHE rep deviation reports
- Outcomes of previous audit and behavioural based safety inspections
- Incident and / or accident reports and investigations
- Incident, accident and / or injury statistics
- Health and safety plan (revisions and new requirements)
- Training (awareness, competence and off-the-job)
- Emergency Preparedness Plan
- Non-conformances and notices
- Toolbox talks Program
- Close and next meeting

#### **5.1.4 Reporting of Incidents and Occupational Diseases (Reg. No. 8 of GAR)**

- (1) The contractor shall,
  - (a) Give notice to the Provincial director in the form of WCL 1 or WCL 2 within seven days of any incident referred to in section 24(1)(a) of the Act,
  - (b) Report to the provincial director by telephone, facsimile or similar communication where a person, in consequence of such an incident, dies, becomes unconscious, suffers the loss of a limb or part of a limb, or is otherwise injured or becomes ill to such a degree that he or she is likely either to die or to suffer a permanent physical defect, such incident, including any other incident contemplated in section 24(1)(b) and (c) of the Act.
- (2) The principal contractor shall furnish the provincial director with the following information whenever an incident arises to persons other than employees,
  - (a) name of the injured person;
  - (b) address of the injured person;
  - (c) name of the user, employer or self-employed person;
  - (d) address of the user, employer or self-employed person;
  - (e) telephone number of the user, employer or self-employed person;
  - (f) name of contact person;
  - (g) details of incident:
    - (i) what happened;
    - (ii) where it happened (place);
    - (iii) when it happened (date and time);
    - (iv) how it happened;
    - (v) why it happened; and
  - (h) names of witnesses.
- (3) The principal contractor shall make use of a registered medical practitioner for the examination or treatment of a person for a disease contemplated in section 25 of the Act, give notice thereof to the chief inspector and the employer in the form of WCL 22.
- (4) Any other person not contemplated in this regulation may in writing give notice of any disease contemplated in section 25 of the Act, to the employer and chief inspector.

#### **5.1.5 Recording and Investigation of Incidents ((Reg. No. 9 of GAR)**

The Principal Contractor shall report all incidents and accidents including near miss incidents, first aid, medical treatment, lost time incidents (disabling injuries & fatalities); OH&S Act Section 24 and 25 incidents; electrical contact; falls from height; major equipment damage; chemical spillage and other Environmental Incidents to the appointed Project Manager or Engineer within 24 hours of them occurring or, before the end of the work shift.

For any incident (near miss, first aid, medical) that has contravened any of the Statutory Requirements, the Contractor's Representative (Construction Health and Safety Officer) (including the Subcontractor's Representative, if applicable) may be required to present to the client, the incident and the mitigation measures that would be implemented to prevent a recurrence and the implementation of a deadline for all corrective actions to be implemented.

The Principal Contractor and all the other contractors shall ensure that immediate post incident drug and alcohol samples are taken for all parties who are involved in the accident. This may include machine operators, riggers, general labourers and supervisors as well as any witness and the injured. Testing may take place even if there is no property damage or injury, as in the event of a near miss.

If it is found that the Principal Contractor or their Subcontractors are not reporting incidents, actions (which may include disciplinary action) shall be taken against the contractor's or subcontractor's representatives.

A detailed investigation report, including supporting documents, proof of actions taken and proof of communication to other affected employees, shall be completed within 14 days of the incident and submitted to the Project Manager or Engineer formally for comment and review. Should the contractor require a greater period of time to conduct the investigation then permission should be sought from the client's representatives (Engineer or appointed Project Manager). Medical reports received by the contractor after the investigation submission should be forwarded immediately to the client's representative.

An Incident flash report shall be submitted by the Principal Contractor and all the Contractors upon knowledge of an incident; health and safety and occupational injury as soon as reasonably practicable.

Near misses shall be reported and investigated based on the severity of the near miss. The Principal Contractor and Contractors shall submit the completed investigation within seven days.

The Principal Contractor and all the other contractors shall ensure that all accidents / incidents are investigated by a competent person and are discussed at the relevant SHE meetings. The client reserves the right to participate in any accident / incident investigation if the accident / incident is directly linked to any activity related to the project. The Construction Health and Safety Agent (CHSA) must be part of the incident investigation team for all project related incidents.

The Principal Contractor shall keep at his Project Site Office a record of all accidents and incidents reported in the form of the OH&S Act Annexure 1 investigation form as referenced in the OH&S Act. (Incident Investigation Report).

The client or the client's appointed CHSA reserves the right to conduct an independent investigation of any accident and / or incident reported by the Principal Contractor or Subcontractors over and above their own investigations. The Principal Contractor and Subcontractors shall co-operate fully with the investigation and implement any additional improvement measures.

Investigations shall begin as soon as practicable after the incident / accident has occurred. Where applicable and with appropriate authorisation (when required), photographs shall be taken of the scene of the incident as well as any equipment involved. Interviews with witnesses shall be conducted as soon as possible after the incident occurred whilst it is still fresh in their memory and if necessary, followed up later to determine if further information was recalled.

The Principal Contractor shall investigate all incidents immediately and supply to the Engineer a written report within five days, unless otherwise specified by Engineer, which shall include but not limited to:

- Date, time and place of incident;
- Description of incident;
- Root causes of incident/accident;
- Type of injury and/or (if any);



- Medical treatment provided (if any);
- Persons involved;
- Loss or damage sustained (if any);
- Names and contact details of witness/s;
- Description of corrective action to prevent a recurrence (with clear deadlines and persons identified for taking remedial action).
- All corrective actions shall be closed out within 14 days of the date of the incident, unless otherwise agreed by the Engineer.

#### **5.1.6 Registration in terms of the COID Act**

The Principal Contractor and all the other Contractors on site must be in good standing with the Compensation Commission for Occupational Injuries and Diseases or similar (Federated Employer's Mutual Assurance- FEMA) by registering in terms of the COID Act. A copy of a *valid letter of good standing* as issued by the Compensation Commission for Occupational Injuries and Diseases (Department of Employment and Labour) or similar (Federated Employer's Mutual Assurance- FEMA) must be retained in the safety file all the times.

#### **5.1.7 Contents of the Health and Safety File (CR 7 (1) b**

**The Principal Contractor shall open and retain on site a SHE files with the following minimum requirements:**

- Notification of construction work to the Department of Employment and Labour
- Letter of good standing
- Safety, Health and Environmental (SHE) plan
- SHEQ policy, procedures and guidelines
- SHE Organogram
- Definitions
- Substance abuse, alcohol and Drug Policy
- Legal Appointments relevant to the project scope of work
- Risk Assessment relevant to the project scope of work
- Method statements relevant to the project scope of work
- Safe work procedures relevant to the high-risk tasks and machinery
- Safety Induction derived from the risk assessment and aligned to the project scope of work.
- First aid arrangements
- Lifting and tackle equipment
- Excavation work
- Key Performance Indicators
- Working at heights (Fall Protection Plan)
- Access ladders
- Vehicle Safety policy for Construction vehicles and mobile plant
- Use and temporary storage of flammable liquids
- Incident Management
- Personal Protective Equipment
- Housekeeping
- Stacking and storage
- Fire precautions on site
- Emergency Evacuation plan
- Medical examination
- Toolbox talks
- Safety Audit
- Monthly SHE stats reporting and recording
- Traffic management plan
- SHE Communication
- Employee wellness program TB & HIV
- Waste Management
- Asset Register
- Inspection registers not limited to the following:
  - Accident and/or incident register;

- Occupational health and safety representatives' inspection register;
- Construction vehicles and mobile plan inspections;
- Daily inspections of construction vehicles, plant and other equipment by the operator, driver and/or user;
- Daily inspections of excavations by competent person;
- Record of training;
- Record of toolbox talks;
- Designer's inspections record;
- Inspection and maintenance of explosive powered tools;
- Inspection of electrical installations (including inspection of portable electrical tools, electrical equipment and other electrical appliances);
- Fall protection inspections;
- First-aid box content;
- Record of first-aid treatment;
- Fire equipment inspection and maintenance;
- Record of hazardous chemical substances kept and used on site;
- Ladder inspection;
- Machine safety inspections (including machine guards, lock-outs etcetera);
- Inspection registers and logbooks for lifting machines and –tackle (including daily inspections by drivers/operators);
- Inspection of excavation
- Inspection of stacking and storage;
- Inspection of use and temporary storage of flammable liquids on construction sites
- Inspection of housekeeping and general safeguarding on construction site
- Inspection of construction employees' facilities
- Traffic accommodation signage inspection
- Inspection of material hoists
- Inspection of bulk mixing plant
- Inspection of cranes
- Inspection of construction vehicles and mobile plant
- Inspections of vessels under pressure;
- Inspection of electrical installations and machinery on construction sites; and
- Records of issuing of Personal Protective Equipment;

The Principal Contractor must note that the contents mentioned herein must be used as a guideline, It is the responsibility of the Principal Contractor to ensure that the SHE file is comprehensive and entails all the procedures meant to mitigate the project's identified risk and endeavour to meet health and safety legal requirements. The Principal Contractor must ensure that all the Contractors (subcontractors) on site develop and submit a SHE file to the approval of the CHSO, contents thereof must be discussed between the Principal Contractor's CHSO and the Contractors SHE personnel.

## **5.2 GENERAL SAFETY REGULATIONS (GSR) REQUIREMENTS**

### **5.2.1 Personal Protective Equipment (Safety PPE and Clothing)**

All applicable legislation concerning Personal Protective Equipment (PPE) must be complied with at all times. As a minimum, the following PPE must be worn by all persons (including visitors) at all times whilst on the project site:

- Safety footwear with steel toe protection;
- Face mask;
- Safety glasses (individuals who wear prescription spectacles must be provided with either over-spec safety glasses or prescription safety glasses);
- Safety helmet (hard hat); and
- High visibility protective clothing with reflective taping (long trousers and long-sleeved shirts with collars and cuffs).
- Additional PPE requirements must be informed by hazard identification and risk assessment i.e must be risk based. This hazard-specific PPE (such as hand protection, welding suit, hearing protection and respiratory protection) must

be worn as required (e.g. when in a certain area, when performing a certain task, or when working with a certain substance);

- The correct PPE must always be worn:
- In accordance with site requirements (as indicated at the entrances to a project site and at the entrances to buildings and / or designated areas on the premises);
- In zoned areas (e.g. noise zones and respirator zones); or
- As required by a Safe Work Procedure, a risk assessment, safety information boards or a Material Safety Data Sheet (MSDS).

The Principal Contractor and all the Contractors must provide each of his employees with all required PPE (at no cost to the employee). Only in isolated circumstances such as proven act of negligence by the employee should a cost be attached to the replacement of the PPE. The specific PPE that is provided to a particular employee must be based on the nature of that employee's work and the location in which the work is performed (i.e. must be based on the hazards and risks which the employee is exposed to). PPE requirements for a particular job or for a particular area must be determined through a risk assessment for that task or area.

Any employee who does not have all of the PPE that is required for him to perform his duties safely will not be permitted to work. Each employee must care for his PPE, maintain it in good condition, and inspect it on a daily basis. If an item of PPE has worn out, has become damaged, or is found to be defective in any way, it must be replaced by the contractor.

PPE must be stored in accordance with the manufacturer's requirements and / or recommendations. All PPE issued must be SABS (or equivalent) approved.

Each employee must receive training in the use, maintenance and limitations of the PPE that is provided to him, and must be made aware of why the PPE is necessary as well as the consequences of not wearing it as instructed (i.e. the potential for injury and / or disciplinary action). Training records must be retained.

The Principal Contractor and all the Contractors must conduct a PPE survey so as to define the relevant PPE per project task this must be aligned to the risk profile of the task in question.

Any person who refuses to wear PPE as required must follow the necessary Principal Contractor's disciplinary procedures and must not be allowed to conduct any site tasks. Symbolic signs indicating mandatory PPE requirements must be prominently displayed at the entrances to a project site and at the entrances to buildings and / or designated areas on the premises where additional PPE is required. These signs must comply with the applicable national standard (if one exists).

The Principal Contractor and any other Contractor must appoint an employee to:

- Control the issuing and replacement of PPE;
- Keep an up-to-date register as proof that items of PPE have been issued to individuals (an employee must sign for the items that he receives);
- Ensure that there is an adequate supply of all required PPE (i.e. maintain PPE stock levels on site); and
- Carry out regular inspections to ensure that PPE is being used correctly, is being maintained in a good, serviceable and hygienic state, and is not being shared between employees

### **5.2.2 Access Control/Admittance of Persons**

All persons shall report to the Security Officer at the main site office before proceeding to site. Visitors shall sign a visitors' log book and read through the induction notes as detailed on the induction book. All visitors to be accompanied by an authorized person for inspections and other site related assignments.

### **5.2.3 Display of Notices, Symbolic SHE signs, Hazard Notices and danger areas**

All symbolic safety signage that the Principal Contractor is to use/display shall conform to the requirements of SANS 1186.

The display of the following signs is mandatory:

- 01.02 For Site Establishment: The Principal Contractor's Company Name Sign must be posted at their site offices to reflect the name and contact details of the: Construction Manager; CHSO; First Aider(s); Health and Safety Representative and Evacuation arrangements.
- 01.03 The Principal Contractor must ensure that the name board is aligned to the employer's requirements in terms of contents thereof.
- 01.04 "Radio-Active Material" symbolic signs for radioactive material storage areas.
- 01.05 The location of every First Aid Box; Fire Extinguisher and Emergency Exit is to be clearly indicated by means of appropriate signage.
- 01.06 When in use, an explosive Power Tool shall have signage warning of its operation.
- 01.07 Other specific signage for high-risk activities shall be displayed e.g. deep excavations and traffic accommodation signage.
- 01.08 Contractor(s) shall post Company Name Sign on all fuel storage containers.
- 01.09 Symbolic SHE signs must be displayed as per the risk profile of the task in the different project areas.

The Contractor shall provide the signage where work is carried out, where unauthorised entry is prohibited and/or where alerting and cautioning passers-by to be aware of potential dangers. Risk based signage shall be installed as the project progresses.

#### **5.2.4 First Aid, Emergency Equipment & Procedures**

The Principal Contractor must develop, implement, test and maintain an Emergency Preparedness Plan (incorporating emergency evacuation procedures with all the necessary emergency evacuation routes) that focuses specifically on the Principal Contractor's team and work activities and sequence. The plan must be risk-based and must detail the procedures that must be followed when responding to all potential emergency scenarios such as a medical emergency (including first aid response), a fire, an explosion, a hazardous substance spill, flooding, rescue from height, rescue from a confined space, mob violence, hostage situation etc.

Consideration must be given also to potential off-site emergency scenarios must be included (e.g. emergency scenarios related to the transport of personnel, strikes, the transport of hazardous materials, and personnel performing work in remote locations and lone working).

The Emergency Preparedness Plan must satisfy and comply with all applicable legal requirements. The plan must be adequately resourced to ensure effective implementation. These resources must include appropriate personnel, external emergency response service providers, emergency response equipment, and warning devices. All equipment and warning devices must be identified, maintained and tested to ensure availability at all times.

Accountability for the Emergency Preparedness Plan must be clearly defined. An Emergency Response Team (ERT) responsible for the implementation, management and execution of the Emergency Preparedness Plan must be established. The roles and responsibilities of each team member must be clearly defined in the plan. Each team member must receive appropriate training to ensure that each role is performed competently.

The process for managing incident communication, notification, and reporting must be incorporated into the Emergency Preparedness Plan. The responsible person(s) must be clearly identified, and the protocols for communicating with internal and external stakeholders must be defined.

Emergency evacuation procedures must be developed and included in the Emergency Preparedness Plan. A copy of the plan must be submitted to the CHSA or the Resident Engineer or his representative for approval prior to site establishment. The Emergency Preparedness Plan must be formally reviewed (and amended if necessary) when project needs require, and following any emergency situation, to ensure that it remains appropriate and effective.

At each project work site, as a minimum:

- A suitable evacuation alarm (whistle or siren) must be provided. All persons working in an area where an evacuation alarm is sounded must respond to it immediately.
- Suitable fire-fighting equipment must be provided and maintained, and personnel must be trained in fire-fighting procedures and the use of fire-fighting equipment.

- Suitable first aid equipment and supplies must be provided and maintained, and an adequate number of appropriately trained First Aiders must be in place.
- Emergency assembly points positioned in safe locations away from buildings, plant and equipment must be designated (and conspicuously signposted). In the event of an evacuation, all persons (i.e. personnel and visitors) must assemble and be accounted for at these emergency assembly points.
- All personnel must receive awareness training on the applicable Emergency response procedures, and all visitors entering the site must be properly instructed in these procedures.
- The Emergency response procedures must be displayed on each notice board.
- A diagram (site plan) indicating evacuation routes, emergency assembly point locations, and the positioning of emergency equipment (fire extinguishers, first aid boxes, etc.) must be prominently displayed in all buildings and plants, in all offices, on all notice boards, and in other locations on the site as may be required.
- An up-to-date list of emergency telephone numbers must be compiled and maintained. A copy of this list must be posted at each site entrance, in each office, near each telephone, and on every notice board.
- Emergency response drills must be conducted to test the effectiveness of the emergency procedures and equipment, as well as the knowledge and proficiency of the response personnel consisting mainly site personnel. Where appropriate, drills must include liaison with and the involvement of external emergency response service providers. A range of emergency scenarios must be tested including, but not limited to, medical emergencies, fires, rescues, and hazardous substance spills. A drill must be carried out one month after site establishment and then again six months thereafter.

Each drill must be monitored and the outcomes (highlights and shortcomings) must be documented. Corrective actions must be identified and implemented to address the shortcomings, and the Emergency Preparedness Plan and associated procedures must be amended as required.

### **Fire Fighting**

The contractor must ensure that Fire Fighting requirements are complied with. An appointed competent Fire Fighter must be appointed to ensure compliance to firefighting requirements. Applicable standards and codes of practice apply.

### **First Aid and First Aid Kits**

The Principal Contractor must ensure that First Aiders are trained and appointed as described in the Site-Specific Health and Safety Specification and in accordance with relevant legislative requirements (GSR 3).

A suitable first aid kit (i.e. appropriate to the level of training) must be readily available to each First Aider. All kits must be provided and maintained by the contractor.

Taking into account the type of injuries that are likely to occur in the workplace, each first aid kit must contain suitable equipment and supplies. First aid equipment and supplies required by applicable legislation must be provided as a minimum.

The contents of each first aid kit must be kept clean and dry. Each kit must be contained in either a portable weather-proof case / bag or a steel box mounted to a fixed structure. Access to first aid equipment / supplies must be limited to train First Aiders only. Access to portable kit bags must be controlled and steel first aid boxes mounted in the workplace must be kept locked. Approved signage must be in place to indicate the locations of the first aid boxes / bags. A record of each treatment administered must be kept in a suitable register.

No tablets or medication to be stored in the first aid box. No tablets or medication to be administered by first aiders or other personnel to employees who are not feeling well or have been injured.

The first aid kits must, as a minimum, contain the following equipment and supplies:

**Table1: Minimum Requirements to be included when equipping first aid boxes**

Item 1:	Wound cleaner/ antiseptic – 100ml;
Item 2:	Swabs for cleaning wounds;
Item 3:	Cotton wool for padding – 100g;
Item 4:	Sterile gauze – minimum quantity 10;
Item 5:	1 x Pair of forceps – for splinters;
Item 6:	1 x Pair of scissors – minimum size 100mm
Item 7:	1 x Set of safety pins;
Item 8:	4 x Triangular bandages;
Item 9:	4 x Roller bandages – 75mm x 5m;
Item 10:	4 x Roller bandages – 100mm x 5m;
Item 11:	1 x Roll of elastic adhesive – 25mm x 3m;
Item 12:	1 x Non-allergenic adhesive strip – 25mm x 3m;
Item 13:	1 x Packet of adhesive dressing strips – minimum quantity 10 assorted sizes;
Item 14:	4 x First aid dressings – 75mm x 100mm;
Item 15:	4 x First aid dressings – 150mm x 200mm;
Item 16:	2 x Straight splints;
Item 17:	2 x Pairs large and 2 x pairs medium disposable latex gloves;
Item 18:	2 x CPR mouth pieces or similar devices.

Additional items / supplies may need to be provided depending on the nature of the workplace (specific hazards) and the level of training of the first aider in position of the kit.

### 5.2.5 Work in Elevated Positions

There is no scope for working in elevated positions for this project. Where a contractor is appointed to install street lights and light fittings the requirements of Construction Regulations 10 shall be adhered to.

#### 5.1.1 Use and storage of flammable liquids

Refer to Operational Control Section of the SSHSS

### 5.2.7 Stacking of articles

The Principal Contractor and all the other contractors must, in addition to compliance with the provisions for the stacking of articles in the General Safety Regulations, 2003, ensure that:

- A competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;
- Adequate storage areas are provided;
- There are demarcated storage areas; and
- Storage areas are kept neat and under control.

### 5.2.8 Ladders

Access step ladders shall be used for deep excavations; the following requirements shall be complied with regarding ladders and ladder work:

- The term "ladders" refers to both fixed and portable ladders.
- Ladders shall be clearly numbered, and inspected on the register provided.

- A competent person shall be identified and appointed as the ladder inspector.
- Where aluminium ladders cannot be used, then wooden ladders shall be straight grained, unpainted to allow for proper inspection of the grain for cracking.
- Ladders shall be secured at the top and chocked at the base to prevent slipping.
- Where chocking of the base is not possible, then the user shall ensure that the ladder is held in position by another employee when ascending the ladder.
- Ladders shall be inspected a minimum once per month by the person appointed as the ladder inspector.
- Proper storage shall be provided for all ladders when not in use.

### **5.3 APPLICATION OF CONSTRUCTION REGULATIONS (CR) (2014 REQUIREMENTS)**

The intended construction work falls within the scope of “construction work” as defined in the Construction Regulations, 2014 made under the Occupational Health and Safety Act 1993 (OHS Act), as amended (“the Act”).

#### **5.3.1 Construction Design Management (CR 6- Duties of Designer)**

The Designers must ensure that all the designs for the project are in line with the requirements of Construction Regulation 6 and the requirements for construction material and substances as spelt out in the OHS Act Sect 10: General duties of manufacturers and others regarding articles and substances for use at work are met.

The Designers must demonstrate proof that health and safety by design prevails throughout all the construction stages of the project. As a minimum requirement a Design Health and Safety Report should be compiled at Design Stage and must consequently form part of the contract documentation to be accessible to contractors for construction documentation and management stage.

The minimum requirements of the Design Health and Safety Report should consist but not limited to the following:

- The purpose of the project as outlined by the client / client representative in the project brief.
- All the relevant parties consulted in undertaking the design.
- Design risk register.
- Product Technical statements and relevant material safety data sheets for construction.
- Relevant test results as outlined in the contract documents and relevant code of practice.
- The hazards and risks identified during the design process, and control measures incorporated into the design, specifically in relation to:
  - Any hazardous materials specified in the design.
  - Any unusual or atypical features requiring attention during construction stage.
  - Evidence of consideration of design ergonomics while undertaking the design.
  - Any features of the design which present specific risks.
  - The recommended control measures for any foreseeable activities (for instance operation, maintenance, repair and any disposal requirements).
- Manuals and procedures for safe operations and maintenance post project completion.

The Designers must provide evidence and supporting documentation throughout the Design Development such as:

- Design Development Planning
- Design and development inputs
- Design development controls and related reviews
- Design Development desired outputs and hold points to support design reviews conducted.
- Design and development changes.
- Final Design approval and provision for ongoing design reviews to manage health and safety risks.

#### **5.3.2 Contractor Health and Safety Management System (HSMS)**

##### **Health and Safety Philosophy**

Health and safety is a shared responsibility and team work effort. The client shall endeavour to provide a working environment that is free from health, safety and environmental hazards. To this end, the Principal Contractor and all the other Subcontractors in the project must execute their tasks in the safest possible manner. The Principal Contractor must ensure that a health and safety management system is developed, implemented, monitored and continually reviewed on site to ensure that the risk of harm to employees from construction hazards is reduced to as a low as reasonably practicable. The Health and Safety Management System must clearly outline the following steps ‘Plan, Do, Check, Act’ and the risk-based approach to site tasks, this approach shall be explained in detail to

the Principal Contractor upon contractor and subcontractor induction to be conducted by the Construction Health and Safety Agent.

### 5.3.2.1 Occupational Health and Safety (OHS) Structure and Responsibilities

#### (i) APPOINTMENTS

All appointment letters must be signed by the appointer and acknowledged by the appointee. Appointment letters must be retained in the SHE file and must be up-to-date with the duration of the appointment. The following legal appointments are relevant to this project:

Chief Executive Officer	[OHSAct Section 16.1]
Project Manager	[OHSAct Section 16.2]
Construction Manager	[Construction Regulation 8.1]
Construction Health and Safety Officer	[Construction Regulation 8(5)]
Construction Supervisor	[Construction Regulation 8(7)]
Construction Supervisor Assistant	[Construction Regulation 8(8)]
Temporary Electrical Installations Insp & Controller	[Construction Regulation 24 e]
Electrical Machinery Inspector	[Construction Regulation 24 d]
Drivers/Operators of Construction Vehicles/Plant	[Construction Regulation 23]
Crane Operator	[Construction Regulation 22 a]
Emergency/Security/Fire Coordinator	[Construction Regulation 29]
Excavation Supervisor	[Construction Regulation 13(1) a]
Excavation Inspector	[Construction Regulation 13 (2) h]
First Aider	[General Safety Regulation 3]
Fire Fighting Equipment Inspector	[Construction Regulation 29]
Hazardous Chemical Substances Supervisor	[HCS Regulations 10]
Incident Investigator	[General Admin Regulation 9]
OH&S Committee	[OHSAct Section 19]
OH&S Officer	[Construction Regulation 8(5)]
OH&S Representatives	[OHSAct Section 17]
Person Responsible for Machinery	[General Machinery Regulation 2]
Risk Assessor	[Construction Regulation 9(1)]
Stacking and Storage Supervisor	[Construction Regulation 28]
Construction Vehicles/Mobile Plant/Machinery Operator	[Construction Regulation 23 (1) d]
Construction Vehicles/Mobile Plant Inspector	[Construction Regulation 23]
Ladder Inspector	[General Safety Regulation 13 A]
Lifting Machine Inspector	[Driven Machinery Regulation 18 (5)]
Lifting Machinery Operator	[Driven Machinery Regulation 18 (11)]
Lifting Tackle Inspector	[Driven Machinery Regulation 18 (10) e]
Goods Hoist Inspector	[Driven Machinery Regulation 17 (2)]
Handtools Inspector	[OHS Act Sect 8]

***Based on the HIGH degree of risk attached to the project, a Full-Time Construction Health and Safety Officer (CR 8.5) registered with SACPCMP as a Construction Health and Safety Officer must be appointed to oversee construction health and safety aspects of the project.***

The above legal appointments are not exhaustive the Principal Contractor and all the other subcontractors must ensure that the Legal appointments register is updated in line with the changing scope of work and consequent risk register. ***Change of Project Personnel must be done with the approval of the client's representative.***

#### (ii) ADDITIONAL DUTIES OF PRINCIPAL CONTRACTOR



- a) It is the responsibility of the principal contractor to notify the Department of Employment and Labour regarding the intended construction work. Notification of construction work with the Department of Employment and Labour is applicable to this project.
- b) Coordination, supervision and monitoring of other contractors on site remains the responsibility of the Principal Contractor.

It is the responsibility of the principal contractor to carry out duties as outlined in the Construction Regulations 7. All subcontractors are required to submit a complete health and safety file to Safety Agent. The later shall evaluate and approve the safety file. A minimum score of 95% must be achieved by any contractor before commencement with any tasks on site.

- c) The Principal contractor must provide proof of registration with the Compensation commission or any other registered insurer. The letter of good standing must be valid and available on site all the times.
- d) The Principal Contractor must engage with the CHSA with respect to subcontractor challenges when it comes to development and implementation of the safety management system on site which must be aligned to the SSHSS and also the baseline risk assessment for the project.

### **(iii) MANDATORIES**

The Principal Contractor shall be appointed by the client to undertake construction work on site in terms of Construction Regulations 5 (1) k. An Agent (The Project Manager, Project Engineer) is appointed in writing to represent the client. The Construction Regulations places the responsibility on the client to oversee health and safety matters (who in turn appoints a Construction Health and Safety Agent to oversee health and safety aspects of the project. The Project Manager or Project Engineer must be competent to perform project management functions of the project.

### **(iv) SCHEDULE OF ALL CONTRACTORS**

A sub-contractor list with key contact persons shall be maintained on site. All subcontractors shall be evaluated for competence and compliance to health, safety, environmental and other applicable legislation. Each subcontractor shall be legally appointed and shall be required to sign the Construction Regulation 7 1 C v appointment and the Occupational Health and Safety Act Section 37 (1) (2) Mandatory agreement.

### **(v) OCCUPATIONAL HEALTH AND SAFETY ACT SECTION 37(2) AGREEMENTS**

The principal contractor shall sign the 37 (1) (2) agreement with the client. All other subcontractors on site shall also sign the Sect 37 (1) (2) upon appointment by the principal contractor.

## **5.3.2.2 GENERAL OHS PROVISIONS**

### **5.3.2.2.1 Risk Assessment and Method Statement**

**(Project specific assessment requirements / Potential Sources of risks, RA Plan and Contractor Health and Safety Plan)**

Detailed hazard identification and risk assessment processes must be followed for all work to be performed as well as for all associated equipment and facilities as required by the Construction Regulation of 2014, Regulation 9(1) – (7).

The Client through the appointed Construction Health and Safety Agent shall provide a baseline risk assessment (BRA) informing the Principal Contractor on the hazards and risks relevant to the project. The Principal Contractor must also conduct a detailed suitable and sufficient risk assessment for the project. The Principal Contractor must ensure that effective procedures and risk assessment systems are in place to control hazards and to mitigate risks to levels that are as low as is reasonably practicable.

The risk assessment processes must be applied to:

- The full life cycle of the project, including any design changes within the project scope of work;
- Routine and non-routine activities;
- Planned or unplanned changes;

- All employees, sub-contractors, suppliers and visitors; and
- All infrastructure, equipment and materials.

The risk assessment processes and methodologies must be in context with the nature and scale of the risks, and must be compiled and implemented by competent persons. To this end, a competent risk assessor must be appointed in writing.

The process of analysing and managing risk must include the following:

- Establishing the context of the risk assessment;
- Identifying hazards and determining possible risk scenarios (unwanted events);
- Evaluating risks and assigning ratings (classification);
- Recording the risk analysis in a risk register;
- Managing risks according to their classification (prioritising for action);
- Identifying and implementing control measures (through the application of the Hierarchy of Controls) to ensure that risks are managed to levels that are as low as is reasonably practicable (ALARP);
- Developing action plans for reducing risk levels (where possible);
- Verifying the completion of actions;
- Re-evaluating the risks and classifications as appropriate; and
- Reviewing and updating the risk register.

#### **Baseline Risk Assessments**

Prior to site establishment, (the Client or appointed client representative, the CHSA in this instance) will conduct a detailed Baseline Risk Assessment identifying foreseeable hazards and risk scenarios associated with the contractor's scope of work on the project site(s) as required by Construction Regulations of 2014, regulation 5(1)(a). Details concerning proposed control measures shall be included. The Principal Contractor shall conduct a task-based risk assessment for all the project tasks, ideally the project programme of works should be used to align the task-based risk assessment and ensure that all high-risk project tasks are adequately assessed. The risk assessment process must be facilitated by a competent person who has been appointed in writing and must involve the participation of the contractor's site management representatives, supervisory personnel and technical experts. An attendance register must be completed and retained for reference purpose. The Baseline Risk Assessment must be reviewed and approved by the Project CHSO and Project Construction Manager.

When carrying out a Baseline Risk Assessment or a Task-Based Risk Assessment, Hazard (Energy) Types must be specified. Risk scenarios must be described indicating the manner in which a person may come into contact with, or be exposed to, a specific hazard.

An initial risk rating must be assigned to each risk scenario without taking any control measures into consideration. Control measures for managing the risks to levels that are as low as is reasonably practicable must then be identified for implementation on the project, and a residual risk rating must be assigned to each risk scenario taking the identified control measures into consideration.

A Risk Register comprising of all significant risks (i.e. Risks rated as major or catastrophic) identified for the project will be compiled using the information contained in the project Baseline Risk Assessment as well as the contractor's Baseline Risk Assessment. Key control measures for managing each of these risks will be specified in the register.

For the significant risks in particular, action plans will be developed for reducing the risk levels (where possible).

The project Risk Register will be reviewed and, if necessary, updated:

- On a quarterly basis during construction;
- When changes are made to a design and / or the construction scope, schedule, methods, etc. That result in a change to the risk profile; and
- Following an incident.
- Project risk monitoring and review plan must be retained by the contractor and any subcontractor on site.

The Principal Contractor must ensure that the hazards, risk scenarios and control measures identified in the contractor's Baseline and Task-Based Risk Assessments are taken into consideration when developing, implementing and maintaining the various elements of the contractor's health and safety management system for the project (e.g. Competence, training and awareness requirements).

All persons potentially affected must be made aware of the hazards, risk scenarios and control measures identified in the contractor's risk assessments. This must be done through training, Toolbox Talks, and Daily Safe Task Instructions.

### **Task-Based Risk Assessments**

The Principal Contractor must carry out detailed project-specific Task-Based Risk Assessments which must be reviewed and approved by the Client's appointed CHSA and internally by the Principal Contractor's Project Construction Manager prior to the commencement of any work.

The risk assessment process must be facilitated by a competent person who has been appointed in writing in terms CR 9 sub regulation (1). The contractor's site management representatives, supervisory personnel, technical experts (as required) and workforce personnel directly involved with the task being examined must participate in the risk assessment process. An attendance register must be completed and retained.

**Please Note:** Under no circumstances may a Contractor's Health and Safety Officer perform a risk assessment in on his/ her own. The active participation of all persons referred to above is mandatory, a risk assessment team must conduct the risk assessment.

A Task-Based Risk Assessment must at least:

- Be accompanied by a Work Method Statement (describing in sufficient detail how the specific job or task is to be performed in a logical and sequential manner);
- Provide a breakdown of the job or task into specific steps;
- Identify the hazards and potential risk scenarios associated with each step;
- Include consideration of possible exposure to noise, heat, dust, fumes, vapours, gases, chemicals, radiation, vibration, ergonomic stressors, or any other occupational health hazard or stressor;
- Describe the control measures that will be implemented to ensure that the risks are managed to levels that are as low as is reasonably practicable; and
- Assign an initial risk rating (without taking any control measures into consideration) and a residual risk rating (taking the identified control measures into consideration) to each risk scenario.

A Task-Based Risk Assessment must be reviewed and, if necessary, updated:

- On an annual basis (as a minimum);
- When changes are made to the associated Work Method Statement; and
- Where there are changes to the project scope.
- Where there are design changes.
- Introduction of new equipment.
- Introduction of new personnel.
- Introduction of new material.
- Following an incident.
- Whenever the need arises based on the progress of the project.

The Principal Contractor and all the other contractors are advised to align the Task Based Risk assessment to the tasks as outlined in the Project Programme of works for their specific project scope of work. The following is a guide in terms of tasks and equipment that require risk assessment:

- **Site establishment**
- **Setting out of works**
- **Accommodation of traffic**
- **Excavation of trenches**
- **Installation of bedding, compaction and backfilling**

- **Installation of stormwater management system**
- **Road construction**
- **Installation of road signage and road markings**
- **Construction of sidewalks, paving and other**
- **Site De-establishment**
- **Maintenance of the work during the construction and subsequent liability periods**
- **Any other specific tasks as part of the project works.**

***It remains the responsibility of the Principal Contractor and all the other contractors in the project to ensure that the risk assessment is aligned and relevant to their scope of work.***

#### **Pre-Task Hazard Assessments (Daily Safety Task Instruction- DSTI)**

A pre-task hazard assessment (Daily Safety Task Instruction- DSTI) must be completed before conducting any task on site and whenever a change is identified while carrying out an activity. Any deviation from what was discussed during the Daily Safety Task Instruction (prior to the activity commencing), or anything that was not discussed, constitutes a change.

Before carrying out the particular task that involves the identified change, a few minutes must be spent identifying the hazards and risks associated with that task as well as suitable control measures.

#### **5.3.2.3 CONTRACTOR HEALTH AND SAFETY PLANS**

The Principal Contractor must prepare, implement and maintain a project-specific Health and Safety Management Plan. The plan must adhere to the requirements of the SHE specification, aligned to the project risk assessment and comply with relevant/applicable legislation. It must cover all activities that will be undertaken as part of the Project from project inception, site mobilisation, project implementation right upto decommissioning.

The plan must demonstrate the Principal Contractor 's commitment to health and safety and must, as a minimum, include the following:

- A copy of the contractor's **Health and Safety Policy**; in terms of the OHS Act section 7
- Procedures concerning **Hazard Identification and Risk Assessment**, including both Baseline and Task-Based Risk Assessments;
- Arrangements concerning the identification of applicable Legal and Other Requirements, measures to ensure compliance with these requirements, and measures to ensure that this information is accessible to relevant personnel;
- Details concerning Health and Safety Objectives – a process must be in place for setting objectives (and developing associated action plans) to drive continual improvement;
- Details concerning Resources, Accountabilities and Responsibilities – this includes the assignment of specific health and safety responsibilities to individuals in accordance with legal or project requirements, including the appointment of a Project Manager, Health and Safety Officers, Supervisors, Health and Safety Representatives, and First Aiders;
- Details concerning Competence, Training and Awareness – a system must be in place to ensure that each employee is suitably trained and competent, and procedures must be in place for identifying training needs and providing the necessary training;
- Communication, Participation and Consultation arrangements concerning health and safety, including Safety Observations and Coaching, Toolbox Talks, Daily Safe Task Instructions, project health and safety meetings, and notice boards;
- Documentation and Document Control – project-specific documentation required for the effective management of health and safety on the project must be developed and maintained, and processes must be in place for the control of these documents;
- Processes and procedures for maintaining Operational Control, including rules and requirements (typically contained in Safe Work Procedures) for effectively managing health and safety risks, particularly critical risks associated with working at heights, confined spaces, mobile equipment and light vehicles, lifting operations, hazardous chemical substances, etc.;
- Emergency Preparedness and Response procedures;
- Fall protection planning

- Management of Change – a process must be in place to ensure that health and safety risks are considered before changes are implemented;
- Sub-contractor Alignment procedures – a process must be in place for the assessment of sub-contractors and suppliers with regard to health and safety requirements and performance (before any contract or purchase order is awarded);
- Measuring and Monitoring plans, including a plan for the measuring and monitoring of employee exposure to hazardous substances or agents (e.g. Noise, dust, etc.) In order to determine the effectiveness of control measures;
- Incident Reporting and Investigation procedures describing the protocols to be followed with regard to incident reporting, recording, investigation and analysis;
- Non-conformance and Action Management procedures concerning the management of corrective actions;
- Performance Assessment and Auditing procedures concerning health and safety performance reporting, monthly internal audits to assess compliance with the project health and safety requirements, and daily site health and safety inspections; and
- Details concerning the Management Review process followed to assess the effectiveness of health and safety management efforts.

Once the plan has been reviewed, the Principal Contractor must action and resolve any outstanding issues within 7 days from the start of work.

If the issues requiring corrective action are not resolved within this 7-day period, the Principal Contractor shall submit an action plan with relevant commitment dates.

Any proposed amendments or revisions to the Principal Contractor 's Health and Safety Management Plan must be submitted and approved by the client's appointed CHSA.

Should it be identified that the contractor has overlooked a high-risk activity, and as a result has omitted the activity and associated control measures from the Health and Safety Management Plan, the plan will not be approved. The Principal Contractor shall be advised to review the Health and Safety Management Plan incorporating the omissions as identified before approval by the CHSA.

#### **5.3.2.4 H & S POLICY**

The Principal Contractor must develop, display, communicate and implement a Health and Safety Policy that clearly states the Principal Contractor 's values and objectives for the effective management of health and safety as required by OHS Act of 1993, 7(3). These values and objectives must be endorsed by the contractor 's management representative (ideally the Chief Executive Officer) and must be consistent with those adopted for the project.

The policy must be signed and dated, and must be reviewed annually. The policy must commit to:

- Compliance with all applicable legal requirements;
- The effective management of health and safety risks;
- Risk based approach to project tasks
- The establishment of measurable objectives for improving performance, and the provision of the necessary resources to meet these objectives;
- The prevention of incidents; and
- Achieving continual improvement with regard to health and safety performance.

All employees of the Principal Contractor as well as the employees of any sub-contractors that may be appointed by the Principal Contractor must be made aware of the policy. This must be done through Health and Safety Induction Training and Toolbox Talks. A copy of the policy must be displayed in each meeting room and on each notice board. The copy of the health and safety (environmental policy) must be available for interested and affected parties.

#### **5.3.2.5 LEGISLATIVE REQUIREMENTS AND SITE-SPECIFIC REQUIREMENTS**

The Principal Contractor must comply with the requirements of all applicable health, safety and environmental legislation as well as any other project-specific standards, relevant codes of practice and procedures as issued by the client.

The Principal Contractor must compile and maintain a register of all legal and other (standards, specifications, codes of practice and municipal by laws) requirements relevant to the project. This register must be updated regularly to ensure relevance.

Applicable laws and standards must be appropriately communicated to all employees of the contractor (as well as the employees of any sub-contractors that may be appointed by the contractor) through training, Toolbox Talks, and Daily Safety Task Instructions.

### 5.3.2.6 OHS GOALS AND OBJECTIVES & ARRANGEMENTS FOR MONITORING AND REVIEW OF OHS PERFORMANCE

The Principal Contractor and all the other contractors are required to maintain zero man-days lost. The contractor will report man-days lost to the client on a monthly basis.

$$\text{LTIR} = \frac{(\text{Number of Lost Time Injuries}) \times 200\,000}{\text{Total Number of Man-hours Worked Over Period for the Construction Project}}$$

**Lost-Time Injury (LTI):** A work-related injury or illness resulting in unfitness or absence from normal work activities and the employee's absence is calculated from the time of the incident / accident. Lost-Time Injuries include injuries / accidents where an employee is placed on light-duty or any other duty for which he/she is not normally employed as a result of an accident / injury.

The Principal Contractor shall establish health and safety objectives and targets and come up with ways of measuring performance with regards to achieving the set objectives. Progress towards the set objectives must be discussed during toolbox talks, safety meetings and ad hoc meetings. A system to report on SHE performance must be put in place by the Principal Contractor.

### 5.3.2.7 TRAINING, COMPETENCE AND INFORMATION

#### (i) General Induction Training

All Principal Contractor and sub-contractor employees shall receive induction training based on the entire safety management system for the project. All project employees inducted, must be in possession of proof of induction. No employee must commence with any site activities without receiving induction training and proof thereof. All subcontractor employees must be inducted before proceeding to site. A programme to induct visitors must also be put in place. No visitor shall proceed to site without being inducted.

#### (ii) Site/Job Specific Induction Training.

The Principal Contractor must compile a risk-based induction programme, this must be based on the hazards and risks identified on site. Site personnel must receive this induction as it is in context with project tasks. The principal contractor's employees and any other subcontractor employees must be in possession of proof of task specific induction training.

#### (iii) Other Training

The Principal Contractor must conduct training as stipulated by the Construction Regulations and other relevant regulations. Other training to be offered must be based on the Contractor's safety plan and as identified as a control in risk assessment. Other training shall include but not limited to the following:

- a) General induction training (Section 8 of the OHSACT- duty to inform).
- b) Site / task specific induction for employees and visitors (Section 8 & 9 OHSACT).
- c) OHS Representative Training (OHSACT Sect 18 (3)).
- d) Legal appointees training.
- e) Plant Operators, Light Driven Motor Vehicle drivers, Heavy Driven Vehicles drivers (Construction Regulation 23).
- f) Basic Fire Fighting (Environmental Regulations 9)
- g) Storekeeping methods and stacking storage (Construction Regulation 28).
- h) Emergency Coordination (Construction Regulation 29)
- i) Hazard identification and risk assessment (Construction Regulation 9).
- j) Use of power tools training
- k) Flagmen training

Any other training that is meant to mitigate an identified risk as an administrative control.

**(iv) Proof of Training**

Employees that are required to be trained according to the OHS Act, Construction Regulation and any other relevant legislation shall remain valid proof of training all the times.

**(v) Awareness & Promotion**

The Principal Contractor is required to create safety, health and environmental awareness for the duration of the project. This can be achieved through but not limited to the following:

- a) Use of SHE posters
- b) Use of SHE videos
- c) Toolbox talks
- d) SHE suggestion systems such as suggestion boxes
- e) Participating platforms such as SHE meetings.

**(vi) Competence**

The Principal Contractor shall ensure that all legally appointed personnel including subcontractor employees are competent to execute tasks assigned to them. Proof of competence shall be in the form of formal training and also on the job experience. Verification of proof of competence shall be through planned task observations and recommendations thereof.

Refresher training shall be conducted as and when required. Change in the risk profile of the tasks at hand may also necessitate refresher training for project personnel. Use of power tools such as the whacker, jack-hammer, grinding machines shall require formal training by a registered institution.

All training records shall be retained in the safety file for inspection.

### **5.3.2.8CONSULTATION, COMMUNICATION AND LIAISON**

The Principal Contractor shall maintain documented information detailing how to communicate, participate and consult with employees and external interested parties on issues of safety, health and environment.

Effective internal communication, participation and consultation is essential for the operation of the safety, health and environmental programme and the achievement of OH&S, Environment objectives. Methods of communication, participation and consultation with employees must be incorporated into all the Procedures and Work Instructions to promote interaction between all relevant levels. Individual and group responsibilities must be defined for recording, reporting and sharing of data and information. Monthly and Quarterly, Health & Safety and Environment Meetings must be held to maintain safety management system in place so as to reduce risk to health, safety and environment.

Effective communication and consultation with external interested parties is a vital component of maintaining a positive working relationship with legal regulators, customers, contractors, OH&S and Environmental interest groups.

A pro-active approach must be taken by communicating and consulting with staff in setting objectives and targets for SHE performance improvement.

The Principal Contractor must ensure that, SHE Procedures and method statements must describe the information and data to be recorded and communicated for effective operation of the SHE management System.

All personnel in the project or through a representative (Supervisor) must be:

- Involved (take part) with the development and review of Safe Work Procedures related to the hazards of their activities/area.
- Consulted with regard to changes that affect their health and safety, and the environment.
- Represented on OH&S matters by their Safety Representative.
- Informed who their Safety Representative and OH&S and or any other safety appointee are by means of notices on the notice boards.



The Principal Contractor must ensure that Procedures that have a specific role in the formal communication system include:

- **Responsibility, Authority and Resources** informing all personnel of the structure, responsibility and resources for OH&S, Environmental. This assists with the understanding of the sources of OH&S, Environmental information and who should be advised of OH&S and Environmental.
- **Document Control** ensuring the communication of correct instructions to all personnel by defining and controlling the distribution of documentation of the OHS and Environmental System.
- **Procurement** communicating OH&S and Environmental expectations to individuals and organizations that provide products and services. Suppliers and contractors are expected to comply with OH&S and Environmental rules relating to the contractor's and subcontractor's policy and procedures when on site. The contractor must ensure that major suppliers carry out suitable OH&S and Environmental controls depending on the actual or potential OH&S and Environmental impacts of their products and services. This control also applies to any subcontractor on site.
- **Corrective Action** The contractor must identify problems arising from non-conformance incidents, accidents, emergencies and internal audits and communicating the causes, responsibilities and remedial action.
- **Internal Audits** The contractor must monitor the effective implementation of the SHE policies and procedures and communicating the results to all salient stakeholders in the project.

The Principal Contractor and any other subcontractor in the project must ensure that other specific communication methods that are used to capture and share information on OH&S and Environmental issues including:

- **Team Briefings** must be conducted to advise project personnel on current issues and to seek ideas and opinions. All relevant topics must be discussed. Frequency of team briefings shall be determined by the contractor and all the other subcontractors in the project.
- **Notice Boards** must be conspicuously displayed on site to advise personnel of the SHEQ Policies, performance and initiatives for OH&S and Environmental improvement.
- **Safety & Wellness program and 5-minute Safety Talks** shall include general OH&S and Environmental information and must aim to maintain a constant awareness of OH&S and Environment by all employees. It must include OH&S and Environment incidents and monthly OH&S and Environmental statistics.
- **External Communication of Significant Aspects** The contractor shall evaluate the identified significant aspects; determine which of these will have an influence outside of company boundaries. Such aspects must be communicated to the relevant interested and affected parties, both internally and externally.

External communication on significant aspects shall only take place provided the communication is related to a legal requirement.

- **After-Hours communications:**

The contractor shall ensure that after-hours communications are limited to emergencies and contact details for emergencies must be available on the notice board on the site's entrance gate.

- **A letter of notification** must be used to notify interested parties e.g.
  - Neighbouring companies
  - Department of Employment and Labour - Chief Inspector
  - Provincial Director
  - Emergency Services
  - Local Town Council.
  - The local community any other interested and affected parties

### 5.3.2.9 CHECKING AND REPORTING AND CORRECTIVE ACTION

#### Monthly Audit by Client (CR 5(1) o).

The client through the appointed CHSA shall monitor and ensure that contractor is implementing the safety plan in place by conducting monthly audits as per Construction Regulation 5 (1) o. The client reserves the right to appoint a competent person to conduct these audits, the CHSA in this case.

#### Other Audits and Inspections by Client

The client technical personnel including the appointed SHE personnel reserve the right to conduct scheduled site inspection. The Principal Contractor and any other subcontractor must ensure that a competent representative accompanies the team on any inspection conducted.

### Conducting an Audit

The Principal Contractor must ensure that he has an appointed representative to accompany the auditor, it is the responsibility of the Principal Contractor or any subcontractor to ensure that findings raised are closed within a reasonably practicable timeframe. The turnaround time for closing the findings shall be agreed between the CHSA and the Principal Contractor, this shall be based on the degree of risk with regards to the finding raised.

An action plan with commitment dates and resources required to close SHE legal compliance audit finding must be sent to the CHSA within 3 days after notification of the finding. The Principal Contractor must commit to adhere to commitment dates as outlined in the action plan.

All the OHS legal compliance audit findings must be addressed through a Request For Improvement (RFI) system that aims to identify and conclusively address the root cause so as to mitigate the probability of recurrence. The RFI form, shall form part of the annexures to the SHE specification. The CHSA shall conduct formal month SHE legal audits without any prior arrangement or formal notice to the Principal Contractor or contractors on site. Ad hoc inspections shall be conducted ongoing as measure for health and safety monitoring and control.

### Construction Regulations 5 (1) q Site works stoppages

***The CHSA has the authority as vested upon him by the client in line with CR 5 (1) q... 'stop any contractor from executing a construction activity which poses a threat to the health and safety of persons which is not in accordance with the client's health and safety specifications and the principal contractor's health and safety plan for the site'***

The CHSA shall conduct ad hoc OHS inspections and the outcomes shall also be incorporated to the monthly OHS legal compliance audit. The CHSA reserves the right to conduct OHS inspections and OHS legal compliance without any prior notification to the Principal Contractor. This is based on the premise that the project MUST be compliant all the times.

### OHS legal compliance audit rating

0 to 50% Fail	51 to 79% Not acceptable	80 to 89% Acceptable- improvements required	90 to 100% Desired
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***For any given period under review the Principal Contractor or any other contractor appointed on the project must aim to achieve the DESIRED OHS legal compliance audit score that is between the 90- 100% range. Where the PC achieves an audit score in the ranges of 0-50% & 51- 79% this shall give strong motivation for suspension of site works pending rectification of the OHS deviations raised.***

***In any month where there was temporary work stoppages based on OHS deficiencies by the Principal Contractor or any other appointed contractor, the OHS audit score for the month shall be categorised as unacceptable by default.***

### **Principal Contractor's Audits and Inspections**

The Principal Contractor shall conduct SHE monthly audits to measure performance of the SHE management system in place. Records of such audits and inspections must be retained in the safety file for record keeping and inspection. The appointed CHSO must engage Supervisor(s), the Construction Manager and other relevant personnel in terms of addressing the findings raised during the internal audit.

### **Inspections by OH&S Representative's and other Appointees**

The appointed SHE Rep shall conduct daily and weekly inspections to identify any situations that are a risk to health and safety within the project. Any deviations noted must be immediately reported to the Supervisor or the personnel responsible for the area.

### **Recording and Review of Inspection Results**

Records of formal inspections and audits must be filed and reviewed during SHE committee meetings, SHE meetings and during progress and technical meetings as held by the client.

### **Reporting of Inspection Results**

The principal contractor is required to formally present a monthly audit report to the client at the end of each respective month.

## **5.3.2.10 OPERATIONAL CONTROL**

### **5.3.2.10.1 Notification of Construction Work (CR 4).**

In the event that the contract meets the requirements of Construction Regulation 4, the contractor shall notify the Department of Labour 7 days before any construction works begins. The notification to the Department of Employment and Labour must be valid for the duration of the contract and retained in the safety file. The notification must be in the form of Annexure 2 of the Construction Regulations 4. The project triggers Notification of Construction Work with the Department of Employment and Labour.

Response 5.3.2.10.2 Emergency Preparedness (EP), Contingency Plan and  
(See 5.2.4 of the specification).

### **5.3.2.11 First Aid (See 5.2.4 of the Specifications)**

#### **5.3.2.11.1 Security**

All persons shall report to the Security Officer at the main site office before proceeding to site. Visitors shall sign a visitors' log book and read through the induction notes as detailed on the induction book. All visitors to be accompanied by an authorized person for inspections and other site related assignments.

All Security Personnel to be in good standing in terms of PSIRA. A habitable guardhouse should be provided for all security personnel.

#### **5.3.2.11.2 Provision for substance abuse on site**

The contractor must ensure that all personnel under his authority do not at any time enter the site or perform any work whilst under the influence of alcohol, a drug, or any other intoxicating substance. To this end, the Principal Contractor shall put in place an adequate substance abuse, alcohol and drug policy in place.

Selling or possessing drugs, alcoholic beverages or any other intoxicating substance on the site is strictly prohibited. This constitutes a dismissable offence and the SAPS shall be engaged whenever such behaviour is discovered on site.

A drugs and alcohol testing program will be implemented. Persons entering the site shall be daily/ randomly tested. Any person who tests positive for alcohol or drug consumption will be subject to disciplinary action and shall be permanently removed from the site.

Any person has the opportunity to rather report that he/she is under the influence before accessing the project site – in these case the employee may only be sent home for the day by the responsible Project Manager representative but will then be tested for the following five days (each day) on his return to the project site. If it is found that the same person is frequently reporting that he/she is under the influence before even accessing the project site, It shall be the responsibility of the nominated project management representative to take disciplinary action and remove such a person's from the project site.

Should the actions and / or demeanour of an employee suggest possible drunkenness, the employee must be removed from the site. This may be done without testing.

Note: All personnel involved in an incident / accident must immediately be subjected to an alcohol test and a drug test as part of the investigation.

#### **5.3.2.11.3 Excavation Work (CR 13)**

Prior to commencing work on any trench or excavation, the Contractor shall first submit a completed Excavation Method Statement and risk assessment to the Engineer or any appointed client's representative for approval. After reviewing the method statement, the Engineer or appointed client's representative shall sign and approve retain a copy and issue the signed original to the contractor. For all trenches or excavations over 7 meters deep, the contractor or any appointed subcontractor must have the sloping, shoring, or shielding method reviewed by a Licensed Professional Engineer (Excavation Technologist) of discipline. The design must be submitted to the Engineer as an attachment to the Excavation method statement.

The Principal Contractor shall ensure that a full sketch is provided as part of the method statement detailing the excavation and the location of underground services.

The Principal Contractor shall ensure that the requirements of the Employer's trenching and excavation procedure is complied with during activities. This will include the marking of the excavation boundaries, the location of all known services, performing a scan with a cable locator or Cable Avoidance Tool (CAT) by a trained individual, and also performing a physical evidence survey (ground trothing).

The Principal Contractor shall appoint a competent person to fill out the permit and monitor all trench and excavation work where required. Daily excavation inspections are also required to be performed and documented; an excavation Supervisor must be appointed to perform this function.

Adequate precautions shall be taken to prevent the collapse of excavations, as well as to prevent rocks and loose material falling onto workers. Sloping, shoring or shielding shall be provided for all excavations over 1.5 meters in depth. Angle of repose for project site shall not exceed 1:1 unless otherwise approved by a Licensed Professional Engineer of discipline and approved by the Engineer.

All excavations shall be clearly demarcated and securely barricaded to prevent unauthorised access. Only solid barricading will be used at areas where a fall hazard is present. Solid barricading such as fencing shall be provided by the Contractor around all holes or openings to prevent any person being injured as a result of a fall. Safety nets may only be used as a pre-warning to make the solid barricading more visible and to prevent persons from coming too close to the danger area.

If an excavation or trench endangers the stability of buildings or walls, shoring, bracing, or underpinning will be provided by the Contractor with prior approval from the Engineer. Excavations and trenches that are adjacent to backfilled excavations or trenches, or which are subject to vibrations from railroad traffic, road traffic, blasting or

the operation of machinery (e.g., shovels, cranes, trucks), must be secured by a support system, shield system or other protective systems (i.e., sheet pile shoring, bracing).

No backfill material shall be allowed to be within 1 meter of the excavation edges. All excavations shall be on a register and inspected daily (documented) before work commences and after inclement weather (e.g. rainfall) by an appointed competent person. When declared safe work can recommence and the findings recorded in the register. If the excavation is not safe to use, remedial action shall be taken before the work site is re-opened.

Deep excavations (6 meters) shall have an escape ladder for access/egress and use in emergencies. The contractor shall ensure that all precautionary measures as stipulated for confined spaces are determined. No work shall commence in an excavation unless the excavation has been declared safe by the competent person.

The Contractor shall conduct a cable scan using a device that can detect cables and other services. The Contractor shall ensure that the operator of the scanner is adequately trained and competent to use the device to its full capabilities with and without the use of a signal generator.

#### **5.3.2.11.4 Protection of Overhead & Underground Services**

The contractor shall ensure that a three-meter buffer zone is adhered to whenever working with close proximity to live overhead cables or adhere to compliance condition as stipulated by the service owner. A cable detector shall be used to sensor and identify any underground services. This shall be done in conjunction with the use of way-leaves as issued by the client. All the areas with underground services shall be marked, excavation in such areas shall be done with supervision from an appointed competent Excavation Supervisor.

It is the responsibility of the Principal Contractor to ensure that the wayleaves issued by each respective local authority are up to date. A register of wayleaves and expiry dates thereof must be retained by the contractor; expired wayleaves must be updated before the date of expiration. It remains the responsibility of the Principal Contractor make further effort and identify any other existing services within the project boundaries.

A safer buffer zone must be maintained for overhead services. In specific circumstances the Principal Contractor must ensure that where the relevant authorities are notified before working closer to specific services such as gas pipes.

It remains the responsibility of the Principal Contractor to ensure that wayleaves in place remain valid up to the completion of the project. Wayleaves conditions must be adhered to all the times. Where work require special permits for instance excavating on the road, the CHSO must ensure that approvals are in place from the relevant local authorities.

#### **5.3.2.11.5 Cranes and Lifting Equipment**

Lifting equipment must be designed and constructed in accordance with the manufactures/designers specifications as well as generally accepted technical standards and operated, used, inspected and maintained in accordance with the manufactures requirements as well as that of the of Driven Machinery Regulations promulgated in terms of the Occupational Health and Safety Act (Act no 85 of 1993):

The Driven Machinery Regulations requires that:

- Lifting equipment be clearly and conspicuously marked with the maximum mass load (MML) that it is designed to carry safely. When the MML varies with the conditions of use a table showing the maximum mass load with respect to every variable condition shall be posted up by the user in a conspicuous, place easily visible to the operator and the table shall be used by the driver/operator;
- Each winch on a lifting machine must at all time have, at least, three full turns of rope on the drum when the winch has been run to its lowest limit;
- Lifting equipment shall be fitted with a brake or other device capable of holding the MML. This brake or device shall automatically prevent the downward movement of the load when the lifting power is interrupted;

- Lifting equipment shall be fitted with a load limiting device that automatically arrest the lift when the load reaches its highest safe position or when the mass of the load is greater than the MML;
- Every chain or rope on a lifting machine that forms an integral part of the machine must have a factor of safety as prescribed by the manufacturer of the machine. Where no standard is available the factor of safety must be:
  - chains – 4 (four)
  - steel wire ropes - 5 (five)
  - fibre ropes- 10 (ten)
- Every hook or load attaching device must be designed to prevent the load from slipping off or disconnecting;
- Every lifting machine must be inspected and load tested by a competent person every time it has been dismantled and re-erected and every 12 months after that. The load test must be in accordance with the manufacturer's requirements or to 110% of the MML. In addition, all ropes, chains, hooks or other attaching devices, sheaves, brakes and safety devices forming an integral part of a lifting machine must be inspected every 3 months (quarterly) by a competent person;
- All maintenance, repairs, alterations and inspection results must be recorded in a log book and each lifting machine must have its own log book; and
- No person may be lifted by a lifting machine not designed for lifting persons unless in a cradle approved by the inspector of the Department of Labour.

#### General requirements for cranes and lifting equipment

All documentation must be provided to the client's appointed CHSA or appointed Project Engineer prior to mobilisation. Failure to do so and the resulting cost of any delays and/or remedial activities will be for the Contractor's account.

All crane operators must be authorised by the relevant Engineer before they may operate a crane or lifting machine. The Load charts must be displayed in the cab of the crane.

Daily pre-use inspections of the cranes must be done and be kept on the file. The inspections must be logged in a logbook. The area in which a lift is performed must always be barricaded to prevent employees from entering.

A crane or lifting machine must not be left unattended and the keys may never be left in the ignition when the operator is not present. Properly constructed out rigger pads must be used when soil is uneven or unstable. (Only sleepers or appropriately designed steel plate pads may be used for this purpose).

Only a competent rigger may direct a lift of any kind unless the following requirements are met. Rigger assistants used for performing lifting operations shall be limited to lifts with all of the following requirements:

- Lifts lower than 5 tons
- Easy lifts that do not require the load to be lifted over structures, equipment or machinery
- Equipment that is not critical
- Rigging configuration that requires the attachment of several parts of lifting equipment such as chain blocks to adjust the angle of loads.

All safety devices on a crane or lifting machine must be functional.

All personnel responsible for lifting operations shall be appropriately identifiable.

#### Cranes and Lifting Machines

A contractor must in addition to compliance with the Driven Machinery regulation, 1988 ensure that tower cranes are used-

- They are designed and erected under supervision of a competent person;
- A relevant risk assessment and method statement are developed and applied
- The effects of wind forces on the crane are taken into consideration and that a wind speed device is fitted that provides the operator with an audible warning when the wind speed exceeds the design engineer's specification;
- the bases for the tower cranes and tracks for rail-mounted tower cranes are firm, level and secured;
- the tower cranes operators are competent to carry out the work safely and;

- the tower crane operators have a medical certificate of fitness to work in such an environment, issued by an Occupational Health Practitioner in the form of Annexure 3

#### Crane Test Certificate

The Contractor's CHSO and the Responsible Engineer must inspect all cranes and lifting machines before they are brought onto the construction site.

Certification will be required for record purpose, and shall cover the following:

- A Brake or other device capable of holding the maximum mass should the power fail, or which is such that it shall automatically prevent the uncontrolled downward movement of the load when the raising effort is interrupted; and
- A limiting device which shall automatically arrest the driving effort when:
- the Hook or Load attachment point of the Power-Driven lifting machine reaches its highest safe position; and
- in the case of a Winch Operated lifting machine with a lifting capacity of 5000kg or more; the load is greater than the rated mass load of such machine.

No user shall use or permit any person to use a Jib-Crane with a lifting capacity of 5000kg or more at a minimum Jib radius, unless it is provided with:

A load indicator that shall indicate to the operator of the Jib-Crane the mass of the load being lifted, provided that such a device shall not require manual adjustment from the application of the load, to the Jib-Crane, until the release of the load.

A Limiting Device which shall automatically arrest the driving effort whenever the load being lifted is greater than the rated mass load of the Jib-Crane.

The user shall ensure that every lifting machine is operated by an Operator specifically trained for a particular type of lifting machine; the user shall not require or permit a person to operate such lifting machine unless the operator is in possession of a certificate of training, issued by an accredited person or organisation.

#### Acceptance of Cranes on Site

No Crane shall be used at arrival on site before copies of all documentation have been handed over to the Contractor's CHSO, or the CHSA or the appointed Resident Engineer and the Crane have been checked by a person dually authorised and signed off as acceptable. Copies of all documentation must be kept in the SHE File at all times.

No Crane shall be used without a pre-use check and findings entered on an approved checklist. Before any cranes are established on site the following must be inspected and approved:

- Operator's licences
- Training certificates
- Medical fitness certificate.
- The cranes load test certificate.
- Rope test certificates including Mill / Destructive test.
- The lifting gear load test certificates.
- The load limiting device calibration certificate.
- Proof that the hooks have been measured for spreading.
- The service inspection history.
- monthly comprehensive inspection certificate
- Operation and maintenance Manuals and crane condition.

#### Mobile Crane near Power Lines

No mobile cranes are to be used near overhead power lines until the client's Representative has been notified and provided safe access conditions and a valid permit to work is obtained. Mobile cranes shall be effectively earthed when working in the vicinity of electrical wires. Assume that all electrical equipment and wires are live and avoid them.

#### Lifting tackle

The following requirements will apply to lifting tackle:

- Manufactured of sound material, well-constructed and free from patent defects;
- Clearly and conspicuously marked with an identity number;
- MML factor of safety:
  - Natural fibre ropes - 10(ten)
  - Man-made fibre ropes and woven webbing - 06(six)
  - Steel wire ropes – single rope - 06(six)
  - Steel wire ropes – combination slings - 08(eight)
  - Mild Steel chains - 05(five)
  - High tensile/alloy steel chains - 04(four)
- Steel wire ropes must be examined by a competent person every three months and the results recorded in a designated log book. The ropes must be discarded (not used any further for lifting purposes) when wear and corrosion is evident.

Lifting equipment such as chain blocks and slings must be load tested every quarter by a registered Lifting Machinery Inspector.

#### Machine operators

The following requirements will apply to machine operators:

- Every lifting machine operator must be trained specifically for the type of lifting machine that he is operating.
- Operators of Jib cranes with a MML of 500 kg or more must be in possession of a certificate of training issued by a training provider accredited by The Department of Employment and Labour.

#### **Material hoists**

A contractor must ensure that every material hoist and its tower have been constructed in accordance with the generally accepted technical standards and are strong enough and free from defects. (2) A contractor must ensure that the tower of every material hoist is -:

- (a) Erected on firm foundations and secured to the structure or braced by steel wire guy ropes, and extends to a distance above the highest landing to allow a clear and unobstructed space of at least 900 millimetres for over travel;
- (b) Enclosed on all sides at the bottom, and at all floors where persons are at risk of being struck by moving parts of the hoist, except on the side or sides giving access to the material hoist, with walls or other effective means to a height of at least 2100 millimetres from the ground or floor level; and provided with a door or gate at least 2100 millimetres in height at each landing, and that door or gate must be kept closed except when the platform is at rest at such a landing.

A contractor must cause –

- (a) the platform of every material hoist to be designed in a manner that it safely contains the loads being conveyed and that the combined mass of the platform and the load do not exceed the designed lifting capacity of the hoist;
- (b) the hoisting rope of every material hoist which has a remote winch to be effectively protected from damage by any external cause to the portion of the hoisting rope between the winch and the tower of the hoist; and
- (c) every material hoist to be provided with an efficient brake capable of holding the platform with its maximum load in any position when power is not being supplied to the hoisting machinery.

No contractor may require or permit trucks, barrows or material to be conveyed on the platform of a material hoist and no person may so convey trucks, barrows or material unless those articles are secured or contained in a manner that displacement thereof cannot take place during movement.

A contractor must cause a notice, indicating the maximum mass load which may be carried at any one time and the prohibition of persons from riding on the platform of the material hoist, to be affixed around the base of the tower and at each landing.

A contractor of a material hoist may not require or permit any person to operate a hoist, unless the person is competent in the operation of that hoist.



No contractor may require or permit any person to ride on a material hoist

A contractor must ensure that every material hoist –

- (a) Inspected on daily basis by a competent person appointed in writing by the contractor and such competent person must have the experience pertaining to the erection and maintenance of material hoists or similar machinery;
- (b) Inspection contemplated in paragraph (a), includes the determination of the serviceability of the entire material hoist, including guides, ropes and their connections, drums, sheaves or pulleys and all safety devices; (c) Inspection results are entered and signed in a record book by a competent person, which book must be kept on the premises for that purpose;
- (d) Properly maintained and the maintenance records in this regard are kept on site.

#### **5.3.2.12 Construction Vehicles and Mobile Plant**

All vehicles brought to site must meet safety requirements. Each vehicle to be used on site must be inspected and approved by the client's representative before a site access permit will be issued for the vehicle / equipment. No vehicle shall be permitted to enter the site unless it is duly authorised. Access permits are vehicle-specific and may not be transferred between vehicles.

The contractor must allow any vehicle that is brought onto site (including privately owned vehicles) to be searched at any time while on the premises, or when entering or leaving the premises.

The Principal Contractor is solely responsible for the safety and security of all vehicles (including private vehicles) that is brought onto the site. All road-going vehicles used by the contractor on the site must be roadworthy and registered with the relevant traffic authority.

A vehicle will not be permitted to enter the site in an un-roadworthy condition. Access will be denied if, for example, but not limited to:

- The vehicle has a defective exhaust system;
- A serious oil or fuel leak is evident;
- The vehicle has unsafe bodywork or is carrying an unsafe load;
- The vehicle is fitted with extraneous or non-standard equipment;
- Passengers are not seated properly;
- The vehicle is not fitted with a seat belt for each occupant; or
- The vehicle has any obvious mechanical defect;
- Pre-inspection requirements are not met.

Overloaded vehicles will not be permitted to enter the site. The driver / operator of any vehicle / mobile equipment must carry a copy of his appointment with him at all times. Each driver / operator must:

- Comply with all site rules and regulations pertaining to traffic and the safe operation of vehicles / mobile equipment;
- Obey all road signs;
- Obey all instructions given by security or emergency services personnel;
- Remain within the boundaries of the site; and
- Ensure that the vehicle that he is operating is never overloaded, and that loads are always properly secured.

In the interest of safety, only the minimum number of vehicles required by the contractor to complete the work under the contract will be permitted to enter the site. When not in operation, the contractor's vehicles / mobile equipment must be parked within the boundaries of his lay- down area or yard.

Parking is only permitted in designated parking areas. All cars are parked on site at the owner's risk. In the event of a vehicle accident on site, the driver(s) must report the incident immediately and must remain at the scene until a nominated project management representative arrives, or until a nominated project management representative authorizes him to leave (unless, of course, the driver requires medical attention).

#### **Construction Plant**

- All plant must comply with the OHS and Regulations requirements in relation to operation and maintenance thereof.
- Records of service and maintenance of the vehicles must be of a high standard at all times.
- All plant shall subject to design be fitted with back-up alarms and audible indicating devices.
- The Principal Contractor/Contractor shall ensure that all construction plant's moving parts are adequately protected.
- Pre-start inspections shall be conducted on all motorised equipment daily; deviations of such inspections shall be recorded.
- Construction plant identified for use shall be operated by a trained and authorised operator only.
- All construction plant shall be operated under the direct supervision of a person competent to identify potential hazards in the work he is conducting.
- Work involving the use of construction plant shall be conducted in accordance with an approved Risk Assessment.
- The Principal Contractor/Contractor shall ensure all operators are equipped with the necessary PPE namely; safety shoes, overall, safety glasses, and gloves.
- All Plant shall be fitted with an extinguisher where practicable.
- Washing shall be conducted in the designated washing areas.

The Principal Contractor/Contractor shall ensure the all equipment moving to and from site is adequately secured, and that all Principal Contractor/Contractor abide by this requirement.

The Principal Contractor/Contractor must provide proof of medical and psychological fitness including training of all operators engaged in the construction activity.

#### **Transport of Personnel**

- Should it be necessary for the Principal Contractor/subcontractor to transport their personnel to site, only safe vehicular transport must be provided. This shall include proper seating, side restraints and cover. Seats shall be firmly secured and adequate for the number of employees to be carried.
- No personnel shall be permitted to travel on any plant or equipment on the site works.

Road safety principles shall be adhered to on and off site, this includes adherence to the Road Traffic Management Act.

#### **5.3.2.13 Electrical Installations (CR 24)**

The installation of temporary electrical installations shall comply with Construction Regulation 24 and the Electrical Installations Regulations.

The Principal contractor must ensure that the following are in place for all electrical installations:

- a) Existing services are located and marked before construction works commences, markings must be clearly visible also during the construction work.
- b) Suitable protective work must be provided to employees working with equipment such as jackhammers. Suitable personal protective equipment includes but not limited to the following: rubber mats, insulated handles, non-electricity conductor wear.
- c) Electrical equipment must be suitable for intended site works.
- d) Temporary electrical installations must be inspected at least once a week by an appointed Temporary Electrical Installations Inspector (competent). Records of such inspections must be retained in the safety file.
- e) All electrical equipment in use on site must be inspected before use by a competent (operator), such inspection records must be retained in the safety file.
- f) A Certificate of Conformance (CoC) must be issued by a competent person for all temporary electrical installations.

### 5.3.2.14

### Electrical and Mechanical Lockout

The Principal Contractor is mandated to develop a mechanical and electrical lock out procedure, which shall be submitted to the client for approval before any construction work commences. The Principal Contractor and any appointed subcontractor must adhere to the lock-out procedure in place.

### Flammables

### 5.3.2.15 Use and Storage of

Storage of fuel and other hazardous chemical substances on site shall be done upon prior approval in writing by the client or his nominated representative.

If the on-site storage of a fuel or a flammable liquid is approved, the contractor must ensure the following:

- The quantity of fuel / flammable liquid to be stored on site must be kept to the minimum that is required;
- Applicable by laws in terms of fuel storage on site are adhered to i.e. notification of relevant local authorities;
- The storage area must be located in a well-ventilated area at least 10 metres away from any building, drain, boundary or any combustible material;
- If more than 200 litres of fuel / flammable liquid is to be stored, the tank must be installed / the containers must be positioned within a bund;
- If the fuel / flammable liquid is to be stored in bulk tanks / vessels, then the minimum capacity of the bund must be 110% of the volume of the largest tank / vessel. If many small containers (e.g. 210 litre drums) are to be stored, the bund must be able to contain 25% of the total volume of the stored products;
- The bund must be impermeable. It must have a solid concrete floor and the walls must be constructed out of brick and must be plastered on the inside;
- The bund must be fitted with a lockable drain valve (for draining away rainwater), which must remain locked in the closed position. The valve may only be opened under supervision and in accordance with a written procedure;
- The fuel / flammable liquid storage area may not be used for the storage of any other materials / equipment, and must be kept completely free of all combustible materials (including rubbish, brush and long grass) at all times;
- Access to the storage area must be controlled (wire mesh fencing and gate);
- The contractor must ensure that appropriate warning signage (i.e. —Flammable Liquid, —No Smoking and —No Naked Flames) must be prominently displayed at the storage area. The contents and volume of each tank must be indicated;
- In order to contain spillages, the offloading / refuelling bay at the fuel / flammable liquid storage area must have a solid concrete base surrounded by bund walls, ramps or humps and / or spill trenches (covered with steel grating) that lead into a sump;
- Fuel dispensing pumps must be protected against impact damage;
- All fuel / flammable liquid storage tanks and dispensing equipment must be electrically bonded and properly earthed;
- All electrical installations and fittings must be of an approved intrinsically safe type;
- Two 9kg dry chemical powder fire extinguishers must be mounted in an easily accessible position near the entrance gate to the fuel / flammable liquid storage area. Depending on the size of the storage area, additional fire extinguishers may be required to ensure that an extinguisher is no further than 10 metres away from any point on the perimeter of the storage area;
- A fire extinguisher must be at hand wherever refuelling is carried out;
- Smoking or open flames within 5 metres of a fuel / flammable liquid storage / refuelling area is strictly prohibited;
- No petrol- or diesel-powered vehicle or equipment may be refuelled while the engine / motor is running;
- Cellular phones must be switched off in fuel / flammable liquid storage / refuelling areas;
- Spill clean-up kits (containing a suitable absorbent fibre product) must be provided;
- Any spillages must be cleaned up immediately and all contaminated cleaning materials must be disposed of in accordance with the applicable legislation;
- If a flammable liquid is spilt or is leaking from a container / vessel, the area must be cordoned off and appropriate warning signage must be displayed to keep unauthorized personnel away from the affected area. Every effort must be made to contain the spillage. All hot work in the vicinity must be stopped immediately. If the spilt product is volatile and the possibility exists that a vapour cloud may form, or if the leak or spillage cannot be contained or stopped, then appropriate emergency response procedures must be activated, including the evacuation of all

persons in the vicinity. Suitable firefighting equipment must be positioned ready for use should the spilt product ignite;

- The manual decanting of fuel or a flammable liquid from a large container should only be done using a stirrup pump (or similar) or a purpose-made frame which allows the container/ drum to tilt for decanting and then return to the upright position;
- Drip trays must be used wherever required;
- All tanks, drums, cans, etc. containing flammable liquids must be tightly closed and properly sealed except for when a container is being filled or when a product is being decanted;
- The transport or storage of corrosive or flammable liquids in open containers is strictly prohibited;
- Daily-use quantities of fuel (up to a maximum of 20 litres) must be handled in an approved safety can with a flash arresting screen, spring closing lid and spout cover that will safely relieve internal pressure if the can is exposed to fire;
- Where safety cans may be impracticable, only approved metal containers with screw caps may be used. Each container must be clearly labelled to indicate its contents;
- Only small quantities of flammable liquids (paints, solvents, etc.) may be stored within a building. Each product must be kept either in its original container or in an approved container which must be properly sealed. Each container must be clearly labelled to indicate its contents. When not in use, all such containers must be stored in a well-ventilated steel cabinet which must be kept locked to prevent unauthorized access;
- Not even small quantities of flammable liquids may be stored or dispensed in buildings or places of public assembly, in general warehouses, or in buildings containing sources of ignition such as space heaters, cooking devices, open electric motors, motor vehicles, or where welding, cutting, or grinding activities are being carried out;
- Safe Work Procedures must be compiled for the transportation (including delivery), offloading, storage, handling and use of any fuel / flammable liquid on site;
- All personnel that will be required to work with or may come into contact with a flammable liquid must be made aware of the hazards associated with the product and must be thoroughly trained in the safe transportation, use, handling and storage thereof.

#### **5.3.2.16 Housekeeping (CR27)**

The Principal Contractor must maintain a high degree of tiredness in all work areas free of debris and any other unwanted rubbish. Unless directed otherwise, the contractor must dispose of all debris, rubbish, spoil and hazardous waste off site in a designated and authorized area or facility. The contractor must familiarize himself with the waste management plan for the site including collection and disposal arrangements, and must align his waste management activities accordingly. Proof of waste disposal must be retained by the contractor.

In cases where an inadequate standard of housekeeping has developed and compromised safety and cleanliness, a nominated project management representative may instruct the contractor to stop work until the area has been tidied up and made safe. Neither additional costs nor contract deadline extensions will be allowed as a result of such a stoppage. Failure to comply will result in a clean-up being arranged through another service provider at the cost of the non-complying contractor.

The Principal Contractor must carry out housekeeping inspections on a weekly basis to ensure maintenance of satisfactory standards. The contractor must document the results of each inspection. These records must be retained in the safety file.

The contractor must implement a housekeeping plan for the duration of the contract ensuring that the site housekeeping is maintained. Furthermore, at the end of every shift, the contractor must ensure that all work areas are cleaned, all tools and equipment are properly stored, and construction rubble is removed.

Where the contractor fails to maintain housekeeping standards, the client representative may instruct the contractor to appoint a dedicated housekeeping team for the duration of the project at the contractor's expense. Littering is prohibited.

#### **5.3.2.17 Stacking and Storage (CR 28)**

The Principal Contractor and any other subcontractor must ensure that all stacking is supervised by a competent person appointed in writing. Clearly defined and allocated storage areas are to be provided and identified. All

materials being stored within these areas are to be stacked in accordance with the sound stacking principles of sort-by-sort. Storage areas are to be level and access through them is to be maintained. The height to which material is stacked shall not exceed three times the base width.

The PC and other contractor must avoid stacking of materials such as kerbs and other on the actual construction site where these introduce a secondary risk of injury to the public. Where materials are stored on site e.g. stormwater pipes adequate protection measures must be in place such as use of a physical barricade or fence to protect stacked material and stormwater pipes. Relevant signage and reflecting netting must be used to compliment the physical barricade. Public protection remains key in relation to the stacking and storage of material on site.

#### **5.3.2.18 Storage of Hazardous Chemicals (including flammables)**

(See 5.3.1.3.13 above)

#### **5.3.2.19 Fire Prevention and Protection (CR 29)**

The Principal Contractor must compile a Fire Protection and Prevention Plan for the work that will be carried out on site where a fire hazard has been identified.

The Principal Contractor must assess his area of responsibility and identify locations where the risk of fire is high. It is noteworthy that certain locations may need to be designated as high risk due to the presence of large quantities of flammable or combustible materials / substances. For all high-risk areas, the contractor must ensure that additional precautions are taken to prevent fires and strict control is exercised over any hot work (i.e. welding, cutting, grinding, etc.) that is carried out.

The contractor must supply and maintain all required fire-fighting equipment. The type, capacity, positioning, and number of fire-fighting appliances must be to the satisfaction of the appointed client's representative and must meet the requirements of the applicable legislation. Fire mains, hydrants and hose reels will rarely be available on site, so use must primarily be made of portable fire extinguishers.

Fire-fighting equipment, fixed and portable, must be strategically located such that they are easy to use to bring potentially dangerous and destructive fires under control without causing significant damage.

All fire extinguishers (and any other fire-fighting equipment) placed on site must be:

- Conspicuously numbered;
- Recorded in a register;
- Visually inspected by a competent person on a monthly basis (the results of each inspection must be recorded in the register and the competent person must sign off on the entries made);
- Inspected and serviced by an accredited service provider every year (the appointed client representative may require that this frequency be increased depending on the environmental conditions (e.g. high dust levels, water, heat, etc.) to which the fire extinguishers are exposed).

Any fire extinguisher that has a broken seal, has depressurised, or shows any sign of damage must be sent to an accredited service provider for repair and / or recharging. Details must be recorded in the register. Fire-fighting equipment may not be used for any purpose other than fighting fires.

Access to fire-fighting equipment, fixed or portable, must be kept unobstructed at all times. Approved signage must be in place to clearly indicate the location of each permanently mounted fire extinguisher, fire hose reel, etc.

The contractor must ensure that all persons working in / entering his area of responsibility are made aware of where all fire-fighting appliances and alarm points are located. The contractor must ensure that his employees (and those of any appointed sub-contractors) are trained in fire-fighting procedures and the use of fire-fighting equipment.

The contractor must compile an emergency response procedure detailing the actions that must be taken in the event of a fire or a fire / evacuation alarm. All personnel working within the contractor's area of responsibility must be trained, and all visitors must be instructed, on this procedure. Copies of the procedure must be prominently displayed in the workplace in all languages commonly used on the site.

Used fire extinguishers must be replaced by the contractor without delay.

No hot work (i.e. welding, cutting, grinding, etc.) or any other activity that could give rise to a fire may be performed outside of a designated area without a Permit to Work having been issued.

At the end of every working period (i.e. before each tea / lunch break and at the end of every shift / day), the workplace must be thoroughly inspected to ensure that no material is left smouldering and no condition / situation exists that could give rise to a fire.

The Principal Contractor must ensure that all Supervisors and all employees carrying out or assisting with any hot work or any other activity that could give rise to a fire have been trained in fire-fighting procedures and the use of fire-fighting equipment. The training must be conducted by an accredited training provider.

When using electrical equipment, all cables must be in good condition and the nearest convenient socket must be used. No power socket may be loaded beyond its rated capacity through the use of adaptors, etc. Makeshift electrical connections are not permitted under any circumstances. Water-based fire-fighting equipment must not be used on electrical equipment or burning liquids.

Each vehicle used on site for work purposes and each item of mobile equipment with a diesel or petrol engine must be fitted with a permanently mounted fire extinguisher. Smoking is only permitted in designated smoking areas. Cigarette ends / butts must be properly stubbed out in the ashtrays provided and never thrown into waste bins.

The contractor must ensure that good housekeeping practices are enforced, as this is crucial to the prevention of fires.

All combustible waste materials must be removed from the workplace on a daily basis (at the end of each shift) and placed in waste receptacles located at least 5 metres away from any structure. The accumulation of waste materials in out-of-the-way places is prohibited. Offices, desks, cabinets, etc. must always be kept tidy and uncluttered. Waste paper bins must be emptied regularly.

The storage of combustible materials under stairways or in attics is prohibited. The storage of any materials against the exterior of a building or any other structure is prohibited. All walkways, passages and stairways must be kept clear (i.e. must be unobstructed) at all times, as they may need to be used as a means of escape.

The areas around and the routes to all exits, fire escape doors, fire hydrants, fire hose reels and fire extinguishers must be kept clear (i.e. must be unobstructed) at all times. "No Smoking" signs must be conspicuously displayed in and around all storage areas / rooms. Waste may not be burned under any circumstances.

No flammable liquid (such as petrol, acetone, alcohol, benzene, etc.) may be used for starting fires or as a solvent for cleaning clothes, tools, equipment, etc. Only solvents approved by the nominated project management representative may be used for cleaning purposes.

Whenever any work is carried out involving the use of a flammable substance / material, the area must be cordoned off and appropriate warning signage (i.e. —No Unauthorized Entry, —No Smoking and —No Naked Flames) must be displayed.

#### **5.3.2.2 Eating, Changing, Washing and Toilet Facilities (CR 30)**

As a minimum requirement the following will apply:

a) Toilets

The National Building Regulations and Construction Regulations 30 stipulates that a contractor must provide toilets to his staff. The contractor must provide chemical toilets to a ratio of 1:30 on site.

The contractor must commit with the toilet supplier a service schedule that must adhered to all the times between the toilet supplier and the contractor. Records of service must be retained in the SHE file for inspection.

b) Showers

If permissible, cold showers must be provided to employees at a ratio of 1 shower per 15 workers.

c) Change rooms

Changing rooms must be provided for personnel in the project. Male and female changing rooms must be provided and must be kept tidy at all times.

d) Eating Facility

A decent eating facility must be provided. Excessive heat, wind, cold and any inclement weather must be considered when establishing an eating facility for employees. The facility must be located away from workplace activities that might introduce risk to health.

e) Living accommodation

There is no living or accommodation on site.

### 5.3.2.21 PPE (See 5.2.1 of the specifications)

#### 5.3.2.21.1 Portable Electrical Tools and Equipment

##### Machinery, Tools and Equipment

The Principal Contractor shall ensure that all machinery, tools and equipment are identified, safe to be used and maintained in a safe condition. All tools and equipment must be allocated a unique identifier.

Power tools like the compactor will be selected with the ergonomics of the operator taken into account. The machine will be fitted with an automatic stop device should the operator lose control.

All machines driven by means of belts, gear wheels, chains and couplings shall be adequately guarded. A machine is guarded when persons cannot gain access to the moving parts. The Contractor shall maintain an inventory list for all machinery, tools and equipment on site.

All machinery, tools and equipment shall be regularly inspected at least monthly or as required by legislation and risk assessments. A registers of tools shall be kept on the health and safety file.

All machinery, tools and equipment must have the necessary approved test or calibration documentation where applicable prior to being brought onto the premises.

The client's representative (CHSA) reserves the right to inspect equipment and plant brought to the project site (and at other places, if any, as may be specified under the contract as forming part of the Site) by the Contractor for use on the project. Should any item be found to be inadequate, faulty, unsafe or in any other way unsuitable for the safe or satisfactory execution of the work for which it is intended, the contractor or subcontractor shall be advised in writing and shall remove the item from the site and replace it with a safe and adequate substitute. In such cases, the contractor or subcontractor shall not be entitled to extra payments or extensions of time in respect of delay caused by these instructions.

***All Principal Contractor's and subcontractor personnel must receive formal training and be declared competent for use of power tools and potable electrical equipment. No employee shall use portable electrical equipment and power tools in the absence of formal training by an accredited institution.***

##### Portable Lights

- a) Must be fitted with a robust non-hygroscopic non electricity conducting handle.
- b) Live metal parts which may become live must be protected against contact.
- c) The lamp must be protected by a strong guard.
- d) The cable lead in must withstand rough handling.
- e) A register for each light must be retained and inspection thereof.
- f) When used in wet/damp/metal container conditions, it must be protected the same manner as portable electrical tools as stated above.

### 5.3.2.22 Public Health and Safety

**It is the duty of the Principal Contractor and all the other contractors to ensure that non employees are equally protected from the project hazards and concomitant risks. This includes non-employees that are located further**

**away from the project site, this is said considering the trans-boundary nature of other occupational stressors such as construction dust. Typical vulnerable population group include the following:**

- Non- employees entering the site for whatever reason;
- The surrounding community.
- School children within the project footprint.
- Businesses that are within the project footprint.
- Residents that are within the project footprint.
- Passers-by the site.
- Any other persons that maybe affected by the project works.

Appropriate signage must be posted to this effect and all employees on site must be instructed to ensure that non-employees are protected at all times. All non-employees entering the site must receive induction into the hazards and risks of the project and the control measures to be observed. The Principal Contractor should make efforts to identify the project site boundaries areas such as borrow pits and ensure that adequate measures are in place to protect the public especially in the absence of the Principal Contractor after working hours.

Access to residents' houses should be considered during excavation works, temporary access ramps should be put in place to ensure safe access. A suitable and sufficient risk assessment should accompany the installation of temporary access ramps such as load bearing aspects are considered.

Spectator value should be factored where heavy plant and equipment are at work. Children and some adults are fascinated by the various construction works and other equipment such as crane works, Excavator, the Grader, tipper trucks and many. It is a common occurrence that people watch such heavy plant and machinery executing project tasks. The PC must ensure that there is a safe buffer zone for anyone watching such construction works. The objective is to use a physical barricade with dust proof netting to protect t the project works especially where there are deep excavations. A designated person must be appointed to ensure that any persons watching construction works is further away from the construction activities such that the risk of harm as a result of the execution of project tasks is reduced to as low as reasonably practicable. All Plant Operators shall be given induction such that there are aware of the movement of public within the construction footprint. Appropriate NO TRESSPASSING signage shall also be used to restrict the public from trespassing into the project high risk areas. Designated personnel must be appointed to ensure public health and safety in relation to the various construction works.

Airborne dust is a significant occupational stressor that is transboundary and may easily affect the adjacent community resulting in short-term and chronic respiratory illness. The PC must put in place dust control programme (wet method) such that it is consistently implemented for the duration of the project. Excavation works; movement of plant, backfilling and compaction works are bound to generate clouds of airborne dust. The dust suppression programme should be spearheaded by an appointed person. The PC should ensure that water used for dust suppression does not introduce secondary health risk to the community.

The laying of stormwater pipes is characterised by deep excavations to various depths. The PC must develop and submit an excavation and laying of stormwater pipes method statement to the approval of the client's representative. Ideally the method statement should consider the length and duration of open excavations. The PC must ensure that excavations are done where pipes are set to be lain and backfilling must ensue such that the area is 'closed' at the end of the work shift. The PC should avoid instances whereby lengthy trenches are opened without laying the pipes and consequent backfilling. The method statement should consider the following: open, lay backfill material, lay the pipes after the necessary tests and backfill. Only small areas of trenches should be left open, where these are left open a physical barricade (speed fence or equivalent) including reflective barricade netting should be used.

The PC shall ensure that safe pedestrian walkways are in place for use by the public. The construction works are likely to temper or affect the original pedestrian walkways within the construction footprint. Pedestrian walkways should be clutter free and consider motor vehicle movement. The risk of harm in relation to the use of the designated pedestrian walkways should be reduced to as low as reasonably practicable

**Awareness creation in relation to project works**



The PC shall put measures in place meant to create awareness within the community in respect of the project construction works and the inherent construction hazards and risks and mitigation thereof. The PC must consider using public platforms such as community forums held from time to time to formally introduce the project and the anticipated inconveniences as a result of project works. Flyers should also be used to disseminate information with regards to the project mainly focusing on business and residents where project disturbances are expected to be significant. The CLO is strategically positioned to formally introduce the project to the community also detailing the basic health and safety aspects that the community should be cognisant of. The appointed CHSO and the CLO should target schools such that information regarding the common project risks and mitigation measures is communicated to school children.

#### **5.3.2.23 Protecting the Environment**

It is a legal and moral obligation to ensure that the environment is protected from degradation as a result of project activities. The project must be executed within the realms of environmental sustainability and the project's ecological footprint must be reduced at all costs. It is the responsibility of the contractor to create environmental awareness through various initiatives such as environmental monthly workshops, environmental toolbox talks, and other environmental campaigns.

The project has various workplace hazards that includes but not limited to the following:

- a) Chemical (dust and vapours)
- b) Physical (heat, light, noise and radiation)
- c) Posture and motion (vibration and ergonomics)
- d) Biological (bacteria and viruses etc)
- e) Psychosocial (stress, bullying, and violence)

#### **Effective management of workplace health risks will assist the Employer to:**

- a) Maximize the productivity per employee as a result of improved well-being.
- b) Avoid illness as result of workplace exposures.
- c) Employee retention and consequently improved productivity.
- d) Good and positive company image, increased prospects of getting more work.
- e) Improved turnover and no income lost as result of standing time while investigating incidents.
- f) Improved personal relations amongst employees.
- g) Avoid prosecution and penalties.

#### **5.3.2.25 Transportation of employees**

Employees must not be transported with tools and equipment. Any bakkie or motor vehicle to be used on site for employee transport must be fitted with adequate seating facilities and restraint covers and must be approved by the client representative prior to be used on site. No persons shall be transported on construction plant and equipment. The contractor must develop a vehicle policy that must also incorporate the transporting of employees on site, to and from work.

#### **5.3.2.26 Sub-Contractors**

A detailed subcontractor list shall be retained on site by the principal contractor. Each subcontractor to be appointed formally and legally appointed using the CR 7 1 c v contractor and appointment and the Mandatary OHSACT Sect 37 (1) (2) agreement.

Each subcontractor shall be given that SHE specification and in turn must compile a safety plan that shall be approved by the Principal contractor. Each subcontractor to submit a detailed safety plan with all the necessary SHE procedures as identified by the respective risk assessment. The principal contractor to formally approve the Safety file.

All subcontractor employees to undergo induction before commencing with any site works. Each subcontractor must conduct his own induction (based on his scope of work) records of such to be retained in the safety file. It remains the responsibility of the Principal contractor to prescribe as to whether a full-time safety officer must be appointed by the subcontractor. This shall be based on the risk profile of the task at hand.

The Principal Contractor Safety Officer must audit the subcontractor on a monthly basis to ensure that the contractor is adhering to the safety management system in place.

#### **5.3.2.27 Traffic Management**

Traffic Management Plan should be developed and approved by the client's representative Resident Engineer. No open manhole in streets, lanes or any place where the public or other persons have access shall be left unguarded. The necessary road signs and speed limitation boards must also be in place. Any construction area must have all barricading requirements and a person assigned as flagman in every entrance to the site.

Appointed trained flagpersons should be available all the times. The placement of traffic accommodation equipment shall be in line with the traffic accommodation drawings as issued by the client's representative where applicable. It remains the prerogative of the Resident Engineer to request for a competent Traffic Safety Officer for the traffic accommodation aspects of the project.

#### **5.3.2.28 Handtools**

The contractor must inspect all hand tools before it is brought onto the site.

- As far as possible all hand tools must be numbered and placed on register to be inspected monthly by a person designated to do so.
- Any tools found to be in an unsafe condition must immediately be removed from service and either discarded or rectified.
- No chisels with "mushroomed" heads must be used.
- No hammer shall be used with a cracked or damaged handle.
- All files must be fitted with handles.
- All trolleys, pushcarts, etc. used on site must be identifiable, placed on register and inspected at least once every month.
- Non-sparking tools must be used in areas where the risk of fire or explosion is present.
- No home-made hand tools are allowed on the project.

#### **5.3.2.29 Barricading**

Barricading method statements are to be presented by the Principal Contractor for any major operations involving site works for approval by the client's appointed CHSA or Project Manager. Where areas are unsafe, they should be enclosed with barricading. Examples are Man at work, Narrow, Arrow etc. Where there is a risk of injury, the area should be barricaded off with secure solid barricades. The barricade must be constructed a minimum of 1,5m away from the hazard.

Barricading for the prevention of access into areas with a potential risk of injury shall as a minimum be constructed of a hand-rail, knee-rail and appropriately supported as to prevent any person from falling into the restricted/risk area.

All physical barricades shall be covered with netting ensuring visibility by personnel and operators of machinery.

Appropriate signage shall be affixed to the barricade indicating the hazard and risk associated (i.e. deep excavation, lifting operations etc.) and the responsible Supervisor and contact details shall be displayed. All barricading shall have a "No Entry" signs on all sides and at each change of direction. Signage shall be placed at 20 m intervals where lengths exceed. All signage shall be a minimum size of 290 mm x 290 mm.

Danger tape shall not be utilised to prevent personnel from entering into areas. Where no risk exists of injury to personnel such as stacking and storage areas, the use of wire shall be acceptable to demarcate the area.

All barricades will have a dedicated entrance where it is required that personnel enter the areas. Appropriate signage shall be placed at the entrance indicating which Contractor has right of entry.

It is the Contractor's responsibility to remove all redundant barricades directly after use. The Contractor's CHSO will maintain a marked-up site plan indicating where barricades are erected.

It will be a requirement that the contractor protects employees against contact with exposed rebar and poles by the installation of rebar-caps on all exposed areas where there is a potential that an employee could be injured.

#### **5.3.2.30 Blasting works**

The Principal contractor shall appoint a competent blaster for all the project scope of works that require blasting. The appointed blasting contractor shall submit a comprehensive OHS file with all the relevant risk based blasting procedures, blasting risk assessment, blasting permits and notifications required and other required relevant documentation. The Principal Contractor shall approve the appointed blasting contractor OHS file, and the file shall be maintained for the duration of the blasting project scope. All the relevant legislation in relation to blasting works shall be adhered to all the times.

#### **5.3.4 CRITICAL (SAFE) OPERATING CONTROL PROCEDURES (SWPS)**

**Procedures (but not limited) to the following activities shall be developed and implemented.**

- a) Site clearance;*
- b) Earthworks (Roads and subgrade)*
- c) Subbase*
- d) Asphalt base and surfacing*
- e) Road markings and road signage*
- f) Stormwater drainage excavation*
- g) Installation of stormwater pipes*
- h) Constriction of manhole and other relevant infrastructure*
- i) Construction of sidewalks*
- j) Segmented paving*
- k) Kerbing and channelling*
- l) Street furniture*
- m) Minor concrete works*
- n) Plumbing and drainage*
- o) Minor Electrical works*
- p) And other related civil works*
- q) Existing underground water, electricity and other Services*
- r) Use of ladders*
- s) Any other specific items or tasks relating to the construction work to be undertaken*

**PART C4: SITE INFORMATION**

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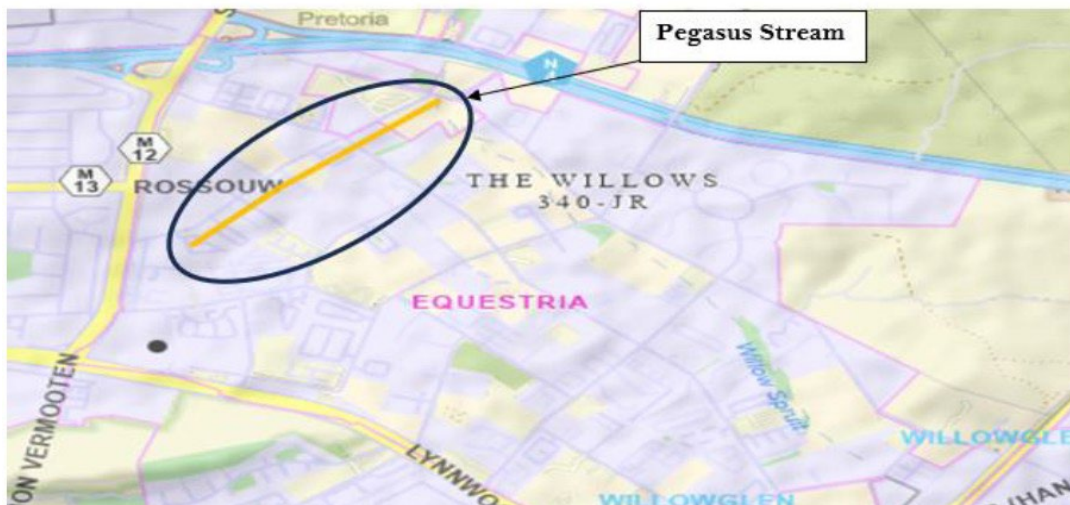
**C4.1 DESCRIPTION OF THE SITE AND SURROUNDINGS**

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#### C4.1.1 Locality

below is the locality map of the site:



#### Locality Map

#### C4.1.2 General Description of the Site

Pegasus Canal is located in the eastern part of the City of Tshwane under Region 6, in Equestria. The canal is a major stormwater system that drains the areas between the Bronberg mountain, parts of Die Wilgers and Equestria.

- Scope of work:
  - Construction of a 7-metre-wide reinforced concrete open canal with a total length of 700 metres.
  - Construction of two bridge culvert systems along Griffith Avenue and Furrow Road.
  - Construction and rehabilitation of embankments along canal route.
  - Construction of Stormwater pipelines and outlet structures.

#### C4.1.3 Site Conditions

##### C4.1.3.1 Topography

The topography of the area is gently sloping in a north easterly direction toward a watercourse to the North-East of the scope area. illustrate the topography of the area. The alignment of the stormwater canal is generally characterised by a gradient sloping in a north-easterly direction, with an average longitudinal slope ranging between 1.6% and 2.9%. The existing natural ground mean sea level along the route ranges from 1350m to 1334m at the end of the proposed canal.

##### C4.1.3.2 Site Geology

The subsurface horizons comprise topsoil, transported soil, reworked residual soil and residual soil. The material along the canal route is cohesive and may not be used for construction but may be used as a liner.

##### C4.1.3.3 Hydrology

The area faces hydrological challenges due to summer rainfall, leading to surface runoff, localized flooding, and a need for enhanced stormwater infrastructure.

Contract: RTD 11 2025/26: Tender for the appointment of a Contractor for the Upgrading of Pegasus Stormwater Canal in Equestria for a period of 12 months

Part C4: Site Information

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