



## REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS $\pm 0.6\text{KM}$

**SCMU8 – 25/26 – 0040**

<b>Directorate: Supply Chain Management</b> <b>Deputy Director: SCM</b> <b>Head Office</b> 1ST Floor, Indwe House Private Bag X 040 Bhisho 5600 Contact: Name: Mrs. S. Minya Telephone: 040 602 5263/ 079 505 9722 Email: nosibusiso.minya@ecagriculture.gov.za	<b>Directorate: Engineering Services</b> <b>Chief Engineer</b> <b>Head Office</b> Dohne ADI. Private Bag X 015 Stutterheim 4930 Contact: Name: Mr. S Kondlo Telephone: 063 693 0652 Email: Sonwabile.Kondlo@ecagriculture.gov.za
<b>Name of Tenderer</b> ..... .....	
<b>CSD Number:</b> .....	
<b>LOGIS Number:</b> .....	
<b>Preference Points Claimed:</b> .....	
<b>Closing date on tender:</b> <b>30 MAY2025</b> at 11:00	
<b>Total of the prices inclusive of applicable taxes: R</b> .....	

# **The Tender**

PROVINCE OF THE EASTERN CAPE

DEPARTMENT OF AGRICULTURE

TENDER NO: SCMU8 – 25/26 – 0040

REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ±0.6KM

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# **PART T1: TENDERING PROCEDURES**

**PROVINCE OF THE EASTERN CAPE  
DEPARTMENT OF AGRICULTURE**

**REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ±0.6KM  
T1.1 Tender Notice and Invitation to Tender**

1.	<p>The Department of Agriculture, Province of the Eastern Cape, invites tenders from experienced civil engineering Contractors for:</p> <p><b>Tender No. SCMU8– 25/26 – 0040</b></p> <p><b>REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ±0.6KM</b></p> <p>The construction works will include but not limited to the following:</p> <ul style="list-style-type: none"> <li>• REHABILITATION of existing 0.6km gravel roads to blacktop surfacing to a width of 5.5m, and associated pavement layers in accordance with the Drawings;.</li> <li>• Construction of a stormwater drainage system consisting of concrete pipes up to 900mm diameter;.</li> <li>• Construction of appurtenant works such as service ducts, kerbing, etc;.</li> <li>• Location and protection of existing services and relocation where necessary.</li> </ul> <p>Time of completion for this contract is <b>22 Weeks</b></p>
2.	<p>All tenderers must submit proof of valid registration with the CIDB in a <b>4CE</b> class of construction works: It is estimated that tenderers must have a CIDB designation of level <b>4 CE</b> or higher. Bidders exceeding their threshold of CIDB grading by more than <b>15%</b> in combination with any other contract awarded to the contractor, which will be executed simultaneously, could be regarded as non-responsive.</p>
3.	<p>Tender documents will be available during working hours after <b>08:00</b> as of <b>02 MAY 2025</b> until the day before the tenders close and can be downloaded free of charge from the Departmental website (<a href="http://www.drdar.gov.za">www.drdar.gov.za</a>) or <a href="https://etenders.treasury.gov.za/">https://etenders.treasury.gov.za/</a>.</p>
4.	<p>A compulsory site inspection and clarification meeting will be held on <b>14 May 2025 at 10:00 at Fort Cox College, Middledrift</b>. After the Clarification, meeting the prospective tenderers will be taken to the site to familiarize themselves with the conditions of the roads and site. No documents will be sold at the site inspection meeting. No late attendance will be entertained.</p>
5.	<p>The completed tender document and any supporting documentation shall be placed in a single sealed envelope clearly marked “<b>TENDER NO: SCMU8– 25/26 – 0040: REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ±0.6KM</b>” and deposited in the tender box at: <b>THE DEPARTMENT OF AGRICULTURE, SCM OFFICES 1ST FLOOR, INDWE HOUSE, BHISHO, 5600</b> not later than <b>11:00 on 30 May 2025</b> when the tender box will close.</p> <p>Tenderers should ensure that tender documents are delivered timeously to the correct address. If the tender is late, it will not be accepted for consideration.</p> <p>It is the responsibility of the tenderer/s to ensure that bid documents are submitted on or before closing time and the correct location as the department will not take responsibility of wrong delivery.</p> <p>Tenderers using courier services for delivery of their bid documents must ensure the delivery is at the correct place / location and time as the department will not be held responsible for wrong delivery.</p> <p>The Department will not accept responsibility if bids received by officials are not timely deposited in the Bid Box.</p>
6.	<p><b>Tenders will be opened in public immediately after closing time where the name of the tenderer, the financial offer, preference points claimed and proposed period for completion will be read aloud.</b></p>

7.	<b>All submitted certificates must be valid for 90 days after the Tender Closing Date.</b>																										
8.	In terms of Preferential Procurement Regulation of 2022, the 80/20 preference point system is applicable.																										
9.	<p>The Department is targeting specific goals in accordance to the Supply Chain Management Policy 2023 with reference to the Preferential Procurement Regulations 2022. The tenderers must submit verification documentation in proof of the preferential points claimed on SDB 6.1, according to table below:</p> <table border="1"> <thead> <tr> <th>No</th><th>Specific Goals</th><th>Preference Points allocated out of the 20</th><th>Documentation to be submitted by bidders to validate their claim for points</th></tr> </thead> <tbody> <tr> <td>1</td><td>An EME or QSE which is at least 51% owned by black people</td><td>5</td><td> <ul style="list-style-type: none"> <li>ID Copy</li> <li>CIPC (Company registration)</li> <li>CSD report (the ownership status of the 2 documents must correspond in order to be awarded points)</li> </ul> </td></tr> <tr> <td>2</td><td>Located in the Province where the services will be rendered/ item delivered.</td><td>2</td><td> <ul style="list-style-type: none"> <li>Municipal rates account OR</li> <li>Letter from councilor confirming residence OR</li> <li>Lease Agreement</li> </ul> </td></tr> <tr> <td>3</td><td>An EME or QSE which is at least 51% owned by women</td><td>7</td><td> <ul style="list-style-type: none"> <li>ID Copy</li> <li>CIPC (Company registration)</li> <li>CSD report (the ownership status of the 2 documents must correspond in order to be awarded points)</li> </ul> </td></tr> <tr> <td>4</td><td>An EME or QSE which is at least 51% owned by youth (up to 35 years of age)</td><td>4</td><td> <ul style="list-style-type: none"> <li>ID Copy</li> <li>CIPC (Company registration)</li> <li>CSD report (the ownership status of the 2 documents must correspond in order to be awarded points)</li> </ul> </td></tr> <tr> <td>5</td><td>An EME or QSE which is at least 51% owned by people with disability</td><td>2</td><td> <ul style="list-style-type: none"> <li>ID Copy</li> <li>CIPC (Company registration)</li> <li>CSD report (the ownership status of the 2 documents must correspond in order to be awarded points)</li> <li>Medical certificate</li> <li>SASSA registration or confirmation of disability from a relevant authority.</li> </ul> </td></tr> </tbody> </table> <p>A trust, consortium or joint venture must obtain and submit documented proof for each party of such trust, consortium or joint venture.</p>			No	Specific Goals	Preference Points allocated out of the 20	Documentation to be submitted by bidders to validate their claim for points	1	An EME or QSE which is at least 51% owned by black people	5	<ul style="list-style-type: none"> <li>ID Copy</li> <li>CIPC (Company registration)</li> <li>CSD report (the ownership status of the 2 documents must correspond in order to be awarded points)</li> </ul>	2	Located in the Province where the services will be rendered/ item delivered.	2	<ul style="list-style-type: none"> <li>Municipal rates account OR</li> <li>Letter from councilor confirming residence OR</li> <li>Lease Agreement</li> </ul>	3	An EME or QSE which is at least 51% owned by women	7	<ul style="list-style-type: none"> <li>ID Copy</li> <li>CIPC (Company registration)</li> <li>CSD report (the ownership status of the 2 documents must correspond in order to be awarded points)</li> </ul>	4	An EME or QSE which is at least 51% owned by youth (up to 35 years of age)	4	<ul style="list-style-type: none"> <li>ID Copy</li> <li>CIPC (Company registration)</li> <li>CSD report (the ownership status of the 2 documents must correspond in order to be awarded points)</li> </ul>	5	An EME or QSE which is at least 51% owned by people with disability	2	<ul style="list-style-type: none"> <li>ID Copy</li> <li>CIPC (Company registration)</li> <li>CSD report (the ownership status of the 2 documents must correspond in order to be awarded points)</li> <li>Medical certificate</li> <li>SASSA registration or confirmation of disability from a relevant authority.</li> </ul>
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10.	<p>All tenderers must be registered on the National Treasury Centralized Suppliers Data Base, the CIDB before the closing date of tenders and provide the information.</p> <p><b><u>Invalid or non-submission of the following documents will render the Bidder disqualified:</u></b></p> <ul style="list-style-type: none"> <li>➤ Tax compliance status and company directors of bidders will be verified on <u>CSD</u> for all price quotations and bids. <b><u>Therefore, Hard copies of Tax Certificate are no more required.</u></b></li> <li>➤ CK documents must be attached in the bid.</li> <li>➤ Copy of CIDB contractor grading certificate</li> <li>➤ JV Agreement (if Applicable)</li> <li>➤ Proof of CSD registration (active &amp; recently updated)</li> </ul>																										
11.	Part of the works cannot be sub contracted without prior approval from the Engineer.																										
12.	The tender with the lowest price or any tender offer will not necessarily be accepted.																										

13.	<b>For a project to the value of R 5.0 million and more, a Bidder/Contractor who is not from the Eastern Cape Province, must sub-contract 25% of the contract value to a Bidder/Contractor within the Eastern Cape Province.</b>
14.	All tenders must be submitted on the official forms – (not to be re-typed). Telephonic, telegraphic, e-mail or facsimile will not be accepted.
15.	Failure to supply all supplementary information, certificates and documentation may result in the tender being rendered non-responsive.
16.	This tender is subject to the General Conditions of Contract (GCC 2015) and, if applicable, any other Special Conditions of Contract (SCC).
17.	Bidders must submit in terms of point 15 above, the following with the bid submission: i) CIDB certificate of the subcontractor(s). ii) Proof of the CSD registration of the subcontractor(s). iii) Provide details of which items in the bill of quantities will be part of the subcontracting agreement.
18.	<b>NB: Bidders should note that this forms part of a batch of tenders included into the DOA infrastructure program within the Eastern Cape; the employer reserves the right not to award more than TWO projects to be executed simultaneously within the province. The department as a procuring entity will conduct a risk assessment based on amounts and nature of the commodity for the final decision vs the bidder's capacity.</b>
19.	Administrative enquiries should be directed to: Mrs. S. Minya Tel: 040 602 5263/ 079 505 9722 Email: nosibusiso.minya@ecagriculture.gov.za
20.	Technical enquiries should be directed to: Mr. T. Twenani Tel: 043 726 6513 / 076 574 7498 Email: themba@mbsaconsultants.com

# PART A INVITATION TO BID

SBD 1

<b>YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE</b> (NAME OF DEPARTMENT/ PUBLIC ENTITY)					
BID NUMBER:	SCMU8 – 25/26 – 0040	CLOSING DATE:	30 May 2025	CLOSING TIME:	11:00
DESCRIPTION	REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ±0.6KM				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
DEPARTMENT OF AGRICULTURE					
SUPPLY CHAIN MANAGEMENT OFFICES, 1ST FLOOR, INDWE HOUSE,					
BHISHO, 5600					
<b>BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO</b>			<b>TECHNICAL ENQUIRIES MAY BE DIRECTED TO:</b>		
CONTACT PERSON	Mrs. S. Minya		CONTACT PERSON	Mr. T. Twenani	
TELEPHONE NUMBER	079 505 9722		TELEPHONE NUMBER	076 574 7498	
FACSIMILE NUMBER	N/A		FACSIMILE NUMBER	N/A	
E-MAIL ADDRESS	nosibusiso.minya@ ecagriculture.gov.za		E-MAIL ADDRESS	themba@mbsaconsultants.com	
<b>SUPPLIER INFORMATION</b>					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELL PHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA _____
SPECIFIC GOALS CLAIMED	TICK APPLICABLE BOX]  <input type="checkbox"/> Yes <input type="checkbox"/> No		ALL SUPPORTING DOCUMENTATION FOR THE GOALS CLAIMED ATTACHED		[TICK APPLICABLE BOX]  <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>[ALL DOCUMENTATION REQUIRED FOR THE CLAIM OF PREFERENCE POINTS AS PER THE SPECIFIC GOALS DETAILED IN THE EVALUATION CRITERIA.]</b>					
1.1 ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]		1.2 ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?		<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER PART B:3 ]
<b>QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS</b>					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE A BRANCH IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?			<input type="checkbox"/> YES <input type="checkbox"/> NO		
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.					

## PART B TERMS AND CONDITIONS FOR BIDDING

<b>1. BID SUBMISSION:</b>	
1.1.	BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2.	<b>ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED (NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.</b>
1.3.	THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4.	<b>THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).</b>
<b>2. TAX COMPLIANCE REQUIREMENTS</b>	
2.1	BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2	BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3	APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4	BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5	IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED; EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6	WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7	NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

**NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.**

SIGNATURE OF BIDDER: .....

CAPACITY UNDER WHICH THIS BID IS SIGNED: .....  
(Proof of authority must be submitted e.g. company resolution)

DATE: .....

## **T 1.2**

### **Tender Data**

**PROVINCE OF THE EASTERN CAPE  
DEPARTMENT OF AGRICULTURE**

**REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ±0.6KM**

**T1.2 Tender Data**

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Construction Procurement (August 2019). (See [www.cidb.org.za](http://www.cidb.org.za)).

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

**The additional conditions of tender are:**

<b>Clause number</b>	<b>Tender Data</b>
C.1.1	The employer is the Department of Agriculture, PROVINCE OF THE EASTERN CAPE.

C.1.2 VOLUME 1: The General Conditions of Contract for Construction Works [3rd Edition] 2015 are published by the South African Institution of Civil Engineering. This publication is available and tenderers must obtain copies at their own cost from the South African Institution of Civil Engineering [SAICE], Private Bag x200, Halfway House 1685, Tel: [011] 805 5971, email: [civilinfo@saice.org.za](mailto:civilinfo@saice.org.za)

VOLUME 2: The Standard Specifications for Road and Bridge Works for State Road Authorities prepared by the Committee of Land Transport Officials. This publication is available and tenderers must obtain copies at their own cost from the South African Institution of Civil Engineering [SAICE], Private Bag x200, Halfway House 1685, Tel: [011] 805 5947, Fax [011] 805 5971, email: [civilinfo@saice.org.za](mailto:civilinfo@saice.org.za)

VOLUME 3: The tender documents issued by the employer comprise:

T1.1 Tender notice and invitation to tender

T1.2 Tender data

T2.1 List of returnable documents

**Part 1: Agreements and contract data**

C1.1 Form of offer and acceptance

C1.2 Contract data

C1.3 Form of Guarantee

C1.4 Adjudicator's Contract

**Part 2: Pricing data**

C2.1 Pricing instructions

C2.2 Activity schedules / Bills of Quantities

**Part 3: Scope of work**

C3.1 Scope of work

C3.2 Specifications

**Part 4: Site information**

C4.1 Site information

C4.2 Drawings

Additional documents of which the Contractor are to obtain their own copies are:

**“General Conditions of Contract for Construction Works – 3<sup>rd</sup> Edition 2015”.**

This document is issued by the South African Institution of Civil Engineering. (Short title “General Conditions of Contract for Construction Works 2015”), and is obtainable separately. Tenderers shall obtain their own copies.

**“South African National Standards”.**

These documents are obtainable separately, and tenderers shall obtain their own copies of the applicable sections.

**“The Occupational Health and Safety Act No 85 of 1993 and Amendment Act No 181 of 1993, and the Construction Regulations 2014”.**

This document is obtainable separately, and tenderers shall obtain their own copies.

In addition, tenderers are advised, in their own interest, to obtain their own copies of the following acts, regulations and standards referred to in this document as they are essential for the tenderer to get acquainted with the basics of construction management, the implementation of preferential construction procurement policies and participation of targeted enterprise and labour.

**The Construction Industry Development Board Act No 38 of 2000 and the Regulations in terms of the CIDB Act 38/2000, Government Notice No 692 of 9 June 2004,**

**SANS 1921:2004 Construction and Management**

Part 1: General Engineering and Construction Works;

Part 6: HIV/AIDS Awareness.

**SANS 10396:2003 Implementing Preferential Construction Procurement Policies using Targeted Procurement Procedures**

**SANS 1914:2003 Targeted Construction Procurement, Parts 1 to 6, dealing with Participation of Targeted Enterprises, Joint Ventures, Targeted Labour etc.**

**The Department of Agriculture Procurement Policy.**

The Tender Document and the drawings shall be obtained from the Employer or his authorized representative at the physical address stated in the Tender Notice, upon payment of the deposit stated in the Tender Notice.

Clause	Data
C.1.4	The employer's agent is: S Kondlo 063 693 0652 <a href="mailto:sonwabile.kondlo@ecagriculture.gov.za">sonwabile.kondlo@ecagriculture.gov.za</a>
C1.5.1	<p>The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such cancellation and rejection but will give written reasons for such action upon written request to do so.</p> <p>It is a condition of this contract that the Employer reserves the right to limit the expenditure on the works due to possible budget restraints. Should the tender sum exceed the budgeted amount, the scope of works may be reduced at any time, before or during the contract period, to ensure that the final contract amount does not exceed the budgeted amount.</p> <p>Should these conditions be applied, such adjustments or limitations shall be deemed to be a variation of the form or quantity of the works or any part thereof in terms of Clause 6.3 of the General Conditions of Contract. The validity of the tender, the individual rates or sums tendered shall not be influenced by any such adjustments or limitations and no claim will be considered on the basis of such adjustments or limitations in terms of Clause 6.11 of the General Conditions of Contract.</p> <p>The successful Tenderer will be required to submit a valid and certified copy of their Letter of Good Standing from the Compensation Commissioner or FEMA within 21 days of receipt of their Letter of Award for this Tender.</p>

	The successful Tenderer will be required to submit a valid and certified copy of their Letter of Good Standing from Bargaining Council for Civil Engineering Industry (BCCEI), within 21 days of tender award.
C2.1	<b>ELIGIBILITY</b>
C2.1.1	Delete the clause and replace with the following: Tenderers must submit a tender offer that complies in all aspects to the conditions as detailed in this document. Only those tenders that comply in all aspects with the tender conditions, specifications, pricing instructions and contract conditions will be declared responsive.
C2.1.3	Add the following after C.2.1.2: Only those tender submissions from which it can be established that a clear and unambiguous offer has been made to Employer, by whom the offer has been made and what the offer constitutes, will be declared responsive.
C2.1.4	Only those tenderers who satisfy the following eligibility criteria are eligible to submit tenders:
C.2.1.4.1	<p><b>[a] CIDB registration</b></p> <p>Registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations for a <b>4 CE</b> class of construction work, are eligible to have their tenders evaluated. Bidders exceeding the threshold of CIDB grade <b>4</b> in combination with any other contract awarded to the contractor which will be executed simultaneously could be regarded as non-responsive.</p> <p>Joint ventures are eligible to submit tenders provided that:</p> <ol style="list-style-type: none"> <li>every member of the joint venture is registered with the CIDB;</li> <li>the lead partner has a contractor grading designation in the <b>4 CE</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 grading designation determined in accordance with the sum tendered for a <b>4 CE</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.2.1.4.2	<p><b>Compliance with requirements of Employer's SCM Policy and procedures</b></p> <ol style="list-style-type: none"> <li>Only those tenders that are compliant with the requirements below will be declared responsive: Full name of entity submitting tender to be provided;</li> <li>Identification number or company or other registration number to be provided;</li> <li>Tax reference number to be provided;</li> <li>VAT registration number (if any) to be provided;</li> <li>A completed returnable schedule SBD 1: INVITATION TO BID AND TERMS AND CONDITIONS FOR BIDDING to be provided. Failure to provide or comply with any of the particulars of this schedule may render the tender nonresponsive;</li> <li>A completed returnable schedule SBD 4: DECLARATION OF INTEREST to be provided. In the case of a joint venture (JV), a separate schedule is to be completed and provided by each JV member. Non-compliance with the requirements of the applicable returnable schedule will render the tender nonresponsive. Furthermore, should the declaration prove to be false the Employer may reject or act against the tenderer in terms of clause F.3.7 of the Conditions of Tender;</li> <li>A completed returnable schedule SBD 8: DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES to be provided and which does not indicate any conflict or past practices that renders the tender non-responsive. In the case of a joint venture (JV), a separate schedule is to be completed and provided by each JV member;</li> <li>A completed returnable schedule SBD 9: CERTIFICATE OF INDEPENDENT TENDER DETERMINATION to be provided and which does not indicate any non-compliance with the requirements of the applicable returnable schedule.</li> <li>A completed returnable schedule P: COMPULSORY ENTERPRISE QUESTIONNAIRE to be provided. In the case of a joint venture (JV), a separate schedule is to be completed and provided by each JV member;</li> </ol>

	<p>j. A completed CERTIFICATE OF AUTHORITY FOR SIGNATORY to be provided and attached to returnable schedule B: CERTIFICATE OF AUTHORITY FOR SIGNATORY. Compliance with the requirements of the applicable returnable schedule is deemed a material responsiveness criterion.</p> <p>k. A completed returnable schedule H: REGISTRATION ON NATIONAL TREASURY CENTRAL SUPPLIER DATABASE to be provided, including attached printed copy of the Active Supplier Listing on the National Treasury Central Supplier Database. In the case of a joint venture (JV), the tenderer shall provide printed copies of the Active Supplier Listing on the National Treasury Central Supplier Database for each member of the JV;</p> <p>l. In the case of a tender submission by a joint venture (JV). The tenderer must attach a signed copy of the JV Agreement to returnable schedule G: JOINT VENTURE AGREEMENT DISCLOSURE;</p> <p>m. The tenderer or any of its directors is not listed in the Register of Tender Defaulters or the List of Restricted Suppliers managed by the National Treasury (<a href="http://www.treasury.gov.za">www.treasury.gov.za</a>) in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;</p> <p>n. The tenderer has not abused the Employer's Supply Chain Management System;</p> <p>o. The tenderer has not failed to perform on any previous contract with the Employer;</p> <p>p. The tenderer's tax matters with SARS are in order.</p> <p>q. The tenderer has provided a completed and signed Form of Offer in terms of C1.1.1 of PART C1: AGREEMENTS AND CONTRACT DATA, deemed as a material responsiveness criteria.</p>
C2.1.4.3	<p><b>Company Experience in Roads Contract Management</b></p> <p>Tenderer must have completed at least two surfaced road REHABILITATION projects to the value of at least <b>R 5 000 000.00</b> in the last 10 years.</p> <p>A similar road upgrade project shall be defined as a surfaced road REHABILITATION project and includes at least the following:</p> <ul style="list-style-type: none"> <li>• <b>Bulk earthworks operations</b></li> <li>• <b>Road layer works and bituminous surfacing</b></li> <li>• <b>Stormwater drainage (major and minor culverts)</b></li> <li>• <b>Targeted subcontractor management / development.</b></li> </ul> <p>All such projects shall be located within the SADC (South African Development Community) region.</p> <p>A completed returnable <b>Schedule D: SIMILAR PROJECT(S) COMPLETED BY THE TENDERER</b> to be provided. To demonstrate completion of a similar project(s) as defined in this clause, submit for each project listed a completed returnable <b>Schedule D (A): SIMILAR PROJECT COMPLETED VERIFICATION FORM</b> (respondent's stamp is critical).</p> <p>Furthermore, submit for each project listed a <b>COMPLETION CERTIFICATE</b>.</p> <p>Details of roads related projects &amp; supporting information must be entered in <b>Form D</b> of the Returnable Schedules. Copies of Completion Certificates, appointment letters and reference letter from the client must be attached, in order to qualify for this tender.</p> <p>Failure to comply with the requirements or to complete Form D (A) will render the tender non-responsive.</p>
C2.1.4.4	<p><b>Key Personnel</b></p> <p>In order to be considered for a Contract in terms of this Tender, the tenderer must have in its employment or intend to employ, for the duration of the contract the following key personnel who comply with the following minimum requirements:</p> <ol style="list-style-type: none"> <li>1. A suitably qualified and experienced Construction Manager (GCC 2015 term for Site Agent) who will be the single point accountable and responsible person for the full- time management of the construction works on site, who:       <ol style="list-style-type: none"> <li>a) is registered and has a valid registration certificate with ECSA as a Professional Engineer (Pr Eng) or Professional Engineering Technologist (Pr Tech Eng) or Professional Engineering Technician (Pr Techni Eng);</li> </ol> <p>OR</p> </li> </ol>

	<p>b) is registered and has a valid registration certificate with SACPCMP as a Professional Construction Project Manager (Pr CPM) or Professional Construction Manager (Pr CM); AND</p> <p>c) has a minimum of ten (10) years' experience in surfaced road upgrading project(s).</p> <p>2. A suitably qualified and experienced full time Construction Health and Safety Officer(s) to manage the Contractor's health and safety obligations on site who:</p> <p>i. is registered and has a valid registration certificate with SACPCMP as a Professional Construction Health and Safety Agent (Pr CHSA) or Professional Construction Health and Safety Manager (Pr CHSM) or Professional Construction Health and Safety Officer (Pr CHSO); AND</p> <p>ii. has a minimum of five (5) years' experience as a Construction Health and Safety Officer on road projects</p> <p>A completed returnable <b>Schedule E: TENDERER'S KEY PERSONNEL</b> to be provided. Attach to each schedule proof of indicated professional registration with the specified professional body.</p> <p>Where the key personnel are no longer available to undertake the necessary work after the Award of the Tender, the then Contractor shall within a period of fourteen (14) working days replace the key personnel listed in returnable Schedules E with personnel with equivalent competencies, subject to approval by the Employer. Such approval shall not be unreasonably withheld if compliant in terms of the requirements of this clause.</p> <p>Failure to comply with the requirements of this clause and applicable returnable schedule will render the tender non-responsive.</p>
C2.1.4.5	<p><b>Construction Equipment</b></p> <p>In order to be considered for a Contract in terms of this Tender, the tenderer must be able to demonstrate his ability to provide (either by means of his own construction equipment or ability to hire construction equipment from others) construction equipment exclusively intended for the execution of the works as specified in the tender document.</p> <p>To demonstrate his ability, the tenderer is required to provide a completed signed declaration in terms of returnable <b>Schedule F: DECLARATION IN RESPECT OF CONSTRUCTION EQUIPMENT</b>.</p>
C2.1.4.6	<p><b>Local Content</b></p> <p>Only those tenders that are compliant with the requirements of returnable <b>Schedule SBD 6.2: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS</b> will be declared responsive.</p> <p>For this tender the stipulated minimum threshold(s) for local production and content for "Steel Products and Component for Construction" is 100%.</p> <p>A completed returnable <b>Schedule SBD 6.2: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS</b> including applicable Annexures to be provided.</p>
C2.1.4.7	<p><b>Registration with Bargaining Council</b></p> <p>Only those tenders submitted by tenderers who are registered with <b>the Bargaining Council for the Civil Engineering Industry (BCCEI)</b> will be declared responsive.</p> <p>A completed returnable <b>Schedule I: DECLARATION IN RESPECT OF COMPLIANCE WITH LABOUR LEGISLATION</b> to be provided and attach proof of registration with the applicable Bargaining Council to the applicable returnable schedule. In case of joint venture (JV) each member of the JV must provide proof of registration with the applicable Bargaining Council for Civil Engineering Industry.</p> <p>Failure to comply with the requirements of this clause and applicable returnable schedule will render the tender non-responsive.</p>
C2.1.4.8	<p><b>Fulfilment of the Construction Regulations, 2014</b></p> <p>Only those tenders submitted by tenderers who demonstrate by means of completing and providing returnable Schedule J: DECLARATION IN RESPECT OF FULFILMENT OF THE CONSTRUCTION</p>

	REGULATIONS, 2014 may be deemed responsive if the tenderer's declaration reasonably satisfy the Employer that the tenderer has, in terms of the Construction Regulations, 2014 of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely and have included in his tender rates and prices (in the appropriate payment items provided in the Pricing Schedules / Bill of Quantities) for all resources, actions, training and any other costs required for the due fulfilment of the Regulations for the duration of the construction and defects liability period.
C.2.2	The employer <b><u>will not</u></b> compensate the tenderer for any costs incurred during the tender process.
C.2.6	<p><b>Addenda</b></p> <p>Tenderers are required to download any addenda issued by the Employer from the Eastern Cape Department of Agriculture Website <a href="http://www.drda.gov.za">www.drda.gov.za</a> or <a href="https://etenders.treasury.gov.za/">https://etenders.treasury.gov.za/</a>. Addenda will only be issued seven (7) days before the Tender Closing date and it is the Tenderers responsibility to check the addenda issued in the departmental website and eTender portal. Please note, <b>ONLY</b> addenda critical to the evaluation will be issued.</p> <p>Failure to apply instructions contained in Addenda will render a tenderer's offer non-responsive in terms of Condition of Tender.</p>
C.2.7	The arrangements for a clarification meeting are as stated in the Tender Notice and Invitation to Tender.
C.2.8	<p>Seek clarification</p> <p>Delete the clause and replace with the following: Request clarification of the tender documents, if necessary, by notifying the Employer before <b>21 April 2025</b>.</p> <p>The tenderer declares that it has:</p> <ol style="list-style-type: none"> <li>Inspected the Specifications and read and fully understood the Conditions of Contract.</li> <li>Read and fully understood the whole text of the Specifications and Pricing Schedules and thoroughly acquainted itself with the nature of the goods / services proposed and generally of all matters which may influence the Contract.</li> <li>Visited the site(s) where delivery of the proposed works will take place, carefully examined existing conditions, the means of access to the site(s), the conditions under which the delivery is to be made, and acquainted itself with any limitations or restrictions that may be imposed by the Employer or other authorities in regard to access and transport of materials, plant and equipment to and from the site(s) and made the necessary provisions for any additional costs involved thereby.</li> <li>Requested the Employer to clarify the requirements contained in the Specifications and Pricing Schedules, the exact meaning or interpretation of which is not clearly intelligible to the tenderer.</li> <li>Received any Addenda to the tender documents which have been issued in accordance with the Employer's SCM Policy.</li> </ol> <p>The Employer will therefore not be liable for the payment of any extra costs resulting from any claim submitted by the tenderer arising from any alleged ambiguity or uncertainty contained in the tender document.</p>
C2.12	<p><b>The criteria for alternative tenders are:</b></p> <p>There will be no alternative tender accepted.</p>
C2.13	<b>Submitting a tender offer</b>
C.2.13.2	Submit one original document completed in black ink.

	<p>The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.</p> <p>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. Proof of posting shall not be accepted as proof of delivery.</p> <p>Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of the standard conditions of tender in this part of SANS 10845 apply equally to the extended deadline.</p>
C.2.13.3	<p>Add the following to C.2.13.3 at the end of the first sentence:</p> <p>Parts of each tender offer communicated on paper shall be submitted as an original, plus zero (0) copies.</p>
C.2.13.5	<p>The employer's address for delivery of tender offers and identification details to be shown on each tender offer package are:</p> <p>Location of tender box:  <b>DEPARTMENT OF AGRICULTURE,  SCM OFFICES  1st Floor, Indwe House,  Bhisho, 5600</b></p> <p>Physical address:  <b>SCM OFFICES  1st Floor, Indwe House,  Bhisho, 5600</b></p> <p>Identification details: Reference number, title of tender and the closing date and time of the tender.</p> <p>Postal address: <b>DEPARTMENT OF AGRICULTURE  Supply Chain Management Directorate  Private Bag X0040  Bhisho, 5600</b></p>
C2.13.6	<p>A two-envelope procedure will not be followed.</p>
C.2.13.9	<p>Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.</p>
C.2.15.	<p>The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.</p>
C.2.16	<p>The tender offer validity period is <b>90 days</b>.</p>
C.2.17.	<p>Additional information/clarification could be requested after closure of the bid. Non-submission / late submission of such information/clarification, could result in the bid being declared non-responsive.</p> <p>The employer may also request additional information / bank ratings, in order to establish the financial capacity of the bidder. Non-submission / late submission of such information / bank ratings, could result in the bid being declared non-responsive.</p>
C.2.23.	<p><b>Certificates</b></p> <p>The tenderer is required to submit with his tender</p> <ul style="list-style-type: none"> <li>• a Certificate of Contractor Registration issued by the Construction Industry Development Board and where a tenderer satisfies CIDB contractor grading designation requirements through joint venture formation, such tenderers must submit the Certificates of Contractor Registration in respect of each partner.</li> <li>• a Copy of CSD registration Proof (Active &amp; Recently updated).</li> <li>• Joint Venture Agreement and Power of attorney in case of a Joint Venture.</li> <li>• ID certificates in case of one-man concerns.</li> <li>• Workman's Compensation Registration Certificate.</li> <li>• Documentation to proof preferential points claimed.</li> </ul>

	<p>Add the following: The tenderer is required to submit with his tender all certificates as required for in <b>T1.2: TENDER DATA and T2.2: RETURNABLE SCHEDULES</b>.</p>									
C.3.4	<p><b>Opening of tender submissions</b></p> <p>Tenders will be opened in public immediately after closing time where the name of the tenderer, the financial offer, preference points claimed and proposed period for completion will be read out loud.</p>									
C3.9	<p><b>Arithmetical errors, omissions and discrepancies</b></p> <p><i>Add the following after clause C.3.9.2:</i></p> <p>C.3.9.3 In the event of tendered rates or lump sums being declared by the Employer to be unacceptable to it:</p> <ul style="list-style-type: none"><li>a. because they are not priced,</li><li>b. either excessively low or high,</li><li>c. or not in proper balance with other rates or lump sums,</li></ul> <p>The tenderer may be required to produce evidence and advance arguments in support of the tendered rates or lump sums objected to. If, after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the tendered rates or lump sums objected to, it may request the tenderer to amend these rates and lump sums along the lines indicated by it.</p> <p>The tenderer will then have the option to alter and/or amend the rates and lump sums objected to and such other related amounts as are agreed on by the Employer, but this shall be done without altering the tender offer in accordance with this clause. Should the tenderer fail to amend his tender in a manner acceptable to and within the time stated by the Employer, the Employer may declare the tender as nonresponsive.</p>									
C.3.11.	<p><b>This bid will be evaluated in Four (4) phases as follows:</b></p> <p><b>Phase One:</b> Prequalification: Only bids of bidders adhering to the minimum CIDB grading designation, and whose CIDB registration is active on date of closure will be further considered.</p> <p><b>Phase Two:</b> Compliance, responsiveness to the bid rules and conditions, thereafter they will be evaluated on PPPFA.</p> <p>NB Failure to submit all the requested documents such as , key personnel, work program etc. will result in the bid not be further considered.</p> <p><b>Phase Three:</b> Bidders passing all stages above will thereafter be evaluated on PPPFA.</p> <p><b>PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT (PPPFA) POINTS WILL BE AWARDED AS FOLLOWS:</b></p> <table><tr><td>Maximum points on price</td><td>-</td><td><b>80 points</b></td></tr><tr><td>Maximum points for Specific goals</td><td>-</td><td><b>20 points</b></td></tr><tr><td><b>Maximum points</b></td><td>-</td><td><b>100 points</b></td></tr></table> <p><b>Important:</b></p> <ul style="list-style-type: none"><li>• <b>Failure to submit a fully completed and signed bid document such as Bill of Quantities, work program etc. will result in the bid not being further considered.</b></li><li>• <b>Gross calculation errors, and omissions in the Bill of Quantities, will render the bid non-responsive.</b></li><li>• <b>Gross under and over pricing will also render the bid as non-responsive.</b></li></ul>	Maximum points on price	-	<b>80 points</b>	Maximum points for Specific goals	-	<b>20 points</b>	<b>Maximum points</b>	-	<b>100 points</b>
Maximum points on price	-	<b>80 points</b>								
Maximum points for Specific goals	-	<b>20 points</b>								
<b>Maximum points</b>	-	<b>100 points</b>								

## **1. PHASE ONE: PRE-QUALIFICATION**

1. Prequalification: Only bids of bidders adhering to the minimum cidb grading designation, and who's cidb registration is active on the closing date will be considered further.

## **2. PHASE TWO: RESPONSIVENESS TO THE BID REQUIREMENTS AND RULES**

### **A. Bidders' proposals must meet the following minimum requirements and supporting documents must be submitted with the completed bid document in a sealed envelope in the bid box at the closing date and time. Failure to comply will automatically eliminate the bid for further consideration:**

1. Bid Document (This Document must be submitted in its original format)
2. Bids which are late, incomplete, unsigned or submitted by facsimile or electronically, will not be accepted.
3. Bidder must be registered with CIDB in the correct grading and class of works as per the tender notice and requirements. And must the status on CIDB be active during award stage. It is the responsibility of the bidder to keep the status on CIDB active throughout bidding process (advert till award stage).
4. Bidders must be a legal entity or partnership or joint venture or consortia.
5. Form of offer and Acceptance (fully completed and signed)
6. SBD 4- Declaration of Interest (fully completed and signed)
7. Compulsory Enterprise Questionnaire (Completed and signed)
8. Bid price must be all inclusive of all applicable taxes. Bidders are not entitled to claim the VAT if they are not VAT registered.
9. Certificate of Authority for Joint Ventures (if applicable). In the case of a joint venture, a signed JV agreement stating the share interest or percentage of each partner should also be made available to the department by the JV.
10. Resolution to Sign (if applicable)
11. Attendance of compulsory briefing meeting (where applicable)
12. Only one offer per item per bidder is allowed and alternative offers will not be considered. If more than one offer per item is received, none of the offers will be considered. Bidders are also not allowed to submit a bid/ quotation whilst they are in agreements with other bidders in the form of joint ventures or consortiums.
13. This tender will be awarded as a whole. All trades listed in the Bills of Quantities or Pricing schedule must be priced for (except provisional sums and allowances), failure to do so will result increase commercial risk of the bid and may lead to elimination or passing over of the bidder.
14. Past experience reports (Refer to Annexure K and H)
15. List of Key personnel and their CVs
16. Work program

### **B. Other Conditions of bid/ Non eliminating**

1. DOA Policy applies.
2. Returnable Schedule: SBD1 – Invitation to bid must be completed and signed
3. The bidder must be registered on the Central Supplier Database (CSD) prior the award
4. All bidders' tax matters must be in order prior award. Bidders' tax matters will be verified through CSD.
5. Declaration of Employees of the State or other State Institutions.
6. Bidders must submit a minimum of three (3) written contactable references for projects successfully completed in the past (clearly indicating client name, contract value, contract term, contact person, contact details). Refer to Annexure I and Annexure M. This is not an elimination factor, but important for the department to make a decision. Unless it is used for Quality/functionality Points.
7. Bidders must submit a list of projects where he or she has submitted tender offers but tender results have not been confirmed by the client.
8. Bidders must submit their company profiles, list of available resources, plant and machinery and any other additional capacity with the bid.. This is not an elimination factor, but important for the department to make a decision. Unless it is used for Quality/functionality Points.
9. The bidder must also list all projects where there are pending litigations or litigations have been concluded. The form for this is also attached after Annexure J.

10. Bidders submit all the required documented proof to validate the preferential points claimed on SBD 6.1. (Refer to Point 9 of the Tender Notice)
11. The Department will contract with the successful bidder by signing a formal contract.
12. This tender will be awarded as a whole. All trades listed in the Bills of Quantities or Pricing schedule must be priced for (except provisional sums and allowances which also need to be added to the total), failure to do so will increase commercial risk of the bid and may lead to elimination or passing over of the bidder.
13. Wherever a brand name is specified in this document (i.e. specifications, pricing schedule, bill of quantities or anywhere), the department requires an item similar/equivalent or better.

### **3. PHASE THREE: EVALUATION POINTS ON PRICE AND REGULATIONS OF 2022**

The **80/20 preference point system** shall be applied for the purposes of this bid as per the requirements of the *Preferential Procurement Policy Framework Act, 2000* (Act No. 5 of 2000) and SPECIFIC GOALS/ PPPFA Regulations of 2022

Criteria	Points
<b>POINTS ON PRICE</b>	<b>80</b>
<b>SPECIFIC GOALS</b>	<b>20</b>
<b>TOTAL</b>	<b>100</b>

**The 80/20 preference point system for acquisition of services, works or goods up to Rand value of R50 million:**

- (a) The following formula must be used to calculate the points for price in respect of tenders (including price quotation) with a Rand value equal to, or above R 30 000 and up to Rand value of R 50 000 000 (all applicable taxes included):

The financial offer will be scored using the following formula:

$$A = (1 - \frac{P - P_m}{P_m})$$

The value of value of  $W_1$  is:

- 1) 90 where the financial value inclusive of VAT of all responsive tenders received have a value in excess of R 50 000 000 or
- 2) 80 where the financial value inclusive of VAT of one or more responsive tender offers have a value that equals or is less than R 50 000 000.

C.3.11.1  
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*Add the following after C.3.11.9:*

#### **Risk Analysis**

Notwithstanding compliance with regard to CIDB registration or any other requirements of the tender, the Employer will perform a risk analysis in respect of the following:

- a) reasonableness of the financial offer
- b) reasonableness of unit rates and prices
- c) as per clause C.1.5.1 (C), the previous and the current contracts performance of the responsive bidders will be used to draw a conclusion to determine the acceptability of the tender offer. The Department reserves the right to consider other similar contracts undertaken by the prospective bidder that do not form part of this proposal.
- d) The risk analysis will not be limited to a-c above, should there be required information deemed necessary for finalisation of the award, the department will therefore request the information within the time frames stipulated in the tender document.

The conclusions drawn from this risk analysis will be used by the Employer in determining the acceptability of the tender offer.

C.3.13.

**Tender offers will only be accepted if:**

- a) the tenderer is registered on the Central Supplier Database (CSD) for the South African government (see <https://secure.csd.gov.za/>) unless it is a foreign supplier with no local registered entity

- b) the tenderer is in good standing with SARS according to the Central Supplier Database. Bidders must submit a CSD no. or tax status compliance pin.
- c) the preferred tenderer will be required to submit an approved insurer undertaking to provide the Performance Bond / Guarantee / Surety / Security to the format and/or standard as per contract data.
- d) the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation;
- e) the tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;
- f) the tenderer has not:
  - i) abused the Employer's Supply Chain Management System; or
  - ii) failed to perform on any previous contract and has been given a written notice to this effect;
- g) the tenderer has completed the Compulsory Declaration and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process;
- 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;
- i) Bids which are late, incomplete, unsigned or submitted by facsimile or electronically will not be accepted.
- j) the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer;
- k) The tenderer undertakes to maximize the sourcing of building material or infrastructure input material from Eastern Cape based suppliers or manufacturers.
- l) the employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.
- m) A Resolution of signatory form has been completed and signed by director/s or a letter bearing a letterhead of the tenderer has been attached (specific to this bid) to the bid submission; it must be duly signed by all directors and submitted the bid. Only a duly authorized official can sign the bid.
- n) Prospective bidders must register on CSD prior submitting bids (open tenders). Any prospective bidder found to have Tax matters not in order with SARS (verified through CSD) during the evaluation process (after being given an opportunity to rectify tax matters) will be eliminated and not be considered further in the process. Preferred bidder/s will be afforded an opportunity to rectify their tax affairs within 7 days. A bidder that fails to rectify its tax matters with SARS will be eliminated.
- o) **NOTE:** The amount reflected on the Form of Offer and Acceptance takes precedence over any other total amount indicated elsewhere in bidder's tender submission. If the Form of Offer and Acceptance has no value or figure, the bidder will be regarded as having made no offer.
- p) The department reserves the right not to award the bid to the most favorable tenderer, if any of the situations occur: if it is not assisting in the advancement of designated groups; risk profile of the favorable firm is too high; the bidder has been awarded a considerable number of projects by the department or provincial government; has performed unsatisfactorily in the past, etc.
- q) Documents required for the specific goals:

	No	Specific Goals	Documentation to be submitted by bidders to validate their claim for points
	1	An EME or QSE which is at least 51% owned by black people	<ul style="list-style-type: none"> <li>• ID Copy</li> <li>• CIPC (Company registration)'</li> <li>• CSD report (the ownership status of the 2 documents must correspond in order to be awarded points)</li> </ul>
	2	Located in the Province where the services will be rendered/ item delivered.	<ul style="list-style-type: none"> <li>• Municipal rates account OR</li> <li>• Letter from councilor confirming residence OR</li> <li>• Lease Agreement</li> </ul>
	3	An EME or QSE which is at least 51% owned by women	<ul style="list-style-type: none"> <li>• ID Copy</li> <li>• CIPC (Company registration)'</li> <li>• CSD report (the ownership status of the 2 documents must correspond in order to be awarded points)</li> </ul>
	4	An EME or QSE which is at least 51% owned by youth (up to 35 years of age)	<ul style="list-style-type: none"> <li>• ID Copy</li> <li>• CIPC (Company registration)'</li> <li>• CSD report (the ownership status of the 2 documents must correspond in order to be awarded points)</li> </ul>
	5	An EME or QSE which is at least 51% owned by people with disability	<ul style="list-style-type: none"> <li>• ID Copy</li> <li>• CIPC (Company registration)</li> <li>• CSD report (the ownership status of the 2 documents must correspond in order to be awarded points)</li> <li>• Medical certificate</li> <li>• SASSA registration or confirmation of disability from a relevant authority.</li> </ul>
C.3.17.	The number of paper copies of the signed contract to be provided by the employer is one (1).		

## T1.3 STANDARD CONDITIONS OF TENDER

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the CIDB Standard for Uniformity in Construction Procurement (August 2019). (See [www.cidb.org.za](http://www.cidb.org.za)).

### C.1 General

#### C.1.1 Actions

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

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

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

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

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

#### C.1.2 Tender Documents

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

#### C.1.3 Interpretation

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

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

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

- a) **conflict of interest** means any situation in which:
  - i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfill his or her duties impartially;
  - ii) an individual or tenderer 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 tenderer who employs that employee.
- b) **comparative offer** means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration;
- c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process;

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

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

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

#### **C.1.5 Cancellation and Re-Invitation of Tenders**

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

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

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

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

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

##### **a) 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.

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

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

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

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

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

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

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

#### **C.1.6.3.1 Option 1**

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

#### **C.1.6.3.2 Option 2**

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

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

### **C.2 Tenderer's obligations**

#### **C.2.1 Eligibility**

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

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

#### **C.2.2 Cost of tendering**

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

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

#### **C.2.3 Check documents**

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

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

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

#### **C.2.5 Reference documents**

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

### **C.2.6 Acknowledge addenda**

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

### **C.2.7 Clarification meeting**

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

### **C.2.8 Seek clarification**

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

### **C.2.9 Insurance**

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

### **C.2.10 Pricing the tender offer**

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

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

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

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

### **C.2.11 Alterations to documents**

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

### **C.2.12 Alternative tender offers**

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

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

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

### **C.2.13 Submitting a tender offer**

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

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

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

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

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

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

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

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

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

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

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

#### **C.2.15 Closing time**

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

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

#### **C.2.16 Tender offer validity**

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

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

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

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

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

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

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

### **C.2.18 Provide other material**

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

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

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

### **C.2.19 Inspections, tests and analysis**

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

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

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

### **C.2.21 Check final draft**

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

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

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

### **C.2.23 Certificates**

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

## **C.3        *The employer's undertakings***

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

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

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

- a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;

- b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
- c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

### **C.3.2 Issue Addenda**

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

### **C.3.3 Return late tender offers**

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

### **C.3.4 Opening of tender submissions**

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

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

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

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

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

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

### **C.3.6 Non-disclosure**

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

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

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

### **C.3.8 Test for responsiveness**

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

- a) complies with the requirements of these Conditions of Tender,

- b) has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the tender documents.

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

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

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

**Important:**

- **Failure to submit a fully completed and signed bid document such as Bill of Quantities, work program etc. will result in the bid not being further considered.**
- **Gross calculation errors, and omissions in the Bill of Quantities, will render the bid non-responsive.**
- **Gross under and over pricing will also render the bid as non-responsive.**

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

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

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

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

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

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

- a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.
- b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

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

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

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

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

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

<b>The CIDB Standard Conditions of Tender are based on a procurement system that satisfies the following system requirements:</b>	
<b>Requirement</b>	<b>Qualitative interpretation of goal</b>
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

#### **d) C.3.11.1 General**

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

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

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

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

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

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement;
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other

physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract;

- c) has the legal capacity to enter into the contract;
- d) is not; insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act No. 2008, bankrupt or being wound up, has his/her affairs administered by a court or a judicial officer, has suspended his/her business activities or is subject to legal proceedings in respect of any of the foregoing;
- e) complies with the legal requirements, if any, stated in the tender data; and
- f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

#### **C.3.14 Prepare contract documents**

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

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

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

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

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

#### **C.3.16 Registration of the award**

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

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

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

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

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

## **PART T2 - RETURNABLE DOCUMENTS**

**PROVINCE OF THE EASTERN CAPE  
DEPARTMENT OF AGRICULTURE**

**REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS  $\pm 0.6\text{KM}$**

**T2.1 List of Returnable Documents**

The tenderer must complete the following returnable documents:

**1 Returnable Schedules required only for tender evaluation purposes**

- Certificate of authority for joint ventures (where applicable)
- Compulsory Enterprise Questionnaire
- Record of Addenda to Tender Documents
- Proposed Amendments and Qualifications
- Schedule of Subcontractors
- Schedule of Plant and Equipment
- Schedule of the Tenderer's Experience
- Schedule of current projects

**2 Other documents required only for tender evaluation purposes**

- Proof of registration on the CSD and copy of active and updated certificate attached.
- Certificate of Contractor Registration issued by the Construction Industry Development Board.
- Documented proof of points claimed for Specific goals.

**3 Returnable Schedules that will be incorporated into the contract**

- Preferencing Schedule SBD 6.1

**4 Other documents that will be incorporated into the contract**

- Declaration of validity of information.
- Declaration of Interest - SBD 4.
- POPI – Consent Form
- Certificate of tenderer's visit to site.
- Tenderer's financial standing.
- Surety and Bank details.
- Form of intent to provide a Performance Guarantee.
- Key personnel for project.
- Curriculum Vitae of key personnel.
- Preliminary Construction Programme.
- Alteration by tenderer.
- Contractor's Health and Safety declaration.
- Contractor's Health and Safety Plan.

**5 The offer portion of the C1.1 Offer and Acceptance**

**6 C1.2 Contract Data (Part 2)**

**7 C2.2 Bills of quantities**

## CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

This Returnable Schedule is to be completed by joint ventures.

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorise Mr/Ms . . . . .  
 . . . . . , authorised signatory of the company . . . . .  
 . . . . . , acting in the capacity of lead partner, to sign all documents in connection with the  
 tender offer and any contract resulting from it on our behalf.

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

## 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:**      **SBD4 issued by National Treasury must be completed for each tender and be attached as a tender requirement.**

**Section 8:**      **SBD 6 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 authorized to do so on behalf of the enterprise:

- i) Authorize the employer to verify the tenderers tax clearance status from the South African Revenue Service that it is in order;
- ii) Confirms that neither the name of the enterprise or the name of any partner, manager, director or any 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 Corruption Activities Act of 2004;
- iii) Confirms that no partner, manager, director or any other person, who wholly or partly exercises or may exercise control over the enterprise, 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 rendering 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			

## RECORD OF ADDENDA TO TENDER DOCUMENTS

The undersigned confirm that the following communications received from the employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		

Attach additional pages if more space is required.

Signed		Date	
Name		Position	
Tenderer			

## PROPOSED AMENDMENTS AND QUALIFICATIONS

The Tenderer should record any deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such deviations and qualifications in a covering letter to his tender and reference such letter in this schedule.

The Tenderer's attention is drawn to clause C.3.8 of the Standard Conditions of Tender referenced in the Tender Data regarding the employer's handling of material deviations and qualifications.

Page	Clause or item	Proposal

Signed .....

Date .....

Name .....

Position .....

Tenderer .....

## SCHEDULE OF PROPOSED SUBCONTRACTORS

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

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

	Name and address of proposed Subcontractor	Nature and extent of work	Previous experience with Subcontractor.
1.			
2.			
3.			
4.			
5.			

Signed .....

Date .....

Name .....

Position .....

Tenderer .....

## SCHEDULE OF PLANT AND EQUIPMENT

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

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

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

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

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

## SCHEDULE OF THE TENDERER'S EXPERIENCE

The following is a statement of similar work in respect of this tender successfully executed by myself / ourselves during the past three (3) years:

Employer, contact person and telephone number.	Description of contract	Value of work inclusive of VAT (Rand)	Date contract started	Date contract completed (Date on Completion Certificate)

Signed \_\_\_\_\_ Date \_\_\_\_\_

Name \_\_\_\_\_ Position \_\_\_\_\_

Tenderer \_\_\_\_\_

## SCHEDULE OF CURRENT PROJECTS

Tenderers must submit a max one-page description of all projects under construction/ on hold/ just handed over/ towards completion (if they exist). **Attach an Appointment letter for each of the project provided.**

The description of each project must include the following information:

1. Essential introductory information:
  - 1.1. Name of project.
  - 1.2. Name of client.
  - 1.3. Contact details of client.
  - 1.4. Contact details (including telephone numbers and email addresses) of currently contactable references.
  - 1.5. The period during which the project was performed, and also, if this is different, the period during which the tenderer's team members were contracted.
  - 1.6. Cost of works and/or contract value (making it clear in broad terms what this cost/value purchased, and to what extent (if any) this cost/value was part of a larger project budget or programme budget).

NO.	NAME OF PROJECT.	NAME OF CLIENT.	CONTACT DETAILS OF CLIENT.	PROJECT VALUE	STAGE OF PROJECT
1					
2					
3					

***Attach a separate page to address this issue (the above table is just for reference purposes).***

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

Signed \_\_\_\_\_ Date \_\_\_\_\_

Name \_\_\_\_\_ Position \_\_\_\_\_

Enterprise name \_\_\_\_\_

## CONTRACTORS CERTIFICATE OF REGISTRATION ON CSD

*[The tenderer shall submit the Contractor's Certificate of Registration on the CSD. Failure to submit the certificate with the tender document will lead to the conclusion that the tenderer is not registered on the National Treasury Central Suppliers Database and therefore not eligible to tender].*

## CONTRACTORS CERTIFICATE OF REGISTRATION WITH CIDB

*[The tenderer shall submit the Contractor's Certificate of Registration with CIDB. Failure to submit the certificate with the tender document will lead to the conclusion that the tenderer is not registered with the CIDB and therefore not eligible to tender].*

## PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

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

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

### 1. 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

*(delete whichever is not applicable for this tender).*

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
<b>Total points for Price and SPECIFIC GOALS</b>	<b>100</b>

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 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:

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ \mathbf{Ps} = \mathbf{80} \left( \mathbf{1} - \frac{\mathbf{Pt} - \mathbf{Pmin}}{\mathbf{Pmin}} \right) & \mathbf{or} & \mathbf{Ps} = \mathbf{90} \left( \mathbf{1} - \frac{\mathbf{Pt} - \mathbf{Pmin}}{\mathbf{Pmin}} \right) \end{array}$$

Where

Ps = Points scored for price of tender under consideration  
Pt = Price of tender under consideration  
Pmin = 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:

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ \mathbf{Ps} = \mathbf{80} \left( \mathbf{1} + \frac{\mathbf{Pt} - \mathbf{Pmax}}{\mathbf{Pmax}} \right) & \mathbf{or} & \mathbf{Ps} = \mathbf{90} \left( \mathbf{1} + \frac{\mathbf{Pt} - \mathbf{Pmax}}{\mathbf{Pmax}} \right) \end{array}$$

Where

Ps = Points scored for price of tender under consideration  
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.)***

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
An EME or QSE which is at least 51% owned by <b>black people</b>	N.A.	5		
<b>Located</b> in the Province where the services will be rendered/ item delivered.	N.A.	2		
An EME or QSE which is at least 51% owned by <b>women</b>	N.A.	7		
An EME or QSE which is at least 51% owned by <b>youth (up to 35 years of age)</b>	N.A.	4		
An EME or QSE which is at least 51% owned by people with <b>disability</b>	N.A.	2		
Total	N.A.	20		

## 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;
- 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>	..... .....

## BIDDER'S DISCLOSURE

### 1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

### 2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest<sup>1</sup> in the enterprise,

employed by the state?

YES/NO

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

---

<sup>1</sup> the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

1.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? YES/NO

2.2.1 If so, furnish particulars:  
.....  
.....

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? YES/NO

2.3.1 If so, furnish particulars:  
.....  
.....

**3 DECLARATION**

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium<sup>2</sup> will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.

<sup>2</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.

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

3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

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

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....	.....
Signature	Date
.....	.....
Position	Name of bidder

## DEPARTMENT OF AGRICULTURE

### REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ±0.6KM

#### POPI - CONSENT FORM

Contractor/Service Provider/Supplier:	
Bid/Quotation No.:	
Project Description:	
Duration of Contract:	
Contract Value:	

#### CONSENT TO PROCESS PERSONAL INFORMATION IN TERMS OF THE PROTECTION OF PERSONAL INFORMATION ACT, NO. 4 OF 2013 (POPIA)

The purpose of the POPIA is to protect personal information of individuals and businesses and to give effect to their right of privacy as provided for in the Constitution. By signing this form, you consent to your personal information to be processed by the Department of Agriculture and consent is effective immediately and will remain effective until such consent is withdrawn.

1. I ..... a natural person "herein referred to as the Data Subject" with ID No..... hereby give my consent to the DOA "herein referred to as the Responsible Party" to collect, process and distribute my personal information where DOA is legally required to do so.
2. I understand my right to privacy and the right to have my personal information processed in accordance with the conditions for the lawful processing of personal information.
3. I understand the purposes for which my personal information is required and for which it will be used and consent to third parties accessing my personal information and to DOA sharing my personal information strictly for reporting purposes.
4. I understand that, should I refuse to provide DOA with the required consent and/ or information, the DOA will be unable to assist me.
5. I declare that all my personal information supplied to DOA is accurate, up to date, not misleading and that it is complete in all respects and will be held and/ or stored securely for the purpose for which it was collected and that I will immediately advise DOA of any changes to my Personal Information should any of these details change.
6. I also understand that I have the right to request that my personal information be corrected or deleted, if it is inaccurate, irrelevant, excessive, out of date, incomplete, misleading, or obtained unlawfully or that the personal information or record be destroyed or deleted if the responsible party is no longer authorized to retain it.

Signed at..... On this ..... day of .....20...

.....

Signature of data subject/ designated person

.....  
Name & Surname/Departmental Responsible Party

.....  
Signature

## CERTIFICATE OF TENDERER'S VISIT TO SITE

This is to certify that, I .....  
representative of (tenderer) .....

.....  
.....

of (address) .....  
.....  
.....  
.....

Telephone number: .....

Fax number: .....

in the company of (Engineer's representative) .....

visited and examined the site on (date) .....

**I further certify that I have made myself familiar with all local conditions likely to influence the work and the cost thereof, that I am satisfied with the description of the work and the explanations given by the said Engineer's Representative and that I understand perfectly the work to be done, as specified and implied, in the execution of this contract.**

**TENDERER'S REPRESENTATIVE:** (Signature) .....

(Name) .....

**ENGINEER'S REPRESENTATIVE:** (Signature) .....

(Name) .....

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

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

## KEY PERSONNEL

In terms of the Project Specification and the Conditions of Tender, unskilled workers may only be brought in from outside the local municipality if such personnel are not available locally.

The tenderer shall list below the personnel, which he intends to utilise on the Works, including key personnel, which may have to be brought in from outside if not available locally.

DESIGNATION	NAME OF NOMINEE	NATIONALITY	SUMMARY OF		HDI Status Yes/No	NQF 7 Certified Yes/No
			QUALIFICATIONS	EXPERIENCE AND PRESENT OCCUPATION		
<u>HEADQUARTERS</u> Contracts Director						
Construction Manager						
<u>CONSTRUCTION MONITORING</u>  Engineer on Site						
Other key staff (give designation)						

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

## CURRICULUM VITAE OF KEY PERSONNEL

DIRECTOR	
Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional Registration Number:	
Name of Employer (firm):	
Current position:	Years with firm:
<u>Employment Record:</u>	
<u>Experience Record Pertinent to Required service:</u>	

**Certification:**

I, the undersigned, certify that, to the best of my knowledge and belief, this data correctly describes my qualifications, my experience and me.

**DATE** . ..... **SIGNATURE OF DIRECTOR** .....

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





## PRELIMINARY CONSTRUCTION PROGRAM

The tenderer shall submit a preliminary program reflecting the proposed sequence and duration of the various activities comprising the work for this Contract to include the projected cash flow for each activity. The program shall be in accordance with the information supplied in the Contract, requirements of the Project Specifications and with all other aspects of his tender.

[Note: The program must be based on the completion time as specified in the Contract Data.]

Schedule	Abbreviated description	Days per action	Cumulative project construction days
1	Site Establishment		
2	Site clearance		
3	Roadbed preparation		
4	Construction of subbase		
5	Stormwater drainage		
6	Kerbing		
7	Base course		
8	Priming		
9	Tack coat		
10	Surfacing		
11	Clean site and remove establishment on site		

PROPOSED CONSTRUCTION PERIOD \_\_\_\_\_ MONTHS

DATE . \_\_\_\_\_ SIGNATURE OF TENDERER \_\_\_\_\_  
 (of person authorised to sign on behalf of the Tenderer)

## BASELINE RISK ASSESSMENT

<b>PROJECT TITLE</b>	REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS $\pm 0.6\text{KM}$
<b>SCMU NUMBER</b>	SCMU8 – 25/26 – 0040
<b>PLEASE NOTE THAT THIS IS A BASELINE RISK ASSESSMENT AND NOT A DETAILED RISK ASSESSMENT OF ALL ANTICIPATED ACTIVITIES ON SITE</b>	

<b>Activity</b>	<b>Risk to Safety</b>	<b>Risk to Health</b>	<b>Risk to Environmental</b>	<b>Risk to Public Safety</b>	<b>Control Measures</b>
<b>COVID 19 OHS</b>	<b>Low</b>	<b>High</b>	<b>N.A</b>	<b>High</b>	<b>Adhere to Disaster Management Act (57/2002): Covid-19 Occupational Health and Safety Measures in Workplaces Covid-19 (Gov Gazette No. 43257, Dated 29 April 2020 and any amendments)</b>
<b>Working at height of 2-9m</b>	<b>Medium</b>	<b>Low</b>	<b>N.A.</b>	<b>Low</b>	<b>Make use of appropriate scaffolding and ladders.</b>
<b>Working in single story roof</b>	<b>Medium</b>	<b>Low</b>	<b>N.A.</b>	<b>Low</b>	<b>Make use of appropriate safety gear.</b>
<b>Excavations of up to 1.5m</b>	<b>Medium</b>	<b>Low</b>	<b>N.A.</b>	<b>Medium</b>	<b>Barricade excavation areas.</b>
<b>Movement of machinery and vehicles on site</b>	<b>Low</b>	<b>Low</b>	<b>N.A.</b>	<b>Medium</b>	<b>Fence site, and put access control measures in place.</b>

You can list all activities on a separate page to address this issue (the above table is just for reference purposes).

**Signed**

**Date**

**Name**

**Position**

**Enterprise name**

## ALTERATIONS BY TENDERER

Should the tenderer desire to make any departure or modification to the General Conditions of Contract, Special Conditions of Contract, Specifications, Schedule of Quantities or Drawings, or to qualify his tender in any way, he shall set out his proposals clearly hereunder, or alternatively, state them in a covering letter attached to his tender and referred to hereunder, failing which the tender will be deemed to be unqualified.

[illegible]

**DATE..** ..... **SIGNATURE OF TENDERER** .....  
(of person authorised to sign on behalf of the tenderer)

# CONTRACTORS HEALTH AND SAFETY DECLARATION

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

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

## Declaration by Tenderer

1. I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHSA 1993 Construction Regulations 2014.
2. I hereby declare that my company has the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Employer's Health and Safety Specifications.
3. I hereby confirm that adequate provision has been made in my tendered rates and prices in the Bill of Quantities to cover the cost of all resources, actions, training and all health and safety measures envisaged in the OHSA 1993 Construction Regulations 2014, including the cost of the specific items listed in the tables hereafter.

**(Tables to be completed by tenderer)**

**TABLE 1: COST OF SAFETY PERSONNEL**

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

**TABLE 2: COST OF SAFETY EQUIPMENT**

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

4. I hereby undertake, if my tender is accepted, to provide, before commencement of the works under the contract, a suitable and sufficiently documented Health and Safety Plan in accordance with Regulation 7(1)(a) of the Construction Regulations, which plan shall be subject to approval by the Employer.
5. I confirm that copies of my company's approved Health and Safety Plan, the Employer's Safety Specifications as well as the OHSA 1993 Construction Regulations 2014 will be provided on site and will at all times be available for inspection by the Contractor's personnel, the Employer's personnel, the Engineer, visitors, and officials and inspectors of the Department of Labour.
6. I hereby confirm that, I will be liable for any penalties that may be applied by the Employer in terms of the said Regulations (Regulation 33) for failure on the Contractor's part to comply with the provisions of the Act and the Regulations.
7. I agree that my failure to complete and execute this declaration to the satisfaction of the Employer will mean that I am unable to comply with the requirements of the OHSA 1993 Construction Regulations 2014, and accept that my tender will be prejudiced and may be rejected at the discretion of the Employer.

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

## CONTRACTORS HEALTH AND SAFETY PLAN

*[Not applicable for tender purposes]*

*[The successful Tenderer, only, shall be required to submit the Contractor's Health and Safety Plan as required in terms of Regulation 7 of the Occupational Health and Safety Act 1993 Construction Regulations 2014, and referred to in T2.1, List of Returnable Documents point 4 (other documents that will be incorporated into the contract) after acceptance of the tender]*

## EVALUATION SCHEDULE 1 – PROJECT REFERENCE FORMS - 1

<b>Project title:</b>	<b>REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ±0.6KM</b>
<b>Project Number:</b>	<b>SCMU8 – 25/26 – 0040</b>

**NOTE:** This returnable document must be completed by the person who was the Engineer/Project Manager on a project of similar value and complexity that was completed successfully by the tenderer.

I, \_\_\_\_\_ (name and surname) of  
 \_\_\_\_\_ (company name) declare  
 that I was the Project Manager on the following building construction project successfully executed by  
 \_\_\_\_\_ (name of tenderer):

Project name: \_\_\_\_\_

Project location: \_\_\_\_\_

Construction period: \_\_\_\_\_ Completion date: \_\_\_\_\_

Contract value: \_\_\_\_\_

- Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting "Yes" in the relevant box below:

Key Performance Indicators	Very Poor 1	Poor 2	Fair 3	Good 4	Excellent 5	Total
1. Project performance						
2. Quality of Service						
3. Resources: Personnel						
4. Time management / programming						
5. Financial management / Project budget management/cash flow, etc.						
<b>TOTAL</b>						

- Would you consider / recommend this tenderer again:

YES	NO

- Any other comments:

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

- My contact details are:

Telephone: \_\_\_\_\_ Cellphone: \_\_\_\_\_ Fax: \_\_\_\_\_

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

Thus signed at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

\_\_\_\_\_

Signature of principal agent



**NOTE:**

If reference cannot be verified due to the inability to get hold of the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points. It is the responsibility of the tenderer to put referees who are reachable.

\_\_\_\_\_  
Name of Tenderer

\_\_\_\_\_  
Signature of Tenderer

## EVALUATION SCHEDULE 1 – PROJECT REFERENCE FORMS - 2

<b>Project title:</b>	<b>REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ±0.6KM</b>
<b>Project Number:</b>	<b>SCMU8 – 25/26 – 0040</b>

**NOTE:** This returnable document must be completed by the person who was the Engineer/Project Manager on a project of similar value and complexity that was completed successfully by the tenderer.

I, \_\_\_\_\_ (name and surname) of  
 \_\_\_\_\_ (company name) declare  
 that I was the Project Manager on the following building construction project successfully executed by  
 \_\_\_\_\_ (name of tenderer):

Project name: \_\_\_\_\_

Project location: \_\_\_\_\_

Construction period: \_\_\_\_\_ Completion date: \_\_\_\_\_

Contract value: \_\_\_\_\_

- Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting "Yes" in the relevant box below:

<b>Key Performance Indicators</b>	<b>Very Poor 1</b>	<b>Poor 2</b>	<b>Fair 3</b>	<b>Good 4</b>	<b>Excellent 5</b>	<b>Total</b>
1. Project performance						
2. Quality of Service						
3. Resources: Personnel						
4. Time management / programming						
5. Financial management / Project budget management/cash flow, etc.						
<b>TOTAL</b>						

1. Would you consider / recommend this tenderer again:

YES	NO

2. Any other comments:

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3. My contact details are:

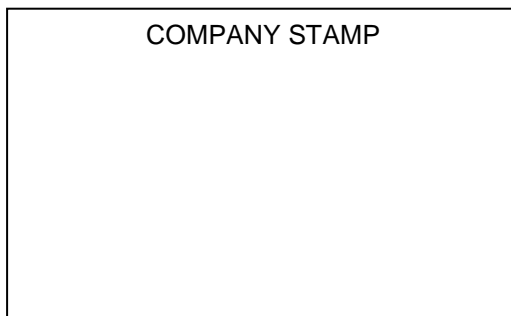
Telephone: \_\_\_\_\_ Cellphone: \_\_\_\_\_ Fax: \_\_\_\_\_

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

Thus signed at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

\_\_\_\_\_

Signature of principal agent



**NOTE:**

If reference cannot be verified due to the inability to get hold of the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points. It is the responsibility of the tenderer to put referees who are reachable.

\_\_\_\_\_  
Name of Tenderer

\_\_\_\_\_  
Signature of Tenderer

## EVALUATION SCHEDULE 1 – PROJECT REFERENCE FORMS - 3

<b>Project title:</b>	<b>REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ±0.6KM</b>
<b>Project Number:</b>	<b>SCMU8 – 25/26 – 0040</b>

**NOTE:** This returnable document must be completed by the person who was the Engineer/Project Manager on a project of similar value and complexity that was completed successfully by the tenderer.

I, \_\_\_\_\_ (name and surname) of  
 \_\_\_\_\_ (company name) declare  
 that I was the Project Manager on the following building construction project successfully executed by  
 \_\_\_\_\_ (name of tenderer):

Project name: \_\_\_\_\_

Project location: \_\_\_\_\_

Construction period: \_\_\_\_\_ Completion date: \_\_\_\_\_

Contract value: \_\_\_\_\_

4. Please evaluate the performance of the Tenderer on the abovementioned project, on which you were the principal agent, by inserting "Yes" in the relevant box below:

<b>Key Performance Indicators</b>	<b>Very Poor 1</b>	<b>Poor 2</b>	<b>Fair 3</b>	<b>Good 4</b>	<b>Excellent 5</b>	<b>Total</b>
1. Project performance						
2. Quality of Service						
3. Resources: Personnel						
4. Time management / programming						
5. Financial management / Project budget management/cash flow, etc.						
<b>TOTAL</b>						

1. Would you consider / recommend this tenderer again:

YES	NO

2. Any other comments:

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3. My contact details are:

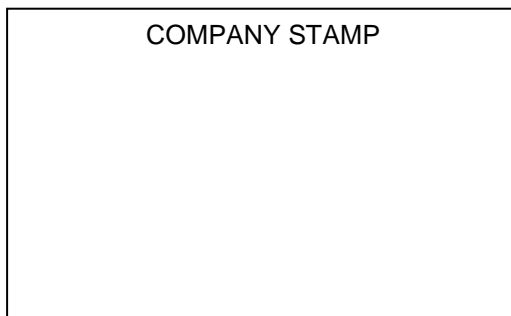
Telephone: \_\_\_\_\_ Cellphone: \_\_\_\_\_ Fax: \_\_\_\_\_

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

Thus signed at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

\_\_\_\_\_

Signature of principal agent



**NOTE:**

If reference cannot be verified due to the inability to get hold of the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points. It is the responsibility of the tenderer to put referees who are reachable.

\_\_\_\_\_  
Name of Tenderer

\_\_\_\_\_  
Signature of Tenderer

# The Contract

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

## **C 1.1**

### **Form of Offer and Acceptance**

**PROVINCE OF THE EASTERN CAPE  
DEPARTMENT OF AGRICULTURE**

**REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ±0.6KM**

**C1.1 Form of Offer and Acceptance**

**Note:** 1 This form of offer and acceptance is identical to that contained in Annex F of SANS 10845 - 1: Construction Procurement Processes, Procedures and Methods.

2 SAICE's Practice Manual #1, The use of South African National Standards in Construction Procurement, provides guidance on the formulation of the wording for the actual offer where it is not based on the offered total of prices.

**Offer**

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of: **SCMU8 – 25/26 – 0040: REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ±0.6KM**. The tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the tenderer offers to perform all of the obligations and liabilities of the contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

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

..... Rand (in words);

R ..... (in figures) (or other suitable wording)

This offer may be accepted by the employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the tender data, whereupon the tenderer becomes the party named as the contractor in the conditions of contract identified in the contract data.

Signature(s)		Date:	
Name(s)			
Capacity:			
For tenderer: (Name and address)			
Name & Signature of witness:		Date:	

## ACCEPTANCE

By signing this part of this form of offer and acceptance, the employer identified below accepts the tenderer's offer. In consideration thereof, the employer shall pay the contractor the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the tenderer's offer shall form an agreement between the employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1 Agreements and contract data, (which includes this agreement)

Part C2 Pricing data

Part C3 Scope of work

Part C4 Site information and drawings and documents or parts thereof, which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as 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 after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the employer's agent (whose details are given in the contract data) to arrange the delivery of any 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 (5) working days of the date of such receipt notifies the employer in writing of any reason why he/she cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

Signature(s)		Date:	
Name(s)			
Capacity:			
For the employer: (Name and address)			
Name & Signature of witness:		Date:	

# SCHEDULE OF DEVIATIONS

## Notes:

1. *The extent of deviations from the tender documents issued by the employer before 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.*

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

Details: \_\_\_\_\_

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

Details: \_\_\_\_\_

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

Details: \_\_\_\_\_

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

Details: \_\_\_\_\_

By the duly authorised representatives signing this agreement, the employer and the tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the returnable schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance.

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

For the Tenderer:

..... Signature

..... Name

..... Capacity

For the Employer:

.....

.....

.....

Name and address of organization:

.....

.....

Name and address of organization:

.....

.....

.....

.....

..... Witness Signature .....

..... Witness Name .....

..... Date .....

## CONFIRMATION OF RECEIPT

The Tenderer, (now Contractor), identified in the form of Offer part of the Agreement, hereby confirms receipt from the Employer. Identified in the Acceptance part of the Agreement, of one fully completed original copy of this Agreement. Including the Schedule of Deviations (if any) today:

The .....(day) of ..... (month) 20.....(year), at

..... (place)

For the Contractor:

Signature: .....

Name: .....

Capacity: .....

Signature and name of witness:

Signature: .....

Name: .....

## **C 1.2**

### **Contract Data**

**PROVINCE OF THE EASTERN CAPE  
DEPARTMENT OF AGRICULTURE**

**REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ±0.6KM**

**C1.2 Contract Data**

*The General Conditions of Contract for Construction Works (2015) published by the South African Institution of Civil Engineering, is applicable to this contract. Copies of these conditions of contract may be obtained from the South African Institution of Civil Engineering (Tel 011-805 5947).*

The General Conditions of Contract for Construction Works make several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the general conditions of contract.

The Contract Data and General Conditions of Contract shall have precedence over the Drawings, Scope of Work and Standardised Specifications in the interpretation of any ambiguity or inconsistency.

**Contract Specific Data**

The following contract specific data, referring to the General Conditions of Contract for Construction Works, Third Edition, 2015, are applicable to this Contract:

Clause	Data																		
1.1.1.5	The Commencement Date shall be the date on which the contract is awarded to the Contractor. The letter of appointment shall state the date commencement date, failing which the date on which the letter was drafted shall be used as the commencement date.																		
1.1.1.13	The Defects Liability Period is <b>12 Months</b> , measured from the date of the Certificate of Completion.																		
1.1.1.14	The time for achieving Practical Completion is <b>22 Weeks</b> , inclusive of the 14 day period referred to in Clause 5.3.2 below, and inclusive of non-working days referred to in Clause 5.8.1 below, but exclusive of special non-working days (Clause 5.8.1).																		
1.1.1.15	The name of the Employer is DEPARTMENT OF AGRICULTURE																		
1.1.1.16	<p>The Engineer is <b>MBSA CONSULTING.</b></p> <p>The Engineer's address for receipt of communications is:</p> <table border="0"> <tr> <td>Physical (street address) address:</td><td>Postal address:</td></tr> <tr> <td>MBSA House</td><td></td></tr> <tr> <td>8 Pine Park</td><td>8 Pine Park</td></tr> <tr> <td>Vincent</td><td>Vincent</td></tr> <tr> <td>East London</td><td>East London</td></tr> <tr> <td>5241</td><td>5241</td></tr> <tr> <td>Telephone: 043 726 6513/ 076 574 7498</td><td></td></tr> <tr> <td>Fax: 086 606 1408</td><td></td></tr> <tr> <td>E-mail: themba@mbsaconsultants.com / info@mbsaconsultants.com</td><td></td></tr> </table>	Physical (street address) address:	Postal address:	MBSA House		8 Pine Park	8 Pine Park	Vincent	Vincent	East London	East London	5241	5241	Telephone: 043 726 6513/ 076 574 7498		Fax: 086 606 1408		E-mail: themba@mbsaconsultants.com / info@mbsaconsultants.com	
Physical (street address) address:	Postal address:																		
MBSA House																			
8 Pine Park	8 Pine Park																		
Vincent	Vincent																		
East London	East London																		
5241	5241																		
Telephone: 043 726 6513/ 076 574 7498																			
Fax: 086 606 1408																			
E-mail: themba@mbsaconsultants.com / info@mbsaconsultants.com																			
1.1.1.17	Add the following to the clause: Any reference to the term "Engineer's Representative" in this Contract shall mean "Employer's Agent's Representative" and vice versa.																		
1.1.1.26	The Pricing Strategy is Re-measurement Contract																		

1.1.1.34	“writing” means any hand-written typed or printed communication (comprising words, figures or drawings) including electronic communication through means of email, but excluding communication via social media (WhatsApp, Facebook etc.) resulting in a permanent record. “In writing” and “written” shall have corresponding meaning.
1.1.1.35	Add clause 1.1.1.35 : “Cost” means all expenditure reasonably incurred (or to be incurred) on the contract by the Contractor related to the delay, whether on or off the Site, including overhead and similar charges, but does not include profit.
1.1.1.36	<b>Letter of Notification</b> ” means the letters of formal notification, signed by the Employer, of the decision of the Supply Chain Management Bid Adjudication Committee sent to all tenderers. The notification of the decision does not form part of the Employer’s Acceptance of the successful tenderer’s Offer and no rights shall accrue.
1.2.1.2	The Employer’s address for receipt of communications and notices is: The Employer's address for receipt of communications is: <u>Physical address:</u> DEPARTMENT OF AGRICULTURE DOHNE ADI STUTTERHEIM 4930 Telephone: 063 693 0652  Contact Person : Mr S Kondlo  <u>Postal address:</u> Private Bag x 015 STUTTERHEIM 4930
1.2.1.2	The Employer’s Agent’s address for receipt of communications and notices is: <b>MBSA CONSULTING</b> 8 Pine Park Vincent East London 5241 Contact Person : Themba Twenani Tel : (043) 726 6513/ 076 574 7498 Email : <a href="mailto:themba@mbsaconsultants.com">themba@mbsaconsultants.com</a> / info@mbsaconsultants.com
1.3.7	Add the following new subclause: “All information, documents, recommendations, programmes and reports collected or compiled must be regarded as confidential and may not be communicated or made available to any person outside the Employer's service and may not be published either during the currency of this Contract or after termination thereof without the prior written consent of the Employer.”

2.1.4	<p>The following additional clause applies: -</p> <p>"Without limiting the generality of the afore going, the Schedule of Rates and Prices shall include:</p> <ul style="list-style-type: none"> <li>(a) The provision and use of all labour, plant, tools instruments, templates, materials, transport and all other appliances that may be required for satisfactorily protecting and efficiently carrying out the works without interruption or delay.</li> <li>(b) The provision and housing of adequate staff and labour force and the provision of false work of every kind and description necessary for the due and proper performance of the Contract.</li> <li>(c) The execution of the Works in orderly and progressive manner until it has been completed. Time being of the essence of the Contract the progressive development of the Works shall be arranged so that the time from the start to the finish of the construction of the said Works shall not exceed the time laid down in the Tender.</li> <li>(d) The inclusion in the tendered rates for all and any of the general liabilities such as Establishment Charges, legal contingencies, regulations, risks or damage, Royalties and all other overhead charges.</li> </ul> <p>The submission of a tender shall be considered prima facie evidence that the Contractor has complied with the requirements of this clause and has satisfied him/herself as to all circumstances and local conditions which may influence or affect his Tender."</p>
2.4.1	<p>The following additional clause applies: -</p> <p>"In the event of any ambiguity, conflict, or discrepancy between the various contract documents, lists and schedules, the order of precedence (from highest to lowest) shall be as follows:</p> <ul style="list-style-type: none"> <li>1. Form of Offer and Acceptance and Schedule of Deviations.</li> <li>2. Contract Data.</li> <li>3. General Conditions of Contract (2015).</li> <li>4. Scope of Works.</li> <li>5. Standard Specifications of Roads and Bridgeworks (1998).</li> <li>6. Site Information.</li> <li>7. Construction Drawings.</li> <li>8. Bill of Quantities.</li> <li>9. The Returnable Schedules</li> </ul>
3.2.3	<p>The Employer's Agent shall obtain the specific approval of the Employer before executing any of his functions or duties according to the following Clauses of the General Conditions of Contract:</p> <p>New Clause</p> <ul style="list-style-type: none"> <li>3.2.3.1 For expenditure on the Contract that exceeds the Contract Sum.</li> <li>Clause 3.3.1 Nomination of Employer's Agent Representative</li> <li>Clause 3.3.4 Employer's Agent authority to delegate</li> <li>Clause 5.7.2 Night Work</li> <li>Clause 5.8.1 Non-working times</li> <li>Clause 5.11.2 Suspension of the Works</li> <li>Clause 5.12 Granting of extension of time excluding Clause 5.12.2.2 (Abnormal climatic conditions).</li> <li>Clause 5.13 Reduction of penalty for delay.</li> <li>Clause 5.14.4 The issue of a Certificate of Completion.</li> <li>Clause 5.16.1 The issue of a Final Approval Certificate.</li> <li>Clause 6.11 Adjustment of General Items &amp; Approval of Claims.</li> </ul>

3.2.4	<p>Add the following to the clause :</p> <p>The Employer has appointed an independent Health and Safety Agent (HSA) on this Contract in terms of the Construction Regulations, 2014 as promulgated in terms of section 43 of the Occupational Health and Safety Act, 1993.</p> <p>The Contractor shall prepare a Health and Safety Plan in accordance with the Site Specific Health and Safety Specification and submit such to the appointed HSA for legal compliance assessment and verification / approval prior to any works commencing.</p> <p>The Client's Occupational Health, Safety Agent will conduct a review of the approved Health and Safety Plan to verify compliance with the Health and Safety Specifications.</p>
3.2.5	<p>Add the following additional sub-clause :</p> <p>The Employer's Agent shall have the authority to suspend, without any additional cost, portions of the Works if there are any acceptance test results outstanding (including level control), as required in terms of the relevant standardised or project specific specifications.</p>
3.3.7	<p>The following additional clause applies: -</p> <p>The onus rests with the Contractor to raise any item about which the Contractor may be uncertain, with the Engineer's Representative. Any advice given to the Contractor by the Engineer's Representative in response to matters so raised shall not be construed as instructions and shall be held to have been given without prejudice.</p>
3.3.8	<p>The following additional clause applies: -</p> <p>The Employer or the Employer's Agent under delegated authority, reserves the right to obtain the services of consultants on any matter pertaining to this contract; the employment of such consultants forms no part of this contract; a consultant's advice and/or documentation is to be followed only if the Employer's Agent or the Employer's Agent Representative so instructs.</p>
4.3.1	<p>Add the following to the clause :</p> <p>The Contractor shall comply with the :</p> <ul style="list-style-type: none"> <li>• Basic Conditions of Employment Act, Act No 75 of 1997;</li> <li>• National Environmental Management Act, Act 107 of 1998;</li> <li>• The Basic Conditions of Employment Act, Act No 75 of 1997;</li> <li>• Occupational Health and Safety Act, Act No 85 of 1993;</li> <li>• Construction Regulations 2014;</li> <li>• Health and Safety Specification prepared by the Employer in terms of the Construction Regulations 2014;</li> <li>• Environmental Management Specification; and</li> <li>• Any and all other relevant applicable laws, regulations, statutory provisions and agreements.</li> <li>• Chapter 13 of the South African Road Traffic signs manual (SARTSM) with regard to the provision of traffic accommodation.</li> </ul>
4.3.3	<p>The following additional clause applies: -</p> <p>The Employer and the Contractor shall enter into an agreement to complete the work required for the construction of the works in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (Act 85 of 1993) and the Construction Regulations promulgated there under.</p> <p>An agreement is included in the Contract Document (at the end of Contract Data) and shall be completed and submitted to the Employer together with a letter of good standing from the Compensation Commissioner (if not insured with a Licensed Compensation Insurer) within fourteen (14) days after the Commencement Date. The Contractor shall ensure that any letter of good standing shall be timeously renewed in order that it remains in full force for the duration of the Contract.</p>
4.12.2	<p>Notwithstanding the requirements of this clause, the Contractor's appointed Construction Manager shall be solely dedicated to this contract and shall be on site at all times when work is being performed.</p>

4.12.4	<p>Add the following new sub-clause :</p> <p>The Contractor shall submit a comprehensive progress report at least 24 hours prior to monthly site meetings. The progress report shall consist of at least the following documents on a monthly basis:</p> <ul style="list-style-type: none"> <li>• Approved programme indicating the base programme, actual and planned percentage complete of each item including the “time now” line;</li> <li>• A summary of the progress to date;</li> <li>• Updated realistic cash flow;</li> <li>• Any delays encountered or anticipated, including rainfall statistics for the month;</li> <li>• An information required schedule indicating any information or drawings required;</li> <li>• Plant and Labour Report; and</li> </ul> <p>Failure to submit the complete progress report in time for the monthly progress meeting will result in an initial fine of R10 000 and an additional R 1 000 per day from the date required. Deductions shall be applied in the next payment certificate by the Employers Agent.</p>
5.3.1	<p>The documentation required before commencement with the Works execution are:</p> <ol style="list-style-type: none"> <li>1 Health and Safety Plan (Refer to Clause 4.3)</li> <li>2 Initial programme (Refer to Clause 5.6)</li> <li>3 Security (Refer to Clause 6.2)</li> <li>4 Insurance (Refer to Clause 8.6)</li> <li>5 CV of Construction Manager (Refer to clause 4.12)</li> <li>6 Letter of Good Standing with the Civil Engineering Bargaining Council</li> </ol>
5.3.2	<p>The Contractor is required to submit all contractual documentation within 14 days of the Client’s letter of acceptance. The documentation listed in the Contract Data clause 5.3.1 shall be submitted to the Employer’s Agent for his approval.</p>
5.3.3	<p>The Contractor shall commence with execution of the Works within 7 days after receiving an instruction to commence with the Works.</p>
5.4.1	<p>The Contractor shall bear all costs and charges for special and temporary rights of way required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional facilities outside the Site required by him for the purposes of the Works.</p>
5.5.1	<p>The Works shall be completed (Practical Completion) within <b>5 Months</b>.</p>
5.6	<p>The preliminary Works programme shall be submitted to the Engineer within fourteen (14) days of any such written request.</p>
5.8.1	<p>Delete the words “between sunset and sunrise” in the first line and replace with “outside normal working hours”.</p> <p>Add the following to the clause :</p> <p>Normal working hours shall be those as stated in the applicable Sectoral Determination applicable to a 5 (five) day week (Monday to Friday) from 07:00 to 17:00.</p> <p>The non-working days are Saturdays and Sundays.</p> <p>The special non-working days are:</p> <ol style="list-style-type: none"> <li>(1) All gazetted public holidays falling outside the year end break.</li> <li>(2) The year end break commencing on 15 December and ending on 9 January</li> </ol>
5.8.1.5	<p>Add the following new sub-clause :</p> <p>The cost of supervision by the Employer’s Agent or his representatives outside of normal working hours (Monday to Friday) in accordance with this Clause shall be to the Contractor’s account.</p>

5.8.3	<p>The following additional clause shall apply:</p> <p>Should the Employer's Agent permit work outside of normal Employer working hours (viz Mondays to Fridays inclusive sunrise to sunset) and on Saturdays, Sundays or on any of the non-working days stated in the Appendix and if he deems the presence of the Employer's Agent Representative or other duly authorised representative to be necessary, the Contractor will be liable for the cost of such supervision (calculated at a daily rate of 1/130 of the annual salary of such representative). Where the Employer's Agent has ordered such work, the salary of the representative will be to the account of the Employer.</p> <p>A minimum of 24 hours notification of intent to work outside normal working hours shall be regarded as sufficient notice as set out in 5.8.1"</p>
5.12.2.2	<p>Add the following to the clause:</p> <p>The time period specified as the time for completion includes allowances for those days on which it is expected that work, on the critical path items of the works, would be prevented due to weather conditions such as wind, rain falling or the subsequent waterlogged condition. Based on average weather conditions of wind, rain and sunshine the allowances are:</p> <ul style="list-style-type: none"> <li>• 2 working days per month for the months of May to October</li> <li>• 3 working days per month for the months of November to April</li> </ul> <p>If the Contractor is prevented by these weather conditions from working on the critical path items of the works, then he must notify the Employer's Agent in writing. The submission shall be made within five calendar days of the resumption of work. The Employer's Agent shall upon considering all the relevant factors determine the extension of time to be granted on the basis that an extension of time to the Contract will only be granted if the total number of days upon which work on the critical items was prevented, exceeds the total number of days calculated in terms of the above allowance and considering the official Contract period as a whole.</p> <p>The tendered sums of the appropriate time-related items shall be increased to take account of the extensions of time granted.</p>
5.12.2.4	<p>Amend the clause to read as follows :</p> <p>Any disruption which is entirely beyond the Contractor's control except for internal (Contractor's own or his subcontractors labour) unrest, disruptions, strikes, lock-outs, etc.</p>
5.12.3	<p>Delete the contents of clause 5.12.3 and replace with the following :</p> <p>If an extension of time is granted, the Contractor shall be paid such proven additional costs including for special non-working days, if applicable, as are appropriate regarding any other compensation which may have already been granted in respect of the circumstances concerned.</p>
5.12.5	<p>Add the following to the clause :</p> <p>Critical Path Provision</p> <p>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 into account for the extension of time.</p>
5.13.1	<p>The penalty for failing to complete the Works is <b>R100 of contract amount per day</b>. No claim for bonus payments in respect of early completion will be entertained.</p>
5.14.1	<p>The requirements for Practical Completion are that the Works reach a state of readiness, fit for the intended purpose and occupation without danger or undue inconvenience to the Employer.</p>
5.16.3	<p>The latent defect period is 10 years for civil works, The latent defects period shall commence on the date of the Final Approval Certificate.</p>

6.2.1	<p>Replace the wording “as selected” in Clause 6.2.1 with “as stated”.</p> <p>The security to be provided by the Contractor shall be:</p> <ul style="list-style-type: none"> <li>a Performance Guarantee of ten per cent (10%) of the Contract Sum, plus Retention monies due shall be subjected to Clauses 6.10.1.3 and 6.10.3.</li> </ul> <p>The Performance Guarantee shall be from an approved Insurance Company or Bank to be jointly and severally bound with the Contractor, in accordance with the provisions of the Performance Guarantee. A Retention Money Guarantee is not permitted.</p> <p>The wording of the Performance Guarantee shall be identical to the pro-forma provided under Clause C1.3: Performance Guarantee of the Contract Data</p> <p>The time to deliver the Performance Guarantee is within fourteen (14) days after the Commencement Date.</p>
6.2.2	<p>Replace the entire contents of Clause 6.2.2 with the following:</p> <p>“If the Contractor fails in his obligations to provide the stated security within the period stated in Clause 5.3.2, or if the Performance Guarantee shall differ from the pro-forma provided under Clause C1.3: Performance Guarantee of the Contract Data, the Employer may terminate the Contract in terms of Clause 9.2.”</p>
6.2.3	<p>Replace the entire contents of clause 6.2.3 with the following:</p> <p>The Contractor shall ensure that the fixed performance guarantee remains valid and enforceable until the issue of the Certificate of Completion.</p>
6.6.1	<p>The provisional sums stated in the Schedule of Quantities are net amounts covering the actual expenditure which the Employer may incur.</p>
6.8.1	<p>Should the rated tendered be unrealistically high or low, the Employer’s Agent may instruct the contractor to balance the rates while the contract sum will remain firm, before commencement of construction. The revised balanced rates will be final and binding. And the value of the payment certificates is to be calculated in accordance with the revised rates and/or prices of the tender throughout the period of the Contract.</p>
6.10.1.5	<p>The percentage advance on materials not yet built into the Permanent Works is <b>80%</b>.</p>
6.10.3	<p>Replace the entire contents of Clause 6.10.3 with the following:</p> <p>Payment of the amounts referred to in Clauses 6.10.1.1, 6.10.1.2, 6.10.1.3 and 6.10.1.4 shall be subject to a retention by the Employer of an amount (called the “retention money”), being the percentage retention stated in the Contract Data, of the said amounts due to the Contractor, until the retention money reaches the “Limit of retention money” stated in the Contract Data.</p> <p>The percentage retention shall be 10% of payments due up to the “Limit of retention money” which shall be 5% of the Contract Sum.</p>
6.10.4	<p>Replace the wording “within 28 days” in Clause 6.10.4 with the wording “within 45 days”, but will endeavour to pay within 30 days”.</p>
6.10.6.2	<p>Replace clause 6.10.6.2 with the following new clause:</p> <p>No interest shall be payable to the Contractor upon any moneys retained or overdue in terms of the Contract.</p>
8.3.1.6	<p>Electrical supply interruptions due to ‘load shedding’ implemented by the electricity suppliers is excluded from the risks accepted by the Employer.</p>
8.5.2	<p>The following additional clause shall apply:</p> <p>If the Contractor receives any claim in respect of any loss or injury or damage to any person or property, then the Contractor shall immediately report the same to the Employer’s Agent and, if at the end of ninety days from the date of receipt of such claim the Contractor cannot satisfy the Employer’s Agent that the claim has been settled or that valid reasons for the non-settlement of the claim exist, then the Employer may, without limiting the obligations and responsibilities of the Contractor, negotiate a settlement and deduct all sums due in respect of such claim from payments due to the Contractor.</p>
8.6.1	<p>Without limiting the Contractor’s obligation in terms of the Contract, the Employer will effect and maintain for the duration of the Contract, until the expiry of the Defects Liability Period the following insurances as stated in Section C1.5 of the document.</p>
8.6.1.1.2	<p>The value of plant and materials supplied by the Employer to be included in the insurance sum is <b>Nil</b>.</p>

8.6.1.1.3	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is <b>R 200 000.00</b> .
8.6.1.3	The limit of indemnity for liability insurance is <b>R 2 000 000.00</b> per claim for projects under <b>R 5 000 000.00</b> and <b>R 5 000 000.00</b> for projects over <b>R 5 000 000.00</b> .
8.6.1.5	The following additional and varied insurances are required: “The Contractor and subcontractor shall feel 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.”
9.1.4	<p>Replace Clause 9.1.4 with the following:            Up to the time of termination of the Contract by either party in terms of this Clause, or until the Contractor gives notice in terms of this Clause to terminate the Contract and the Contractor is precluded from exercising his right to terminate the Contract because the Employer agrees to bear any resultant additional costs provided for in Clause 9.1.2.2 hereof, the Contractor:</p> <ul style="list-style-type: none"> <li>a) will be entitled to an extension of time for working days lost as may be approved by the Employer, and</li> <li>b) will be reimbursed the cost of delay to be agreed with the Employer’s Agent.</li> </ul> <p>Where the circumstances described in Clauses 9.1.1 and 9.1.2 are applicable only to a certain portion of the Contract, the Employer’s Agent will decide after consulting the Contractor, to what extent the Contract as a whole is affected and whether or not a claim in terms of this Clause can be submitted.</p>

9.2	<p><b>DELETE AND REPLACE WITH:</b>  <b>"9.2 Termination by Employer:</b></p> <p>9.2.1 If:</p> <p>9.2.1.1 Application is made for the sequestration of the Contractor's estate, or if the Contractor publishes a notice of surrender of his estate, or presents a petition for the acceptance of the surrender of his estate as insolvent, or (being a company or close corporation) goes into liquidation, whether provisionally or finally (other than a voluntary liquidation for the purpose of amalgamation or reconstruction), or is placed under business rescue (whether by resolution or court order);</p> <p>9.2.1.2 The Contractor makes a compromise with his creditors, or assigns in favour of his creditors, or agrees to carry out the Contract under the supervision of a committee representing his creditors, or if the Contractor assigns the Contract without having first obtained the Employer's written consent, or if execution is levied on his goods, then the Employer may (with specific reference to this Clause) terminate the Contract."</p> <p>9.2.2 If:</p> <p>9.2.2.1 After giving effect to Clause 3.2.2, the Employer's Agent certifies, in writing, to the Employer and to the Contractor, with specific reference to this Clause, that the Contractor;</p> <p>9.2.2.2 Has abandoned the Contract; or</p> <p>9.2.2.3 Has failed, in terms of Clause 5.3.2, to submit documentation in time, or to submit acceptable documentation; or</p> <p>9.2.2.4 Has failed to commence the Works in terms of Clause 5.3 hereof, or has suspended the progress of the Works (other than in terms of Clause 5.11.1) for fourteen (14) consecutive days after receiving from the Employer's Agent written notice to proceed; or</p> <p>9.2.2.5 Has failed to proceed with the Works in accordance with the approved programme, or in the absence of an approved programme, in the Employer's agent's opinion; or</p> <p>9.2.2.6 Has failed to remove Plant or materials from Site, or to demolish and redo work, within fourteen (14) days after receiving from the Employer's Agent written notice that the said Plant, materials or work have been condemned and rejected by the Employer's Agent in terms of these conditions; or</p> <p>9.2.2.7 Is not carrying out the Works in accordance with the Contract, or is neglecting to carry out his obligations under the Contract; or</p> <p>9.2.2.8 Anyone, on his behalf has paid, offered, or offer as payment, to any person in the employ of the Employer or to the Employer's Agent, or any person in the employ of the Employer's Agent, a gratuity or reward or commission; or</p> <p>9.2.2.9 Has furnished inaccurate information in the returnable documents completed at tender stage and forming part of the Contract;</p> <p>then the Employer may, after giving fourteen (14) days written notice to the Contractor, (with specific reference to this Clause) to remedy the default, terminate the Contract."</p> <p>9.2.3 When the Contract is terminated, the Employer may order the Contractor to vacate the Site and hand it over to the Employer. The Employer may then enter the Site and the Works and expel the Contractor therefrom without thereby affecting the rights and powers conferred on the Employer or the Employer's Agent by the Contract. The Employer may complete the Works himself, or may employ another contractor to complete the Works, and the Employer, or such other contractor, may use for such completion as much of the Construction Equipment, Temporary Works and materials brought onto the Site by the Contractor as the Employer may think proper. If, Clause 9.2.1.1 is not applicable, the Employer may at any time sell any of the said Construction Equipment, Temporary Works and unused materials and apply the proceeds of sale towards payment of any sums that may be due or become due to the Employer by the Contractor under the Contract. In such circumstances, the Contractor shall forthwith vacate the Site and shall not be entitled to remain on the Site based on a right of retention until amounts due to him have been paid and neither will the Contractor be entitled to any further payments in terms of this Contract.</p> <p>9.2.4 Should the amounts the Employer must pay to complete the Works exceed the sum that would have been payable to the Contractor on due completion by him, the Contractor shall, upon demand, pay to the Employer the difference. This sum shall legally be deemed a debt due by the Contractor to the Employer and shall be recoverable accordingly;</p> <p>provided that, should the Contractor on demand not pay the amount of such excess to the Employer, such sum may be determined and deducted by the Employer from any sum due to or that may become due to the Contractor under this or any previous or subsequent contract between the Contractor and the Employer.</p>
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	9.2.4 If the provisions of Clause 9.2.11 apply, any notice or order referred to in this Clause shall be delivered to the trustee or liquidator or business rescue practitioner, and the rights and obligations vested in, or binding on the Contractor, shall vest in or be binding on the estate under sequestration, liquidation or business rescue.”
9.2.1.3.8	Add the following to clause:  The Contractor committed a corrupt or fraudulent act during the procurement process or the execution of the contract.
9.2.1.3.8	Add the following to clause:  An official or other role player committed any corrupt or fraudulent act during the procurement process or in the execution of the contract that benefited the Contractor.
9.3.1	DELETE AND REPLACE WITH: (a) “Has repudiated the Contract (the termination of the Contract by the Employer in terms of Clause 9.2.1 shall not be a repudiation); or”
10.1	Replace all references to <b>28 days</b> , with <b>14 days</b> in this clause and all sub clauses.
10.2.1	DELETE AND REPLACE WITH: “In respect of any matter arising out of or in connection with the Contract, (except the termination of the Contract by the Employer in terms of Clause 9.2.1), which is not required to be dealt with in terms of Clause 10.1, the Contractor or the Employer shall have the right to deliver a written dissatisfaction claim to the Employer’s Agent. This written claim shall be supported by particulars and substantiated.
10.4.1	The parties may at any time agree to settle disputes with the help of an impartial third party.
10.5.3	The number of Adjudication Board Members to be appointed is one (1).

<b>2. CLAUSES APPLICABLE TO EPWP CONTRACTS</b>	
1.	Employer’s objectives: The employer’s objectives are to deliver infrastructure using labour-intensive methods according to EPWP guidelines.
2.	Labour-intensive works: Labour-intensive works shall be conducted using local workers who are temporary employed in terms of the scope of work.
3.	Labour-intensive competencies of supervisory and management staff: The contractor shall engage supervisory and management staff in labour intensive works that have completed the skills programme including Foreman/Supervisors at NQF level 4 “National Certificate on supervision of Civil Engineering Construction Processes” and Site Agent/manager at NQF level 5 on “Manage labour-intensive Construction Processes” or equivalent QCTO qualification.
4.1	Variations to the Conditions of Contract are: <i>Add the following at the end of sub clause 4.1.2.</i>
4.1.3	The Employer and the Contractor hereby agree, in terms of the provisions of Section 37(2) of the Occupational Health and Safety Amendment Act, 1993 (Act 85 of 1993), hereinafter referred to as 'the Act', that the following arrangements and procedures shall apply between them to ensure compliance by the Contractor with the provisions of the Act: (i) The Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all relevant provisions of the Act and the Regulations promulgated in terms of the Act. (ii) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of the Act and Regulations on the Contractor will be fully complied with. (iii) The Contractor accepts sole liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and Regulations and expressly absolves the Employer from

	<p>himself being obliged to comply with any of the aforesaid duties, obligations and prohibitions, with the exception of such duties, obligations and prohibitions expressly assigned to the Employer in terms of the Act and its associated Regulations.</p> <p>(iv) The Contractor agrees that any duly authorised officials of the Employer shall be entitled, although not obliged, to take such steps as may be necessary to monitor that the Contractor has conformed to his undertakings as described in paragraphs (i) and (ii) above, which steps may include, but will not be limited to, the right to inspect any appropriate site or premises occupied by the Contractor, or any appropriate records or safety plans held by the Contractor.</p> <p>(v) The Contractor shall be obliged to report forthwith to the Employer and Engineer any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and Regulations, pursuant to work performed in terms of this Contract, and shall, on written demand, provide full details in writing, to the Employer and Engineer, of such investigation, complaint or criminal charge.</p>
6.7.6	<p><i>Add new subclause 6.7.6:</i></p> <p><b>"Payment for the labour-intensive component of the works</b></p> <p>Payment for works identified in the Scope of Work as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the scope of work. Any non-payment for such works shall not relieve the Contractor in any way from his obligations in contract.</p> <p>The Contractor's payment invoice 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. <b>The contractor's invoices shall not be paid until all pending labour information has been submitted.</b></p>
<b>3. ADDITIONAL CONDITIONS OF CONTRACT:</b>	
<b>Clause</b>	
4.13	<p>Add new sub clause 4.13:</p> <p><b>Applicable labour laws</b></p> <p>The Ministerial Determination 4, Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice No R347 of 7 May 2012 (Gazette no 35310), as reproduced below, shall apply to works described in the scope of work as being labour-intensive and which are undertaken by unskilled or semi-skilled workers.</p>
4.13 (cont.)	<p><b>1 Introduction</b></p> <p>1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on a Expanded Public Works Programme (EPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a EPWP.</p>
4.13 (cont.)	<p>1.2 In this document –</p> <ul style="list-style-type: none"> <li>(a) "department" means any department of the State, implementing agent or contractor;</li> <li>(b) "employer" means any department, implementing agency or contractor that hires workers to work in elementary occupations on a EPWP;</li> <li>(c) "worker" means any person working in an elementary occupation on a EPWP;</li> <li>(d) "elementary occupation" means any occupation involving unskilled or semi-skilled work;</li> <li>(e) "management" means any person employed by a department or implementing agency to administer or execute an EPWP;</li> <li>(f) "task" means a fixed quantity of work;</li> <li>(g) "task-based work" means work in which a worker is paid a fixed rate for performing a task;</li> </ul>

	<p>(h) “task-rated worker” means a worker paid on the basis of the number of tasks completed;</p> <p>(i) “time-rated worker” means a worker paid on the basis of the length of time worked.</p> <p><b>2 Terms of work</b></p> <p>2.1 Workers on a EPWP are employed on a temporary basis.</p> <p><b>3 Normal hours of work</b></p> <p>3.1 An contractor may not set tasks or hours of work that require a worker to work–</p> <p>(a) more than forty hours in any week;</p> <p>(b) on more than five days in any week; and</p> <p>(c) for more than eight hours on any day.</p> <p>3.2 An contractor and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.</p> <p>3.3 A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker.</p> <p><b>4 Meal breaks</b></p> <p>4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.</p> <p>4.2 An contractor and worker may agree on longer meal breaks.</p> <p>4.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.</p> <p>4.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.</p>
<p>4.13 (cont)</p> <p>4.13 (cont)</p>	<p><b>5 Special conditions for security guards</b></p> <p>5.1 A security guard may work up to 55 hours per week and up to eleven hours per day.</p> <p>5.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.</p> <p><b>6 Daily rest period</b></p> <p>Every worker is entitled to a daily rest period of at least eight consecutive hours.</p> <p>The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.</p> <p><b>7 Weekly rest period</b></p> <p>Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work (“emergency work”).</p> <p><b>8 Sick leave</b></p> <p>8.1 Only workers who work more 24 hours per month have the right to claim sick-pay in terms of this clause.</p> <p>8.2 A worker who is unable to work on account of illness or injury is entitled to claim one day’s paid sick leave for every full month that the worker has worked in terms of a contract.</p> <p>8.3 A worker may accumulate a maximum of twelve days sick leave in a year.</p> <p>8.4 Accumulated sick leave may not be transferred from one contract to another contract.</p> <p>8.5 A contractor must pay a task-rated worker the worker’s daily task rate for a day’s sick leave.</p> <p>8.6 A contractor must pay a time-rated worker the worker’s daily rate of pay for a day’s sick leave.</p> <p>8.7 A contractor must pay a worker sick pay on the worker’s usual pay day.</p>

	<p>8.8 Before paying sick pay, a contractor may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is –</p> <ul style="list-style-type: none"> <li>(a) absent from work for more than two consecutive days; or</li> <li>(b) absent from work on more than two occasions in any eight-week period.</li> </ul> <p>8.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.</p> <p>8.10 A worker is not entitled to paid sick leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.</p>
4.13 (cont)	<p><b>9 Maternity leave</b></p> <p>9.1 A worker may take up to four consecutive months unpaid maternity leave.</p> <p>9.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.</p> <p>9.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.</p> <p>9.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.</p> <p>9.5 A worker may begin maternity leave –</p> <ul style="list-style-type: none"> <li>(a) four weeks before the expected date of birth; or</li> <li>(b) on an earlier date – <ul style="list-style-type: none"> <li>(i) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or</li> <li>(ii) if agreed to between employer and worker; or</li> </ul> </li> <li>(c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.</li> </ul> <p>9.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.</p> <p><b>10 Family responsibility leave</b></p> <p>10.1 Workers who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances:</p> <ul style="list-style-type: none"> <li>(a) when the employee's child is born;</li> <li>(b) when the employee's child is sick;</li> <li>(c) in the event of a death of <ul style="list-style-type: none"> <li>(i) the employee's spouse or life partner;</li> <li>(ii) the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.</li> </ul> </li> </ul> <p><b>11 Statement of conditions</b></p> <p>11.1 A contractor must give a worker a statement containing the following details at the start of employment:</p> <ul style="list-style-type: none"> <li>(a) the contractor's name and address and the name of the EPWP;</li> <li>(b) the tasks or job that the worker is to perform; and</li> <li>(c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;</li> <li>(d) the worker's rate of pay and how this is to be calculated;</li> <li>(e) the training that the worker will receive during the EPWP.</li> </ul> <p>11.2 A contractor must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.</p>

	11.3 A contractor must supply each worker with a copy of these conditions of employment.
4.13 (cont)	<p><b>12 Keeping records</b></p> <p>12.1 Every employer must keep a written record of at least the following:</p> <ul style="list-style-type: none"> <li>(a) the worker's name and position;</li> <li>(b) copy of an acceptable worker identification;</li> <li>(c) in the case of a task-rated worker, the number of tasks completed by the worker;</li> <li>(d) in the case of a time-rated worker, the time worked by the worker;</li> <li>(e) payments made to each worker.</li> </ul> <p>12.2 The employer must keep this record for a period of at least three years after the completion of the EPWP.</p> <p><b>13 Payment</b></p> <p>13.1 A contractor must pay all wages at least monthly in cash or by cheque or into a bank account.</p> <p>13.2 A worker may not be paid less than the minimum EPWP wage per day as set out in the National Minimum Wage Act no.9 of 2018 and subsequent updates.</p> <p>13.3 A task-rated worker will only be paid for tasks that have been completed.</p> <p>13.4 A contractor must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.</p> <p>13.5 A time-rated worker will be paid at the end of each month.</p> <p>13.6 Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.</p> <p>13.7 Payment in cash or by cheque must take place –</p> <ul style="list-style-type: none"> <li>(a) at the workplace or at a place agreed to by the worker;</li> <li>(b) during the worker's working hours or within fifteen minutes of the start or finish of work;</li> <li>(c) in a sealed envelope which becomes the property of the worker.</li> </ul> <p>13.8 A contractor must give a worker the following information in writing:</p> <ul style="list-style-type: none"> <li>(a) the period for which payment is made;</li> <li>(b) the numbers of tasks completed or hours worked;</li> <li>(c) the worker's earnings;</li> <li>(d) any money deducted from the payment;</li> <li>(e) the actual amount paid to the worker.</li> </ul> <p>13.9 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it.</p> <p>13.10 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.</p> <p><b>15 Deductions</b></p> <p>15.1 A contractor may not deduct money from a worker's payment unless the deduction is required in terms of a law.</p> <p>15.2 A contractor must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.</p> <p>15.3 A contractor who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.</p> <p>15.4 A contractor may not require or allow a worker to –</p> <ul style="list-style-type: none"> <li>(a) repay any payment except an overpayment previously made by the contractor by mistake;</li> <li>(b) state that the worker received a greater amount of money than the employer actually paid to the worker; or</li> <li>(c) pay the contractor or any other person for having been employed.</li> </ul>

4.13 (cont)	<p><b>15 Health and safety</b></p> <p>15.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.</p> <p>15.2 A worker must –</p> <ul style="list-style-type: none"> <li>(a) work in a way that does not endanger his/her health and safety or that of any other person;</li> <li>(b) obey any health and safety instruction;</li> <li>(c) obey all health and safety rules of the EPWP;</li> <li>(d) use any personal protective equipment or clothing issued by the contractor;</li> <li>(e) report any accident, near-miss incident or dangerous behaviour by another person to their contractor or manager.</li> </ul> <p><b>16 Compensation for injuries and diseases</b></p> <p>16.1 It is the responsibility of the contractor to arrange for all persons employed on a ESPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.</p> <p>16.2 A worker must report any work-related injury or occupational disease to their contractor or manager.</p> <p>16.3 The contractor must report the accident or disease to the Compensation Commissioner.</p> <p>16.4 An contractor must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The contractor will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.</p> <p><b>17 Termination</b></p> <p>17.1 The contractor may terminate the employment of a worker for good cause after following a fair procedure.</p> <p>17.2 A worker will not receive severance pay on termination.</p> <p>17.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.</p> <p>18.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available.</p> <p>17.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available.</p> <p><b>18 Certificate of service</b></p> <p>18.1 On termination of employment, a worker is entitled to a certificate stating –</p> <ul style="list-style-type: none"> <li>(a) the worker's full name;</li> <li>(b) the name and address of the employer;</li> <li>(c) the EPWP on which the worker worked;</li> <li>(d) the work performed by the worker;</li> <li>(e) any training received by the worker as part of the EPWP;</li> <li>(f) the period for which the worker worked on the EPWP;</li> <li>(g) any other information agreed on by the contractor and worker.</li> </ul>
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## PART 2: DATA PROVIDED BY THE CONTRACTOR

Clause	Data				
1.1.1.9	The name of the Contractor is .....				
1.2.1.2	<p>The address of the Contractor is:</p> <p>Physical Address: Postal Address:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>e-mail: .....</p> <p>Tel. No. ....</p> <p>Fax No. ....</p>				
1.1.1.14	The time for achieving Practical Completion is <b>5 Months.</b>				
6.5.1.2.3	The percentage allowance to cover overhead charges is ..... %				
6.2.1	The security to be provided by the Contractor shall be the following:				
<table border="1"> <thead> <tr> <th>Type of security</th><th>Fixed Performance Guarantee of 10% of the Contract Sum</th></tr> </thead> <tbody> <tr> <td> </td><td> </td></tr> </tbody> </table>		Type of security	Fixed Performance Guarantee of 10% of the Contract Sum		
Type of security	Fixed Performance Guarantee of 10% of the Contract Sum				

## C1.3: PERFORMANCE GUARANTEE (PRO FORMA)

For use with the General Conditions of Contract for Construction Works, Third Edition (2015)

### GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means: .....

Physical address: .....

"Employer" means: THE DEPARTMENT OF AGRICULTURE, EASTERN CAPE

"Contractor" means: .....

"Employer's Agent" means: As appointed by the Employer

"Works" means: REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED  
STANDARDS  $\pm 0.6$  KM

"Site" means: The land and other places made available by the Employer, for the purpose of  
the Contract, on, under, over, in or through which the Works are to be carried  
out

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

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

Amount in words: .....

"Guaranteed Sum" means: The maximum aggregate amount of R .....

Amount in words: .....

Type of Performance Guarantee: **Fixed**

"Expiry Date" means..... or any other later date set by the Contractor and/or  
Employer provided such instruction is received prior to the Expiry Date as indicated here

### CONTRACT DETAILS

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

## 1. FIXED PERFORMANCE GUARANTEE

- 1.1 Where a Fixed Performance Guarantee has been selected, the Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
- 1.2 The Guarantor's period of liability shall be from and including the date on which the Performance Guarantee is signed, up to and including the Expiry Date, or the date of issue by the Employer's Agent of the Certificate of Completion of the Works, or the date of payment in full of the Guaranteed Sum, whichever occurs first.
- 1.3 The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.

## 2. CONDITIONS APPLICABLE TO VARIABLE AND FIXED PERFORMANCE GUARANTEES

- 2.1 The Guarantor hereby acknowledges that:
  - 2.1.1 Any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship.
  - 2.1.2 Its obligation under this Performance Guarantee is restricted to the payment of money.
- 2.2 Subject to the Guarantor's maximum liability referred to in 1.1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 2.2.1 to 2.2.3:
  - 2.2.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 2.2.2;
  - 2.2.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 2.2.1 and the sum certified has still not been paid;
  - 2.2.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 2.2.
- 2.3 Subject to the Guarantor's maximum liability referred to in 1.1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:
  - 2.3.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 2.3; or
  - 2.3.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 2.3; and
  - 2.3.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.
- 2.4 It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 2.2 and 2.3 shall not exceed the Guarantor's maximum liability in terms of 1.1.
- 2.5 Where the Guarantor has made payment in terms of 2.3, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
- 2.6 Payment by the Guarantor in terms of 2.2 or 2.3 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
- 2.7 Payment by the Guarantor in terms of 2.3 will only be made against the return of the original Performance Guarantee by the Employer.
- 2.8 The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may consider fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.

- 2.9 The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
- 2.10 This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 1.2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
- 2.11 This Performance Guarantee, with the required demand notices in terms of 2.2 or 2.3, shall be regarded as a liquid document for the purposes of obtaining a court order.
- 2.12 Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrates' Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at .....

Date .....

Guarantor's signatory (1) .....

Capacity .....

Guarantor's signatory (2) .....

Capacity .....

Witness signatory (1) .....

Witness signatory (2) .....

# AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT NO. 85 OF 1993

THIS AGREEMENT is made between .....

(hereinafter called the EMPLOYER) of the one part, herein represented by: .....

in his capacity as: .....

AND:

(hereinafter called the CONTRACTOR) of the other part, herein represented by .....

in his capacity as: .....

duly authorised to sign on behalf of the Contractor.

**WHEREAS** the CONTRACTOR is the Mandatory of the EMPLOYER in consequence of an agreement between the CONTRACTOR and the EMPLOYER in respect of

**CONTRACT No.: SCMU8-25/26-0040: REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS  $\pm 0.6$ KM;**

**NOW THEREFORE** the parties agree as follows:

1. **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.**
2. The CONTRACTOR undertakes to fully comply with all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations: Provided that should the EMPLOYER have prescribed 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.
3. The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures, if any, imposed by the ACT and Regulations, and the CONTRACTOR expressly absolves the EMPLOYER and the Employer's CONSULTING EMPLOYER'S AGENTS from being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedures in respect of the work included in the contract.
4. 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 his 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 take such steps it may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.
5. The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge.

Thus signed at ..... for and on behalf of the **CONTRACTOR**

on this day ..... day of .....20\_\_\_\_\_

SIGNATURE: .....

NAME AND SURNAME: .....

CAPACITY: .....

WITNESS: 1. ....

2. ....

Thus signed at ..... for and on behalf of the **EMPLOYER**

on this day ..... day of .....20\_\_\_\_\_

SIGNATURE: .....

NAME AND SURNAME: .....

CAPACITY: .....

WITNESS: 1. ....

2. ....

## CESSION OF RIGHTS FOR MATERIALS ON SITE

Claim for materials on site

Payment Certificate No. .... Date: .....

Contract: .....

Employer: .....

Contract No:.....

Contractor: .....

I / We, the undersigned, .....  
(Print name)

in my / our capacity as..... of .....  
(Print capacity) (Company)

hereby confirm that the Contractor is the bona fide owner of the goods and materials described in the attached schedule and the Contractor hereby cedes assigns and transfers all the right, title and interest claim and demand in and due to the materials and goods described in the attached schedule in favour of the Employer.

All rights of the Employer in and to this Cession shall become effective immediately upon the Contractor obtaining payment for the goods referred to on the attached schedule (less payment of retention monies that may be validly retained in respect thereof) from which time forward the ownership of all the stated goods and materials will vest in and pass irrevocably to the Employer.

Notwithstanding the foregoing all risk or loss and/or damage to the said goods and materials whilst in the Contractor's stores up until the time that all the goods and materials have been installed in the Works shall be the responsibility of the Contractor.

This Cession shall neither constitute a novation of nor amend the terms of the Contract existing between the Employer and the Contractor nor shall it in any manner vitiate any of the rights and obligations imposed on either party.

Signed by: ..... Date: .....  
for and on behalf of the Contractor.

Witnessed by: .....Date: .....

(NOTE: This form, together with the documentary proof of ownership or proof of payment by the Contractor to the supplier, shall accompany the Contractor's claim for payment for materials on site in terms of Clause 49.1.5 of the General Conditions of Contract Third Edition 2015).

## **PART C2 – PRICING DATA**

## **C 2.1**

# **Pricing Instructions**

**PROVINCE OF THE EASTERN CAPE  
DEPARTMENT OF AGRICULTURE**

**REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS  $\pm 0.6$  KM**

**C2.1 Pricing Instructions**

1. Measurement and payment shall be in accordance with the relevant provisions of the COLTO Standard Specification for Road and Bridge Works for State Authorities (1998 edition) as amended in the Scope of Works.
2. The units of measurement described in the Pricing Schedule are metric units. Abbreviations used in the Pricing Schedule are as follows:

%	=	percent
h	=	hour
ha	=	hectare
kg	=	kilogram
kl	=	kilolitre
km	=	kilometre
km-pass	=	kilometre-pass
kPa	=	kilopascal
kW	=	kilowatt
l	=	litre
m	=	metre
mm	=	millimetre
m <sup>2</sup>	=	square metre
m <sup>2</sup> -pass	=	square metre-pass
m <sup>3</sup>	=	cubic metre
m <sup>3</sup> -km	=	cubic metre-kilometre
month	=	month
MN	=	meganewton
MN.m	=	meganewton-metre
MPa	=	megapascal
No.	=	number
Prov sum	=	Provisional sum
PC sum	=	Prime Cost sum
R/only	=	Rate only
sum	=	lump sum
t	=	ton (1000 kg)
W/day	=	Work day
LI	=	Labour Intensive

3. For the purpose of the Pricing Schedule, the following words shall have the meanings assigned to them:

Unit: The unit of measurement for each item of work as defined in the COLTO Standard Specification for Road and Bridge Works for State Authorities (1998 edition).

Quantity: The number of units of work for each item.

Rate: The payment per unit of work for which the Service Provider 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 Pricing Schedule, the Scope of Work or elsewhere, but of which the quantity of work is not measured in units.

4. Unless otherwise stated, items are measured nett in accordance with the drawings, and no allowance is made for waste.
5. It will be assumed that prices included in these Bills of Quantities are based on Acts, Ordinances,

Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to [www.stanza.org.za](http://www.stanza.org.za) or [www.iso.org](http://www.iso.org) for information on standards)

6. The prices and rates in the Pricing Schedule are fully inclusive prices for the work described under the items. Such prices and rates cover all costs and expenses that may be required in and for the execution of the work described in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices will be used as a basis for assessment of payment for additional work that may have to be carried out.
7. Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered such items.
8. An item against which no price is entered will be considered to be covered by the other prices or rates in the Pricing Schedule. A single lump sum will apply should a number of items be grouped together for pricing purposes.
9. The quantities set out in the Pricing Schedule are approximate and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the Pricing Schedule. The short descriptions of the items of payment given in the Pricing Schedule are only for the purposes of identifying the items. More details regarding the extent of the work entailed under each item appear in the Scope of Work.
11. The item numbers appearing in the Pricing Schedule refer to the corresponding item numbers in the COLTO Standard Specification for Road and Bridge Works for State Authorities (1998 edition).
12. Those parts of the contract to be constructed using labour-intensive methods have been marked in the bill of quantities with the prefix LI filled in against every item so designated. The works, or parts of the works, including those parts requiring the use of selected subcontractors, so designated are to be constructed using labour-intensive methods only. The use of plant to provide such works, other than plant specifically provided for in the scope of work, is a variation to the contract. The items marked with the letters LI are not necessarily an exhaustive list of all the activities which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour intensive specification in the Scope of Works.
13. Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the Scope of Works) will not be made unless they are constructed using labour-intensive methods. Any unauthorised use of plant to carry out work which was to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment. These items are marked L1 in the bill of quantities.
14. Mathematical errors in the Tender will be dealt with according to "Practice Note H2, August 2006 Version 3 – February 2008" as published by the CIDB.
15. Note on B12.12: The Tender has to calculate the total for the relevant Section and then calculate the percentage mark up amount. This means that the Tenderer is required to insert Quantity, Rate and Amount.

## **C 2.2**

### **Bill of Quantities**

<p align="center"><b>PROVINCE OF THE EASTERN CAPE</b></p>									
<p align="center"><b>DEPARTMENT OF AGRICULTURE</b></p>									
<p align="center"><b>UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM</b></p>									

## DEPARTMENT OF AGRICULTURE

## UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM

[illegible]

PROVINCE OF THE EASTERN CAPE						
DEPARTMENT OF AGRICULTURE						
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM						
ITEM No.	LI	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1500		ACCOMODATION OF TRAFFIC				
B15.01		Accommodation of traffic and maintaining temporary deviations	km	1.0		
B15.03		Temporary traffic-control facilities				
	LI	(a) Flagmen (including equipment)	man-day	50		
		(b) Portable STOP and GO-RY signs	No	2		
		(d) Amber flicker lights	No			Rate Only
		(e) Road signs, R- and TR-series, (1200 mm)	No	2		
		(f) Road signs, TW-series, (1200 mm)	No	2		
		(h) Delineators (TW401.TW402)				
		(i) Single sided blade (200mm x 800mm)	No			Rate Only
		(ii) Double sided blade (200mm x 800mm)	No			Rate Only
		(i) Moveable barricade/road sign combination TW 411 (2400mm x 400mm)	No			Rate Only
		(j) Traffic cones (750 mm)	No	5		
		(n) Other signs or facilities				
		(i) Provisions of other signs or facilities	Prov Sum			5 000.00
		(ii) Contractor's handling charges and profit on subitem (n) (i)	%	5 000		
B15.10		Extra over item 15.01 for accommodation of traffic where road is constructed in half widths or full width with one way traffic accommodation				
	(a)	Half-width construction with STO and GO/RV control during daylight and temporary Road CLOSED or other signs at night	km			Rate Only
B15.14		Safety Equipment for use by the Engineer				
	(a)	Reflectorized high visibility vests	No			Rate Only
	(b)	Amber flashing lights complete as specified	No			Rate Only
B15.15		Traffic Safety Officer	Month			Rate Only
CARRIED FORWARD TO SUMMARY :						

PROVINCE OF THE EASTERN CAPE

DEPARTMENT OF AGRICULTURE

UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM

ITEM No.	LI	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
1700		<b>CLEARING AND GRUBBING</b>				
B17.01		Clearing and grubbing	ha	0.30		
B17.02		<b>Removal and grubbing of large trees and tree stumps:</b>				
		(a) Girth exceeding 1m up to and including 2m	No			Rate Only
		(b) Girth exceeding 2m up to and including 3m	No			Rate Only
B17.04	LI	<b>Clearing and grubbing at inlets and outlets of hydraulic structures</b>	m <sup>2</sup>	10		
B17.05		<b>Cleaning out of hydraulic structures</b>				
		(a) Pipes with an internal diameter up to and including 750mm	m <sup>3</sup>	10		
B17.07		<b>Removal and conservation of topsoil obtained from the road reserve or borrow areas within a freehaul of 1.0km</b>	m <sup>3</sup>	125		
CARRIED FORWARD TO SUMMARY :						

PROVINCE OF THE EASTERN CAPE						
DEPARTMENT OF AGRICULTURE						
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM						
ITEM No.	LI	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2100		DRAINS				
B21.01		Excavation of open drains				
		(a) Excavating soft material situated within the following depth ranges below the surface level				
	LI	(i) 0m up to 1,5m	m³	560		
	LI	(i) Exceeding 1.5m up to 3,0m	m³	25		
		(b) Extra over subitem B21.01(a) for excavation in hard material, irrespective of depth	m³	20		
B21.02		Clearing and shaping existing open drains	m³	10		
B21.03		Excavation for subsoil drainage systems:				
		(a) Excavating soft material situated within the following depth ranges below the surface level:				
	LI	(i) (i) 0m up to 1.5m	m³			Rate Only
	LI	(b) Extra over subitem 21.03 (a) excavation in hard material,irrespective of depth.	m³			Rate Only
B21.06		Natural permeable material in subsoil drainage systems (crushed stone)				
		(b) Crushed stone obtained from commercial sources 19mm	m³			Rate Only
B21.08		Pipes in subsoil drainage systems:				
		(b) unplasticized PVC pipes and fittings, normal duty, complete with couplings 110mm diameter perforated pipe.	m³			Rate Only
B21.10		Synthetic-fibre filter fabric (Biddum A2)	m²			Rate Only
CARRIED FORWARD TO SUMMARY :						

PROVINCE OF THE EASTERN CAPE						
DEPARTMENT OF AGRICULTURE						
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM						
ITEM No.	LI	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
B22.00		<b>SECTION 2200: PREFABRICATED CULVERTS</b>				
		<b>Excavation:</b>				
B22.01		(a) Excavating in soft material with the following depth ranges below the surface level				
	LI	(i) 0m up to 1,5m	m³	124		
		(ii) Exceeding 1,5m and up to 3m	m³	5		
		(iii) Exceeding 3m and up to 4.5m	m³	5		
		(b) Extra over subitem B22.01(a) for excavation in hard material, irrespective of depth	m³	25		
B22.02		<b>Backfilling:</b>				
	LI	(a) Using excavated material	m³	54		
	LI	(b) Using imported selected material	m³	65		
B22.03		(b) <b>Concrete pipe culverts (On Class B Bedding)</b>				
		(i) 450 mm dia. Type 100D	m	36.60		
		(ii) 600 mm dia. Type 100D	m	36.60		
		(iii) 750 mm dia. Type 100D	m			
		(iv) 900 mm dia. Type 100D	m			
22.12		<b>Removing existing concrete</b>				
		(a) Plain concrete	m³	2.00		
22.13		<b>Remove and re-laying existing pipes:</b>				
		(b) Class B bedding				
		(i) 450mm dia	m	12.00		
TOTAL CARRIED FORWARD:						

PROVINCE OF THE EASTERN CAPE						
DEPARTMENT OF AGRICULTURE						
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM						
TOTAL BROUGHT FORWARD:						
ITEM No.	LI	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
B22.14		Removing and stacking existing prefabricated culverts				
		(i) 300mm dia on Bedding B or C	m			Rate Only
		(ii) 450mm dia on Bedding C	m	12		
B22.17		Manholes, catchpits, precast inlet and outlet structures complete				
		(a) Manholes: (standard depth: 1.2m)				
	LI	(i) 450mm dia. brick manhole: (As detailed on drawing No. C2407-STW & RD-01	No	3		
	LI	(iii) 600mm dia. brick manhole:(As detailed on drawing No. C2407-STW & RD-01	No	2		
	LI	(iii) 750mm dia. brick manhole:(As detailed on drawing No.	No			Rate Only
	LI	(iv) 900mm dia. brick manhole:(As detailed on drawing No.	No			Rate Only
		(f) Kerb inlet (standard depth: 1.2m)				
	LI	(i) 450mm dia. kerb inlet (As detailed on drawing No.C2407-STW & RD-01	No	3		
	LI	(ii) 450mm dia. kerb inlet (Low Point) (As detailed on drawing No.	No			Rate Only
	LI	(iii) 600mm dia. kerb inlet (As detailed on drawing No. C2407-STW & RD-01	No	2		
	LI	(iii) 750mm dia. kerb inlet (As detailed on drawing No.	No			Rate Only
	LI	(iv) 900mm dia. kerb inlet (As detailed on drawing No.	No			Rate Only
		(g) Headwalls				
	LI	(i) 450mm dia. (Normal) (As detailed on drawing No. C2407-STW & RD-01	No	6		
TOTAL CARRIED FORWARD:						

PROVINCE OF THE EASTERN CAPE						
DEPARTMENT OF AGRICULTURE						
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM						
TOTAL BROUGHT FORWARD:						
ITEM No.	LI	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	LI	(ii) 600mm dia. (Normal)	No	4		
	LI	(iii) 750mm dia. (Normal)	No			Rate Only
	LI	(iii) 900mm dia. (Normal)	No			Rate Only
22.18		Brickwork:				
	LI	(b) 230mm thick	m <sup>2</sup>	30		
22.19	LI	Plaster	m <sup>2</sup>	30		
22.20	LI	Benching	m <sup>2</sup>	8		
	LI	Hand excavation to determine the position of existing services existing services	m <sup>3</sup>	10		
22/B16.02		Overhaul on material hauled in excess of 1.0km	m <sup>3</sup> -km	31		
CARRIED FORWARD TO SUMMARY :						

PROVINCE OF THE EASTERN CAPE

DEPARTMENT OF AGRICULTURE

UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS  $\pm 0.6\text{KM}$

ITEM No.	LI	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
2300		<b>CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS</b>				
B23.01		<b>Concrete kerbing</b>				
		(a) Precast edge strip kerbing (figure 12) . complete with concrete screed:				
	LI	(i) Radius exceeding 4m up to 20 m	m	671		
B23.02		<b>Concrete kerbing channelling combination</b>				
		(a) Precast kerbing Figure 8, complete with precast kerbing concrete backing, for 150mm base course and for curvatures indicated:				
	LI	(i) Radius exceeding 4m up to 20 m	m	671		
23.05		<b>Inlet, outlet, transition and similar structures</b>				
	LI	(a) (i) 1m long transition piece and barrier kerbing and mountable kerb and channel as per per Drawing No.C2407-STW & RD-01	No	10		
	LI	(ii) 1m long transition piece between barrier and channel and edge strip as per Drawing No.C2407-STW & RD-01	No	10		
23.07		<b>Trimming of excavations for concrete-lined open drains</b>				
	LI	(a) In soft material	m <sup>2</sup>	20		
23.08		<b>Concrete-lined open drains</b>				
	LI	(a) Cast in situ concrete lining Class 25/19	m <sup>3</sup>	4		
	LI	(b) Class U2 surface finish to cast in situ concrete as per Drawing No. MBSACE/ELM_018	m <sup>2</sup>	20		
23.15		Precast concrete blocks in outlet structures as shown on Dwg No ECS/23/3/C12	No	20		
CARRIED FORWARD TO SUMMARY :						

PROVINCE OF THE EASTERN CAPE						
DEPARTMENT OF AGRICULTURE						
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM						
ITEM No.	LI	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3300		<b>MASS EARTHWORKS</b>				
B33.01		Cut and borrow to fill, including freehaul up to 1.0km:				
	(a)	Material in compacted layer thickness of 200mm :				
	(ii)	Compacted to 93% of mod AASHTO	m <sup>3</sup>	617		
	( e )	Pioneer layer (as specified in subclause 3307 ( c ) )	m <sup>3</sup>	62		
33.03		<b>Extra over item 33.01 for excavating and breaking down oversize materials in :</b>				
	(a)	Intermedite excavation	m <sup>3</sup>	62		
	(b)	Hard Excavation	m <sup>3</sup>	185		
	(c)	Boulders excavation Class A	m <sup>3</sup>			Rate Only
	(d)	Boulders excavation Class B	m <sup>3</sup>			Rate Only
B33.04		<b>Cut to spoil, including freehaul up to 1.0km. Material obtained from:</b>				
	(a)	Soft excavation	m <sup>3</sup>	95		
	( c )	Hard excavation	m <sup>3</sup>	15		
	(d)	Boulder excavation Class A	m <sup>3</sup>			Rate Only
	(e)	Boulder excavation Class B	m <sup>3</sup>			Rate Only
B33.07		<b>Removal of unsuitable material (including freehaul of 1.0km):</b>				
	(a)	In layer thickness of 200 mm and less:				
	(i)	Stable material	m <sup>3</sup>	10		
	(ii)	Unstable material	m <sup>3</sup>	10		
	(b)	In layer thickness exceeding 200 mm:				
	(i)	Stable material	m <sup>3</sup>	5		
	(ii)	Unstable material	m <sup>3</sup>	5		
TOTAL BROUGHT FORWARD:						

PROVINCE OF THE EASTERN CAPE						
DEPARTMENT OF AGRICULTURE						
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM						
TOTAL BROUGHT FORWARD:						
ITEM No.	LI	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
B33.12		In situ treatment of roadbed				
	(a)	In situ treatment by ripping 200mm thickness and compact to 93% Mod AASHTO	m³	683		
B33.13		Finish-off cut and fill slopes, medians and interchange areas:				
	(a)	Cut Slopes	m²	50		
	(b)	Fill Slopes	m²	50		
33/B16.02		Overhaul on material hauled in excess of 1.0km	m³-km	150		
TOTAL BROUGHT FORWARD:						

PROVINCE OF THE EASTERN CAPE						
DEPARTMENT OF AGRICULTURE						
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM						
ITEM No.	LI	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
3400		PAVEMENT LAYERS OF GRAVEL MATERIAL				
B34.01		Pavement layers constructed from gravel obtained from commercial sources:				
		(a) Gravel Selected layer compacted to:				
		(i) 95% of modified AASHTO density compacted in 150mm layer thickness (G7)	m³	683		
		(c) Gravel subbase (unstabilised gravel) compacted to:				
		(i) 95% of modified AASHTO density compacted in 150mm layer thickness (G6)	m³	585		
		(e) Gravel base (unstabilised gravel) compacted to:				
		(ii) 98% of modified AASHTO density compacted in 150mm layer thickness (G4)	m³	536		
CARRIED FORWARD TO SUMMARY :						

PROVINCE OF THE EASTERN CAPE						
DEPARTMENT OF AGRICULTURE						
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM						
ITEM No.	LI	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
4100		PRIME COAT				
B41.01		Prime Coat				
	(c)	MC-30 Cut-back Bitumen	/			Rate Only
	(f)	Eco-Prime at a nominal rate of 0.8l/m²	/	2 860		
CARRIED FORWARD TO SUMMARY :						

PROVINCE OF THE EASTERN CAPE									
DEPARTMENT OF AGRICULTURE									
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM									

## DEPARTMENT OF AGRICULTURE

UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS  $\pm 0.6\text{KM}$ [illegible]

PROVINCE OF THE EASTERN CAPE									
DEPARTMENT OF AGRICULTURE									
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM									

PROVINCE OF THE EASTERN CAPE									
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UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM									

PROVINCE OF THE EASTERN CAPE									
DEPARTMENT OF AGRICULTURE									
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM									

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PROVINCE OF THE EASTERN CAPE									
DEPARTMENT OF AGRICULTURE									
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM									

## DEPARTMENT OF AGRICULTURE

## UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM

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CARRIED FORWARD TO SUMMARY :		
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PROVINCE OF THE EASTERN CAPE						
DEPARTMENT OF AGRICULTURE						
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM						
ITEM No.	LI	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
5600		SECTION 5600 : ROAD SIGNS				
B56.01		Road sign boards complete with supports with Class 1 retro-reflective background. Symbols and lettering in semi matt black. Borders in Class 1 retro- reflective material, where the signboard is constructed from :				
	(c)	Prepainted galvanised steel plate (Chromadek 1.2mm thick) or approved equivalent				
	(i)	600mm diameter Round or Stop signs:				
	(ii)	R1	No	2		
	(d)	Prepainted galvanized steel profiles (200mm high Chromadek or equivalent approved)				
	(i)	Area not exceeding 2m <sup>2</sup>	m <sup>2</sup>	5		
	(ii)	Area exceeding 2m <sup>2</sup> but not exceeding 10m <sup>2</sup>	m <sup>2</sup>	4		
56.02		Extra over item 56.01 for using:				
	(a)	Background retro-reflective material				
	(i)	Class III	m <sup>2</sup>	10		
	(b)	Lettering, symbols, numbers, arrows. Emblems and borders of retro-reflective material				
	(i)	Class II	m <sup>2</sup>	10		
B56.03		Road sign supports:				
	(b)	Timber (treated with tanalith)				
	(i)	75mm diameter	m	15		
	(ii)	110mm diameter	m	10		
56.05		Excavation and backfilling for road sign supports( not applicable to kilometer posts)	m <sup>3</sup>	10		
56.06		Extra over item 56.05 for cement-treated soil backfill	m <sup>3</sup>	2		
CARRIED FORWARD TO SUMMARY :						

PROVINCE OF THE EASTERN CAPE									
DEPARTMENT OF AGRICULTURE									
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM									

## DEPARTMENT OF AGRICULTURE

UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS  $\pm 0.6$ KM[illegible]

PROVINCE OF THE EASTERN CAPE									
DEPARTMENT OF AGRICULTURE									
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM									

PROVINCE OF THE EASTERN CAPE									
DEPARTMENT OF AGRICULTURE									
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM									

PROVINCE OF THE EASTERN CAPE									
DEPARTMENT OF AGRICULTURE									
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM									

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PROVINCE OF THE EASTERN CAPE									
DEPARTMENT OF AGRICULTURE									
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM									

## DEPARTMENT OF AGRICULTURE

UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS  $\pm 0.6\text{KM}$ [illegible]

PROVINCE OF THE EASTERN CAPE						
DEPARTMENT OF AGRICULTURE						
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM						
ITEM No.	LI	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
9400		OCCUPATIONAL HEALTH AND SAFETY				
94.01		Preparation of Contractor's site specific Health and Safety Plan	Lump sum	1		
94.02		Principal Contractor's initial obligations in respect of the OHS Act and Construction Regulations	Lump sum	1		
94.03		Principal Contractor's time related obligations in respect of the OHS OHS Act and Construction Regulations	Month	5		
94.04		Provision of Personal Protective Equipment & Protective Clothing (PPE)				
	(a)	Reflective vests	No	10		
	(b)	Hard hats	No.	10		
	( c)	Protective foot wear	No	10		
	(d)	Earplugs	No	10		
	(e )	Dust masks	No	10		
	(f)	Gloves	No	10		
	(g)	High visibility overalls to SARTSM Chapter 13 Level 3	No	10		
	(h)	Ear defenders SABS approved	No	10		
94.05		Provision of full time Construction Health & Safety Officer	Month			Rate Only
94.06		Costs of medical certificates and Medical Surveillance				
	(a)	Initial (baseline) medical examinations	No	10		
	(b)	Periodic and exit examinations	No	10		
	( c)	Contractor's charge to allow for handling costs and profit in respect of subitems 13/X.06 (a) and (b)	%	10000		
94.07		Induction Training	No	10		
94.08		Payment for health and safety representatives at meetings	Hr	12		
94.09		Provision of First Aid Boxes	No	1		
TOTAL CARRIED FORWARD TO SUMMARY:						

PROVINCE OF THE EASTERN CAPE		
DEPARTMENT OF AGRICULTURE		
UPGRADING OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS ± 0.6KM		
TENDER NO: SCMU8 – 24/25 – 0059 (A)		
SUMMARY OF THE SCHEDULE OF QUANTITIES		
SECTION	DESCRIPTION	AMOUNT
Section 1300	Contractor's Establishment on Site and General Obligations	
Section 1500	Accommodation Of Traffic	
Section 1700	Clearing and Grubbing	
Section 2100	Drains	
Section 2200	Prefabricated Culverts	
Section 2300	Concrete Kerbing	
Section 3300	Mass Earthworks	
Section 3400	Pavement Layer of gravel material	
Section 4100	Prime Coat	
Section 4200	Asphalt Base and Surfacing	
Section 5100	Pitching, Stone work and Protection Against Erosion	
Section 5400	Guardrails	
Section 5600	Road Signs	
Section 5700	Road Marking	
Section 5900	Finishing the Roads and Road Reserve and Treating Old Roads	
Section 8100	Testing Workmanship and Materials	
Section 9400	Occupational Health and Safety	
NETT TOTAL OF TENDER		
ALLOW 5% FOR CONTINGENCIES		
SUB TOTAL 2		
ALLOW 15% VALUE ADDED TAX		
TOTAL AMOUNT CARRIED TO FORM OF OFFER		

# PROVINCE OF THE EASTERN CAPE

## DEPARTMENT OF AGRICULTURE

### REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS $\pm 0.6$ KM

#### SECTION C3.1: DESCRIPTION OF THE WORKS

##### C3.1.1 MISCELLANEOUS

The works specifications form an integral part of the contract documents and shall be deemed to supplement, the Standard Specifications

In the event of any discrepancy or conflict with any part or parts of the Standard Specifications, the Bill of Quantities or the Drawings, the Works Specifications shall take precedence.

The Standard Specifications which form part of this Contract have been written to cover all phases of work normally required for road contracts and they may therefore cover items not applicable to this particular contract.

##### C3.1.2 EMPLOYER'S OBJECTIVES

The Employer's objectives are to deliver public infrastructure using labour-intensive construction methods in the execution of certain items of the Works. In this specific instance the Employer's objectives are to upgrade existing gravel roads in Fort Cox College to surfaced roads by introducing requirements that certain construction activities must be carried out by hand in terms of the Expanded Public Works Programme (EPWP).

The aim is to provide temporary employment opportunities coupled to on job training for the communities in close proximity of the road by introducing labour-intensive construction methods on those items of the work that is suitable to be executed in this manner.

The description of the project contained in the Scope of Work is merely an outline of the Contract Works and shall not limit the work to be carried out by the Contractor under this Contract. Details of some of the major items are given in this section and approximately detailed quantities for each type of work to be carried out in accordance with the Contract Documents are included in the Bill of Quantities.

##### C3.1.3 EXTENT OF THE WORKS

The purpose of the project is to improve the standard of roads within the Fort Cox College and improving quality of life by providing better infrastructure to previously disadvantage communities. The scope of work in relation to the length of road to be upgraded in Fort Cox College is approximately 0.6 km.

##### C3.1.4 ROAD PAVEMENT DESIGN

- (a) Surfacing : 30mm thick asphalt
- (b) Base layer: 150mm imported G4 material and compacted to 98% Mod AASHTO
- (c) Subbase: 150mm thick G6 material and compacted to 95% Mod AASHTO
- (d) Selected: 150mm thick G7 material and compacted to 95% Mod AASHTO
- (e) Subgrade: Reshape, rip and recompact the subgrade to 93% Mod AASHTO
- (f) Kerbing: Figure 8 & Figure 12 kerbs to be constructed on both sides of the road
- (g) Surface width: Minimum width of 5.5m with a minimum crossfall of 2.5%
- (h) Prime at 0.7 l/m<sup>2</sup> and spray Tack coat at 0.6 l/m<sup>2</sup>
- (i) Stormwater drainage
- (j) Road marking and road signs
- (k) Guardrails

A further objective related to the detail design philosophy is to implement the most efficient route alignment for the road, improving the existing road alignment to achieve a design speed of 40 km/h.

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

### **SECTION A: STANDARD AMENDMENTS ISSUED BY COLTO**

#### Notes to tenderer

1. The Standard Specifications for Road and Bridge Works for State Road Authorities 1998, prepared by the Committee of Land Transport Officials, (COLTO), as amended, shall apply to this contract.
2. Where reference is made to the General Conditions of Contract and Sub-Clauses thereof in the abovementioned Standard Specifications, they refer to the appropriate edition of the 'General Conditions of Contract for Road and Bridge Works for State Road Authorities,' issued by COLTO (Clause 1115 of the Standard Specifications refers).

The General Conditions of Contract applicable to this contract are the "Conditions of Contract for Construction Works (Third Edition) 2015 (SAICE), as published by the South African Institute of Civil Engineering and the necessary amendments to the Standard Specifications have been made and included in the Project Specifications contained in this document.

3. The terms "Schedule of Quantities", (used throughout the Standard Specifications) and "Bill of Quantities", (used in all other documents forming part of this contract), and "Pricing Schedule" are synonymous.

## PART C3 : SCOPE OF WORK

### SECTION B: PROJECT SPECIFICATION AMENDMENTS TO THE STANDARD SPECIFICATIONS

Notes to tenderer:

1. In certain clauses the Standard Specifications allow a choice to be specified in the project specifications between alternative materials or methods of construction and for additional requirements to be specified to suit a particular contract. Details of such alternatives or additional requirements applicable to this contract are contained in this part of the project specifications. It also contains some additional specifications required for this particular contract.
2. The number of each clause and each payment item in this part of the project specifications consists of the prefix B followed by a number corresponding to the number of the relevant clause or payment item in the standard specifications. The number of a new clause or a new payment item which does not form part of a clause or a payment item in the standard specifications and which is included here, is also prefixed by B followed by a new number. The new numbers follow on the last clause or item number used in the relevant section of the standard specifications.
3. The tenderer shall note that the COLTO Standard Specifications are based on the General Conditions of Contract for Road and Bridge Works for State Road Authorities (1998 Edition) (COLTO), prepared by the Committee of Land Transport Officials. Reference to specific clauses in these COLTO General Conditions of Contract shall need to be exchanged for the equivalent clause in the General Conditions of Contract for Construction Works 3rd Edition 2015 (SAICE), as published by the South African Institute of Civil Employer's Agenting, as amended in the Contract Data (C1.2) of this document. Table 1115/1 showing details of the equivalent clause numbers is included in Clause B1115 of the Project Specifications.

Whereas every effort has been made to include all of the affected clauses in the table, there may be some omissions. In every case, however, the SAICE General Conditions of Contract for Construction Works, as amended in the Contract Data (C1.2), shall apply and the Contractor shall be responsible for interpretation of the equivalent clause.

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

### **SECTION B: PROJECT SPECIFICATION AMENDMENTS TO THE STANDARD SPECIFICATIONS**

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## **SECTION 1100: DEFINITIONS AND TERMS**

### **B1111 CULVERT**

*Add the following to this Clause:*

"Culverts are specified either as being prefabricated or of cast in situ concrete. Prefabricated culverts, together with their associated inlet and outlet structures are specified under Section 2200 while cast in situ concrete culverts are treated as structures under the 6000 Series."

### **B1115 GENERAL CONDITIONS OF CONTRACT**

Replace Clause 1115 with the following:

"The General Conditions of Contract for Construction Works 3rd edition 2015 (abbreviated as "GCC 2015" or as "General Conditions of Contract 2015") published by the South African Institution of Civil Engineer's (SAICE), as amended in the Contract Data (C1.2) shall apply to and form part of this contract."

All references in the Standard Specifications for Road and Bridge Works for State Road Authorities COLTO are to the General Conditions of Contract for Road and Bridge Works for State Road Authorities COLTO. Consequently, all references in the COLTO Standard Specifications have to be amended accordingly to reflect the SAICE General Conditions of Contract that is applicable to this contract. The COLTO Standard Specifications have been scrutinized and the clauses, which refer to the COLTO General Conditions of Contract, were identified. Each COLTO clause reference is tabulated in Table B1115 below (context of reference is also given) together with the relevant equivalent clause in the SAICE General Conditions of Contract that is applicable to this contract.

Whereas every effort has been made to include all of the affected clauses in the table, there may be some omissions. In every case, however, the SAICE General Conditions of Contract for Construction Works, as amended in the Contract Data (C1.2), shall apply and the Contractor shall be responsible for interpretation of the equivalent clause."

**TABLE B1115: REFERENCES IN COLTO STANDARD SPECIFICATIONS TO THE COLTO GENERAL CONDITIONS OF CONTRACT AND RELEVANT SAICE GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION WORKS 3rd EDITION 2015**

COLTO Standard Specification		COLTO General Conditions of Contract 1998		SAICE General Conditions of Contract for Construction Works 3 <sup>rd</sup> edition 2015	
ClauseNo	Page No	Clause No	Description or Reference	Clause No	Description or Reference
1204	1200-2	15	Programme	5.6	Programme
1209(e)	1200-5	52: 52(1)(e) 52(2)	Monthly payments (documentary evidence of ownership of materials) Valuation of material brought onto Site	6.9 & 6.10: 6.9 6.10.2	Vesting of plant and materials Valuation of material brought onto Site
1210	1200-5	54: 54(1) 54(2) 54(3)	Certificate of practical completion	5.14: 5.14.1 5.14.2 5.14.3	Certificate of Practical Completion
1212(l)	1200-7	49: 49(2)	Contract Price Adjustment Factor	6.8: 6.8.2	Contract Price Adjustment Factor
1215	1200-9	45	Extension of time for completion	5.12	Extension of time for practical completion
1217	1200-10	35	Care of the Works	8.2	Care of the Works
1303	1300-1 and 1300-2	49 & 53: 49(2) and 49(3) 53	Contract Price Adjustment Factor and special materials Variations exceeding 20%	6.8 & 6.11: 6.8.2 and 6.8.3 6.11	Contract Price Adjustment Factor and special materials Variations exceeding 15%
1303	1300-2	12 & 45: 12 45	Commencement of Works and Commencement Date Extension of time for completion	5.3 & 5.12: 5.3 5.12	Commencement of the Works Extension of time for practical completion
1403 (c)(ii)	1400-4	40(1)	Valuation of variations	6.4.1	Value of variations
1505	1500-3	40: 40(1)	Valuation of variations	6.4: 6.4.1	Value of variations
1507 Items: 15.08 15.09 15.11	1500-8	48: 48.1	Provisional Sums	6.6: 6.6.1	Provisional Sums
3108 Note (2)	3100-4	40: 40(1)	Valuation of variations	6.4: 6.4.1	Value of variations
3204 (b)(iii)	3200-2	40: 40(1)	Valuation of variations	6.4: 6.4.1	Value of variations

COLTO Standard Specification		COLTO General Conditions of Contract 1998		SAICE General Conditions of Contract for Construction Works 3 <sup>rd</sup> edition 2015	
Clause No	Page No	Clause No	Description or Reference	Clause No	Description or Reference
3303(b)	3300-2	2	Employer's Agent and Employer's Agent's Representative	3	Employer's Agent
5803(c)	5800-3	40:		6.4:	
		40(1)	Valuation of variations	6.4.1	Value of variations
5805(d)	5800-4	40:		6.4:	
		40(1)	Valuation of variations	6.4.1	Value of variations
5809 Item 58.10	5800-10	48:		6.6:	
		48.1	Provisional Sums	6.6.1	Provisional Sums
8103(c)	8100-1	40:		6.4:	
		40(1)	Valuation of variations	6.4.1	Value of variations
8117 Item 81.03	8100-26	22	Clearance of site on completion	5.15	Clearance of site

The relevant definitions of the SAICE General Conditions of Contract (Third Edition) 2015 shall apply to this contract with the following reference to the terms used in the COLTO Standard Specifications:

#### **SAICE General Conditions of Contract (Third Edition) 2015 : Sub-clause 1.1 Definitions**

*Replace clause 1.1.1.2 with the following:*

"1.1.1.2 **"Bill of Quantities"** means the Schedule of Quantities document so designated in, and forming part of, the Tender. The Schedule of Quantities forms part of the Pricing Data that lists the items of work and the quantities and rates associated with each item to allow the Contractor to be paid at regular intervals an amount equal to the agreed rate for the work multiplied by the quantity of work completed."

*Replace Sub-clause 1.1.1.8 with the following:*

"1.1.1.8 **"Contract Data"** means the specific data in the document so designated in, and forming part of, the Tender. The Contract Data together with the General Conditions of Contract and the Special Conditions of Contract collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract."

*Replace Sub-clause 1.1.1.25 with the following:*

"1.1.1.25 **"Pricing Data"** means the document that contains the Schedule of Quantities and provides the criteria and assumptions which it will be assumed in the Contract that were taken into account by the Contractor when developing the Contract Sum."

Add the following new Definitions:

"1.1.1.35 **"Project Specifications"** means any specifications appearing under this heading and forming part of the Contract, and containing any amendments to, omissions from or additions to the Standard Specifications that may be required in connection with a specific project."

"1.1.1.36 **"Special Conditions"** means any addition to, departure from or amendment of the General Conditions of Contract as set out in the Contract Data forming part of the Tender Documents."

“1.1.1.37      **“Works Specifications”** means all specifications forming part of the Contract whether they appear in the Standard Specifications, the Project Specifications or on the Drawings, or be they instructions given to the Contractor, or any other specifications referred to in the above- mentioned Specifications.

#### **B1155            WORK IN RESTRICTED AREAS**

*Delete the contents of Clause 1155 and replace with the following:*

"Notwithstanding any reference in any specification to work in restricted areas, no additional payment will be made for work in restricted areas.

The Contractor will be deemed to have included any cost relating to work in restricted areas in the tendered rates."

*Add the following additional clauses:*

#### **“B1156            PROCESS CONTROL**

Process control is the responsibility of the Contractor and refers to all testing required to be carried out on the Works in order to ensure that the completed permanent works comply with the specifications and drawings. All such testing will be subject to inspection and approval by the Employer's Agent.

Process control will be carried out at the cost of the Contractor.

#### **B1157            ACCEPTANCE CONTROL**

Acceptance control means whatever testing the Employer's Agent carries out over and above the process control testing already carried out in order to decide on the acceptability of any work submitted by the Contractor.

Process control tests can be used as acceptance control if the Employer's Agent is satisfied with the results as presented to him.

The Employer shall not pay claims for delays to the works resulting from the awaiting of test results.

#### **B1158            VALUE OF WORK DONE**

The value of work done referred to in Section 1300 shall be defined as the total of the work done measured in the Bill of Quantities including items 13.01(a) to (c) (when calculated to include themselves), all day work done, all work done due to variation orders and eighty percent of the value of all materials on site but excluding any payment made for Contract Price Adjustment and VAT.

#### **B1159            COMMERCIAL SOURCE**

A commercial source is a source of material for which the Contractor is responsible for proving compliance with all relevant specifications. The tendered rate shall include full compensation for all required testing, transport and processing.

Should the Contractor elect not to utilise material for the proposed sources and instead utilise an alternative source then all material products from such source shall be deemed to be as from a “commercial source” for purposes of responsibility of specification compliance and payment.”

## B1160 AGGREGATE SIZE

Where reference is made in this specification or the standard specifications to aggregate size, nominal aggregate size or maximum aggregate size, the aggregate size as listed shall be replaced with the new corresponding aggregate size as indicated in the following table:

Aggregate size	New aggregate size
26.5	28
19	20
13.2	14
9.5	10
6.7	7.1
4.75	5
2.36	2
1.18	1

## B1161 COMPACTION

The standard for compaction efforts shall change from Modified AASHTO Density as per TMH1 Test Method to Maximum Dry Density (MDD) as per SANS 3001. Where reference is made to compaction or of Modified AASHTO Density in the contract documentation or the standard specifications or wherever there is conflict between the contract documentation and the standard specifications, the SANS 3001 specification and terminology shall govern.

## B1162 SANS TEST METHODS AND SPECIFICATIONS

Where reference is made to TMH test methods in this project specification or the standard specifications, it shall be replaced with the relevant currently published SANS test methods (including the 3001 and 4001 series).

On this contract where a SANS specification exists, all products shall conform to the specification and shall bear the inspection seal or brand mark of the SABS (South African Bureau of Standards)."

## SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS

### B1202 SERVICES

*Add the following at the end of clause 1202:*

"A provisional sum is included in the Schedule of Quantities to cover the costs of relocating the known services. This provisional sum shall be used to effect payments for the services relocation work carried out by the service provider in consultation with the Employer."

*Add the following to the second paragraph:*

"The Contractor shall immediately inform the Employer's Agent's representative of any services encountered and which he discovers during the contract."

*Insert the following paragraphs after the fifth paragraph:*

"All services which exist or are presumed to exist by the Contractor or the Employer's Agent must be searched for and exposed by the Contractor so that the Employer's Agent can take a final decision about possible protection or shifting.

It is also a condition of this contract that the Contractor notify the Employer's Agent in writing at least one week in advance of the intention to search and expose any existing services. During this period the Contractor must assist the Employer's Agent in gathering any information about these services."

*Add the following after the sixth paragraph of Clause 1202 of the Specifications:*

"The Contractor's attention is drawn to the relevant clauses of the General and Special Conditions of Contract regarding liability for damage to the works, or property, or injury to persons arising from the construction of the works. His attention is also drawn to Clause 8.6 of the General Conditions of Contract regarding insurance to be effected by the Contractor. Special attention is drawn to the exclusions in this insurance policy and particularly to the exclusions regarding consequential damage."

*In the second paragraph (now the third paragraph), delete the word "utility" at the end of the second line.*

*In the final paragraph delete the second and third sentences starting with "Should" and replace with the following:*

Before any work can commence the Contractor shall verify the actual position of each service and bring to the attention of the Employer's Agent any service that is not recorded. As the Contractor is not authorised to remove or replace these facilities he shall:

- (i) Give preliminary notice, in writing to the relevant service provider, that the services on the site will require removal or protection prior to works being carried out in the vicinity of each service. The Contractor shall advise the service provider of:
  - a) the number of services and their locations and
  - b) the proposed dates when works will commence in the vicinity of each service.
- (ii) In addition to the above preliminary notice, give the service provider thirty days written notice of the intention to commence work in the vicinity of each facility.
- (iii) Upon completion of the work in the vicinity of each facility, the Contractor shall notify the service provider, in writing, that work is complete and the service may be reinstated.

Any delay resulting from the removal/replacement of a service shall not be the subject of a claim, it being deemed that the Contractor shall employ the services of the service provider as a subcontractor.

For further details and positions of these services refer to Drawings in Volume 4

Any cost of repairs, replacement and/or installation of services and equipment resulting from the Contractor's negligence or unauthorised action shall be to the Contractor's account."

*Add the following to this Clause:*

"The cost of alterations to services necessitated by the construction will be borne by the Employer.

The Contractor shall allow all reasonable access to any authority or department for the purpose of maintaining, laying and/or altering any service cables or mains during the construction period.

(a) Owing to the possible inaccuracy of records of existing services (water mains, electric cables, telephone cables, etc.) the Contractor shall locate services that may be affected by this Contract prior to the commencement of excavations.

Payment for the exposure of services by excavation will be on the basis of the tendered rates or, if no appropriate rate exists, on a Dayworks basis.

(b) The Contractor shall not damage adjoining fences and buildings when depositing spoil and/or materials. All claims arising from such causes shall be settled by the Contractor.

The Contractor shall prevent damage to buildings, fences and other objects in the vicinity of the Works, as a result of the execution of this Contract. The Contractor shall supply and erect shoring, screens, barricades, temporary supports and other items necessary for preventing such damage."

*Add the following to the eight paragraph:*

"Eskom and Telkom will be responsible for the relocation of all the electrical and telecommunication services under their control while the Contractor will be responsible for the relocation and / or protection of all other services. The list of known services (Part C3) indicated in the schedule are indicative only and must be confirmed by the Contractor."

## **B1203 ROAD INTERSECTIONS AND JUNCTIONS**

In the first sentence of the first paragraph of this Clause insert ", public transport embankments" after the words "farm accesses".

Add the following Subclauses to this Clause:

"(a) Treatment at gravel road intersections and other accesses

The base layer as well as the surfacing shall end at the specified limit of construction shown on the drawings for proclaimed roads and such other roads as directed by the Employer's Agent.

Each of the underlying layers of the new road shall project a distance at least 600 mm beyond the termination of the layer immediately above it.

The void shall be backfilled with approved wearing course gravel or shoulder material compacted in layers by hand operated vibrating compactors.

Prior to placing the surfacing, an edge beam of 200 mm wide and 100 mm deep neatly excavated over the full width of the junction. This trench shall be filled with concrete, as specified in Section 2300 of the Specifications.

The concrete shall be finished off level with the finished base and the surfacing for the new road shall be extended over this thickened edge.”

## **B1204 PROGRAMME OF WORK**

### **(a) General requirements**

Add the following as a continuation of the first paragraph:

“In drawing up the programme the Contractor shall make allowance for the following:

- (i) All special non-working days defined in the Contract Data (C1.2).
- (ii) The expected delays defined in clause B1215: Extension of time resulting from abnormal climatic conditions.
- (iii) The following restricted working conditions:
  - Limitations in terms of weather conditions;
- (iv) Physical conditions and artificial obstructions and their effects.
- (v) The accommodation and safeguarding of public traffic.
- (vi) Dealing with, altering and installing services, including services which have to be relocated by others.
- (vii) All the training requirements specified.
- (viii) All other actions required in terms of this Contract.
- (ix) All programme implications of employing SMME subcontractors in accordance with the requirements of Part 3: Section F.

The Contractor shall clearly indicate the following:

- (i) Proposed production rates.
- (ii) Sequence of activities and dependencies.
- (iii) The critical path activities.
- (iv) Non-working days i.e. special non-working days, pay weekends, year-end break etc.

This initial programme shall realistically account for the forecast cash flow within the defined contract period. If an alternative contract period is offered, the Contractor shall submit a separate programme with the alternative tender.”

The following details shall be submitted together with the programme:

- (i) The number of working hours per day, working days per week, assumed holiday or shut down periods on which the programme is based.
- (ii) The overall labour and major plant resource levels on which the programme is based.
- (iii) The detailed traffic accommodation proposals on which the programme is based (road or lane closures, lengths of sections to be worked, timing etc.)

The Contractor shall base his programme of work on the scope of the work that he has determined from his own design and as described in the Project Specification. The Contractor shall take full responsibility for the programming of the work and make the necessary allowances for any factors that he considers relevant.

Should the Employer’s Agent believe that a major revision of the programme is required, the Contractor will be required to submit a revised programme within two weeks of a written notification to this effect.

Progress reports and charts required in terms of the Contract shall be submitted at least three working days before each monthly site meeting. The format of the reports shall be agreed in advance with the Employer's Agent and shall contain amongst others the following information:

- (i) The contract programme with progress charts and programme graphs updated to reflect the actual progress to date.
- (ii) A summary of progress on site over the month preceding the site meeting. The report shall be in the form of a detailed narrative to the contract programme.
- (iii) Details of activities running late, indicating what steps have been or will be taken to ensure that the work is completed within the specified time.
- (iv) Details of subcontracts running late.
- (v) A report on all labour, plant and materials on site.
- (vi) A report on the training aspects of the contract.

It should be noted that it is in the Contractor's best interest to provide a comprehensive programme giving as much information as possible about the times allowed for the various activities as well as resource or other limitations affecting the programme.

Add the following new sub-clauses:

### **"(c) Limitations**

The Contractor shall take into account the following when drawing up his construction programme:

#### **(i) Working time**

The entire works shall be completed within the time for completion stated in the Contract Data.

#### **(ii) Construction limitations**

Requirements for safety and accommodation of traffic, seals and road marking as set out in the Project Specifications shall be strictly enforced.

In compiling the programme of work, the Contractor shall take into account the weather and operational limitations regarding the application of bituminous products as specified in Series 4000 of the specifications.

#### **(iii) Access to site**

The whole of the site will be handed over at commencement and there are no restrictions anywhere work may be carried out at any one time (Refer to Clause B1224).

It is a condition of the Contract that the road or temporary bypass will be open to two-way traffic during the end of year Contractor's closure.

#### **(iv) In compiling the programme of work, the Contractor shall incorporate the following:**

- a) Weather and operational limitations.
- b) The maximum lengths of road allowed to be occupied at any one time.

### **(d) Programme revisions**

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 against the original approved programme.

The Contractor shall indicate what resources and programme changes he intends to implement in order to remedy any activity that may have fallen behind. The Employer's Agent may instruct the Contractor to carry out a major revision of the programme. Such a revision shall be submitted for approval within fourteen days of the instruction."

## **B1205: WORKMANSHIP AND QUALITY CONTROL**

Add the following after the title:

“The Contractor shall appoint a quality manager who shall ensure that members of the Contractor’s staff comply with the requirements of the quality system. The quality system and the methods used to implement it shall be described in a quality plan produced by the Contractor. **See Part C3 – Scope of Works – Quality Assurance Framework for Road Works** for a guideline in preparing the quality plan / system.

The quality manager shall be resident on site full time. No construction activities shall take place on site before the Employer’s Agent approves the method statement for that activity.”

Delete the second, third, fourth and fifth paragraphs and replace with the following:

“The Contractor shall submit the quality assurance system he proposes using to the Employer’s Agent, for his approval, within two weeks of the site handover. Once accepted by the Employer’s Agent the Contractor shall not deviate from it unless written notification of proposed changes have similarly been submitted and approved. The system shall record the lines and levels of responsibility and indicate the method by which testing procedures will be conducted.”

*Add the following at the end of this clause:*

“Quality control as detailed in section 8200 (scheme 1) will be used for determining the acceptance levels with respect to the properties of the materials and workmanship executed by the Contractor. Where small quantities of work are involved, a lot shall mean a full day’s production for a specific item of work subject to acceptance control testing.”

## **B1206: THE SETTING OUT OF WORK AND PROTECTION OF BEACONS**

Delete “and of clause 14 of the general conditions of contract” in the sixth paragraph.

*Add the following paragraphs:*

“The Contractor shall take care that property beacons, trigonometrical survey beacons or setting-out beacons are not displaced or destroyed without the consent of the Employer’s Agent. Property beacons and trigonometrical survey beacons that have been displaced or destroyed shall be replaced by a registered land surveyor, who shall certify such replacement.

The cost of replacing all beacons displaced or destroyed during the course of the contract without the consent of the Employer’s Agent shall be the Contractor’s responsibility and deemed to be included in the tendered rates.

The contractor shall use appropriate methods for setting out the works to be constructed by labour-based methods. This may include the use of special templates and sight rails and other suitable implements, which will assist the labourers in constructing the works to the required lines, levels and standards. The cost of these implements and additional setting-out procedures shall be included in the rates for the works items and no separate payment will be made for them.”

*Add the following at the end of the fourth paragraph:*

“The scope of Clause B1206 shall be extended to include the appointment of Professional Land Surveyors to survey the final road reserve fence and frame SG Diagrams of the subdivided portions. The Contractor shall obtain quotations from a minimum of three (3) Professional Land Surveyors approved by the Employer’s Agent to undertake this work. The final selection of Land Surveyor shall be approved by the Employer’s Agent. Payment items for this work as well as for the Contractor’s handling costs and is deemed to be included in the tendered rates.”

## **B1207 NOTICES, SIGNS AND ADVERTISEMENTS**

*Delete the 4th paragraph and replace with the following:*

“All signboards erected in accordance with the drawings or as approved advertisements for the Contractor’s establishment, shall be removed at the same time as the Contractor’s de-establishment. Payment under sub- item 13.01 for the final instalment of 15 % of the tendered lump sum shall not be made unless all the advertisements, notices and temporary signs have been removed.”

*Add the following to this clause:*

“Detail of the notice boards that are required in terms of clause 1207, are shown in Volume 4.”

## **B1208 MEASUREMENTS**

### **(a) Measurement of Completed Work**

Add the following:

"(v) The actual authorised quantities of application or mix proportion of materials such as bituminous binders, aggregates, mineral fillers, paint, etc., shall be measured and paid for irrespective of allowed variations from nominal mix proportions or prescribed, portions. Any unauthorised increase in rates of application or mix proportions above those specified, shall however not be paid for.

The Employer's Agent may also reject any work outright where the actual rate of application of the aforementioned is not within the specified limits and this work shall be rectified or reconstructed at the Contractor's expense."

## **B1209 PAYMENT**

### **(b) Rates to be inclusive**

In the first paragraph of this subclause insert the following between the words "temporary work," and "testing,"

"Complying with the OHS Act and in particular with its Construction Regulations, providing the required health and safety measures,".

Add the following to the first paragraph:

"VAT shall be excluded from the rates."

### **(c) The meanings of certain phrases in payment clauses**

#### **(i) Procuring and furnishing (material)**

Delete the words: 'but excluding overhaul' in the first paragraph. Add the following:

"Payment for procuring and furnishing material from commercial sources shall include all transport costs, irrespective of distance hauled".

### **(e) Materials on the site**

*Add the following:*

"The Employer's Agent may at his sole discretion allow payments under "Materials on the site" in respect of any construction materials, if stored off-site, providing that:

- (i) the site selected for this purpose is approved by the Employer's Agent;
- (ii) such land is physically separated from any production plant or operation;
- (iii) only materials for use under this contract are stockpiled on such land; and
- (iv) the Contractor has provided proof of an agreement with the owner of such land that the owner has no objection to using the land for these purposes and has no claim whatsoever on any materials stockpiled on such land."

*Add the following sub-clauses:*

### **"(g) Trade names**

Where materials are specified under trade names, tenders must be based on those materials. Alternative materials may be submitted as an alternative tender and the Employer's Agent may, after receipt of tenders, approve the use of equivalent materials.

### **(h) Payment Certificates**

With reference to Clause 6.10.1 of the General Conditions of Contract, the Contractor shall, at his own expense, submit to the Employer's Agent three sets of A4-size paper copies of the monthly statement for payment.

(i) Value Added Tax (VAT)

No value added tax shall be included in the Contractor's tendered rates or amounts. Payment of value added tax (VAT) shall be made as a separate item in the Bill of Quantities Summary."

(j) Working in confined areas

Except where provided for in the Standard Specification and the Bill of Quantities no extra payment shall be made nor shall any claim for additional payment be considered for construction in confined areas. The omission of standard pay items from the Bill of Quantities shall be taken to be deliberate and any additional costs incurred shall be deemed to be included in the bulk rate.

The Contractor must note that measurement and payment will be in accordance with the specified cross-sections and dimensions only, irrespective of the method used for achieving these cross-sections and dimensions and that the tendered rates and amounts shall include full compensation for all special equipment and construction methods and for all difficulties encountered when working in confined areas and narrow widths, and at or around obstructions, and that no extra payment will be made nor will any claim for additional payment be considered in such cases.

(k) Rates to remain unchanged when scope of work changes

The Employer intends to increase or reduce the scope of work to match the budget allowed for this project. The value of such increase or reduction in the scope of works shall not give cause for the contractor to vary the offered rates and prices, which shall remain final and binding for the duration of the contract, excluding items under section B1300 of the pricing schedule, provided that:

- (i) Notification of the change to the scope of work is given in writing in the Appendix to the Form of Acceptance.
- (ii) The value of the increase or reduction in the scope of work does not alter the tendered sum, excluding all provisional sums, by more than 20%.

The Employer reserves the right to negotiate with the contractor rates and prices for items under section B1300, as provided for in this clause."

## **B1210 CERTIFICATE OF PRACTICAL COMPLETION OF THE WORKS**

*Add the following paragraph:*

"In addition to the listed specified items of work and regardless of the degree of beneficial occupation by the employer, no sections of the works, individually or collectively, shall be considered for practical completion unless the following criteria have also been met:

- (i) In the case of partial completion, the estimated cost to complete the outstanding work is less than 2 % of the estimated cost to construct the whole section or sections, excluding CPA, Contingencies and VAT.
- (ii) In the case of the whole works, the estimated cost to complete the outstanding work is less than 2 % of the tendered value of work plus the cost of any variation or extra work orders, but excluding CPA, contingencies and VAT.
- (iii) It must be possible for the Contractor to complete the written list of outstanding items of work within 28 days of the list having been issued to the Contractor."
- (iv) Any information in the Contractor's possession, that is required by the Employer's Agent and has been requested in writing, has been supplied.

## **B1214 CONTRACTOR'S ACTIVITIES IN RESPECT OF PROPERTY OUTSIDE THE ROAD RESERVE AND OF SERVICES MOVED, DAMAGED OR ALTERED**

*Add the following to Sub clause (a):*

"(iii) any land outside the road reserve which the Contractor, with the approval of the Employer's Agent, wishes to temporarily use or occupy, for the purpose of a borrow pit, spoil area, haul or construction road, traffic diversion, stockpiling of material or a bridge camp site, will be temporarily expropriated by the Employer, as specified in Clause B1230.

In all such cases the Contractor shall not be required to pay compensation to the owner of the land, directly, nor will he give any undertaking or make any promises towards landowners in this regard. The Employer will enter into negotiations with landowners and will then authorise the Contractor to pay under Item B12.07(a) such compensation directly to the owners.

(iv) The Contractor shall be responsible for serving notice on the owner, in writing, of his intentions to use a borrow pit and the Employer's Agent shall be supplied with a copy of such notice. If applicable, the Contractor shall fence the area and access road according to the details of the temporary expropriation, prior to the excavation and removal of borrow materials."

*Replace sub-subclause (b)(ii) with the following:*

"Compensation, if applicable, for the land taken or for land temporarily used or occupied outside the area provided by the Employer."

*Add the following to the last paragraph of subclause (d)*

"Copies of these written agreements shall be handed to the Employer's Agent before the final certificate will be issued. Failing to obtain these written agreements from all landowners and authorities concerned, the Defects Liability Period will be extended including all conditions related to such an extension, until such time that all these agreements are obtained.

The obtaining of any such written agreements will not relieve the Contractor of the execution of any of his obligations to the satisfaction of the landowner or authority concerned, and to the approval of the Employer's Agent".

*Under subclause (e) replace the opening paragraph with:*

"Should the Contractor use land not provided by the Employer for the purpose of his own establishment, Employer's Agent's offices and laboratory, or storing of equipment or materials required for construction or disposal, it shall be subject to the following:",

*Add the following sub-subclauses:*

"(vi) That lease agreements are concluded with the owner or owners of such land for the full period that such areas are required. The leases shall provide for possible extensions to match the duration of the Contract. The lease agreements shall also provide for the Contract being terminated by Contractor's default or liquidation and the resulting possibility for them to be taken over by a succeeding Contractor.

(vii) That copies of lease agreements shall be submitted to the Employer's Agent prior to signature by the signing parties, and copies lodged with the Employer's Agent after signing. Notwithstanding the Employer's Agent's approval of the conditions of a lease the Contractor shall be solely responsible for adhering to the terms of the agreements."

*Add the following subclauses to this clause:*

"(f) Alterations to existing works

Under no circumstances shall the Contractor alter or in any way interfere with existing works or overhead or underground services which are not to be relocated, replaced or removed. Where such works are required to be moved on account of unsuitable levels or situations, adequate notice shall be given to the Employer's Agent, who will arrange with the department and/or statutory authority concerned for the alterations to be carried out.

Where existing works are of such a nature that the Employer's Agent may require them to be moved by the Contractor, the cost of such work will be paid for at scheduled rates or as Dayworks."

(g) Clearance agreements from landowners

The Contractor shall provide the Employer's Agent with copies of all written clearance agreements obtained from landowners under subclauses (b) to (e) before the final certificate will be signed. Should any of the written clearance agreements not be obtained from any of the landowners, the Defects Liability Period, together with all its obligations, will be extended until such time as all the written clearance agreements are obtained.

The acquiring of any written clearance agreement shall not free the Contractor from the carrying out of his obligations to the affected landowner."

## B1215 EXTENSION OF TIME RESULTING FROM ABNORMAL RAINFALL

Replace the expressions “Abnormal rainfall” and “rainy weather” with “abnormal climatic conditions” wherever these expressions appear in this clause.

In the second sentence of the third paragraph insert after the words “been granted” the following:

“but excluding the period of the contractors holidays in December and January.”

Extensions of time resulting from abnormal climatic conditions under this contract shall be calculated according to the requirements of Method (i) (Rainfall formula).

*Add the following:*

The numbers of days per month on which work is executed not to be possible as a result of normal rainfall for which the contractor shall make provision, are given:

Month	Rn (mm)	Nn (days)
January	37	4
February	56	4
March	41	4
April	37	2
May	23	1
June	77	1
July	32	1
August	35	1
September	36	1
October	21	1
November	41	4
December	38	5
TOTAL	474	27

## B1216 INFORMATION FURNISHED BY THE EMPLOYER

*Add the following before the first paragraph*

“The reduced drawings that form part of the tender document (Volume 4 : Book of Drawings) shall be used for tender purposes only.

The Contractor will be supplied with three (3) paper copies of each of the construction drawings. These paper copies will be issued free of charge and the Contractor shall only be provided with additional copies on request and for his account.

Any information in the possession of the Contractor, which the Employer’s Agent’s representative requires for completing his as-built drawings, shall be supplied to the Employer’s Agent’s representative before a certificate of completion will be issued.

Only figured dimensions shall be used and drawings shall not be scaled unless so instructed by the Employer’s Agent. The Employer’s Agent will supply all figured dimensions omitted from the drawings.

The levels given on drainage/structural drawings are subject to confirmation on site, and the Contractor shall submit all levels to the Employer’s Agent for confirmation before he commences with the construction of drainage or other

structures. The Contractor shall also check all clearances given on the drawings and shall inform the Employer's Agent of any discrepancies in accordance with the requirements specified in the paragraph below:

If the Contractor discovers any discrepancy of any sort in the information supplied by the Employer or Employer's Agent he shall, within 7 calendar days of such discovery, submit full details of the discrepancy to the Employer's Agent in writing. The Employer's Agent, in turn, will give a written ruling on rectification of the discrepancy within 7 calendar days of receipt of the Contractor's submission."

Add the following after the second paragraph:

"Drawings and quantities regarding the distribution and extent of repair work items were compiled and calculated to the best of the Employer's Agent's knowledge and available information at the time of the design and could be subject to significant variations at the construction stage. Such variations shall, however, not form grounds for a claim by the Contractor in terms of Clause 10 of the General Conditions of Contract."

## **B1217 PROTECTION OF THE WORKS AND REQUIREMENTS TO BE MET BEFORE CONSTRUCTION OF NEW WORK ON TOP OF COMPLETED WORK IS COMMENCED**

*Add the following:*

"(h) Prior to the start of any excavation on any part of the works, the Contractor shall submit to the Employer's Agent for approval a method statement for the execution of that part of the work. The Contractor is responsible for the protection of the underlying pavement layers and the drying out and/or keeping dry of such excavations. The Contractor's programme shall make provision for the speedy backfilling of the excavations and the drainage thereof if inundation cannot be prevented.

The contractor shall, at his own cost, be responsible for the repair of pavement layers which have been damaged due to his own works or his neglect to submit his planning to the Employer's Agent for approval or to adhere to approved precautionary measures."

## **B1219 WATER**

*Add the following:*

"The Contractor must identify suitable water sources. The Contractor shall arrange for chemical tests to be carried out to confirm the suitability of his proposed water sources for use as drinking water and for use in the concrete construction. The Contractor shall ensure that these tests also include testing for salinity and sugar content levels.

The Contractor shall note that the necessary permission must be obtained from the Department of Water Affairs for the abstraction of water from streams and rivers."

**TABLE B1219: WATER CLASSIFICATION OF CONSTRUCTION TESTING**

Property	Unit	Water Quality Classification Code						Method
		H0 Pure water (AR)	H1 Clean water (Rain)	H2 Treated water (Municipal)	H3 Silty (muddy) water with low salt content	H4 Highly mineralised chloride sulphate water (brackish)	H5 Waste brack, sewage, marsh, sea, etc water	
pH*	-	7.0	5.7 – 7.9	4.5 – 6.5	4.5 – 8.5	9.0	-	SABS M113 SM 11 – 1990
Dissolved solids*	ppm	0	1000	1500	3000	-	-	SABS 213 SM213 – 1990
Total hardness*	-	None	None	Temporary	Temporary	Permanent	-	SABS 215 SM 215 – 1971
Suspended matter	ppm	0	2000	2000	5000	-	-	SABS 1049 SM 1049 – 1990
Electrical conductivity	mS/m	0	200	200	500	-	-	SABS 1057 SM 1057 – 1982
Sulphates (SO <sub>4</sub> )	ppm	0	200	300	500	1000	-	SABS 212 SM 212 – 1971
Chlorides (Cl)	ppm	0	500	1000	3000	5000	-	SABS 202 SM 202 – 1983
Alkali Carbonates (CO <sub>3</sub> ) & Bicarbonates (HCO <sub>3</sub> )	ppm	0	500	1000	1000	2000	-	SABS 241 – 1999
Sugar	-	Negative	Negative	Negative	Negative	Negative	-	SABS 833
Quality of water required	Untreated layer works	✓	✓	✓	✓	✓	Investigate the effect on the quality of the material	
	Chemically treated layer works	✓	✓	✓	✓	Investigate the effect on the quality of the material		
	Concrete mass	✓	✓	✓	✓	Investigate the effect on the quality of the material		
	Concrete prestressed	✓	✓	✓	✓			
	Slurry & emulsion	✓	✓	✓	✓			
	Soil/gravel tests	✓	✓	✓	✓			
	Chemical or control tests	✓	✓	✓	✓			

\* A primary property. The quality of the water is that quality where all three of the primary properties are within the limits.

The tabulated single values are maximum values except in the case of the pH value for pure water, which must be 7.0"

## **B1222 USE OF EXPLOSIVES (see clause 1518)**

*Add the following subclauses to this clause:*

"(h) The Contractor shall submit to the Employer's Agent, at least thirty days before the commencement of excavation, full details of his proposed methods and sequence of excavation and programme for

the use of explosives. These shall comply both with the Explosives Act (15 of 2003) and the Occupational Health and Safety Act and Regulations

The method to be used for blasting shall be discussed with the Employer's Agent who will specify the use to which the blasted material shall be put. The blasting method must be such as to produce the type and size of rock material required for the specified use. Failure to achieve the required product will result in a no payment for extra over and hard material as Items 33.03(b) and 33.04(c).

The work shall be programmed so as to minimise blasting adjacent to previously constructed sections of the Works.

The Employer's Agent reserves the right to reject the proposals if, in his opinion, undesirable damage to permanent rock surfaces or existing structures will result from carrying out the blasting as proposed. No such approval will be unreasonably withheld and a trial section of blasting shall be undertaken to confirm the efficacy of the proposed method. If acceptance is withheld following a failed trial blast, new proposals in whole or in part shall be submitted. No drilling or blasting shall be carried out in areas for which the proposals have not been accepted by the Employer's Agent.

Each separate blast shall then be designed in accordance with modern blasting practice to break out the rock with the minimum explosive force.

The consent by the Employer's Agent to any blasting proposals shall not relieve the Contractor of his responsibilities under the Contract and in law.

There must be a qualified person on site to take seismic readings until such time that the Employer's Agent is satisfied.

The Contractor shall notify the Employer's Agent of the intention to blast at least twenty-four hours beforehand, and at the same time shall advise if any changes will be made to the previously agreed methods.

The Contractor shall distribute written notification to all organisations and communities adjacent to the site twenty-four hours prior to undertaking blasting. Any delay or postponement of any blasts shall be notified to all organisations and communities immediately.

In addition to any statutory requirements the firing of explosives will, unless otherwise approved by the Employer's Agent in writing, be restricted to between 10:00 and 15:00, Monday to Friday.

(i) Unless otherwise agreed by the Employer's Agent all blasting work shall be carried out using controlled blasting techniques.

Use shall be made of approved special explosives and/or blasting techniques which will minimise blasting induced fractures, or disturbance, on the rock faces outside the excavation line so preserving the rock in the soundest possible condition.

The rocky face after blasting shall exhibit a regular fracture plane between barrels without back break and with half barrels visible over the major portion of the surface. The surface shall be scaled down of all loose and hollow sounding rock to leave a solid, intact surface. Light charges shall be used for enlarging or correcting the excavated profile and also for excavating trenches.

If in the opinion of the Employer's Agent, the methods of blasting are at any time causing excessive or undesirable disturbance of the rock mass surrounding the excavated space, he may order the Contractor to change his methods of blasting and/or carry out blasting trials until the desired results are achieved. No additional payment shall be made for any change or trials ordered by the Employer's Agent or any delays resulting there from.

(j) In each and every case where the Contractor wishes to blast within 15 m of a structure, he shall prepare a proposal for this blasting and submit it to the Employer's Agent for consent. No blasting work of this nature may be carried out without the written consent of the Employer's Agent. The Contractor is to make a photographic record of every structure/houses within a 500 metre radius of the blast.

No separate payment will be made for any restrictions regarding blasting near structures which may be imposed by the Employer's Agent in terms of the Specifications.

(k) The Contractor shall keep records of all blasting carried out showing the time and location of each blast, the type and amount of explosive used, together with any other relevant data. Two copies of these records shall be sent to the Employer's Agent weekly relating to the previous week's work.

l) All requirements of the Occupational Health and Safety Act and Regulations, as amended from time to time must be complied with. All method statements and risk analyses must be signed off by the Employer's Agent's representative as well as the OHS agent.

## **B1224 THE HANDING-OVER OF THE ROAD RESERVE**

*Add the following:*

"The entire road reserve as well as all other roads within the construction limits of the contract will be handed- over to the Contractor at the commencement of the contract. The Contractor shall then be responsible for the accommodation of traffic and all routine maintenance of these roads from the date of the handing-over of the site until the date of issue of the certificate of completion of the works.

Once the certificate of completion of the works has been issued the responsibility for normal maintenance of the road (e.g. collection of litter, clearing of drains, repair of road signs damaged by the public, etc.) shall revert to the Employer.

Upon the handing-over of the site the Contractor shall immediately assume responsibility for the road reserve within the limits of this Contract as set out in the specifications.

Prior to the commencement of work the Contractor and the Employer's Representative shall together carry out a joint inspection of the road section. During such an inspection, notes shall be made of all damaged fences, guardrails, signs and any other notable problems or features that exist at the time of hand-over. The following matters should be agreed at the time of handing-over:

- (1) The limits, lengths, widths and areas of construction.
- (2) The location of kilometre markers and reference beacons.
- (3) The scope of remedial/repair or preparatory work measures to be executed by the Contractor.
- (4) The location of stockpile areas and the responsibilities of the Contractor with regard to the road reserve area and the stockpile sites (fencing, re-establishment, height of stockpile, etc.).
- (5) The method of accommodation of public traffic with regard to safety, sight distances, interference with existing road signs and road markings both within the work area and providing advance warning before the work area.
- (6) The method of construction and supervisory control measures."

## B1228 LEGAL PROVISIONS

Add the following to this Clause:

"The Contractor shall comply with the requirements of the Provincial Department of Environmental Affairs and Tourism (DEAT) and Department of Minerals and Energy (DME).

## B1229 SABS CEMENT SPECIFICATIONS

Add the following:

"All cement used during construction shall comply with SANS 50197-1:2013 for common cements and SANS 50413-1:2004 for masonry cement. Any reference to SABS 471 in the standard specifications shall be replaced with the new specification SANS 50197-1:2013 Part 1: Compositions, specifications and conformity criteria for common cements.

Where the old SABS 471 product nomenclature has been used in the standard specifications, the Contractor shall supply and use the relevant new product, in compliance with SANS 50197-1."

The product names available in the Eastern Cape and Northern Cape, obtained from The Concrete Institute, and are provided in the table below.

<b>Cement Grade</b>	<b>Cement Type</b>	<b>Afrisam Eastern Cape</b>	<b>Afrisam Northern Cape</b>	<b>Lafarge Eastern Cape</b>	<b>Lafarge Northern Cape</b>
52.5 R	CEM I	Rapid Hard Cement	Rapid Hard Cement	-	-
52.5 N	CEM II A-V	-	-	-	Rapidcem / Fastcast
42.5 R	CEM II A-M	High Strength Cement	High Strength Cement	-	-
	CEM II A-M (V-L)	-	-	Powercrete Plus	Powercrete Plus
32.5 R	CEM II B-L	All Purpose Cement	All Purpose Cement	-	-
	CEM IV B-V	-	-	Buildcrete / Civilcrete	Buildcrete / Civilcrete
32.5 N	CEM II B-L	Roadstab Cement	Roadstab Cement	-	-
	CEM II B-M (V-S)	-	-	-	RoadCem

The blending of cements on site shall not be permitted."

Add the following new clauses:

#### **“B1230 SAFETY**

The Contractor must comply with the Occupational Health and Safety Act (Act No 85 of 1993) as amended as well as all the publications pertaining to the act or as specified in the Contract Document: A staff member will be appointed as the Construction Health and Safety Representative and will need to complete a site inspection register on a daily basis. Payment for the Construction Health and Safety Officer will be made under Item EB1.05. Payment for the Traffic Safety Officer will be under Item B15.16. The Traffic Safety Officer will report to the Construction Officer.

The Contractor shall nominate a Construction Health and Safety Officer who will be responsible at all times, including after hours, nights, weekends and public holidays, for the safety of the work area and the Contractor's adherence to the Health and Safety Specification and Plan. The accommodation of traffic will be supervised by the Traffic Safety Officer. All standard safety procedures and documentation must be adhered to.

The travelling public and emergency services shall have the right of way on public roads. The Contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on those roadways open to the public.

The Contractor may not commence construction activities before adequate provision has been made to accommodate traffic in accordance with the requirements of the specifications and drawings.

Failure to maintain road signs, warning signs and flicker lights in good working conditions shall constitute ample reason for the Employer's Agent to suspend work until such road signs and road safety ancillaries have been repaired or reinstated to the Employer's Agent's satisfaction.

The Contractor shall ensure that all plant left in the work area overnight is parked safely in accordance with the requirements of specifications.

All construction vehicles and equipment must be highly visible with flashing lights, reflective markings, stickers, etc. Operators must be aware of the public at all times.

In areas of steep embankments where public access cannot be limited, temporary guardrails will be erected where instructed by the Employer's Agent so that pedestrians can proceed safely. All open excavations to be clearly demarcated with plastic mesh etc.

Security arrangements will be deemed to be included in the amount tendered for in Items 13.01(a) and 13.01(c).

#### **B1231 MATERIALS**

The Contractor, when using materials that are required to comply with any standard specification, shall, if so ordered, furnish the Employer's Agent with certificates showing that the materials do so comply. Where so specified, materials shall bear the official mark of the appropriate authority. Samples ordered or specified shall be delivered to the Employer's Agent's office on the Site free of charge.

Where proprietary products have been specified, equivalent equal products may be used subject to the prior written approval of the Employer's Agent.

Unless otherwise specified, all proprietary materials shall be used and placed strictly in accordance with the relevant manufacturer's current published instructions.

Unless anything to the contrary is specified, all manufactured articles or materials supplied by the Contractor for the permanent works shall be unused.

Earth, stone, gravel, sand, and all other materials excavated or present on the Site or in borrow areas provided by the employer shall not become the property of the Contractor, but will be at his disposal only in so far as they are approved for use on the Contract.

Existing structures on the Site shall remain the property of the Employer and except as and to the extent required elsewhere in the Contract, shall not be interfered with by the Contractor in any way.

No materials to be included in the works shall be damaged in any way and, should they be damaged on delivery or by the Contractor during handling, transportation, storage, installation or testing they shall be replaced by the Contractor at his own expense.

All places where materials are being manufactured or obtained for use in the Works, and all the processes in their entirety connected therewith shall be open to inspection by the Employer's Agent (or other persons authorised by the Employer's Agent) at all reasonable times, and the Employer's Agent shall be at liberty to suspend any portion of work which is not being executed in conformity with these specifications.

(a) Ordering of Materials

Immediately upon his Tender being accepted, the Contractor shall order materials which are in short supply or for which the delivery period may be long.

The quantities set out in the Bill of Quantities have been determined from calculations based on data available at the time and should therefore be considered to be only approximate quantities. The Contractor shall therefore, before ordering materials of any kind, check with the Employer's Agent the quantities required. No liability or responsibility whatsoever shall attach to the employer for materials ordered by the Contractor except if they have been ordered in accordance with written confirmation issued by the Employer's Agent.

**B1232 ENVIRONMENTAL MANAGEMENT (see 1302 (i))**

The Contractor will be responsible for managing a non-specific Environmental Management Plan (EMP) in terms of Volume 7. Apart from the EMP in Volume 7, the Contractor should also adhere to an Environmental Management Programme Report (EMPR) for the use of material abstracted from borrow pits. The EMPR is legally binding and shall be adhered to at all times.

The Contractor shall take the utmost care to minimize the impact of his establishment and other construction activities on the environment and shall adhere to the requirements as set out in Volume 7.

The Contractor will be required to submit a Method Statement to the Environmental Control Officer (ECO) detailing his construction activities and what measures will be implemented to prevent the pollution of streams, rivers and countryside through the spilling of fuels, bituminous binders, sewage from the temporary toilets and other deleterious materials.

Where in the opinion of the Employer's Agent, the Contractor has not adhered to these requirements; the Contractor shall rectify the damage at his cost and to the satisfaction of the Employer's Agent.

**B1233 CONSTRUCTION SITE CONTROL**

In addition to normal good construction practices expected of the Contractor, the Contractor shall also observe the following:

(a) Restriction of working areas

Working in areas defined as those areas reasonably required by the Contractor to execute the Contract as agreed with the Employer. These shall generally be restricted to within the road reserve but where this is not possible, they shall be kept to a minimum in order to minimise damage to areas outside the road reserve.

Before commencing any other work the Contractor shall, in order to prevent unauthorised movement of persons or vehicles outside the designated working areas and access road servitudes, erect and maintain temporary fences along the boundaries of the working areas, access roads, spoil and stockpile areas etc. in conformity with the environmental specifications. Movement of vehicles and personnel outside the designated working areas will not be permitted and discipline on site and in the camp shall be to such a degree as to indemnify the Employer from all complaints.

(b) Protection of fauna and flora

All flora and fauna whether within or outside the road reserve, or in borrow areas, shall be dealt with in accordance with the environmental specifications.

No domestic animals shall be permitted on site.

## **B1234 SITE CLEANLINESS AND PRECAUTIONS AGAINST NUISANCE**

Wherever machinery is excavating or loading material which is liable to form a dust nuisance, an effective method of spraying the excavation area and loaded material with water shall be installed.

No separate or additional payment will be made for dust prevention measures.

The costs incurred by the Contractor for the provision of these measures shall be deemed to have been included in the rates for the operations requiring such measures.

The Site shall be maintained in a clean, orderly and sanitary condition as required and to the satisfaction of the Employer's Agent."

## **B1235 USE OF LABOUR**

It is an objective of the Employer to create employment on this contract and therefore all the requirements in this respect contained in the contract will be rigorously monitored and enforced.

## **B1236 MEASUREMENT AND PAYMENT**

<b>Item</b>	<b>Unit</b>
-------------	-------------

### **B12.01 Community Liaison Officer (CLO)**

- |  |                            |
|--|----------------------------|
| (a) Salary plus expenses incurred by the CLO                   | provisional sum (Prov Sum) |
| (b) Handling cost and profit in respect of sub-item B12.01 (a) | percentage (%)             |

A provisional sum is provided for the cost of community liaison, which shall include the salary of the Liaison Officer for the duration of the Contract, as well as costs with respect to the provision of use of a cell phone and site-related travel for the duration of the contract. The Liaison Officer will be required on a full-time basis and this provisional sum shall be expended as approved by the Employer's Agent.

The tendered percentage is a percentage of the amount actually spent under sub item B12.01 (a), which shall include full compensation for the handling costs and the profit of the Contractor."

<b>Item</b>	<b>Unit</b>
-------------	-------------

### **B12.02 The protection, removal, realignment and replacement of services and other payment**

- |  |                            |
|--|----------------------------|
| (a) Utility Services   |                            |
| (1) Telkom   | provisional sum (Prov Sum) |
| (2) Eskom  | provisional sum (Prov Sum) |
| (3) Water  | provisional sum (Prov Sum) |
| (4) Other  | provisional sum (Prov Sum) |
| (5) Handling Cost and profit in respect of sub items B12.02 (a)(1), (2), (3) and (4) | percentage (%)             |

Expenditure shall be made in accordance with the provisions of the General Conditions of Contract.

The tendered rate for item B12.02(a)(5) is a percentage of the amount actually spent under items B12.02 (a)(1), (2), (3) and (4). Both percentage rates shall include full compensation for handling cost and profit of the Contractor.

<b>Item</b>	<b>Unit</b>
-------------	-------------

B12.03 Project Steering Committee (PSC)	provisional sum (Prov Sum)
---	----------------------------

- |   |                |
|---|----------------|
| (a) Payment of expenses/disbursements to the members of the PSC |                |
| (b) Handling cost and profit in respect of sub items B12.03 (a) | percentage (%) |

Payment of the provisional sum provided in sub item B12.03(a) is to reimburse members of the PSC for costs of travelling and subsistence for each meeting attended.

Item	Unit
<b>B12.04 Provision of accredited training</b>	
(a) Wages and salaries of local labourers employed by the Contractor in respect of training periods for on-site training by the Contractor during which no productive work is executed	lump sum
(b) Accredited and approved training courses for selected local labourers including wages during training	prime cost (PC) sum
(c) Contractor's charges to allow for handling costs and profit in respect of sub item B12.04(b)	percentage (%)

Payment of the lump sum tendered for sub item B12.04(a) shall include full compensation for the wages and salaries of local labourers for the periods during which they attend courses and receive training that are arranged and paid for by the Contractor in terms of the Contractor's training schedule and are thus not available for the execution of productive work.

The lump sum tendered for sub item B12.04(a) will be paid monthly in equal instalments.

Payment for the prime cost (PC) sum provided in sub item B12.04(b) to cover the costs incurred for the attendance by selected and approved local labourers in the employ of the Contractor and Selected Sub Contractors of approved training courses presented by accredited institutions shall be effected in accordance with the provisions of Clause 6.6.2 of the General Conditions of Contract. The payment shall cover the applicable course fees as agreed to by the Employer's Agent as well as wages and transport costs expended by the Contractor or Selected Sub Contractor related to the approved training courses.

The tendered percentage tendered for sub item B12.04(c) is the percentage of the amounts actually expended under sub items B12.04(a) and B12.04(b) that will be paid to the Contractor in full compensation for the Contractor's handling costs and profit in respect of sub items B12.04(a) and B12.04(b).

No additional payment will be made for any of the extra costs which will be incurred as a result of the additional supervision required for managing labour and for providing informal training to the workers. The Contractor shall make suitable allowance for these costs in his tendered rates for the various items of work. Additional allowance must also be made for the involvement of senior staff members, directors and managers in training and guidance of emerging Contractors and attendance at meetings and discussions in respect of all training matters.

Except as specifically provided for in the relevant pay items included in the Bill / Schedule of Quantities no additional payment will be made to the Contractor in respect of the execution of the prescribed and approved training programme. Full compensation for the costs of training not covered by the above pay items shall be deemed to be included in the rates tendered for the Contractor's general obligations.

## **SECTION 1300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS**

### **B1302 GENERAL REQUIREMENTS**

#### **(a) Camps, construction plant and testing facilities**

*Add the following after the first paragraph of subclause 1302(a) of the Specifications:*

"No specific land has been made available for the camp and offices and the Contractor shall make his own arrangements concerning a suitable site and location, as well as the provision of water, electricity and other services for the campsite. Where necessary the Contractor shall make his own arrangements with land- owners."

No direct payment will be made for the provision of water, electrical and other services and the cost thereof shall be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required.

The Contractor is responsible for obtaining the water extraction permit."

Add the following new subclauses after subclause 1302(c) of the Specifications:

#### **“(d) Contractor’s ablution facilities**

The Contractor shall, at each construction section, provide sufficient portable chemical latrine units. Furthermore the Contractor shall also provide a portable chemical latrine unit at each temporary traffic control facility. The latrine units shall be serviced daily and kept in a hygienic and orderly state to the approval of the Employer's Agent. No separate payment shall be made for this requirement and the costs thereof shall be deemed to be included in the rates tendered for the Contractor's time-related obligations."

#### **(e) Housing**

The Contractor shall not erect any housing or other accommodation facilities on the site of the Works and shall make all the necessary arrangements for accommodation of his personnel and site staff off the site of the Works.

#### **(f) Services**

The Contractor shall at his own expense, make the necessary connections to any utility services required by him for the execution of the works.

#### **(g) Sanitation and waste management**

The Contractor shall provide suitable sanitary and waste management arrangements for his staff at his campsite. If outside latrines are provided, they shall be of a neat construction and shall be provided with doors and locks. They shall be to the satisfaction of the Employer's Agent's Representative and the Local Authorities and comply with the requirements of the specifications.

The Contractor shall provide portable chemical latrines on Site, as agreed by the Employer's Agent for use by construction workers. The latrines shall be serviced daily and maintained in good condition. No separate payment shall be made for any costs incurred in this regard and the Contractor shall allow for these costs in his tendered rates for establishment.

The Contractor shall be responsible for providing all necessary services to keep the latrines for himself, the Employer's Agent's Representative and the subcontractors on the Site in a clean, neat and hygienic condition, including the cost of refuse removal and disposal from the Site and from all accommodation provided by him.

The use of liquids containing formaldehyde in chemical toilets is not allowed.

If the Contractor fails to provide and/or maintain all Site sanitation facilities in a clean and hygienic condition the Employer's Agent's Representative may order the Contractor to suspend any or all work on the Site until the requirements of the Specifications are met. No payment shall be made for any delays or disruption of the Works caused thereby nor shall extensions of time be granted for such delays.

On completion of the Contract, the Contractor shall remove the sanitation system and reinstate the area to the satisfaction of the Employer's Agent's Representative and in compliance with the requirements of the specifications.

#### **(h) Security**

The Contractor shall provide adequate security and strict control of access to the campsite on a 24-hour basis including weekends and public holidays. The campsite area shall be adequately fenced with security fencing and security lights placed at strategic points. Notices to indicate that unauthorised persons may not enter the campsite area shall be erected at prominent locations as required by the Occupational Health and Safety requirements or agreed with the Employer's Agent's Representative.

#### **(i) Environmental protection (see item B1232)**

Construction will take place within the existing road reserve and every precaution must be taken to protect the established vegetation and roadside facilities notwithstanding the provision set out in Volume 7 of these documents.

The following conditions apply:

- (i) Personnel and plant shall not enter property beyond the road reserve boundary irrespective of whether the boundaries are fenced off or not.
- (ii) The Contractor shall, to the satisfaction of the Employer's Agent, take every necessary precaution to prevent the contamination of any watercourses.
- (iii) The Contractor shall plan his activities so that materials, in so far as is possible, can be transported direct to and placed at the point where they are to be used. However, where utilising materials in this manner is impractical, it shall be temporarily stockpiled for later loading and transportation to where it will be used.
- (iv) Stockpiling areas shall be indicated to and approved by the Employer's Agent. Before any stockpiling of material may be done, the site shall be cleaned, and all loose stones or any plant or other material which may cause pollution shall be removed. After the stockpiled material has been removed, the site shall be reinstated as closely as possible to its original condition.
- (v) The Contractor shall be responsible for the establishment of a refuse control system for the collection and removal of refuse from the campsite and working areas.
- (vi) The Contractor shall ensure that waste and surplus food, food packaging plastic and organic waste are not deposited by his employees anywhere on the site except in refuse bins for removal. If his employees are to eat elsewhere on site than in the campsite, the Contractor shall designate restricted places for eating in his working areas, shall provide adequate refuse containers in all these places and shall remove the refuse and clean up any remaining food containers immediately after mealtimes.
- (vii) The Contractor has no right to the trees and shrubs on the Site.
- (viii) No bituminous material or waste material shall be dumped within the road reserve, even if only as a temporary measure. Provision shall be made to remove such excess material directly off the site to suitable waste sites as instructed by the Employer's Agent or Environmental Officer. "

### **B1303 PAYMENT**

#### **B13.01 The Contractor's general obligations**

*Insert the following paragraph after the fourth paragraph:*

"Should the combined total tendered for sub-items (a), (b), and (c) exceed 15 % of the tender sum (excluding VAT), the tenderer shall state his reasons in writing for tendering in this manner. The tenderer's attention is drawn to Form L, (bound in this Volume), to be completed by the tenderer."

*Delete the 17th paragraph commencing "The tendered rate per month for sub-item 13.01(c) ..... " and replace with:*

"The tendered rate per month for sub-item 13.01 (c) represents full compensation for that part of the Contractor's general obligations, which are mainly a function of construction time. The tendered sum will be paid monthly, pro rata for parts of a month, from the Commencement Date (as defined in the General Conditions of Contract under sub-clause 1.1.1.5)

until the end of the period for completion of the works, plus any extension thereof as provided in clause 42 of the general conditions of contract, provided that“

*Add the following after the 19th paragraph:*

"The amount payable to the Contractor for time related costs arising from extensions of time granted by the employer, where the Contractor is fairly entitled to such compensation in terms of clause 5.12 of the General Conditions of Contract, shall be calculated as follows:

Account shall be taken of all time related items scheduled in Sections 1300, 1400 and 1500.

All pay items for which the unit of measurement is "month" shall be deemed to be based upon an average of 23 working days per month.

Payment will be made only for items for which the unit of measurement is "month."

OHS Specifications are to be found in Section C and the Schedule of Quantities are in Schedule C."

## **SECTION 1400: HOUSING, OFFICES AND LABORATORIES FOR THE EMPLOYER'S AGENT'S SITE PERSONNEL**

### **B1402 OFFICES AND LABORATORIES**

#### **(a) General**

*Add the following:*

"It is a requirement of the contract that the offices for the Employer's Agent's supervisory staff shall be supplied with approved burglar proofing, the cost of which shall be taken as included in the relevant tendered rates for the provision of the specified building. In addition, the offices and any living accommodation are to be separated by at least 200m."

#### **(b) Offices**

Delete the first sentence of the first paragraph and add the following:

"The office requirements for the Employer's Agent's Representative are as follows:

- i) One office for the Employer's Agent's Representative.
- ii) Two offices for the Assistant Employer's Agent's Representatives.
- iii) One office for the Assistant Employer's Agent's Material Technician.
- iv) Four offices for the technical staff.

The office size and other requirements are specified elsewhere in this sub clause."

*Add the following to sub-clause (xii):*

"The services shall consist of a telephone in the Resident Employer's Agent's office, four extensions to offices and laboratory to be indicated by the Employer's Agent as well as a dedicated line for the fax apparatus."

*Add the following to sub-clause (xv):*

"Each office as well as the conference room shall be provided with a white board, minimum size 1,3m<sup>2</sup>, which shall be fastened securely to the wall."

*Add the following to sub-sub-clause (xvii):*

"A fax apparatus coupled to a separate dedicated telephone line shall be installed in the Resident Employer's Agent's office, for the exclusive use of the Employer's Agent. The fax apparatus shall be CCIT Group 3 and Group 2 compatible, capable of scanning A4 documents with automatic feed of maximum 30 sheets and able to operate at temperatures between 5 and 35 Deg. C. Ownership of the fax apparatus will revert to the Contractor on completion of the contract. The prime cost sum shall include the cost of installation and consumables in connection with contract administration and the cost of the telephone charges for outgoing faxes."

*Add the following sub-sub-clauses:*

“(xviii) Steel plan cabinets shall be provided and shall be able to accommodate 30 A0 - sized drawings hanging vertically from approved holders.

(xix) Two electric refrigerators of at least 300 litre capacity shall be provided for the use of the Employer's Agent. The Employer's Agent's kitchen shall be provided with a fitted sink with the necessary taps and drains, a microwave oven and a three-plate/ring stove with an oven.

(xx) Provision of floodlights, which are to be controlled by a photocell for security purposes at the offices and laboratory of the supervisory staff.

(xxi) Provision of cellular telephones together with original manufacturer's hands-free kits shall be supplied to the Employer's Agent's site staff for the duration of the contract. The prime cost sum shall also include for the cost of all telephone calls in connection with contract administration, and full insurance cover for the duration of the contract.

(xxii) Provision of approved photocopier capable of making A4 and A3 copies, as well as paper and toner for making up to 1000 copies per month.

All equipment shall revert back to the Contractor on completion of the Contract.”

*Add the following:*

"Specifications for Offices

The Employer's Agent's Representative's office, which shall serve as a back-up conference room and shall have a floor area of thirty (30) square metres. The Assistant Employer's Agent's Representative's office shall each have a floor area of fourteen (14) square metres while the remaining offices shall each have a floor area of twelve (12) square metres.

Each office shall be furnished with the following items:

The Employer's Agent's Representative's Office shall be provided with the following:

- (i) An office desk with a surface area of at least 1,5 m<sup>2</sup> with six drawers, two of which can be locked.
- (ii) One steel general purpose cabinet with a shelf area of at least 1,5 m<sup>2</sup>. The cabinet shall be lockable with two keys.
- (iii) One steel filing cabinet with four drawers, a lock with two keys. The cabinet shall be 1 300 mm high, 480 mm wide and 800 mm from front to back.
- (iv) One drawing table with a smooth top of at least 2 400 mm x 900 mm, and the upper surface shall be 950 mm above floor level.
- (v) Two bookshelf units with at least three shelves each, capable of holding lever arch files. Units to be at least 900 mm wide x 900 mm high.
- (vi) Three sturdy and comfortable chairs.
- (vii) One height-adjustable draughtsman's stool with padded seat and backrest.
- (viii) One wash hand basin.
- (ix) One conference table (approximately 3,2 m x 1,3 m) and 10 chairs.

The Assistant Employer's Agent's Representatives' offices shall be provided with the following:

- (i) An office desk with a surface area of at least 1,5 m<sup>2</sup> with six drawers, two of which can be locked.
- (ii) One steel general purpose cabinet with a shelf area of at least 1,5 m<sup>2</sup>. The cabinet shall be lockable with two keys.
- (iii) One steel filing cabinet with four drawers, a lock with two keys. The cabinet shall be 1 300 mm high, 480 mm wide and 800 mm from back to front.
- (iv) One drawing table with a smooth top of at least 2 400 mm x 900 mm, and the upper surface shall be 950 mm above floor level.
- (v) Two book shelf units with at least three shelves each, capable of holding lever arch files. Units to be at least 900 mm wide x 900 mm high.
- (vi) Two sturdy and comfortable chairs.
- (vii) One height-adjustable draughtsman's stool with padded seat and backrest.
- (viii) One wash hand basin.

The remaining offices shall be provided with the following:

- (i) An office desk with a surface area of at least 1,5 m<sup>2</sup> with six drawers, two of which can be locked.
- (ii) One steel general purpose cabinet with shelf area of at least 1,5 m<sup>2</sup>. The cabinet shall be lockable with two keys.
- (iii) One steel filing cabinet with four drawers, a lock with two keys. The cabinet shall be 1 300 mm high, 480 mm wide and 800 mm from front to back.
- (iv) One drawing table with a smooth top of at least 1 200 mm x 900 mm, and the upper surface shall be 950 mm above floor level.
- (v) One book shelf units with at least three shelves each, capable of holding lever arch files. Units to be at least 900 mm wide x 900 mm high.
- (vi) Two sturdy and comfortable chairs.
- (vii) One height-adjustable draughtsman's stool with padded seat and backrest.

The offices shall be air-conditioned in the summer and heating shall be provided in the winter months. Six carports shall be provided close to the offices."

### **(c) Laboratories**

*Delete the first and second paragraphs of this subclause and add the following:*

"The site laboratory complex shall consist of:

- (1) Offices
- (2) Testing rooms for:
  - (i) indicators
  - (ii) UCS/MOD
  - (iii) ovens
  - (iv) aggregates
  - (v) CBRs
  - (vi) concrete
  - (vii) chemistry
- (3) Roofed work areas with concrete floors
- (4) Kitchen
- (5) Sample store
- (6) Toilets (2 No)
- (7) Car port
- (8) Curing/soaking room/s

The layout shall be approved by the Employer's Agent, who will also indicate his preferred location of power points, work benches, windows, doors, furniture and laboratory apparatus. There shall be a clear height from floor to ceiling of at least 2,4 m. Separate cooking facilities shall be provided."

*Add the following to the end of the first paragraph of Sub-clause (iii)(2) of this Sub-clause:*

"Support shall be provided by single brick walls."

*Add the following to the last paragraph of Sub-clause (iii)(2) of this Sub-clause:*

", and include a robust timber shelf, mounted 400 mm above floor level, for the storage of samples."

*Add the following to Sub-clause (vi) of this Sub-clause:*

"The power consumption is estimated at 4000 KWh per month."

*Add the following to Sub-clause (ix) of this Sub-clause:*

"The water consumption is estimated at 100 kl per month."

*Add the following to Sub-clause (xiv):*

"The concrete test cube baths shall be automatically temperature controlled and fitted with a circulating pump of such capacity that it will maintain a constant temperature of 22° to 25°C, have an overflow at 0,5m above the metal grating, a drain, a hinged cover and a metal grating to support the cubes at 50mm above the floor."

Add the following new Sub-clauses to this Sub-clause:

"(xvii) A rack suitable for hanging clothes.

(xviii) A steel plate 1 m x 1 m x 13 mm thick with 100 mm high x 6,7 mm thick side plates and 19 mm diameter bars welded to the base plate as ordered by the Employer's Agent."

**(g) Ablution units**

Add the following:

"A dedicated ablution unit with a minimum floor area of 10 m<sup>2</sup> for the sole use of the Employer's Agent's supervisory staff shall be provided. The unit shall contain at least the following:

- (i) One flush toilet and one urinal complete with running water and sewer pipes.
- (ii) One shower complete with hot and cold running water.
- (iii) One hand wash basin complete with hot and cold running water.
- (iv) Mirrors, toilet roll holder, paper towels, soap etc."

**(h) Communication system**

*Add the following:*

"The Contractor shall provide two-way radio communication for the use of the Employer's Agent and his site staff. The communication system shall be sufficient to provide communication between his offices and vehicles at any point within the site. Should the Employer's Agent's staff change vehicles during the contract or should staff be replaced by new staff using different vehicles, the Contractor shall transfer the mobile stations between the vehicles. The system including the mobile stations in the Employer's Agent's vehicles shall be removed on completion of the contract. The Contractor shall maintain these sets in good working order at all times.

It may be necessary for the Contractor to supply one or more relaying stations at suitable locations along the route to ensure uninterrupted communication. Such relaying stations will not be paid for separately and compensation therefore shall be deemed to be included in the rates tendered for Section 1300 for the Contractor's establishment."

Add the following sub-sub-clauses:

**“(j) Computers and printers**

When instructed by the Employer's Agent, the Contractor shall provide approved new modems and printers for the exclusive use of the Employer's Agent's site staff. This shall include a network with the necessary cabling, an internet connection and e-mail facility.

Printer: HP Mono LaserJet MFP 137fnw (with 3yr Return to Depot Warranty included), Print, Copy, Scan and Fax Multi-Function unit, HP 106A Black Laser Toner or  
HP LaserJet M1536dnf MFP 4:1 Print, Copy, Scan & Fax; A4 up to 25 pages per minute, 128MB, 600 x 600 dpi, HP FastRet 1200 ; USB2.0, 10/100 Ethernet, 35 page 1 x 250 sheet paper tray ADF, duplex, network, fax (1yr);

Internet & Email: MTN / Vodacom / Telkom LTE 5GB Data Contract & SIM + MiFi Device on 2yr Contract The above to include an email address for use on site (if required), Provider with best signal at site location to be used.

All equipment shall be kept fully serviceable by the Contractor at all times. The Contractor shall repair/replace any defective equipment within 12 hours after notification by the Employer's Agent. The Contractor shall also provide all paper, ink cartridges and other consumables required by the Employer's Agent.

All computer equipment, peripherals, modems, UPSs and software packages shall be cleared with and approved by the Employer's Agent prior to provision.

All the above-mentioned equipment and software shall be handed to the Employer at the end of the Contract.

**(k) Assistance to the Employer's Agent**

The Contractor shall provide for the exclusive use of the Employer's Agent up to two (2) semi-skilled workmen trained or capable of being trained as survey hands, office messengers and laboratory hands. These workmen shall be available for the full Contract period as requested by the Employer's Agent.

All these labourers shall be available to the Employer's Agent and his staff throughout the duration of the Contract and in addition, should it be required by the Employer's Agent, a further period of time not exceeding one month, extending from the time of issue of the Certificate of Completion, at no additional cost to the employer.

**(l) Emergency power supply**

The Contractor will be required to provide emergency power supply to the Employer's Agent's offices, laboratories and kitchen. For that purpose a 25 kVA, 3-phase diesel-driven generator with an eight (8) hour fuel capacity will be required.

**(m) Kitchen**

The kitchen shall have:

- (i) a concrete floor space of at least 8 m<sup>2</sup> in area.
- (ii) a clear height from floor to ceiling of at least 2,4 m.
- (iii) windows of at least 1 m<sup>2</sup> in total area of which 0,75 m<sup>2</sup> can be opened to admit air.
- (iv) one door complete with lock and two keys
- (v) one fixed stainless steel kitchen sink with draining board and cold water tap connected to a potable water supply system.
- (vi) one kettle.
- (vii) one kitchen table and two kitchen chairs."

**B1403 HOUSING**

The housing for the Employer's Agent's staff shall be rented accommodation to the approval of the Employer's Agent, provided in project area as agreed by the Employer's Agent.

**(c) Rented accommodation**

Replace the full stop at the end of the first sentence of sub-subclause (ii) of this subclause with a comma and add "and for all services connected with such accommodation."

Add the following sub-subclause:

"(v) Where either rented or prefabricated accommodation is provided, the following minimum furnishings are required:

- i) A single bed with inner spring mattress
- ii) A kitchen table and 2 upright chairs
- iii) 2 easy chairs
- iv) A television set with access to DSTV, only with the approval of the Employer's Agent, the Contractor will be responsible for all operating costs including licensing."

**(d) Accommodation for labourers**

*Delete the word "labourers" in the sub-heading and the words "labourers" or "labourer" in contents of the sub- clause and replace with the words "Employer's Agent's laboratory staff".*

*Delete the first sentence in the third paragraph and replace with the following:*

"The ablution unit shall be a well-ventilated room of 16m<sup>2</sup> area, provided with electric lighting, a section containing two flush-type latrines complete with WC pans and PVC seats and covers, another section containing two showers, two wash basins, two twin concrete wash tubs, and a stainless steel urinal, all complete with the necessary running hot and cold water, taps, drains and sewerage. Two 300mm x 300mm mirrors shall be fixed to the wall above each washbasin. A clothes line shall be provided outside the ablution unit. One ablution unit shall be provided for every 10 laboratory staff."

*Add the following to the fourth paragraph:*

"An additional cooking unit shall consist of a kitchen of 20m<sup>2</sup> area, to be provided as part of the laboratory.

The unit shall be of the same construction as specified for the ablution unit and shall be provided with electric lighting, a dining room table and ten dining chairs, a double stainless steel sink, a lockable storage cupboard of not less than 1,2m<sup>3</sup> of shelving, ten gas/ring burners and four 45 kg gas cylinders. All the necessary taps, drains, sewerage and hot and cold water supply shall be provided.

The accommodation for employees shall be constructed as specified for offices and laboratory units or prefabricated housing units.

Sub-units of 16m<sup>2</sup> shall be provided. Each sub-unit shall be provided with opaque windows, all of which can open at least halfway, and a steel door with lock and padlock and three keys.

The sub-units shall be provided with vinyl floor covering and 220 Volt AC electricity. Each sub-unit shall be provided with:-

- (a) Two 15amp power points.
- (b) Two Fluorescent light fittings.

Each of the laboratory staff and shall be provided with:

- (a) A sturdy spring-type bedstead. The bedsteads shall be provided with a new mattress of acceptable quality and shall have a minimum thickness of 75mm.
- (b) A steel locker which shall not be manufactured from steel mesh, but be completely enclosed, and not less than 0,7m<sup>3</sup> in size with hanging and shelf space, and which can be locked.
- (c) A sturdy steel chair.
- (d) A bedside chest with a top surface of at least 0,75m<sup>2</sup>.
- (e) A suitable heater shall be provided.

The allocation of people per sub-unit shall be as follows:-

- (a) One foreman or artisan or operator or admin clerk or technician.
- (b) Two laboratory staff.
- (c) Women shall be provided with sub-units separate from those allocated to men."

*Delete the fourth paragraph in the Standard Specifications and replace with the following:*

"A cooking unit shall consist of a room of minimum floor area of 24m<sup>2</sup> and shall be of the same construction as specified for the ablution unit. It shall be provided with gas installations consisting of 4 x 45kg gas bottles and the necessary regulators, tubing and shut-off cocks. The gas bottles shall be enclosed in an expanded metal security cage on the outside of the unit.

The gas installation shall be connected to 10 ring gas burners. The cooking unit shall be provided with two stainless steel kitchen sinks with double basins, at least 6,0m<sup>2</sup> of concrete working top, a dining room table and 10 dining chairs, four lockable storage cupboards of 0,7m<sup>3</sup> volume with shelves and two lockable fridge/freezer of 0,5m<sup>3</sup> minimum size. The unit shall have electric lighting and five power plug points. All the necessary taps, drains, sewerage and hot or cold water supply shall be provided. One cooking unit shall be provided for every 10 laboratory staff. The contractor shall be responsible for the cost of the gas supply."

## **B1404 SERVICES**

### **(b) Water, electricity and gas**

*Add the following:*

"A suitable voltage regulator shall regulate the power supply in order to maintain a constant current and voltage level at all times to prevent damage to the office and laboratory equipment and related machinery during power surges. Payment for the voltage regulator shall be deemed to be included in the rates tendered for the supply of services under Items 14.08 (a)&(b). In the event of damage to the office and laboratory equipment and related machinery because of a faulty voltage regulator, the Contractor shall be liable for payment or all repair or replacement costs of such damaged items."

**(c) Maintenance**

*Add the following:*

"The Contractor shall supply soap, toilet paper, towels, cleaners and sanitary personnel, cleaning aids and refuse removal service to keep the offices, laboratories, ablution facilities and kitchen units clean and tidy at all times. Offices shall be vacuum cleaned once a week.

The Contractor shall also keep the grounds around the offices and laboratory and all access roads to these facilities, carports and surface drains clean and neat and in a condition acceptable to the Employer's Agent."

**(d) Cooking Facilities**

*Add the following:*

A cooking unit shall consist of a hut at least 12 m<sup>2</sup> in size and at least 2 m<sup>2</sup> of window area, all of which can be opened. The hut shall be of the same construction as specified for the ablution unit. It shall be provided with an electric or gas stove, a double kitchen sink and at least 3,0 m<sup>2</sup> of concrete working slab, and 1,5 m<sup>2</sup> of shelving. All the necessary taps, drains, sewerage and hot and cold water supply shall be provided."

Add the following subclauses:

**“(e) Semi-skilled labourers for the Employer’s Agent’s Representative**

The Contractor shall from time to time be required to make available to the Employer's Agent's Representative two (2) suitably educated semi-skilled labourers for his exclusive use on and about the site. The Employer's Agent's Representative shall be at liberty to accept or reject such staff. The Contractor shall at his cost provide the labourers with accommodation, transport to and from the site and training as for other staff. No separate payment for such labour shall be made under this type of contract.

**(f) First aid**

The Contractor shall provide a first aid kit at the site offices in addition to any other requirements in terms of the Occupational Health and Safety Specification."

**B1406 MEASUREMENT AND PAYMENT**

Item	Unit
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**B14.01 Office and laboratory accommodation:**

Add the following sub-item:

“(g) Kitchen (interior floor space only)	square meter (m <sup>2</sup> )”
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Item	Unit
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**B14.02 Office and laboratory furniture:**

Add the following sub-item:

“(g) Kitchen tables	number (No)
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(h) Kitchen chairs	number (No)”
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Item	Unit
<b>B14.03 Office and laboratory fittings installations and equipment</b>	
(a) Items measured by number:	
<i>Amend sub-subitem (v) to read:</i>	
(v) Single light fitting complete with CFC type 75 watt globes	number (No)
<i>Amend the following sub-subitems to read:</i>	
"(xvi) Refrigerators (300 l min.)	number (No)
(xviii) Uninterruptable power supply unit	number (No)"
<i>Add the following sub-subitems:</i>	
"(xix) Steel plan cabinets	number (No)
(xx) Floodlights complete with poles and 500 Watt minimum globes	number (No)
(xxi) 3-plate stove unit oven	number (No)
(xxii) Kitchen sink complete with taps, outlets, water and sewer connections etc	number (No)
(xxiii) Kitchen cupboards	number (No)
(xxiv) Microwave oven (30lt)	number (No)
(xxv) Plan racks	number (No)
(xxvi) Rain gauge	number (No)
(xxvii) Minimum and maximum thermometer	number (No)
The tendered rate for subitem B14.03 (a)(xx) shall include for the operation of the lights from sunset to sunrise for the full duration of the Contract."	
(b) Prime cost items and items paid for in a lump sum:	
<i>Amend the following items to read:</i>	
"(v) Provision of plain paper laser facsimile machine, Nashua 1400 L or similar	Provisional Sum"
<i>Add the following sub-subitems:</i>	
(ix) Cost of cell phone calls on contract administration business and rental charges	ProvisionalSum
(x) Handling costs and profit in respect of subitem 14.03 (b) (ix) above	percentage (%)"
(xi) Provision of ADSL Broadband Internet Access	ProvisionalSum
(xii) Handling costs and profit in respect of subitem 14.03 (b) (xi) above	percentage (%)"
(c) Items measured by area:	
<i>Add the following to sub-subitem (iv) of this subitem:</i>	
"... galvanised iron or fibre cement complete with an insulated lid comprising of styrofoam with marine plywood backing, water depth 500 mm."	
<i>Amend sub-subitem (viii) of this sub item to read:</i>	
"(viii) Soft board notice board	square metre (m²)"
<i>Add the following sub-subitem:</i>	
"(ix) White boards	square meter (m²)"

Item	Unit
<b>B14.05          Housing for labourers</b>	
Amend the item description to read "B14.05 Housing for Employer's Agent's laboratory staff".	
<b>B14.08          Services</b>	
Add the following sub-subitem:	
"(f)    The provision of a back up generator when the provision of electricity is under subitem (a) is from Eskom	
(i)    Fixed costs	lump sum
(ii)   Running costs	hour (h)"

Add the following pay items:

"Item	Unit
<b>B14.11 Provision of semi-skilled labour for use by the Employer's Agent</b>	
(a)    Wages, salaries and allowances	prime cost (PC) sum
(b)    Handling costs and profit in respect of sub-item B14.11(a)	percentage (%)

Expenditure under this item will be in accordance with the general conditions of contract. Payment under sub- item B14.11(a) shall be made monthly. The amount due to the Contractor will be equal to the total of the actual amount paid to the Employer's Agent's semi-skilled labourers plus the direct cost of medical and pension benefits, Workmen's Compensation, sick leave and holiday pay, incurred by the Contractor in respect of the Employer's Agent's semi-skilled labourers. The Contractor shall advise the Employer's Agent of the full monthly cost for each semi-skilled labourer engaged. No payment other than that provided above will be made in respect of the employment of semi-skilled labourers for the Employer's Agent. Contract price adjustment will not apply to this item.

The tendered percentage is a percentage of the amount actually spent under sub-item B14.11(a), which shall include full compensation for the handling costs of the Contractor, plus the profit and all other incidentals, in connection with paying the Employer's Agent's assistants.

## SECTION 1500: ACCOMMODATION OF TRAFFIC

### B1501          SCOPE

*Add the following:*

"This section also covers the provision of additional information signs for motorists and releasing any notices to the media and public.

It is a condition of this contract that traffic is accommodated considering the provisions of the latest edition of the South African Road Traffic Signs Manual (SARTSM).

Copies of this publication are available from Government Printers attention Anna Steyn Tel. (012) 334-4500, e-mail: [asteyn@print.pwv.gov.za](mailto:asteyn@print.pwv.gov.za)"

### B1502          GENERAL REQUIREMENTS

#### (a)    Safety

*Add the following at the end of the second paragraph of this subclause:*

"The entire site will be handed over to the Contractor. The Contractor may, however, only occupy such areas on the site in accordance with the approved construction programme or as approved by the Employer's Agent.

The Contractor shall submit a programme for the accommodation of traffic to the Employer's Agent for approval."

Approval of temporary deviations

Add the following:

"If, after any temporary deviation has been constructed, any changes are considered necessary or desirable, the proposal shall be submitted to the Employer's Agent for his approval."

**(i) Traffic Safety Officer**

Add the following after the second paragraph:

"The Contractor shall submit a CV of the candidate to the Employer's Agent for approval before the Traffic Safety Officer is appointed. The Traffic Safety Officer shall be made available to discuss road safety and traffic accommodation matters whenever required by the Employer's Agent." This Traffic Safety Officer may not be the same person as the Construction Safety Officer contemplated in Section C of this specification. If a Traffic Safety Officer is found to be incompetent, the Employer's Agent will instruct the Contractor to remove and replace him with a competent person. The Traffic Safety Officer will report to the Construction Safety Officer.

*At the end of the subclause add the following:*

"The duties of the responsible persons shall include liaison with the relevant traffic authorities and in the event of an accident on the section of road under construction, the Traffic Safety Officer or his assistants shall be responsible for contacting the traffic authority and South African Police Service."

*Replace sub-subclauses (ii) and (iii) with the following:*

"(ii) Record on neat and dimensioned sketches and submit to the Employer's Agent the position and sign reference number where applicable of each sign, barricade, delineator, cone, amber flicker light, guardrail and permanent or temporary painted road marking feature. The position of each of the above-mentioned signs and road marking features shall be adequately referenced to identifiable permanent features located along the site of the works.

These records shall also show the date and time at which the recorded traffic accommodation features are certified correct by the Traffic Safety Officer, and shall be signed by the Traffic Safety Officer before being submitted to the Employer's Agent.

The records shall be amended whenever changes are made in the field and the amended detailed sketches shall be submitted to the Employer's Agent. Such amendments shall record the position(s) of flagmen and stop/go control men and their associated traffic accommodation equipment wherever they are used.

(iii) Personally inspect the position and condition of each traffic accommodation feature on the whole site of works at least twice each day at 9h30 and at 16h30, to record all irregularities discovered and the remedial action taken, and to sign off as correct and submit to the Employer's Agent such record sheets by the middle of the next working day at the latest. The Traffic Safety Officer shall keep a duplicate book for this specific purpose. The provision of daily photographs is advisable.

The Traffic Safety Officer shall also submit the daily labour returns of flagmen, stop/go and traffic signal control men employed, with this report.

*Add the following sub-subclauses:*

"(ix) The Traffic Safety Officer shall be equipped with a cellular telephone and shall have a vehicle and sufficient labourers at his disposal 24 hours a day, including special non-working days and shall not be available for other duties. He shall be directly answerable to the Contractor's Site Agent. The traffic safety vehicle shall be a truck with a capacity of 3 tons and shall be equipped with a high visibility rear panel in accordance with the requirements of the South African Road Traffic Signs Manual.

The words "TRAFFIC CONTROL" shall be written on a warning sign in highly legible letters (not less than 150 mm in height) and the sign shall be mounted on the vehicle at a height of at least 1,5 m above ground level. The proposed sign with size of letters shall be submitted to the Employer's Agent for his approval before the sign is ordered.

The vehicle shall be equipped with an amber-coloured flashing light of the rotating parabolic reflector type, with a minimum intensity of 100 W. The warning light shall be switched on at all times and the aforementioned sign shall be displayed when the vehicle is used on site.

The Traffic Safety Officer shall have a direct line of communication with the police and traffic officers responsible for the area within the limits of the contract at all times. The provision of the road safety vehicle, driver, sufficient labourers and the cost of the cellular telephone shall be deemed to be included in the tendered rates."

(x) Ensure that all obstructions related to the Contractor's activities be removed before nightfall, where applicable or as instructed by the Employer's Agent and that the roads are safe for night traffic.

(xi) Be responsible for implementing actions requested in writing by the traffic authorities with regard to the work to be carried out and be responsible for the erection and maintenance of all traffic signs necessary for the accommodation of traffic.

(xii) In the event of an accident, the Traffic Safety Officer shall record details of the accident in a written report accompanied by photographs and a neat sketch plan which show identifiable permanent features, relevant dimensions and the position of all temporary road signs, barricades, delineators and other devices used for traffic accommodation."

(xiii) Also ensure full compliance with all the requirements of the Occupational Health and Safety Act and Construction Regulations which may pertain to the accommodation of traffic.

(xv) Keep the responsible traffic officers fully informed with regard to any changes in the accommodation of traffic planned by the Contractor due to construction activities."

*Add the following subclauses:*

**“(j) Failure to comply with provisions**

Failure or refusal on the part of the Contractor to take the necessary steps to ensure the safety and convenience of the travelling public, accommodation of traffic, and the provision of plant and personnel in accordance with these specifications or as required by statutory authorities or ordered by the Employer's Agent, shall be sufficient cause for the Employer's Agent to apply penalties as follows:

(i) A fixed penalty of R5 000,00 per occurrence shall be deducted for each and every occurrence of non-compliance with any of the requirements of section 1500 of the standard specifications and section B1500 of the works specifications.

(ii) In addition, a time-related penalty of R500,00 per hour over and above the fixed penalty shall be deducted for non-compliance to rectify any defects in the accommodation of traffic within the allowable time after an instruction to this effect has been given by the Employer's Agent. The Employer's Agent's instruction shall state the allowable time, which shall be the time in hours for reinstatement of the defects. Should the Contractor fail to adhere to this instruction, the time-related penalty shall be applied from the time the instruction was given.

**(k) Site personnel**

The Contractor shall ensure that all his personnel, excluding those who are permanently office bound, are equipped with reflective safety jackets and that these are worn at all times when working on or near to the travelled way.

Any person found not wearing a reflective jacket under these circumstances shall be removed from the site until such time as he is in possession of and wearing a reflective jacket. Furthermore the above penalties will also be applied. Reflective safety jackets shall be kept in good condition and any jackets that are, in the opinion of the Employer's Agent, ineffective shall be immediately replaced by the Contractor.

**(l) Use of the road by the public**

The Contractor shall plan and conduct his activities so as to bring about the least possible disruption to the traffic on the roads on which he works. The Contractor shall deal with deliberate courtesy and understanding in any discussions or disputes at all points of contact with the travelling public.

**(m) Extension of time for completion**

No delays caused by the requirement that public traffic be accommodated during the construction of the works and that traffic flows be maintained as specified will be regarded as reason for an extension of time in terms of the General Conditions of Contract.

**(n) Provision of safety equipment for the Employer's Agent**

The Contractor shall provide the Employer's Agent with:

- (1) Amber rotating flashing lights for mobile use which shall be approved by the Employer's Agent.
- (2) Safety jackets (not bibs) for the Employer's Agent and visitors for moving around the site. The jackets shall be of an approved type, orange/yellow in colour and shall be in accordance with the South African Road Signs Manual (Volume 2, Chapter 13) on Figure 13.30 (Detail 13.30.2).

**(o) Flagmen**

Where required by the Employer's Agent, flagmen shall be provided for the control of traffic at lane closures and road accidents if and when they occur.

Flagmen shall be adequately trained in the standard flagging techniques as described in the South African Road Signs Manual (Volume 2, Chapter 13) on Figure 13.23 (Detail 13.23.1) and be provided with conspicuous clothing such as safety jackets utilising retro-reflective and/or fluorescent panels in red, yellow and / or white.

Flagmen shall have in their possession, at all times, certification that they have attended and passed an accredited course in flagging techniques before being allowed onto the construction site.

Flags shall be made from bright red or red-orange material and shall be square with a minimum side length of 600 mm. The flag shall be attached to a staff at least 1,0 m in length.

Flagmen shall be placed at positions as shown on the drawings or as directed by the Employer's Agent. Such positions shall be a sufficient distance from the work areas to allow vehicles to slow down before entering the work area but not so far away that the drivers tend to increase speed before entering the work areas. The minimum requirement shall be one flagman at the start of each closure.

During the daytime, at least two flagmen shall be provided at each traffic control point in addition to the STOP/GO sign operator, one flagman at the 80 km/h sign and a second roving flagman to indicate to the traffic at the end of the queue to stop.

At night time at least one roving flagman equipped with a Stromberg Lightman xenon strobe, or similar approved, and a torch is required at each traffic control point as well as the traffic light operator. Where the shoulder of the road is closed to traffic, a flagman shall be provided at the leading end of the closure during daytime. This flagman shall be provided at the 80-km/h sign to warn the traffic about the closure. No flagman shall be on duty for a period of more than 10 hours per day. The traffic control site shall be well-lighted at night with at least one floodlight positioned so as to illuminate the area and not shine into the oncoming traffic.

In terms of lateral clearance and safety, flagmen shall stand on the shoulder of the lane of traffic that is being controlled and under no circumstances shall flagmen be permitted to stand within the traffic lane. In order to obtain maximum visual impact for the travelling public, flagmen shall stand alone.

Flagmen shall be provided at all access exit points to the working areas.

**(p) Access to the works**

The Contractor's plant and equipment shall not stop on the trafficked carriageway except to unload or load traffic control facilities."

**B1503 TEMPORARY TRAFFIC-CONTROL FACILITIES**

Replace the first sentence of the first paragraph with the following:

"The Contractor shall provide, erect and maintain and remove when no longer required the necessary traffic- control devices, road signs, channelisation devices, barricades, warning devices and road markings (hereinafter referred to as traffic-control devices) in accordance with these special provisions and as shown on the drawings and in the SARTSM and remove them when no longer required. It shall be incumbent upon the Contractor to see to it that the abovementioned traffic-control devices are present where required and are functioning properly at all times."

Delete the last sentence of the second paragraph and substitute the following:

"Traffic-control devices no longer required at the site of a deviation or a lane closure shall be moved for re- use. Traffic-control devices lost or damaged by the Contractor shall be replaced at his own cost. Where it can be proved that any traffic-control device has been damaged by others and its loss of effective performance is beyond the Contractor's control and not the result of his actions or omissions, the Employer's Agent may order the device to be replaced and paid for at scheduled rates."

Replace the third paragraph with the following:

"The type of construction, spacing and placement of traffic-control devices shall be in accordance with the latest edition of the South African Roads Traffic Signs Manual (SARTSM). The recommended arrangements of the traffic control devices illustrated and/or drawings shall not be departed from without prior approval of the Employer's Agent. The arrangements expected to be most commonly used on this contract are shown on the tender drawings.

The details shown for spacing and placement of traffic-control facilities may however, be revised at the discretion of the Employer's Agent where deemed necessary to accommodate local site geometry and traffic conditions."

#### **(a) Traffic-control devices**

*Add the following to this subclause:*

"Flagmen shall be provided at all access exit points to the working areas."

Add the following to this subclause:

"An all-weather shelter of at least 3 m<sup>2</sup> capable of accommodating two operators with a clear window, a stable door, two chairs and a portable chemical toilet which shall be maintained regularly, shall be provided at each traffic control point. Each control point shall have a generator and a 2 x 400W metal halide floodlight mounted onto a 9 m winched fibreglass pole bolted to a 1,5 m buried galvanized stem to light up the traffic control point at night-time.

The Contractor shall be responsible for the removal of all litter at the traffic control points on a daily basis to an approved dumping site."

#### **(b) Road signs and barricades**

Add the following after the second paragraph of this subclause:

"The Contractor shall be responsible for the protection and maintenance of all signs, and shall at his own cost replace any that have been damaged, or lost, or stolen.

All temporary road signs required to remain in position for some time shall be pole mounted as shown on the drawings. All temporary road signs required to be moved more often shall be mounted on portable supports for the easy moving of signs to temporary positions. The only permitted method of ballasting the sign supports shall consist of durable sandbags filled with sand of adequate mass to prevent signs from being blown over by wind. The cost of the sandbags shall be included in the tendered rates for the various types of temporary road signs.

Temporary road signs and channelisation devices shall be manufactured in accordance with the South African Road Traffic Signs Manual (Volume 2, Chapter 13) and arranged along the road as shown on the drawings and in the Manual.

*Add the following paragraphs:*

"All road signs shall be new or approved by the Employer's Agent as new in accordance with the specifications. The Contractor shall have available on site sufficient extra road signs, barricades, delineators, channelization devices and traffic cones to replace items that have become defective or missing.

The Contractor shall be responsible for the protection and maintenance of all signs, and shall take all reasonable measures to ensure minimum damages to signs and other traffic control devices.

The covering of permanent road signs, if applicable, shall be by first utilising a hessian bag, which shall be pulled over the sign in the form of a hood and fastened to the signposts. Plastic bags or other materials fastened by means of adhesive tape shall not be permitted. The cost of covering of permanent road signs shall be deemed to be included in the tendered rates for items B15.01 and B15.10.

No work may proceed on any section where accommodation of traffic is required until such time as the relevant requirements with regard to sign posting and other detail shown on the Contractor's drawings are met and approved by the Traffic Safety Officer in writing."

### **(c) Channelisation devices and barricades**

*Add the following:*

"The start of barricades shall be positioned such that a minimum sight distance of 150m, measured at a height of 1,05m from the road surface, is obtained.

The use of drums as channelization devices shall not be permitted. Drums may however be used to set up barriers. Collapsible delineators shall be used.

Delineator blades as well as blades used on channelization devices shall:

- (i) Comply with the manufacturing and reflective requirements of the SARTSM and the blades shall be reversible with dimensions as indicated on the drawings;
- (ii) Have the lower edge of the reflective portion of the delineator blade not lower than 250 mm above the road surface;
- (iii) Have smooth and round edges and be mounted on stand-alone purpose made bases or purpose made interlockable channelizing base sections and assembled in accordance with the manufacturers' instructions as determined by the intended purpose of the installation;
- (iv) Be capable to withstand air turbulence created by passing traffic as well as wind gusts up to 100km/h without getting blown away or falling over.;
  - o Bases for collapsible delineators shall be ballasted by a sufficient number of sandbags, filled with sand only with maximum aggregate size of 2 mm.
  - o Bases for heavy duty reboundable delineators shall be single moulded (not assembled or laminated) and, in addition to complying with the minimum dimensions, shall have a minimum mass of 20 kg per unit
- (vi) Together with its mounting be designed such that it will collapse or rebound, as required, in a safe manner under traffic impact.

Traffic cones manufactured in a fluorescent red-orange or red plastic material may be used only at short term lane deviations during daylight. Cones shall not be used on their own but shall be interspersed with delineators at a ratio not exceeding 3:1. Cones used on all deviations shall be 750mm high. Lane closures which continue into the night-time shall be demarcated by delineators only.

The line of delineators along the centre line separating traffic exiting a closure from the contra-flow traffic queuing to enter the closure, shall be determined based on the maximum average queue length of the traffic plus 100 m, or 100 m whichever is the greater. The spacing of delineators in this zone shall not be more than 5 m."

### **(e) Warning devices**

*Add the following:*

"All construction vehicles and plant used on the works shall be equipped with rotating amber flashing lights and warning boards as specified. All vehicles and plant, before being allowed onto the site, shall obtain a clearance permit from the Employer's Agent.

Rotating lights shall have an amber lens of minimum height of 200 mm and shall be mounted in such a way as to be highly visible from all directions. The lights on construction vehicles shall not be switched on while vehicles are being operated on unrestricted sections of a public road, but shall be switched on while construction vehicles are operating within the accommodation of traffic area, as the vehicles decelerate to enter a construction area, or as the vehicles accelerate to the general speed when entering the road from a construction area. Lights on plant shall operate continuously while the plant is working alongside sections of road open to public traffic.

All LDV's and cars operating on site shall also be equipped with rotating amber flashing lights which shall be placed so as to be highly visible and operated continuously while the vehicles are manoeuvring in or out of traffic or is travelling or parked alongside roads open to public traffic.

Rotating lights and the "CONSTRUCTION VEHICLE" signs on the Contractor's vehicles and plant shall not be paid for separately but shall be included in the rates covering the use of the vehicles. Those for the Employer's Agent's staff will be paid for under item B15.15.

The Contractor shall apply and maintain lights together with temporary mounting brackets, to the approval of the Employer's Agent. Vehicles and plant that do not comply with these requirements shall not enter the site.

Two amber flashing lights shall be vertically mounted on top of the traffic signs (i.e. sign mounted flashing lights) at each end of each traffic accommodation section as shown on the drawings. The lights shall be operated during the hours of darkness."

**(f) Road markings**

Replace this subclause with the following:

"Where the road is open full width to traffic and the new markings have not yet been painted on the new surfacing, where directed by the Employer's Agent, a temporary centreline of 100 mm wide broken white lines shall be painted along the centre of the road using PVA paint.

On curves and blind rises, the frequency of temporary broken white lines shall be increased by halving the intervals between the lines and painting barrier lines."

Add the following:

"Where a section of road marking has been removed / covered, and before opening the section of road to traffic, the Contractor shall comply with the following:

- (i) Install temporary road marking;
- (ii) Install temporary road studs.

Should the time constraints not allow the Contractor to comply with (ii) above, the Contractor shall erect temporary delineators at 24 m spacing on the yellow line to indicate the edge of the slow lane. These delineators shall be provided, installed and maintained at the Contractor's cost.

Refer to B5701 for permanent road markings."

Add the following subclauses:

**"(g) Other traffic control measures ordered by the Employer's Agent**

The Employer's Agent may instruct the Contractor to provide any other road sign, reflective tape, etc. not measured in standard pay items. Such road signs shall conform to the requirements of the South African Road Traffic Signs Manual, or specification provided by the Employer's Agent.

Similarly, in order to ensure that the travelling public is kept fully informed and warned on matters relating to the accommodation of traffic, construction sign posting and the effect of the construction on the flow of traffic through the site, the Employer's Agent may arrange for advertising in the press and/or for other forms of publicity.

**(h) Cleanliness of traffic-control facilities**

All delineators and traffic signs shall at all times be maintained in a clean and visible condition. Any bitumen or other material on delineators or traffic signs shall be removed by the Contractor, or they shall be replaced with new ones at his own cost.

**(i) Temporary traffic-control signal systems**

A complete traffic control signal system shall consist of four traffic control signals each with three aspects, and shall include the control device, power supply and mountings.

Temporary traffic-control signals shall be erected where directed by the Employer's Agent and shall comply with the following requirements:

- i) The provisions of Volume 4, Chapter 10 of the South African Road Traffic Signs Manual.
- ii) The signals shall be capable of operating under fixed time or linked control. Manual control shall also be possible. The signal timer shall control the cycle length, phase length and interval length. Amber times shall be a minimum of 3 seconds. Cycle times shall be adjustable up to at least 600 seconds.

- iii) The signals and the power supply shall be capable of operating under all weather conditions for uninterrupted periods of at least 15 hours.
- iv) Standard signal faces with 210 mm diameter red and green aspects shall be provided.
- v) The traffic-control signal lights shall comply with SABS 1459-1988. Aspects shall be fitted with 50 W tungsten halogen lamps.
- vi) Two standard signal faces, both erected on the right-hand side of the road, shall be provided to control each direction of traffic.

Traffic-control signal systems shall be used during the night and shall be operated manually. Sufficient staff, equipped with two-way radios, shall be provided to operate the traffic-control signal system, in shifts of not more than eight hours. The same personnel shall not be on duty throughout an entire night.

The Contractor shall provide a backup power supply such that the traffic control signals can be operated continuously at night-time. In addition, the Contractor shall have available on site adequate spares to effect immediate repairs to a traffic control signal unit in the event of breakdown. The Contractor shall provide backup two-way radios for use in the event of breakdowns."

#### **B1504 WIDTH AND LENGTH OF TEMPORARY DEVIATIONS**

*Replace "10m" and "5m" in the first paragraph with "6m" and "4m" respectively.*

*Replace the second paragraph with the following:*

"Where the road is constructed in half widths or in full width with single direction traffic, the roadway width for accommodating one-way traffic shall be at least 3,2 m wide. The length of the half-width construction or full width construction with single direction traffic controlled by STOP and GO/RV signs shall not exceed 4,5 km. The minimum spacing between two consecutive sections of half width construction shall be 2,0 km (no construction activities will be allowed in this section and traffic will flow uninterrupted), and a maximum number of three sections of half width construction with closures (day/night and/or day only) shall be allowed at any one time.

Along the sections where the road is constructed in half widths and the existing roadway width cannot accommodate one-way traffic on a width that is at least 3,2 m wide, the existing road will be widened by constructing a temporary gravel widening to allow the first half to be constructed. The sections that require temporary gravel widening will be identified and instructed by the Employer's Agent.

The traffic shall be single direction controlled by STOP and GO/RV signs during daytime and temporary traffic signals at night as agreed by the Employer's Agent."

#### **B1506 EARTHWORKS FOR TEMPORARY DEVIATIONS**

Add the following to this clause:

"Wherever possible and to the thickness as instructed by the Employer's Agent topsoil shall be stripped off the area required for deviations. The topsoil shall be stockpiled in accordance with the specifications for later re- use to re-instate the deviations. Payment for the stockpiling and re-use of topsoil will be made under Section 5800."

#### **B1513 ACCOMMODATION OF TRAFFIC WHERE THE ROAD IS CONSTRUCTED IN HALF WIDTHS**

Add the following:

"Where the road is constructed in half widths or in full width with one-way traffic, the traffic shall be accommodated as follows:

One-way traffic during working hours with STOP and GO/RV control and open to accommodate two-way traffic after working hours where this is possible. In this instance the road shall be in a safe trafficable condition for two-way traffic over the entire width or sufficient width to accommodate two-way traffic at the end of each day's work.

Where it is not possible to open the full width of the road or sufficient width to accommodate two-way traffic after working hours, the traffic shall be accommodated as one-way traffic with stop and GO/RV control during working hours and temporary traffic signals at night.

The Contractor shall only work on one side of the road where traffic is accommodated as one-way traffic with stop and GO/RV control. Work on both sides of the road shall not be allowed where traffic is accommodated as one-way traffic with stop and GO/RV control.

All work on the travelled way and shoulders shall be done in such a way that the remaining portion of the roadway is available for traffic.

Construction shall be separated from traffic by means of barricades, guideposts, road signs, delineators and other arrangements in accordance with SARTSM and the drawings or as requested by the Employer’s Agent.

The traffic flow shall be controlled during the daytime by flagmen with STOP and GO/RV signs and by manually operated traffic signals at night.”

Add the following to the end of this clause:

“It may be required to close the road temporarily when blasting. The Contractor will be allowed to close the road for a maximum period of three (3) hours every day to allow for blasting and cleaning up after the blast before traffic is allowed through the pass again. The following will be required before the blasting operations can be commenced with:

- (i) The local residents/road users shall be informed of the times for these temporary closures through the CLO and the PSC.
- (ii) The public shall also be informed of the times for the temporary closures by means of a press release through the local media.
- (iii) Special signs shall be erected at both ends of the road as well as possible other locations indicated by the Employer’s Agent. The times for the temporary closures shall be indicated on these signs. The wording on these signs as well as the sizes shall be approved by the Employer’s Agent before they are ordered.
- (iv) Further signs that will indicate that the road is actually closed on a specific day shall also be displayed at the same locations as the signs mentioned in (iii) above.

Proper programming will be required to ensure that the blasting as well as cleaning of the road after the blast shall be completed within the four hours that the road will be closed.

The Contractor shall also ensure that these operations be programmed and executed in a way to reduce the impact on the flow of traffic to the minimum.”

**B1517 MEASUREMENT AND PAYMENT**

Item	Unit
B15.01 Accommodating traffic and maintaining temporary deviations	kilometre (km)

Amend the second sentence in the second paragraph as follows:

“The provision of a full-time Traffic Safety Officer and all the duties performed by him shall be paid for under Item B15.14”.

Item	Unit
<b>B15.02 Earthworks for temporary deviations</b>	

- (a) Shaping of temporary deviations

Add the following sub-subitem to this subitem:

- “(i) Temporary deviations (new construction) kilometre (km)”

Item	Unit
<b>B15.03 Temporary traffic control facilities</b>	

- (a) Flagmen

In the payment refers clause (a), delete the first sentence: “The unit of measurement shall be a day worked by a flagman.” and replace with “The unit of measurement shall be a full day and night shift worked by flagmen. A person day shall be deemed to comprise of 3 x 8 hour shifts, in a 24 hour period.”

In the payment refers clause (a), amend “a flagman who is” to read “flagmen who are” and at the end delete the full stop and add the following:

“, Stromberg Lightman xenon strobes and torches”. (b), (c), (d), (e), (f) and (h).  
Delete the second paragraph and replace with the following:

“The tendered rates shall include full compensation for the provision, erection and eventual removal of the signs. The rates shall also include for the moving or covering of the signs as required throughout the Contract.”

Add the following to this item:

"Note: For all road signs measurement and payment shall differentiate between signs fixed in the ground and mounted on stands."

Amend sub item (h) to read as follows:

Item	Unit
"(h) Provision, maintenance and replacement of delineators and channelizers all complete with blades, and sandbag ballast as and where required:	bases
(i) Collapsible delineators	
(1) Delineator base, including ballast, only	Number (No)
(2) Delineator blade only (single sided) (height and width (mm))	Number (No)
(3) Delineator blade only (double sided) (height and width (mm))	Number (No)
(ii) Reboundable (heavy duty) delineators	
(1) Delineator base, including ballast, only	Number (No)
(2) Delineator blade only (single sided) (height and width (mm))	Number (No)
(3) Delineator blade only (double sided) (height and width (mm))	Number (No)"

Amend the following notes in the measurement paragraphs as follows:

“The tendered rate for subitem (h) shall also include full compensation for each delineator, for the provision of two sandbags per delineator to hold it in position and for their replacement when necessary due to whatever reason. Only the standard plastic type TW 401/402 (old DTG 50 J) will be allowed on this Contract.”

Add the following new subitems:

Item	Unit
<b>“B15.03 (n) Other traffic control measures ordered by the Employer’s Agent:</b>	
(i) Provision of other traffic control measures	provisional sum (Prov Sum)
(ii) Contractor’s handling charges and profit on sub-subitem B15.03(n)(i)	percentage (%)

The provisional sum has been provided to allow for the supply and installation of any additional signs or other traffic control measures requested by the Employer’s Agent on instruction and in accordance with clause B1503, and press releases.

The tendered percentage is a percentage of the actual amount spent under sub-subitem B15.02(n)(i), and shall include full compensation for the handling costs of the Contractor, and profit in connection with the provision of other signs and facilities required by the Employer’s Agent.

Item	Unit
<b>B15.03 (o) Temporary information signs (TIN-series)</b>	<b>square metre (m²)</b>

The unit of measurement shall be the square metre of sign face, measured on the face of each item provided.

The tendered rate shall include full compensation for providing and erecting each sign, complete with posts, and eventual removal of the signs. The rates shall also include for the moving or covering of the signs as required throughout the Contract.”

Item	Unit
B15.10 Accommodation of traffic where the road is constructed in half-widths	kilometre (km)

In the second paragraph delete from the third line the expressions “flagmen”, “guards”, and “lights”.

Add the following new paragraphs:

“Half-width construction is defined as the construction of the layers of the shoulder and the lane and only where two-way traffic cannot be accommodated. Also, no slurry, seal and asphalt overlay works shall in any circumstances be measured under this item and shall be included in item B15.01 for the payment thereof. Cognisance should be taken that for the maximum 2 km sections controlled by temporary traffic signals for half-width construction, payment shall be made once only and payment for the changeover of the trafficked lanes shall not be made.

Where payment is made for a section of road in item B15.10, payment shall not be made under item B15.01.”

B15.11	Traffic signals
--------	-----------------

Replace this item with the following:

“Item	Unit
<b>B15.11 Temporary traffic-control signal systems:</b>	

- (a) Provision, first erection on Site and final removal of traffic-control signal systems number (No)

The unit of measurement shall be the number of traffic-control signal systems provided and erected. A traffic-control signal system shall consist of all the equipment required to operate four traffic-control signals each with at least two aspects and shall include the control device, power supply and mountings.

The tendered rate shall include full compensation for the provision, first erection, maintenance and final removal of the traffic-control signal system. 75% of the rate will be payable when the signals have been provided and erected and 25% when finally removed from the Site.

- (b) Re-use on Site of traffic-control signal systems number (No)

The unit of measurement shall be the number of traffic-control signal systems removed once and re-erected.

The tendered rate shall include full compensation for the dismantling, storing if required, transportation and re-erection in an entirely new locality and no payment will be made for their removal to a fresh position at the same location.

- (c) Manual operation

- (i) Traffic-control signal systems hours (h)

- (ii) STOP and GO-RY boards hours (h)

The unit of measurement shall be the number of hours the traffic-control signal system is manually operated.

The tendered rate shall include full compensation for the maintenance of the power supply, replacement of lamps as required, two-way radios, portable all-weather shelters, flood lights, toilets, chairs etc., and litter removal.”

Add the following items:

“Item	Unit
<b>B15.14 Traffic Safety Officer</b>	month

The unit of measurement shall be the period in months that the approved Traffic Safety Officer is employed.

The tendered rate per month shall include full compensation for the cost of the Traffic Safety Officer to perform his duties as specified in subclause B1502 (i).

## **B15.15 Provision of traffic safety equipment for use by the Employer's Agent**

- |     |  |             |
|-----|--|-------------|
| (a) | Amber strobe/rotating lights, complying with SARTSM 13     | number (No) |
| (b) | High visibility jackets                                    | number (No) |
| (c) | Magnetic signs "Construction Vehicle" or "Road Inspection" | number (No) |

The unit of measurement shall be the number of each item provided, as ordered by the Employer's Agent, for the duration of the Contract.

Item	Unit
<b>B15.16 Amber flashing lights mounted on signs</b>	number (No)

The unit of measurement shall be the number of amber flashing lights or sets of stroboscopic lights provided and erected.

The tendered rate shall include full compensation for the provision, erection and final removal of the amber flashing light.

## **SECTION 1600: OVERHAUL**

### **B1602 DEFINITIONS**

#### **(a) Overhaul material**

*Add at the beginning of the first paragraph of this subclause:*

"Except that no overhaul shall apply to materials from commercial sources ..."

*Add as the last paragraph of this subclause:*

"The tendered rates for all materials from commercial sources will be held to include full compensation for hauling the materials from source to point of use."

#### **(b) Overhaul**

Delete the text of the subclause and replace with:

"Payment shall only be made for material hauled in excess of 1 kilometre. Overhaul shall be measured as the product of the volume of material hauled and the overhaul distance."

#### **(c) Haul distance**

*Add the following to this sub clause:*

"The haul distance of any material which is removed from existing pavements shall be measured along the shortest route from the place of excavation to the point of use (should the material be re-used directly) or to the approved stockpile, and the shortest distance from the approved stockpile to the point of use."

#### **(d) Free-haul distance**

*Replace the last sentence with:*

"This distance shall be 1 kilometre in the case of all overhaul materials."

Add the following new paragraph:

"In the case of material hauled to a stockpile and then hauled again to point of use, the free-haul distance shall apply only once."

### **B1603 MEASUREMENT AND PAYMENT**

Amend item 16.02 to read as follows:

<b>"Item</b>	<b>Unit</b>
<b>B16.02 Overhaul on material hauled in excess of 1 km</b>	cubic metre-kilometre (m <sup>3</sup> -km)".

Delete the first paragraph of the first set of notes.

## **SECTION 1700: CLEARING AND GRUBBING**

Add the following as a final paragraph:

"Clearing and grubbing for the construction of site offices shall not be measured separately and shall be deemed to be included in the rates tendered for item B13.01."

### **B1702 DESCRIPTION OF WORK**

#### **(c) Conservation of topsoil**

Add the following to the end of the 1st paragraph:

"The depth of topsoil removed shall be reliant on the terrain, suitability of material and topsoil requirements of the work. Generally, the contractor will not be required to remove topsoil to more than an average depth of 400mm unless approved by the Employer's Agent before commencing with topsoil removal from any particular area."

Replace the second paragraph of this clause with the following:

"After clearing and grubbing, all topsoil shall be removed to either windrows alongside the construction area or to stockpile. Where ordered by the Employer's Agent, any topsoil that shall be required for the top soiling of new banks and cuts, but which cannot be accommodated within the construction site, shall be loaded and hauled to the designated stockpile area where it shall be placed in temporary stockpiles for later use in the rehabilitation of the site affected by construction activities. Where new borrow pits are to be opened up the topsoil shall first be removed (independently of the overburden) and placed in temporary stockpiles at the edge of the borrow pit. The moving of topsoil from windrow or the loading of topsoil from temporary stockpiles and the placing and spreading thereof on cut or fill slopes or on borrow pit spoil sites, is covered in Section 5800."

### **B1703 EXECUTION OF WORK**

*Add the following as the new first paragraph:*

"This section covers the clearing of the site and the grubbing necessary for the construction of the Works covered by the Contract."

#### **(a) Areas to be cleared and grubbed**

*Delete "normally" in the first line of the second paragraph of this subclause.*

### **B1704 MEASUREMENT AND PAYMENT**

<b>Item</b>	<b>Unit</b>
<b>B17.01 Clearing and grubbing</b>	hectare (ha)

Add the following to the measurement and payment paragraphs:

"Clearing and grubbing for the construction of camp sites shall not be measured separately. Payment shall be regarded as included in the rates tendered for the applicable items for the above-mentioned work."

Add the following new items:

<b>"Item</b>	<b>Unit</b>
<b>B17.07 Demolition, removal and disposal off site of miscellaneous structures consisting of:</b>	

(a)	Unreinforced concrete	cubic metre (m <sup>3</sup> )
(b)	Masonry and stone pitching	cubic metre (m <sup>3</sup> )
(c)	Reinforced concrete	cubic metre (m <sup>3</sup> )
(d)	Pipe culverts (state size)	metre (m)

The unit of measurement for sub items (a), (b) and (c) shall be the cubic metre prior to demolition of concrete, masonry or stone pitching demolished and disposed of. Subitem (a) also includes existing concrete beams under guardrails.

The unit of measurement for subitem (d) shall be the metre of pipe demolished.

The tendered rate shall include full compensation for all materials, labour, plant, tools, equipment and for all work necessary for and incidental to the demolition of the structures. The tendered rate shall include full compensation for the disposal of all material in an approved disposal site within a free-haul distance of up to 1,0 kilometre.

Excavation and backfilling will be measured separately. For the purposes of this item reinforced concrete shall be taken to mean concrete which contains at least 0,2% of steel by volume."

## **SECTION B1800: DAYWORKS**

Add the following section to the standard specifications:

### **SECTION B1800: DAYWORKS AND HIRE OF CONSTRUCTION EQUIPMENT**

#### **Contents**

B1801	SCOPE
B1802	GENERAL REQUIREMENTS
B1803	MEASUREMENT AND PAYMENT

#### **B1801 SCOPE**

This Section covers the listing of daywork items in accordance with the General Conditions of Contract subclause 6.5 as amended by Special Condition, for use in determining payment for work which cannot be quantified in specific units in the Bill of Quantities, or work ordered by the Employer's Agent during the construction period which was not foreseen at tender stage and for which no applicable rate exists in the Bill of Quantities.

#### **B1802 ORDERING OF DAYWORK**

No daywork shall be undertaken unless written authorisation has been obtained from the Employer's Agent. Work will be classified as daywork only if the Employer's Agent considers no other rate in the Schedule of Quantities to be appropriate for payment purposes.

An instruction regarding all work to be carried out under daywork in terms of subclause 6.5 of the General Conditions of Contract will be issued at the discretion of the Employer's Agent. Some or all of the items priced under daywork in the Schedule of Quantities may possibly not be required for this contract.

Before ordering any material, the Contractor shall submit quotations to the Employer's Agent for his approval, and shall submit such receipts or vouchers to the Employer's Agent as may be necessary for proving the amount claimed.

#### **B1803 MEASUREMENT AND PAYMENT**

<b>Item</b>	<b>Unit</b>
<b>B18.01 Personnel</b>	
(a) Personnel (during normal hours)	
(i) Unskilled labour	hour (h)
(ii) Semi-skilled labour	hour (h)
(iii) Skilled labour	hour (h)
(iv) Ganger	hour (h)

(v)	Flagmen	hour (h)
(b)	Personnel (outside normal working hours and Saturdays)	
(i)	Unskilled labour	hour (h)
(ii)	Semi-skilled labour	hour (h)
(iii)	Skilled labour	hour (h)
(iv)	Ganger	hour (h)
(v)	Flagmen	hour (h)
c)	Personnel (outside normal working hours Sundays and public holidays)	
(i)	Unskilled labour	hour (h)
(ii)	Semi-skilled labour	hour (h)
(iii)	Skilled labour	hour (h)
(iv)	Ganger	hour (h)
(v)	Flagmen	hour (h)

The tendered rates shall include full compensation for overhead charges, profit, liabilities, obligations, site supervision, and the use of hand tools, appliances, and equipment and for consumable stores. The tendered rates shall be subject to the CPA factor as laid down in the General Conditions of Contract.

Item	Unit
B18.02 Contractor's Equipment (state type & size)	hour (h)

The tendered rates submitted for vehicles, constructional plant and equipment shall include for maintenance, operating costs, establishment, insurance and all other contingency costs relating to the running of the vehicles, plant and equipment.

The Contractor and the Employer's Agent will agree on the method of recording the working hours prior to the commencement of the Work. Any long period of idling at any one time which in the opinion of the Employer's Agent or his Representative is beyond that required for normal operating conditions will not be paid for as working time. Non-working hours for any reason shall not be measured for payment.

The tendered rate shall also include full compensation for all administrative costs, supervision, overheads liabilities and obligations related to the running of the vehicles, constructional plant and equipment, profit and shall be subject to the Contract Price Adjustment Factor as laid down in the General Conditions of Contract.

Item	Unit
<b>B18.03 Materials</b>	

(a)	Procurement of materials	provisional sum (Prov Sum)
(b)	Contractor's handling costs, profit and all other charges in respect of Sub item B18.03 (a)	percentage (%)

The prices for materials (excluding VAT) shall be based on the documented proof submitted to the Employer's Agent as specified in clause B1803 and expenditure shall be made in accordance with the General Conditions of Contract. The prices shall not be subject to the Contract Price Adjustment Factor.

The tendered percentage as an on-cost on the net cost price of materials shall include full compensation for handling, overheads, profit, liabilities, obligations, risks, incidents and other on-cost for the supply, delivery and distribution of materials for dayworks.

Item	Unit
<b>B18.04 Transport</b>	

(a)	LDV	kilometre (km)
(b)	Flatbed truck (8 ton)	kilometre (km)

The unit of measurement for items B18.01 and B18.02 shall be the hour for the item of equipment or personnel. Non-working hours or transport breakdown, lack of operator of any other reason shall not be measured. The time shall be taken from the time that the personnel and/or equipment depart until return.

Measurement shall only be for work instructed and directed by the Employer's Agent, where the Employer's Agent considers no other appropriate rate is applicable in the Schedule of Quantities. Prior to the commencement of any work by the personnel described under item B18.01 the Contractor must obtain written consent from the Employer's Agent regarding their classification in terms of "unskilled", semi-skilled" and "skilled" personnel.

The tendered rates for labour under B18.01 shall include full compensation to cover overhead charges and profit, leave pay, bonuses, subsistence, allowances, Employer's contributions, additional payment for overtime where applicable, insurances, housing, site supervision, use of small hand tools and appliances, non-mechanical plant and equipment and consumable stores, for all administrative, supervisory, operative and contingent costs, relating to the supply of personnel.

The unit of measurement for item B18.04 shall be the kilometre distance that the vehicle travelled for transporting personnel and/or plant. All travelling shall be approved by the Employer's Agent.

The tendered rate for item B18.04 shall include full compensation for the cost of the vehicle including fuel, driver, maintenance depreciation and insurance as well as running costs.

The above mentioned tendered rates shall be full compensation for the various items as specified and no further profit shall be paid.

## **SECTION 2100: DRAINS**

### **B2101 SCOPE**

*Amend the first paragraph to read:*

"This section covers all the work in connection with the excavation and construction of open drains, subsoil drainage and banks and dykes at the location and to the size, shapes, grades and dimensions as shown on the drawings or as directed by the Employer's Agent, and the test flushing of subsoil drains."

### **B2104 SUBSOIL DRAINAGE**

#### **(a) Materials**

##### **(i) Pipes**

Amend the 1st paragraph as follows:

"Pipes for subsoil drainage and shall be of the following type:

Perforated or slotted unplasticised PVC pipes complying with SABS 791"

##### **(ii) Natural permeable material**

Delete the 3rd paragraph and replace with the following:

"Crushed stone shall be coarse graded (20,0 mm nominal size) and shall conform to the following requirements:

Percentage passing through a 26.5 mm sieve: 100% Percentage passing through a 19.0 mm sieve: 60-85%"

##### **(iii) Geotextiles**

Under item (4) Selection, of this sub-clause, replace the 1st paragraph with the following:

"The filter-fabric used for subsoil drains shall be grade 3 and shall satisfy the criteria for this grade of geotextile as given in Table 2104/2."

TABLE 2104/3

Properties		Units	Core	Test Method
POLYMER TYPE			HDPE	
MASS	(minimum)	g/m <sup>2</sup>	500	EN ISO 9864
THICKNESS	(under 2 kPa)	mm	4.0	EN ISO 9863
TENSILE STRENGTH	(machine & across)	kN	5.0	EN ISO 10319
DISCHARGE CAPACITY OF GEOCOMPOSITE				
DISCHARGE CAPACITY	(under 50 kPa)	l/s/m	>0.1	EN ISO 12958

## (b) Construction of subsoil drainage systems

(iv) Geocomposite Drains (Fin Drains) drainage systems shall be constructed in accordance with the details shown on the drawings or as directed by the Employer's Agent.

The fin drain is supplied in 30m rolls and the pipes supplied in 6m lengths. The geocomposite drainage system shall be laid out and assembled above ground. The pipe shall be placed within the geotextile flap component of the fin drain with the white soffit mark facing towards the geo-net and secured in place. The composite in- plane system shall be installed against a vertical trench side through which the subsoil flow is expected. The trench shall then be backfilled and compacted in layers with suitable material resulting from the excavation for the subsoil drain. The pipe shall be bedded in a minimum 1.6 x pipe diameter of non-plastic fill over pipe before compaction. Where insitu soils that are not compatible with geotextile filtration are encountered, the composite in-plane drainage system shall be backfilled using materials not less than G7 quality material.

## B2107 MEASUREMENT AND PAYMENT

<b>Item</b>	<b>Unit</b>
-------------	-------------

### B21.01 Excavation for open drains

Add the following to the penultimate paragraph of the payment clause:

"The tendered rate shall also include full compensation for trimming the open drains."

<b>Item</b>	<b>Unit</b>
-------------	-------------

### B21.04 Impermeable backfilling to subsoil drainage systems

Delete the unit and add the following new subitems:

(a) Unstabilised natural gravel	cubic metre (m <sup>3</sup> )
(b) G5 material stabilised with 4% cement as stabilising agent	cubic metre (m <sup>3</sup> )".

<b>Item</b>	<b>Unit</b>
-------------	-------------

### B21.12 Concrete outlet structures, manhole boxes, junction boxes, and cleaning eyes for subsoil drainage systems:

Add the following paragraph to the payment clause:

"The tendered rate for item B21.12(a) shall also include full compensation for procuring and finishing the galvanised mesh, cutting, waste, installing the mesh at outlets and keeping the mesh in the pipe openings clean for the duration of the contract period as specified on drawing No ECS/21/3/C4."

Amend item 21.17 as follows:

<b>Item</b>	<b>Unit</b>
-------------	-------------

**B21.17 Proving of pipes in subsoil drainage systems**

metre (m)

The unit of measurement shall be the metre of subsoil drainage pipe proved and accepted by the Employer's Agent.

The tendered rate shall include compensation for the proving procedure as specified."

Item	Unit
<b>B21.19</b>	<b>Selected backfill material under concrete-lined side drains compacted to 93% of MDD</b>

Delete the unit and add the following subitems:

"(a) Using the excavated material	cubic metre (m <sup>3</sup> )
(b) Using imported selected material	cubic metre (m <sup>3</sup> )
(c) Extra over subitems B21.19 (a) and (b) for soil cement (3%)	cubic metre (m <sup>3</sup> )"

Add the following at the end of the payment clause of this item:

"In addition to the above, the tendered rate for (c) shall include for the supply and mixing in of the specified quantity of cement."

**SECTION 2200: PREFABRICATED CULVERTS****B2201 SCOPE**

Add the following to this clause:

"The information given on the drawings, long sections and drainage schedules may be altered to suit actual site conditions. Culverts shall only be constructed once the information on the drawings has been confirmed by the Employer's Agent. Prefabricated units shall only be ordered once actual measurements of length have been confirmed on site."

**B2203 MATERIALS**

- (b) Portal and rectangular prefabricated concrete culvert units

Delete the contents of this Subclause entirely and replace them with the following:

"Precast concrete units shall comply with the requirements of the latest SABS 986 specification.

Prior to the manufacture of any units the manufacturer shall submit his Quality Plan to be approved by the Employer's Agent before delivery of any units to site. As part of the Quality Plan submitted for approval copies of calibration certificates of both gauges used for proof loads and cover meters used at the factory shall be supplied to the Employer's Agent. The originals of these certificates shall at all stages also be available for inspection at the factory premises. The manufacturer shall check each precast unit for cover compliance, and random checking of units shall not be permitted. The Employer's Agent's Representative may visit the factory at any stage to ascertain adherence to the quality plan as well as to check covers before delivery to site. Any substandard cover shall result in the batch being rejected. Should the manufacturer not be adhering to their Quality Plan the Employer's Agent may exercise the right to reject the use of products from the manufacturer concerned. The Employer shall also be informed in all such cases.

For durability requirements due to the reduced cover provided for pre-cast culverts all durability testing shall be done in accordance to Clause B6404 (h) shall fall within the severe category. For units within the 5km zone from the coast the very severe category shall be used and increased cover shall be as specified by the Employer's Agent."

- (d) Fine Granular Material

Add the following:

"Selected material, approved by the Employer's Agent, may be used for the bedding."

- (f) Skewed ends

Replace the first and second paragraphs of this subclause with the following:

"No units shall be supplied with skew ends and no cutting of skew ends on site will be allowed."

Add the following subclause to this clause:

"(j) Steel reinforcement

All steel reinforcement work shall be carried out in accordance with the requirements of Section 6300."

#### **B2204 CONSTRUCTION METHODS**

Add the following:

"In all cases where soft founding material is classified as suitable for culvert bedding construction, the in situ material shall be ripped, moistened and compacted to 90% or 93% MDD. The depth of preparation and compaction of founding material shall be as indicated on the drawings or as specified by the Employer Agent. Allowance for measurement and payment for this work is made in the schedule of quantities under this section.

All culverts shall be installed/constructed by the "trench method" as described under subclause (a) except where otherwise instructed by the Employer's Agent. All these culverts shall be constructed and backfilled before the subbase is constructed."

#### **B2205 EXCAVATION FOR CONSTRUCTION BY TRENCH METHOD**

(b) Width of excavation

Add the following paragraph after the first paragraph:

"The width of excavation shall be as indicated on the drawings. The specifications given elsewhere in this section for backfilling the culverts shall apply mutatis mutandis to pipe culverts, inlet and outlet structures, catch pits and manholes."

#### **B2207 UNSUITABLE FOUNDING CONDITIONS**

Add the following to the first paragraph of this clause:

"Such material shall be classed as backfill for purposes of payment."

Amend the last three lines of the second sentence of the first paragraph of this clause to read as follows:

"... or other approved material, such as rock fill, compacted in accordance with Clause 3307."

Add the following to this clause:

"Unsuitable material excavated by the Contractor on the Employer's Agent's instructions shall be measured under item 22.01. The backfilling of the excavated material below the bottom of the culvert shall be termed "foundation fill" shall be measured under fill material."

#### **B2210 LAYING AND BEDDING OF PREFABRICATED CULVERTS**

(a) Concrete pipe culverts

In the first line of the first paragraph amend "Class A, B, C or D" to read "Class A or C".

(iii) Class C Bedding

Replace the contents of this sub-subclause with the following:

"The pipes shall be laid on a bedding cushion of lightly compacted selected material in accordance with the details as shown on the drawings or as prescribed by the Employer's Agent."

#### **B2204 CONSTRUCTION METHODS**

Add the following:

"All culverts shall be installed/constructed by the "trench method" as described under subclause (a) except where otherwise instructed by the Employer's Agent. All these culverts shall be constructed and backfilled before the subbase is constructed."

#### **B2205 EXCAVATION FOR CONSTRUCTION BY TRENCH METHOD**

(b) Width of excavation

Add the following paragraph after the first paragraph:

"The width of excavation shall be as indicated on the drawings. The specifications given elsewhere in this section for backfilling the culverts shall apply mutatis mutandis to pipe culverts, inlet and outlet structures, catch pits and manholes."

#### **B2207 UNSUITABLE FOUNDING CONDITIONS**

Add the following to the first paragraph of this clause:

"Such material shall be classed as backfill for purposes of payment."

Amend the last three lines of the second sentence of the first paragraph of this clause to read as follows:

"... or other approved material, such as rock fill, compacted in accordance with Clause 3307."

Add the following to this clause:

"Unsuitable material excavated by the Contractor on the Employer's Agent's instructions shall be measured under item 22.01. The backfilling of the excavated material below the bottom of the culvert shall be termed "foundation fill" shall be measured under fill material."

#### **B2210 LAYING AND BEDDING OF PREFABRICATED CULVERTS**

(a) Concrete pipe culverts

In the first line of the first paragraph amend "Class A, B, C or D" to read "Class A or C".

(iii) Class C Bedding

Replace the contents of this sub-subclause with the following:

"The pipes shall be laid on a bedding cushion of lightly compacted selected material in accordance with the details as shown on the drawings or as prescribed by the Employer's Agent."

(b) Portal and rectangular culverts

(i) Cast in situ floor slabs

Add the following to this sub-subclause:

"Joints of the types detailed on the drawings shall be formed in the floor slabs, and between the floor slabs and the inlet and outlet structures."

(iii) Placing the portal portions of culverts

Add the following to this sub-subclause:

"The upper portion of portal and rectangular culverts shall not be placed until the in situ concrete floor slab has attained half its 28 day strength. Furthermore, on completion of backfilling, no traffic, including construction traffic, shall be permitted over the complete culvert until the in-situ concrete has achieved its 28 day strength."

#### **B2211 BACKFILLING OF PREFABRICATED CULVERTS**

Amend the first line of the second paragraph of this clause to read as follows:

"The material used for the backfilling alongside the culvert shall be selected material of at least G7 quality."

Add the following Clause to this Section:

## **B2212 INLET AND OUTLET STRUCTURES, CATCHPITS AND MANHOLES**

Add the following subclause:

"(j) Subsurface drain outlet into catchpit and manholes

Where required, subsurface drain pipes shall discharge into stormwater catchpits or manholes as shown on the drawings or as directed by the Employer's Agent. Provision shall be made during construction of the stormwater structure."

Add the following new clause:

## **"B2219 CONSTRUCTION TOLERANCES**

The installation of all culverts and ducts shall comply with the requirements stated below:

(a) Level

The permissible deviation from the specified level shall be + 25 mm.

(b) Alignment and grade

The permissible deviation of the alignment and grade of each culvert and pipeline shall be + 20 mm from the specified line and level, or from the line between culvert or pipe inverts at successive headwalls, manholes or catchpits, as applicable, when measured over any 6 m length, and all such deviations shall be gradual. Reverse falls are unacceptable."

## **B2218 MEASUREMENT AND PAYMENT**

### **B22.01 Excavation**

Add the following subitems:

<b>"Item</b>	<b>Unit</b>
(c) Extra-over sub item B22.01(a) for excavation in intermediate material, irrespective of depth	cubic metre (m <sup>3</sup> )
(d) Extra-over sub item B22.01 (a) for excavation in boulder material, irrespective of depth	cubic metre (m <sup>3</sup> )
(e) Extra-over sub item B22.01 (a) for additional excavation required by the Employer's Agent after the excavation has been completed	cubic metre (m <sup>3</sup> )
(f) Extra-over subitem 22.01(a) for excavating material by hand, irrespective of depth	cubic metre (m <sup>3</sup> )

If, after a trench excavation has been completed, cleaned and trimmed ready for culvert laying to commence, the Employer's Agent orders further excavations to be made on account of changed dimensions and/or unsuitable founding conditions, an extra over payment (subitem 22.01(e)) on the additional excavation measured for payment shall be payable in full compensation for any incidentals to the Contractor over and above the normal excavation costs."

### **B22.03 Concrete pipe culverts**

Add the following to the third paragraph to this item:

"Should a pipe unit be specified as half of the standard length, the actual length of the unit will be measured for payment as it is accepted that only certain lengths are available from the manufacturers. The tendered rate for concrete pipe culverts shall also include any additional cost with respect to units which are half the standard length. The standard length of a concrete pipe is 2,44 m."

Add the following items to this clause:

<b>"Item</b>	<b>Unit</b>
<b>B22.29 Bedding from sources on site (including free haul of 1,0 km)</b>	
(a) For culverts	cubic metre (m3)
(b) For ducts	cubic metre (m3)

The unit of measurement shall be the cubic metre of bedding material measured in place after compaction. The quantity shall be calculated from the dimensions shown on the typical detail drawings.

The tendered rate shall include full compensation for procuring, furnishing and placing the bedding material and for transporting the material for a free haul distance of 1,0 km where the material is obtained on site."

Add the following new clause:

#### **"B2219 CONSTRUCTION TOLERANCES**

The installation of all culverts and ducts shall comply with the requirements stated below:

- (a) Level

The permissible deviation from the specified level shall be + 25 mm.

- (b) Alignment and grade

The permissible deviation of the alignment and grade of each culvert and pipeline shall be + 20 mm from the specified line and level, or from the line between culvert or pipe inverts at successive headwalls, manholes or catchpits, as applicable, when measured over any 6 m length, and all such deviations shall be gradual. Reverse falls are unacceptable."

#### **SECTION 2300: CONCRETE KERBING, CONCRETE CHANNELLING, OPEN CONCRETE CHUTES AND CONCRETE LININGS FOR OPEN DRAINS**

##### **B2301 SCOPE**

Add the following to clause 2301:

"This section also covers the construction of concrete paved footways and islands."

##### **B2302 MATERIALS**

###### **(b) Kerbing and channelling**

Add the following paragraph to this subclause:

"Precast kerb and channel units used in curved kerbs shall have the following lengths: Kerb radii up to and including 20 m 0,3 m  
Kerb radii exceeding 20 m and straight 1,0 m".

##### **B2304 CONSTRUCTION**

###### **(a) Excavation and preparation of bedding**

- (i) Kerbs and channels

In the first sentence of this sub-subclause amend "approved bedding material at least 75 mm thick" to read "15 MPa concrete at least 50 mm thick".

Add the following to this sub-subclause:

"If necessary due to pavement layer thicknesses some of the layers on which the bedding material is to be placed will have to be removed in order to ensure that the minimum thickness of 50 mm bedding beneath the kerbs and channels can be placed. The Contractor will be deemed to have allowed for the removal of this material in the rates for kerbing and channelling."

**(b) Prefabricated concrete kerbing and channelling**

Add the following to this sub-subclause:

"Kerbing of radius 1m and less shall be cast in situ in accordance with sub-clause 2304(e) and as shown on the drawings.

All prefabricated kerbs shall be provided with continuous in-situ concrete backing (haunching), the cost of which shall be included in the tendered rate.

Dimensions of the triangular-shaped (in cross-section) haunching shall be calculated as follows: If the difference in levels between the top of the kerb and the subbase on which the kerb is laid is (h), then the height of the haunch is 2/3h and the width of the haunch is h.

Where a line of kerb and marker meets a line of kerb with channel, the difference in top of kerb height shall be transitioned over a length of 4 m or 4 full kerb lengths. Over this length the channel shall be formed in 20 MPa cast in-situ concrete, varying uniformly from the marker to the channel."

**(e) Cast in situ kerbs and channels**

In the second sentence of the second paragraph of this subclause delete everything after the words "...shall then be finished..." and replace with "...with a steel trowel to a smooth, dense, uniform finish before the concrete has hardened and without the use of additional cement. Exposed edges shall be rounded to a radius of 5 mm."

Add the following to this sub-subclause:

"Where new kerbing and channelling or concrete v-drains has to be laid adjacent to an existing bitumen surface, the surface shall be neatly saw-cut to a straight line with approved means along the edge of the channel. The existing road foundation shall then be carefully removed over the width and depth required to construct the new kerb and channel or v-drain.

During the construction of the in situ channel, the contractor shall take care not to stain or damage the existing road surface. Any damage, excess overbreak, undermining or staining shall be repaired by the Contractor at his own expense."

(i) Construction sequence

(i) Where kerbs and channelling are constructed before the base.

In the last sentence of this sub-subclause after the words "...precautionary measures..." insert "..., including complete backfilling behind kerbs, ..."

Add the following new subclause to Clause 2304:

"(l) Shrinkage joints for cast in-situ concrete work

Unless shown otherwise on the drawings, cast in situ channels shall be provided with shrinkage joints spaced a maximum of 2m apart. Shrinkage joints shall be constructed so that shrinkage cracks are generated at the joints. Sections of channel which have cracked between shrinkage joints shall be removed and replaced by the contractor at his own expense."

**B2307 MEASUREMENT AND PAYMENT**

Add the following new items:

Item	Unit
B23.16 Demolition and removal of existing chutes, chute inlets and channels	cubic metre (m3)

The unit of measurement shall be the cubic metre of concrete measured in situ before demolition/breaking up.

The tendered rates shall include full compensation for breaking up the existing concrete or reinforced concrete, removal from site to an approved spoil site, clearing the excavation of all loose debris and to backfill the excavation where new concrete is not required. Overhaul will be paid under item 23/B16.02.

Item	Unit
B23.17 Precast concrete bus shelters	number (No)

The unit of measurement shall be the number of bus shelters placed. The rate tendered shall include full compensation for the delivery of the shelter units on site and the placing of the units in accordance with the specifications."

## **SECTION 3100: BORROW MATERIALS**

### **B3103: OBTAINING BORROW MATERIALS**

Add new paragraph:

"The Contractor shall adhere to the requirements within the Environmental Management Plan (EMP) as provided in Volume 7 for the preparation of the areas to be utilised as borrow pits. This shall include the removal and storage of the topsoil within the affected area, maintenance of the area during use and the rehabilitation of the area to its natural state on completion. A photographic record shall be kept of all borrow pit areas. Any construction materials spoiled within these sites shall be buried to a depth of not less than 300 mm below the surface soil. No construction material of any nature shall be left visible after top soiling. The Employer's Agent shall confirm this before grassing commences. The area shall be kept free of all undesirable plant material (5807(e))."

#### **General**

Add the following:

"The acquisition and compensation for land from which borrow material is obtained shall be negotiated and paid for by the Employer."

#### **c) Use of borrow materials**

Delete the last sentence of the second paragraph and replace with the following:

"Compensation to owners and arrangements with owners for taking material from alternative borrow pits proposed by the contractor shall be the contractor's responsibility and entirely at his own expense and risk. Such borrow pits may be accepted by the Employer Agent only if the material complies in all respects with the specifications, it is the best economic alternative, and the contractor can provide proof of compliance with all relevant legislation."

Add the following new paragraphs to the end of this sub-clause:

"The Employer's Agent shall instruct the Contractor as to the applicable usage of borrow pits always employing the best economic alternative (lowest cost in terms of tendered rates) taking cognizance of the following:

Quality of material; Haulage distance; Hardness of material; Overburden.

Under no circumstances shall the Contractor be entitled to any additional compensation in respect of any instruction by the Employer's Agent as to the usage of borrow pit material."

### **B3104 OPENING AND WORKING BORROW PITS AND HAUL ROADS**

Add the following subclause to this clause:

"(h) Construction of haul roads

Access or haul roads to/from borrow pits shall be adequately constructed of suitable gravel thickness such that it can carry traffic without undue wear and tear. Only one access/haul road from any borrow-pit shall be constructed and/or used."

## **B3105 FINISHING OFF BORROW AREAS AND HAUL ROADS**

### **(a) Borrow areas**

Add the following to this Clause:

"The Contractor shall be responsible for complying with the requirements of the Environmental Management Programme Report (EMPR) provided in Volume 7 and as indicated on the drawings. The Contractor shall be responsible for complying with the EMPR requirements irrespective of whether the rehabilitation required is as a result of his own activities or of the activities carried out in the designated borrow pits and stockpile areas prior to the hand-over of such areas for use during this Contract. The rehabilitation of any new areas disturbed by the Contractor, or areas previously rehabilitated and again utilized, shall also be the responsibility of the Contractor.

Work required by the Contractor at the borrow pits shall include, but not be limited to:

- The return of all oversize material, overburden and other residual or reject material to the borrow pits, whether generated by the Contractor or not.
- Covering all the slopes with overburden and topsoil and the establishment of vegetation.

### **(b) Haul roads**

In the second paragraph delete the comma after the words "private access roads" and insert "and public village access roads".

## **B3108 MEASUREMENT AND PAYMENT**

<b>Item</b>	<b>Unit</b>
<b>B31.01 Excess overburden</b>	cubic metre (m3)

Delete the word "stripping" in the 1st sentence of the 2nd paragraph under the payment description as payment for this item of work is covered under payment items 17.01 and B17.07(c).

<b>Item</b>	<b>Unit</b>
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### **B31.03 Finishing-off borrows areas in:**

Add the following subitem to this item:

"(d) In all materials as ordered by the Employer's Agent provisional sum (Prov Sum)

Expenditure under this item will be made for additional rehabilitation requirements as ordered by the Employer's Agent, which are additional to the requirements as paid for under sub items (a) to (c).

The expenditure to be determined using tendered rates and daywork items as applicable."

Add the following to the measurement clause:

"The tendered rates shall include full compensation for complying with the rehabilitation requirements as reflected in the approved Environmental Management Programme Report in Volume 7."

## **SECTION 3200: SELECTION, STOCKPILING AND BREAKING-DOWN THE MATERIAL FROM BORROW PITS, CUTTINGS AND EXISTING PAVEMENT LAYERS, AND PLACING AND COMPACTING THE GRAVEL LAYERS**

### **B3203 STOCKPILING THE MATERIAL**

In the first paragraph, in the first sentence insert the following before "borrow pits": "commercial sources, existing pavement layers, ..."

In the third paragraph, replace the second and third sentences with:

"Before any stockpiling may be done the area shall be cleared of topsoil to a sufficient depth that will subsequently allow for the complete rehabilitation of the site with cover of topsoil that does not exceed 100mm in depth and is not less than 75mm in depth. If there is insufficient topsoil; the contractor shall acquire whatever balance is needed to rehabilitate the area at his own cost. No make-up topsoil shall be affected by construction activities nor impede the natural flow of water. The topsoil shall be windrowed or stockpiled and its surrounds shall be kept free of all undesirable vegetation. The

Contractor shall not commence his stockpiling activities without prior written approval from the Employer's Agent that the site has been adequately prepared.

After the stockpiled material has been removed, the site shall be reinstated as closely as possible to its original condition by ripping of the affected areas, re-landscaping if necessary, re-instatement of the topsoil and re-vegetation."

#### **B3204 BREAKING DOWN THE MATERIAL**

(a) Initial breaking-down of the material in cuttings, borrow pits and existing pavement layers

Add the following to the end of the first sentence of the subclause:

"or cut across in a side cut to fill operation".

Amend the line "Pavement layers 300 mm maximum dimension" to read "Pavement layers 150 mm maximum dimension".

#### **B3205 CRUSHING AND SCREENING**

Add the following at the end of the last paragraph of this clause:

"It is strongly recommended that the Contractor use a vertical impact crusher in the multistage crushing process for the production of all crushed products at the project quarry."

#### **B3208 PLACING AND COMPACTING THE MATERIALS IN LAYER THICKNESSES OF 200 mm AND LESS AFTER COMPACTION**

Add the following before the 1st paragraph:

"In the case of in situ reconstruction of existing pavement layers, the contents of this clause shall apply regardless of the layer thickness after compaction."

Add the following subclauses to this clause:

"(d) Joints in new layers

Where joints are formed between adjacent portions of the same layer the following conditions shall apply:

(i) Wherever possible, joints shall be either at right angles or parallel to the road centreline or the kerb lines. Joints in upper layers shall not correspond with those of the layer below and shall be offset by not less than 250 mm from the joint below. The need for and positions of all proposed joints shall be approved by the Employer's Agent prior to commencement of work on any layer where a joint is required.

(ii) During the placement of layers adjacent to a joint the material previously placed which forms the first half of the layer shall either be cut back sufficiently to ensure the removal of any loose or disturbed material or ripped and compacted together with the second half layer placed or only recompacted together with the second half layer as may be required by the Employer's Agent to ensure that a sound fully compacted joint is formed. To ensure proper compaction of the joint the Employer's Agent may require the use of hand operated vibratory compactors or other suitable equipment."

#### **B3212 MEASUREMENT AND PAYMENT**

In the first sentence of the paragraph immediately below the heading of this clause, after the words "given in this section", insert "including the forming of all joints as specified".

In the introductory paragraph replace the comma after "below" in the penultimate line with a full stop and delete the remainder of the paragraph.

Add the following as a 2nd paragraph:

"Separate payment for work applicable to these payment items shall be made under the relevant sections in these specifications pertaining to the construction material required. For example, material procured from borrow that is crushed and screened for use in selected and sub-base layers shall be measured for payment under Section 3400: PAVEMENT LAYERS OF GRAVEL MATERIAL as:

34/32.01(d) and 34/32.03(d) etc., whichever is the relevant pairing of pay items under sections 3200/3400."

Item	Unit
<b>B32.01 Providing a crushing and/or screening plant:</b>	

Amend subitem B32.01(b) to read:

"(b) Two-stage crusher and screening plant	number (No)"
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Item	Unit
<b>B32.02 Re-erecting the crushing and/or screening plant:</b>	

Amend subitem B32.02(b) to read:

"(b) Two-stage crusher and screening plant	number (No)"
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Item	Unit
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**B32.03 Crushing and screening:**

Amend subitem B32.03(b) to read:

"(b) Two-stage crushing and screening	cubic meter (m³)"
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Item	Unit
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B32.06 Stockpiling of material	cubic metre (m³)
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Add the following to the end of the first paragraph of this item:

"measured in place after compaction where it is finally used."

Add the following to the second paragraph of this item:

"The tendered rate shall also include for removal of topsoil, stockpiling of topsoil, replacing topsoil and any sacrificial layer(s) of material placed to form a stable stockpiling platform and for the removal of such material including all haul. The tendered rate shall also include full compensation for spreading or mixing material as required and for any wastage in the stockpile."

**SECTION 3300: MASS EARTHWORKS**

**B3302 MATERIALS**

**(b) Fill**

Add the following to sub-subclause (i):

"At least 20% of rockfill material by mass shall pass the 5,00 mm sieve in order to attain maximum densities."

Add the following to sub-subclause (ii):

"The minimum CBR of the material at 93% of MDD, at a depth between 0 m and 0,8 m below final road surface, shall be 7."

Replace the last paragraph of sub-subclause (ii) with the following:

"The Employer's Agent may allow or order the use of material not meeting these requirements, i.e. clay or clayey material with a CBR of less than 3% at 90% MDD, provided that such material shall be placed in the centre portion of fill so that at no place is it less than 2 m from any exposed face of the side slopes and not less than 6 m from the finished road level. The 2 m criterion may need to be increased depending on the outcome of stability analysis on the composite fill."

Add the following to the first paragraph of sub-subclause (iii):

"The minimum MDD of material, at a depth between 0,0 m and 0,8 m below final road surface, shall be 93%."

Amend sub-subclause (iv) to read:

"The maximum swell at 100% MDD shall be not more than 2%."

### **B3305 TREATING THE ROADBED**

#### **(a) Removing unsuitable material**

Add the following to the first paragraph of this subclause:

"Roadbed material within 0,8 m of the finished road level shall have a minimum CBR of 3 at 90% of MDD. Any material which does not meet this requirement shall be treated as unsuitable, removed and replaced with suitable fill material as specified in Clause B3302."

Replace "or" in the eight line of the third paragraph with "and"

#### **d) In situ treatment of roadbed**

Add the following after the second paragraph:

"Shales and mudstone shall be treated as directed by the Employer's Agent."

### **B3306 CUT AND BORROW**

#### **(a) Dimensions of cuts**

Add the following new paragraph between the existing 2nd and 3rd paragraphs:

"As this is essentially an REHABILITATION project all the cut earthworks contemplated in this project will effectively be widening of existing cuts. Item 33.08 for widening of cuts will therefore not be paid in respect of the initial earthworks cut widening. The paragraph below shall therefore only apply in the case of widening of cuts which have been completed or partly completed during the course of this contract."

#### **(b) Use of cut material**

Add the following at the end of the last paragraph of this subclause:

"The Contractor shall submit his detailed earthworks utilization plan to the Employer's Agent for approval before commencing with the permanent earthworks."

#### **(e) The temporary stockpiling of material**

Replace the contents of this subclause with the following:

"The Contractor shall plan his activities so that materials excavated from cuttings and borrow areas can be directly transported and placed at the designated points."

The temporary stockpiling of material to be re-used for layerworks will be measured and paid for under the various items of use. Any other temporary stockpiling will not be paid for."

#### **(g) General**

Add the following after the first sentence of the second paragraph:

"The final cut surface in hard excavation shall not be more than 0,5 m below the specified slope face, measured at right angles to the strike and dip directions of the slope face."

Add the following paragraph:

“The Contractor’s attention is drawn to the requirements of clause B1222 when blasting is required. The road shall be closed for traffic during blasting operations and blasting shall only be allowed during the periods as stated in clause B1222.”

**B3307 FILLS**

**(c) Constructing a pioneer layer**

Add the following new paragraph after the first paragraph:

“When the road is in cut, all unsuitable material shall, in accordance with clause B3302(b), be cut to spoil to a depth of 800mm below the final road level (FRL) or to a depth as determined by the Engineer. The unsuitable material shall be replaced with a suitable fill material (gravel or rock) as directed by the Engineer.

If the use of gravel fill material is ordered it shall be placed in layers not exceeding 200mm in thickness and paid for under the relevant fill payment items.

If the use of rock is ordered, the layer thickness shall not exceed either 350mm or 375mm, as ordered by the Engineer, and the layer shall be classified as a pioneer layer and paid for under the relevant pioneer layer payment items. The maximum size of rock used in the layer shall be 300mm. The surface of the layer of rock shall be blinded with finer material so that the following selected layer can be placed and compacted.”

**(d) Benching**

Add the following after the second paragraph:

“The method to be used for benching when existing fills or embankments are to be widened, or where new fills are to be constructed adjacent to existing fills or embankment shall be as indicated on the drawings or as otherwise agreed to on site between the Contractor and the Employer’s Agent.”

**(i) Widening of fills**

Add the following new paragraph between the existing 7th and 8th paragraphs:

“As this is essentially an upgrading project all the fill earthworks contemplated in this project will effectively be widening of existing fills. Items 33.16 and 33.17 for widening of fills will therefore not be paid.”

**B3312 MEASUREMENT AND PAYMENT**

Delete items 33.16 and 33.17.

**Note:** The free haul distance for all items, where applicable, in this section has been changed to 1,0 km as per the revision in Clauses B1602(b) and (d).

Item	Unit
<b>B33.04 Cut to spoil, including free-haul up to 0,5km. Material obtained from:</b>	
• Replace “0,5km” with “1,0km” as the free haul distance in the item description.	
• Add to the paragraph starting "The tendered rates for cut to spoil shall include..." the following:	
".... and shall also where applicable allow for spoiling at sites where borrowing is taking place at the same time. No additional payment for temporary stockpiling or double handling will be made, the Contractor being compensated for any extra costs by the fact that his trucks are able to "double haul".	

Add the following item:

Item	Unit
<b>B33.20 Provision for special geotechnical works (lateral support etc)</b>	provisional (Prov) sum

Where ordered by the Engineer special geotechnical works shall be carried out (such as lateral support works) to deal with any unstable conditions that become evident during cut excavation etc. The work shall be carried out in accordance with the details issued by the Engineer and, if necessary, it shall be completed by specialist subcontractors.

The provisional sum shall be paid in accordance with the provisions of subclause 6.6 of the General Conditions of Contract."

## SECTION 3400: PAVEMENT LAYERS OF GRAVEL MATERIAL

### B3402 MATERIALS

#### (a) General

In Table 3402/1 under the "G5" column delete the words "May contain approved natural fines not obtained from parent rock." in the "Additional Fines" row and replace it with the following:

"May contain up to 15% by mass of approved natural fines (or sand) not necessarily obtained from the parent rock. Added fines shall have a LL not exceeding 25 and PI not exceeding 6."

Revise the relevant portion of Table 3402/5 as follows:

**Table B 3402/5 : Requirements for Chemically Stabilized Pavement Layers**

CRITERIA	C3	C4
Durability : Fines lost Wet-dry	20% maximum	30% maximum

#### (b) Compaction requirements

Replace the contents of this subclause with the following:

"The minimum in situ dry density of gravel material shall be as specified hereinafter for the respective layers in terms of a percentage of MDD.

Selected layer

Lower selected layer (G9)	:	93%, or 100% for sand
Upper selected layer (G7)	:	95%, or 100% for sand
Stabilized subbase	:	95%
Unstabilized subbase	:	95%
Selected material for Sidewalks, verges and medians (G7 or G5)	:	93% except where vehicle crossings are constructed where 95% is required.
Shoulders and wearing course	:	95%"

Add the following subclause:

#### (d) Crushed subbase

The gradation of the material in a crushed subbase layer, measured after compaction shall comply with the limits stated in Table B3402/6."

**TABLE B3402/6: GRADATION OF CRUSHED SUBBASE MATERIAL**

Nominal aperture size of sieve (mm)	% passing through sieve by mass
50,0	100
37,5	85 - 100
28,0	-
20,0	60 - 90
14,0	-
5,00	30 - 65
2,00	20 - 50

0,425	10 - 30
0,075	5 - 15

Add the following subclause:

**“(e) Subbase using blended material**

When subbase material is mixed from different sources, the aggregate of the homogenous blend, prior to compaction, shall have a maximum size of 63mm.”

**B3405 CONSTRUCTION TOLERANCES**

**(a) Level**

Replace the table in the sub-sub-clause with the following:

Layer	H90	Hmax
Selected layers	25 mm	33 mm
Subbase layers	15 mm	20 mm
Base layers	12 mm	15 mm
Shoulders		25 mm"

Add the following:

"Level control for the various pavement layers shall be done at least at the following intervals in the longitudinal direction:

Layer	Interval
Selected layer, subbase, shoulders and wearing course	20 m
Base	10 m

**(b) Layer thicknesses**

Replace the table in the sub-sub-clause with the following:

Layer	D90	Dmax	Dave
Selected layers	25 mm	35 mm	8 mm
Subbase layers	18 mm	24 mm	5 mm
Base layers	15 mm	22 mm	5 mm
Shoulders		30 mm	0 mm"

**B3406 QUALITY OF MATERIALS AND WORKMANSHIP**

Replace the second paragraph with the following:

"Test results and measurements will be assessed in accordance with the provisions of Section 8200 (Scheme 1)."

**B3407 MEASUREMENT AND PAYMENT**

Delete the note at the start of the measurement and payment clause dealing with work in restricted areas and replace with the following:

"On this Contract, no extra over payment will be made due to the nature of the site or the size of the work area available. All costs associated with carrying out the works are deemed to be included in the tendered rates for the items in the Schedule of Quantities."

**Item**

**Unit**

**B34.01 Pavement layers constructed from gravel taken from cut or borrow, including free haul up to 1,0 km.**

Add the following subitem to this item:

“(i) Drainage layer compacted to:

(i) 93% of MDD 150 mm thick cubic metre (m³)”

Add the following sentence to the first paragraph of this clause:

“The tendered rates for all work including partial width construction shall also include for all work and any extra materials required to form the centreline longitudinal joint including cutting back at least 150 mm into the first half width when constructed in partial widths.”

Item	Unit
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**B34.04 In situ reconstruction of existing pavement layers as:**

Add the following subitem to this item:

“(m) Gravel shoulder wearing course compacted to 96% of MDD, using chemically stabilised material (100mm thick)  
cubic metre (m³)”

Add the following new payment item:

Item	Unit
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**B34.14 Pavement layers constructed from gravel or crushed stone obtained from commercial sources**

(a) Gravel selected layer compacted to:

(i) 95% of MDD G7 material 150 mm thick cubic metre (m³)

(b) Crushed-stone subbase (chemically stabilized material) compacted to:

(i) 96% of MDD G5 material 150 mm thick cubic metre (m³)

(c) Gravel upper fill layer compacted to:

(i) 93% of MDD G9 material 150 mm thick cubic metre (m³)

The unit of measurement shall be the cubic metre of compacted pavement layer, and the quantity shall be calculated from the authorized dimensions of the completed layer.

The tendered rates shall include full compensation for procuring, furnishing and transporting the materials over an unlimited free-haul distance, for placing, preparing, processing, shaping, watering, mixing and compacting the materials to the densities or in the manner specified, and for removing and disposing of all oversize material from the road after processing, including transport for the full haul distance to approved dumping sites provided

by the Contractor and the protection and maintenance of the layer and the conducting of control tests, all as specified.”

## **SECTION 3500: STABILIZATION**

### **B3501 SCOPE**

Add the following as a 3rd paragraph:

“The use of recyclers for cold in situ recycling purposes is also covered in this section, which includes cement, lime, emulsion and foam stabilisation of base and subbase layers consisting of gravel and/or crushed stone material as described in sections 3400 and 3600.”

### **B3502 MATERIALS**

(a) Chemical stabilizing agents

Add the following:

"The stabilizing agent under normal circumstances shall be cement.

The Employer's Agent will specify to the Contractor the percentage and possibly the types of stabilizing agent after tests on the Site during construction."

**(i) Road lime**

Add the following:

"Road lime shall be calcium type lime."

Delete sub-clauses "(ii) Ordinary Portland cement" and "(iii) Portland blast-furnace cement" and replace with the following:

"Cement shall comply with the relevant requirements of SANS 50197-1:2000. The use of strength classes greater than 32.5 shall not be permitted. On this contract only CEM II 32.5 N cement shall be used for stabilization purposes."

**B3503 CHEMICAL STABILIZATION**

**(a) Preparing the layer**

Insert the following before the first paragraph:

"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."

**(b) Applying the stabilizing agent**

Replace the second sentence of the second paragraph with the following:

"Spreading shall only commence when the Employer's Agent is satisfied that the correct quantity of stabilizing agent has been placed on the layer and has given permission that the stabilizing agent may be spread uniformly over the entire surface to be treated."

Add the following to this subclause:

"For subbase stabilization the minimum rate of application shall be 1.8% 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 C4 quality material as specified after stabilization. The Employer's Agent 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.

For base stabilization the minimum rate of application shall be 1.0% and the nominal rate is 1.5% by mass per mass of the specified stabilizing agent. The Employer's Agent 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."

**(d) 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 Employer's Agent.

The fact that the Employer's Agent 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."

### **(e) Watering**

The Contractor's attention is drawn to the provisions of the third paragraph of this standard Clause, especially the second sentence, which states:

"The moisture content of the material during compaction shall never exceed 80% of the saturated moisture content of the natural material without stabilising agent..."

This requirement will be rigorously enforced on site to reduce the occurrence and magnitude of shrinkage cracks.

### **(h) Curing the stabilized work**

Amend the first paragraph of this subclause to read:

"The stabilized layer shall be protected against rapid drying out. In the case of subbase, curing method (i) shall be used until method (ii) is implemented. Method (ii) shall be implemented within seven days of the completion of the underlying layer. In the case of base, curing method (i) shall be used until method (iii) is implemented. Method (iii) shall be implemented within seven days of the completion of the underlying layer."

Add the following to the second paragraph of this subclause:

"Only methods (i) (ii) and (iii) for curing and protection of the layer shall be used."

Delete "(iv), or (v)" from the second sentence of subclause (i). Amend the final paragraph of this subclause to read: "No additional payment will be made for curing as described above."

### **(i) Construction limitations**

In Table 3503/1, delete "8 hours" for "Ordinary Portland cement, and/or approved Portland cement blends" and replace with "6 hours".

Replace the fourth paragraph starting with "No stabilization ..." with the following:

"No stabilization shall commence during windy conditions, wet weather or with falling air temperatures (7°C and dropping), or during rising air temperatures (when the air temperature is still 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 (stabilized subbase) shall be covered with the next layer as soon as possible. With regards to a stabilized base layer, the Contractor shall be responsible for taking the necessary precautions to prevent the layer from freezing.

All stabilized layers damaged by rain, frost or by the formation of ice in the layer shall be removed and replaced by the Contractor at his own expense.

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 vehicles required to cover the underlying layer according to curing method (ii) and (iii) will be permitted onto the layer 72 hours after the last work on the underlying layer was completed.

The Contractor shall make allowance for these requirements in his construction programme, and no claims in this connection will be considered."

Add the following sub-clauses:

### **“(j) General**

The Contractor shall at all times supply all workers exposed to chemical stabilizing or modifying agents with approved protective apparel, eyewear and masks, and no person without such apparel, eyewear and masks may be permitted to work with or be exposed to the chemical agents. Precautionary measures shall also be taken to ensure that any livestock and the public will not be exposed to the chemical agents blown by the wind or under similar circumstances.

**(k) Stabilization agent application rate**

At least ten weeks before the programmed start of stabilization the Contractor shall submit samples of proposed subbase material and stabilization agent for the Employer's Agent's approval and strength design testing. Based on the testing the Employer's Agent will determine an application rate for the stabilization."

**B3504 MECHANICAL MODIFICATION**

(b) Mixing materials from various sources

Add the following to this subclause:

"The Employer's Agent may instruct that a layer is to be constructed by mixing materials from various sources. Where mixing is required the material from each source, before mixing, shall comply with the specified requirements applicable to the type and quality of material that the Employer's Agent instructs shall be obtained from the particular source i.e. natural gravel G6 material shall comply with the requirements of Section 3400 for a G6 Uncrushed material while a crushed G5 material shall comply with the requirements of Section 3400 G5 Crushed material etc."

**B3506 TOLERANCES**

(b) Uniformity of mix (chemical stabilization)

Test method (ii) as prescribed in the clause 3506(b), shall be applied to assess the uniformity of the mix.

**B3507 CONSTRUCTION OF TRIAL SECTION**

Add the following to the first paragraph:

"The Employer's Agent may instruct the Contractor to construct the trial section as part of the permanent layer works in lower layers of the pavement structure."

Insert the following before the second paragraph:

To allow the Employer's Agent sufficient time to assess all aspects of quality of the completed trial section and contingent on the results being satisfactory, the Contractor shall programme to start production recycling work no sooner than one week after constructing the trial section.

Should the Contractor make any alterations in the methods, processes, equipment or materials used, or if he is unable to comply consistently with the specifications due to variations in the in situ material, or for any other reason, he may be required to undertake further trial sections before continuing with the permanent work."

Insert the following new paragraph after the third paragraph:

"For cold in situ recycling, provision is made for payment for the first approved trial section. Such payment will be made as an extra-over to the various payment items for recycling work together with all additives that will be measured and paid as normal production work. Any further trial sections ordered by the Employer's Agent shall likewise be paid provided they are approved."

**B3509 QUALITY OF MATERIALS AND WORKMANSHIP**

Add the following after the second paragraph:

"The test results and measurements will be judged in accordance with the provisions of Section 8200 Quality Control (Scheme 1)."

Add the following:

"The Employer's Agent shall be notified in good time to enable him to conduct tests himself.

Where the stabilizing agent is to be spread by hand, pockets of the stabilizing agent shall be placed on the layer at regular intervals. However, spreading shall only commence when the Employer's Agent is satisfied that the correct quantity of stabilizing agent has been placed on the layer and has given permission that the stabilizing agent may be spread.

The Employer's Agent will use unconfined compressive strength (UCS) test for evaluation layer compliance. The Contractor shall note that this method requires the samples to be taken immediately after the material has been mixed with water and stabilizer and spread, but before the layer is compacted, and shall therefore make the necessary arrangements timeously and allow for the time to collect the samples.

Any delamination of the completed layer (biscuiting), identified by the hollow sound caused when a chain is dragged over the stabilized layer, shall be removed and repaired prior to the construction of subsequent layers. The repair method shall be approved by the Employer's Agent. No payment will be made for repairs.

**(a) Process control for cold in situ recycling**

The Contractor shall establish a comprehensive process control system for the recycling work. The following daily reports shall be submitted as a minimum:

- The production plan;
- The completed pre-start check list;
- Weather conditions and temperature measurements;
- Details of the recycling work completed during the day with the following information for each cut that was made:
  - start and end chainage;
  - depth of cut (including a schedule of dip measurements);
  - width of application of stabilising agent(s);
  - nozzle settings (closures) for each spraybar (where relevant);
  - computer data input;
  - cement / lime spreading check measurements (where relevant); and
  - compaction data in electronic format from the integrated compactometer device fitted to the primary roller (if applicable):
- Relevant comments / information concerning the recycling operation. These shall include but shall not be limited to:
  - standing time and the reason(s);
  - sections where in situ pavement conditions changed together with a description of the change (e.g. thick asphalt between km 1+200 and km 1+230 in Cut #2);
  - details of any non-routine tests that were undertaken;
  - any changes in the weather during the day (e.g. strong wind from 13:00); and
  - relevant instructions received and from whom; and
- The location where the daily sample of material was taken."

**B3510 MEASUREMENT AND PAYMENT**

Item	Unit
<b>B35.01 Chemical stabilization extra over unstabilized compacted layers</b>	cubic metre (m³)

Add the following to the payment paragraph:

"The tendered rate shall also include full compensation for pre-shaping and preparing the layer (as required), working in restricted areas, or on top of and alongside culverts where necessary.

The tendered rate shall also include full compensation for blending any of the different stabilization agents, if required, and curing the stabilized layer as specified in subclause B3503(h).

The tendered rate shall also include full compensation for curing the stabilization layer as specified in Subclause B3503(h)."

Delete items 35.04 and 35.05.

Add the following new clauses:

**“B3511 PLANT AND EQUIPMENT FOR COLD IN SITU RECYCLING**

All cold in situ recycling shall be done utilising purpose-built wheel-mounted in situ recycling machines. The following specifications are applicable to such machines. Where the Contractor intends using any other type of machine to recycle (e.g. a modified track-mounted milling machine) he shall submit for the approval of the Employer's Agent a full motivation

for using such a machine, including a detailed work plan describing the recycling / mixing process and subsequent compaction / levelling processes that will produce a layer that meets the specified end product requirements.

The treated material exiting from the rear of the recycler shall be processed using suitable compaction equipment and graders to achieve a layer that meets the specified requirements.

## **B3512 CONSTRUCTION OF LAYERS BY MEANS OF COLD IN SITU RECYCLING**

### **(a) Requirements before recycling commences**

#### **(i) Stabilisation mix design procedure for cold in situ recycling**

The following mix design procedure shall be followed as a minimum requirement for each stabilisation type:

Within 30 days of the Contractor taking possession of the site, the Contractor shall commence with the work to obtain samples for the stabilization design process. This process shall be carried out on samples of neat materials extracted from the full depth of the recycling horizon blended with, as may be required, with imported materials. Samples shall be extracted by means of hand excavated test pits as determined by the Employer's Agent.

Stabilisation mix designs shall be undertaken by the Employer's Agent to determine:

- details for blending the recycled material with imported material (where necessary);
- application rates for stabilising agent(s);
- target strengths achieved from such application rates; and
- impact of material variations (sensitivity analysis)

The Contractor shall construct a trial section for the approved mix design developed for the first uniform section. Recycling work may only commence once the trial section has been approved by the Employer's Agent. Thereafter, it will be incumbent on the Contractor to obtain the necessary approval for the relevant mix design for each uniform section ahead of the recycling work. Should the situation arise where the Contractor has not followed the mix design procedure to obtain the required approval of the Employer's Agent recycling work shall cease until such time as the prescribed process for approval has been followed. The Contractor shall have no recourse for costs incurred as a consequence of such a delay.

#### **(ii) Setting out and control of the work for cold in situ recycling**

Unless otherwise stated in the specifications, the Contractor shall establish his own reference and level beacons for the setting-out and control of the works.

##### **(1) Layers constructed utilising existing levels**

The existing horizontal alignment shall be retained and only minor modifications made to the vertical alignment, as described below.

The Contractor shall establish a series of level control poles placed at a constant offset on both sides of the road at a maximum interval of 10m. At each level control location, the Contractor shall record the existing road surface levels at the centre-line and at the outer limits of each lane and prepare a series of graphs (for sections not less than 2.0km in length) with the recorded levels plotted at an exaggerated scale against the km distance. Final levels for the new stabilised layer shall be selected in accordance with a "best-fit" principle, taking into account the following:

- the required camber or super elevation details at each location;
- the minimum requirements governing changes in grade (longitudinal grade line);
- the thickness of the existing base layer; and
- minimising the amount of pre-work required (pre-treatment and/or importing new material) before recycling can commence.

At least two weeks before recycling work is scheduled to commence on any specific section, the Contractor shall select the best-fit design levels and submit these proposals to the Employer's Agent (both as a schedule of longitudinal grade, cross-fall and final surface levels, as well as a drawing with the design lines superimposed on the existing levels) for approval or amendment.

The Employer's Agent will take control measurements to determine the accuracy and adequacy of the reference beacons / control poles, and may instruct the Contractor to correct any faulty work and to take and provide such additional measurements and details as may be deemed necessary.

Survey work will not be measured and paid for separately and compensation for any work involved in staking, setting out, taking levels, determining the final surface elevations and transferring these design levels on to the level control poles (including the cost of all labour materials and reinstatement if required for any reason) will be deemed to be included in the rates for the relevant payment items for cold in situ recycling. No payment will be made for any inconvenience or delay caused by compliance with these requirements.

(2) Layers constructed utilising new levels

Layers shall be constructed according to new design levels as indicated on the drawings.

(iii) Production Plan

Prior to the start of a shift, the Contractor shall prepare a production plan detailing his proposals for the forthcoming shift's work. As a minimum, this plan shall include a sketch showing:

- the overall layout of the length and width of road intended to be recycled during the day, broken into the number of parallel cuts required to achieve the specified width of treatment;
- the location of and overlap width (minimum 150mm) at each longitudinal joint between adjacent cuts, together with the location of the inner and outer wheel paths of each lane affected by recycling;
- the sequence and length of each cut to be recycled before starting on the adjacent or following cut; and
- an estimate of the time required for recycling each cut and for finishing off the work.

(iv) Preparing the surface

Before any recycling work commences, the surface of the existing road shall be prepared by:

- cleaning all vegetation, garbage and other foreign matter including road studs from the full road width, including any adjacent lanes or shoulders that are not to be recycled;
- removing any standing water;
- pre-milling to remove high-spots and/or pre-pulverising where ordered;
- providing a reference line to assist the operator to accurately steer the recycling machine, and
- record the location of all road marking features (e.g. extent of barrier lines) that will be obliterated by recycling.

(v) Surface shape and level requirements

Where surface defects are to be corrected and/or modifications made to the grade line, instructions will be issued detailing the new surface level requirements. These may be achieved prior to recycling by either pre-milling to remove in situ material, by pre-pulverising, pre-shaping and pre-compacting the pulverised material, or by importing material and accurately spreading on the existing road surface, as described below.

(ix) Addition of imported material

Where instructed to import material for blending and/or as make-up material for the purpose of shape, level or material grading correction, the prescribed material shall be imported and spread on the existing road surface prior to recycling. The method of placing and spreading the imported material shall be such as to achieve the required surface levels and will require the use of a paver, motor grader or other such plant. All imported material shall be pre-compacted to a minimum of 95% of the mod AASHTO density.

Nowhere shall the thickness of imported material exceed the recycling depth.

**(b) The recycling process**

(i) Before starting

Prior to starting to recycle, the production planned for the day shall be approved by the Employer's Agent and the following checks carried out:

- All relevant temperatures shall be measured and recorded, including:
  - air temperature;
  - the material in the recycling horizon; and
  - the contents of all bulk supply tankers (including water).

- All plant and equipment is on site and the operators of the different machines are adequately trained and briefed on their particular tasks.
- The recycling machine has been prepared and set up for the first cut. Such preparations shall include:
  - checking that the mixing chamber is free of any material build-up that may affect the functioning of the application nozzles on all relevant spraybars;
  - the cutting tools have sufficient remaining life to complete the first cut without stopping;
  - all relevant liquid application systems are functioning, free of blockages and the in-line filters are clean. Where a bitumen stabilising agent is applied, a relevant check-sheet (similar to the example forms included in the Appendices of SAPEM and TG2) shall be diligently followed, signed off and submitted to the Employer's Agent;
  - the on-board computer has been correctly set up and the input data verified;
  - the spraybar is set up with the correct nozzles selected to achieve the required width of application;
- Bulk supply tanker(s) are coupled correctly to the recycling machine, all feed pipes are properly connected, bled of air and free of leaks. Where a bitumen stabilising agent is applied, the feed pipe shall only be connected immediately before work is about to start. Where the stabilising agent is foamed bitumen, the outlet plumbing on the tanker shall be checked and any "cold plug" of bitumen removed before attaching the feed pipe.
- Where cement or lime is spread by hand on the road surface ahead of the recycling machine, the bag spacing shall be checked at random intervals and recorded.
- A clear guideline is in place for the recycling machine to follow and is correctly aligned relative to the road geometry.
- The integrated compactometer system on the primary roller properly functioning and has been set up to record the correct relevant data.

(ii) Recycling

The recycling machine shall be set up and operated to ensure that:

- The speed of advance is regulated (below the maximum allowable of 10m/min) to achieve;
- adequate pulverisation of all bound materials in the existing pavement to produce a material that meets the grading requirements;
- operating pressures and flow rates in all liquid application systems that remain within the limits prescribed by the manufacturer of the machine.
- The depth of recycling coincides with the line and level specified for the bottom horizon of the new stabilised layer. The bottom of cut horizon shall be checked at least once every 100m of cut using a suitable T-bar to dip from a stringline pulled between the relevant final level reference marks on the level control poles.
- The planned width of overlap along all longitudinal joints is maintained and the line of cut does not deviate laterally by more than 50mm from that required (measured from the operator's guideline that shall be positioned for each and every cut).
- The process is continuous with a minimum number of stops. Transverse joints that occur every time the recycling machine stops are properly treated to achieve continuity of stabilisation and moisture across the resulting joint.
- The application rate of liquid stabilising agent(s) and water is uniformly continuous across the required width of treatment, including all longitudinal joints.
- The temperature across the width of material exiting the mixing chamber shall be checked at least once every 100m using a digital thermometer with a laser beam target held no more than 100mm above the material. Where the temperature varies consistently by more than 3°C along a particular longitudinal strip  $\pm 200$ mm wide, the recycling machine shall be stopped and the relevant application nozzles on all spraybars that coincide with the offending strip shall be checked for blockages.
- The moisture content of the treated material is continuously monitored and the application of water adjusted to achieve a uniform moisture content as specified.
- The mixed material exiting from behind the recycling machine is struck off by the rear door of the mixing chamber with sufficient pressure applied to obtain a uniform surface that is free of valley lines, empty pockets and particle segregation.

The advance speed of the recycling machine and the speed of rotation of the recycling drum shall be set to obtain the required grading and sufficient mixing of all components (recycled material and additives) so that a homogeneous material is produced.

(c) Primary compaction

Recycling machines are configured such that their rear wheels run on top of the treated material towards the outer extremities of the cut. To prevent introducing a density differential across the width of cut, primary compaction shall be completed prior to any grader work commencing. If the treated material is pre-shaped by grader prior to being compacted, the work shall be summarily rejected.

A single-drum vibrating roller shall be deployed to compact the recycled material immediately behind the recycling machine. This roller shall travel forwards and backwards at a constant speed (maximum 3km/hr (50m/min)), remaining within the confines of the recycled cut. Recycled material covering the outer extremities of cut shall be moved at regular intervals ( $\pm 5$ m) to expose the cut line, thereby allowing the operator to remain within the cut width.

Successive lengths of recycled / treated material shall be compacted (each approximately 50m in length).

Rolling shall continue on each section until the maximum achievable density has been reached. Where an integrated compactometer device is utilised normally rolling have to continue until the device indicates that no further density is being achieved over at least 80% of the length of the section (i.e. maximum achievable density has been reached). Should the device indicate a consistent loss of density at any point during primary compaction (as indicated over two successive recording passes), rolling on that section normally has to be terminated and the roller moved forward to start compacting the next section.

After each day's production, the Contractor shall provide the Employer's Agent with his process control records of the densities achieved for primary compaction. Where a compactometer device was used an electronic copy of the data file containing detailed compaction records for the day's work shall be provided to the Employer's Agent. As a minimum, the records shall include the number of passes made on each section of every cut made by the recycling machine, the compaction achieved on every cut as well as the following data for each 2m interval along the length of each cut:

- the compactometer reading (where applicable);
- the amplitude of vibration; and
- the advance speed of the roller.

These records will constitute the Contractor's Process Control for primary compaction.

A "roller pass" shall be defined as a single unidirectional pass made by the roller. Where the roller travels forwards and backwards over the same point, it would have made "2 passes".

A "recording pass" is a roller pass where the compactometer readings are stored (recorded) and used for comparison purposes. Recording passes are always in one direction of travel only. Recordings shall be made commencing with the first pass and every alternative subsequent pass that is made (i.e. 1, 3, 5, 7, etc.).

The primary compaction process shall follow at the same rate as the recycling operation. The Contractor shall ensure that a sufficient number of rollers are available to achieve this.

#### **(d) Final levels and secondary compaction**

(i) After completing the primary compaction on all adjacent cuts that make up the width of pavement that is recycled in one shift, the surface shall be pre-shaped and final levels cut before final compaction is applied. Pre-shaping shall address the lateral shift of material resulting from the surface inclination (cross-fall). The moisture in the layer shall be controlled during this process. No roller will be allowed onto the layer during the pre-shaping process to prevent the lamination phenomenon (biscuiting) occurring.

Secondary compaction shall then be applied using the smooth-drum vibrating roller operating in low amplitude vibration mode. The outer cut extremities shall be exposed as a guide for the roller operator to ensure that the compaction effort is directed only on to the recycled material (thereby preventing any "bridging across" from the unrecycled pavement).

### **B3513 PROTECTION AND MAINTENANCE**

#### **(a) Trafficking the completed layer**

(i) Cementitious stabilisation

Under no circumstance shall traffic be allowed to travel on layers of cement stabilised material.

#### **(b) Application of surfacing**

To prevent environmental degradation and/or abrasion damage, new base layers shall be surfaced as soon as the moisture content at all positions within the layer is below 50% of optimum moisture content.

The maximum time delay between completing a new base layer and applying the surfacing shall be 14 days (with due allowance made for inclement weather)."

**SECTION 5100: PITCHING, STONework AND PROTECTION AGAINST EROSION**

**B5101 SCOPE**

Add the following paragraph to this section:

"This section also covers the furnishing of materials and the construction of cast in situ concrete paving for walkways."

**B5102 MATERIALS**

**(a) Stone**

Replace the 2nd paragraph with the following:

"Unless suitable stone can be located on site, the stone for pitching shall come from commercial sources but, from whatever source, its use shall be subject to the prior approval of the Employer's Agent."

**(b) Cement**

Delete the paragraph and replace with:

"Cement shall comply with the relevant requirements of SANS 50197-1:2000. The use of strength classes greater than 32,5 shall not be permitted."

**(c) Sand**

**(ii) Sand for bedding**

Replace this sub-sub-clause with the following:

"Sand for bedding used for paving blocks shall not contain any deleterious impurities and shall comply with the requirements given in table B5102/1.

**TABLE B5102/1**

Sieve size (mm)	Percentage passing
10	100
5	95 – 100
2	73 – 86
1	43 - 78
0,600	25 – 60
0,300	10 - 30
0,150	5 – 15
0,075	5 - 10

**Note: Refer to standard COLTO table for COLTO grading if required**

**B5108 MEASUREMENT AND PAYMENT**

Amend this payment item to read as follows:

Item	Unit
<b>B51.04 Concrete pavement</b>	
(a) Cast in situ concrete paving (class of concrete and thickness of pitching indicated)	square meter (m²)"

## SECTION 5200: GABIONS

### B5202 MATERIALS

#### (a) Rock

Add the following:

"The largest dimension of any rock shall not exceed 250 mm, and at least 85% by weight of the rock shall have a size equal to or larger than 125 mm. No rock shall pass through the mesh."

#### (b) Wire mesh

Add the following:

"The diameter of the wire and the size of the meshes shall be as follows:

Depth (m)	Mesh Size (mm)	Wire Diameter (mm)
Gabions : 0,5m and over	80 x 100	2,7
Mattresses : 0,2m to 0,3m	80 x 100	2,5

#### (f) Filter fabric below the gabions

Replace "sub subclause 2104(a)(iii) for grade 3 filter fabric" in the first sentence with "geotextile fabric grade 1 as specified below."

Add the following:

##### "(i) Composition and manufacturing

The synthetic-fibre filter fabric, or geotextile, shall be manufactured from a synthetic polymer processed into a permeable, homogenous sheet. Geotextile of non-woven construction is preferred, and woven geotextiles will be considered only if published data can be provided which show the satisfactory long-term performance of these geotextiles in an environment similar to that in which they are to be used.

On account of the temperature and moisture susceptibility of polyamide, this synthetic product is not considered acceptable.

##### (ii) Classification

The geotextile is classified according to the mechanical properties thereof, viz. its penetration load, puncture resistance and the minimum water-percolation rate as measured in the permeability test. The table below gives values for the properties.

**Table B5202/2 Grade 1 Geotextile Properties**

PROPERTY	GRADE 1	TEST METHOD
Penetration Load (minimum), N	3800	3,5 of SABS 0221-1988
Puncture Resistance (maximum), mm	14	Clause 8114
Water percolation (minimum) litre / m <sup>2</sup> / sec	20	3,7 of SABS 0221-1988
Mass per unit area (minimum), g/m <sup>2</sup>	320	3,4 of SABS 0221-1988

Notes:

- The standard atmosphere for testing and the preconditioning atmosphere for all geotextile tests (SABS tests and others) shall have a relative humidity falling within the rate of 0 to 80% and a temperature within the range of 15°C to 35°C.
- The resistance of a geotextile to puncture is the average diameter of the hole formed when a 45° cone with a mass of 1 kg is dropped through 500 mm onto the geotextile fixed in the holding device.

(iii) Durability

A geotextile is required to comply with the following specification:

- Resistance to chemical attack."

## **B5203 CONSTRUCTING GABION CAGES**

### **(c) Binding and Connecting Wire**

Replace the existing paragraph with the following:

"Sufficient binding and bracing wire for all the tying to be done during construction of the gabions, as specified in clause 5204 below, shall be supplied with the gabions.

## **B5204 CONSTRUCTING GABIONS**

### **(c) Assembly**

Replace the existing first paragraph with the following:

"The method of constructing the gabion wall viz. stretching, placing in position, tensioning, supporting on temporary frames, bracing, filling with rock and tying by lacing shall generally be in accordance with the manufacturer's instructions which have been approved by the Employer's Agent. Nevertheless, a minimum of six internal bracing wires per square metre of face shall be tensioned between the vertical sides of all the outer visible cells to prevent the deformation of cages as they are being filled with rocks.

Tension on the cages shall be released only when fully packed at which point the temporary frames are removed and the lids laced down into place.

During assembly of the cages all sharp ends of wire shall be twisted towards the inside of the cages to prevent damage to the filter fabric."

### **(d) Rock filing**

#### **(i) Boxes in gabion walls**

Add the following:

"The practice of using sub-standard small stones in the upper levels of the basket to "make up" to the required level shall not be permitted."

## **B5205 MEASUREMENT AND PAYMENT**

Add the following items to this clause:

<b>Item</b>	<b>Unit</b>
B52.05 Backfilling behind gabion retaining wall (G7)	cubic metre (m <sup>3</sup> )

The unit of measurement shall be computed as the product of the height of the wall and the area between the back face of the wall and cut face, or as shown on the drawings.

The tendered rate shall be extra-over that for item B33.01 and shall include full compensation for all additional costs involved in protecting the walls, use of light compaction equipment and any other precautions necessary for the completion of the work.

<b>Item</b>	<b>Unit</b>
B52.06 Metallic reinforcing mesh: "gabion wire tails" (Terramesh or similar approved)	cubic metre (m <sup>3</sup> )

The unit of measurement shall be the square metre of metallic mesh (Terramesh or similar approved) installed. The tendered rate shall include full compensation for the supplying of all the materials, labour, plant and equipment required for the operation.

## **SECTION 5400: GUARDRAILS**

### **B5401 SCOPE**

Add the following sentence at the end of the paragraph of this clause:

"and includes careful removal of all guardrails and posts for re-erection."

### **B5402 MATERIALS**

#### **a) Guardrails**

At the end of the 1st sentence delete the full stop and add "or SANS 51317 and carry the SABS mark or a mark by any other SANAS approved certification body for the applicable SANS specification."

#### **(b) Guardrail posts**

##### **(i) Timber posts**

Add the following to this sub-subclause:

"Timber posts and spacer blocks shall be treated with creosote."

##### **(ii) Steel posts**

Replace the paragraph with the following:

"Where offered or instructed to be used, steel posts shall be part of an approved guardrail system as tested and complying with SANS 51317, and galvanized in compliance with the requirements of SABS 763 for type A1 articles, shall be used.

Where guardrails are placed on concrete retaining walls or concrete structures, the steel posts shall be of the type and size shown on the drawings or described in the project specifications."

#### **(c) Reflective plates**

Replace "1,5 mm thick" in the second line with "1,2 mm thick, grade Z275 pre-galvanized sheet"

After the first sentence, add the following:

"Type D reflective plates shall be manufactured as follows: The base plate of 1,2 mm thick, grade Z275 pre-galvanized sheet and the front face reflector of 1,0 mm thick, grade Z275 pre-galvanized sheet."

### **B5403 CONSTRUCTION**

#### **(a) Erection**

In the second sentence of the first paragraph of this Sub clause amend "1 m" to read "1,2 m".

Replace the 7th paragraph with the following:

"Steel posts placed on concrete retaining walls or concrete structures shall be erected and fixed as shown on the drawings. For all other applications, steel posts shall be erected and fixed in compliance with the approved guardrail system as tested and approved in terms of SANS 51317."

Add the following after the final paragraph:

"The Contractor shall complete the installation of all guardrails along a completed length of road constructed in half-width, before he will be permitted to open that length of road to traffic."

**B5405 REMOVING, RENOVATING AND RE-ERECTING EXISTING GUARDRAILS**

Add the following before the first paragraph to this clause:

"Where in situ reconstruction is to be carried out adjacent to guardrails, the Contractor shall carefully remove all elements to the guardrails, temporarily store the elements and re-erect them on completion of the layer works. The Employer's Agent will indicate which materials are suitable for reuse. Any elements damaged as a result of negligent workmanship shall be replaced by the Contractor at his own cost. Materials that are suitable for reuse shall be cleaned and painted as instructed."

**B5406 MEASUREMENT AND PAYMENT**

Add the following new items to this clause:

Item	Unit
B54.14 Nailing of gang nail plates on top of timber guardrail posts	number (No.)

The unit of measurement shall be the number of gang-nail plates supplied and fixed as specified.

The tendered rate shall include full compensation for supplying all materials and labour and for fixing to the top of the sealed guardrail post."

## **SECTION 5500: FENCING**

### **B5501 SCOPE**

Add the following to this clause:

"This section also covers the repairing of existing fences that form part of the permanent work and/or routine maintenance."

### **B5502 MATERIALS**

#### **(a) Straining posts, stays, standards and droppers**

Add the following:

"The straining posts, stays and intermediate posts shall be manufactured on site or at a location approved by the Employer's Agent."

#### **(c) Wire**

##### **(i) Barbed wire**

Add the following to this sub-subclause:

"Barbed wire shall be high-tensile-grade zinc-coated (heavy duty – fully galvanised) single-strand, 3,15 mm x 2,5 mm oval-shaped wire with a 2,82 mm equivalent diameter, for use at any height above ground."

Barbed wire shall be coloured yellow by a factory painting process integral with the galvanised process. No additional payment will be made and the cost thereof shall be deemed to be included in the tendered rates."

##### **(ii) Smooth wire**

Add the following:

"Smooth wire shall comply with the requirements of SABS 675 and shall be of the types specified below: Straining wire shall be 4.0 mm diameter zinc-coated (fully galvanized) high-tensile grade steel wire. Fencing wire shall be high-tensile grade steel 2.24mm diameter zinc-coated (fully galvanized) wire."

Fencing wire shall be coloured yellow by a factory painting process integral with the galvanizing process. No additional payment will be made and the cost thereof shall be deemed to be included in the tendered rates."

Tying wire shall be 2.5 mm diameter mild-steelcoated (heavy duty– fully galvanized) wire for tying fencing wire to standards and droppers and 1.6 mm mild-steel-zinc-coated wire for tying netting and mesh wire to the fencing wire."

#### **(g) Gates**

Add the following:

"Gates shall be zinc coated (fully galvanized)."

### **B5506 ERECTING STRAINING POSTS AND STANDARDS**

To the second paragraph of this clause add the following:

"A 50 mm permeable drainage layer shall be placed below concrete backfill for timber posts."

Add the following to this clause:

"All vertical straining posts and corner posts shall be planted in holes backfilled with concrete in accordance with the details shown on the drawings."

## Item

**B55.02 Supply and erect new fencing material for new fences and for supplementing material in existing fences which are being repaired or removed**

(i) Straining posts, corner posts, intermediate posts and anchors	number (No)
1. Straining posts	
2. Corner posts	
3. Intermediate posts	
4. Anchors	

Add the following paragraph to the payment clauses:

Add the following items:

Unit

The unit of measurement for concrete backfill for fencing shall be the cubic metre of concrete to the specified dimensions used of backfilling where ordered by the Employer's Agent. Where the specifications and drawings direct that concrete backfill shall be used in all cases, this concrete shall not be measured separately and the tendered rates for the various types of straining and corner posts, H-frame struts shall include for this concrete.

The rate tendered for each cubic metre of concrete backfill in position as ordered by the Employer's Agent shall allow for the procuring and furnishing of all materials needed, mixing and placing the concrete backfill and disposal of surplus excavated material."

Item

Unit

B55.11 Repairing existing fences	kilometre (km)
----------------------------------	----------------

The unit of measurement for repairing existing fences shall be the kilometre of existing fence repaired on the instruction of the Employer's Agent.

The tendered rate shall include full compensation for untying the existing fence (where necessary) and reinstating it. Tying of droppers and repairing and re-aligning of standards to the satisfaction of the Employer's

Agent as well as for coiling and stacking material unsuitable for re-use. Fencing material replaced shall be paid for under items 55.02 and 55.03.

If the existing fence is damaged by the Contractor's construction activities, the Contractor shall repair the fence at his own cost."

## **SECTION 5600: ROAD SIGNS**

### **B5601 SCOPE**

Replace "South African Road Traffic Signs Manual" in the second paragraph with "SADC Road Traffic Signs Manual".

### **B5602 MATERIALS**

- (a) Structural steel

Substitute "Where specified, all structural steel" in the second paragraph with "All structural steel".

- (c) Steel plate and steel profiles

- i) Steel plate

Substitute "1,40 mm" in the first paragraph with "1,20 mm".

- (g) Retro-reflective material

Add the following to this subclause:

"The retro-reflective material shall conform to a Class III material with a 7 year warranty grade."

- (e) Aluminium

Substitute "2,0 mm" in the last paragraph with "1,6 mm".

### **B5603 MANUFACTURING OF ROAD SIGN BOARDS AND SUPPORTS**

Add the following to the third paragraph of this Sub-clause:

"All reinforcement frames required shall be supplied with an undercoat and a high quality sprayed finish. Where epoxy glue is used to fix sign boards to frames the glue shall last for the specified sign guarantee period."

- a) Road signboards

Add the following:

"The contractor shall make every effort to ensure that signboards are correct in all respect and before dispatching the boards from the manufacturer's factory shall provide the Employer's Agent with a 100mm x 150mm colour photograph of each sign face for approval of the correctness of the legend. Such approval will not imply final acceptance of the board. If the contractor is in any doubt as to the correctness of the sign detail, the sign designer shall be contacted for verification."

- (ii) Steel profile road signboards

Add the following:

"Chromadek section shall be assembled in accordance with the details of Standard Plans 1051-04-RS-D14 to 1051-04-RS-D23.

Where the letter or legends cross the horizontal joints of the sign panels, the letter shall be cut on the joint and both ends folded around the radius.

Retro-reflective material to adjoining Chromadek panels on a sign shall be practical visual match of the specified colour."

- (f) Road sign supports

Replace the first paragraph of this subclause with the following:

"Supports for large ground mounted signs (sign area > 2 m<sup>2</sup>) shall be constructed in accordance with the details shown on the drawings. Where the details provided do not suit the framework and attachment details of the road sign boards proposed for use, the Contractor shall design new supports and submit the details to the Employer's Agent for approval

before manufacture. Small ground mounted signs (sign area < 2 m<sup>2</sup>) shall be constructed in accordance with the details shown on the drawings."

#### **B5604 ROAD SIGN FACES AND PAINTING**

(a) Colours, symbols and legends

Add the following paragraphs to this Sub-clause:

"All reflective signs shall be solid colours and not silk screened. Non-reflective borders, diagonals, letters and legends on non-reflective signs shall be made of cast vinyl material with a seven year durability. Colour impregnated reflective material shall be used and applied according to the requirements of the sheeting manufacturer.

All symbols, letters and numerals shall be applied with a single piece of material. All borders shall be restricted as follows:

Round signs - not more than four pieces Octagonal signs - not more than eight pieces Triangular signs - not more than three pieces

Diagonals and all other sign components shall be restricted to the minimum number of pieces required. Overlap between adjacent pieces shall be a minimum of 10 mm."

Add the following sub-clause:

"e) Application of retro-reflective material

All sign faces shall be faced with retro-reflective material. Painted front sign faces shall not be used.

Where applied to Chromadek sections, retro-reflective material shall be applied as specified for aluminium section in Clause 5603(d) of the Standard Specification, and of Clause B5603(a)(ii) of this Project Specification."

#### **B5605 STORAGE AND HANDLING**

Add the following:

"The following shall not be allowed on the sign face:

- Drilling of holes, except for the fastening of overlays
- Application of any form of adhesive
  
- Cleaning with any chemicals that are not specifically approved by the manufacturer of the retro- reflective material
- Covering the sign face with an impermeable material that does not allow free circulation of air."

#### **B5606 ERECTING ROAD SIGNS**

(b) Excavation and backfilling

In the first sentence of the first paragraph of this Sub-clause after "shown on the drawings" insert "or as directed by the Employer's Agent."

Add the following:

"A 50 mm thick permeable drainage layer shall be placed below concrete or soil-cement backfill for timber posts. No additional payment will be made and the cost thereof shall be deemed to be included in the tendered rates".

c) Erection

Add the following:

"After erection the signboard shall be thoroughly cleaned with a cleaning agent approved by the retro-reflective material's manufacturer.

All vegetation obstructing the new or replaced sign board shall be removed and disposed of as instructed by the Employer's Agent."

## B5608 DISMANTLING, STORING AND RE-ERECTING EXISTING ROAD SIGNS

Add the following:

"Existing overhead and ground mounted road signs that are being replaced by new signs shall be dismantled and disposed of by the contractor. Where possible the dismantling of the signs shall not be before the replacement sign is erected and displayed. Where dismantling of the sign is required before erection of the replacement sign, the dismantling shall not take place until immediately before work is to commence on the replacement, and the replacement shall be completed and the new sign displayed as soon as possible thereafter (within 72 hours).

Dismantling shall include sign panels and ground mounted sign supports.

Ground mounted sign supports shall be cut off just below ground level. Material excavated for removal of buried poles shall be replaced, and any depression made good using excess material from excavation for new signs.

Payitems are provided in the Pricing Schedule. Payment will differentiate between different types of sign panels."

## B5609 MEASUREMENT AND PAYMENT

Item	Unit
B56.01 Road sign boards with painted or coloured semi-matt background. Symbols, lettering, and borders in semi-matt black or in Class I retro-reflective material, where the sign board is constructed from:	
(c) Pre-painted galvanized steel plate (Chromadek 1,2 mm thick or approved equivalent):	
Add the following sub-item to this sub-item:	
"(iv) Signs measured by number (state type and dimensions)	number (No)"

Amend the last two lines of the second paragraph of this item to read:

"completion, delivery, installation of the road sign board complete as specified, and the removal and disposal of all vegetation obstructing the motorists' view of the new or replaced sign board."

Item	Unit
B56.05 Excavation and backfilling for road sign supports (not applicable to kilometre posts)	
Substitute "not in concrete" in the first paragraph with "not in concrete or a soil/cement mixture".	
Add the following pay items:	

Item	Unit
B56.10 Danger plates at culverts/structures (state type and dimensions)	number (No)
The unit of measurement shall be the number of danger plates provided and erected in accordance with the drawings.	
The tendered rate shall include full compensation for all labour and material, painting, posts, excavation, backfilling with soil etc., as may be necessary for completing the work in accordance with the details shown on the drawings."	

Item	Unit
B56.11 Extra over item 56.05 for concrete backfill Class 20/20 (excluding marker signs)	cubic metre (m <sup>3</sup> )

The tendered rate shall cover full compensation for the supply of concrete and for backfilling signpost holes with concrete as specified as shown on the drawings or as directed by the Employer's Agent on site."

## **SECTION 5700: ROAD MARKINGS**

### **B5701 SCOPE**

Replace “South African Road Traffic Signs Manual” in the second paragraph with “SADC Road Traffic Signs Manual”.

Replace the words “ordinary road marking paint” with “solvent borne road marking paint”.

Replace “BS 3262” with “EN 1436”.

### **B5702 MATERIALS**

Insert the following before subclause (a) Paint:

“The selection of the appropriate road marking paint and materials for permanent road markings to ensure conformance with the requirements of this specification rests with the Contractor. Such paint and material shall have technical characteristics (brightness, luminance, skid resistance, durability) equal to or greater than road marking paint and materials specified in subclauses 5702(a), (b) and B5702(c).

Where plastic road-marking material (hot-melt plastic (also known as thermoplastic) and two-component (also known as cold plastic)) is used, the contractor shall obtain an approved guarantee from the manufacturer that the paint complies with the specification. This shall be submitted to the Employer’s Agent on request.

Information of the type of road marking material utilized and application rates for each order shall be included in the quality control processes.

Normally road markings applied within 3 months of bituminous surfacing are deemed to be temporary road markings. For the purposes of clarity within this project, however, permanent road marking shall be deemed to be those applied within 3 months of bituminous surfacing in their permanent positions. Temporary road markings shall be deemed to be road markings applied on surface treatments prior to placing of the final surfacing of the road, or those applied in a position which is not the final position.”

#### **(a) Paint**

Replace sub-subclause B5702(a)(i) with the following:

“(i) Road marking paint

Road marking paint shall be Type 1 as specified in SANS 731-1. Only paint, manufactured in a SANS approved and accredited facility shall be accepted. The no-pick-up time of road-marking paint shall comply with the Class 1 requirement in accordance with SANS 731-1.

The paint shall be delivered at the site in sealed containers marked in accordance with SANS 731-1. The viscosity of the paint shall be such that it can be applied without being thinned down.”

(ii) Retro-reflective road-marking paint

Add the following:

“During actual painting the Contractor shall supply sealed samples of the paint to be used to the Employer’s Agent together with details of the paint batch numbers and testing carried out on these particular batches by

the paint manufacturer to prove compliance with this specification. These samples shall be kept until the end of the defects liability period.”

(iv) Colour

Change the title to read:

“(iv) Colour, luminance and coefficient of retro reflection”

Amend the last sentence to read as follow:

“The colour and luminance shall as specified in Chapter 7 of Volume 1, Part 3 of SADC Road Traffic Signs Manual. The coefficient of retro reflection shall be a minimum of 150 minicandelas/lux/m<sup>2</sup> for white new material, and 100 minicandelas/lux/m<sup>2</sup> for yellow new material, as tested within 2 to 6 weeks of application.”

Add subclause (v):

“(v) Other road marking materials

The Contractor may use other road marking materials which would ensure more durable markings and which would meet the specified performance criteria.

Such materials should comply with a standard set by a recognized national standards institution. Information on such materials and the standards to which they comply shall be submitted to the Employer’s Agent.”

Add the following subclause:

“(c) **Retro-reflective beads**

Retro-reflective glass beads shall be applied to the wet paint, thermoplastic and cold plastic.

The beads shall comply with Class A beads in accordance with EN 1424: 1998, with the following requirements or as approved by the Employer’s Agent:

- Colour : crystal clear
- roundness : > 80%
- size range of : 14 – 200 US Mesh (75 – 1400 Microns)
- refractive index : > 1.5
- specific gravity : ± 2.5

Cumulative retained mass		
Sieve	Minimum	Maximum
1700	0	2
1400	0	10
1180	5	30
850	40	80
600	70	100
425	80	100
355	90	100
212	95	100
Pan	100	100

The beads shall be delivered to the site in sealed bags, marked with the name of the manufacturer, the batch number and an inspection seal of SANS, confirming that the beads form part of a lot tested by SANS and comply with the requirements of EN 1424: 1998. Alternatively, the Contractor shall at all times have a SANS certificate on the site, identifying the batches to which the inspection seals apply and certifying that they have been tested by SANS, and comply with the requirement of EN 1424: 1998.”

## **B5704 MECHANICAL EQUIPMENT FOR PAINTING**

Add the following sentence at the end of the first paragraph:

“The road-marking machine shall be fitted with a device to guide the operator to the centre of the line to be painted. This device shall be used at all times of operation.”

## **B5705 SURFACE PREPARATION**

Add the following at the end of the second paragraph:

“The onus is on the contractor to ensure that the surface on which the road markings are to be applied is sufficiently clean, dry and non-flaky to ensure that the quality of the road markings will not be adversely affected. The contractor is

also responsible for protecting road studs from being painted over, and the subsequent cleaning thereof if such over-painting did occur.”

#### **B5706 SETTING OUT THE ROAD MARKINGS**

Insert the following before the first paragraph:

“Where road markings are to be replaced after any construction activity, it is essential that all existing road marking be accurately surveyed and referenced before commencement of such construction activities which will obliterate the existing road markings. The position of barrier lines shall be re-assessed on site by the Employer’s Agent before the Contractor commences with the road marking.”

#### **B5707 APPLYING THE PAINT**

Insert the following before the first paragraph:

“The Contractor’s establishment on site and general obligation shall be deemed to fully include the establishment of the road-marking team, irrespective of the number of times the road-marking team is required to be on site or is required to move within the site.

Provision is also made under item B57.07 for de-establishment and re-establishment in the contract or defects notification period if such action is required by delays not attributable to the Contractor and/or ordered by the Employer’s Agent.”

Replace the sixth paragraph with the following:

“All road marking materials shall be applied at a rate decided upon by the Contractor taking into cognisance of the conditions on the road and ensuring that the performance specifications are met, but shall be a minimum of 0.42 litres/m<sup>2</sup>.

In order to ensure proper coverage on all types of surfaces the Employer’s Agent may order an increase in the above nominal application rates. Payment for these variations in application rates shall be made under item 57.04.

A daily log-sheet, provided by the Employer, shall be completed and signed by the Contractor and the Employer’s Agent’s representative, recording the quantities of paint and glass beads used on that day and shall be available for inspection at all times. The completed and signed log-sheet for the period covered by a payment certificate shall be attached to the payment certificate.”

Replace the last paragraph with the following:

“Solvent-based road marking as specified by the Employer’s Agent shall be carried out within 14 days of opening the road full width to traffic after the completion of the surfacing.

If in the in the opinion of the Employer’s Agent, conditions are unsafe, the centre-line shall be painted immediately after 2,0 km of continuous road has received a new asphalt layer, or 4,0 km of continuous road has received a new seal surfacing.

All road markings shall be applied with due cognisance of future road marking work, and shall be compatible with subsequent, envisaged road marking work.”

#### **B5708 APPLYING THE RETRO-REFLECTIVE BEADS**

In the first paragraph, replace the nominal application rate of 0,8kg/litre with “400g/m<sup>2</sup>”. Add the following: “Beads shall be applied in accordance with EN 1424.

The rate of application and the distribution of the beads on permanent road markings shall be sufficient to ensure that the retro-reflective requirements are met as specified, but shall not be less than 0.34 kg/m<sup>2</sup> of marking.”

#### **B5710 TOLERANCES**

(c) Alignment of markings

Add the following paragraphs to this subclause:

"When an unbroken line and a broken line are painted alongside each other, the beginning and the end of the unbroken line shall coincide with the beginning of one broken line and the end of another broken line. When existing lines are repainted, the new markings shall not deviate more than 100mm in the longitudinal direction nor 10mm in the transverse direction from the existing marking.

The alignment of the road studs shall not deviate from the true alignment by more than 10mm and shall be positioned so that the reflective faces are within 5° of a right angle to the centre line of the road."

Add the following subclause:

"e) Testing

(1) Plant

Before painting any permanent road markings, the Contractor shall satisfy himself and the Employer's Agent, by painting test lines on a section of pavement other than the section required to be marked:

- that the painting machine is in good working order and properly adjusted;
- that the operator is fully experienced; and
- that the machine sprays at the specified rate of paint application.

The Contractor shall bear the cost of all materials and workmanship required for the above plant tests.

In addition, the Contractor shall conduct random paint thickness tests and dip/spread tests as required by the Employer's Agent."

## **B5711 GENERAL**

Replace the third paragraph with the following:

"The Contractor shall guarantee that permanent road markings shall meet the minimum initial requirements as specified in Chapter 7 of SADC Road Traffic Signs Manual."

Add the following:

"The Contractor shall ensure that all roadstuds which have been affected by the painting will be cleaned without damaging the lens elements of the roadstuds. Such cleaning will be done within 24 hours after the studs have been affected by the painting."

Insert the following into the last sentence of the last paragraph between "black paint" and "or chemical paint remover":

", bituminous emulsion, slurry"

Add the following to the last paragraph:

"Where black paint is used, it shall be matt."

Add the following clause:

"The Contractor shall provide temporary traffic control facilities in accordance with Section 1500 of the COLTO's standard specifications for road and bridge works to ensure traffic safety where work is being executed.

Property and/or road signs damaged by the Contractor, his personnel, his agents or sub-contractors shall be repaired or restored to their condition prior to the damage at his own cost."

## **B5712 FAULTY WORKMANSHIP OR MATERIAL**

Add the following paragraphs to this item:

"The Contractor shall rectify in an acceptable manner and at his own costs; all marking that do not comply with the specified requirements.

While work is in progress, tests shall be carried out on materials and/or the quality of work to ensure compliance with the specified requirements. The sampling methods are specified in SANS 731-1. The sampling methods described in TMH5 shall be followed where applicable.”

**B5713 PROTECTION**

Add the following paragraph

”Traffic cones shall not be smaller than 750mm in height and shall be placed on the road not further than 48m apart. Cones shall not be removed before the paint on the road has hardened to such an extent that it will not be damaged by traffic and the adhesive of the road studs has hardened to such an extent that the studs will not turn or become loose. All marks on the road caused by traffic driving over wet paint shall be removed by the Contractor at his own cost.”

**B5714 MEASUREMENT AND PAYMENT**

Item	Unit
B57.06 Setting out and pre-marking the lines (excluding traffic island markings, lettering and symbols)	kilometre (km)

Add the following to the payment clause:

“Referencing of existing barrier lines and other road marking lines prior to milling and other operations, shall be included in the tendered rate for setting out and pre-marking.”

Amend pay item 57.07 by replacing the pay item with the following:

“Item	Unit
<b>B57.07 Re-establishing the painting unit:</b>	
(a) During the contract period	lump sum
(b) During the defects notification period, including accommodation of traffic	lump sum”

In the 4th line of the 1st paragraph delete the word “maintenance” and replace with “defects notification”.

**SECTION 5800: LANDSCAPING AND GRASSING**

**B5801 SCOPE AND DEFINITION**

**(a) Scope**

Add the following to this subclause:

“Vegetation shall be established on deviations, borrow pits and other areas as directed by the Employer’s Agent using hydro seeding techniques.”

**B5802 MATERIALS**

**(a) Fertiliser/soil-improvement material**

The types of fertilisers shall be as follows:

Type	Application rate (kg/hectare)
2:3:2(30)	400
Super phosphate	500
Lime	250
L.A.N.	50
Total kg per hectare	1200

**(c) Grass seeds**

Add the following to this subclause:

"The grass seed mixture shall be as follows:

(1)	Cynodon dactylon	3.7 kg/ha
(2)	Tragus berteronianus	2.5kg/ha
(3)	Heterogon contortus	15.0kg/ha
(4)	Chloris gayana	5.0kg/ha
(5)	Eragrostis curvula	7.5kg/ha
(6)	Chloris virgata	0.5kg/ha
(7)	Digitaria eriantha	2.5kg/ha
(8)	Melinis repens	2.0kg/ha
(9)	Aristida congesta subso, Congesta	0.8kg/ha
(10)	Cymbopogon excavatus	2.5kg/ha
	Total	42.0kg/ha

All seed used shall be labelled in accordance with the Government Seed Act No. 28 of 1961 or amendment thereof. The Contractor shall furnish the Employer's Agent with signed copies of a statement from the seed merchant certifying that each container of seed delivered is fully labelled in accordance with the Government Seed Act. This certification shall appear on, or be submitted with, all copies of invoices for the seed."

**(f) Anti-erosion compounds**

Add the following to this subclause:

"Where directed by the Employer's Agent Surfisol soil stabilizer (or similar approved anti-erosion products) shall be applied at a rate of 150 kg/ha."

**(g) Topsoil**

Add the following to this subclause:

"Prior to commencing any earthmoving operations, the Contractor shall strip and stockpile all topsoil, to a depth of 150 mm or as otherwise instructed by the Employer's Agent, within the working area and construction camp for subsequent use in the rehabilitation and re-vegetation of the site. Topsoil shall be stripped in a phased manner, so as to retain vegetation cover for as long as possible. Topsoil from different soil types shall be stockpiled separately and replaced in the same areas from which they were taken.

Topsoil thickness in certain areas may exceed the thickness instructed by the Employer's Agent but the Contractor shall not strip topsoil beyond the instructed thickness. Such material will be measured and paid for as "cut to spoil" or any other classification, as ordered by the Employer's Agent.

The Contractor shall ensure that stockpiled material does not blow or wash away. If the topsoil is in danger of being washed or blown away, the Contractor shall cover it with a suitable material, such as mulch and/or seed it with a fast-growing annual grass.

Topsoil material shall be stockpiled for as short a period as possible. Stockpiles shall be monitored at weekly intervals to identify invasive plants, which shall be removed when they germinate, to prevent contamination of the seed bank. Stockpiles shall not be covered with materials, such as plastic, that may cause it to compost, or kill any seeds."

**5804 PREPARING THE AREAS FOR PLANTS**

**(c) Areas which require topsoil**

Add the following to this subclause:

"Prior to top soiling, the Contractor shall remove all remnants of building materials, concrete foundations, timber and other foreign debris from the site.

Before placing topsoil, the Contractor shall remove all visible weeds from the placement area and from the topsoil. The area to be re-vegetated shall be ripped or scarified as directed by the Employer's Agent.

The stockpiled topsoil shall generally be spread evenly over the prepared surface to a depth of 75 to 150 mm on flat ground or to a minimum of 75 mm on slopes of 1:3 or steeper."

#### **B5805 GRASSING**

##### **(c) Hydroseeding**

Add the following to this subclause:

"A minimum of 4500 litres of water per hectare shall be applied with the hydroseeding mixture to ensure proper distribution of all the ingredients.

The hydroseeder shall be capable of pumping the specified seed mix, fertilizer and soil stabiliser (mixed in water) at the specified rates over the areas to be seeded. The slurry distribution lines shall be large enough to prevent stoppage, and the discharge line shall be equipped with a set of hydraulic spray nozzles suitable for the even distribution of the slurry on the various slopes to be seeded.

Hydroseeding machines shall be thoroughly cleaned after each operation and before different seed mixes of different origins are introduced into it. The mixture shall be kept uniform during the seeding operation by means of a power-driven agitator."

##### **(f) Sowing by hand**

Delete the following from this subclause:

"If approved by the Employer's Agent,"

Add the following to this subclause:

"The thickness of the topsoil layer shall be as specified by the Employer's Agent. The preparation of the soil for areas to be grassed is to include scarifying just before sowing the grass seed. Should erosion of any kind (by animal, wind or rain) have occurred before the Contractor applies the grass seed, the slope shall be re- instated, at the Contractor's cost, to its original, erosion free state before seeding.

The types and mixtures of seeds to be used shall be as specified in the Project Specifications. The Contractor shall be solely responsible for establishing an acceptable grass cover, and any approval by the Employer's Agent of seed mixtures intended for use by the Contractor shall not relieve him of his responsibility."

#### **B5808 GENERAL**

##### **(a) Time for planting**

Add the following to this subclause:

"The Contractor shall not begin planting work until all construction activities in the area to be vegetated have been completed. Hydroseeding shall be carried out either during April, May or June."

##### **(e) Responsibility of establishing acceptable cover**

Add the following to this Sub clause:

"Establishment of acceptable cover shall include maintaining the surface to the required slopes and levels without erosion or sedimentation, watering, weeding, fertilising, disease and insect pest control and any other procedure consistent with good horticultural practice necessary to ensure normal, vigorous and healthy growth of the plant material on site.

In the absence of adequate rainfall, all seeded areas shall be watered once weekly, during the first month, and once every two weeks during the second month. Rainfall of less than 60 mm in the first month and less than 45 mm in the second month is regarded as inadequate water supply. Watering should be carried out from a tanker, using a fine nozzle spray to avoid erosion and disturbance of the vegetation. The Contractor shall supply all water required for irrigation during the establishment period and shall provide all plant necessary for the operation.

As part of establishment, the Contractor shall be responsible for topdressing the re-vegetated areas with L.A.N., at a rate of 150 kg/ha, in August/September and April. The Contractor shall also be responsible for monitoring and controlling all alien/invasive vegetation and implementing appropriate erosion control and remediation measures, as approved by the Employer’s Agent."

**B5809 MEASUREMENT AND PAYMENT**

Add the following pay item:

“Item	Unit
<b>B58.12 Removal of undesirable vegetation</b>	
(a) Within the road reserves	kilometre (km)
(b) Borrow and quarry areas	hectare (ha)

The unit of measurement for sub items (a) and (b) above shall be the linear kilometre measured along the road centreline and within the road reserve, and the hectare measured in borrow and quarry areas respectively and measured each time the Contractor has been instructed by the Employer’s Agent to remove the undesirable vegetation under these pay items. These items shall not be payable in respect of undesirable vegetation that has occurred within areas affected by construction activities, which are considered a contractual obligation (5807(e)).

The tendered rates shall include full compensation for all plant, equipment, labour, and consumables required to effectively remove the undesirable vegetation, including the entire root system, and disposing by approved means."

**SECTION 7300: CONCRETE BLOCK PAVING FOR ROADS**

**B7300 SCOPE**

This section covers the furnishing of material and the construction of concrete block paving for roads.  
Add the following as the second sentence of the first sentence:  
"0% number of paving blocks required for the scope of work will be manufactured on site using paving plant and trained local labour".

**B7302 MATERIAL**

**(b) Concrete paving blocks**

Add the following on the second sentence of the first paragraph:  
"The block shall be of class 25, type SA and 80mm thickness, grey coloured interlocking concrete segmental pavers laid in 45° herringbone pattern specified in the scope of work, on the drawings, or in the schedule of quantities".  
"The block shall be of class 25, type SA and 60mm thickness, grey coloured interlocking concrete segmental pavers laid in 45° herringbone pattern specified in the scope of work for sidewalk, on the drawings, or in the schedule of quantities".

**(f) Block Paving Plant**

Add the following:  
"The purchasing of all material (sand, stone, cement, crusher dust, pallets, etc.) required for manufacturing of the paving blocks on site to the requirements of SABS 1058. The operation of the plant, labourer requirements including the payment thereof, manufacturing, curing and packing of the paving blocks to the requirements of SABS 1058. Both the water and power supply is available on the block yard site.

**B7304 MEASUREMENT AND PAYMENT**

Item	Unit
"B73.01 Concrete block paving.....	square metre (m²)
a) Class 25, type and 80mm thick	square metre (m²)
b) Class 25, type and 60mm thick	square metre (m²)

The unit of measurement shall be the square metre of completed concrete block paving. The quantity shall be calculated from dimensions shown on the drawings or authorized by the engineer.  
The tendered rate shall include full compensation for furnishing all materials, constructing the sand bedding, laying, compacting the concrete pavement blocks, filling the joints with jointing sand, provision of approved herbicide and ant poison, and for all other work necessary to complete the concrete block paving as specified.

Item	Unit
<b>"B73.02 Cast in situ concrete edge and intermediate beams.....</b>	cubic metre (m <sup>3</sup> )

The unit of measurement shall be the cubic metre of concrete in edge and intermediate beams. The quantity shall be calculated from the dimensions shown on the drawings or authorized by the engineer

The tendered rate shall include full compensation for furnishing all materials, and constructing the edge beam intermediate beams complete as specified, including all excavation and backfilling in all classes of material.

Item	Unit
<b>"B73.04 Producing of block pavers.....</b>	number (no)
(a) Supplied from commercial sources	number (no)

The unit of measurement shall be number of purchased concrete block paving from commercial source as per SABS 1058 specification. The 20% calculated from the total number of blocks required for the scope of work or authorized by the engineer.

The tendered rate shall include full compensation for furnishing all materials, and for all other work necessary to purchase a complete concrete block paving as specified.

(b) Produced by paving plant on site	number (no)
--------------------------------------	-------------

The unit of measurement shall be number of manufactured concrete block paving on site as per SABS 1058 specification. The 80% calculated from the total number of blocks required for the scope of work or authorized by the engineer.

The tendered rate shall include full compensation for furnishing all materials, and for all other work necessary to manufacture a complete concrete block paving as specified

## SECTION 8100: TESTING MATERIALS AND WORKMANSHIP

### B8103 THE COSTS OF TESTING

#### (a) Process control

Rename the heading as "Materials Quality Control" and replace the contents with the following:

"Testing shall be undertaken by a commercial independent laboratory facility for process control (where the process control testing can be utilised as acceptance control), acceptance control and correlation testing subject to the following requirements laid down by the Employer:

(i) The Contractor accepts the test results of the commercial independent laboratory. Should there be any doubts with regard to certain test results, this will be settled by another independent laboratory mutually agreed upon. The cost in such cases will be to the account of the party at fault. The Contractor shall apply in writing, quoting this clause, as to which specific tests are in doubt, providing test reference numbers and details as to the reasons why the test result is in doubt.

### B8117 MEASUREMENT AND PAYMENT

Amend item B81.02 to read as follow:

Item	Unit
<b>B81.02 Other special tests required by the Employer's Agent</b>	
(a) Special tests requested by the Employer's Agent	provisional sum (Prov Sum)
(b) Handling cost and profit in respect of subitem B81.02(a)	percentage (%)

Add the following paragraph to the payment clause of item B81.02:

"The percentage for sub item B81.02(b) is a percentage of the actual amount spent under sub item B81.02(a), which shall include full compensation for the handling cost of the Contractor, and the profit in connection with the special tests."

## SECTION 8200: QUALITY CONTROL (SCHEME 1)

### B8201 SCOPE

Add the following paragraph to this Clause:

"Quality Control Scheme 1 as specified in section 8200 shall apply to this Contract."

### B8204 GENERAL REQUIREMENTS

#### (d) Outliers

(ii) Method 2, shall apply to this Contract using the critical values for the different value of n from the following added tables for the different product properties.

Table B8204 (d) 3

Critical C-values for the outlier test for granular material ( $C_{0.99}(N)$ – sigma values)									
N	Compaction %	Sieve Size (only for G1 & G2 base), mm							PI
		26.5	19.0	13.2	4.75	2.00	0.425	0.075	
4	4.1	6.1	8.5	8.5	7.3	5.6	3.6	3.2	2.4
5	4.4	6.4	9.0	9.0	7.7	5.9	3.9	3.3	2.5
6	4.6	6.7	9.4	9.4	8.0	6.2	4.0	3.5	2.7
7	4.7	6.9	9.7	9.7	8.3	6.3	4.1	3.6	2.8
8	4.8	7.1	9.9	9.9	8.5	6.5	4.2	3.7	2.8
9	4.9	7.2	10.1	10.1	8.6	6.6	4.3	3.7	2.9
≥10	4.9	7.3	10.2	10.2	8.7	6.7	4.4	3.8	2.9

Table B8204 (d) 4

Critical C-values for the outlier test for asphalt layers ( $C_{0.99}(N)$ – sigma values)										
N	Density	Sieve Size, mm							Bitumen Content	VIMS
		26.5	19.0	13.2	4.75	2.36	0.300	0.075		
3	2.9	5.6	6.7	7.6	7.8	7.2	6.2	2.3	0.4	2.1
4	3.2	6.1	7.3	8.6	8.5	7.9	6.8	2.5	0.4	2.3
5	3.3	6.4	7.7	9.0	9.0	8.4	7.2	2.6	0.5	2.4
6	3.5	6.7	8.0	9.4	9.4	8.7	7.5	2.7	0.5	2.5
7	3.6	6.9	8.3	9.7	9.7	9.0	7.7	2.8	0.5	2.6
8	3.7	7.1	8.5	9.9	9.9	9.2	7.9	2.9	0.5	2.7
9	3.7	7.2	8.8	10.1	10.1	9.4	8.1	3.0	0.5	2.7
≥10	3.8	7.3	8.7	10.2	10.2	9.4	8.1	3.0	0.5	2.8

Critical C-values for the outlier test for surfacing aggregate ( $C_{0.99}(N)$ – sigma values)									
N	Sieve Size, mm								
	26.5	19.0	13.2	9.5	6.7	4.75	2.36	0.425	0.075
3	2.1	2.0	2.0	1.8	2.4	1.8	2.3	1.8	0.9
4	2.3	2.2	2.2	2.0	3.2	2.0	2.5	2.0	1.0
5	2.4	2.3	2.3	2.1	4.0	2.1	2.6	2.1	1.1
6	2.5	2.4	2.4	2.2	4.6	2.2	2.7	2.2	1.1
7	2.6	2.5	2.5	2.2	5.6	2.2	2.8	2.2	1.2
8	2.7	2.6	2.5	2.3	6.4	2.3	2.9	2.3	1.2
9	2.7	2.6	2.5	2.3	7.2	2.3	2.9	2.3	1.2
≥10	2.7	2.6	2.5	2.3	8.0	2.3	3.0	2.3	1.2

Table B8204 (d) 5

Critical C-values for the outlier test for cemented layers ( $C_{0,99}(N)$ – sigma values					
N	Compaction %	UCS		PI	CBR
		Lime	Cement		
3	4,4	1,1	1,6	3,3	22
4	4,9	1,2	1,7	3,6	24
5	5,1	1,3	1,8	3,9	26
6	5,4	1,3	1,9	4,0	27
7	5,5	1,4	1,9	4,1	28
8	5,7	1,4	2,0	4,2	28
9	5,8	1,4	2,0	4,3	29
≥10	5,8	1,5	2,0	4,4	29

**B8206 JUDGEMENT PLAN B**

Replace Table 8206/1 with the following table in controlling the characteristic properties in accordance with this judgement scheme.

Structure	Characteristics, Properties
Gravel pavement layers	Relative compaction
Crushed stone base or sub base	Relative compaction
Chemically stabilised layers	Relative compaction Stabiliser agent content by UCS determinations Unconfined Compressive Strength
Concrete	Compressive Strength

**(a) Taking samples and testing the properties.**

Add the following to the first paragraph of this clause:

“A valid concrete compressive strength test result, the sample size (n), is the average of 3 test specimens (concrete cubes) from a single batch of concrete tested at the same age.”

**(d) Determining the judgement limits**

Values of constants

Replace Table 8206/3 with the following table (table B8206/3):

Table B8206/3

Material	Properties	Minimum Sample Size n	L <sub>s</sub> (Lower Specification limit)	L <sub>s</sub> (Upper Specification limit)	Ø
Selected Sub grade	Relative compaction	6	Top 95% Bottom 93% Sand 100%	-	15
Sub base	Relative compaction	6	97%	-	15
Gravel base	Relative compaction	6	100% and if stabilised 98%	-	15
Sub base or base	Grading		See table 3602/4		20 sieves 26,5-4,75 10 sieves

				4,75-0,075
	Gradings		See table 4213/1	20 sieves 26,5-13,2 10 sieves 13,2-0,075
Chemically stabilised layers	Relative compaction	6	Upper/Single layer 96% Lower Layer 95%	15
	Cementitious binder content by UCS determinations		See sub clause 3506 (b)(ii)	-
	Unconfined Compressive Strength		See table 3402/5*	
Strength concrete (structural)	Compressive strength (28 days)	See table 8206/2	See note 3	5
Pavement concrete	Compressive strength (28 days)	6	See sub clause 7103(d)	5

## B8208 CONDITIONAL ACCEPTANCE

Amend the first paragraph to read:

"Any lot which does not comply with the requirements for acceptance plan B may be conditionally accepted should the value of the sample mean lie within the rejection limits given in Clause 8211."

Add the following to the first paragraph:

"The rejection limits for this contract shall be determined in accordance with the requirements of clause 8211 : Determination of Rejection Limits in accordance with statistical criteria."

## B8209 PROCESS CONTROL BY THE CONTRACTOR

Add the following to the first paragraph:

"As part of his quality control system, the Contractor shall carry out the minimum number of tests as stated in Table 8209/1 and submit the results to the Employer's Agent when completing the Employer's Agent's form: Request for approval of Work. The stated requirements may be replaced by alternative proven and approved requirements in the event of a manufacturing plant being accredited in terms of SABS 0157."

## B8210 ROUTINE TESTS AND INSPECTION BY THE ENGINEER

Amend the last sentence of the first paragraph to read: "The testing frequencies and sample and lot sizes for quality control testing shall be in accordance with Table: 8210/1".

Table 8210/1

Pavement Layer	Properties to be tested	Sample per Lot size
Roadbed and Fill (upper 150mm)	Relative compaction Grading Atterberg Limits MDD/OMC  CBR	} >6 depending on lot size see form S-LAY-TPG2-E  4 or 6 first lot (trial section) and thereafter 1 per lot for sequential testing  1
Upper and Lower Selected Layers	Relative Compaction Grading Atterberg Limits MDD/OMC	} >6 depending on lot size see form S-LAY-TPG2-E  4 or 6 first lot (trial section) and thereafter 1 per lot for sequential testing

	CBR	1
Granular Sub base	Relative Compaction Grading Atterberg Limits MDD/OMC  CBR	} >6 depending on lot size see form S-LAY-TPG2-E  4 or 6 first lot (trial section) and thereafter 1 per lot for sequential testing  1

Table 8210/1 (cont)

Pavement Layer	Properties to be tested	Sample per Lot size
Cemented Sub base Before Treatment	Grading Atterberg Limits	>6 depending on lot size see form S-LAY-TPG2-E
After treatment	MDD/OMC	4 or 6 first lot (trial section) and thereafter 1 per lot for sequential testing
	CBR Relative Compaction UCS	1  >6 depending on lot size see form S-LAY-TPG2-E
Granular Base	Relative Compaction Grading Atterberg Limits BRD/OMC  Flakiness Fractured Faces or Elongation	>6 depending on lot size see form S-LAY-TPG2-E  4 or 6 first lot (trial section) and thereafter 1 per lot for sequential testing  1  1 (If alluvial ie round pebbles)

**Note:**

- (1) A minimum of 4 tests per lot can be allowed for unforeseen circumstances but shall be at the Employer's Agent's discretion.
- (2) Confined areas (lots) due to their size and nature are normally subjected to lesser testing than that which is prescribed, which can be allowed for as long as the quality of the material tested can be established for acceptance control purposes.

*Delete the existing 2 paragraphs and replace with:*

"The Contractor shall be responsible for acceptance control testing of the work carried out under the Contract as specified which is the normal client required acceptance control testing which will be carried out by a previously defined joint laboratory between Contractor and professional Engineering design and supervision team. For sections of the works where hand compaction methods are used (as opposed to machine compaction) then additional control and acceptance testing will be required. On-site determination of variability using a field pilot study will be required. This additional testing would be for the Contractor's account.

The Employer's Agent's Representative shall have access to all process and acceptance control test results. He may order additional acceptance control testing through the Contractor's site laboratory or an accredited approval external testing laboratory to satisfy himself that the required quality standards are being met.

**B8211 DETERMINING REJECTION LIMITS IN ACCORDANCE WITH STATISTICAL CRITERIA**

The rejection limits shall be determined in accordance with the requirements of clause 8211."

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

### **SECTION C : OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS**

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

### **SECTION C : OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS**

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## **C1 INTRODUCTION**

### **C1.1 List of Abbreviations**

CHSA : Construction Health and Safety Agent  
CHSO : Construction Health and Safety Officer  
DoA : Department of Agriculture of the PROVINCE OF THE EASTERN CAPE  
DME : Department of Mineral and Energy  
DMR : Department of Mineral Resources DoL : Department of Labour  
DSTI's : Daily Safe Task Instructions EA : Employers Agent  
EAR : Employers Agents Representative EEA: Employers Environmental Agent  
FEMA : Federated Employers Mutual Association H&S : Health and Safety  
HIRA : Hazard Identification Risk Assessment  
MH&SA : Mine Health and Safety Act No. 29 of 1996 (as amended)  
OHS : Occupational Health and Safety  
OHSA : Occupational Health and Safety Act No. 85 of 1993 (as amended)  
PSHSS : Project Specific Health and Safety Specification  
PC : Principal Contractor  
PPC : Personal Protective Clothing  
PPE : Personal Protective Equipment  
SANS: South African National Standards (Authority)  
SMME : Small, Micro, Medium Enterprise  
SoP's : Safe Operating Procedures  
SWP : Safe Work Procedure  
TMS : Technical Method Statement  
WCC : Workman's Compensation Commissioner

### **C1.2 Definitions**

The definitions used will be those set out in the Regulation Gazette No 37305 of 7th February 2014 with the following additions or amendments;

Client: Hereafter referred to as the Employer in terms of the Contract.

Employers Agent: Means a competent person appointed by the Client to design, supervise and monitor construction on their behalf.

Hazard Identification and Risk Assessment (HIRA) and Risk Control: Means a documented plan, which identifies hazards, assesses the risks and details the control measures and safe working procedures which are to be used to mitigate and control the occurrence of hazards and risks during construction or operational phases.

Induction Training: Means once off introductory training on general health and safety issues given to all employees and visitors to the site before commencement of work on site.

Mine: Any excavation from which material (soil, gravel, stone etc.) is taken for use on the construction site.

Site: Means the area in the possession of the Principal Contractor for the construction of the works. Where there is no demarcated boundary it will include all adjacent areas and haul roads which are reasonably required for the activities for the Principal Contractor and approved for such use by the Employer's Agent.

The Act: Means, unless the context indicates otherwise, the Occupational Health and Safety Act, No. 85 of 1993 and Regulations promulgated thereunder, as amended.

Health and Safety Plan: The Pre-Construction Health and Safety Plan is the foundation upon which the health and safety management of the construction phase of a project needs to be based.

### **C1.3 Key Role-Players**

Client ECDa represented by the Head of Department and/or such other person or persons, authorised thereto in writing.

Designer / Employer's Agent As appointed in terms of the Contract. The Designer/Employer's Agent as referred to in CR6 is hereafter referred to as the Employers Agent.

CHS Agent As appointed by the Employer in terms of CR5.2(5) of the OHS Act Principal Contractor As appointed in terms of CR5.1(k) of the OHS Act.

Contractor A Contractor appointed by the Principal Contractor in terms of CR7.1(c)(v) of the OHS Act.

#### **C1.4 Key References**

Occupational Health and Safety Act No. 85 of 1993 and Regulations (as amended) Mine Health and Safety Act and Regulations No. 29 of 1996 (as amended) Compensation for Injury and Occupational Diseases Act No. 100 of 1993 (as amended)

Committee of Land Transport Officials (COLTO) South African Roads Specifications for Road and Bridge Construction South African National Standards

General Conditions of Contract 2015 (GCC) Edition 3

Traffic Safety Manual (SARTSM) Chapter 13, Volume 2 of 1999 Road Traffic Act No. 93 of 1996 (as amended)

Covid 19 Occupational Health and Safety Measures in Workplaces (Covid-19 C19 OHS), 2020

## **C2 PURPOSE OF THIS PROJECT SPECIFIC HEALTH AND SAFETY SPECIFICATION (PSHSS)**

This PSHSS highlights the aspects to be implemented over and above the minimum requirements of current legislation. Requirements may be changed should new risks or issues be identified that could not have been foreseen during the design phase of the project. The Principal Contractor will be required to include Covid 19 health and safety measures in the construction health and safety plan.

### **C2.1 Preamble**

The Department of Agriculture (DoA) is tasked to provide infrastructure within the Eastern Cape including the construction of roads and civil structures.

Each year fatalities and serious injuries mar the reputation of the Construction Industry. The DoA has a responsibility to limit such injuries by ensuring a zero tolerance approach to Contractors and those affiliated to a particular project. Thus a high premium is placed on the Health and Safety DoA stakeholders, which include its employees, professional service providers, public and its physical assets. The responsibilities that the DoA and relevant stakeholders have toward its employees are captured in this document. The responsibilities stem from both moral, civil and a variety of legal obligations.

The Principal Contractor is to take due cognisance of the above statement.

This PSHSS is a performance specification to ensure that the DoA and any bodies that enter into formal agreements with the DoA, i.e. Employer's Agents, Principal Contractors (PC) and Contractors, achieve an acceptable level of OHS compliance.

No advice, approval of any document required by this PSHSS (i.e. hazard identification and risk assessment, action plans) or any other form of communication from the Client shall be construed as an acceptance by the Client. Nor shall such communication relieve or absolve the PC from any obligation or from achieving compliance with legal requirements. The PC remains responsible for achieving the required performance levels.

## **C3 IMPLEMENTATION OF THE PROJECT SPECIFIC HEALTH AND SAFETY SPECIFICATION (PSHSS)**

This PSHSS forms an integral part of the Contract, and the Principal Contractor is required to make it an integral part of their Contracts with Contractors and Suppliers. A PSHSS is to be available for each level of Contract and Contractor, and must be complied with.

This PSHSS must be read in conjunction with the OHSA, it's Regulations (as amended) and any other standards relating to work being done, and ensure compliance thereto. The information relative to the scope of the project, the works etc. is detailed in the tender document, and is to be taken into account when developing the H&S Plan and associated documentation.

The Employers baseline design risk assessment is included, as is a summary of risks identified. Refer to Annexure J in these specifications

### **C3.1 Summary of Risks Identified During Design**

- (a) General Requirements and Provisions (Series 1000)
- (b) Drainage (Series 2000)
- (c) Earthworks (Series 3000)
- (d) Asphalt Pavements and Seals (Series 4000)
- (e) Ancillary Roadwork's (Series 5000)
- (f) Structures (Series 6000)
- (g) Sundry Structures (Series 7000)
- (h) Sundries (Series 8000)
- (i) Specified Hazardous Chemical Substances

Should there be design changes, or change in the scope of works, an amended PSHSS may be issued. Where amended PSHSSs are issued, the PC will be required to ensure a resubmission of an amended H&S Plan and OHS BoQ for approval. Further to this, the PC must ensure that a similar system must be implemented between all their Contractors and Suppliers.

#### C4 REQUIREMENTS AT TENDER STAGE

##### C4.1 Documentation required from the Tenderer;

- (a) Declaration – Fulfilment of the Construction Regulations 7th February 2014 and any subsequent additions
- (b) OHS BoQ - Adequate pricing for Occupational Health and Safety is required, and the appropriate section in the BoQ is to be completed.
- (c) OHS BoQ – Pricing should include also include Covid 19 compliance (Awareness, Screening, Sanitisers, PPE, etc.) as gazetted on the Covid 19 Occupational Health and Safety Measures in Work Places Covid-19 (C19 OHS) No.43257 of 29 April 2020

These documents can be found in the Tender Document and are to be completed by the tenderer where applicable. These documents shall be deemed to form part of the returnable Contract Documents.

#### C5 REQUIREMENTS PRE-COMMENCEMENT OF WORKS

##### C5.1 Documentation required from the Principal Contractor;

- (a) The successful tenderer must provide a Project Specific Health and Safety Plan which includes Covid 19 health and safety specifications within 14 days of the award of the tender. Refer to "Annexure A" in these specifications.
- (b) Mandatory Agreement "SECTION 37.2"

##### C5.2 Documentation required from the Employers Agent;

- (a) Construction Specification and Scope of Works
- (b) Contract Construction Drawings
- (c) Geotechnical Reports

##### C5.3 Documentation required by the Employer or his/her appointed CHSA;

- (a) Letter of Approval of the PC's OHS Plan.
- (b) Application for a Permit to do "CONSTRUCTION WORK ANNEXURE 1"

The application will not be submitted until the PC's OHS Plan has been approved by the Client/CHSA and the Annexure 1 – Application for a Permit to do Construction Work being correctly completed by the Client/CHSA and the PC.

The Client or his/her appointed CHSA shall submit all the relevant documentation to the Provincial Director of the Department of Labour (DoL) once the OHS Plan has been approved, with the form as in Annexure 1 of the Construction Regulations-2014.

The following needs to be submitted with the Annexure 1 (but not limited to):

- (a) Baseline risk assessment
- (a) H&S Specification
- (b) Approved H&S Plan
- (c) Appointment letter for the Contracts manager and Construction health and safety officer together with certified copies of the identity document and training certificates.

- (d) Registration certificate of the CHSO from the SACPCMP
- (e) Letter of award from the Client
- (f) Approved drawings
- (g) Appointment letter as per CR 5(1) (k)

The site-specific Construction Work Permit Number must be displayed conspicuously at the main entrance to the site on its own. The size of the permit board should be clearly visible from a distance of 20 meters the site-specific number is not transferable.

The Principal Contractor must keep a copy of the construction work permit in the health and safety file. Should any changes be made to the Contracts manager and Construction health and safety officer as per the submitted construction work permit, the Principal Contractor must provide the replacement persons documentation for approval to the CHSA.

## C6 REQUIREMENTS FOR COMMENCEMENT OF THE WORKS

No work may commence until the following has been complied with;

- (a) Work Permit issued by the Department of Labour to the Employer/CHSA
- (b) An acknowledgement letter must be signed by the Principal Contractor on receipt of Construction Work Permit from the Employer/ CHSA
- (c) Covid 19 awareness and action plan [Government Notice No 43257 – 29 April 2020]

## C7 REQUIREMENTS DURING THE CONSTRUCTION STAGE

### C7.1 Requirements from the Principal Contractor

- (a) Compilation and continuous updating of the H&S Plan. Refer to “Annexure B” in these specifications
- (b) Action plans as well as close out reports for all non-conformances issued by the Employer, his/her Agent, CHSA or any other parties who have the necessary powers to conduct legal inspections on the construction site
- (c) Construction Appointments. Refer to “Annexure C” in these specifications.

### C7.2 Requirements from the Employer/CHSA

- (a) Conduct at least a monthly or more frequently if deemed necessary OHS Compliance Audit of the PC’s H&S File as well as the Works
- (b) All activities on the site and all appropriate documentation will be monitored and reported on to the Client, Employer’s Agent and PC.
- (c) Discuss all findings of an audit with the PC and/or his/her representative
- (d) Submit an audit report with findings within seven (7) days of the actual audit taking place
- (e) Issue the PC with a non-conformance report within seven (7) days for action by the PC
- (f) Non-conformance close out to be completed within 3 days of issue of audit report.
- (g) Penalties or work stoppage instructions will be issued where appropriate.
- (h) Communication between the CHSA and the PC will be through the Employers Agent.

## C8 APPOINTMENTS

### C8.1 Appointment of Competent Site Personnel

The CEO (OHSA S16.1) of the PC will take overall responsibility for the appointment of competent site personnel for the duration of the contract. Should the CEO not be personally involved in the project, the H&S responsibilities are to be delegated to the Contracts Manager (OHSA 16.2. and CR8.1)

In terms of the OHSA the PC is required to make the following minimum appointments for the duration of the Contract (or part thereof).

#### C8.1.1 Contracts Manager (CR8.1)

- (a) Appointment of the Contracts Manager (CR8.1) is subject to approval by the Employer in terms of the Contract Data
- (b) In the absence of the CR8(1) an alternate manager suitably qualified shall be appointed to manage the site.

### C8.1.2 Construction Managers (CR8.2)

Appointment of the Construction Manager(s) (CR8.2) is subject to the size and complexity of the Contract as determined by the PC.

### C8.1.3 Construction Work Supervisors (CR8.7)

Appointment of construction work supervisors shall be concluded by the contracts manager for construction activities.

#### C8.1.4 Construction Health and Safety Officer (CR8.5) PC's H&S obligations

For this Contract it is a requirement that the PC appoint at least one (1) approved full-time CHSO to manage the on site OHS for the duration of the Contract.

The above CHSO's will report directly to the Contracts Manager and The PC's Construction Health and Safety Manager.( if applicable)

#### SMME Contractor(s) H&S obligations

Furthermore to the above the PC is required to appoint an additional at least one (1) approved full-time CHSO to manage the appointed SMME work packages on site for the duration of the works.

Please note that the full time CHSO appointed to manage the H&S obligations of the SMME Contractor(s) shall be assisted by Health and Safety Representatives (as referred to in "Clause C8.2.2" of this specification) as appointed by the SMME Contractor(s).

The SMME CHSO will report directly to the PC CHSO.

CHSO's CV's , qualifications and SACPCMP registration certificates are to be submitted to the Employer's Agent and CHSA for approval.

Candidate Construction Health and Safety Officers will not be accepted. Approval of the CHSO's is subject to the following minimum requirements:

- (a) Professionally registered with the South African Council for the Project and Construction Management Professions (SACPCMP) at a minimum as a Professional Construction Health and Safety Officer (Pr CHSO).
- (b) Accredited Qualifications regarding the Occupational Health and Safety Act Procedures and Regulations.
- (c) Valid South African driver's license
- (d) Minimum two (2) years' experience related to Health and Safety on road construction projects.

The PC is required to provide each of the approved CHSO's with the following minimum resources:

- (a) Suitable dedicated construction vehicle
- (b) Mobile phone and airtime
- (c) Computer with internet access and printer
- (d) Camera with; Time, Date and GPS stamp facilities
- (e) Vehicle dash camera for daily site video recording. (Allow for digital storage capacity)
- (f) Two way radios for communication
- (g) Any other equipment or facilities to enable him/her to carry out their duties effectively

Restrictions applicable to the approved CHSO's:

- (a) May not be appointed or be responsible for any other work activity on site.
- (b) May not be appointed as the Traffic Safety Officer in terms Clause B1502 (i), Section B, Part 3 of 4 of the Contract.

In the case of a contract where Contractors are employed, the CHSO must have the competence to evaluate the Contractors Health and Safety Plans.

The Contracts Manager assisted by the CHSO's will be held responsible for all H&S on the project. Senior Site Staff, Supervisors and Contractors are to follow systems, instructions etc. given by the CHSO at all times. No new workers or Contractors may commence work without the required site inductions and approval of the H&S Plan as submitted by Contractors.

The CHSO will be responsible for ensuring that daily Traffic Management is adequately managed for the entire construction site.

A monthly report compiled by the CHSO of all H&S activities and incidents is required by the end of the first week of each month, or at a date agreed to by the CHSA and the CHSO. Refer to "Annexure G" in these specifications.

The CHSO will be responsible for collating the H&S documentation (electronically) at the close out of the project. A list of the typical aspects are included in these specifications. Refer to "Annexure D" in these specifications.

## C8.2 Health and Safety Representatives and Committee (OHS Act 17 & 19)

C8.2.1 H&S Representatives are to be appointed following the start-up of the project, to be made up from both Principal Contractor, Contractors and Local Labour. Representatives from local labour can be appointed to represent such labour for the duration of the contract. Local labour should not be responsible for H&S duties unless appropriate training has been provided and the CHSO deems such labour competent to do so. Development in H&S of such labour would be an advantage to the community and the PC. H&S Representatives are to be actively involved with H&S and serve on the H&S Committee.

The CHSO shall ensure that there is a H&S Committee made up of active site staff and H&S Representatives, representing each work area, including all Contractors. Meetings will be held at least monthly, and more frequently if so instructed. Key site staff is to be appointed. Issues arising from the CHSA audits are to be discussed, as well as all H&S related issues.

Minutes are to be distributed and discussed among all workers and Contractors and records kept thereof. H&S Committee Meetings are to be held in the first week of each month

C8.2.2 The Health and safety Representatives as appointed by the SMME Contractors will also be required to train Safety Representatives for their respective works packages in the following fields to assist the CHSO appointed to manage the H&S for the SMME's

- (a) Safety Representative
- (b) HIRA
- (c) Incident Investigation
- (d) Level One First Aid
- (e) Basic Fire Fighting

## C8.3 Appointment of Competent Contractors (CR7.3)

C8.3.1 The Principal Contractor is to ensure compliance with the Clients minimum standards and all legislative requirements. The same H&S standards required of the PC are to be applied to all Contractors. A register of all Contractors and Suppliers is to be on file and kept updated at all times. The PC is to ensure there is sufficient funding for H&S compliance by each Contractor.

The following minimum aspects are applicable to any Contractor appointed:

- (a) The CHSO is to ensure a Contractors appointment and approval of H&S
- (b) documentation at least seven (7) working days prior to commencing work.
- (c) No Contractor may work under the PCs Compensation Registration Number. If required the PC may assist SMMEs with their registration with the Compensation Commissioner. However, such Contractors will not be able to commence work until proof of registration or Letter of Good Standing has been received.
- (d) No work may commence without the following documentation in place:
- (e) The Contractor is to have an appointment letter
- (f) Mandatory (37.2) agreements between parties in place.
- (g) Valid letters of Good Standing or proof of application (not older than 3 months)
- (h) OHS Plan Approval Letter issued by the PC

C8.3.2 The following aspects are applicable to Suppliers or short-term works (surveying, repairs, servicing, deliveries etc.). Cognisance is to be taken of the level of risk involved and the CHSO is to ensure the level of H&S documentation is appropriate:

- (a) Mandatory Agreements in place
- (b) Letter of Good Standing
- (c) TMS and Risk Assessments
- (d) Competencies for drivers and operators of delivery vehicles

## C9 GENERAL RISK MANAGEMENT

### C9.1 Health Risks and Medical Surveillance

A Contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed as per Annexure I and issued by an Occupational Health Practitioner CR7.8.

Medical surveillance will commence at pre-employment. All workers (including Professional Team, Principal Contractor and Contractors) are required to be in possession of a medical certificate of fitness prior to commencing work. Annual medical surveillance is required (unless identified as being required more frequently), as well as an exit medical.

Given the potential health risks the following aspects are to be included in each medical surveillance intervention:

- (a) Full medical, surgical and occupational history;
- (b) Full physical examination of all systems, and
- (c) Referral if required for the management of identified health issues that may affect the worker.

Specific testing for existing conditions and limitations relative to exposure could include, but are not limited to:

- (a) Audiometry (hearing tests);
- (b) Spirometry (lung function testing);
- (c) Chest X-rays;
- (d) Liver function testing (volatiles), and
- (e) Any other tests identified as relevant

#### C9.1.1 Noise Risks

All plant and equipment is to be measured for noise levels as soon as the majority of plant is on site (including Contractors construction plant and equipment).

The CHSO shall provide a list of all plant on site with their individual noise levels as assessed. Findings are to be discussed at the H&S Committee and H&S Representatives and Supervisors are to ensure that noise zones are identified and wearing of the appropriate PPE is enforced.

#### C9.1.2 General Environmental Conditions

Any spillages of substances which could be toxic to persons must be dealt with adequately. The PC must include his spillage procedure in the OHS Plan in the OHS File.

### C9.2 Emergency Procedures

Attention to emergency planning and procedures is very important. The full emergency plan must form part of the supporting documentation with the H&S Plan. The CHSA approval of all emergency plans and procedures is required prior to commencement on site. It is advised that the system should be simple and easy for any worker to follow. The plan must be updated should new information or risks be identified.

First aiders shall be available in each working team, and be able to work as a team when responding to any emergency on the project.

The procedure shall detail the response plan in relation to the works, and include at least (but are not limited to) the following key elements:

- (a) Appointment of a competent emergency response co-ordinator and wardens;
- (b) Lists of first aiders, and
- (c) Requirement in terms of identified risks:
- (d) Fire;
- (e) Explosions;
- (f) Falls from heights, and
- (g) Motor vehicle accidents.

The emergency plan is to ensure the inclusion of relevant local service providers. Such arrangements should be made with these persons prior to the commencement of the project. Local emergency telephone numbers must be displayed and made part of the emergency procedure.

#### C9.2.1 First Aiders and First Aid Equipment

Competent, trained First Aiders are to be formally appointed for the project. If the project is in a remote area, at least 3 workers are to be trained to Level 3. In urban areas and close to medical assistance 2 Level 3 first aiders are required. First aiders are to be available at all times and be able to cover each working

team. Further first aiders from the community or SMMEs, if not already accredited, are to be sent for SAQA accredited first aid training. Contractors are expected to ensure compliance and manage their own first aiders and equipment.

The PC shall provide an on-site First Aid Station with first aid facilities, including first aid boxes containing, at least the requirements to manage the type of emergencies identified. All Supervisors are to carry a Regulation 3 first aid kit in their vehicles at all times.

#### C9.2.2 Fires and Emergency Management

The PC shall ensure that any fire risks will be managed appropriately. Trained fire fighters shall be appointed at offices or areas where fire risks are deemed high. The emergency plan shall include the risk of fire at site camps, on site and related to any specific activities.

Fire extinguishers are to be appropriate for the risk and in sufficient numbers to deal with the type of fires that could occur. Every item of heavy plant, e.g. Graders, TLBs, Rollers etc., must be fitted with at least a 4.5Kg DCP fire extinguisher.

#### C9.2.3 Incident Management and Compensation Claims

The PC will ensure there is a management system to investigate all incidents. All serious incidents involving any form of disabling injury or fatality are to be reported to the Employer's Agent and CHSA telephonically immediately. This shall be confirmed in writing as soon as possible after the incident. Full details are to be included in the H&S meetings, and each site meeting. The details are also to be included in the CHSO monthly report.

#### C9.3 Personal Protective Equipment (PPE) and Clothing (PPC)

The wearing of the identified SANS approved PPE and PPC at all times is non-negotiable. The PC shall ensure that all workers (Including Contractors and other PCs) are issued with and shall wear PPE/PPC as per the OHS BoQ.

Adequate quantities of PPE shall be kept on site at all times. This shall include necessary PPE for visitors.

#### C9.4 Occupational Health and Safety Signage

On-site H&S signage is required. Signage shall be posted up at the appropriate fixed or temporary working areas, on scaffolding, and other potential risk areas/operations including vehicles. These signs shall be in accordance with the requirements of the General Safety Regulations or SANS requirements as amended. Signage is to be noted on the site drawings indicating where fixed signage is required.

Signage is to include (but not be limited to) the following:

- (a) 'no unauthorised entry';
- (b) 'report to site office';
- (c) 'site office';
- (d) 'beware of overhead work';
- (e) 'hard hat area' or other PPE / PPC requirements noted;
- (f) First aid box positions (including vehicles), and
- (g) Fire extinguishers

Signs shall be posted permanently or temporarily at areas of work onsite indicating that a construction site is being entered and that persons should take note of safety requirements.

The Contractor shall establish a system for controlling and recording entrance to the Site Office and camp area, which shall include a visitors site induction

#### C9.5 Induction of Employees and Visitors, General H&S Training

A formal induction programme is to be submitted as an addendum for approval with the H&S plan. Inductions must be carried out for all workers and visitors to the site. Pre-task training is required to ensure workers are familiar with the

risks and H&S measures of the work or tasks to be done. Such training is to be done at least daily. Records of inductions and pre-task training are to be kept in the H&S file.

Any person found on site without proof of induction will be removed from site until the proof of their induction is supplied.

#### C9.6 Testing Laboratory and the use of Radioactive Equipment

A joint laboratory may be required, or a service provider will be appointed for the project. The service provider will be seen as a Contractor, or where appointed as a joint laboratory, as a PC. All the H&S rules and requirements are to be met. Where appointed as a PC, the CHSA will be responsible for approving the initial H&S plan and ensuring on-going compliance. All other requirements of the construction PC are to be met. Each PC is to be familiar with the H&S rules of each party. Mandatory Agreements, Inductions and Emergency requirements among other are to be addressed and managed to ensure limitation of H&S risks.

The use of radioactive equipment for the measuring of compaction parameters shall conform to the requirements of the "Code of Practice for the safe use of soil moisture and density gauges containing radioactive sources" as published by the Department of Health: Directorate: Radiation Control Soil revised September 2001. TMS, risk assessments and the appropriate training will be required.

#### C9.7 Use of Support Work, Scaffolding and other Temporary Works

Where temporary works are envisaged on the project, these must be properly designed and signed off by a competent person. In these instances a competent person is defined as a Professional Employer's Agent (registered with ECSA) who has sufficient experience in the design of the type of temporary work in question to be able to assess the design. The appropriate competent persons are to be appointed to manage and monitor such works to the satisfaction of the Employer's Agent. Where the scaffolding, and /or support work is to be supplied and designed by a specialist company, care must be taken to comply with all the requirements of the supplier. Records and registers are to be properly completed and kept in the H&S file.

All formwork must be designed and approved by a competent person.

#### C9.8 Quarries, Borrow Pits, Crushers, Blasting and Batch Plants

It must be noted that the use of quarries and borrow pits falls under the Mine Health and Safety Act 29 of 1966 and its Regulations. Work in these areas must comply with these requirements and separate appointments and CoP's will be required.

Where single or multistage crushers are established on site, for quarries or borrow pits, the requirements of the MH&SA as well as the OH&SA and Regulations shall apply.

The Department of Mineral Resources (DMR), as well as the CHSA will carry out audits on this aspect of the project. Non-conformances raised by either party will require closeout within specified time periods negotiated at the time.

All blasting must comply with the Explosives Act No. 15 of 2003 and the OHSA and MH&SA or other legislation as applicable.

Blasting activities will only be allowed to take place from Tuesday's to Thursdays between the hours of 09:00 and 15:00. These times are to include the actual blast as well as clean-up of material.

If any blasting activities are to take place within 500m of any Eskom installation, including sub-stations and power lines. The Principal Contractor will be required to notify the local Eskom Depot Manager in writing seven (7) days before the blasting is to take place. This is due to Eskom having their own regulations regarding blasting in the vicinity of their installations

TMS and Risk Assessments will be required before blasting will be permitted. The Employer's Agent and CHSA will be required to approve the arrangements. Should a blasting Contractor be used, the requirements relating to the management of Contractors shall apply. A Blasting Application is attached, refer to "Annexure F" in these specifications.

#### C9.9 Management of Plant and Equipment

A substantial amount of large plant and equipment will be used. Close control of the PCs plant and equipment is required, including that of Contractors.

Daily monitoring of all plant and equipment is required prior to commencing work. Full lists of hired and own plant are to be available during the CHSA's audit. Copies of all daily inspection records are to be retained in the H&S file. Registers are not to be more than 1 week behind. Plant Hire or Haulage Contractors are to comply with the requirements, and comply with all H&S standards for the project.

All supervisory vehicles and construction plant are to be fitted with beacon/s capable of emitting an intermittently-flashing amber light in any direction.

All operators on site are to be competent and medically fit.

The following documentation is to be supplied for each operator on site:

- (a) Valid medical certificate issued by an OH Practitioner and Annexure 3
- (b) Valid driver's licence
- (c) Applicable PrDP for vehicle or plant
- (d) Appointment letter
- (e) Competency certificate for the specific vehicle or plant to be operated

Movement of plant in closures and in confined working areas is to be closely monitored and managed by the CHSO and CTSO and Supervisors. The blind spots of plant are to be taken into account and workers and Contractors protected accordingly.

#### C9.10 Excavations

Steep slopes require careful management. A Geotechnical report is available and is to be utilised to assess ground conditions. Shoring may be required, where indicated in the Geotechnical report or by the Employer's Agent. The PC is to ensure that the Community Liaison Officer (CLO) and the local community, schools and general public are aware of the dangers of open excavations.

All excavations are to be securely barricaded at all times. Only barrier netting will be allowed.

Initial barricading will be the responsibility of the Excavation Inspector. Once the excavations have been barricaded this information will be submitted to the CHSO for continuous monitoring.

Continuous monitoring of all barricading around excavations will be the responsibility of the Excavations Inspector CM, CHSO and CTSO.

#### C9.11 Inclement Weather

High levels of humidity and temperatures during the summer months may be experienced. Workers are at greater risk of heat exhaustion where the discomfort index rises above 100. A weather station has been allowed for to monitor temperature and humidity specifically. Should the discomfort index rise above 105, work may be partially or totally stopped.

During winter in areas known for cold weather, notice must be taken of the wind-chill factor. Workers must be supplied with adequate protective clothing and shelters provided as necessary.

Flooding may occur during the rainy season. High winds may be experienced and to limit dust or danger when working at heights, a wind speed should be set at which work may be stopped or the workers in an affected area moved.

The emergency plan is to include how these and other weather extremes identified are to be managed. The general aspects as detailed in the Environmental Regulations will be applied.

All decisions regarding work stoppage will be decided between the PC, the CHSO and the Employer's Agent.

#### C9.12 Internal Auditing

The PC will ensure that all their Contractors are internally audited by the CHSO at least monthly prior to the CHSA monthly audit by the CHSO and these audit reports are to be available for perusal by the CHSA during the audit.

The PC audits may be done more frequently where short term contracts are in place, or deemed high risk. Audit results will be acted upon and non-conformances and penalties issued. The Client, Employer's Agent or CHSA may act or require further outcomes if non-compliances are noted or unsafe acts are noted on

site. Internal audits are to include site conditions as well as ensuring H&S files are appropriate, and compliant.

### C9.13 Communication on Site

All communication on site will be done through the Employer's Agent to the PC and be in writing, including the issue and responses to non-conformances and H&S audit results.

### C9.14 Care of Workers on Site (Welfare)

Toilets for each sex where applicable, will be within reasonable distance of workers, or placed with each working team in safety, with reasonable privacy. Only bacterial or enzyme based products may be used in portable toilets; the use of products containing Formaldehyde is not allowed. The ratio of portable toilets on site will be a minimum of 1:30. Daily cleaning and increased removal of waste may be required if deemed necessary. Proof of safe disposal of waste will be required. Waste Removal Contractors or the PC are to ensure the appropriate H&S systems are available to limit exposure to sewage.

Hand washing facilities will be provided. The Environmental and Facilities Regulations will be adhered to at all times.

### C9.15 Discipline, Alcohol and Substance Abuse

All employees (management included) are to follow instructions given in the interest of H&S. Disciplinary action is to be imposed on those who do not follow such instructions or company rules or policies.

No person is allowed to work or access site if under the influence of alcohol or other substances that could impact on their own or others safety. The PC is to have a drug and alcohol policy available to manage such instances.

### C9.16 Electrical Equipment

In addition to the requirements of the Electrical Machinery Regulations and the General Machinery Regulations any electrical distribution board used for construction work shall be fitted with suitable earth leakage protection. Leads must be properly and firmly connected, they should be so placed as to avoid damage especially if they cross portions of the site. Plugs and sockets shall be in good and safe condition.

All electrical apparatus, other than electrical hand tools, shall have a physical "lock out" system which will prevent any operation other than that authorized by a supervisor. A "lock out" sign shall be displayed when the apparatus is not in use.

TMS and Safe Work Procedures will be required for all work involving electrical apparatus.

The relevant certificate of compliance (COC) must be issued for the site camp and any other establishment with regards to the project.

### C9.17 Traffic Accommodation

Traffic accommodation is covered under section 1500 of the COLTO specifications which form part of this contract and as amended by the requirements listed in the Amendments to the Standard Specification.

Traffic accommodation drawings will be according to SARTSM Chapter 13 Volume 2, and any changes suggested or required are to be discussed with the Employer's Agent.

Speed controls must be clearly stipulated and managed.

Speed limits must be strictly adhered to by all construction traffic. Unreasonable limits may be revised by the Employer's Agent and/or CHSA. Additional care must be taken where workers and construction traffic interface. This should be in the form of trained competent flag persons to direct vehicular traffic and adequate signage as directed by the Employer's Agent.

### C9.18 Transportation of Workers to and on Site

Transportation of workers shall comply with the relevant legislative requirements. Vehicles used to transport workers to, from, or on site, shall have secure seats with seat belts and be covered. No equipment or materials shall be transported in the same vehicle at the same time as workers.

The CTO's and their teams are to have vehicles which are designed to safely transport employees as well as equipment at the same time. Preferably crew cab type vehicles.

Tenderers must indicate in their OHS Plans what type of transport is envisaged for the general employees and how this will be managed.

## C10 HEALTH AND SAFETY FILE CLOSEOUT AT THE END OF THE PROJECT

The H&S File shall be closed out following the hand-over of the project. For closeout requirements refer to “Annexure D” in these specifications.

## C11 NON-CONFORMANCES

Should, at any time, the works, or part of the works, be stopped due to unsafe acts or non-compliance with the Clients or PCs H&S Plan; neither the PC nor any other Contractor shall have a claim for extension of time or any other compensation.

The following constitute examples of the types of non-conformances that will attract penalties:

<b>Minor Penalty: R500.00 / count</b>	<b>Medium Penalty: R1000.00 / count and a non-conformance</b>	<b>Severe Penalty: R5000.00 / count, a non-conformance and / or activity stoppage</b>
Non-use of PPE supplied	Toilets not supplied or regularly serviced Lack of drinking water	Contractors working without Health and Safety Plan approval
Non completion of registers for plant and equipment on site	Contractors not audited	Workers transported in contravention of the OHS plan or legal requirements
Lack of H&S signage at work areas	Working without training or the appropriate H&S TMS	Invalid Letters of Good Standing
Tools and equipment identified in poor condition during inspections	Legal non-conformances identified during the previous audit and not addressed within the agreed time frame	Non-compliance with traffic accommodation requirements: layout or physical conditions
	No monthly OHS report at site meeting to report on	Fall protection harness not tied off / not worn
	No certificates of fitness for workers as required	Any breach of legal requirements
	Working without approved TMS	

### C11.1 Failure to Comply with Provisions

Failure or refusal on the part of the contractor to take the necessary steps to ensure the safety of workers and the general public in accordance with these specifications or as required by statutory authorities or ordered by the Employer's Agent or the Client's H&S Agent, shall be sufficient cause for the Employer's Agent to apply penalties as follows:

(a) A penalty as shown in the Table above shall be deducted for each and every occurrence of non-compliance with any of the requirements of the PSHSS.

(b) In addition a time-related penalty of R500.00 per hour over and above the fixed penalty shall be deducted for non-compliance to rectify any non-conformance within the allowable time after a site instruction to this effect has been given by the Employer's Agent Representative or Employer's Agent. The site instruction shall state the agreed time, which shall be the time in hours for reinstatement of the defects. Should the Contractor fail to adhere to this instruction, the time-related penalty shall be applied from the time the instruction was given.

**FAILURE TO COMPLY WITH ANY OF THE ABOVE AS WELL AS ANY OTHER LEGAL REQUIREMENT WILL BE CONSIDERED A SERIOUS OFFENCE.**

## C12 MEASUREMENT AND PAYMENT

Payment items to cover the Principal Contractor's cost related to Occupational Health and Safety Compliance are included in the bill of quantities. These items are described under SCHEDULE C – OCCUPATIONAL HEALTH AND SAFETY in SECTION C : OCCUPATIONAL HEALTH AND SAFETY.

Item	Unit
C10.01 Preparation of Principal Contractor's site specific Health and Safety Plan	lump sum

The lump sum tendered shall include full compensation for the Principal Contractor to prepare and submit, for approval by the Employer's Health and Safety Agent, a site specific health and safety plan as detailed in these specifications.

Payment of the once-off tendered lump sum shall be made only once the Employer's Agent has issued the instruction to commence the works.

Item	Unit
C10.02 Principal Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	lump sum

The lump sum tendered shall include full compensation for the Principal Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations as detailed in these specifications.

Payment of the once-off tendered lump sum shall be made only once the Employer's Health and Safety Agent has verified that the Principal Contractor has fulfilled the required initial obligations.

Item	Unit
C10.03 Principal Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations	month

The tendered rate per month represents full compensation for that part of the Principal Contractor's obligations in respect of the Occupational Health and Safety Act and Construction Regulations which are mainly a function of construction time.

The tendered rate will be paid monthly, pro-rata for parts of a month, from the date on which the Employer's Agent issue the instruction to commence the works to the date on which the Employer's Agent issue the Certificate of Completion in terms of the contract.

Payment shall be made when the Employer's Health and Safety Agent has verified the Principal Contractor's compliance as part of his monthly audit report.

Item	Unit
C10.04 Provision of personal protective equipment (PPE):	
(a to ....) As per Bill of Quantities	number (No)

The unit of measurement shall be the number of each type of PPE, specified in the bill of quantities, issued to local labours employed by the Principal Contractor in terms of the contract.

The tendered rate shall include full compensation for the procurement, delivery, storage, issuing and maintenance (replacement PPE) of all PPE required by local labours of the Principal Contractor. Payment shall be based on first time issuing of PPE, specified in the bill of quantities, to local labours employed by the Principal Contractor in terms of the contract. The issue register for PPE as kept by the Construction Health and Safety Officer shall be used to verify quantities of PPE claimed under this item.

General:

Only first PPE items, specified in the bill of quantities, issued to local labours employed by the Principal Contractor shall be paid for under this pay item. Replacement PPE issued to local labours shall not be paid for under this pay item and the cost thereof shall be deemed to be included in the rate of each type of PPE as specified in the bill of quantities. Any other PPE, not specified in the bill of quantities, issued to local labours such as standard overalls and standard workshop safety equipment shall be at the Principal Contractor's own cost.

The cost of required PPE for the Principal Contractor's site staff, operators and skilled labours shall be at the Principal Contractor own cost.

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

C10.05 Provision of full time Construction Health and Safety Officer:

- |   |       |
|---|-------|
| (a) To manage the Principal Contractor's H&S obligations on site (No. required) | month |
| (b) To manage the appointed SMME's H&S obligations on site (No. required)       | month |

The tendered rate per month represents full compensation for providing full time Construction Health and Safety Officer(s) in terms of these specifications; to manage the Principal Contractor's H&S obligations on site for subitem C10.05(a) and to manage the appointed SMME's H&S obligations on site for subitem C10.05(b).

The tendered rate shall include full compensation for employment of full time Construction Health and Safety Officer(s) in terms of these specifications, overheads, provision of transport and all other equipment and resources necessary to carry out their duties effectively.

The tendered rate will be paid monthly, pro-rata for parts of a month for:

- (i) Subitem C10.05(a), from the date on which the Employer's Agent issue the instruction to commence the works to the date on which the Employer's Agent issue the Certificate of Completion in terms of the contract
- (ii) Subitem C10.05(b), from the date on which the first SMME is appointed by the Principal Contractor to the completion of the last SMME works.

Item	Unit
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C10.06 Costs of medical certificates and medical surveillance:

- |   |             |
|---|-------------|
| (a) Initial (baseline) medical, including audiometric and lung function testing | Number (No) |
| (b) Annual or Periodic examinations   | Number (No) |
| (c) Exist examinations  | Number (No) |

The unit of measurement shall be the number of medical testing and surveillance of local labours employed by the Principal Contractor in terms of the contract.

The tendered rates shall include full compensation for the obtaining of baseline, periodic (at least annually) and exit medical certification and conducting medical surveillance for all workers and especially operators of construction vehicles and mobile plant as contemplated in CR 23; Workers at Heights CR16 and workers exposed to hazardous chemicals including bituminous fumes under Regulation 7 of the HCSR; for temporary workers and workers exposed to noises at or above the limits given in the Noise-Induced Hearing Loss Regulations, as stipulated above.

Chest X-rays will be required in the case of local labours who may be exposed to high concentrations of dust (silica) working in the quarry and/or borrow pits

Medicals and medical surveillance of the Principal Contractor's site staff, operators and skilled labours shall be at the Principal Contractor's own cost.

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

C10.07 Environmental monitoring:

- |   |             |
|---|-------------|
| (a) Air quality monitoring  | Number (No) |
| (b) Compliance with Amendment of the Occupational Exposure Control Limit for Silica in Table 1 of the Hazardous Chemical Substances Regulations (February 2010) | Number (No) |
| (c) Air sampling in situ  | Number (No) |
| (d) Analysing sample  | Number (No) |
| (e) Tests on workers  | Number (No) |

The unit of measurement shall be the number environmental monitoring, sampling and testing required in terms of the contract.

The tendered rate shall include full compensation for testing and monitoring the environment in respect of general health hazards including the presence of hazardous chemicals, as required by the Construction Regulations and the Mine Health and Safety Act. Furthermore the costs shall include for all air monitoring, air sample testing and tests on workers for silica exposure as required by the above amendment. It should be noted that these items must be under the control of an authorised inspection authority which would normally be a registered H&S Hygienist or Occupational Health Practitioner familiar with the Hazardous Chemical Regulations and include for all necessary costs in this regard including travelling to and from site and all required reporting.

Item	Unit
C10.08 Establishment of noise zones	Number (No)

The unit of measurement shall be the number of noise zones established on site in terms of Regulation 9, of the Noise-Induced Hearing Loss Regulations.

The tendered rate shall include full compensation for establishment of noise zones on site, including any workshops, in terms of Regulation 9, of the Noise-Induced Hearing Loss Regulations.

All equipment established on site by the Principal Contractor are required to have noise zones established before coming onto site and therefor any noise level testing for establishment of noise zones are at the Principal Contractor's own cost.

Where a zone has previously been established for a particular item of equipment within the last two years, the test need not be repeated but must be kept valid for the duration of the contract.

Item	Unit
C10.09 Payment for Health and Safety Representatives at meetings	hour (hr)

The unit of measurement shall be the number of hours appointed Health and Safety Representatives attend monthly meetings.

The tendered rate shall include full compensation for the loss of productive time while attending monthly meetings as specified in these specifications.

Payment shall be based on attendance registers of monthly meetings submitted to the Employer's Health and Safety Agent for verification.

Item	Unit
C10.10 Provision of First Aid Boxes	Number (No)

The unit of measurement shall be the number of first aid boxes provided by the Principal Contractor on site.

The tendered rate shall include full compensation for the provision and maintenance of first aid boxes in terms of these specifications.

Item	Unit
C10.11 Transportation of workers	month

The tendered rate per month represents full compensation for the safe transportation of workers in terms of these specifications.

The tendered rate will be paid monthly, pro-rata for parts of a month, from the date on which the Employer's Agent issue the instruction to commence the works to the date on which the Employer's Agent issue the Certificate of Completion in terms of the contract.

Item	Unit
C10.12 Submission of the Occupational Health and Safety File	lump sum

The lump sum tendered shall include full compensation for the Principal Contractor's to fulfil all his close-out obligations in respect of the Occupational Health and Safety Act and the Construction Regulations and has submitted his Health and Safety File complete as envisaged in these specifications to the Employer's satisfaction.

The Principal Contractor's Health and Safety File must be submitted to the Employer's Health and Safety Agent prior to the Employer's Agent issuing the Certificate of Completion in terms of the contract.

Item	Unit
C10.13 Construction Work Permit Board	lump sum

The lump sum tendered amount shall include compensation for the Principal Contractors obligation to prominently display the permit number at the site entrance, in respect of the Construction Regulations.

## ANNEXURE A CONTENTS AND NUMBERING FOR THE H&S PLAN

1. Index of the H&S Plan
2. Letter of Good Standing from Workman's Compensation Commissioner or with a licensed compensation insurer as contemplated in COIDA
3. Appointment letter from the Employer
4. Signed Section 37(2) Agreement between the Employer and the Principal Contractor
5. Occupational Health & Safety Policy
6. Quality Policy
7. Environmental Policy
8. Waste Management Policy
9. HIV AIDS Policy
10. Alcohol / Drug Policy
11. PPE / PPC Policy
12. Health & Safety BoQ
13. Employers Site Specific Safety Specification
14. Project Specific Baseline Hazard Identification and Risk Assessment
15. Site Specific Risk Assessment
16. Technical Method Statements, Safe Operating Procedures and Safe Work Procedures for the first three (3) months planned project works
17. Site Specific Organogram
18. Signed Appointment Letters and CV's for the following Site Personnel
  - 18.1. Responsible Person 16.2
  - 18.2. Construction Manager CR8.1
  - 18.3. Assistant Construction Manager CR8.2
  - 18.4. Construction Health and Safety Officer CR8.5
  - 18.5. Construction Supervisor CR8.7
  - 18.6. Risk Assessor CR9
  - 18.7. Construction Traffic Safety Officer S 8(2)(d)
  - 18.8. Incident Investigator GAR9
  - 18.9. First Aider GSR3.4
19. A Site Plan indicating the following;
  - 19.1. Positions of emergency assembly points and equipment at the site camp, or each fixed working area
  - 19.2. Traffic routes for plant and pedestrians as well as parking areas
  - 19.3. Storage areas (flammable stores, materials etc.)
  - 19.4. Location of facilities
  - 19.5. Electrical installations
20. First Aid, Accident, Incident and Emergency management procedure
21. Safety and Access Signage management procedure
22. Traffic Safety management procedure
23. Waste management procedure
24. Hazardous chemical substances management procedure
25. Construction plant and machinery management procedure
26. Public Health and Safety management procedure
27. Employee facilities management procedure
28. PPE management procedure
29. Occupational medical examinations procedure
30. Safety inspections and Inspection register management
31. Internal Audit management procedure

## 32. Contractor management procedure

### **ANNEXURE B CONTENTS AND NUMBERING SYSTEM FOR THE H&S FILE**

Approved H&S Plan (as submitted at Pre-Construction Stage for approval by the Employer)

All Construction/TMS and SWP are to be generated by senior site personnel, and the appropriate Risk Assessments developed therefrom in conjunction with the CHSO.

The TMS and SWP are to be signed by the CM, CHSO and EAR on site

The construction team is to ensure that the CHSO is kept up to date with all planned activities, to ensure all H&S requirements are met.

1. Index of the H&S File
2. Updated COIDA Letter of Good Standing
3. Updated organizational organogram and signed Letters of Appointment
4. Registrations, qualifications and other proof of competency
5. Training and Competency Matrix
6. Medical Certificates of Fitness
7. Risk monitoring and review records
8. Procedures
  - 8.1. Training and OHS competency
  - 8.2. General record keeping
  - 8.3. Issue based risk, risk review and risk monitoring management procedure
  - 8.4. Night work
  - 8.5. Excavation management (include hard rock)
  - 8.6. Temporary work management
  - 8.7. Fall protection plan
  - 8.8. Demolition management
  - 8.9. Electrical management
  - 8.10. Delivery, offloading, stacking, storage and housekeeping
  - 8.11. Concrete and batching management
  - 8.12. Hired plant and machinery management
  - 8.13. Lifting and rigging management
  - 8.14. Water environments
9. Registers
  - 9.1. Issue based Risk Assessments
  - 9.2. Inspection Registers
  - 9.3. DSTI records
  - 9.4. MS & SWP training records
  - 9.5. Induction training programme & records
  - 9.6. Visitor Induction records
  - 9.7. Inspection & Maintenance records
  - 9.8. PPE Issue and Condition check
  - 9.9. Incident registers & Investigation reports
10. COIDA accident and incident management
11. Waste manifests
12. Safety Data Sheets
13. Internal audits
14. Letters of Approval Contractors H&S plan
15. Letters of Appointment of Contractors
16. Audits by Employers Agent
17. Corrective/Preventive action plans for clients audits
18. Contractors audits
19. Certified documents and Permits (CoC – PV Test – Lifting Equipment Certificates – Haz.Substance Permits)
20. Archived Documents

## ANNEXURE C CONSTRUCTION APPOINTMENTS

No	Designation	Legal Reference
1	Principal Contractor	CR 5.1(k)
2	Contractor	CR 7.1(c)(v)
3	Construction Manager	CR 8.1
4	Assistant Construction Manager	CR 8.2
5	Construction Health and Safety Officer	CR 8.5
6	Construction Supervisor	CR 8.7
7	Assistant Construction Supervisor	CR 8.8
8	Risk Assessor	CR 9.1
9	Fall Protection Plan Developer	CR 10.1(a)
10	Fall Protection Plan Supervisor	CR 10
11	Temporary Works Designer	CR 12.1
12	Temporary Works Supervisor	CR 12.2
13	Excavation Supervisor	CR 13
14	Blaster	CR 13.2(k)
15	Demolition Supervisor	CR 14
16	Explosive Method Plan Designer	CR 14.11
17	Scaffold Supervisor	CR 16.1
18	Suspended Platform Supervisor	CR 17.1
19	Rope Access Work Supervisor	CR 18.1(a)
20	Material Hoist Inspector	CR 19.6
21	Material Hoist Inspector	CR 19.7(a)
22	Bulk Mixing Plant Supervisor	CR 20.1
23	Bulk Mixing Plant Operator	CR 20.2
24	Explosive Actuated Fastening Device Controller	CR 21.2(g)(i)
25	Construction Vehicle and Mobile Plant Inspector/Operator	CR 23.1(d)(k)
26	Electrical Installation Controller	CR 24(c)
27	Electrical Installation Inspector	CR 24(d)
28	Housekeeping Supervisor	CR 27
29	Stacking and Storage Supervisor	CR 28
30	Fire Extinguisher Inspector	CR 29(h) & PER 19
31	Assigned Responsibilities	OHSA S 16.2
32	Scaffold Inspector	SANS 10085-1:2003 Item 16.1(c)
33	Scaffold Erector	SANS 10085-1:2003 Item 16.1(a)
34	Traffic Control Planner	OHSA S 8.2(d)
35	Traffic Control Supervisor	OHSA S 8.2(i)
36	Emergency / Fire Co-ordinator	OHSA S 8
37	Incident Investigator	GAR 9
38	First Aider	GSR 3
39	Ladder Inspector	GSR 13A
40	Lifting Machine Operator	DMR 18
41	Portable Electrical Equipment Inspector	EMR 9
42	Radiation Protection Officer	National Nuclear Regulatory Act 1999
Additional appointment could be added as and when required		

## ANNEXURE D CLOSE OUT REQUIREMENTS

CONSOLIDATED HEALTH & SAFETY FILE			
Construction Regulations - February 2014 7(1b,e & f)			
1	DEFINITION: CONSOLIDATED HEALTH AND SAFETY FILE		
	A file or other means containing record in permanent form, of the information required as contemplated in the Construction Regulations of February 2014: Regulation 7(1b, e & f)		
	The H&S files for the Principal Contractors and all Contractors require closure and handover to the Client at the completion of the project.		
	The following list is an example of what should be included, but is not exhaustive.		
	The OHS Agent or the Client may require further information at the time of completion and the Principal Contractor is to ensure that all instructions are met. Documentation would include all records from the start of the project.		
	Daily or monthly plant inspection records are not required unless they are related to an accident.		
	All records to be in electronic format and submitted to the OHS agent for approval in adequately formatted lists and folders.		
	Layout should be logical and in the same order as in the site files.		
REQUIRED DOCUMENTATION			
2	The Principle Contractor submits a formal letter to the project appointed Agent, consolidating and Confirming the H & S history of the project.		INCLUDED
	The following summary of information is required in the letter, but not limited to:		YESNO
a	Client H&S Specification		
b	Principal Contractor's OHS Plan(s)		
c	Organograms		
d	Legal Appointments		
e	Notification to Department of Labour of commencement of work		
f	Letters of Good Standing for the Project		
g	Full files for all Contractors as well as their close out reports		
i	List of Contractors		
ii	Letters of Approval of Contractors		
iii	Mandatory Agreements		
iv	Letters of Good Standing		
v	Appointments		
h	Incident Records		
	Non- Conformance records		
	Agent's Audits		
	TMS		
	Risk Assessments		
	Safe Work Procedures		
	Medical surveillance certificates of fitness. Medical records are to be kept according to the OH&S Act as amended.		
	All drawings for temporary structures (suspended beams/scaffolds etc)		
	Copies of test results, policies and procedures for environmental monitoring (silica, noise, dusts etc.)		
Please Note:			
3	The Client's appointed OHS Agent will verify the submission of the Principal Contractor in writing before handing the above documentation to the Client		
4	The Client / Agent need to evaluate the SHE performance of the Principal Contractor i.e. Compliance, Performance, Quality and refer same in their cover letter which will be added to the Principal Contractor's portfolio of evidence.		
5	Defect and Liability Period		
	The H&S files are to be kept 'live' for the defect and liability period by the Principal Contractor, including those of their Contractors. Any work required during the defect and liability period will require an assessment of the H&S file by the OH&S Agent prior to any work commencing. A copy of the as-built Drawings is to be placed on file by the Designers once complete.		

**ANNEXURE E SPECIFIED HAZARDOUS CHEMICAL SUBSTANCES**

PRODUCT	POTENTIAL HEALTH OR OTHER RISKS
CEM II grade 32,5N / Cement	Hand mixing may occur, will be used for structures, stabilizing. 50kg bags delivered on pallets, ergonomic risk from handling, dust exposure, chromates. Eye, skin and respiratory irritant
Shutter Oil	Usually hand application prior to placing formwork in position. Volatiles present. Skin and respiratory irritant.
Penetration grade bitumen 70/100	Vapours, overexposure to fumes- loss of consciousness, respiratory problems.
Polymer modified bitumen-Class S-E1 (Hot applied)	Avoid skin contact with hot emulsions, Burns
Polymer modified emulsion (cold Applied)	Principal Contractor to ensure use of SDSs and appropriate protection measures
Petroleum based pre-coating fluid	Danger of cutaneous absorption, irritation to the skin
Polymer modified binder conforming to class A-E2	Principal Contractor to ensure use of SDSs and appropriate protection measures
Asphalt	Inhalation will cause headaches, nausea, respiratory, eye and skin irritation. Carcinogen. Burns from hot mix. Hydrogen Sulphide and carbon monoxide emitted as by-product. Breaking or cutting will release silica (crystalline)
Retro-reflective Road paint	High levels of volatiles, Products have narcotic effect. Carcinogen
Lime	Dust, eye and respiratory irritation
Petrol/Diesel/Lubricants	Storage tanks/ bowsters on site. Fire, spillage, fumes
Superphosphate Fertilizers	Eye, respiratory and skin irritant
Limestone Ammonium Nitrate Fertilizer (LAN)	Prolonged skin or eye contact could cause irritation. Explosive and will release toxic fumes if heated
Formula 2:3:2 Fertilizer	Prolonged skin or eye contact could cause irritation. Explosive and will release toxic fumes if heated.
Creosote (pre-treated poles)	Eye and skin irritation and minor burns, carcinogen
Herbicides and Ant Poison	Type not specified, but will be used. Principal Contractor to ensure use of SDSs and appropriate protection measures
Epoxies and Epoxy Resins	Type not specified, but will be used. Principal Contractor to ensure use of SDSs and appropriate protection measures
Coatings	Type not specified, but will be used. Principal Contractor to ensure use of SDSs and appropriate protection measures
Grouts	Will be determined by the Principal Contractor; various grouts will be required, cementitious or other, may contain silica (crystalline - quartz), hexavalent chromium, respiratory, skin and eye irritant

# ANNEXURE F REQUEST TO CONDUCT BLASTING ACTIVITIES

## PART 1: REQUEST TO CONDUCT BLASTING ACTIVITIES

Request Date:						
Blast Date:						
Blast Time:						
Blasting Company:						
Project:						
Project Number:						
Blast Number:						
Request Submitted By:						
Blast Details						
Blaster Name:						
Location GPS:						
Chainage No:						
Average Hole Depth:						
Number of Holes:						
Type of Explosives:						
Estimated Quantities of Explosives to be Used:						
Estimated Rock Volume:						
Blasting Company's Documentation						
Blasting Certificate of Registration:						
Letter of Good Standing:						
Explosives Permit:	No:		Expiry Date:			
Explosives Transport Permit:	No:		Expiry Date:			
Risk Assessment:						
Legal Appointments:						
Competency Certificates:						
Hazards						
Distance to Nearest Structures and Services in meters:						
Vibration Recorder to be Placed at:						
Photographic Evidence of Nearby Structures:						
Copies Attached:						
Other Comments:						
Notices Distributed to:	Contractor	Client	Employer's Agent	Safety Agent	Community	Media
Accepted by Principal Contractor:	Date		Name		Signature	
Construction Manager:						
Construction Safety Officer:						
Accepted by Client Representatives:	Date		Name		Signature	
Employer's Agent:						
Construction Safety Agent:	Date		Name		Signature	
Refused by Client Representatives:						
Employer's Agent:						
Construction Safety Agent:						
Reason for Refusal:						

PART 2 POST BLAST REPORT			
Blast Date:			
Blast Time:			
Blasting Company:			
Project:			
Project Number:			
Blast Number:			
Report Submitted By:			
Blast Details			
Blaster Name:			
Location GPS:			
Chainage No:			
Post Blast Report			
Average Vibration:			
Damage to Structures, Vehicles and / or Services:			
Photographic Evidence of Damages:			
Injuries to People / Animals			
Other Comments:			
	Date	Name	Signature
Received by Principal Contractor:			
Construction Manager			
Construction Safety Officer			
Received by Client Representatives:			
Employer's Agent:			
Construction Safety Agent			

## ANNEXURE G CONSTRUCTION HEALTH AND SAFETY OFFICER MONTHLY REPORT

### II. MONTH ENDING: YEAR:

Manpower Returns		Current Month	Project to Date
Total Number Principal Contractors employees			
Total Number Contractor employees			
Total Number of Contractors			
No. Shifts/Days Worked (incl. Weekend & Public Holidays)			
Man Hours Worked			
Total for Principal Contractor			
Total for Contractor/s			
Total All Man-Hours For Current Month	Total All Man-Hours Worked	LTI Free Hours (From Last Incident)	Target LTI Free Hours

List of Contractors		No. of Employees		No. of Vehicles
Incident Report	Current Month	Project to Date	Investigation Status	
No. of First Aid Cases				
No. of Medical Cases				
No. of Lost Time Injury (LTI) excluding Fatalities				
No. of Occupational Disease Cases				
No. of Fatalities				
No. of Reportable Incidents				
No. of Environmental Incidents				
No. of Property Damage				
No. of Near Misses				
No. of Vehicle related Accidents				
Disabling Injury Frequency Rate	Current Month		Project to Date	
(LT Injuries x 200 000) / man hours				

#### Incident Details

Incident No.	Brief Details (incl. Nature of Injury, e.g. Laceration on Right Hand)	Status of Injured Employee/s	Incident Type (e.g. Fall to Below, Struck By)
Incident Analysis and Trends and Action Plans			
(Including new or revised risk assessments)			
Corrective Actions Implemented	Actioned By		Date Completed

OHS Training	Current Month	Year to Date
Induction		
Safety Representative		
First Aid		
Fire Fighting		
Scaffold Erection and Inspection		
Vehicle (stipulate)		
Safety Harness		
Other		
Other		

Site Audits & Inspections			
Management			
Client			
External			
Additional Comments / Remarks (e.g. site issues or concerns)			
<u>Awards or Achievements:</u>			
Submitted By			
Name	Designation	Signature	Date

## ANNEXURE H NON-CONFORMANCE CLOSEOUT REPORT

NON-CONFORMANCE CLOSE-OUT REPORT			
Project			
Client			
Principal Agent			
Principal Contractor			
CHSA			
OHS Audit No		Date of Audit	
Non-Conformance No		Non-Conformances to Date	
COMMENTS ON WHAT WAS DONE (ATTACH PROOF IF AVAILABLE)		DATE COMPLETED	VERIFIED BY CLIENT / AGENT
PHOTOGRAPHIC EVIDENCE			
1		2	
3		4	
5		6	
Engineer's Representative (RE)		Principal Contractors - CM (8.1)	
Date		Date	
Principal Contractors CHSO (8.5)		Client / CHSA	
Date		Date	

ANNEXURE I      EXAMPLE OF MEDICAL CERTIFICATE OF FITNESS

ANNEXURE 3 OCCUPATIONAL HEALTH AND SAFETY ACT, 85 OF 1993      CONSTRUCTION REGULATIONS, 2014 Medical Certificate of Fitness		
Name of Employee:	ID Number:	Co. Number:
	*Possible Exposures e.g. Noise, Heat, Fall Risk, Confined Space, etc.	*Job Specific Requirements e.g. Operating Mobile Crane, Digging Trenches, Erecting Formwork & Support Work, etc.
		*Protective Equipment e.g. Dust Respirator, (Light Duty), Welding Gloves, etc.
*Occupation  e.g. General Worker, Welder, Bricklayer, Steel Fixer, Mobile Crane Operator, etc.		
* The Employer to complete the information in the spaces marked with an * before sending the Employee for a medical examination		
Declaration by the Medical Examiner:  I certify that I have, by examination and testing, using the above criteria specified by the employer, satisfied myself that the above mentioned employee is fit to perform the duties as described by the employer in the matrix above.		
Occupational Medicine Practitioner / Occupational Health Nursing Practitioner: (Please Print Name):		
Signature: _____ Date _____ ; _____		
Address: _____		

## ANNEXURE JDESIGN HAZARD IDENTIFICATION AND RISK ASSESSMENT

DESIGN HAZARD IDENTIFICATION AND RISK ASSESSMENT				Low	Med	High
Risk Rating Multiplier: Low = 1; Medium = 2; High = 3				1	4	12
Baseline Raw Design Risk - Typical behaviour given the design / factors present				2	6	18
Residual Risk - The extra factors noted that must be in place to reduce the risk				3	8	27
Low Risk - Does not mean that the activity is safe, or that potential injuries and / or fatalities are eliminated						
Key Risks will be assessed and reported on in the Site Specific H&S Specification						
New tasks require re-assessment as the project progresses						
GAR	General Administration Regulations	GMR	General Machinery Regulation			
GSR	General Safety Regulations	OHS Act	Occupational Health and Safety Act and Regulations 85 of 1993			
SANS	South African National Standards	SWP	Safe Work Procedures			
SABS	South African Bureau of Standards	MS	Technical Method Statements			
NIHL	Noise Induced Hearing Loss	HCS	Hazardous Chemical Substances			
		PrDP	Professional Driving Permit			

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences f an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
SERIES 1000 - GENERAL REQUIREMENTS AND PROVISIONS												
1202	Services- Eskom, Telkom lines, underground water, and sewage. Telkom and Eskom will remove own services where required.	Yes	PC will expose and protect services.	2	2	2	8	Competent supervision and adequate pre-task training will be required	2	2	1	4
1202		Yes	May be illegal connections	2	2	2	8	Removal of asbestos pipe to be according to the Asbestos Regulations	2	2	1	4

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
1202		Yes	Asbestos pipes	2	2	2	8	All excavations open longer than 1 shift are to be demarcated with netting or similar, at least 1m from the edge of the excavation. MS and SWP are required for the exposure of services, and are to be approved by the ER prior to commencing the activity	2	2	1	4
1219	Water	Yes	All water will be treated as contaminated and maybe unfit for human consumption	3	2	2	12	Treatment of contaminated water will be required, water testing will take place regularly. Tankers of water may be required to be brought in from other sources	3	2	1	6
1219		Yes	Potable water is available in the towns and rural water schemes are available for use. Alternate water sources/supplies will have to be approved by DWA	3	2	2	12		3	2	1	6

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
1302	Construction plant workshops and camps to be established and maintained by the contractor for the duration of the contract	Yes	A number of camps may be established and maintained for various activities to construct what is required to undertake the works	2	3	3	18	The PC will be required to submit with his pre- tender H&S plan the TMS, risk assessments and supporting documentation to ensure overall activities are managed.	2	3	2	12
1402	Offices and Laboratories	Yes	Offices required for staff and a Laboratory for onsite testing	2	3	3	18	All buildings to be to SANS requirements and according to specifications in the tender document	2	3	2	12
1403	Housing	Yes	Housing for the Employer's Agents employees who operate the laboratory	2	3	3	18	All buildings to be to SANS requirements and according to specifications in the tender document	2	3	1	6

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
1404	Electricity, Telkom, Water, Sewerage, Gas and Sanitation	Yes	Depends on the site chosen by the PC. May be septic tanks and or French drainage system. Temporary chemical toilets for use by workers Local or imported water supply, ESKOM, Telkom and gas supply River water is to be treated as contaminated, and workers may well be exposed when working around bridges and culverts	2	3	2	12	The ECO to provide the requirements relative to sanitary requirements on site. The PC will be required to submit with his pre- tender H&S plan the TMS, risk assessments and other supporting documentation to ensure start up activities are adequately managed. Please ensure adequate servicing of portable toilets in the very hot months, as the chemicals deteriorate more rapidly. Formaldehyde is used in the portable toilets	2	3	1	6

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
1502(a)	Traffic Safety	Yes	The whole site will require traffic accommodation All deviations and Stop/Go controls to be conspicuously sign posted There will be public and construction traffic on the road during construction	3	3	3	27	Construction drawings to be provided, all accommodation in line with SARTSM Ch. 13 Vol. 2. TMS and risk assessments to reflect management of same. Dedicated Traffic Safety Officer is to be employed to control these requirements	3	3	2	18
1502(b)(f)	Temporary deviations	Yes	All deviations and Stop/Go controls to be conspicuously sign posted There will be public and construction traffic on the road during construction	3	3	3	27	Construction drawings to be provided, all accommodation in line with SARTSM Ch. 13 Vol. 2. TMS and risk assessments to reflect management of same. Dedicated Traffic Safety Officer is to be employed to control these requirements	3	2	1	6

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
1502(e)(h)	Are there specific concerns regarding public access?	Yes	All deviations and Stop/Go controls to be conspicuously sign posted There will be public and construction traffic on the road during construction	3	3	3	27	Construction drawings to be provided, all accommodation in line with SARTSM Ch. 13 Vol. 2. TMS and risk assessments to reflect management of same. Dedicated Traffic Safety Officer is to be employed to control these requirements	3	3	2	18
1502(i)	Traffic Safety Officer (TSO) will be appointed?	Yes	All deviations and Stop/Go controls to be conspicuously sign posted There will be public and construction traffic on the road during construction	3	3	3	27	Adequate competent TSO's to be appointed. TSO shall not be H&S Officer	3	3	2	18
1503(a)	Construction will be under traffic?	Yes	Construction in half widths and single lane closures will be used for the project (24 hr) Stop/Go required	3	3	3	27	Traffic safety teams to maintain 24 hour closures, construction drawings to be provided, all accommodation in line with SARTSM Ch 13 Vol 2. Stop/Go controllers are not to exceed specified shift hours	3	3	2	18

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
1503(b)	Erection of signage	Yes	Digging of holes and mounting of signs on poles, planting of poles, use of lifting equipment	3	3	3	27	PPE, Method Statement, Training, Lifting equipment to be certified as per DMR and other requirements of the OHS Act	3	3	2	18
1511	Dust from vehicles on the road	Yes	Dust suppression to be carried out in built areas and where employees are working and to improve driving visibility	3	3	3	27	Water tankers to spray roads as and when required	3	3	2	18
1700	Clearing and Grubbing	Yes	All Material to be stock piled for further use. Conservation of top soil	3	3	3	27	Permission from the Employer's Agent for the disposal of materials TMS and Environmental approval	3	3	2	18
SERIES 2000 – DRAINAGE												
2100	Drains	Yes	Open earth drains, Banks and dykes and sub-soil drains	2	2	2	8	Trenches kept to a minimum depth/ Excavations checked on a daily basis by competent person TMS, Risk Assessments, PPE	2	2	1	4

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
2200	Prefabricated culverts Concrete kerbing, concrete	Yes	Where insitu casting is not preferred	2	2	2	8	Prefabricated culverts are to be to design specification. PPE, moving of castings with lifting equipment, Method Statement and Risk Assessment	2	2	1	4
2300	channelling, chutes and down pipes and concrete linings for open drains	Yes	Pre-cast kerbs, insitue concrete pavement construction in rural areas	2	2	2	8	Trenches kept to a minimum depth/ Excavations checked on a daily basis by competent person TMS, Risk Assessments, PPE	2	2	1	4
SERIES 3000 - EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE												
3100	Borrow Pits	Yes	Borrow pits will be spread to cover most of the site.	3	3	2	18	All borrow pits are to be fenced and only authorised personnel granted access. TMS All operators to be competent in their specific operations Rehabilitation of borrow pits	3	2	1	6

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
3200	Stock piling	Yes	Stock piling will take place at the different sites along the route	3	3	2	18	Permission from the Employer's Agent for the disposal of materials TMS and Environmental approval are to be fenced and are to comply with the relevant safety regulations	3	2	1	6
3300	Haulage of material in tipper trucks	Yes	Material will be hauled on the entire project from a commercial source and borrow pits	3	3	2	18	Dust management, suppression, daily registers and competent operators TMS and SWP required	3	2	1	6
3400	Pavements	Yes	Excavation, compaction and placement of pavement	3	2	2	12	Alternative safe pedestrian passage is required where pavements are under construction TMS and SWP required	3	2	1	6
3500	Stabilization	Yes	Use of chemicals to be in line with safety regulations and MSDS's	2	3	3	18	PPE, MSDS, Method statements and SWP required	2	3	2	12
3600	Crushed stone base	Yes	Transportation and storage on site Hauled from commercial source and stock piles	3	2	2	12	TMS and SWP required	3	2	1	6
SERIES 4000 - ASPHALT PAVEMENTS AND SEALS												

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
4102 4300 4600	Single and double layer seals will be used with slurry will be used. Mixes may change during the project. Applications may be “hot” or “cold” mixes	Yes	SDS's, fire fighting and first aid equipment, bunded storage areas and correct disposal from site	3	3	3	27	First aiders, PPE, training, induction, medical surveillance, SWP and supervision	3	3	2	18
4103a,b,c,d 4303	Use of binders, water carts, rotary brooms, hand tools, spreaders, cutters, rollers and hand spraying	Yes	Operation may be conducted by Principal Contractor or Contractor	3	3	3	27	Noise Levels, PPE, supervision, training, induction	3	3	2	18
4302	Chips will be coated on site	Yes	Inhalation of fumes, exposure to dust	3	3	3	27	Limit exposure, Training, Induction, medical surveillance and PPE. Correct storage, washing facilities	2	3	1	6
4400	Cationic spray emulsion bitumen will be used. Material will be used at different temperatures 0C to 220C	Yes	SDS's, Inhalation of fumes, burns	3	3	3	27	First aiders, PPE, training, induction, medical surveillance, SWP and supervision	3	3	2	18
SERIES 5000 - ANCILLARY WORKS												
5100	Stonework	Yes	Transportation of material to site. Manual labour. Vehicle traffic	3	3	3	27	TMS and SWP required PPE, DD Green gloves	3	3	2	18

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
5200	Gabions	Yes	Transportation of material to site. Manual labour. Vehicle traffic	3	3	3	27	TMS and SWP required PPE, DD Green gloves	3	3	2	18
5400	Guardrails	Yes	Working on roadway while open to the traffic. PPE required and traffic control Speed drop offs	3	3	3	27	TMS and SWP required Workers are to be issued with DD Green gloves, PPE,	3	3	2	18
5600/5700	Road signs & markings	Yes	Manual labour on roadway while open to traffic Use of crane truck - Use of ladders	3	3	3	27	Competent contractor should be employed for this task Inspections of equipment and inspector of equipment to be appointed Load test of equipment required Approved traffic control and daily plans	3	3	2	18
5800	Landscaping	Yes	Use of chemicals and manual labour Poisons, Phosphates and Herbicides	3	3	3	27	TMS and SWP required SDS's, PPE and training	3	3	2	18

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences f an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
SERIES 7000 - SUNDRY STRUCTURES												
7100	Concrete Pavements	Yes	Excavations, compacting and pouring of concrete	3	3	3	27	TMS, SWP, PPE, Specialised personnel	3	2	1	6

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences f an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
OHS SPECIFICATIONS												
OHS Specification	Drilling	Yes	Holes for blasting will take place as follows; Borrow Pits and Road, TMS	3	3	3	27	Use of competent blasting and drilling company, TMS, PPE, Risk Assessments, SANS Codes	3	3	2	18
OHS Specification	Weather	Yes	High as well as low temperatures as well as humidity will be encountered	3	3	3	27	Weather station to monitor weather conditions	2	3	2	12
	Labour	Yes	Local labour as well as SMME's will be used	3	3	3	27	Local labour to have a medical. SMME's to produce H&S Plans before commencement of work on site	2	3	2	12

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
	Preparation of blast areas	Yes	Preparation as per TMS	3	3	3	27	Use of competent blasting and drilling company, TMS, PPE, Risk Assessments, SANS Codes	3	3	2	18
	Blasting	Yes	Blasting on the road	3	3	3	27	Use of competent blasting and drilling company, TMS, PPE, Risk Assessments, SANS Codes, OHS Act and SWP. Approval of blasting plan from the ER and CHSA at least 48 hours before the planned blast	2	3	2	12
	All materials will be considered containing Silica	Yes	Risk Assessments, medical surveillance and chest x-rays for all workers and operators	3	3	3	27	PC is to ensure compliance and medical surveillance is adequately managed	3	3	2	18
	Crane Work	Yes	Cranes could be used to position bridge beams and / or culverts	3	3	3	27	Certified contractor, TMS, certified operators	3	2	1	6

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
OHS Specification	Transportation	Yes	Vehicles will be used on entire project	3	3	3	27	All operators to have a valid licence, PrDP (P.G.D.) Certificate of competence and a valid medical certificate issued by an Occupational Health Practitioner Vehicles to have amber flashing lights, reverse warning hooters and daily check checks	3	3	2	18
	Hazardous Chemicals	Yes	HCS's will be used during the project Construction Vehicles	3	3	3	27	Medicals are required for persons using HCS Medical certificate issued by an Occupational Health Practitioner TMS and SWP are to be in place	3	3	2	18
	Transportation	Yes	All vehicles to be identified as	3	3	3	27	Amber flashing lights, licensed competent operators	3	3	2	18
	Lifting Equipment	Yes	Lifting equipment will be used on the project	3	3	3	27	All lifting equipment is to be on a register All equipment to be tested according to DMR 18	2	3	1	6
	Fire Fighting Equipment	Yes	Fire fighting equipment will be used on site	2	3	2	12	All fire fighting equipment to be recorded and tested according to SANS 1475	3	2	1	6

COLTO / LEGISLATION REF	Design aspect present	Yes / No	Describe the conditions and activities associated with the task	Baseline Raw Design Risk				Extra control measures necessary to reduce risk / Redesign	Residual Risk			
				Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category		Likely Consequences of an Accident	Frequency of Exposure	Probability of Harm	Risk Rating Risk Category
OHS Specification	First Aid Equipment	Yes	First Aid equipment will be used on site	3	3	3	27	All first aid equipment to be recorded and checked according to OHS Act GSR 3 Rural area and availability to emergency services is to be taken into account. Injuries resulting from the type of operations are to be taken into consideration for the provision of first aid equipment	3	2	1	6
	River work will be required in the dry season	Yes	There may be a need to construct coffer dams or pump water from excavations	3	3	3	27	Work in dry season, emergency plan, risk assessment, method statements and safe work procedures	3	2	2	12
	Hazardous Chemicals	Yes	SEE ANNEXURE	3	3	3	27	PPE, Method Statement, Training, Medicals and Induction	3	2	2	12

**PROVINCE OF THE EASTERN CAPE**

**DEPARTMENT OF AGRICULTURE**

**TENDER NO. SCMU8 - 25/26 - 0040**

**REHABILITATION OF FORT COX COLLEGE ROADS TO SURFACED STANDARD  
±0.6KM**

**PART C3: SCOPE OF WORK**

**SECTION D : HIV/AIDS AWARENESS EDUCATION SPECIFICATION**

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## **D1 SCOPE**

This specification contains all requirements applicable to the Contractor for creating HIV/AIDS awareness amongst all of the Workers involved in this project for the duration of the construction period, through the following strategies:

- (a) Raising awareness about HIV/AIDS through education and information on the nature of the disease, how it is transmitted, safe sexual behaviour, attitudes towards people affected and people living with HIV/AIDS, how to live a healthy lifestyle with HIV/AIDS, the importance of voluntary testing and counselling, the diagnosis and treatment of Sexually Transmitted Infections and the closest health Service Providers.
- (b) Informing Workers of their rights with regard to HIV/AIDS in the workplace.
- (c) Providing Workers with access to condoms and other awareness material that will enable them to make informed decisions about sexual practices.

## **D2 DEFINITIONS AND ABBREVIATIONS**

### **D2.1 Definitions**

**Service Provider:** The natural or juristic person recognised and approved by the National Department of Agriculture as a specialist in conducting HIV/AIDS awareness programmes.

**Service Provider Workshop Plan:** A plan outlining the content, process and schedule of the training and education workshops, presented by a Service Provider which has been approved by the Representative/Agent.

**Worker:** Person in the employ of the Contractor or under the direction or supervision of the Contractor or any of his Sub-contractors, who is on site for a minimum period of 30 days in all.

**Representative / Agent:** The Employer's Agent as defined in the Contract Data.

### **D2.2 Abbreviations**

HIV : Human Immunodeficiency Virus  
AIDS : Acquired Immune Deficiency Syndrome  
STI : Sexually Transmitted Infection

## **D3 BASIC METHOD REQUIREMENT**

The Contractor shall, through a Service Provider, conduct onsite workshops with the Workers.

The Service Provider shall develop and compile a Service Provider Workshop Plan to be presented at the workshops and which will be best suited for this project to achieve the specified objectives with regard to HIV/AIDS awareness.

The Service Provider Workshop Plan shall be based on the following information provided by the Contractor:

- (a) Number of Workers and Sub-contractors on site.
- (b) When new Workers or Sub-contractors will join the construction project.
- (c) Duration of Workers and Sub-contractors on site.
  
- (d) How the maximum number of Workers can be targeted with workshops.
- (e) How the Contractor prefers workshops to be scheduled, e.g. three hourly sessions per Worker, or one 2.5 hour workshop per Worker.
- (f) Profile of Workers, including educational level, age and gender (if available)
- (g) Preferred time of day or month to conduct workshops.
- (h) A Gantt chart reflecting the construction programme, for scheduling of workshops.
- (i) Suitable venues for workshops.

The Contractor shall submit the Service Provider Workshop Plan for approval within 21 days after the commencement date. After approval by the Representative/Agent, the Contractor shall make available a suitable venue that will be conducive to education and training

The Service Provider Workshop Plan shall address, but will not be limited to the following:

- (j) The nature of the disease;
- (k) How it is transmitted;
- (l) Safe sexual behaviour;
- (m) Post exposure services such as voluntary counselling and testing (VCT) and nutritional plans for people living with HIV/AIDS;
- (n) Attitudes towards other people with HIV/AIDS;
- (o) Rights of the Worker in the workplace;
- (p) How the Awareness Champion will be equipped prior to commencement of the HIV/AIDS awareness programme with basic HIV/AIDS information and the necessary skills to handle questions regarding the HIV/AIDS awareness programme on site sensitively and confidentially;
- (q) How the Service Provider will support the Awareness Champion;
- (r) Location and contact numbers of the closest clinics, VCT facilities, counselling services and referral systems;
- (s) How the workshops will be presented, including frequency and duration;
- (t) How the workshops will fit in with the construction programme;
- (u) How the Service Provider will assess the knowledge and attitude levels of attendees to structure workshops accordingly;
- (v) How the video will be used;
- (w) How the Service Provider will elicit maximum participation from the Workers;
- (x) A questions and answers slot (interactive session)

The Service Provider Workshop Plan shall encompass the Specific Learning Outcomes (SLO) as stipulated.

#### **D4 HIV/ AIDS AWARENESS EDUCATION AND TRAINING**

##### **D4.1 Workshops**

The Contractor shall ensure that all Workers attend the workshops.

The workshops shall adequately deal with all the aspects contained in the Service Provider Workshop Plan.

A video of HIV/AIDS in the construction industry, which can be obtained from all Regional Offices of the National Department of Agriculture, is to be screened to Workers at workshops. In order to enhance the learning experience, groups of not exceeding 25 people shall attend the interactive sessions of the workshops.

##### **D4.2 Recommended practice D4.2.1 Workshop Schedule**

Presenting information contained in the Service Provider Workshop Plan can be divided in as many workshop sessions as deemed practicable by the Contractor, provided that all Workers are exposed to all aspects of the workshops as outlined in the Service Provider Workshop Plan. Breaking down the content of information to be presented to Workers into more than one workshop session however, has the added advantage that messages are reinforced over time while providing opportunity between workshop sessions for Workers to reflect and test information. Workers will also have an opportunity to ask questions at a following session.

##### **D4.2.2 Service Providers**

A database of recommended Service Providers is available from all Regional Offices of the National Department of Agriculture.

##### **D4.2.3 HIV/AIDS Specific Learning Outcomes and Assessment Criteria**

Workers shall be exposed to workshops for a minimum duration of two-and-a-half hours. In order to set a minimum standard requirement, the following specific learning outcomes and assessment criteria shall be met.

(a) UNIT 1: The nature of HIV/AIDS

After studying and understanding this unit, the Worker will be able to differentiate between HIV and AIDS and comprehend whether or not it is curable. The Worker will also be able to explain how the HI virus operates once a person is infected and identify the symptoms associated with the progression of HIV/AIDS.

Assessment Criteria:

- (i) Define and describe HIV and AIDS.
- (ii) List and describe the progression of HIV/AIDS.

(b) UNIT 2: Transmission of the HI virus

After studying and understanding this unit, the Worker will be able to identify bodily fluids that carry the HI virus. The Worker will be able to recognise how HIV/AIDS is transmitted and how it is not transmitted.

Assessment Criteria:

- (i) Record in what bodily fluids the HI virus can be found.
- (ii) Describe how HIV/AIDS can be transmitted.
- (i) Demonstrate the ability to distinguish between how HIV/AIDS is transmitted and misconceptions around transmittance of HIV/AIDS.

(c) UNIT 3: HIV/AIDS preventative measures

After studying and understanding this unit, the Worker will comprehend how to act in a way that would minimise the risk of HIV/AIDS infection and to use measures to prevent the HI virus from entering the bloodstream

Assessment Criteria:

- (i) Report on how to minimise the risk of HIV/AIDS infection.
- (ii) Report on precautions that can be taken to prevent HIV/AIDS infection.
- (iii) Explain or demonstrate how to use a male and female condom.
- (iv) List the factors that could jeopardize the safety of condoms provided against HIV/AIDS transmission.

(d) UNIT 4: Voluntary HIV/AIDS counselling and testing

After studying and understanding this unit, the Worker will be able to recognise methods of testing for HIV/AIDS infection. The Worker will be able to understand the purpose of voluntary HIV/AIDS testing and pre- and post-test counselling

Assessment Criteria:

- (i) Describe methods of testing for HIV/AIDS infection.
- (ii) Report on why voluntary testing is important.
- (iii) Report on why pre- and post-test counselling is important.

(e) UNIT 5: Living with HIV/AIDS

After studying and understanding this unit, the Worker will be able to recognise the importance of caring for people living with HIV/AIDS and be able to manage HIV/AIDS

Assessment Criteria:

- (i) List and describe ways to manage HIV/AIDS.
- (ii) Describe nutritional needs of people living with HIV/AIDS.
- (iii) Describe ways to embrace a healthy lifestyle as a person living with HIV/AIDS.
- (iv) Explain the need for counselling and support to people living with HIV/AIDS.

(f) UNIT 6: Treatment options for people with HIV/AIDS

After studying and understanding this unit, the Worker will be familiar with the various treatments available to HIV/AIDS infected or potentially HIV/AIDS infected people.

Assessment Criteria:

- (i) Discuss anti-retroviral therapy.
- (ii) List methods of treatment to prevent HIV/AIDS transmission from mother-to-child.
- (iii) Describe the need for treatment of opportunistic diseases for people living with HIV/AIDS.
- (iv) Describe post exposure prophylactics.

(g) UNIT 7: The rights and responsibilities of Workers in the workplace with regard to HIV/AIDS

After studying and understanding this unit, the Worker will be able to identify the rights and responsibilities of the Worker living with HIV/AIDS in the workplace. The Worker will recognise the importance of accepting colleagues living with HIV/AIDS and treating them in a non-discriminative way.

Assessment Criteria:

- (i) Discuss the rights of a person living with HIV/AIDS in the workplace.
- (ii) Discuss the responsibilities of a person living with HIV/AIDS in the workplace.
- (iii) Report on why acceptance and non-discrimination of colleagues living with HIV/AIDS is important.

**D4.3 Displaying of plastic laminated posters and distribution of information booklets**

The Contractor shall obtain a set of four laminated posters conveying different key messages and information booklets, which are available from all Regional Offices of the Department of Agriculture

The above-mentioned posters and information booklets have been prepared to raise awareness and to share information about HIV/AIDS and STIs

Posters or display stands shall be displayed on site as soon as possible, but not later than 14 days after the date of site handover

Posters shall be displayed in areas highly trafficked by Workers, including toilets, rest areas, the site office and compounds

The posters on display must always be intact, clear and readable

Information booklets must be distributed to all Workers as soon as possible, but not later than 14 days after site handover, or as soon as the Worker joins the site

**D5 PROVIDING WORKERS WITH ACCESS TO CONDOMS**

The Contractor shall provide and maintain condom dispensers and make both male and female condoms, complying with the requirements of SABS ISO 4074, available at all times to all Workers at readily accessible points on site, for the duration of the contract. The Contractor may obtain condom dispensers from the Department of Health and condoms may be obtained from the Local Clinic or the Department of Health.

At least one male and one female condom dispenser and a sufficient supply of condoms, all to the approval of the Representative/Agent, shall be made available on site within 14 days of site hand over. Contractors should note that arrangements to obtain condoms from the Department of Health Clinics prior to site hand over may be necessary, to ensure that condoms are available within 14 days of site handover

Condoms shall be made available in areas highly trafficked by Workers, including toilets, the site office and compounds.

## **D6 ENSURING ACCESS TO HIV/AIDS TESTING AND COUNSELLING FACILITIES AND TREATMENT OF SEXUALLY TRANSMITTED INFECTIONS (STI)**

The Contractor shall provide Workers with the names of the closest Service Providers that provide HIV/AIDS testing and counselling and Clinics providing Sexually Transmitted Infection (STI) diagnosis and treatment. Information on these Service Providers and Clinics must be displayed on a poster of a size not smaller than A1 in an area highly trafficked by Workers.

## **D7 APPOINTMENT OF AN HIV/AIDS AWARENESS CHAMPION**

Within 14 days of site handover the Contractor shall appoint an Awareness Champion from amongst the Workers, who speaks, reads and writes English, who speaks and understands all the local languages spoken by the Workers and who shall be on site during all stages of the construction period. The Contractor shall ensure that the Awareness Champion has been trained by the Service Provider on basic HIV/AIDS information, the support services available and the necessary skills to handle questions regarding the HIV/AIDS programme in a sensitive and confidential manner.

The Awareness Champion shall be responsible for:

- (a) Liaising with the Service Provider on organising awareness workshops;
- (b) Filling condom dispensers and monitoring condom distribution;
- (c) Handing out information booklets;
- (d) Placing and maintaining posters

## **D8 MONITORING**

The Contractor shall grant to the Representative/Agent reasonable access to the construction site, in order to establish that the Contractor complies with his obligations regarding HIV/AIDS awareness under this contract.

The Contractor must report problems experienced in implementing the HIV/AIDS requirements to the Representative/Agent.

## **D9 REPORTING**

D9.1 The contractor shall prepare and attach to his claims for payment a compliance report which outlines how the actions taken by the contractor in the period for which payment is claimed comply with the requirements, and a schedule which lists the names, identity numbers, trade/occupation and the name of the employer of all the construction workers exposed to the programme (refer Annexure A for a pro-forma for the report).

D9.2 The employer shall certify the report and schedule described in D9.1 whenever a claim for payment is issued to the employer.

NOTE: In the event that the contractor fails to comply with the requirements of D9, the employer may apply any of the sanctions provided for in the contract. Sanctions may include the application of a financial penalty.

## **D10 MEASUREMENT AND PAYMENT**

Schedule C [Item EB1.01 to EB1.12] in the BoQ will be followed for Health and Safety of this specific tender. The pricing must include awareness, induction, training on all communicable diseases and health and safety in the work place etc.

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

### **SECTION E : LABOUR SPECIFICATIONS**

This part of the project Specifications contains comprehensive additional specifications for matters not covered by and work which is not carried out in terms of the Standard Specifications. The number of each clause and each payment item in this part of the Project Specification is prefixed with an E to differentiate these clauses and items as additional works.

The following additional specifications are covered under this part of the Scope of Work:

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#### **E1 EMPLOYMENT OF LOCAL LABOUR AND TRAINING REQUIREMENTS**

##### **E1.1 SCOPE**

The specification sets out the requirements relating to the employment of local labour by involving the community through the established structures as well as the training requirements for these labourers.

##### **E1.2 DEFINITIONS**

The definitions given in the conditions of contract, the Contract Data and the Works specifications, together with the following additional definitions shall, unless the context dictates otherwise, apply:

'Key Personnel' means all contract managers, site agents, materials and survey technicians, trainers, supervisors, foremen, skilled plant operators and the like, and all other personnel in the permanent employ of the Contractor or subcontractor who possess special skills and/or who play key roles in the Contractor's or subcontractor's operation.

'Labourer' means a worker statutorily defined as employees in the Basic Conditions of Employment Act, 1997, who is temporarily or permanently employed by the Contractor and subcontractors (SMME's) to perform prescribed work on this Contract. 'Labour' means labourers or workers.

‘Labour Register’ means the list of available Local Labourers compiled by the Community Liaison Officer (CLO) in co-operation with the Project Steering Committee (PSC) in accordance with the results of their negotiations with the Contractor and the Local Community subsequent to the awarding of the Contract.

‘Local Labourer’ means a worker who is normally permanently residing in the target area(s) as defined by the Employer in the Works Specifications and who is available to be temporarily employed by the Contractor and subcontractors to perform prescribed tasks that form part of the Works.

‘Targeted Labour’ means the Local Labourers, who are defined as the target group for the Contract as normally permanently residing in the target area(s) as defined by the Employer in the Works Specifications. It is incumbent on individuals defined as Target Labour to demonstrate their claims to such residency on the basis of identification and association with and recognition by members of the community residing within the target area. It is incumbent on individuals to provide evidence of qualifying for the target groups.

‘Worker’ for the purposes of this specification means any person, not being one of the Contractor’s key personnel, nor any key personnel of any subcontractor, who is engaged by the Contractor, a subcontractor or the Employer and paid on an hourly paid basis to participate in the execution of any part of the contract works and shall include unskilled labour, semi-skilled and skilled labour, artisans, clerical workers and the like.

‘Workforce’ means the aggregate body comprising of all workers and shall, unless the context dictates otherwise, include the workforces of the Contractor and all subcontractors.

### **E1.3 ENGAGEMENT OF LOCAL LABOUR**

The temporary workforce shall, as far as practically possible, and with the exception of key personnel, be recruited/selected from the local communities living in close proximity to the project.

Prior to the award of the Contract, the Employer shall, at his own cost, take all necessary actions to advertise within the local communities of the fact that the Contract will provide temporary employment opportunities and preference will be given to the use of the Local Labour on this Contract. Labourers and workers of the local community required by the Contractor shall be recruited/chosen from a Labour Register and appointed for work to enable the Contractor to comply with the specific minimum target value set for the Local Labour Goal (LLG) for the Contract. Labourers and workers of the Local community who are engaged by other employers, other sub-Contractors in paid positions of employment shall not be eligible for inclusion on the Labour Register.

#### **E1.3.1 Employment of Local Labourers**

Upon the award of the Contract the Contractor shall without delay consult with the Project Steering Committee (PSC), the Employer’s Agent and the Employer, and appoint a Community Liaison Officer (CLO) from a shortlist provided by the PSC, if so instructed, who is mutually acceptable to all parties. The Community Liaison Officer shall negotiate with the Contractor and the PSC and compile the required list of available Local Labourers called the Labour Register (Labour Desk).

The Contractor shall select and appoint temporary contract workers required for work included in the Contract from the available Local Labourers listed in the Labour Register with due observance of the skills required for the work in question.

#### **E1.3.2 Selection of Local Labourers**

The Contractor shall advise the CLO and the PSC in writing of the various categories of Local Labourers required for construction and the number of Local Labourers required in each category, together with the personal attributes which he considers desirable that each category of Local Labourers shall possess, taking due cognisance of the provisions of the Contract relating to Training.

The Contractor shall make his selection of Local Labourers from the applicants in the Labour Register, taking due cognisance of his requirements for the workforce and the provisions of the Contract in regard of the provision of Training to the workforce and in accordance with the following principles:

- (a) No potential Local Labourer shall be precluded from being employed by the Contractor on the execution of the Works by virtue of his lack of skill in any suitable operation forming part of the Works unless:
  - (i) All available vacancies have been or can be filled by labourers who already possess suitable skills; or
  - (ii) The completion period allowed in the Contract, or the remaining portion of the Contract period (as the case may be) is sufficient to facilitate the creation of the necessary skills;
- (c) Preference shall be given to the long-term and single heads of households;
- (d) The Contractor shall, in so far as is reasonably practicable, accommodate the applicant's expressed preferences regarding the types of work for which they are selected;
- (e) The selection process shall make provision for, but shall not be limited to, the inclusion in the Labour Register of disabled Local Labourers who are deemed capable to perform selected tasks, youths who are older than sixteen but not older than thirty five years and women.

After making his selection, the Contractor shall advise the CLO and the Employer's Agent thereof in writing, and the Employer's Agent, with the assistance of the CLO has the right to call a meeting with PSC and the Local Community for the purpose of ratifying the Contractor's selection. The Contractor shall attend such meeting and where reasonably required, shall motivate his selection. Should the Employer's Agent or the Local Community make reasonable objection to the selection of any particular applicant by the Contractor, the Contractor shall not employ such applicant and shall select another suitable applicant acceptable to the Employer's Agent and the Local Community as a replacement of the rejected applicant, in order to finalize the composition of the workforce.

The provisions this clause shall also apply in respect of the selection of additional or replacement members of the workforce as may be necessary from time to time for the execution and completion of the Works.

#### **E1.4 CONTRACTUAL REQUIREMENTS**

##### **E1.4.1 Legislation**

The onus shall be on the Contractor to ensure that all statutory requirements applicable to the employment of Labour are observed.

##### **E1.4.2 Labour content**

The Labour Content (LC) of the Contract shall be determined as follows:

LC = total value of wages, allowances and costs paid to local labourers, including those employed by subcontractors and selected subcontractors.

The total Rand value of the Labour Content, expressed as a percentage of the total Award Value (Contract Price exclusive of VAT, and allowances for contingencies and escalation), shall be defined as the Labour Content Percentage or the local labour goal as stated in Part C4. .

##### **E1.4.3 Targeted labour**

The targeted labour shall be as specified above. The definitions, provisions and specifications of the South African National Standard Specification SANS1914-52002, Targeted Construction Procurement : Part 5 : Participation of Targeted Labour will apply to this contract. Should there however be conflict between SANS1914-5:2002 and the Works Specification, the latter shall take precedence and prevail.

The Contractor shall engage targeted labour directly in the execution of the Works to the extent that the monetary value (Labour Content) of such engagement, expressed as a percentage of the Award Value (Contract Price exclusive of VAT, Provisional Sums, Prime Cost Sums and allowances for contingencies and escalation), is not less than that specified in Part C 4.of this tender document.

#### **E1.4.4 Records and reporting**

The Contractor shall maintain accurate and comprehensive records of all local labourers engaged on the contract. Forms 1 to 3 (of which pro-formas are included in Part C1: Agreements and Contract Data) shall be completed and submitted to the Employer's Agent at the end of each month, from the Commencement date up to the completion of the Contract. Form 3 may be substituted by the use of electronic banking records provided that the system can be audited.

The completed forms shall accompany the Contractor's monthly claim presented to the Employer's Agent for payment of certified completed work. The Employer reserves the right to delay payments due to the Contractor should the Contractor fail to provide any item of required documentation to the approval of the Employer's Agent.

The Contractor's Labour Content performance will be measured at the end of each month in order to monitor the extent to which he is striving to reach the Local Labour Goal specified in Part A of the Works Specification.

The Contractor shall, on completion of the contract, and as a pre-requisite event to the release of any retention money in terms of the conditions of contract, provide the Employer's Agent with independently audited documentary evidence of the total actually paid to the workforce and the number of workers days generated during the contract.

#### **E1.4.5 SANCTIONS**

In the event that the Contractor fails to substantiate that any failure to achieve the Local Labour Goal was due to quantitative under runs, the elimination of items, or any other reason beyond the Contractor's control which may be acceptable to the Employer, the Contractor shall be liable to pay to the Employer a financial penalty (P) calculated in accordance with the following formula:

$$P = 1,05 \times (LM - LA) \times VA.$$

Where:

P = Rand value of penalty payable.

VA = Award value (Contract Price exclusive of VAT, and allowances for contingencies and escalation)

LM = Local Labour Goal % stated in the Project Document

LA = The local labour component % which the Employer's Representative certifies as being achieved upon completion of the contract.

#### **E1.5 PROJECT STEERING COMMITTEE**

When required a Project Steering Committee (PSC) shall be established to manage the project, consisting of members elected from each of the wards along the project road. The Contractor will have one senior member of his staff as representative on the PSC without any voting powers.

The Contractor will report all progress, deviations from the Contract, deviations from the programme, labour related matters, and financial progress to the PSC.

The PSC will act as liaison channel between the Contractor and the community. The PSC will assist the Contractor in identifying and recruiting local labour for the project.

The Contractor shall hold meetings with the PSC on a regular basis (at least once per month but not more than twice per month) to ensure that the PSC is informed and aware of progress and problems that may arise.

Allowance is made for the payment of subsistence/travel allowances to the members of the PSC attending meetings with the Contractor, by the Contractor in the Schedule of Quantities.

## **E1.6 COMMUNITY LIAISON OFFICER**

### **E1.6.1 Appointment**

The Contractor shall appoint a Community Liaison Officer (CLO) after consultation with the Project Steering Committee (PSC), the Employer's Agent and the Employer, as a link between the PSC and the Contractor. The Community Liaison Officer shall be nominated by the PSC and shall be appointed as a member of the Contractor's management personnel and the Contractor's normal employment conditions shall be applicable to the appointment. The Contractor shall disclose his normal employment conditions to the Employer's Agent when called upon to do so.

### **E1.6.2 Duties of the Community Liaison Officer The Community Liaison Officer shall:**

- (a) be available on Site daily between the hours agreed on by the Contractor, the Employer and the Employer's Agent from time to time;
- (b) assist the Contractor in the identification of suitable trainees and shall attend one of each of the training sessions;
- (c) communicate with the Contractor and the Employer's Agent to determine the labour requirements with regard to the numbers and skills;
- (d) assist in maintaining good labour relations, and when applicable partake in Labourers' grievances and dispute procedures;
- (e) assist in and facilitate the recruitment of suitable temporary labour and the establishment of the Labour Register (Labour Desk);
- (f) attend all meetings in which the Local Community and/or Labourers are present or are required to be represented;
- (g) assist in the identification, and screening of Labourers from the Local Community in accordance with the Contractor's requirements;
- (h) inform temporary Labourers of their conditions of temporary employment, and inform temporary Labourers as early as possible when their period of employment will be terminated;
- (i) attend disciplinary proceedings to ensure that hearings are fair and reasonable;
- (j) keep a daily written record of his interviews and community liaison activities;
- (k) carry out specific tasks ordered by the Employer's Agent;
- (l) perform such other duties as required and agreed upon between all parties concerned.

### **E1.6.3 Remuneration**

The remuneration of the Community Liaison Officer shall be determined jointly by the Contractor, Employer's Agent and the Employer. A Provisional Sum is provided in the Schedule of Quantities to cover the remuneration of the Community Liaison Officer.

The Community liaison Officer shall only be employed and paid for the period in which the duties of a Community Liaison Officer are required as agreed on by the Employer's Agent and the Contractor.

### **E1.6.4 Transport of the Community Liaison Officer**

The Contractor shall provide transport for the Community Liaison Officer as agreed upon between the Employer, the Employer's Agent and the Contractor.

A Provisional Sum is provided in the Bill of Quantities to cover the provision of transport for the Community Liaison Officer.

## **E1.7 TRAINING REQUIREMENTS**

Where training is specified in the Contract, the Contractor shall implement a formal training programme in which the various skills required for the execution and completion of the works are imparted to the workers, and where applicable, subcontractors engaged therein, in a programmed and progressive manner. Workers

shall be trained progressively throughout the duration of the contract in the various stages of a particular type of work.

All Training shall take place during normal working hours and the Contractor shall make adequate allowance in his programme of work to accommodate the Training to be provided in terms of the Contract and shall ensure that the workers are available at the appropriate times to undergo such Training.

The Contractor shall submit with his tender full details of the formal training which he intends to implement on the Contract. Details of the proposed Training shall be provided on Schedule of Proposed Training in the: Returnable Schedules and shall include the following:

- (i) The name of the training institution and course programme.
- (ii) Each type of training and course content synopsis.
- (iii) The manner in which the training is to be delivered.

The cost of the Training in accordance with the Contractor's Schedule of Proposed Training programme shall not exceed the sums provided for Training in the relevant pay items in the Bill / Schedule of Quantities.

The Contractor's Training schedule shall be subject to the approval of the Employer's Agent, and the Contractor shall, if so instructed by the Employer's Agent, alter or amend the Training schedule and its contents to suit changing conditions on the Site and changes in the Contractor's programme of work.

#### E1.7.1 Training of Local Labourers

Depending on the requirements of the Contract the Training shall make provision for on-site hands-on Training, courses presented in-house by the Contractor, and selected courses presented by institutions accredited by the Construction, Education and Training Authority (CETA) or other institution recognized by the Department of Labour and the Employer.

Each Labourer shall receive basic instructions and on-site hands-on training for the category of work required to be executed by him/her.

An approved number of Local Labourers chosen by the Contractor in conjunction with the Employer's Agent shall attend in-house courses conducted by trainers in the employ of the Contractor in accordance with the approved Training programme to satisfy the need for trained Labourers on the Site.

Where formal accredited training is specified in the Contract, Local Labourers with the required aptitude shall be nominated by the Contractor, and subject to the approval of the Employer's Agent, shall attend

approved formal training courses presented by accredited institutions and considered essential for the execution of the Works.

For this purpose the Contractor shall submit a selection of courses from known training institutions accredited by the Construction, Education and Training Authority (CETA) or other institution recognized by the Department of Labour and the Employer from which the Employer's Agent will choose the courses to be attended by the nominated and approved Local Labourers.

#### E1.7.2 Training for Emerging Contractors (SMME's)

The Contractor shall closely monitor the performance of the principals of Emerging Contractors (SMME's), the execution of their subcontracts and shall identify those who, in his opinion, display the potential to benefit from formal Training provided for in the Contract, and when required by the Employer's Agent, the Contractor shall make recommendations in this regard. The final list of candidates will be decided on between the Contractor and the Employer's Agent.

Where required, Emerging Contractors engaged by the Contractor shall receive training and guidance according to an approved formal training programme which comprises both management skills and business development skills.

The Contractor shall, when requested provide full details of any additional accredited and in-house training, viewed to be necessary by the Contractor, which he intends to implement at his own cost.

If so indicated, the Contractor shall alter or amend the formal training programme and its contents to suit changing conditions on Site and changes in the Contractor's programme of work.

#### **E1.7.3            Labourers remunerated during training**

All Local Labourers employed by the Contractor shall be remunerated in respect of the time spent undergoing formal training. Payment for Labourers in respect of training periods during which no productive work is executed, shall be reimbursed to the Contractor as provided for in the Bill / Schedule of Quantities.

#### **E1.7.4            Non-compliance**

If at any stage the Employer's Agent notifies the Employee in writing that the Contractor is not complying with the requirements of the Contract in respect of the training to be provided to Local and other Labourers and to the Emerging Contractors, then the Employer is entitled to appoint competent firms or persons to conduct the specified training at the Contractor's expense and the amounts paid to such firms or persons will be deducted from the Contractor's payment.

The Contractor shall be obliged to make Local Labourers and other employees available for Training when so required by the Employer's Agent.

### **E1.8 FORMAL TRAINING**

#### **E1.8.1            General**

The formal skills training programme to be implemented by the Contractor shall comply with the following minimum standards:

- (a) Be accredited by the Construction, Education and Training Authority (CETA) or other institution recognized by the Department of Labour, as being appropriate for this project.
- (b) Be delivered by suitably qualified and experienced trainers accredited to do so.
- (c) Be delivered in the modules as described by an authorized Training Centre. The modules listed are those considered applicable to most civil Employer's Agenting projects and shall serve as a guide only for planning purposes. The actual training needs, training agency and programme shall be agreed with the Employer's Agent prior to implementation.

The Contractor shall be responsible for the provision of everything necessary for the delivery of the skills training programme, including the following:

- (i) Sufficient skilled, competent and accredited trainers to deliver the training programme to all workers in accordance with the training programme;
- (ii) A suitably furnished venue (if required)
- (iii) Transport to and from the works (as necessary)
- (iv) Tools, equipment and teaching aids;
- (v) Stationery and all other necessary materials

All members of the workforce will initially receive training in the module. Road safety for construction workers followed by training in the various work activity modules depending on the activities for which they will be employed. Each worker employed must be given the opportunity of completing at least one of the work activity modules during the initial training period, with further training being given on merit.

The Contractor shall keep comprehensive records of the training given to each worker as well as the nature and number of work tasks executed by the worker and whenever required shall provide copies of such records to the Employer's Agent.

The Contractor shall in so far as it is reasonable and practical taking due and cognisance of the nature of the works to be executed at any given time, use training workers on those aspects of the works for which they have been trained.

#### E1.8.2 Accredited training and attendance

Only qualified trainers employed by training agencies that are accredited by the Construction, Education and Training Authority (CETA), or other institution recognized by the Department of Labour shall deliver all training. Accredited training referred to both the trainers as well as to the training material. Certificates affirming the successful participation in the various courses shall be presented to each attendant.

The Contractor shall facilitate in the delivery of training by instructing and motivating the hired local Labour, supervisors and subcontractors regarding attendance and participation.

All training shall take place within normal working hours or as agreed with the trainees.

#### E1.8.3 Supervisors

Attention shall be given to the formal and informal training of supervisors.

Candidates having the potential to become supervisors shall be selected from amongst the workforce and be given additional formal and informal training as outlined above. This selection will take place only once the initial skills training have been completed and workers have been given sufficient opportunity to prove their worth.

#### E1.8.4 Training records and certificates

The Contractor shall keep comprehensive records of the formal training given to each Labourer and principal of the Emerging Contractor and whenever required shall provide copies of such records to the Employer's Agent. At the successful completion of each course each participant shall be issued with certificate indicating the course contents as proof of attendance and completion.

#### E1.8.5 Labour / Training Agent

If specified in the Contract, the Contractor shall appoint a Labour / Training Agent, subject to the written approval of the Employer's Agent. The Labour / Training Agent shall be on the Site at all times when Local and other Labourers are executing work allocated to them.

The labour / Training Agent shall report in writing to the Employer's Agent on a daily basis on the work executed by the Local and other Labourers in the employ of the Contractor, the quality of the work the progress and all other information that the Employer's Agent may require. The Labour / Training Agent shall also be responsible for those aspects of training which are assigned to him the Contract.

#### E1.8.6 Training centre

If so specified in the Contract a suitable onsite Training centre shall be provided by the Contractor to the satisfaction of the Employer's Agent. The Training centre shall comply with the specifications for site offices as specified in the Specifications Measurement and payment of the Training centre and the required equipment shall be as specified in the Project Specification.

## **E2 SPECIFICATION FOR LABOUR-INTENSIVE CONSTRUCTION**

### **E2.1 SCOPE**

In order to reduce unemployment the Government has initiated the promotion of labour-intensive construction through the Department of Agriculture projects.

This is a short-term, non-permanent, labour-intensive programme initiated by Government and funded whether fully or partially, from public resources to provide a public asset.

This specification sets out the provisions and requirements relating to labour-intensive construction works.

### **E2.2 DEFINITIONS**

For the purpose of this Contract, the definitions given in the Contract Data, the Standard Specifications, and the Works Specifications, together with the following additional definitions shall, unless the context dictates otherwise, apply:

‘Labour-intensive’ means the economically efficient employment of as many unskilled or semi-skilled Local Labourers as is technically feasible for an identifies portion or section of the Works.

‘Subcontractor’ means any person or group of persons in association, or firm, or body corporate (whether formally constituted or otherwise) not being the Contractor, to whom specific portions or aspects of the works are sublet or subcontracted by the Contractor in accordance with the provisions of the contract.

‘Workforce’ means the aggregate body comprising of all workers and shall, unless the context dictates otherwise, include the workforces of the Contractor and all subcontractors.

Standard specifications (those normally used by the public bodies) are to be utilised. It is necessary, however, to include certain requirements in the scope of work to implement labour-intensive works in accordance with the provisions of these Guidelines.

### **E2.3 LABOUR-INTENSIVE COMPETENCIES OF CONTRACTOR’S STAFF**

#### **E2.3.1 Eligibility requirements**

A contract will only be entered into with a tenderer who has in his employ management and supervisory staff satisfying the requirements of the scope of work for labour-intensive competencies for supervisory and management staff.

The tenderer shall, when requested by the Employer to do so, submit with his tender 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.

#### **E2.3.2 Labour-intensive competencies of supervisory and management staff**

Established Contractors shall only engage supervisory and management staff in labour intensive works who have either completed, or for the period 1 April 2004 to 30 June 2005, are registered for training towards, the skills programme outlined in Table 1.

Emerging Contractors shall have personally completed, or be registered on a skills programme for the NQF level 2 unit standard. All other site supervisory staff in the employ of emerging Contractors must have completed, or be registered on a skills programme for, the NQF level 2 unit standards or NQF level 4 unit standards.

**Table 1: Skills programme for supervisory and management staff**

Personnel	NQF level	Unit standard titles	Skills programme description
Team leader / supervisor	2	Apply Labour Intensive Construction Systems and Techniques to Work Activities	This unit standard must be completed, <b>and</b>
		Use Labour Intensive Construction Methods to Construct and Maintain Roads and Stormwater Drainage	any one of these 3 unit standards
		Use Labour Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	
		Use Labour Intensive Construction Methods to Construct, Repair and Maintain Structures	
Foreman/ supervisor	4	Implement labour Intensive Construction Systems and Techniques	This unit standard must be completed, <b>and</b>
		Use Labour Intensive Construction Methods to Construct and Maintain Roads and Stormwater Drainage	any one of these 3 unit standards
		Use Labour Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	
		Use Labour Intensive Construction Methods to Construct, Repair and Maintain Structures	
Site Agent / Manager (i.e. the Contractor's most senior representative that is resident on site)	5	Manage Labour Intensive Construction Processes	Skills Programme against this single unit standard
Details of these skills programmes may be obtained from the CETA ETQA manager (e-mail: <a href="mailto:gerard@ceta.co.za">gerard@ceta.co.za</a> , tel: 011-265 5900)			

## **E2.4 STANDARD CONDITIONS OF EMPLOYMENT FOR DEPARTMENT OF AGRICULTURE PROJECTS**

### **E2.4.1 Introduction**

- (a) This document contains the standard terms and conditions for workers employed in elementary occupations. These terms and conditions do NOT apply to persons employed in the supervision and management of DoA Projects.
- (b) Additional Definitions:  
The following additional definitions shall, unless the context dictates otherwise, apply:
  - (i) “department” means any department of the State, implementing agent or Contractor;
  - (ii) “employer” means any department, implementing agency or Contractor that hires workers to work in elementary occupations on a DoA project;
  - (iii) “worker” means any person working in an elementary occupation on the Project;
  - (iv) “elementary occupation” means any occupation involving unskilled or semi-skilled work;
  - (v) “management” means any person employed by a department or implementing agency to administer or execute a DoA project.
  - (vi) “task” means a fixed quantity of work;
  - (vii) “task-based work” means work in which a worker is paid a fixed rate for performing a task;
  - (viii) “task-rated worker” means a worker paid on the basis of the number of tasks completed;
  - (ix) “time-rated worker” means a worker paid on the basis of the length of time worked.

### **E2.4.2 Terms of Work**

- (a) Workers are employed on a temporary basis.
- (b) A worker may NOT be employed for longer than 36 months in any five-year cycle.
- (c) Employment does not qualify as employment as a contributor for the purposes of the Unemployment Insurance Act 30 of 1966.

### **E2.4.3 Normal Hours of Work**

- (a) An employer may not set tasks or hours of work that require a worker to work—
  - (i) More than forty hours in any week;
  - (ii) On more than five days in any week; and
  - (iii) For more than eight hours on any day.
- (b) An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.
- (c) A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker.

### **E2.4.4 Meal Breaks**

- (a) A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.
- (b) An employer and worker may agree on longer meal breaks.
- (c) A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.

- (d) A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

#### E2.4.5 Special Conditions for Security Guards

- (a) A security guard may work up to 55 hours per week and up to eleven hours per day.
- (b) A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

#### E2.4.6 Daily Rest Period

Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

#### E2.4.7 Weekly Rest Period

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

#### E2.4.8 Work on Sundays and Public Holidays

- (a) A worker may only work on a Sunday or public holiday to perform emergency or security work.
- (b) Work on Sundays is paid at the ordinary rate of pay.
- (c) A task-rated worker who works on a public holiday must be paid:
  - (i) The worker's daily task rate, if the worker works for less than four hours;
  - (ii) Double the worker's daily task rate, if the worker works for more than four hours.
- (d) A time-rated worker who works on a public holiday must be paid:
  - (i) The worker's daily rate of pay, if the worker works for less than four hours on the public holiday;
  - (ii) Double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.

#### E2.4.9 Sick Leave

- (a) Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.
- (b) A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.
- (c) A worker may accumulate a maximum of twelve days' sick leave in a year.
- (d) Accumulated sick-leave may not be transferred from one contract to another contract.
- (e) An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.
- (f) An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.
- (g) An employer must pay a worker sick pay on the worker's usual payday.
- (h) Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is:
  - (i) Absent from work for more than two consecutive days; or
  - (ii) Absent from work on more than two occasions in any eight-week period.

- (i) A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorized to issue medical certificates indicating the duration and reason for incapacity.
- (j) A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

#### E2.4.10 Maternity Leave

- (a) A worker may take up to four consecutive months' unpaid maternity leave.
- (b) A worker is not entitled to any payment or employment-related benefits during maternity leave.
- (c) A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.
- (d) A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.
- (e) A worker may begin maternity leave:
  - (i) Four weeks before the expected date of birth; or
  - (ii) On an earlier date:
    - If a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or
    - If agreed to between employer and worker; or
  - (iii) On a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.
- (f) A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.
- (g) A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months employment, unless the project on which she was employed has ended.

#### E2.4.11 Family responsibility leave

Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances:

- (a) When the employee's child is born;
- (b) When the employee's child is sick;
- (c) In the event of a death of:
  - (i) The employee's spouse or life partner;
  - (ii) The employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

#### E2.4.12 Statement of Conditions

- (a) An employer must give a worker a statement containing the following details at the start of employment:
  - (i) The employer's name and address and the name of the DoA;
  - (ii) The tasks or job that the worker is to perform; and
  - (iii) The period for which the worker is hired or, if this is not certain, the expected duration of the contract;
  - (iv) The worker's rate of pay and how this is to be calculated;
  - (v) The training that the worker will receive during the DoA project.
- (b) An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.
- (c) An employer must supply each worker with a copy of these conditions of employment.

#### E2.4.13 Keeping Records

- (a) Every employer must keep a written record of at least the following:
  - (i) The worker's name and position;

- (ii) In the case of a task-rated worker, the number of tasks completed by the worker;
  - (iii) In the case of a time-rated worker, the time worked by the worker;
  - (iv) Payments made to each worker.
- (b) The employer must keep this record for a period of at least three years after the completion of the project.

#### E2.4.14 Payment

- (a) An employer must pay all wages at least monthly in cash or by cheque or into a bank account.
- (b) A task-rated worker will only be paid for tasks that have been completed.
- (c) An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the Contractor having submitted an invoice to the employer.
- (d) A time-rated worker will be paid at the end of each month.
- (e) Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.
- (f) Payment in cash or by cheque must take place:
  - (i) at the workplace or at a place agreed to by the worker;
  - (ii) during the worker's working hours or within fifteen minutes of the start or finish of work;
  - (iii) in a sealed envelope which becomes the property of the worker.
- (g) An employer must give a worker the following information in writing:
  - (i) the period for which payment is made;
  - (ii) the numbers of tasks completed or hours worked;
  - (iii) the worker's earnings;
  - (iv) any money deducted from the payment;
  - (v) the actual amount paid to the worker.
- (h) If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it
- (i) If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

#### E2.4.15 Deductions

- (a) An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.
- (b) An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.
- (c) An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.
- (d) An employer may not require or allow a worker to:
  - (i) repay any payment except an overpayment previously made by the employer by mistake;
  - (ii) state that the worker received a greater amount of money than the employer actually paid to the worker; or
  - (iii) pay the employer or any other person for having been employed.

#### E2.4.16 Health and Safety

- (a) Employers must take all reasonable steps to ensure that the working environment is healthy and safe.
- (b) A worker must:

- (i) work in a way that does not endanger his/her health and safety or that of any other person;
- (ii) obey any health and safety instruction;
- (iii) obey all health and safety rules of the SPWP;
- (iv) use any personal protective equipment or clothing issued by the employer;
- (v) report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

#### E2.4.17 Compensation for Injuries and Diseases

- (a) It is the responsibility of the employers (other than a Contractor) to arrange for all persons employed on a SPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.
- (b) A worker must report any work-related injury or occupational disease to their employer or manager.
- (c) The employer must report the accident or disease to the Compensation Commissioner.
- (d) An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

#### E2.4.18 Termination

- (a) The employer may terminate the employment of a worker for good cause after following a fair procedure.
- (b) A worker will not receive severance pay on termination.
- (c) A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.
- (d) A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.
- (e) A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

#### E2.4.19 Certificate of Service

- (a) On termination of employment, a worker is entitled to a certificate stating:
  - (i) The worker's full name;
  - (ii) The name and address of the employer;
  - (iii) The Project on which the worker worked;
  - (iv) The work performed by the worker;
  - (v) Any training received by the worker;
  - (vi) The period for which the worker worked on the project; and
  - (vii) Any other information agreed on by the employer and worker.

### E2.5 VARIATIONS TO STANDARD CONDITIONS OF EMPLOYMENT

Notwithstanding the provisions of the above-mentioned conditions, the Contractor shall comply with the following relevant statutory legislation:

- (a) Basic Conditions of Employment Act 75 of 1997
- (b) Labour Relations Act 66 of 1995

- (c) Employment Equity Act 55 of 1998 (Chapters 1 and 2)
- (d) Occupational Health and Safety Act 85 of 1993
- (e) Compensation for Occupational Injuries and Diseases Act 130 of 1993
- (f) Skills Development Act of 1998

The statutory Department of Labour's Government Notice No. R204 of 2 March 2001: Basic Conditions of Employment Act (No. 75 of 1997): Sectoral Determination 2: Civil Employer's Agenting Sector, South Africa as amended shall apply in respect of any employer or employee associated with the contract.

For the purposes of this contract, the following variations to the above-mentioned Ministerial Determination, Expanded Transport Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice No. R63 of 25 January 2002 shall apply. The Sub clause numbers refer to the relevant Sub clause number under Sub clause E2.4 above.

Delete Sub clause E2.4.3 and replace with the following:

"Clauses 8, 9 and 10 of the Department of Labour Government Notice No. R204 of 2 March 2001: Basic Conditions of Employment Act (No. 75 of 1997): Sectoral Determination 2: Civil Employer's Agenting Sector, South Africa shall apply. Clause 8 makes provision for 45 hours/week."

Delete Sub Sub clauses E2.4.6 and E2.4.7 and replace with the following:

"Clause 12 of the Department of Labour Government Notice No. R204 of 2 March 2001: Basic Conditions of Employment Act (no. 75 of 1997): Sectoral Determination 2: Civil Employer's Agenting Sector, South Africa shall apply. Clause 12 makes provision for a daily rest period of 12 consecutive hours and a weekly rest period of 36 consecutive hours."

Delete Sub subclause E2.4.14 and replace with the following:

"Subclause 5(1) (a) of the Department of Labour Government Notice No. R204 of 2 March 2001: Basic Conditions of Employment Act (No. 75 of 1997): Sectoral Determination 2: Civil Employer's Agenting Sector, South Africa shall apply. Subclause 5(1) (a) makes provision for employees to be paid weekly, fortnightly or monthly."

## **E2.6 EMPLOYMENT OF UNSKILLED AND SEMI-SKILLED WORKERS IN LABOUR INTENSIVE WORKS**

### **E2.6.1 Requirements for the sourcing and engagement of labour.**

- (a) Unskilled and semi-skilled labour required for the execution of all labour intensive works shall be engaged strictly in accordance with prevailing legislation, SANS 1914-5, Participation of Targeted Labour and the Works Specification.
- (b) The rate of pay shall be the latest minimum hourly rate set by the Sectoral Determination : Civil Engineering Sector : South Africa
- (c) If required tasks established by the Contractor must be such that:
  - (i) The average worker completes 5 tasks per week in 40 hours or less; and
  - (ii) The weakest worker completes 5 tasks per week in 55 hours or less.
- (d) 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 sub-clause E2.6.1 (c) above.
- (e) The Contractor shall, through all available community structures, inform the local community of the labour intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:
  - (i) Where the head of the household has less than a primary school education;
  - (ii) That have less than one full time person earning an income;

- (iii) Where subsistence agriculture is the source of income; and
- (iv) Those that are not in receipt of any social security pension income
- (f) The Contractor shall endeavour to ensure that the expenditure on the employment of temporary workers is in the following proportions:
  - (i) 40% women;
  - (ii) 20% youth who are between the ages of 18 and 35; and
  - (iii) 2% persons with disabilities.

#### E2.6.2 Specific provisions pertaining to SANS 1914-5

##### (a) Definitions

Targeted labour: Unemployed persons who are employed as local labour on the project is stated in Part C4.

- (b) Contract participation goals
  - (i) The specified contract participation goal for the contract is the percentage of the award value as stated in Part C4: Site Information. The contract participation goal shall be measured in the performance of the contract to enable the employment provided to targeted labour to be quantified.
  - (ii) The wages and allowances used to calculate the contract participation goal shall, with respect to both time-rated and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.
- (c) 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.

##### (d) Variations to SANS 1914-5

- (i) The definition for net amount shall be amended as follows:  
Financial value of the contract upon completion, exclusive of any value added tax or sales tax which the law requires the employer to pay the Contractor.
- (ii) The schedule referred to in clause 5.2 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of days of formal training provided to targeted labour.

#### E2.6.3 Training of targeted labour

- (a) 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.
- (b) The cost of the formal training of targeted labour, will be funded by the local office of the Department of Labour. This training will take place as close to the project site as practically possible. The Contractor must access this training by informing the relevant regional office of the Department of Labour in writing, within 14 days of being awarded the contract, of the likely number of persons that will undergo training and when such training is required.
- (c) 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.
- (d) 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 sub clause E2.6.3(c) above.
- (e) Proof of compliance with the requirements of sub clause E2.6.3 (b) to (d) must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

## E2.7 GENERIC LABOUR-INTENSIVE SPECIFICATION

### E2.7.1 Applicable Standardized Specification

The Construction and Management Requirements for Works Contracts: Specification SANS 1921-5 : 2004, Part 5 : Earthworks Activities which are to be Performed by Hand shall apply as additional Works Specifications to this contract. The South African National Standard SANS 1921-5 : 2005 Specification is not bound in this document and it may be obtained from South African Standards (website [www.sans.co.za](http://www.sans.co.za)) or viewed by appointment at the offices of the Employer's Representative during normal working hours.

### E2.7.2 Variations to SANS 1921-5: 2004, Part 5: Earthworks activities which are to be performed by hand

#### Clause 4.2: Trench excavation

Add the following to sub-clause 4.2.1:

"The trenches which are to be excavated by hand are up to 1,5m deep."

#### Clause 4.4: Excavations other than in trenches

Replace sub-clause 4.4.1 with the following:

"All material excavatable by hand related to the items listed in Table 4.13/1 shall be excavated by hand."

#### Clause 4.7: Loading

Delete and replace with the following:

"Loading of material in areas difficult for the specialised equipment (restricted areas) shall be done by hand."

#### Clause 4.8: Haul

Add the following:

"This clause shall not apply to this contract."

#### Clause 4.10: Spreading

Add the following:

"This clause shall apply to this contract only provided the material can be economically spread by hand."

Add the following new clauses:

#### "4.13 : Labour-intensive Work

The items/activities that shall be done by hand are listed/provided in Part C4: Site Information. These listed items and others indicated by the prefix LI in the Bill of Quantities are compulsory and may not be executed in any other way.

The Contractor may identify further activities to increase the labour component of the contract.

#### 4.14 : Manufactured Elements

Elements manufactured or designed by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than

320kg. In addition the items shall be large enough so that four workers can conveniently and simultaneously acquire a proper hand-hold on them.

The Contractor may also propose to the Employer's Agent additional labour based activities, or alternative activities in place of any of the above mentioned activities that cannot be executed using labour based methods due to unforeseen and abnormal circumstances.

The Contractor shall take cognisance of his General Obligations and the contribution of Targeted Labour to the Contractor Participation Goal (CPG) specified for the contract.

Before commencing with any labour-intensive operations the Contractor shall discuss his intentions with the Employer's Agent, and shall submit to the Employer's Agent on a weekly basis, daily labour returns indicating the numbers of temporary personnel employed on the works and the activities on which they were engaged."

## **E2.8 MEASUREMENT AND PAYMENT**

### **Prescribed Labour-intensive work**

Those parts of the Works included in the contract, including those parts requiring the use of selected subcontractors, which are to be constructed using labour-intensive methods have been marked in the Schedule / Bill of Quantities.

The numbers of the pay items or sub-items of the works, or parts of the works which are to be constructed using labour-intensive methods only are prefixed by the letters LI .

The use of plant to provide such works, other than plant specifically provided for in the Scope of Work, is a variation to the contract.

The items marked with the prefixed LI are not necessarily an exhaustive list of all the activities which may be done by hand, and this clause does not over-ride any of the requirements in the generic labour intensive specification in this Works Specifications.

Payment for items which are designated to be constructed labour-intensively (either in the Schedule / Bill of Quantities or in the Scope of Work) will not be made unless they are constructed using labour-intensive methods.

Any unauthorized use of plant to carry out work, which is to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment

**PROVINCE OF THE EASTERN CAPE**

**DEPARTMENT OF AGRICULTURE**

**TENDER NO. SCMU8 - 25/26 - 0040**

**REHABILITATION OF FORT COX COLLEGE ROADS TO SURFACED STANDARD  
±0.6KM**

**PART C4: SITE INFORMATION**

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#### **C4.1 MISCELLANEOUS**

The works specifications form an integral part of the contract documents and shall be deemed to supplement the Standard Specifications.

In the event of any discrepancy or conflict with any part or parts of the Standard Specifications, the Bill of Quantities or the Drawings, the Project Specifications shall take precedence.

The Standard Specifications, which form part of this Contract, have been written to cover all phases of work normally required for road contracts and they may therefore include items not applicable to this particular contract.

#### **C4.2 EMPLOYER'S OBJECTIVES**

The Employer's objectives are to upgrade a  $\pm 0.6$ km section of the road in Fort Cox College to Surfaced Standards.

Temporary employment opportunities coupled to training for the communities in close proximity of the road is part of this project. Labour-intensive construction methods will be used on those items of the work that are suitable to be executed in this manner.

The description of the project contained in the Scope of Work is merely an outline of the Contract Works and shall not limit the work to be carried out by the Contractor under this Contract. Details of some of the major items are given in this section and detailed quantities for each type of work to be carried out in accordance with the Contract Documents are included in the Bill of Quantities.

#### **C.4.3 OVERVIEW**

This Contract is for construction of approximately  $\pm 0.6$ km for the upgrading of the existing gravel road to surfaced standard.

The horizontal alignment geometric criteria are based on a 40 km/h design speed. The super elevation will not be taken into consideration since the project is focusing on providing access to the community using a best fit to sticking to the existing road conditions.

In order to ensure the movement of traffic during construction, the following methods will be used:

- Traffic will be accommodated as one-way traffic with stop/go control during daytime and temporary traffic lights during night-time.
- Allowance must be made for night closures. It is proposed that night closures be managed utilizing traffic signals.

The work to be executed under this contract includes the following:

- (a) General
  - (i) Establishment of the Contractor on Site.
  - (ii) Provision of offices for the Employer's Agent.
  - (iii) Accommodation of traffic and the construction of temporary widenings, where required.
  - (iv) The maintenance of the existing road and/or deviations until the contract has been handed over to the Employer.
  - (v) Removal of site establishment.
- (b) Drainage

- (i) The construction of concrete lined side drains and grid inlets in cuttings.
  - (ii) The construction of erosion protection measures where required.
  - (iii) Installation of proposed stormwater pipes
  - (iv) Construction of concrete-lined and/or stone pitched protected side drains on steep slopes, where required, in accordance with existing level of service (all stormwater is to be channelled along the surface)
- (c) Roadworks
- (i) Clearing and grubbing.
  - (ii) Rip, mix, reshape and re-compact in-situ layer
  - (iii) Clearing and repair of stormwater structures
  - (iv) The construction of cuts and fills.
  - (v) The construction of selected layers.
  - (vi) The construction of a subbase layer.
  - (vi) The construction of a base layer.
  - (vi) The construction of a surfacing layer.
  - (vii) Erection of road furniture and signs, where required
  - (viii) Road Markings
  - (ix) Overall cleaning of site.
- (d) Ancillary Roadworks
- (i) Construction of surfaced intersections and sections of side roads.
  - (ii) Fencing of the road reserve.
  - (iii) The provision of road markings.
  - (iv) The installation of new road signs.
  - (v) The erection of guardrails.
  - (vi) Top soiling and grassing of cut and fill slopes.
  - (vii) Finishing off the road reserve, spoil areas and borrow pits.
- (f) Labour-intensive Construction

It will be required that as much of the construction work as practically possible and feasible be undertaken by means of labour-intensive construction methods. This work shall be done in accordance with Part E: Labour Specifications of the Works Specification.

#### **C4.4 EXTENT OF THE WORKS**

##### **C4.4.1 Roadworks**

###### **C4.4.1.1 Existing Road**

The existing is a gravel road with a nominal 6m width. The road was re-gravelled recently where a 100mm wearing course layer was placed on the road.

###### **C4.4.1.2 Proposed Road Cross Section**

The road cross section shall be as shown on the drawings. The surfaced width of the upgraded road will be 6.0 m wide for the entire section of the roads.

###### **C4.4.1.3 Batter Policy**

###### **(a) Fill Slopes**

All fills shall be constructed to a constant batter of 1 vertical to 2 horizontal, unless otherwise ordered by the Employer's Agent.

## (b) Cut Slopes

Cut slopes will generally be constructed at the following batters:

- 1 vertical to 1.2 horizontal in soft material and mudstone.
- 1 vertical to 1.5 horizontal in soft rock; and
- 1 vertical to 1.1 horizontal in competent rock.

### C4.4.1.4 Road Geometry

The design speed of the upgraded road is 40km/h for the entire section of the roads.

### C4.4.1.5 Passing Lanes / Opportunities

No passing lanes will be constructed.

### C4.4.1.6 Widening of Fills

The widening of all the existing fills as well as new fills that are constructed where the natural cross fall of the roadbed exceeds 1:10, shall be bonded to the existing fills or roadbed by means of benches excavated into the existing fills or roadbed as specified and/or as indicated on the drawings.

### C4.4.1.7 Construction of High Fills

There are no high fills on the contract.

### C4.4.1.8 Major Intersections

There are no major intersections on the contract.

### C4.4.1.9 Minor Intersections

There are no minor intersections on the contract.

## C4.4.2 Road Pavement

### C4.4.2.1 Pavement Design

Surfacing: Continuously Graded Asphalt (30 mm);

Base Layer 150mm thick G4 Compacted to 98% MOD AASHTO DENSITY

Subbase: 150mm thick G6 gravel selected layer compacted to 95% of MDD.

Selected: 150mm thick G5 gravel selected layer compacted to 95% of MDD

Roadbed: 150mm thick G9 quality in situ material compacted to 93% of MDD.

### C4.4.2.2 Material Sources

There are operating commercial quarries, relatively close to site, they are located in East London, King Williams Town and Stutterheim

## C4.4.3 Drainage Works

As shown on the drawings, drainage works will consist of the following:

- (i) Clearing and repair of stormwater structures.
- (ii) Installation of proposed stormwater pipes.
- (iii) Installation of kerbing and channelling

#### **C4.4.4 Temporary Works**

The Contractor is responsible for the design of all temporary works including accommodation of traffic, support, and formwork. He shall supply full working plans supported by a professional Employer's Agent's design certificate.

### **C4.5 ACCOMMODATION OF TRAFFIC**

It is proposed that all works are undertaken in full-width methods under traffic accommodation

Allowance must be made for night closures. It is proposed that night closures be managed utilizing traffic signals.

The Contractor will submit the Traffic Accommodation Plan (TAP) with an alternative route for accommodation of traffic that will be utilized for perusal and approval by the Project Engineer. The TAP should indicate Work Zones, Locations, Traffic Accommodation Strategies and Length to allow minimum interruption that can be maintained.

### **C4.6 MAINTENANCE OF EXISTING ROAD**

The requirements of Clauses 1511 and 1512 shall apply to all existing gravel roads, temporary gravel roads, existing surfaced roads and newly surfaced roads used as temporary deviations on this contract.

The Contractor shall be responsible for all routine maintenance operations along the entire length of road reserve, from the date of handing over of the site until the date of issue of the certificate of completion of the works. The maintenance of the existing gravel road is to be carried out using labour intensive methods for as many required activities as practical and as agreed by the Employer's Agent.

Once the certificate of completion of the works has been issued the responsibility for normal maintenance of the road (e.g. collection of litter, clearing of drains, repair of road signs damaged by the public, etc.) shall revert back to the Employer.

### **C4.7 SERVICES**

The affected services are indicated on the drawings .

Eskom and Telkom will be responsible for the relocation of their services as may be required while the Contractor shall be responsible for the relocation and / or protection of all other services.

### **C4.8 DRAWINGS**

The reduced drawings that form part of the tender document shall be used for tender purposes only.

The Contractor will be supplied with three (3) paper copies of each of the drawings. These paper copies are issued free of charge and the Contractor shall only be provided additional copies on request and for his account.

Any information in the possession of the contractor, which the Employer's Agent Representative requires for completing his record drawings, shall be supplied to the Employer's Agent Representative before a certificate of completion will be issued.

Only figured dimensions shall be used and drawings shall not be scaled unless so instructed by the Employer's Agent. The Employer's Agent will supply all figured dimensions omitted from the drawings.

The levels given on drainage/structural drawings are subject to confirmation on site, and the Contractor shall submit all levels to the Employer's Agent for confirmation before he commences any structural construction work. The Contractor shall also check all clearances given on the drawings and shall inform the Employer's Agent of any discrepancies.

#### **C4.9 POWER SUPPLY AND OTHER SERVICES**

The Contractor shall make his own arrangements concerning the supply of electrical power and all other services. No direct payment will be made for the provision of electrical and other services. The cost thereof shall be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required.

The Contractor must liaise with the regional offices of Telkom, Eskom and OR Tambo DM (water) to confirm the position of all above and underground services, before commencing with the works.

Note should be taken of any Eskom restrictions on the supply of electricity as no claims in respect of power outages will apply.

#### **C4.10 CONSTRUCTION IN RESTRICTED AREAS**

It may be necessary for the Contractor to work within restricted areas. Except where provided for in the Specifications, no additional payment will be made for work done in restricted areas. In certain places the width of the fill may decrease to zero and the working space may be confined. The method of construction in these confined areas largely depends on the Contractor's constructional plant.

However, the Contractor must note that measurement and payment will be in accordance with the specified cross-sections and dimensions only, irrespective of the method used for achieving these cross-sections and dimensions and that the tendered rates and amounts shall include full compensation for all special equipment and construction methods and for all difficulties encountered when working in confined areas and narrow widths, and at or around obstructions, and that no extra payment will be made nor will any claim for additional payment be considered in such cases.

#### **C4.11 CONTRACTOR'S CAMP SITE**

The successful tenderer will have to engage with the local community and local authorities in order to secure a site for site establishment that will have electrical and other services.

No direct payment will be made for the provision of electrical and other services. The cost thereof is deemed to be included in the rates and amounts tendered for the various items of work for which these services are required. The successful tenderer shall provide a suitable site for his camp and that of SMME's, and for accommodating his labourers.

Responsibility for security on site rests with the successful tenderer. The successful tenderer shall therefore assess and augment his security measures on site to suit the nature of the works, location of the site and socio-political environment. No additional payment is allowed for providing site security.

#### **C4.12 SECURITY**

The Contractor shall be responsible for the security of his personnel and constructional plant on and around the site of the works and for the security of his camp, and no claims in this regard will be considered by the Employer. The Contractor will also be responsible for the security of the areas around the Employer's Agent's offices and the laboratories.

#### **C4.13 PROCESS AND ACCEPTANCE CONTROL**

A combined laboratory will be established on site and will perform all the process control and acceptance control testing on this Contract.

The Employer shall not pay claims for delays to the works resulting from the awaiting of test results. Testing in the combined laboratory will be affected as promptly as is reasonable but it is in the Contractor's own interest to submit material samples, concrete cubes or other components for testing in good time to assist in avoiding or reducing delays.

The procedure for requests for testing, frequency of tests, testing and reporting of results will be finalised by the Employer's Agent on site in collaboration with the Contractor. The combined laboratory will be under the control of the Employer's Agent.

The Contractor shall be responsible for certain costs with regard to the establishment and running of the combined laboratory (refer to Clause B1205 of these Project Specifications).

#### **C4.14 ENVIRONMENTAL MANAGEMENT**

The Contractor shall take the utmost care to minimize the impact of his establishment and other construction activities on the environment and shall adhere to the requirements as set out in the EMP's. The Contractor will be required to submit a Method Statements to the Environmental Control Officer (ECO) detailing his construction activities and what measures will be implemented to prevent the pollution of streams, rivers and countryside through the spilling of fuels, bituminous binders, sewage from the temporary toilets and other deleterious materials. Where in the opinion of the Employer's Agent, the Contractor has not adhered to these requirements, the Contractor shall rectify the damage at his cost and to the satisfaction of the Employer's Agent.

In addition to aspects of the design which are intended to avoid or reduce environmental impact, and in addition to normal good construction practice expected of the Contractor, the following requirements shall also be observed:

- (a) The Contractor shall comply with the requirements of the Environmental Management Specification contained in Section C.
- (b) Clearing shall be limited to the road prism and, where applicable, to detours, which shall be sited in consultation with the Employer's Agent and the local communities.
- (c) No littering by construction workers shall be allowed. A refuse control system shall be established for the collection and removal of refuse to the satisfaction of the Employer's Agent.
- (d) Adequate provision shall be made for temporary toilet requirements in construction areas. Use of the veld for this purpose shall not be allowed under any circumstances.
- (e) Streams, rivers and dams shall be protected from direct or indirect spillage of pollutants, such as refuse, garbage, cement, concrete, sewage, chemicals, fuels, oils, aggregate tailings, wash water, organic materials and bituminous products. In the event of spillage, prompt action shall be taken to clear the affected area. Emergency measures in the event of spillage shall be set out and the responsible person shall be made aware of the required action. The construction of temporary and / or permanent dams shall be done with the necessary approvals from the Department of Water Affairs and Forestry and the Department of Environmental Affairs and Tourism.
- (f) Bituminous and / or other hazardous products shall not be spoiled on site and shall only be disposed of at licensed authorised disposal facilities.
- (g) Provision shall be made to prevent excessive erosion and siltation throughout the Contract and in particular on adjacent land. Should excessive erosion and / or siltation take place outside the road reserve as a direct result of the Contractor's construction activities, the Contractor shall be responsible for making good the erosion / siltation to the satisfaction of the landowner and the Employer's Agent.
- (h) Invader species of plants shall be controlled.

- (i) Dust and noise pollution shall be restricted to acceptable levels

No separate payment shall be made for observing these requirements as such payment shall be deemed to be included in the amount tendered for item B13.01(c) (The contractor's general obligations: Time-related obligations). Any avoidable non-compliance with these requirements shall be considered sufficient grounds for withholding payment of part or all of the amounts to be paid for the above item in order to pay for the repairs to any damages.

#### **C4.15 PROJECT STEERING COMMITTEE (PSC)**

A Project STEERING Committee (PSC) will be established to manage this project in accordance with the provisions of Part E: Labour Specifications. The Contractor shall have one senior member of his staff as representative on the PSC without any voting powers.

#### **C4.16 COMMUNITY LIAISON OFFICER (CLO)**

It will be required from the Contractor to employ a Community Liaison Officer (CLO) during the execution of the Works as specified in Part E: Labour Specification of this Works Specification.

#### **C4.18 LABOUR INTENSIVE CONSTRUCTION METHODS**

##### **C4.18.1 General**

It is a requirement of this contract that certain activities shall be constructed by means of labour- intensive construction methods.

It is therefore required that as much of the construction works as practically possible and feasible be undertaken by labour-intensive construction methods in accordance with the provisions of Part E: Labour Specification of the Works Specification.

##### **C4.18.2 Targeted Labour**

The targeted labour for the purpose of this project will be South African citizens who permanently reside within a direct distance of approximately 5 km from the road centre line. In the recruitment of local labour preference shall be given to persons residing closest to the road.

The Contractor shall therefore employ labourers, artisans and subcontractors for the execution and completion of the Works from the local communities within the above target area in accordance with the provisions of Part E: Labour Specifications.

##### **C4.18.3 Local Labour Goal**

The minimum local labour goal for this contract, as defined in Part E shall be 10% of the award value excluding Contingencies, Provisional Sums, CPA and VAT.

Failure to comply to this minimum local labour goal will result in the payment of a penalty in accordance with subclause E1.4.5 in Part E of this Works Specification.

If required, after consultation with the community, rotation of labour may be necessary. This will take place on a 4 to 6 month basis and will be limited to general labourers. Additional costs incurred to provide protective clothing for newly rotated workers will be paid in the Schedule of Quantities. All other costs incurred due to labour rotation will be deemed to be allowed for in the tendered rates and no additional payments will be made.

The Contractor and his subcontractors shall ensure that they enter into a Contract of Employment with each employee engaged on this contract. A copy of the Contract of Employment completed for each employee engaged shall be given to the Employer's Agent prior to their commencing work on this Contract.

Skilled workers and competent subcontractors may only be recruited elsewhere if not available locally. SMME's will also be required to carry out work by labour-intensive construction.

The portions of the Works listed in clause C4.18.4 below and those marked by LI in the Bill of Quantities shall, unless otherwise instructed by the Employer's Agent, be constructed under this Contract using labour-intensive construction methods only.

In respect of those portions of the Works which are not listed in clause C4.18.4 and marked as LI in the Bill of Quantities, the construction methods adopted and plant used shall be at the discretion of the Contractor, provided that the construction methods adopted and plant used by the Contractor are appropriate in respect of the nature of the Works to be executed and the standards to be achieved in terms of the Contract.

**PROVINCE OF THE EASTERN CAPE**

**DEPARTMENT OF AGRICULTURE**

**REHABILITATION OF FORT COX INTERNAL ROADS TO SURFACED STANDARDS  $\pm 0.6\text{KM}$**

C.4.2 Schedule of contract Drawings

The following drawings form part of this contract:

DRAWING NO:	DESCRIPTION:
1	C2407-LS-1 –PLAN AND LONG SECTION
2	C2407-XS-1 – CROSS SECTION LAYOUT
3	C2407-XS-2 – CROSS SECTION LAYOUT
4	C2407-STW & RD-01 – STORMWATER AND ROAD DETAILS 1 OF 2
5	C2407-STW & RD-02 – STORMWATER AND ROAD DETAILS 2 OF 2