

CONTRACT

PART C1: AGREEMENTS AND CONTRACT DATA

PART C2: PRICING DATA

PART C3: SCOPE OF WORK

PART C4: SITE INFORMATION

CONTRACT

TABLE OF CONTENTS	Page	Colour
PART C1: AGREEMENTS AND CONTRACT DATA		
C1.1: FORM OF OFFER AND ACCEPTANCE	C3	Yellow
C1.1.1: OFFER	C3	Yellow
C1.1.2: ACCEPTANCE.....	C4	Yellow
C1.1.3: SCHEDULE OF DEVIATIONS	C5	Yellow
C1.2: CONTRACT DATA	C7	Yellow
C1.2.1: CONDITIONS OF CONTRACT	C7	Yellow
C1.2.2: DATA PROVIDED BY THE EMPLOYER	C10	Yellow
C1.2.3: DATA PROVIDED BY THE CONTRACTOR.....	C15	Yellow
C1.3: PERFORMANCE GUARANTEE.....	C16	White
C1.4: AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT NO. 85 OF 1993	C19	White
C1.5: RETENTION MONEY GUARANTEE	C21	White
C1.6: TRANSFER OF RIGHTS.....	C23	White
PART C2: PRICING DATA		
C2.1: PRICING ASSUMPTIONS	C24	Yellow
C2.2: BILL OF QUANTITIES.....	C29	Yellow
PART C3: SCOPE OF WORK		
TABLE OF CONTENTS.....	C43	Blue
C3.1: STANDARD SPECIFICATIONS	C44	Blue
C3.2: PROJECT SPECIFICATIONS.....	C44	Blue
C3.3: PARTICULAR SPECIFICATIONS	C59	Blue
PART C4: SITE INFORMATION		
C4.1: LOCALITY PLAN.....	C118	Green
C4.2: EXAMPLE OF CONTRACT SIGNBOARD DETAILS	C119	Green
C4.3: STANDARD DETAILS.....	C120	Green
ANNEXURE A: GUIDELINES FOR CONSTRUCTION AND MAINTENANCE PROJECTS DURING COVID-19 LOCKDOWN	C128	White

PART C1: AGREEMENTS AND CONTRACT DATA

C1.1: FORM OF OFFER AND ACCEPTANCE

C1.1.1: OFFER

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

CONTRACT NO. ZNB02883/00000/00/ULU/INF/25/T: THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12 TO KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY(EMPANGENI REGION

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

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

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

Amount in Words.....
.....
.....

R..... (in figures).

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

Signature: (of person authorised to sign the tender)

Name: (of signatory in capitals)

Capacity: (of signatory)

Name of Tenderer: (organisation)

Address:

Telephone number:

E-mail:

Witness:

Signature:

Name: (in capitals)

Date:

[Failure of a Tenderer to sign this form will invalidate the tender]

This form is to be completed by the Employer only

C1.1.2: ACCEPTANCE

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

The terms of the contract are contained in

- Part C1 Agreements and Contract Data (which includes this Agreement)
- Part C2 Pricing Data
- Part C3 Scope of Work
- Part C4 Site Information

and the schedules, forms, drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above.

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

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

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

Signature:

Name: *(in capitals)*

Capacity:

Name of Employer: *(organisation)*

Address:

.....

Witness: Signature:

Name: *(in capitals)*

Date:

This form is to be completed by the Employer and the successful tenderer only, upon acceptance of the successful tenderer's offer

C1.1.3: SCHEDULE OF DEVIATIONS

The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Tender Data and the Conditions of Tender.

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 agreement reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.

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.

Any change or addition to the tender documents arising from the above agreement and recorded here shall also be incorporated into the final draft of the Contract.

- 1 **Subject:**
- Details:**.....

- 2 **Subject:**
- Details:**

- 3 **Subject:**
- Details:**

- 4 **Subject:**
- Details:**

- 5 **Subject:**
- Details:**

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

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:

Tenderer: *(Name and address of organisation)*

.....

Witness:

Signature:

Name:

Date:

FOR THE EMPLOYER:

Signature:

Name:

Capacity:

Employer: *(Name and address of organisation)*

.....

Witness:

Signature:

Name:

Date:

C1.2: CONTRACT DATA

C1.2.1: CONDITIONS OF CONTRACT

C1.2.1.1 GENERAL CONDITIONS OF CONTRACT

This Contract will be based on the 'General Conditions of Contract for Construction Works, Third Edition (2015)', issued by the South African Institution of Civil Engineering (abbreviated title: 'GCC 2015').

It is agreed that the only variations from the GCC 2015 are those set out hereafter under "C1.2.1.2 SPECIAL CONDITIONS OF CONTRACT".

C1.2.1.2 SPECIAL CONDITIONS OF CONTRACT

C1.2.1.2.1 GENERAL

These Special Conditions of Contract (SCC) form an integral part of the Contract. The Special Conditions of Contract shall amplify, modify or supersede, as the case may be, the GCC 2015 to the extent specified below, and shall take precedence and shall govern.

The clauses of the Special Conditions of Contract hereafter are numbered "SCC" followed in each case by the number of the applicable clause or subclause in the GCC 2015, and the applicable heading, or (where a new special condition that has no relation to the existing clauses is introduced) by a number that follows after the last clause number in the GCC 2015, and an appropriate heading.

C1.2.1.2.2 AMENDMENTS TO THE GCC 2015

SCC 1.1 Definitions

SCC 1.1.1.14: *delete* "Commencement Date" *in the definition and substitute* "date of commencement of the Works".

Add the following to the end of Clause 1.1:

"SCC 1.1.1.35 "Construction Manager" means the person approved of in writing by the Employer's Agent, as the Contractor's representative on Site.

SCC 1.1.1.36 "Targeted Enterprise" means an enterprise as defined in PART F: Small Contractor Development of section C3.3 Particular Specifications in Part C3: Scope of Work.

SCC 1.1.1.37 "Targeted Labour" means labour as defined in PART F: Small Contractor Development of section C3.3 Particular Specifications in Part C3: Scope of Work."

SCC 4.1.1 Extent of Contractor's obligations

Add the following new paragraphs to the end of Clause 4.1.1:

"If the Contractor fails to achieve the monetary value of the contract participation goal stated in the Contract Data for local labour content in terms of PART E: Expanded Public Works Programme of section C3.3 Particular Specifications in Part C3: Scope of Work, the Contractor shall be liable to the Employer for a sum calculated in accordance with the Contract Data and the aforementioned Scope of Work as a penalty for such underachievement.

If the Contractor fails to achieve the monetary value of the contract participation goal stated in the Contract Data for contract participation by Targeted Enterprises in terms of PART F: Small Contractor Development of section C3.3 Particular Specifications in Part C3: Scope of Work, the Contractor shall be liable to the Employer for a sum calculated in accordance with the Contract Data and the aforementioned Scope of Work

as a penalty for such underachievement.”

SCC 4.4.2 Subcontractor to be approved

Add the following to Clause 4.4.2:

“The Contractor shall comply with the subcontracting restrictions stated in the Contract Data.”

SCC 4.10.1 Engagement of employees

Add the following to Clause 4.10.1:

“The contractor shall pay rates and wages, and observe conditions of labour, which are not lower than those established for the trade or industry where the work is carried out, as stated in the Contract Data.”

SCC 5.3.1 Commencement of the Works

Delete the first sentence of Clause 5.3.1 and substitute the following:

“The Employer’s Agent shall give the Contractor not less than 7 days’ notice of the date of commencement of the Works on which date the Contractor is instructed to commence carrying out the Works, save as may be otherwise provided in the Contract, or be legally or physically impossible. The date of commencement of the Works shall be within the period after the Commencement Date stated in the Contract Data.”

SCC 5.3.3 Time to instruct commencement of the Works

Delete Clause 5.3.3.

SCC 5.14.4 Certification of Completion

Insert the following in the first sentence after the words “has been duly completed,”:

“and the Contractor has submitted the information stated in the Contract Data,”.

SCC 5.14.6 Occupation by the Employer

Add the following to Clause 5.14.6:

“The use of any completed roadway or parts of the Works, whether for unhindered use by the public or for accommodation of traffic, while other parts are being constructed, shall not constitute occupation of the Works by the Employer.”

SCC 6.2.1 Delivery of security

In the last two lines of Clause 6.2.1, delete the words “the type of security for the due performance of the Contract, as selected in the Contract Data” and replace them with the words “a fixed performance guarantee as security for the due performance of the Contract in accordance with the Contract Data Part A: Data Provided by the Employer”.

Delete the entirety of Clause 6.2.2 and replace it with the following:

“SCC 6.2.2 Contractor failing to provide security

If the Contractor fails to provide the required fixed performance guarantee within the time period stated in the Contract Data, or if the performance guarantee shall differ substantially from the pro forma, it shall legally be deemed that the Contractor has selected a security of ten per cent retention of the value of the Works without limiting the Employer’s right to terminate the Contract in terms of Clause 9.2.”

SCC 6.2.3 Validity of performance guarantee

Delete the entirety of the first sentence of Clause 6.2.3 and replace it with the following:

“The Contractor shall ensure that the performance guarantee remains valid and enforceable until the Certificate of Completion is issued.”

SCC 6.10.4 Delivery, dissatisfaction with and payment of payment certificate

Delete “within 28 days” in the third sentence and substitute “within 30 days”.

SCC 6.10.8 Contractor’s completion statement

Delete “within 28 days” in the third sentence and substitute “within 30 days”.

SCC 6.10.9 Final Payment Certificate

Delete “within 28 days” in the second sentence and substitute “within 30 days”.

SCC 10.1.5 Employer’s Agent’s ruling on Contractor’s Claim

Delete “within 28 days” in the first sentence and in Clause 10.1.5.1, and substitute “within 56 days”.

C1.2.2: DATA PROVIDED BY THE EMPLOYER

The following contract specific data are applicable to this contract.

CLAUSE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER								
<p>1.</p> <p>SCC 1.1.1.14</p> <p>1.1.1.26</p> <p>1.1.1.15</p> <p>1.2.1.2</p> <p>1.1.1.16</p> <p>1.2.1.2</p>	<p>GENERAL</p> <p>The Defects Liability Period is 6 months.</p> <p>The time for achieving Practical Completion is <u>6 months</u> from the date of commencement of the Works, including non-working days and special non-working days.</p> <p>Pricing Strategy: The Contract is to be a Re-measurement Contract.</p> <p>Name of Employer: Province of KwaZulu-Natal represented by Head of Department: Department of Transport</p> <p>Address of Employer:</p> <table border="0"> <tr> <td><u>Physical:</u></td> <td><u>Postal:</u></td> </tr> <tr> <td>Unit A Inkonkoni street Ulundi 3838</td> <td>Private Bag X 18 Ulundi 3838</td> </tr> </table> <p>E-mail: Nozipho.Ngcobo@kznttransport.gov.za</p> <p>Telephone No: 035 879 8102 Fax No: (035) 879 8154</p> <p>Name of Employer's Agent: Dr EL Mpanza</p> <p>Address of Employer's Agent:</p> <table border="0"> <tr> <td><u>Physical:</u></td> <td><u>Postal:</u></td> </tr> <tr> <td>Unit A Inkonkoni street Ulundi 3838</td> <td>Private Bag X 18 Ulundi 3838</td> </tr> </table> <p>E-mail: Emmanuel.Mpanza@kznttransport.gov.za Telephone No: 035 879 8102 Fax No: (035) 879 8154</p>	<u>Physical:</u>	<u>Postal:</u>	Unit A Inkonkoni street Ulundi 3838	Private Bag X 18 Ulundi 3838	<u>Physical:</u>	<u>Postal:</u>	Unit A Inkonkoni street Ulundi 3838	Private Bag X 18 Ulundi 3838
<u>Physical:</u>	<u>Postal:</u>								
Unit A Inkonkoni street Ulundi 3838	Private Bag X 18 Ulundi 3838								
<u>Physical:</u>	<u>Postal:</u>								
Unit A Inkonkoni street Ulundi 3838	Private Bag X 18 Ulundi 3838								
<p>3.</p> <p>3.2.3</p>	<p>EMPLOYER'S AGENT</p> <p>The Employer's Agent is required to obtain the specific approval of the Employer before executing any of his functions or duties according to the following Clauses:</p> <p>SCC 5.3.1: Give the Contractor notice of the commencement date of the Works.</p> <p>6.3.1: Order any work as a Variation Order.</p> <p>6.3.1: Order any work which requires the utilisation of the provision for contingencies in the Contract Sum.</p> <p>6.3.1: Order any work which requires the Contract Price to exceed the Contract Sum.</p> <p>10.1.5: Ruling on a Contractor's claim.</p>								

CLAUSE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
5.	TIME AND RELATED MATTERS
SCC 5.3.1 and 5.3.2	<p>The date of commencement of the Works shall be within 28 days, or 56 days if a construction work permit is required, after the Commencement Date.</p> <p>The following documentation shall be submitted within <u>14 days</u> of the Commencement Date by the Contractor before commencing to carry out the Works:</p> <ul style="list-style-type: none"> (i) Health and Safety Plan (refer to Clause 4.3); (ii) Form C1.4 'Agreement in terms of Section 37(2) of the Occupational Health and Safety Act No. 85 of 1993' to be signed by the Contractor and the Employer (refer to Clause 4.3); (iii) Proof of registration and good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993 (Act No. 130 of 1993) (refer to Clause 4.3); (iv) Initial Programme (refer to Clause 5.6); (v) Security (refer to Clause 6.2); and (vi) Insurance (refer to Clause 8.6); <p>and if the Employer is required to apply for a construction work permit to perform construction work in terms of regulation 3(1) of the Construction Regulations 2014, the following documentation shall also be submitted:</p> <ul style="list-style-type: none"> (vii) Temporary works designer's appointment duties in terms of Regulation 6(2) as have been agreed upon plus proof of registration with ECSA [CR 3(5)(b)(iii) read with CR 5(1)(e) and CR 6(2)]; (viii) Evidence that the Principal contractor has made adequate provision for the cost of Health and Safety, i.e., bill of quantities [CR 3(5)(b)(iii) read with CR 5(1)(g)]; and (ix) Evidence that the Principal contractor has the necessary competencies to carry out construction work safely, namely, schedule of activities, relevant appointments and proofs of competency [CR 5(1)(h)].
	The non-working days are Sundays.
5.8.1	<p>The special non-working days are:</p> <ul style="list-style-type: none"> (i) the statutory public holidays in terms of the Public Holidays Act; (ii) the foreseeable election days declared as a statutory public holiday; and (iii) the annual year-end shutdown period as recommended by the Bargaining Council for the Civil Engineering Industry.
5.13.1	The penalty for failing to complete the Works is 0.005% of the Contract Sum per day, up to a maximum limit of twenty-five thousand rand per day (R25 000.000 per day).
5.14.1	The requirements for achieving Practical Completion are as stated in General Conditions of Contract 2015.
5.14.1	The Contractor shall submit the following:
SCC 5.14.4	<ul style="list-style-type: none"> (i) evidence that the local labour has been paid, and that the Targeted Enterprise subcontractors have received all amounts due in terms of their respective subcontract agreements; and (ii) the survey and materials information which the Employer's Agent requires to complete the as-built drawings and records.
	The latent defects period is 10 years.

CLAUSE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
5.16.3	
<p>6.</p> <p>SCC 6.2.1</p> <p>6.5.1.2.3</p> <p>6.8.2</p> <p>6.8.3</p>	<p>PAYMENT AND RELATED MATTERS</p> <p>The security to be provided by the Contractor shall be:</p> <p style="padding-left: 40px;">Fixed Performance Guarantee of 8% of the first One Million Rand plus 3,5% of the balance of the Contract Sum.</p> <p>The percentage allowance to cover overhead charges is 10%.</p> <p>The value of payment certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following data.</p> <p>The values of the coefficients for calculating the Contract Price Adjustment Factor are:</p> <p style="padding-left: 40px;">Routine maintenance (excluding bitumen) (Schedules A, D, F and G):</p> <p style="padding-left: 80px;">a = 0,48 b = 0,37 c = 0.005 d = 0,1</p> <p>“L”, “P”, “M” and “F” are defined as follows:</p> <p>“L” is the “Labour Index” and shall be the Consumer Price Index for “Geographic Indices > CPI per province > KwaZulu-Natal” as published in Table A of the Statistical Release P0141 of Statistics South Africa.</p> <p>“P” is the “Construction Equipment Index” and shall be the Construction Materials Price Index for “Plant and equipment” as published in Table 4 of the Statistical Release P0151.1 of Statistics South Africa.</p> <p>“M” is the “Materials Index” and shall be the Construction Materials Price Index as published in Table 6 of the Statistical Release P0151.1 of Statistics South Africa for:</p> <p style="padding-left: 40px;">Road works (Schedules A, E and F): “Civil engineering material – roads, general (excluding bitumen)”</p> <p>“F” is the “Fuel Index” and shall be the Producer Price Index for “Coke, petroleum, chemical, rubber and plastic products > Coal and petroleum products > Diesel” as published in Table 1 of the Statistical Release P0142.1 of Statistics South Africa.</p> <p>The base month is the month preceding the month of tender closure.</p> <p>Any index calculated by means of a linking factor between an old and new index, shall be rounded to one decimal place.</p> <p>Price adjustments for variations in the cost of bitumen as a special material are allowed.</p> <p>Only the net bitumen content of asphalt and bituminous products shall be subject to variations in cost, and no account shall be taken of transport, emulsifiers, diluents or modifiers that may be supplied ex refinery or added later.</p>

CLAUSE	CONTRACT SPECIFIC DATA PROVIDED BY THE EMPLOYER
<p>6.10.1.5</p> <p>6.10.3</p>	<p>The percentage advance on Plant and materials not yet built into the Permanent Works is 80%.</p> <p>The percentage retention on the amounts due to the Contractor is 10%.</p> <p>The limit of retention money is 5% of the first One Million Rand plus 1,6% of the balance of the Contract Sum excluding contingencies, contract price adjustment, and VAT.</p> <p>A retention guarantee in lieu of a cash retention is permitted.</p>
<p>8.</p> <p>8.6.1.1.2</p> <p>8.6.1.1.3</p> <p>8.6.1.2</p> <p>8.6.1.3</p>	<p>RISKS AND RELATED MATTERS</p> <p>The value of Plant and materials supplied by the Employer to be included in the insurance sum is <u>nil</u>.</p> <p>The amount to cover professional fees for repairing or reinstatement of damage to the Works to be included in the insurance sum is <u>nil</u>.</p> <p>Special Risks Insurance issued by SASRIA is required.</p> <p>The limit of indemnity for liability insurance is <u>R10 000 000.000 (ten million Rand only)</u> for any single liability claim. Liability insurance shall include spread of fire risk.</p>
<p>10.</p> <p>10.5.2</p> <p>10.5.3</p> <p>10.8.1</p>	<p>CLAIMS AND DISPUTES</p> <p>Disputes shall be referred to ad-hoc adjudication.</p> <p>The number of Adjudication Board members to be appointed shall be one.</p> <p>Unresolved disputes shall be determined by court proceedings.</p>
	<p>DATA WITH REFERENCE TO C3.3 PARTICULAR SPECIFICATIONS</p>
<p>PART F</p> <p>F2.9</p>	<p>SMALL CONTRACTOR DEVELOPMENT</p> <p>The target area for local labour is Ulundi Local Municipality.</p>

C1.3: PERFORMANCE GUARANTEE

PRO FORMA

PERFORMANCE GUARANTEE

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

1. GUARANTOR DETAILS AND DEFINITIONS

“Guarantor” means:

Physical address:

“Employer” means:

“Contractor” means:

“Employer’s Agent” means:

“Works” means:

“Site” means:

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

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

Amount in words:

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

Amount in words:

“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.

2. 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.

3. GUARANTOR’S LIABILITY

- 3.1 The Guarantor’s liability shall be limited to the amount of the Guaranteed Sum.
- 3.2 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.
- 3.3 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.

4. CONDITIONS APPLICABLE TO THIS PERFORMANCE GUARANTEE

4.1 The Guarantor hereby acknowledges that:

4.1.1 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.

4.1.2 Its obligation under this Performance Guarantee is restricted to the payment of money.

4.2 Subject to the Guarantor's maximum liability referred to in 3.1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.2.1 to 4.2.3:

4.2.1 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 4.2.2;

4.2.2 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 4.2.1 and the sum certified has still not been paid;

4.2.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.2.

4.3 Subject to the Guarantor's maximum liability referred to in 3.1, 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:

4.3.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 4.3; or

4.3.2 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 4.3; and

4.3.3 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.

4.4 It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4.2 and 4.3 shall not exceed the Guarantor's maximum liability in terms of 3.1.

4.5 Where the Guarantor has made payment in terms of 4.3, 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.

4.6 Payment by the Guarantor in terms of 4.2 or 4.3 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.

4.7 Payment by the Guarantor in terms of 4.3 will only be made against the return of the original Performance Guarantee by the Employer.

4.8 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.

- 4.9 The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
- 4.10 This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 3.2, 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.
- 4.11 This Performance Guarantee, with the required demand notices in terms of 4.2 or 4.3, shall be regarded as a liquid document for the purposes of obtaining a court order.
- 4.12 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)

C1.4: AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT NO. 85 OF 1993

THIS AGREEMENT is made between The Province of KwaZulu-Natal represented by Head of Department: Department of Transport (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. ZNB02883/00000/00/ULU/INF/25/T: THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12.00 TO KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY (EMPANGENI REGION)

for the construction, completion and maintenance of the works;

AND WHEREAS the EMPLOYER and the CONTRACTOR have agreed to enter into an agreement in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act No 85 of 1993, as amended by the Occupational Health and Safety Amendment Act No 181 of 1993 (hereinafter referred to as the ACT);

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 AGENT 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 the EMPLOYER 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 **EMPLOYER**

on this the day of 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1.

2.

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

on this the day of 20.....

SIGNATURE:

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1.

2.

C1.5: RETENTION MONEY GUARANTEE

PRO FORMA

RETENTION MONEY GUARANTEE

THE HEAD: TRANSPORT
PROVINCE OF KWAZULU-NATAL
PRIVATE BAG X9043
PIETERMARITZBURG
3200

CONTRACT NO. _____ FOR _____

ISSUED TO: the **PROVINCE OF KWAZULU-NATAL**, represented by **HEAD: TRANSPORT** (hereinafter referred to as "the Employer")

ON BEHALF OF: (hereinafter referred to as "the Contractor")

In connection with

CONTRACT NO. ZNB02883/00000/00/ULU/INF/25/T (hereinafter referred to as "the Contract")

WHEREAS the Employer and the Contractor have agreed that the Contractor may provide a guarantee in lieu of the whole or portion of the retention monies provided for under the Contract;

NOW THEREFORE we, the undersigned, undertake, in accordance with the following provisions, to pay the Employer such amounts as the Employer may, from time to time, demand from us.

1. Each demand by the Employer shall be in writing signed by the Employer and delivered to us at

.....
or such other address as we shall in writing notify to the Employer and shall be accompanied by a certificate complying with Clause 2, signed by the Employer's Agent as such in terms of the Contract.

2. The Employer's Agent's certificate referred to in Clause 1 shall certify

(a) that he is the Employer's Agent in terms of the Contract,
(b) that the Contractor is in breach of his obligations under the Contract, and
(c) that the amount demanded, which amount the certificate shall specify,

(i) does not exceed the amount of retention monies which, but for this guarantee, would have been retained by the Employer in terms of the Contract at the date of the certificate, less the aggregate of the amounts of retention money actually retained by the Employer and the amounts previously paid by us to the Employer in terms hereof, and

(ii) does not exceed a genuine estimate of the cost to the Employer of having the breach referred to in paragraph (b) remedied less the aggregate of any amounts withheld by the Employer from payments due the Contractor in terms of the Contract by reason of the breach referred to, and any amount in retention money actually held by the Employer save to the extent that the same had been deducted from any previous demand in terms hereof.

3. We shall within 28 days after our receipt of a demand complying with the provisions of Clauses 1 and 2 make payment to the Employer of the amount demanded at 172 Burger Street, Pietermaritzburg or at such other address as the Employer shall in writing notify us.

4. Subject to compliance with the provisions thereof, our liability to make the payments herein referred to shall be unconditional and shall not be affected nor diminished by any disputes, claims or counterclaims between the Employer and the Contractor.

5. Our aggregate liability under this guarantee is limited to R
6. This guarantee shall expire on the date on which the last of the retention monies, which but for this guarantee would have been retained by the Employer, becomes payable to the Contractor.
7. This guarantee is not transferable and must be produced for endorsement if any part payment is made and must be returned to us against final payment of our aggregate liability or on the date of the expiry of the guarantee in terms of Clause 6, whichever is the earlier.

Signed in the presence of the witnesses named hereunder:

At for and on behalf of

on this day of

Signature:

Capacity:

Address:

As Witnesses:

1. Name in Block Letters

2. Name in Block Letters

C1.6: TRANSFER OF RIGHTS

TRANSFER OF RIGHTS AND INDEMNITY

(To be completed during construction by successful Tenderer only)

Claim for Plant and materials on site, Payment Certificate No. Date:

Contract No: For (contract title)

I, the undersigned (name of signatory) in my capacity as
..... of (name of Contractor)

duly authorised hereto on behalf of the Contractor hereby transfer, cede and assign all the Contractor's rights, title and interest in and to the Plant and materials, for which evidence of bona fide ownership is attached hereto, unto and in favour of (name of Employer)

Insofar as the Contractor retains actual control of the materials and goods, the right of ownership thereof passes to the Employer by *constitutum possessorium*.

I herewith indemnify the Employer against any claim to and in respect of the said Plant and materials by reason of the Contractor's sequestration or liquidation or of any defect in the Contractor's title to the materials and agree that no payment for materials on site will be made by the Employer until such time as I have submitted documentary proof of bona fide ownership of the said Plant and materials.

This transfer shall become effective upon conclusion of the Contractor receiving payment from the Employer or from any other person on behalf of the Employer for the Plant and materials as Plant and materials on Site, payment of retention money thereon excluded.

I further confirm that I am fully responsible for all Plant and materials listed under this Transfer of Rights and that they have been insured adequately against all risks and will remain insured until they are built into or used in the permanent works and taken over by the Employer.

This certificate of Transfer of Rights applies only to the Plant and materials as listed in the following table.

DESCRIPTION OF ITEM	UNIT	QUANTITY	RATE	AMOUNT	SUPPLIER
TOTAL VALUE OF PLANT AND MATERIALS					

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

Witnessed by:

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 Plant and materials on site in terms of Clause 6.10.1.5 of the General Conditions of Contract 2015.

PART C2: PRICING DATA

C2.1 PRICING ASSUMPTIONS

1. GENERAL

The Bill of Quantities forms part of the Contract Documents and must be read and priced in conjunction with all the other documents comprising the Contract Documents, which include the Conditions of Tender, Conditions of Contract, the Specifications (including the Project Specifications) and the Drawings.

2. DESCRIPTION OF ITEMS IN THE SCHEDULE

The Bill of Quantities has been drawn up generally in accordance with the relevant provisions of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020.

The short descriptions of the items in the Bill of Quantities are for identification purposes only and the measurement and payment clause of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020. and the Particular Specifications, read together with the relevant clauses of the amendments and additions contained in the Project Specifications and directives on the drawings, set out what ancillary or associated work and activities are included in the rates for the operations specified.

The item numbers appearing in the Bill of Quantities refer to the corresponding item numbers in the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020. Item numbers prefixed by the letter PS refer to items of payment described in Part B Amendments to the Standard Specifications.

For the purposes of this Bill of Quantities, the following words shall have the meanings hereby assigned to them:

Unit:	The unit of measurement for each item of work as defined in the specifications.
Quantity:	The number of units of work for each item.
Rate:	The payment per unit of measurement at which the Tenderer tenders to do the work.
Amount:	The product of the quantity and the rate tendered for an item.
Lump Sum:	An amount tendered for an item, the extent of which is described in the Bill of Quantities, the specifications or elsewhere, but the quantity of work of which is not measured in any units.

3. QUANTITIES REFLECTED IN THE BILL OF QUANTITIES

The quantities given in the Bill of Quantities are estimates only and are subject to re-measure during the execution of the work. The quantities finally accepted and certified for payment, and not the quantities given in the Bill of Quantities, shall be used to determine payments to the Contractor. The Contractor shall obtain the Employer's Agent's detailed instructions for all work before ordering any materials or executing work or making arrangements for it. The quantities of material or work stated in the Bill of Quantities shall not be regarded as authorisation for the Contractor to order material or to execute work.

The Works as finally completed in accordance with the Contract shall be measured and paid for as specified in the Bill of Quantities and in accordance with the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020, the Project Specifications and the Drawings. Unless otherwise stated, items are measured net in accordance with the Drawings, and no allowance has been made for waste. The validity of the contract

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

4. PROVISIONAL SUMS

Where Provisional sums or Prime Cost sums are provided for items in the Bill of Quantities, payment for the work done under such items will be made in accordance with Clause 6.6 of the General Conditions of Contract 2015. The Employer reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

The Tenderer shall not under any circumstances whatsoever delete or amend any of the sums inserted by the Employer in the "Amount" column of the Bill of Quantities and in the Summary of the Bill of Quantities unless so ordered or authorised in writing by the Employer before closure of tenders. Any unauthorised changes made by the Tenderer to provisional items in the Bill of Quantities, or to the provisional percentages and sums in the Summary of the Bill of Quantities, at the Employer's discretion, may invalidate the Tenderer's offer or may be treated as arithmetical errors and the provisional items and percentages corrected without change to the Contract Sum.

5. PRICING OF THE BILL OF QUANTITIES

The prices and rates to be inserted by the Tenderer in the Bill of Quantities shall be the full inclusive prices to be paid by the Employer for the work described under the several items, and shall include full compensation for all costs and expenses that may be required in and for the completion and maintenance during the defects liability period of all the work described and as shown on the drawings as well as all overheads, profits, incidentals and the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Tender is based. The rates and lump sums shall be comprehensive in accordance with Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020.

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

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

Should the Tenderer group a number of items together and tender one lump sum for such group of items, this single lump sum shall apply to that group of items and not to each individual item.

The tendered lump sums and rates shall be valid irrespective of any change in the quantities during the execution of the contract.

The Tenderer shall fill in rates for all items where the words "rate only" appear in the "Amount" column. The provisions of subclause C1.1.3.6 of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020 shall apply to rate only items. "Rate Only" items have been included where:

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

For "Rate Only" items, no quantities are given in the "Quantity" column, but the quoted rate shall apply in the event of work under this item being required. The Tenderer shall, however, note that in terms of the Tender Data the Tenderer may be asked to reconsider any such rates which the Employer may regard as imbalanced.

Reasonable compensation will be received where no pay item appears in respect of work required in terms of the Contract which is not covered in any other pay item.

All rates and amounts quoted in the Bill of Quantities shall be in Rands and cents and shall include all levies and taxes (other than VAT). VAT will be added in the summary of the Bill of Quantities. Note that fractions of a cent in all rates shall be omitted.

6. CORRECTION OF ENTRIES

Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry, and the alteration must be initialled by the Tenderer.

7. INTERIM PAYMENTS

Unless otherwise specified, progress payments in Interim Certificates, referred to in Clause 6.10 of the General Conditions of Contract 2015, in respect of "sum" items in the Bill of Quantities shall be by means of interim progress instalments assessed by the Employer's Agent and based on the measure in which the work actually carried out relates to the extent of the work to be executed by the Contractor.

Notwithstanding any custom to the contrary, the work as executed will be measured for payment in accordance with the methods described in the contract documents under the various items of payment.

Attention is directed to the provisions of Clause C1.1.2 of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020 regarding the measurement of quantities for payment. Except where specified otherwise, the nett measurements or mass of the finished work in place shall be taken for payment, but any quantity of work in excess of that prescribed shall be excluded.

8. ITEMS SCHEDULED FOR CONSTRUCTION USING LABOUR ENHANCED METHODS

Those parts of the Works to be constructed using labour enhanced methods are numbered with the specific COTO, Draft Standard (DS), October 2020 Specifications items in the Bill of Quantities.

9. UNITS OF MEASUREMENT

The units of measurement described in the Bill of Quantities are metric units. The following abbreviations are used in the Bill of Quantities:

mm	= millimetre	m ³ .km	= cubic metre kilometre	Prov sum	= provisional sum
m	= metre	l	= litre	kPa	= kilopascal
km	= kilometre	kl	= kilolitre	MPa	= megapascal
km.pass	= kilometre pass	kg	= kilogram	MN	= meganewton
m ²	= square metre	t	= ton (1 000 kg)	t.km	= ton kilometre
m ² .pass	= square metre pass	No	= number	h	= hour
ha	= hectare	%	= percent	dia	= diameter
m ³	= cubic metre	PC sum	= prime cost sum	Sum	= lump sum
kW	= kilowatt	MN.m	= meganewton metre		

10. CONSISTENCY OF RATES

In order to ensure that payments certified by the Employer's Agent are reasonably consistent with the market value of the work done, and that variations in quantities do not distort the contract valuation, the rates, prices and amounts tendered in the Bill of Quantities are required to be in balance.

A tender will be considered out of balance if:

- (i) the combined, extended total tendered for the item:

C1.3.1 The contractor's general obligations:

C1.3.1.1 Fixed obligations

C1.3.1.2 Value-related obligations

C1.3.1.3 Time-related obligations

exceeds a maximum of 15% of the Contract Sum (excluding contingencies, contract price adjustment and VAT).

- (ii) the rate, price or amount tendered for any other item differs by more than 20 (twenty) percent from the average of the rates, prices or amounts for the same item as tendered by those tenderers who submitted the lowest five responsive tender offers (or as tendered by all the responsive tenderers if there are less than five responsive tenderers).

Any such out of balance tender may be rejected if, after three (3) working days of having been given written notice by the Employer to adjust those rates or lump sums which are unreasonable or out of balance, the Tenderer fails to make the necessary satisfactory adjustments. These adjustments in rectification will be such that increases are balanced by decreases, leaving the tender offer unchanged.

C2.2 BILL OF QUANTITIES

<u>TABLE OF CONTENTS</u>	Page
BILL OF QUANTITIES	C29
TENDER SUMMARY.....	C36

SCHEDULE A: ROADWORKS						CHAPTER C1.2
THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12.00 TO KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY (EMPANGENI REGION)						
ITEM NO	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C1.2	GENERAL REQUIREMENTS AND PAYMENT					
C1.2.2.6	Preparation and submission of all information and reports specified in the Contract Documentation	month		6		
C1.2.5	Safety					
C1.2.5.1	Health and safety plan	Lump Sum		1		
C1.2.5.2	Implementation of health and safety plan	month		6		
TOTAL CARRIED FORWARD TO SUMMARY OF SECTIONS PAGE C41						

SCHEDULE A: ROADWORKS

THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12.0 TO KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY (EMPANGENI REGION)						CHAPTER C1.3
ITEM NO	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C1.3	CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS					
C1.3.1	The Contractor's general obligations					
C1.3.1.1	Fixed obligations	Lump Sum		1		
C1.3.1.3	Time-related obligations	month		6		
C1.3.2	Contract sign boards	m ²	LI	11.75		
TOTAL CARRIED FORWARD TO SUMMARY OF SECTIONS PAGE C41						

SCHEDULE A: ROADWORKS						CHAPTER C1.5
THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 13.70 TO KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY (EMPANGENI REGION)						
ITEM NO	DESCRIPTION	UNIT	LI	QTY	RATE	AMOUNT
C1.5	ACCOMMODATION OF TRAFFIC					
C1.5.7	Temporary traffic control facilities					
C1.5.7.1	Delineators including mounting bases and ballast:					
(b)	Double sided, reversible left or right	No		150		
C1.5.7.2	'Traffic cones, minimum height 750 mm	No		150		
C1.5.7.3	Flagmen	man-shift	L.I	264		
C1.5.7.4	Traffic Controller	man-shift	L.I	264		
C1.5.7.5	Provision of illuminated traffic signs					
(c)	Illuminated road sign - R & TR series (900mm)	No		14		
(d)	Illuminated road sign - TW series (1200mm)	No		14		
(e)	Road Signs, STW-, DTG-, TGS- & TG	No		10		
TOTAL CARRIED FORWARD TO SUMMARY OF SECTIONS PAGE 41						

SCHEDULE A: ROADWORKS						CHAPTER C8.2
THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12.0 TO						

**KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY
(EMPANGENI REGION)**

ITEM	DESCRIPTION	UNIT	L.I	QTY	RATE	AMOUNT
C8.2	'COVER SPRAYS, FOG SPRAYS AND REJUVENATION SPRAYS					
C8.2.1	Cover sprays, fog sprays and rejuvenation sprays					
C8.2.1.2	60% Anionic stable grade emulsion					
(a)	<p>Diluted 50% Emulsion/ 50% Water(Compliance with SABITA manuals or technical standards)</p> <p>The Contractor shall produce, when called upon to do so, certificates from the manufacturer confirming that the materials or products supplied comply with the relevant specifications.</p> <p>The binder distributor used for distributing the bituminous binders shall comply with COTO chapter 10.PartA10.1.6.1</p>	ℓ		110685.2		
TOTAL CARRIED FORWARD TO SUMMARY OF SECTIONS PAGE 41						

SCHEDULE A: ROADWORKS	CHAPTER C 8.8
THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12.0 TO KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY (EMPANGENI REGION)	

ITEM	DESCRIPTION	UNIT	L.I	QTY	RATE	AMOUNT
C8.8	PATCHING AND EDGE BREAK REPAIR					
C8.8.1	Saw cutting pavement layers for patching					
C8.8.1.1	Asphalt or bituminous surfacing to an average depth					
(b)	Exceeding 50 mm but not exceeding 100 mm	m	LI	3127		
TOTAL CARRIED FORWARD TO SUMMARY OF SECTIONS PAGE 41						

SCHEDULE A: ROADWORKS	CHAPTER C 8.8
THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12.0 TO	

**KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY
(EMPANGENI REGION)**

ITEM	DESCRIPTION	UNIT	L.I	QTY	RATE	AMOUNT
C8.8.2	Excavation in existing pavements for patching (non-milling)					
C8.8.2.1	Asphalt Layers					
	Exceeding 10m ² , including for edge repairs wider than 250 mm	m3	LI	90.8		
	Exceeding 50m ² but not exceeding 100m ² , including for edge repairs wider than 250 mm	m3	LI	92.6		
	Exceeding 100 m ²	m3	LI	434.3		
TOTAL CARRIED FORWARD TO SUMMARY OF SECTIONS PAGE 41						

SCHEDULE A: ROADWORKS

THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12.0 TO

**CHAPTER
C 8.8**

**KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY
(EMPANGENI REGION)**

ITEM	DESCRIPTION	UNIT	L.I	QTY	RATE	AMOUNT
C8.8.3	Compacting the floor of excavations for patching (95%-97% MDD)	m2	LI	4123.50		
C8.8.4	Backfilling of excavations for patching with:					
C8.8.4.3	Chemically stabilised pavement materials (state pavement material and the stabilisation agent) for a patch with a surface area:					
(a)	Exceeding 10 m2, including for edge repairs wider than 250 mm	t	LI	241.72		
(b)	Exceeding 50 m2 but not exceeding 100 m2, including for edge repairs wider than 250 mm	t	LI	128.65		
(c)	Exceeding 100 2	t	LI	603.48		
TOTAL CARRIED FORWARD TO SUMMARY OF SECTIONS PAGE 41						

SCHEDULE A: ROADWORKS

THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12.0 TO KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY

**CHAPTER
C 8.8**

(EMPANGENI REGION)

ITEM	DESCRIPTION	UNIT	L.I	QTY	RATE	AMOUNT
C8.8.4.4	Asphalt for a patch with a surface area (Hot-mix asphalt continuous or semi-gap graded and 93 %-97% of voidless density (Rice's Method)):					
(a)	Exceeding 10 m2, including for edge repairs wider than 250 mm	t	LI	87.9		
(b)	Exceeding 50 m2 but not exceeding 100 m2, including for edge repairs wider than 250 mm	t	LI	46.8		
(c)	Exceeding 100 m2	t	LI	68.6		
TOTAL CARRIED FORWARD TO SUMMARY OF SECTIONS PAGE 41						

SCHEDULE A: ROADWORKS

THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12.0 TO

**CHAPTER
C 8.8**

**KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY
(EMPANGENI REGION)**

ITEM	DESCRIPTION	UNIT	L.I	QTY	RATE	AMOUNT
C8.8.6	Repairing edge breaks in surfacing					
C8.8.6.2	Prime coat (a diluted stable grade anionic bitumen emulsion (50/50) and nominal rate 0,5 l/m²)	ℓ	LI	2219.87		
TOTAL CARRIED FORWARD TO SUMMARY OF SECTIONS PAGE 41						

SCHEDULE A: ROADWORKS

THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12.0 TO

CHAPTER

C 11

**KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY
(EMPANGENI REGION)**

ITEM	DESCRIPTION	UNIT	L.I	QTY	RATE	AMOUNT
C11.7	Road Marking and Road Studs					
C11.7.2	Retro-reflective road marking:					
C11.7.2.1	White lines broken or unbroken (water borne paint and 100mm)	km		14.0		
C11.7.2.2	Yellow lines broken or unbroken (water borne paint and 150mm)	km		27.4		
C11.7.2.4	White lettering and symbols (water borne paint)	m ²	LI	43.0		
C11.7.2.5	Yellow lettering and symbols (water borne paint)	m ²	LI	60.0		
C11.7.2.7	Transverse lines, painted island and arrestor bed markings (any colour) (water borne paint)	m ²	LI	36.0		
C11.7.2.11	Hand painted white lettering and symbols (water borne paint)	m ²	LI	30.0		
C11.7.2.12	Hand painted yellow lettering and symbols (water borne paint)	m ²	LI	33.0		
TOTAL CARRIED FORWARD TO SUMMARY OF SECTIONS PAGE 41						

SCHEDULE A: ROADWORKS	CHAPTER C11
THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12.0 TO KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY (EMPANGENI REGION)	

ITEM	DESCRIPTION	UNIT	L.I	QTY	RATE	AMOUNT
C11.7.7	Road Studs					
C11.7.7.1	Permanent road studs compliant to SANS 1442 (type A & white,yellow and red)	no	LI	1713		
C11.7.8	Setting out and premarking the lines (excluding traffic island markings, lettering and symbols)	km	LI	13.7		
TOTAL CARRIED FORWARD TO SUMMARY OF SECTIONS PAGE 41						

SCHEDULE A: ROADWORKS	CHAPTER C20
THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12.0 TO	

**KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY
(EMPANGENI REGION)**

ITEM	DESCRIPTION	UNIT	L.I	QTY	RATE	AMOUNT
C20.1	TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP					
C20.1.2	Special tests requested by the Engineer					
C20.1.2.2	Employer's contribution to other special tests					
(a)	Specify test	Prime cost		R 60 000	1	R 60 000
(i)	Handling costs and profit in respect of item C20.1.2.2(a)	%		R 60 000		
TOTAL CARRIED FORWARD TO SUMMARY OF SECTIONS PAGE 41						

**PROVINCE OF KWAZULU-NATAL
DEPARTMENT OF TRANSPORT**

CONTRACT NO. ZNB02883/00000/00/ULU/INF/25/T: THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12.000 TO KM 25.70) IN THE ZULULAND DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY (EMPANGENI REGION)

SCHEDULE A: ROADWORKS

SUMMARY OF SECTIONS

CHAPTER	DESCRIPTION	FROM PAGE	AMOUNT
C1.2	GENERAL REQUIREMENTS AND PAYMENT	C29	R
C1.3	CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS	C30	R
C1.5	ACCOMMODATION OF TRAFFIC	C31	R
C8.2	COVER SPRAYS, FOG SPRAYS AND REJUVENATION SPRAYS	C32	R
C8.8	PATCHING AND EDGE BREAK REPAIR	C33-C37	R
C11.7	ROAD MARKING AND ROAD STUDS	C38-C39	R
C20.1	TESTING MATERIALS AND JUDGMENT OF WORKMANSHIP	C40	
	TOTAL CARRIED FORWARD TO TENDER SUMMARY PAGE C42		R

**PROVINCE OF KWAZULU-NATAL
DEPARTMENT OF TRANSPORT**

CONTRACT NO. ZNB02883/00000/00/ULU/INF/25/T: THE APPLICATION OF FOG SPRAY ON PROVINCIAL ROAD P52-1 (FROM KM 12.00 TO KM 25.70) IN THE ZULULANDI DISTRICT UNDER ULUNDI LOCAL MUNICIPALITY (EMPANGENI REGION)

TENDER SUMMARY

DESCRIPTION	AMOUNT
Totals of Schedule of Quantities brought forward: Schedule A: Roadworks (b/f from page C41)	R
SUBTOTAL 1	R
CONTINGENCIES 5%	R
SUBTOTAL 2	R
CONTRACT PRICE ADJUSTMENT 5%	R
SUBTOTAL 3	R
Add: VAT (15% of SUBTOTAL 3)	R
TOTAL CARRIED FORWARD TO FORM OF OFFER C1.1.1	R

Signed on behalf of the Tenderer: (Signature)

Date:

Tenderer's Name: (Company Name)

PART C3: SCOPE OF WORK

<u>TABLE OF CONTENTS</u>	PAGE
C3.1 STANDARD SPECIFICATIONS	C44
C3.2 PROJECT SPECIFICATIONS	C44
PART A: GENERAL	
1. DESCRIPTION OF THE WORKS	C45
2. DRAWINGS.....	C53
3. PROCUREMENT	C53
4. CONSTRUCTION	C53
5. MANAGEMENT.....	C54
PART B: AMENDMENTS TO THE STANDARD SPECIFICATIONS	
PROJECT SPECIFICATIONS RELATING TO THE STANDARD SPECIFICATIONS AND OTHER ADDITIONAL SPECIFICATIONS	C57
C3.3 PARTICULAR SPECIFICATIONS	
PART C: ENVIRONMENTAL MANAGEMENT SPECIFICATION.....	C60
PART D: OHSA 1993 HEALTH AND SAFETY SPECIFICATION	C66
PART E: EXPANDED PUBLIC WORKS PROGRAMME.....	C77
PART F: SMALL CONTRACTOR DEVELOPMENT	C180
PART G: CONTRACT SKILLS DEVELOPMENT GOAL	C109

C3.1: STANDARD SPECIFICATIONS

The Standard Specifications on which this contract is based are the '**Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020**'.

C3.2: PROJECT SPECIFICATIONS

The Project Specifications, consisting of two parts, form an integral part of the Contract and supplement the Standard Specifications.

Part A contains a general description of the Works, the Site and the requirements to be met.

Part B contains variations, amendments and additions to the Standard Specifications and, if applicable, the Particular Specifications.

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

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.

C3.2: PROJECT SPECIFICATIONS

PART A: GENERAL

1. DESCRIPTION OF THE WORKS

1.1 Employer's objectives

This Project forms part of the Province of KwaZulu-Natal Department of Transport's maintenance of existing provincial road P52-1 for the purpose of generating employment through mobility of the community Ulundi Local Municipality – Empangeni region.

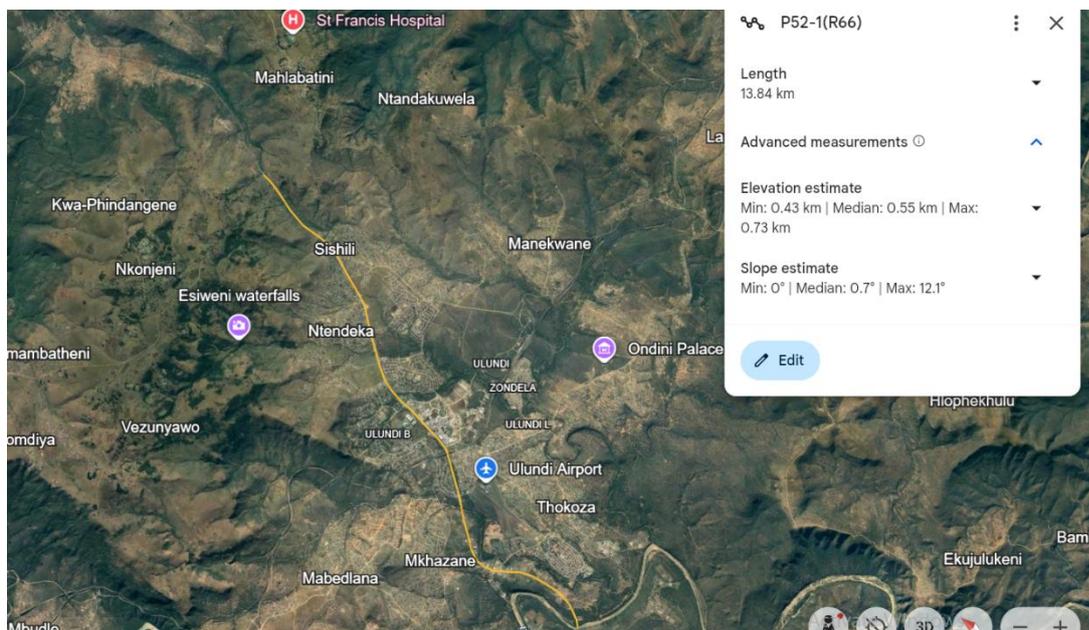
The contract is located in a region of KwaZulu-Natal that has been historically impoverished by a lack of infrastructure access. It is therefore mandatory that the Contractor shall interact with the community via proactive project liaison with and project participation by its leaders and constituted organisations and forums, as well as through the employment of its people, and these activities shall constitute essential facets of the project.

The Employer's objectives in delivering public infrastructure and services for this project include the provision of temporary work opportunities to the local community through the application of labour-enhanced to the maximum extent feasible, in accordance with the Expanded Public Works Programme Guidelines.

The requirements of the Expanded Public Works Programme (EPWP) are contained in Part F of section C3.3 Particular Specifications. The requirements in terms of Government's initiatives for broad-based black economic empowerment with respect to small contractor development are contained in Part G of section C3.3 Particular Specifications.

1.2 Location of the Works

P52/1 is located in Ulundi as the main access route to Ulundi town within wards 19 and 20 under Ulundi Local Municipality KZ266 within DC26. The application of 12 km of fog spray and pothole repairs will start at km 12.0 and end at km 25.7.



1.3 Overview of the Works

The project comprises of Fog Spraying of 12 km of road P52-1 under Ulundi Local Municipality.

1.4 Extent of the Works

The Works to be carried out include the following main activities:

- (a) Establishment and De-establishment on site
- (b) Provision of traffic accommodation
- (c) Compliance with Health and Safety
- (d) Reporting
- (e) Fog Spraying
- (f) Potholes and Edge break repairs
- (g) Road Marking

1.4 Detailed description of the Works

The following description is a broad outline of the works and does not limit the work to be executed by the Contractor in terms of the contract. The description of some of the major items indicated in this section are indicative, not absolute, and are provided to define in general terms the overall scope of the project.

Approximate quantities of each type of work to be carried out in accordance with the contract documents are listed in the Bill of Quantities in Section C2.2.

The site shall not only comprise the proclaimed road reserve but shall be extended in the broader sense to take account of all areas occupied by the Contractor, be it deliberate or unintentional, in the execution of the contract. The site includes all the land within the proclaimed limits of the road reserve along the extent of the works, stockpile areas, locations set aside for construction and supervision accommodation and any other location required for the execution of the Works.

Incidental intrusion into private or tribal property outside the road reserve shall not be permitted without the owner's written authority. Any such agreement reached with a private or tribal landowner (occupier) shall include the proviso that any material or equipment on that site shall remain the exclusive property of the Employer in terms of the contract.

1.5.1 Access to the Site

Access to the site can be obtained from Department of Transport Area Office Mahlabathini.

Throughout the duration of this contract, roads shall be shared with other contractors engaged by the KwaZulu-Natal Department of Transport on identified projects whose construction activities may affect access from time to time. The Contractor shall therefore be required to liaise on an ongoing basis with these other contractors with respect to access related matters throughout the duration of the contract.

1.5.2 Demolition work

The Contractor is not required to carry out any demolition work to existing structures.

1.5.3 Spoiling of surplus material

Surplus material shall be spoiled in designated areas approved by the Employer's Agent. The spoil material shall be disposed of in accordance with subclause A4.1.7.2(l) of the COTO Standard Specifications.

1.5.4 Quantities

The approximate leading quantities for the permanent Works to be constructed are as follows:

Description	Source	Approximate quantity
60% Anionic stable grade emulsion (Diluted 50% Emulsion/ 50% Water)	Commercial	110685.2 l
Hot-mix asphalt continuous or semi-gap graded)	Commercial	1649,4 m2

1.5.5 Material investigations

Materials information is furnished in section C4.4 at the end of this document.

1.5.6 Material sources, spoil and stockpile areas

The above-described material on 1.5.4 shall be obtained from commercial sources.

Weather limitations as specified in Clause A10.1.3.2 of Chapter 10 shall apply

Spoil areas and areas for the temporary stockpiling of construction materials shall be determined and agreed on site in conjunction with the Employer's Agent, the PLC (where applicable) and the local communities (where applicable). The Contractor shall be permitted to use only these agreed spoil and stockpile areas, which shall be landscaped and vegetated on completion of the work.

1.5.7 Accommodation of traffic

The P52-1 is a heavy trafficked road. This project is located on an Abnormal Load Route and the requirements for the Contractor to comply with are e.g. maintain road width of 10.4 metres, or a height clearance of 4,75 m, or traffic deviations to be accessible for Abnormal Loads, or make provision for Abnormal Loads to travel over the Site in a safe manner.

The Contractor shall be required to accommodate traffic on the existing roadway on the existing detours.

1.5.8 Accommodation of other contractors

Other contractors working on the site shall include:

In order to ensure the smooth running of all contracts, the Contractor shall be required to liaise with, cooperate with and accommodate all other contractors working on the site, particularly when such other contractors are working in the same area simultaneously.

1.5.9 Existing services

The following major services are expected to be encountered during the construction of the Works:

It is also expected that unknown domestic services crossings requiring relocation or protection may be encountered along the route as the work proceeds. The Contractor shall make every effort to establish the location of these services in any area prior to excavations commencing in that area. Such efforts shall include diligent enquiry and discussions with adjacent landowners, visual surface inspection and exploratory trenching investigation as necessary.

1.5.10 Employer's Agent's site offices and laboratory

N/A

1.5.11 Climate

The road is located in a high summer rainfall region with a 30 year mean annual precipitation of 673 mm.

1.5.12 Environment

The Contractor's attention is called to clause A1.2.3.3 of Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020 and to the requirements of Part C: Environmental Management Specification contained in section C3.3 Particular Specifications.

1.5.13 Labour

A Project Liaison Committee (PLC) has been established and is a vital means of communication between all parties involved with the project. The composition of the PLC comprises representatives of the Employer, the Employer's Agent and formal structures within the community.

The Contractor shall make use of these communication channels, and shall appoint from amongst his site personnel a responsible person to participate in the affairs of the PLC, and this representative will be also required to attend the monthly PLC meetings.

It is mandatory that the Contractor shall interact with the community via proactive project liaison and project participation by its leaders and constituted organisations and forums, as well as through the employment of its people, and these activities shall constitute essential facets of the project.

Local labour is to be used and the employment of such labour is to be done in conjunction with the PLC. The PLC has formed a Labour Committee who shall assist the Contractor with the recruitment of local labourers to ensure an equal distribution of people employed between the various Amakhosi in the area.

1.5.14 Labour-enhanced construction methods

Labour enhanced construction shall mean the economically efficient employment of as great a portion of local labour as is technically feasible to produce a standard of construction as demanded by the specifications with completion by the Due Completion Date, where local labour is the primary resource, supported by plant for activities that cannot be carried out feasibly by labour only.

Labour enhanced construction activities are to be planned as task-based work as a general rule. A task means a fixed quantity of work, to be performed to a clearly defined quality. Task-based work means work in which a worker is paid a fixed rate for performing a task, which is clearly defined in terms of quantity and quality. Typically, a particular task can be completed within a working day.

Appropriate portions of the Works included in the Contract shall be carried out using labour enhanced construction methods.

Except where the use of equipment is essential in order, in the opinion of the Employer's Agent, to meet the specified requirements by the Due Completion Date, or where the use of equipment is essential as a result of occupational health and safety considerations, the Contractor shall use only hand tools and equipment in the construction of those portions of the Works that are required in terms of these Project Specifications to be constructed using labour enhanced construction methods.

Such portions of the Works shall be constructed utilizing only the local labour of the Contractor and/or the local labour of subcontractors, supplemented by the Contractor's key personnel to the extent necessary and unavoidable, unless otherwise instructed by the Employer's Agent and in accordance with the further provisions of the relevant sections of Part B of the Project Specifications.

Subject to considerations of occupational health and safety, and subject to the nature of the in situ materials being such that they can be excavated efficiently by hand, the portions of the Works to be carried out under supervision

using labour enhanced construction methods are listed under the labour enhanced item numbers as per COTO - Draft Standard(DS) October 2020 specifications in the bill of quantities, include, but are not limited to, the following:

- Erection of the Contractor's and Employer's Agent's site establishment facilities;
- Provision of domestic services at the site establishment facilities;
- Provision of flagmen and labour for erecting traffic accommodation facilities;
- Clearing of the Site;
- Excavation for structures and open drains up to 1,5 m deep where the depth of the water table permits such excavation to be carried out safely, and the subsequent backfilling thereof;
- Transportation and spoiling of all trench materials, where the disposal site is located within 20 metres of the source;
- Spreading of offloaded earthworks materials to the extent scheduled;
- Spreading of offloaded pavement layers materials to the extent scheduled;
- Dismantling / erection of fences;
- Fog spraying
- Potholes Patching
- Road Marking
- Cleaning and tidying up of the Site.

In respect of those portions of the Works which are not listed above, the construction methods adopted and the equipment utilized shall be at the discretion of the Contractor, provided always that the construction methods adopted and the equipment utilized 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.

1.6 Temporary Works

The Temporary Works required under this Contract shall include the traffic accommodation measures implemented, the provision of drainage control, falsework and formwork during the construction of the minor drainage structures, and the provision of any scaffolding or temporary propping used during the erection of the road signs.

All Temporary Works shall be removed from the Site on completion of the Contract.

1.7 Maintenance of the Works during the construction period

The Contractor shall take note of the various requirements of the General Conditions of Contract 2015 and the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020 with respect to the care and protection of the Works.

The handing-over of the road reserve for this contract is described in clause A1.2.3 of Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020. The Contractor shall be responsible for maintaining this portion of the road from the date of hand-over until the issue of the Certificate of Practical Completion.

1.8 Testing of materials

A prime cost sum has been allowed in chapter 20 of the Bill of Quantities for all acceptance control testing laboratory work to be carried out by the Employer's Agent using the laboratory facilities which may include and/or commercial laboratory facilities.

The Contractor shall carry out at his own cost the required process control testing as specified in terms of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020.

1.9 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 shall 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.

1.10 Construction in confined areas

It may be necessary for the Contractor to work within confined areas. Except where provided for in the specifications, no additional payment shall be made for work done in restricted areas. In certain places the width of the fill material and pavement layers 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 shall note that, unless otherwise provided for in terms of the scheduled payment items in the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020 or these project specifications, measurement and payment shall 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 shall be made nor shall any claim for additional payment be considered in such cases.

1.11 Contractor's campsite (Project Specific)

Possible locations for a campsite shall be pointed out at the clarification meeting. (Project Specific Clarification meetings)

The Contractor shall make his own arrangements for the provision of his campsite and housing for construction personnel but the chosen site shall be subject to the approval of the Employer's Agent, the local authorities and, where applicable, the Project Liaison Committee (PLC) associated with the project.

The standard of the Contractor's camp, offices, accommodation, ablution, and other facilities must comply with the requirements of all local authority, environmental and industrial regulations concerned. In establishing and maintaining his campsite, due cognisance is to be taken of the requirements of clause A1.3.3 of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020.

The Contractor is to fully familiarise himself with all local by-laws and Government regulations for the employment, transport and accommodation of labour on site.

The Contractor shall particularly note that there is a high risk of theft, vandalism and damage to property in this area and strict security will be required for all plant, establishment, temporary works and partially completed works. The Contractor shall be responsible for providing security for all plant, establishment, temporary works and partially completed works. No separate payment shall be made for the provision of such security since full compensation for these costs shall be deemed to be included in the amount tendered for item C1.3.1.3 (The contractor's general obligations: Time-related obligations).

1.12 Additional requirements for construction activities

The travelling public shall have the right of way on public roads, and 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 the road.

The Contractor's tendered rates shall include full compensation for all costs which may arise from the construction and maintenance of deviations and construction under traffic. No claim for additional costs which may arise from these methods of traffic accommodation and no additional payment owing to inconvenience as a result of the Contractor's method of working shall be considered.

1.13 Construction programme

The Contractor shall submit a detailed time programme in accordance with clause 5.6.2 of the General Conditions of Contract 2015, clause A1.2.7 of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020.

In addition to any other restrictions accommodated by the Contractor in compiling the construction programme, the following constraints shall be taken into account in the preparation thereof:

-
- (a) The whole of the Works (and the portions of the Works if completion in portions is required) shall be completed within the time period(s) stated (refer to the Contract Data in section C1.2.2).
 - (b) Working days lost due to abnormal rainfall shall be treated as set out in clause A1.2.3.4 (b)
 - (c) Allowance shall be made for non-working days and special non-working days (refer to the Contract Data in section C1.2.2).
 - (d) Construction activities must comply with all the specified environmental requirements including clause A1.2.3.3 of Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020 and the requirements of Part C: Environmental Management Specification contained in section C3.3 Particular Specifications.
 - (e) Construction activities must comply with all the specified health and safety obligations including the requirements of Part D: OHS 1993 Health and Safety Specification contained in section C3.3 Particular Specifications.
 - (f) Strict control of access to and from local public roads shall be required when construction vehicles, plant or equipment leave or enter the site.
 - (g) Throughout the contract period traffic must be accommodated through the site and all other contractors engaged on the construction of identified roads must be accommodated.
 - (h) The Contractor's programme of work shall take due cognisance of risks by limiting the duration of the exposure of the various construction elements to natural phenomena.

PRELIMINARY CONSTRUCTION PROGRAMME

ACTIVITY	UNIT	QTY	MONTH1				MONTH2				MONTH3				MONTH4			
			WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	WEEK 14	WEEK 15	WEEK 16
Fog Spraying	ℓ	110685.2																
Saw cutting pavement layers for patching	m	3127																
Asphalt layers excavation	m3	617.7																
Compacting the floor of excavations for patching	m2	4123.5																
Backfilling of excavations for patching	t	1177.14																
Road Marking and Road Studs	m2	161																
Permanent road studs compliant to SANS 1442 (type A & white and red)	no	1713																
Setting out and premarking the lines (excluding traffic island markings, lettering and symbols)	km	13.7																
ACTIVITY	UNIT	QTY	MONTH5				MONTH6											
Fog Spraying	ℓ	110685.2																
Saw cutting pavement layers for patching	m	3127																
Asphalt layers excavation	m3	617.7																
Compacting the floor of excavations for patching	m2	4123.5																
Backfilling of excavations for patching	t	1177.14																
Road Marking and Road Studs	m2	161																
Permanent road studs compliant to SANS 1442 (type A & white and red)	no	1713																
Setting out and premarking the lines (excluding traffic island markings, lettering and symbols)	km	13.7																

2. DRAWINGS

The drawings for this contract comprise the following:

DESCRIPTION	PLAN NO.
Signposting for Gravel Dumping or Processing	Annexure: A13
Signposting for Gravel Heaps	Annexure: A14
Volume of Material per Kilometre	Annexure: D7
Spacing of Loads for Varying Road Width and Layer Thickness	Annexure: D8
Typical Cross Section Type 6 District Gravel Road	SD 0210
Concrete pipe Headwalls (Masonry)	SD 0406

3. PROCUREMENT

The contractor shall procure goods and services under provisional sums and prime cost sums according to the Employer's standards.

4. CONSTRUCTION

4.1 Applicable SANS 2001 standards for construction work

All construction work must conform with the relevant SABS or SANS specifications referred to in the 'Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020', or in Section C3.2 Project Specifications, Part B: Amendments to the Standard Specifications, of this document.

4.2 Applicable national and international standards

All construction work must be undertaken in accordance with the 'Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020 and as amended in Section C3.2 Project Specifications, Part B: Amendments to the Standard Specifications, of this document.

4.3 Particular / generic specifications

As well as the 'Amendments to the Standard Specifications' contained in Part B of Section C3.2 Project Specifications, of this document, the following Particular Specifications as contained in Section C3.3, are applicable to this Contract:

- Part C: Environmental Management Specification
- Part D: OHS 1993 Health and Safety Specification
- Part E: Expanded Public Works Programme
- Part F: Small Contractor Development (not applicable)

The 'General Conditions of Contract for Construction Works, Third Edition (2015)', published by the South African Institution of Civil Engineering which is applicable to this Contract.

4.4 Certification by recognized bodies

- The bituminous binder bond coat shall be applied either by means of a "self-tacking" paver or by an approved binder distributor as follows:
- Comply with SANS 3001-BT20 and shall be covered by a valid certificate of compliance with SANS 3001-BT20, not older than 12 months, issued by an accredited testing organisation

4.5 Plant and materials provided by the Employer

No plant and materials are to be provided by the Employer.

4.6 Services and facilities provided by the Employer

The Employer's Agent's site office and laboratory facilities will be paid for in terms of the Contract. No other services or facilities are to be provided by the Employer.

5. MANAGEMENT

5.1 Applicable SANS 1921 standards

The following parts of SANS 1921 and associated specification data are applicable:

5.1.1 SANS 1921-1 Part 1: General engineering and construction works

Specification data associated with SANS 1921-1	
Clause No.	Essential data
4.1.7	There are no requirements for drawings, information and calculations for which the Contractor is responsible.
4.2.1	The responsibility strategy assigned to the Contractor for the works is 'A'.
4.3.1	The programme must conform to clause A1.2.7.1 (Scheme 1) 'Programme of Work' of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020 and clause 5.6 'Programme' of the 'General Conditions of Contract 2015'.
4.3.3	The Contractor must give 24 hours' notice for inspection of work that is to be covered up.
4.7.3	Where applicable, the Contractor is afforded the opportunity of pricing an item to cover costs of unavoidable over-break.
4.12.2	The samples of materials, workmanship and finishes that the Contractor is to provide and deliver to the Employer/Employer's Agent are to be as described in clause A1.2.8 'Workmanship and Quality Control' of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020 and clause 7 'Quality and Related Matters' of the 'General Conditions of Contract 2015'.
4.12.2	The fabrication drawings that the Contractor is to provide to the Employer are: none.
4.14.5	The Contractor is to provide latrine and ablution facilities as described in Part C 'Environmental Management Plan' in Section C3.3 Particular Specifications of these Project Specifications.
4.14.6	The requirements for the provision and erection of signboards are as described in clause A1.2.3.10 'Notices, Signs and Advertisements' of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020, and as detailed in the 'Example of Contract Signboard Details' in Section C4: Site Information of these Project Specifications.
4.17.1	The requirements for the termination, diversion or maintenance of existing services are described in clause A1.2.7.3 and Chapter 2 of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020.
4.17.3	Services that are known to exist on the site are described in clause A1.2.7.3 and Chapter 2 of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020.
4.17.4	The requirements for detection apparatus for locating underground services are: none.
4.18	The additional health and safety requirements are described in Part D 'OHS 1993 Health and Safety Specification' in Section C3.3 Particular Specifications of these Project Specifications.

5.1.1.1 Additional clauses:

(a) Site meetings and procedures

Site meetings shall be convened as described in clause A1.2.3.16 'Monthly Site Meetings' of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020. The Contractor shall keep on site a set of minutes of all site meetings, daily records of resources (people and equipment employed), a site memoranda book, a complete set of contract working drawings and a copy of the procurement document, and shall make these available at all reasonable times to all persons concerned with the contract.

(b) Water and electricity

The Contractor is to provide water and electricity as described in clauses A1.2.3.21 'Water' and A1.4.7.3 'Services' of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020.

5.1.2 SANS 1921-6 Part 6: HIV/AIDS awareness

Specification data associated with SANS 1921-6	
Clause No.	Essential data
4.2.1(a)	A qualified service provider is one that is an accredited or provisionally accredited training service provider in the HIV/AIDS field. A list of accredited service providers can be obtained from the Construction SETA (CETA) (tel. 011 265 5900), Health and Welfare SETA (HWSETA) (011 622 6852) or on the Health and Welfare SETA website: www.hwseta.org.za .
4.2.1(a)	The HIV/AIDS awareness programme is to be repeated at four monthly intervals throughout the duration of the contract.

5.1.2.1 Additional clauses:

(a) Workshops

The duration of each workshop shall not be less than 2½ hours.

5.2 Recording of weather

The Contractor shall erect a rain gauge and record the rainfall as described in clause A1.2.3.4 of the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020. This information together with other details of the prevailing weather conditions shall be recorded in the daily site diary.

Please note : Weather limitations as specified in Clause A10.1.3.2 of Chapter 10 shall apply.

5.3 Unauthorised persons

The Contractor shall keep unauthorised persons away from the Works at all times. Under no circumstances may the Contractor's personnel be accommodated on the site.

5.4 Management meetings

Management meetings are to be held weekly at a time convenient to all concerned, to discuss planning and health and safety amongst other things. Attendance by the Construction Manager and the Employer's Agent's Representatives on site is mandatory, and attendance by other interested parties will be by invitation.

5.5 Forms for contract administration

The Employer's Agent's Representative will provide standard forms for 'Site Diary', 'Site Memoranda', 'Requests for Inspection' and any others deemed to be necessary during the contract.

5.6 Electronic payments

Payments of approved payment claims will be made electronically upon submission of the Contractor's banking details.

5.7 Daily records

A site diary is to be compiled jointly by the Construction Manager and the Employer's Agent's Representatives on site and is to be agreed and signed by both parties. The original signed copy is to be retained by the Employer's Agent's Representative.

The Contractor is to keep daily records of people and equipment on site in a format to be agreed by the Employer's Agent's Representative, and is to provide copies to the Employer's Agent's Representative when requested.

5.8 Payment certificates

Details of measurements, proof of payment for items contained in provisional sums and prime cost sums, proof of ownership of Plant and materials on site and documentation pertaining to contract price adjustment and special materials, are required as substantiation of claims for payment.

5.9 Permits

No security/entrance permits are required by the Contractor's personnel to enter the site.

5.10 Proof of compliance with the law

There are no requirements for the Contractor to verify compliance with any legislation.

5.11 Submission of reports

The contractor shall submit monthly reports in accordance with the specifications in Part E: Expanded Public Works Programme and Part F: Small Contractor Development.

C3.2: PROJECT SPECIFICATIONS

PART B: AMENDMENTS TO THE STANDARD SPECIFICATIONS

PROJECT SPECIFICATIONS RELATING TO THE STANDARD SPECIFICATIONS AND OTHER ADDITIONAL SPECIFICATIONS

In certain clauses in the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020, allowance is made for 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 the necessary additional specifications required for this Contract.

The clauses and payment items dealt with in this part of the Project Specifications are numbered 'PS' with a number corresponding to the relevant clause or item number in the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020.

New clauses and payment items not covered by clauses or items in the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020 have been included here and have also been designated with the prefix 'PS'. Such clauses and items have been given a new number following upon the last number used in the particular chapter referred to in the Standard Specifications for Road and Bridge Works for South African Road Authorities (COTO), Draft Standard (DS), October 2020.

CHAPTER 1.2 GENERAL REQUIREMENTS AND PROVISIONS

PART A: SPECIFICATION

PSA1.2.3.4 EXTENSION OF TIME FOR DELAYS BY RAINFALL

Add the following to the end of A1.2.3.4(b) Method 2 (Critical path method with consequential delays):

The value of "n" working days expected delay caused by normal rainy weather as referred to in Method (ii) shall be as given in the table below for each respective calendar month of any year:

Month	Expected delay of "n" working days due to normal rainy weather	Month	Expected delay of "n" working days due to normal rainy weather
January***	5	July	1
February	4	August	1
March	4	September	2
April	3	October	3
May	2	November	4
June	1	December***	5

*** Includes the whole month of December / January.

PSA1.2.3.11 ORDERING OF DAYWORKS

Replace Clause A1.2.3.11 with the following:

PSA1.2.3.11 DAYWORKS

a. Scope

Rates for daywork shall be entered in the under item C1.2.8.1 in accordance with the following specifications.

b. Daywork Rates

According to Clause 6.5 of the General Conditions of Contract 2015, certain work may be carried out using rates tendered in the daywork schedule. A schedule of personnel, construction equipment and vehicles which may be required to perform work on a daywork basis is included in the Bill of Quantities. The quantities used in the Bill of Quantities are for tender evaluation purposes only and the use or not of these items shall not constitute a variation in terms of Clause 6.3 of the General Conditions of Contract 2015.

No work will be paid for as daywork without the written instruction or approval of the Employer's Agent.

c. Type of Work

The Employer's Agent may order daywork in certain cases where it is necessary to vary or to extend the works due to new or unforeseen circumstances to such an extent that the tendered rates for specific items of work are no longer applicable, or where no suitable combination of tendered rates can be used to pay for such work.

As a general rule, applicable rates for additional work items will be agreed between the Contractor and the Employer's Agent. Daywork will only be used in exceptional circumstances.

d. Materials

Materials for use in works carried out under daywork shall be purchased by the Contractor who shall also arrange for delivery to site, and shall be responsible for any other requirements associated with specific materials. A Provisional Sum has been allowed in C1.2.8 of the Bill of Quantities for daywork materials. The Contractor shall enter a tendered percentage in the Bill of Quantities to cover his handling costs and profit, as per other provisional and prime cost sums in this Contract.

Materials shall be paid for using the method described in C2.1, 'Pricing Assumptions'. No contract price adjustment will be applicable to materials.

The Contractor shall submit proof of ownership for any materials used in daywork with his daywork claim to the Employer's Agent. Further, if specific materials are required for daywork, quotations will be called for as per Clause 6.5.2 of the General Conditions of Contract 2015.

e. Construction Equipment

Where daywork is ordered, the tendered rates for construction equipment in C1.2.8 of the Bill of Quantities shall be used in calculating the payment due for any construction equipment required to execute the daywork. If no rate is included in the Bill of Quantities for a particular item of construction equipment, and where no other rate or combination of rates would provide suitable compensation, then the daywork method of payment described in Clause 6.5.1.3 of the General Conditions of Contract 2015 will be used.

The tendered rates for each item of construction equipment shall include for all operating costs associated with the said item of construction equipment. Such costs are deemed to include fuel, re-fuelling costs, lubrication and routine servicing / maintenance, breakdowns and spares, all overhead costs, site management costs and administration costs. The tendered rates shall also include the construction equipment operator and the general supervision of the construction equipment while it is engaged in the daywork.

f. Salaries and Wages of Workmen

The salaries and wages of workmen executing daywork shall be paid for using the tendered rates in the Bill of Quantities. The tendered rates shall include for all costs associated with the employment of personnel, including salaries, wages, allowances, workmen's compensation, medical aid and pension contributions, government levies and taxes, training costs and any costs associated with living on the site. The tendered rates shall also include for the transportation of the workmen to the site of the daywork.

All overhead costs, administration costs, site management costs and the Contractor's profit are deemed to be covered by the daywork rates and no additions or mark ups will be made to the tendered rates.

The tendered rates shall also include any hand tools normally associated with the workmen's job description e.g. picks, shovels, hammers, saws and spirit levels. The tendered rate for labourers shall also include for the casual supervision by a gang leader or foreman. Only when specifically called for by the Employer's Agent, will payment be made for the use of a gang leader or foreman supervising on a continuous basis.

g. Measurement and Payment

The following principles shall also apply to the measurement and payment of daywork.

The unit of measurement for construction equipment shall be the number of Vibroclock hours worked and each item of construction equipment shall be fitted with a Vibroclock, the cost of which shall be included in the rates. Excessive non-productive time when the engine is idling will not be paid for. Where there is ambiguity between the flywheel horsepower and mass of the machine, the flywheel horsepower shall govern the measurement category. Where width and mass are specified, mass shall govern the measurement category.

The Contractor's attention is drawn to the requirements of Clauses 6.5.3 and 6.5.4 of the General

PSA1.2.3.24 Compliance with the Road Traffic Act

When a service necessitates vehicles or plant travelling or working on a public road, the following shall apply:

- The vehicles and plant shall be licensed in terms of the National Road Traffic Act 1996 (Act No. 93 of 1996) as amended.
- Every driver and operator of a vehicle or an item of plant shall be in possession of a valid permit in respect of the class of vehicle or item of plant he / she is driving or operating.

The Contractor shall provide, erect and maintain sufficient road signs, barricades, fencing and guarding as may be necessary or required by the Employer's Agent or by any act, regulation or statutory authority in order to minimise the danger and inconvenience caused to vehicle and pedestrian traffic. The Contractor by accepting this contract shall be deemed to have indemnified the Employer and the Employer's Agent against any claims, damages and / or costs that may arise in this regard.

A1.5.7.7 Liaison with traffic authorities

The Contractor shall liaise with the relevant provincial and/or municipal traffic authority, and with the Employer's traffic management centre if applicable, at the start of the contract period and as often as required thereafter to keep them continually informed in advance about the expected Works being carried out and the detour and deviation and lane closure arrangements that will be in place.

A daily report covering the expected work and traffic control arrangements for the following day shall be submitted to the relevant traffic authorities or to the traffic management centre not later than 10h00.

For exceptional traffic accommodation impacts, such as lane closures in peak hours, short term contra flow conditions, lane closures over weekend peak periods etc., the relevant traffic authorities, and the Employer's traffic management centre if applicable, shall be informed seven days prior to the event.

The Contractor shall inform the relevant traffic authorities, and the Employer's traffic management centre if applicable, about all traffic related incidents as soon as he becomes aware of the incident. The Contractor's site agent and his traffic safety officer must always have the relevant telephone numbers and email addresses with them so that contact can be made as soon as any traffic related incidents occur.

The Contractor shall, in appropriate circumstances that have been agreed with the relevant provincial and/or municipal traffic authorities, be responsible for acquiring the services of a provincial or municipal traffic officer and traffic vehicle (equipped with a blue light) to assist in the accommodation of traffic. The traffic officer and traffic vehicle will be required when lanes are to be closed, or where directed by the Engineer.

If the road under construction forms part of an abnormal load route the Contractor shall liaise with the relevant provincial abnormal load office that issues permits to ensure that permits are not issued when horizontal and/or vertical restrictions do not allow passage of the abnormal load.

C1.3 CONTRACTOR'S SITE ESTABLISHMENT AND GENERAL OBLIGATIONS

PART C: MEASUREMENT AND PAYMENT

PSC1.3.1.3 Time-related obligations

Add the following at the end of clause C1.3.1, Under Item C1.3.1.3

"The amount payable to the contractor for time-related general obligations arising from extensions of time granted in accordance with Clause 5.12.1 and Clause 5.12.2 of the GCC 2015, shall be calculated as follows:

- (i) The Contractor shall apply for the extension of time in terms of the number of days delay incurred calculated in accordance with Clause 5.1 of the GCC 2015.
- (ii) The number of days extension of time calculated in accordance with Clause 5.1 of the GCC 2015, finally granted shall then be added to the due completion date of the contract by the Engineer, commencing on the first working day after the day of the original due completion date. Non-working days and special non-working days as defined in the contract data shall not be counted as working days in calculating the extended completion date.
- (iii) The number of calendar days extension of time granted from the original completion date to the extended completion date as calculated in (ii) above shall then be calculated, commencing on the first calendar day after the day of the original completion date.

The following formula shall then be used to calculate the number of months extension of time granted;

$$\begin{aligned} &\text{No. of months extension of time granted} \\ &= [(\text{No. of calendar days extension of time granted} / 365)] \times 12 \end{aligned}$$

- (iv) The number of months extension of time granted calculated as in (iii) above shall be the number of additional months measured for payment for time-related general obligations under item PSC1.3.1.3 and in accordance with Clause 5.12.3 of the GCC 2015 as a result of the extensions of time granted.

NOTE: The number of months extension of time granted calculated as in (iii) above shall also be included in the measurement of any other items scheduled under Sections C1.3, C1.4 and C1.5 or elsewhere in the schedule of quantities that involve the unit of measurement "month" and that were provided on site for the full duration of the extended period. Where such items were provided for a portion of the extended period only, a pro rata payment shall be made, based on the number of calendar days the item was provided on site after the original completion date divided by the number of calendar days as calculated in (iii) above for the extension of time granted."

CHAPTER 1.5 ACCOMMODATION OF TRAFFIC

PART C: MEASUREMENT AND PAYMENT

CHAPTER C8.2 COVER SPRAYS, FOG SPRAYS AND REJUVENATION SPRAYS

DEFINITIONS

Fog spray or rejuvenation spray -is used for the application of diluted anionic emulsion or rejuvenator for purposes of adding additional binder to the seal or rejuvenating the seal at a later stage of the seal life.

A10.1.3.2 Weather limitations

The following general limitations shall apply:

- Whenever the temperature of the road surface falls below the specified temperature for the binder to be applied or will probably fall below the required temperature before spraying the binder, no binder shall be sprayed;
- No bituminous work shall be done during foggy or rainy weather and, when a cold wind is blowing, the above temperatures as specified in the sub-sections below, shall be increased by 3°C to 6°C.
- When strong winds (more than 30 km/h) are blowing which are likely to interfere with the proper execution of the work, no sealing, especially spraying of binder, shall be done;
- No sealing shall be done when rain or cold temperature is imminent;
- No sealing shall be done when the surface of the layer is visibly wet, i.e. more than damp;
- No sealing shall be done after sunse

Only emulsion products, MC3000 and cutback S-E1 binder shall be permitted during the embargo period stated in the Contract Documentation. Special formulated winter grade binders shall only be allowed if provision is made in the Contract Documentation. The minimum road-surface rising temperatures at which the spraying of the different types and grades of binder shall be allowed are specified in Table A10.1.3-1

Table A10.1.3-1: Minimum road-surface rising temperature

Bituminous binder type Minimum rising road surface temperature	Bituminous binder type Minimum rising road surface temperature
/100 penetration-grade	25°C
MC 3000	10°C
Cationic emulsion	10°C
Anionic emulsion	10°C
S-E	25°C
S-E2	25°C
S-R1	25°C
S-R2	25°C
SC-E1	10°C
SC-E2	10°C
S-E1 cut back with 4.5% MC30	23°C

S-E1 cut back with 9.0% MC30	21°C
Any special formulated binder not defined above	As specified in the Contract Documentation

Conventional slurry shall not be applied at an air temperature of less than 7°C when temperatures are rising or less than 13°C when temperatures are dropping.

During hot weather slurry operations shall be suspended when aggregate is being displaced by the spreader box or squeegees.

Rapid setting slurry or microsurfacing shall be sufficiently versatile to be laid in air temperatures of 4°C to 40°C as well as capable of being laid under damp conditions.

When the breaking process accelerates to such an extent that it renders the product unworkable to attain the required end result, no further work shall be done until adjustments to the composition of the product have been proven through trial sections and approval by the Engineer.

A8.2.3.2 Nominal rate of application for cover sprays, fog sprays and rejuvenation sprays **The nominal rate of application for tender purposes shall be:**

- a) Diluted cationic emulsion cover spray at 1,0 l/m²
- b) Diluted anionic or cationic emulsion cover spray, in the case of Cape seals, at 0,8 l/m²
- c) Diluted anionic emulsion fog spray as enrichment treatment at 0,8 l/m²
- d) Rejuvenation spray with cut-back inverted emulsion or other Agrément certified products at 0,5 l/m

A8.2.4 DESIGN BY CONTRACTOR / PERFORMANCE BASED SYSTEMS

All specifications for cover sprays, fog sprays and rejuvenation sprays relevant to this Section shall apply.

The selection of the appropriate product and application rates are only applicable to alternatives offered by the contractor or if design by the

Contractor is a specific requirement in the Contract Documentation. The proposed product and application rate shall be submitted to the

Engineer, for approval based good practice guidelines.

A8.2.5.1 Bitumen

a) Cover spray

Diluted 65 % cationic spray grade emulsion, or 60 % anionic stable grade emulsion, with the dilutions as specified in Part C: Measurement and Payment.

b) Fog spray as enrichment treatment

A diluted 60 % anionic stable-grade emulsion (50/50) shall be used.

c) Rejuvenation spray

Agrément SA certified products or inverted bitumen emulsion complying with SANS 4001 – BT5, with the exception that the Viscosity at 60 °C on residue from distillation shall be between 10 and 20 Pas.

A10.1.6.1 Binder distributor

The binder distributor used for distributing the bituminous binders shall-

- Comply with SANS 3001-BT20 and shall be covered by a valid certificate of compliance with SANS 3001-BT20, not older than 12 months,
DRAFT STANDARD (DS) OCTOBER 2020 10-16
issued by an accredited testing organisation
- Not have any fuel, oil or binder leaks;
- Have a straight and clean spraybar, all the spray heads of which shall be of the same type which open

simultaneously and shall not leak when closed;

- Have its spray heads all spraying at the same angle to the spraybar and the height adjusted to the correct level so as to obtain the required overlapping. The uneven application of binder shall be unacceptable.
- Have its sieve undamaged and clean;
- Be under the direct control of an operator approved by the Engineer on the grounds of a CV with experience and list of contracts completed

with references, in writing or a certificate of competence signed by a representative of a road authority;

- Be fitted with a suitable cut-off spray-head (end nozzles) or fishplates to prevent over spraying onto gravel shoulders or staining of concrete elements on the edge of the surfacing of the road.
- Be capable of spraying the binder at the specified applications rates. The pump of the distributor shall be capable of delivering the binder at the spray bar nozzles at the correct pressure to obtain the specified application rates, irrespective of the viscosity properties of the prescribed binder and the number of nozzles open.

- Fitted with a suitable valve or other access gate for taking of samples of the binder for testing purposes.

The binder distributor, pumps and nozzles, used for non-homogeneous modified binder shall be adapted to spray the rubber modified binder satisfactorily.

The Contractor shall provide proof by way of a test on the site that the binder distributor has sufficient reserve power to maintain the required constant speed up the steepest incline to which spray has to be applied and to obtain a uniform distribution of the binder.

The transverse distribution of the spray bar shall be field-verified by means of SANS 3001-BT24. Measurements of transverse distribution ('Bucket test') or a binder distributor. The maximum permissible tolerance permitted between the troughs (excluding the outer 300 mm) is dependent on the viscosity of the binder type being applied and shall be as follows:

- All emulsions, cutback and penetration grade bitumens – 5 %
- Hot homogeneous modified bitumens – 7 %
- Non-homogeneous binders (bitumen rubber) – 10 %

The spray bar shall be of such design as to allow for any adjustments to be made in order to meet the above tolerances. This procedure shall be carried out each time the distributor is first established on site and once a week thereafter or when a problem with transverse distribution is suspected. The distributor shall thus have a set of troughs available in order to allow the execution of the test. For limited quantities of spray-work, the Engineer may accept the results of a recently completed distribution test that has been recorded and approved by an independent supervisor on the distributor's test log book.

The transverse distribution of spray flairs shall be field verified according to SANS 3001-BT24 and Clause A20.1.5.9 of Chapter 20.

The maximum permissible tolerance permitted for each trough from the average of the nine troughs is 10 %.

A8.2.7 EXECUTION OF THE WORKS

A8.2.7.1 Preparation and execution

The areas to be treated shall be cleaned of all dust, dirt, dung, oil or any other foreign matter.

The treatment shall consist of the application of a cover spray, fog spray or rejuvenation spray of the specified grade and dilution of bituminous

emulsion to the existing surface, by means of a pressure distributor, at the rates of application as specified in the Contract Documentation or as

directed by the Engineer, in widths that may vary from 0,5 m to 4,0 m.

A water tanker with a pressure distributor shall be available on standby for pre-wetting or post-wetting the areas scheduled for fog spray

A8.2.7.2 Opening to traffic

Treated sections shall only be opened to traffic when the emulsion has properly cured and tackiness has reduced to the extent that no pickup

occurs. Should pick-up occur after opening, immediate action is required by the Contractor to stabilise the situation through closure, water spraying or blinding with approved coarse sand.

Traffic accommodation shall comply with the specifications in Clause A1.5 of Chapter 1.

A10.1.3.4 Protection of kerbs, channels, etc.

Kerbs, channels, manholes, guard rails, bridge railings and any other structures, adjoining seals to be constructed, shall be protected from soiling. The Contractor shall replace at his own cost any items that have been soiled

A10.1.3.9 Spray joints

a) Transverse joints

In order to prevent overlapping at junctions of separate binder applications the previous work along the joint shall be covered with removable reinforced paper for a sufficient distance back from the joint to ensure that the sprayer is operating at the required speed before the untreated surface is reached and also to prevent additional binder application onto the previously treated section. The same method shall be used to ensure a neat joint at the end of the run.

B8.2.7 EXECUTION OF THE WORKS

For cover sprays, fog sprays and rejuvenation sprays, all preparatory activities (sweeping, watering and protection of kerbs and roadside furniture are suitable components for labour enhancement.

Given the light applications, hand spraying is not considered to be suitable for hand work except in restricted areas.

C8.2 COVER SPRAYS, FOG SPRAYS AND REJUVENATION SPRAYS

(i) Preamble

The tendered rate for each item shall include full compensation for providing, maintaining and decommissioning upon completion, of all the plant, equipment, labour, tools, incidentals and supervision to carry out the activity or construct the works in the item, unless otherwise stated.

Any prime cost or provisional sums shall be paid in accordance with the provisions of the conditions of contract. The charge or mark-up tendered or allowed for is a percentage of the amount actually paid under the prime cost or provisional sum. This percentage shall cover all the Contractor's handling, supervision, profit and liability costs to provide the services in the prime cost or provisional sum item.

The requirements of Section C1.1 of Chapter 1 shall apply.

Where pay item descriptions include any wording in brackets it is an indication that contract specific information is to be inserted in the Pricing Schedule included in the Contract Documentation

(ii) Items that will not be measured separately

The following activities, whether required to complete the specified work or not, will not be measured and paid for separately and the Contractor

shall include the cost thereof in other pay items as he deems appropriate:

1. No separate payment will be made for setting out the works.
2. No separate payment will be made for the protection or repair as required of any existing or new road furniture, structures, buildings, infrastructure or services damaged by the Contractor's activities.
3. No additional payment shall be made, nor shall any claim for additional payment be considered, for any specified work in confined or restricted areas. Any additional costs associated with working in confined or restricted areas shall be deemed to be included in the standard applicable pay items.
3. No separate payment will be made for the loading of any materials.
- 4.
5. No separate payment will be made for the hauling of any materials where the material is moved over a distance of less than, and up to 1,0 km.

6. No separate payment will be made for transporting materials from commercial sources irrespective of the haul distance.
7. No separate payment will be made for the removal or any surplus material imported to complete the works.
8. For all Works performed, precautionary measures required in terms of the Occupational Health and Safety Act (Act 85 of 1993) and the latest amendments thereof as well as the latest Construction Regulations shall be deemed included in the rates tendered for the relevant products.

**(iii) Items to be measured and paid for using items specified elsewhere in the specifications
Not applicable to this Section.**

(v) Items specifically for this Section of the specifications

Item Description Unit

C8.2.1 Cover sprays, fog sprays and rejuvenation sprays

C8.2.1.1 65 % Cationic spray grade emulsion

(a) Indicate dilution (Diluted ..% Emulsion/...% Water) litre (ℓ)

C8.2.1.2 60 % Anionic stable grade emulsion

(a) Indicate dilution (Diluted ..% Emulsion/...% Water) litre (ℓ)

C8.2.1.3 Cutback Inverted bitumen emulsion litre (ℓ)

C8.2.1.4 Certified rejuvenator (State type and certification) litre (ℓ)

The unit of measurement shall be the litre of binder measured at spraying temperature and sprayed in accordance with the requirements.

The tendered rates shall include full compensation for cleaning and preparing the existing surface, for furnishing the material and applying the binder and for all other incidentals necessary for completing the work as specified.

C8.8 PATCHING AND EDGE BREAK REPAIR

The tendered rate for each item shall include full compensation for providing, maintaining and decommissioning upon completion, of all the plant, equipment, labour, tools, incidentals and supervision to carry out the activity or construct the works in the item, unless otherwise stated.

The requirements of Section C1.1 of Chapter 1 shall apply.

Where pay item descriptions include any wording in brackets it is an indication that contract specific information is to be inserted in the Pricing Schedule included in the Contract Documentation.

(ii) Items that will not be measured separately

The following activities, whether required to complete the specified work or not, will not be measured and paid for separately and the Contractor shall include the cost thereof in other pay items as he deems appropriate:

1. No separate payment will be made for setting out the works.
2. No separate payment will be made for the protection or repair as required of any existing or new road furniture, structures, buildings, infrastructure or services damaged by the Contractor's activities.
3. No additional payment shall be made, nor shall any claim for additional payment be considered, for any specified work in confined or restricted areas. Any additional costs associated with working in confined or restricted areas shall be deemed to be included in the standard

applicable pay items.

4. No separate payment will be made for the loading of any materials.
5. No separate payment will be made for the hauling of any materials where the material is moved over a distance of less than, and up to 1,0 km.
6. No separate payment will be made for transporting materials from commercial sources irrespective of the haul distance.
7. No separate payment will be made for the removal or any surplus material imported to complete the works.
8. For all Works performed, precautionary measures required in terms of the Occupational Health and Safety Act (Act 85 of 1993) and the latest amendments thereof as well as the latest Construction Regulations shall be deemed included in the rates tendered for the relevant products.

(iv) Items specifically for this Section of the specifications
Item Description Unit

C8.8.1 Saw cutting pavement layers for patching

C8.8.1.1 Asphalt or bituminous surfacing to an average depth

- (a) Not exceeding 50 mm metre (m)
- (b) Exceeding 50 mm but not exceeding 100 mm metre (m)
- (b) Exceeding 100 mm metre (m)

C8.8.1.2 Cemented pavement layers to an average depth

- (a) Not exceeding 100 mm metre (m)
- (b) Exceeding 100 mm but not exceeding 200 mm metre (m)
- (c) Exceeding 200 mm metre (m)

C8.8.1.3 Granular layers to an average depth

- (a) Not exceeding 100 mm metre (m)
- (b) Not exceeding 200 mm metre (m)

The unit of measurement shall be the metre of sawcut. The length in each depth range shall be measured and paid separately.

The tendered rate shall include full compensation for all plant, equipment, labour, supervision, materials, transport and for all incidentals for sawing the asphalt and the cemented pavement layers, complete as specified and prescribed by the Engineer, and also for work in restricted areas. The rate shall also include for any haul to an approved spoil site if so required.

Item Description Unit

C8.8.2 Excavation in existing pavements for patching (non-milling)

C8.8.2.1 Asphalt layers

- (a) Not exceeding 10 m²
including for edge repairs wider than 250 mm cubic metre (m³)
- (b) Exceeding 10 m² but not exceeding 50 m² including for edge repairs wider than 250 mm cubic metre (m³)
- (c) Exceeding 50 m² up to 100 m² including for edge repairs wider than 250 mm cubic metre (m³)
- (d) Exceeding 100 m²

cubic metre (m³)

C8.8.2.2 Cemented layers

(a) Not exceeding 10 m²

including for edge repairs wider than 250 mm cubic metre (m³)

(b) Exceeding 10 m² but not exceeding 50 m² including for edge repairs wider than 250 mm cubic metre (m³)

(c) Exceeding 50 m² up to 100 m² including for edge repairs wider than 250 mm cubic metre (m³)

(d) Exceeding 100 m²

cubic metre (m³)

C8.8.2.3 Other layers (specify type)

(a) Not exceeding 10 m²

including for edge repairs wider than 250 mm cubic metre (m³)

(b) Exceeding 10 m² but not exceeding 50 m² including for edge repairs wider than 250 mm cubic metre (m³)

(c) Exceeding 50 m² up to 100 m² including for edge repairs wider than 250 mm cubic metre (m³)

(d) Exceeding 100 m²

cubic metre (m³)

C8.8.3 Compacting the floor of excavations for patching (specify density) square metre (m²)

The unit of measurement shall be a square metre of excavation floor compacted on the instruction of the Engineer, and the quantity shall be computed in accordance with the authorized dimensions of the excavation floor.

The tendered rate shall include full compensation for compacting the floor of excavations complete as specified, and also for work in restricted

areas. Payment shall not distinguish between the various methods of compaction or various compaction requirements.

Item Description Unit

C8.8.4 Backfilling of excavations for patching with:

C8.8.4.1 Chemically stabilized pavement material (state the pavement

material and the stabilising agent) for a patch with a surface area:

(a) Not exceeding 10 m² including for edge repairs wider than 250 mm cubic metre (m³)

(b) Exceeding 10 m² but not exceeding 50 m² including for edge repairs wider than 250 mm cubic metre (m³)

DRAFT STANDARD (DS) OCTOBER 2020 8-48

(c) Exceeding 50 m² up to 100 m² including for edge repairs wider than 250 mm cubic metre (m³)

(d) Exceeding 100 m² cubic metre (m³)

C8.8.4.2 Bitumen Stabilised Material (specify type and level of compaction) for a

patch with a surface area:

(a) Not exceeding 10 m²

including for edge repairs wider than 250 mm cubic metre (m³)

(b) Exceeding 10 m² but not exceeding 50 m² including for edge repairs wider than 250 mm cubic metre (m³)

(c) Exceeding 50 m² up to 100 m² including for edge repairs wider than 250 mm cubic metre (m³)

(d) Exceeding 100 m² cubic metre (m³)

C8.8.4.3 Asphalt for a patch with a surface area (state type and density)

(a) Not exceeding 10 m²

including for edge repairs wider than 250 mm ton (t)

(b) Exceeding 10 m² but not exceeding 50 m² including for edge repairs wider than 250 mm ton (t)

(c) Exceeding 50 m² up to 100 m² including for edge repairs wider than 250 mm ton (t)

(d) Exceeding 100 m²

ton (t)

C8.8.4.4 Granular base material (state type and density) for a patch with a surface area

(a) Not exceeding 10 m²

including for edge repairs wider than 250 mm ton (t)

(b) Exceeding 10 m² but not exceeding 50 m² including for edge repairs wider than 250 mm ton (t)

(c) Exceeding 50 m² up to 100 m² including for edge repairs wider than 250 mm ton (t)

(d) Exceeding 100 m² ton (t)

The tendered rates shall include full compensation for design of backfill material, providing all the material, irrespective of its origin, including gravel, for all mixing, placing, compacting and finishing as specified in this Section and other appropriate Sections of the specifications, for all transport, work in restricted areas, and also for all machinery, equipment, labour, supervision and other incidentals for executing the work as specified.

11.7 ROAD MARKINGS AND ROAD STUDS

(i) Preamble

The tendered rate for each item shall include full compensation for providing, maintaining and decommissioning upon completion, of all the plant,

equipment, labour, tools, incidentals and supervision to carry out the activity or construct the works in the item, unless otherwise stated.

Any prime cost or provisional sums shall be paid in accordance with the provisions of the conditions of contract. The charge or mark-up tendered

or allowed for is a percentage of the amount actually paid under the prime cost or provisional sum. This percentage shall cover all the Contractor's

handling, supervision, profit and liability costs to provide the services in the prime cost or provisional sum item.

The requirements of Section C1.1 of Chapter 1 shall apply.

Where pay item descriptions include any wording in brackets it is an indication that contract specific information is to be inserted in the Pricing Schedule included in the Contract Documentation.

(ii) Notes on measurement and pay items

None.

(iii) Items that will not be measured separately

(iv)

The following activities, whether required to complete the specified work or not, will not be measured and paid for separately and the Contractor

shall include the cost thereof in other pay items as he deems appropriate:

1. No separate payment will be made for setting out the works.

2.

2. No separate payment will be made for the protection or repair as required of any existing or new road furniture, infrastructure or services damaged by the Contractor's activities.

3. No additional payment shall be made, nor shall any claim for additional payment be considered, for any specified work in confined or restricted

4.

areas. Any additional costs associated with working in confined or restricted areas shall be deemed to be included in the standard applicable pay items.

4. No separate payment will be made for the loading of any materials.
5. No separate payment will be made for the hauling of any materials.
6. No separate payment will be made for transporting materials from commercial sources irrespective of the haul distance.
7. No separate payment will be made for the removal or any surplus material imported to complete the works.
8. For all Works performed, precautionary measures required in terms of the Occupational Health and Safety Act (Act 85 of 1993) and the latest amendments thereof as well as the latest Construction Regulations shall be deemed included in the rates tendered for the relevant products.
 - (iv) Items to be measured and paid for using items specified elsewhere in the specifications
Not applicable to this Section.
 - (v) Items specifically for this Section of the specification
Item Description Unit

A10.1.6.1 Binder distributor

The binder distributor used for distributing the bituminous binders shall-

- Comply with SANS 3001-BT20 and shall be covered by a valid certificate of compliance with SANS 3001-BT20, not older than 12 months, DRAFT STANDARD (DS) OCTOBER 2020 10-16 issued by an accredited testing organisation
- Not have any fuel, oil or binder leaks;
- Have a straight and clean spraybar, all the spray heads of which shall be of the same type which open simultaneously and shall not leak when closed;
- Have its spray heads all spraying at the same angle to the spraybar and the height adjusted to the correct level so as to obtain the required overlapping. The uneven application of binder shall be unacceptable.
- Have its sieve undamaged and clean;
- Be under the direct control of an operator approved by the Engineer on the grounds of a CV with experience and list of contracts completed with references, in writing or a certificate of competence signed by a representative of a road authority;
- Be fitted with a suitable cut-off spray-head (end nozzles) or fishplates to prevent over spraying onto gravel shoulders or staining of concrete elements on the edge of the surfacing of the road.
- Be capable of spraying the binder at the specified applications rates. The pump of the distributor shall be capable of delivering the binder at the spray bar nozzles at the correct pressure to obtain the specified application rates, irrespective of the viscosity properties of the prescribed binder and the number of nozzles open.
- Fitted with a suitable valve or other access gate for taking of samples of the binder for testing purposes.

The binder distributor, pumps and nozzles, used for non-homogeneous modified binder shall be adapted to spray the rubber modified binder satisfactorily.
The Contractor shall provide proof by way of a test on the site that the binder distributor has sufficient reserve power to maintain the required constant speed up the steepest incline to which spray has to be applied and to obtain a uniform distribution of the binder.

The transverse distribution of the spray bar shall be field-verified by means of SANS 3001-BT24. Measurements of transverse distribution ('Bucket test') for a binder distributor. The maximum permissible tolerance permitted between the troughs (excluding the outer 300 mm) is dependent on the viscosity of the binder type being applied and shall be as follows:

- All emulsions, cutback and penetration grade bitumens – 5 %
- Hot homogeneous modified bitumens – 7 %
- Non-homogeneous binders (bitumen rubber) – 10 %

The spray bar shall be of such design as to allow for any adjustments to be made in order to meet the above tolerances. This procedure shall be carried out each time the distributor is first established on site and once a week thereafter or when a problem with transverse distribution is suspected. The

distributor shall thus have a set of troughs available in order to allow the execution of the test. For limited quantities of spray-work, the Engineer may accept the results of a recently completed distribution test that has been recorded and approved by an independent supervisor on the distributor's test log book.

The transverse distribution of spray flairs shall be field verified according to SANS 3001-BT24 and Clause A20.1.5.9 of Chapter 20. The maximum permissible tolerance permitted for each trough from the average of the nine troughs is 10 %.

C11.7.1 Road marking:

C11.7.1.1 White lines broken or unbroken (paint type and width of line indicated) kilometre (km)

C11.7.1.2 Yellow lines broken or unbroken (paint type and width of line indicated) kilometre (km)

C11.7.1.3 Red lines broken or unbroken (paint type and width of line indicated) kilometre (km)

C11.7.1.4 White lettering and symbols (paint type indicated) square metre (m²)

C11.7.1.5 Yellow lettering and symbols (paint type indicated) square metre (m²)

C11.7.1.6 Red lettering and symbols (paint type indicated) square metre (m²)

C11.7.1.7 Transverse lines, painted island and arrestor bed markings (any colour) (paint type indicated) square metre (m²)

C11.7.1.8 Labour enhanced hand painted white lines broken or unbroken (paint type and width of line indicated)
square metre (m²)

C11.7.1.9 Labour enhanced hand painted yellow lines broken or unbroken (paint type and width of line indicated)
square metre (m²)

C11.7.1.10 Labour enhanced hand painted red lines broken or unbroken (paint type and width of line indicated)
kilometre (km)

C11.7.1.11 Labour enhanced hand painted white lettering and symbols (paint type indicated) square metre (m²)

C11.7.1.12 Labour enhanced hand painted yellow lettering and symbols (paint type indicated) square metre (m²)

C11.7.1.13 Labour enhanced hand painted transverse lines, painted island and arrestor bed markings (any colour) (paint type indicated)
square metre (m²)

C11.7.1.14 Labour enhanced hand painted kerb markings (any colour) (paint type indicated) square metre (m²)

C11.7.1.15 Labour enhanced hand operated pressure applied machine white lines broken or unbroken (paint type and width of line indicated)
kilometre (km)

C11.7.1.16 Labour enhanced hand operated pressure applied machine yellow lines broken or unbroken (paint type and width of line indicated)
kilometre (km)

C11.7.1.17 Labour enhanced hand operated pressure applied machine red lines broken or unbroken

(paint type and width of line indicated)
kilometre (km)

C11.7.1.18 Labour enhanced hand operated pressure applied machine white lettering and symbols
(paint type indicated)
square metre (m2)

C11.7.1.19 Labour enhanced hand operated pressure applied machine yellow lettering and symbols
(paint
type indicated)
square metre (m2)

C11.7.1.20 Labour enhanced hand operated pressure applied machine transverse lines, painted
island
and arrestor bed markings (any colour) (paint type indicated)
square metre (m2)

Item Description Unit

C11.7.2 Retro-reflective road marking:

C11.7.2.1 White lines broken or unbroken (paint type and width of line indicated) kilometre (km)

C11.7.2.2 Yellow lines broken or unbroken (paint type and width of line indicated) kilometre (km)

C11.7.2.3 Red lines broken or unbroken (paint type and width of line indicated) kilometre (km)

C11.7.2.4 White lettering and symbols (paint type indicated) square metre (m2)

C11.7.2.5 Yellow lettering and symbols (paint type indicated) square metre (m2)

C11.7.2.6 Red lettering and symbols (paint type indicated) square metre (m2)

C11.7.2.7 Transverse lines, painted island and arrestor bed markings (any colour) (paint type
indicated) square metre (m2)

C11.7.2.8 Hand painted white lines broken or unbroken (paint type and width of line indicated)
kilometre (km)

C11.7.2.9 Hand painted yellow lines broken or unbroken (paint type and width of line indicated)
kilometre (km)

C11.7.2.10 Hand painted red lines broken or unbroken (paint type and width of line indicated)
kilometre (km)

C11.7.2.11 Hand painted white lettering and symbols (paint type indicated) square metre (m2)

C11.7.2.12 Hand painted yellow lettering and symbols (paint type indicated) square metre (m2)

C11.7.2.13 Hand painted transverse lines, painted island and arrestor bed markings (any colour)
(paint
type indicated)
square metre (m2)

C11.7.2.14 Hand operated pressure applied machine white lines broken or unbroken (paint type and
width of line indicated)
kilometre (km)

C11.7.2.15 Hand operated pressure applied machine yellow lines broken or unbroken (paint type and
width of line indicated)
kilometre (km)

C11.7.2.16 Hand operated pressure applied machine red lines broken or unbroken (paint type and
width
of line indicated)
kilometre (km)

C11.7.2.17 Hand operated pressure applied machine white lettering and symbols (paint type indicated) square metre (m2)

C11.7.2.18 Hand operated pressure applied machine yellow lettering and symbols (paint type indicated) square metre (m2)

C20.1 TESTING MATERIALS AND JUDGEMENT OF WORKMANSHIP

Preamble

The tendered rate for each item shall include full compensation for providing, maintaining and decommissioning upon completion, of all the equipment, labour, tools, incidentals and supervision to carry out the activity in the item, unless otherwise stated.

Any prime cost or provisional sums shall be paid in accordance with the provisions of the Conditions of Contract. The charge or mark-up tendered or allowed for is a percentage of the amount actually paid under the prime cost or provisional sum. This percentage shall cover all the Contractor's handling, supervision, profit and liability costs to provide the services in the prime cost or provisional sum item.

The requirements of Section C1.1 of Chapter 1 shall apply.

Where pay item descriptions include any wording in brackets it is an indication that contract specific information is to be inserted in the Pricing Schedule included in the Contract Documentation.

Item Description Unit

C20.1.1 Special tests on elastomeric bearings (150 % vertical load and 150 % shear distortion) number (No)

The unit of measurement shall be the number of elastomeric bearings tested as described.

The tendered rate shall include full compensation for having the test conducted by an approved laboratory, also for replacing the bearings that may possibly be damaged during testing.

Item Description Unit

C20.1.2 Special tests requested by the Engineer

C20.1.2.1 Employer's contribution to concrete durability tests

(a) Tests for water sorptivity prime cost

(b)

(i) Handling costs and profit in respect of item C20.1.2.1(a) percentage (%)

(j)

(c) Tests for oxygen permeability prime cost

(d)

(h) Handling costs and profit in respect of item C20.1.2.1(b) percentage (%)

(i)

(d) Tests for chloride conductivity prime cost

(e)

(j) Handling costs and profit in respect of item C20.1.2.1(c) percentage (%)

(k)

(e) Tests for concrete cover prime cost

(f)

(i) Handling costs and profit in respect of item C20.1.2.1(d) percentage (%)

C20.1.2.2 Employer's contribution to other special tests

(a) Specify test prime cost

(i) Handling costs and profit in respect of item C20.1.2.2(a) percentage (%)

The Prime Cost provided to cover the cost of special tests as requested by the Engineer in terms of Clause A20.1.3.6b) shall be expended in accordance with the provisions of the Conditions of contract. Payment will not be made for any special test should the test indicate that the specifications have not been complied with.

Item Description Unit

C20.1.3 Providing testing equipment:

C20.1.3.1 Core drill number (No)

The unit of measurement shall be the number of each item provided. The core drill shall be an approved type capable of drilling cores with diameters of 100 mm and 150 mm in concrete, stabilised layers and asphalt. It shall be provided with a water supply and necessary drilling parts.

The core drill shall be operated by the Contractor and for acceptance control in the presence of representatives of the Engineer

C3.3: PARTICULAR SPECIFICATIONS

In addition to the Standard Specifications and the Project Specifications, the following Particular Specifications shall apply to this contract and are bound in hereafter:

PART C: ENVIRONMENTAL MANAGEMENT SPECIFICATION	C60
PART D: OHS&A 1993 HEALTH AND SAFETY SPECIFICATION	C66
PART E: EXPANDED PUBLIC WORKS PROGRAMME.....	C77

3.3 PARTICULAR SPECIFICATIONS

PART C: ENVIRONMENTAL MANAGEMENT SPECIFICATION

PART C: ENVIRONMENTAL MANAGEMENT SPECIFICATION

C1. SCOPE

The Employer recognises environmental management as a key component of road infrastructure development and as part of its environmental policy has developed this environmental management specification as a tool for continual improvement in environmental performance.

This environmental management specification prescribes the methods by which proper environmental controls are to be implemented by the Contractor. The duration over which the Contractor's controls shall be in place cover the construction period of the project as well as the limited time after contract completion defined by the General Conditions of Contract 2015 as the Defects Notification Period (maintenance period).

C2. ENVIRONMENTAL MANAGEMENT PLAN

In order to ensure that the construction work is carried out in an environmentally sensitive manner, strict compliance with the Environmental Management Plan (EMP) guidelines is required. The purpose of the EMP is to:

- Encourage good management practices through planning and commitment to environmental issues,
- Provide rational and practical environmental guidelines to:
 - (i) Minimise disturbance of the natural environment,
 - (ii) Prevent pollution of land, air and water,
 - (iii) Prevent soil erosion and facilitate re-vegetation.
- Adopt the best practicable means available to prevent or minimise adverse environmental impact,
- Develop waste management practices based on prevention, minimisation, recycling, treatment or disposal of wastes,
- Train employees and contractors with regard to environmental obligations.

C3. ADMINISTRATION OF ENVIRONMENTAL OBLIGATIONS

The Contractor is responsible for the implementation of this EMP to ensure sound environmental management during the construction phase of a project.

The Contractor shall receive and implement any instruction issued by the Employer's Agent relating to compliance with the EMP including the removal of personnel or equipment.

Compliance with the provisions contained herein or any condition imposed by the environmental approvals, shall become the responsibility of the Contractor through an approved Environmental Officer (EO). The Contractor shall nominate a person from among his site personnel to fulfil this function and submit to the Employer's Agent for his approval the curriculum vitae of the proposed EO. This request for approval shall be given, in writing, at least fourteen days before the commencement of any construction activity clearly setting out reasons for the nomination, and with sufficient detail to enable the Employer's Agent to make a decision.

Once a nominated representative of the Contractor has been approved as the EO, the EO shall be the responsible person for ensuring that the provisions of this EMP are complied with for the duration of the contract. The EO shall submit monthly written reports of compliance with the EMP to the Employer's Agent.

In addition to the compliance duties relating to this EMP, the EO shall also provide full cooperation whenever the Contractor is subjected to regular environmental audits.

C4. TRAINING AND INDUCTION OF EMPLOYEES

The Contractor has a responsibility to ensure that all those people involved in the project are aware of and familiar with the environmental requirements for the project (this includes subcontractors and local labour). The EMP shall be part of the terms of reference for all contractors, subcontractors and suppliers.

C5. COMPLAINTS REGISTER AND ENVIRONMENTAL INCIDENT BOOK

Any complaints received by the project team from the public will be recorded. The complaint should be brought to the attention of the Construction Manager, who will respond.

The following information must be recorded:

- Time, date and nature of the complaint,
- Type of communication (telephone, letter or email),
- Name, contact address and telephone number of the complainant,
- Response and investigation undertaken, and
- Actions taken and by whom.

All complaints received will be investigated and a response given to the complainant within 14 days.

All environmental incidents occurring on the site will be recorded. The following information will be provided:

- Time, date, location and nature of the incident, and
- Actions taken and by whom.

C6. SITE CLEANLINESS AND NEATNESS

- Location of a construction camp is to be approved by the Employer's Agent and is to be restored to its previous condition after completion of construction.
- The construction camp should preferably be fenced with a 1,8m Bonnox fence or similar approved.
- All materials, equipment, plant and vehicles must be stored within the construction camp.
- A dedicated area must be made available for construction staff to change and store their personal belongings.

C7. ACCESS

- Access to existing roads, schools, buildings, shops and residential properties must not be impeded during construction.
- Access roads utilised by the Contractor must be maintained in good condition.

C8. BORROW PITS

- Mining authorisations (permits) for borrow pits must be obtained from the Department of Mineral Resources (DMR) in consultation with the Department of Water and Sanitation (DWS).
- Spoil dumps resulting from borrow pits must not interfere with any natural surface drainage.
- Borrow pits must be rehabilitated after use in accordance with the requirements of DMR and DWS.

C9. DUST CONTROL / AIR QUALITY

- Dust suppression measures must be implemented during construction by ensuring that all surfaces prone to dust generation are kept damp (e.g. use of water tanker).
- Ensure that vehicles and equipment are in good working condition and that emissions are not excessive.
- Special care must be taken in areas where the route passes close to schools and residential areas.
- The speed of construction vehicles must be reduced.

C10. FAUNA

- Contractors' and subcontractors' staff and workers may not chase, catch or kill animals encountered during construction.

C11. FIRE PREVENTION AND CONTROL

- Smoking is prohibited in the vicinity of flammable substances.
- The Contractor must ensure that fire-fighting equipment is available on site, particularly where flammable substances are being stored or used, and that construction staff are aware of where it is kept and how it is operated.

- Fires started for comfort (warmth) are prohibited, due to the risk of veld fires and risk to adjacent property owners' lands.

C12. GRAVE SITES

- Grave sites in close proximity to the road must not be disturbed during construction.

C13. MATERIALS HANDLING AND SPILLS MANAGEMENT

- Any hazardous materials to be used during construction (e.g. lime, fuel and paint) are to be stored in a designated area at the campsite.
- The storage containers/facilities (including any diesel or petrol tanks) must be placed on an impermeable surface and surrounded by a bund wall, in order to ensure that accidental spillage does not pollute the environment.
- Workers must at all times be made aware of the health and safety risks associated with any hazardous substances used (e.g. smoking near fuel tanks), and must be provided with appropriate protective clothing/equipment in case of spillages or accidents.
- Ensure all staff and contractors undergo relevant training in the maintenance of equipment to prevent the accidental discharge or spill of fuel, oil, lubricants and other chemicals.
- Any spill of potentially hazardous materials must be cleaned up immediately (potentially hazardous materials on site include paint, oil, grease, fuel and turpentine).
- The area of contaminated soil or spill must be deposited into the hazardous waste container(s).
- The Contractor should keep Peat Sorb or a similar absorbent on site to clean up any spills. The absorbent must be stored in a designated area and be available for inspection.
- All spills are to be recorded in the environmental incident book.

C14. NOISE

- Noise generating activities must be restricted to between 07:00 and 17:00 Monday to Friday, unless otherwise approved by the appropriate competent person in consultation with adjacent landowners/affected persons.
- All equipment, vehicles and machinery must be in good working condition and be equipped with sound mufflers if necessary.
- Construction staff must be trained and made aware of not creating unnecessary noise such as hooting and shouting.

C15. POLLUTION CONTROL

- Soil and water pollution through usage of fuel, oil, paint, bitumen or other hazardous substances must be avoided.
- All construction vehicles are to be maintained in good working order so as to prevent soil or water pollution from oil, fuel or other leaks, and to reduce noise pollution.

C16. RIVERS AND STREAMS

- During construction of bridge structures, there must be no obstruction of the water flow of rivers and streams.
- Excavated material must not be stockpiled on or near riverbanks, in order to prevent sedimentation occurring.
- Erosion control measures must be employed both during and after construction.
- No impediments to natural surface water flow, other than approved erosion control measures, must occur.

C17. SAFETY

- Safety measures, such as detour signs, must be implemented during construction to ensure the safety of workers, pedestrians and drivers/passengers in vehicles in the vicinity of construction work.
- Special care must be taken in the vicinity of schools to ensure the safety of children wishing to

- cross the road under construction.
- The relevant signage (e.g. speed control signs) must be erected alongside the road during the operation phase in order to control traffic.
- Accommodation must be made for pedestrian pathways alongside the road during the construction and operation phases.

C18. SOIL MANAGEMENT

- Storm water drainage pipes must be installed alongside the road in all areas susceptible to soil erosion.
- Erosion should be minimised by the construction of meadow drains and the planting of indigenous vegetation on the side slopes and drains to reduce flow velocity of storm water.
- Spoil from cuts may be used in existing erosion gullies.
- Stone pitching and gabions should be constructed at pipe culvert outlets.
- Accidental spills of contaminants onto the ground e.g. oil, concrete, fuel and chemicals should be removed together with the contaminated soil.
- If necessary, an absorbent such as Peat Sorb should be used to aid in cleaning up the spill. The contaminated soil should be disposed of in an appropriate container, depending on its classification.
- Servicing and refuelling of vehicles must only be carried out at the construction camp.

C19. WORKER CONDUCT

Code of Conduct for Construction Personnel:

- Do not leave the construction site untidy and strewn with rubbish which will attract animal pests.
- Do not set fires.
- Do not cause any unnecessary, disturbing noise at the construction camp/site or at any designated worker collection/drop off points.
- Do not drive a construction-related vehicle under the influence of alcohol.
- Do not exceed the national speed limits on public roads or exceed the recommended speed limits on the site.
- Do not drive a vehicle which is generating excessive noise or gaseous pollution (noisy vehicles must be reported and repaired as soon as possible).
- Do not litter along the roadsides, including both the public and private roads.
- Do not pollute any water bodies (whether flowing or not).
- No member of the construction team is allowed to enter the areas outside the construction site.

C20. TRAFFIC DISTURBANCES AND DIVERSIONS

- Any traffic diversions must be undertaken with the approval of all relevant authorities and in accordance with all relevant legislation.
- Wherever possible, traffic diversion must only take place on existing disturbed areas and remain within the existing road reserve.
- Traffic diversion routes must be rehabilitated after use.

C21. VEGETATION

- Only vegetation falling directly on the route must be removed where necessary.
- Alien vegetation within the road reserve must be eradicated, and management measures must be implemented for future control of these species.
- Vegetation that has been removed from large areas (e.g. on traffic diversion routes) during construction must be replaced with indigenous vegetation after construction has been completed.

C22. WASTE MANAGEMENT

- All general, non-hazardous waste must be placed in a skip container and disposed of at a registered waste disposal site.
- The Contractor is to ensure that the portable toilet facilities at the campsite are properly maintained and in working order.

- No disposal, or leakage, of sewage must occur on or near the site.
- All hazardous waste (e.g. oil, paint, empty lime bags, and contaminated wash water) must be stored in leakproof containers and disposed of at a registered hazardous waste disposal site.
- The contents of waste storage containers must, under no circumstances, be emptied to the surrounding area. In general, littering, discarding or burying of any materials is not allowed on site or along the route.
- Adequate waste receptacles must be available at strategic points around the construction camp and site for all domestic refuse and to minimise the occurrence of littering.
- Concrete rubble must be collected and disposed of as directed by the Employer's Agent.
- Each working area must be cleared of litter and building waste (e.g. rubble, wood and concrete packets) on completion of the day's work.
- Any spill around the container(s) should be treated as per clause C13 and C18.

C23. MEASUREMENT AND PAYMENT

The contractor shall make provision in the various rates and prices for all costs related to the environmental management specification and measures required in terms of legislation. Provision is made in item B13.02 of the Bill of Quantities for the contractor's general obligations, risks and liabilities in accordance with the environmental management specification.

C3.3 PARTICULAR SPECIFICATIONS

PART D: OHS&A 1993 HEALTH AND SAFETY SPECIFICATION

PART D: OHSA 1993 HEALTH AND SAFETY SPECIFICATION

D1. SCOPE

This part covers the health and safety requirements to be met by the Contractor to ensure a continued safe and healthy working environment for all employees, subcontractors, the Employer, the Employer's Agent, inspectors and all other persons entering the site of works.

This specification shall be read in conjunction with the Occupational Health and Safety Act, 1993 (Act No 85 of 1993 and amendment Act No 181 of 1993) and the corresponding Construction Regulations 2014, and all other safety codes and specifications referred to in the said Act and Construction Regulations.

In terms of the OHSA Agreement in Section C1.4 of the Contract document, the status of the Contractor as mandatory to the Employer (client) is that of an employer in his own right, responsible for compliance with all provisions of OHSA 1993 and the Construction Regulations 2014.

This specification and the Contractor's own Health and Safety Plan as well as the Construction Regulations 2014, shall be displayed on site or made available for inspection by inspectors, the Employer, the Employer's Agent, the Construction Health and Safety Agent, subcontractors, employees, representatives of trade unions and any other persons entering the site of works.

D2. DEFINITIONS

For the purpose of this contract the following shall apply:

D2.1 "**Construction Health and Safety Agent**" (CHSA) means any competent person who acts as a representative for the Employer in managing health and safety on a construction project for the Employer and who has satisfied the registration criteria of the SACPCMP to perform the required functions.

D2.2 "**Contractor**" where used in the contract documents and in this specification, means the Contractor as defined in the General Conditions of Contract 2015, and it shall have the exact same meaning as "**principal contractor**" as defined in the Construction Regulations 2014. "**Contractor**" and "**principal contractor**" are therefore interchangeable and shall be read in the context of the relevant document.

In this specification the terms "**principal contractor**" and "**contractor**" are replaced with "**Contractor**" and "**subcontractor**" respectively.

For the purpose of this contract the Contractor will, in terms of OHSA 1993, be the mandatory, without derogating from his status as an employer in his own right.

D2.3 "**Employer**" where used in the contract documents and in this specification, means the Employer as defined in the General Conditions of Contract 2015 and it shall have the exact same meaning as "**client**" as defined in the Construction Regulations 2014. "**Employer**" and "**client**" are therefore interchangeable and shall be read in the context of the relevant document.

D2.4 "**Employer's Agent**" where used in this specification, means the Employer's Agent as defined in the General Conditions of Contract 2015.

D3. EMPLOYER'S BASELINE RISK ASSESSMENT

D3.1 Risk information

The information presented in this clause is based on the Employer's baseline risk assessment prepared specifically for this contract.

This information describes the type of work required in terms of this contract that will be accompanied by dangers, hazards and risks which the Contractor shall be required to identify, analyse, manage, monitor and review in terms of the Health and Safety Plan and risk assessments.

This information is neither prescriptive nor exhaustive, and is provided as a guideline to Tenderers in

preparing their tender submissions, and to the successful Contractor as a basis for the preparation of the site-specific risk assessments to be performed by the Contractor in terms of Construction Regulation 9.

Tenderers shall make their own assessment of the dangers, hazards and risks that can be expected during the course of this contract, which may include dangers, hazards and risks not identified in the baseline risk assessment, including those that may arise from specific methods of construction employed by the Contractor, and shall make due allowance in their tendered rates and prices for all costs related to complying with the provisions of the Act and Construction Regulations.

This information is given in good faith for the guidance of Tenderers, and no additional payment shall be made as a result of any inaccuracies, discrepancies or omissions contained therein.

D3.2 Baseline risk assessment

The following is a list of risks identified which forms the Baseline Risk Assessment for the project prepared by the Employer in terms of Construction Regulation 5(1)(a).

- The development of a project/work scope and activity risk profile identifying and considering, safety, health and environmental hazards and exposures, for example, rigging, working at height, welding, confined spaces, delivery contractors, unloading materials and equipment from trucks, hazardous substances, etc.
- Personal protective equipment
- The hazard identification and risk assessment process for specific operations and activities and for new activities identified after the development of the project/work scope and activity risk profile
- The implementation of a safety observation (behaviour audit) and coaching process conducted as a minimum by persons in leadership roles.
- Contractor will carry out inspections and maintain requests of the identification of and implementation of inspection and maintenance controls for plant, mobile plant, equipment and tools requiring formal management, including:
 - a.) Vehicles
 - b.) PPE

D4. APPLICATION FOR CONSTRUCTION WORK PERMIT

Where the contract meets the requirements of Construction Regulation 3, the Employer must at least 30 days before commencement of the work and in accordance with the requirements of Construction Regulation 3, apply to the Provincial Director of the Department of Labour in writing for a construction work permit to perform construction work. The Employer's application must be done in a form similar to Annexure 1 of the Construction Regulations, and submitted with the required documentation, some of which the Contractor shall provide as stated in the Contract Data.

A copy of the construction work permit must be kept on site in the occupational health and safety file, available for inspection by inspectors, the Employer, the Employer's Agent, the Construction Health and Safety Agent, subcontractors, employees, representative trade unions and any other persons on the site. The Provincial Director will assign a site-specific number for each construction site, which must be conspicuously displayed at the main entrance to the site.

D5. NOTIFICATION OF CONSTRUCTION WORK

Where the contract meets the requirements of Construction Regulation 4, the Contractor shall, before commencement of the work and in accordance with the requirements of Construction Regulation 4, notify the Provincial Director of the Department of Labour of the intention to carry out the construction work, using the pro forma form included as Annexure 2 to this Health and Safety Specification.

A copy of the notification form must be kept on site, available for inspection by inspectors, the Employer, the Employer's Agent, the Construction Health and Safety Agent, subcontractors, employees, representative trade unions and any other persons on the site. A copy of the notification form shall also be kept on the health and safety file, and a further copy shall be forwarded to the Employer for his records.

D6. HEALTH AND SAFETY PLAN

Before commencement of any construction work, the Contractor shall prepare a project specific Health and Safety Plan complying with the requirements of Construction Regulation 7(1)(a) and this Health and Safety Specification.

The Health and Safety Plan must include a risk assessment performed and recorded in writing by a competent person as required in terms of Construction Regulation 9. The risk assessment shall identify and evaluate the risks and hazards that may be expected during the execution of the work under the contract, and it shall include a documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards identified.

The Health and Safety Plan shall be available on site for inspection by inspectors, the Employer, the Employer's Agent, subcontractors, employees, representative trade unions, and health and safety representatives and committee members, and must be monitored and reviewed periodically by the Contractor.

D7. APPOINTMENT OF EMPLOYEES AND SUBCONTRACTORS

D7.1 Appointments

The Contractor shall appoint in writing all employees.

The Contractor shall appoint in writing all subcontractors, and such appointments shall be in compliance with the requirements of Construction Regulation 7.

D7.2 Health and safety induction training

No person shall be allowed or permitted to enter the site of the works unless such person has undergone health and safety induction training pertaining to the hazards prevalent on the site.

The Contractor shall ensure that all employees under his control, including subcontractors and their employees, undergo health and safety induction training by a competent person before commencement of construction work in compliance with Construction Regulations 7(5) and 9(3) and (4).

The Contractor shall ensure that all visitors to the construction site undergo health and safety induction and are provided with the necessary personal protective equipment in compliance with Construction Regulation 7(6).

D7.3 Medical certificate of fitness

The Contractor shall ensure that every employee, including subcontractors and their employees, has a valid medical certificate of fitness issued in compliance with Construction Regulation 7(1)(g) or 7(8) as applicable.

D8. APPOINTMENT OF SAFETY PERSONNEL

D8.1 Construction manager

Refer to Construction Regulation 8(1), (2), (3) and (4).

The Contractor shall appoint a full-time **Construction Manager** with the duty of managing all the construction work on the site, including the duty of ensuring occupational health and safety compliance.

The Contractor may also have to appoint one or more **assistant construction managers** to assist the Construction Manager where justified by the scope and complexity of the works.

D8.2 Construction health and safety officer

Refer to Construction Regulation 8(5) and (6).

Taking into consideration the size of the project and the dangers, hazards or risks that can be expected, the

Contractor shall appoint in writing a full-time or part-time **construction health and safety officer** to assist in the control of all health and safety related aspects on the site. The construction health and safety officer shall be registered as required by the Chief Inspector of the Department of Labour and shall have the necessary competencies and resources to assist the Contractor.

D8.3 Construction supervisor

Refer to Construction Regulation 8(7), (8), (9) and (10).

The Contractor shall appoint a **construction supervisor** responsible for construction activities and ensuring occupational health and safety compliance on the construction site.

The Contractor may also have to appoint one or more competent employees to assist the construction supervisor where justified by the scope and complexity of the works.

D8.4 Health and safety representatives

In terms of Sections 17 and 18 of the Act (OHSA 1993) the Contractor, being the employer in terms of the Act for the execution of the contract, shall appoint a **health and safety representative** whenever he has more than 20 employees in his employment on the site of the works. The health and safety representative must be selected from employees who are employed in a full-time capacity at a specific workplace.

The number of health and safety representatives for a workplace shall be at least one for every 50 employees.

The function of health and safety representative(s) will be to review the effectiveness of health and safety measures, to identify potential hazards and major incidents, to examine causes of incidents (in collaboration with his employer, the Contractor), to investigate complaints by employees relating to health and safety at work, to make representations to the employer (Contractor) or inspector on general matters affecting the health and safety of employees, to inspect the workplace, plant, machinery, etc. on a regular basis, to participate in consultations with inspectors and to attend meetings of the health and safety committee.

D8.5 Health and safety committee

In terms of Section 19 of the Act (OHSA 1993), the Contractor (as employer) shall establish one or more **health and safety committees** where there are two or more health and safety representatives at a workplace. The persons selected by the Contractor to serve on the committee shall be designated in writing.

The function of the health and safety committee shall be to hold meetings at regular intervals but at least once every three months, to review the health and safety measures on the contract, to discuss incidents related to health and safety with the Contractor and the inspector, to make recommendations regarding health and safety to the Contractor and to keep record of recommendations and reports made by the committee.

D8.6 Competent persons

The Contractor shall appoint in writing designated competent employees and/or other competent persons as required by the Act and Regulations. Such appointments shall be in accordance with the relevant applicable sections of the Act and Regulations as determined by the requirements of the contract.

A competent person may be appointed for more than one part of the construction work with the understanding that the person must be suitably qualified and able to supervise at the same time the construction work in all the work situations for which he has been appointed.

The appointment of competent persons to supervise parts of the construction work does not relieve the Contractor from any of his responsibilities for compliance with **all** requirements of the Construction Regulations.

D9. RECORDS AND REGISTERS

The Contractor shall keep records and registers related to health and safety on site as required by the relevant

applicable sections of the Act and Regulations as determined by the requirements of the contract. Such records and registers shall be available for periodic inspection by inspectors, the Employer, the Employer's Agent, the Construction Health and Safety Agent, subcontractors, employees and representatives of trade unions.

D10. CONTRACTOR'S RESPONSIBILITIES

For this contract the Contractor will be the mandatary of the Employer (Client), as defined in the Act (OHSA 1993), which means that the Contractor has the status of employer in his own right in respect of the contract. The Contractor is therefore responsible for all the duties and obligations of an employer as set out in the Act (OHSA 1993) and the Construction Regulations 2014.

Before commencement of work under the contract, the Contractor shall enter into an agreement with the Employer (Client) in terms of C1.4 'Agreement in terms of Section 37(2) of the Occupational Health and Safety Act No. 85 of 1993', to confirm his status as mandatary (employer) for the contract under consideration.

The Contractor is advised in his own interest to make a careful study of the Act and the Construction Regulations, as ignorance of the Act and the Regulations will not be accepted in any proceedings related to non-conformance to the Act and the Regulations.

D11. MEASUREMENT AND PAYMENT

It is a condition of this contract that contractors who submit tenders for this contract shall make provision in their various tendered rates and prices for all costs related to the health and safety measures required in terms of the Act and Regulations during the construction process.

(a) Health and safety plan

The Contractor shall assess the risks associated with the Works when preparing the health and safety plan. In addition, the Contractor shall implement the health and safety plan, including the provision of a dedicated, full time health and safety officer, carrying out all the required site health and safety training and briefings, staff medical evaluations, monitoring and administrating the health and safety plan and for supplying all transport, personal protection safety items, other health and safety equipment, safety notices and any other health and safety related items that are required on site. Provision is made for the costs of preparing and implementing the health and safety plan in item B13.03 of the Bill of Quantities.

(b) Safety appointments

No separate additional payment will be made to cover the costs related to persons appointed as required in terms of the Act and Regulations to fulfil the various health and safety functions. Such persons include the Construction Manager, any assistant construction managers, the construction health and safety officer, the construction supervisor, any assistant construction supervisors, health and safety representatives, health and safety committee members and competent persons, all as referred to in subclauses E8.1 to E8.6 above. The Contractor shall therefore make provision in the various tendered rates and prices for all costs related to such persons, and for which no separate additional payment will be made except to the extent provided in item B13.03 of the Bill of Quantities.

(c) Records and registers

The keeping of records and registers related to health and safety on site as described in clause E9 above shall be regarded as a normal duty of the Contractor for which payment shall be deemed to be included in the Contractor's various tendered rates and prices, and for which no separate additional payment will be made except to the extent provided in item B13.03 of the Bill of Quantities.

(d) Medical certificates

No separate additional payment will be made to cover the costs related to obtaining the medical certificates of fitness required for every employee, including subcontractors and their employees, issued in compliance with Construction Regulation 7(1)(g) or 7(8) as applicable. The Contractor shall therefore make provision in

the various tendered rates and prices for all costs related to such medical certificates, and for which no separate additional payment will be made except to the extent provided in item B13.03 of the Bill of Quantities.

ANNEXURE 2

**OCCUPATIONAL HEALTH AND SAFETY ACT, 1993
(Regulation 4 of the Construction Regulations, 2014)**

NOTIFICATION OF CONSTRUCTION WORK

1. (a) Name and postal address of principal contractor:

.....

.....

(b) Name and telephone number of principal contractor's contact person:

.....

2. Principal contractor's compensation registration number:

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

.....

(b) Name and telephone number of client's contact person or agent:

.....

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

.....

(b) Name and telephone number of designer's(s') contact person(s):

.....

5. Name and telephone number of principal contractor's construction manager on site appointed in terms of regulation 8(1):

.....

6. Name(s) of principal contractor's assistant construction manager(s) on site appointed in terms of regulation 8(2):

ANNEXURE 2 - Continued

7. Exact physical address of the construction site or site office:

8. Nature of the construction work:

.....
.....

9. Expected commencement date:

10. Expected completion date:

.....

11. Estimated maximum number of persons on the construction site:

Total: Male: Female:

.....

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

.....

13. Name(s) of contractors already selected:

.....

.....

.....

.....
Principal Contractor **Date**

.....
Client's Agent (where applicable) **Date**

.....
Client **Date**

- THIS DOCUMENT IS TO BE FORWARDED TO THE OFFICE OF THE DEPARTMENT OF LABOUR **PRIOR TO COMMENCEMENT** OF WORK ON SITE.

C3.3 PARTICULAR SPECIFICATIONS

PART E: EXPANDED PUBLIC WORKS PROGRAMME

PART E: EXPANDED PUBLIC WORKS PROGRAMME

E1. SCOPE

This part provides the specifications with regard to the following:

- (a) The Expanded Public Works Programme (EPWP)
- (b) National Youth Service (NYS)

The Contractor shall be required to participate in job creation (employment of local labour) by executing various portions of the Works using local labour (unskilled or semi-skilled), recruited from the local community, who are South African Citizens or foreigners in possession of a work visa issued by the Department of Home Affairs (only one such foreigner may be employed on any project). Such local labour shall be the targeted participants in the EPWP.

E2. EXPANDED PUBLIC WORKS PROGRAMME (EPWP)

E2.1 Labour enhanced construction, supervision and management for the Expanded Public Works Programme (EPWP)

The Expanded Public Works Programme (EPWP) is a multi-sectoral government initiative to create jobs. In the case of the infrastructure sector, existing government expenditure is realigned using labour enhanced technologies to create job opportunities. This involves the use of both labour and construction equipment, where labour is preferred and construction equipment is used appropriately.

All work undertaken in terms of the Expanded Public Works Programme (EPWP) shall be implemented using labour enhanced construction methods to the extent economically feasible, in accordance with the "Guidelines for the Implementation of Labour-Enhanced Infrastructure Projects under the Expanded Public Works Programme (EPWP) Third Edition 2015".

The aforementioned guidelines can be downloaded from the EPWP website of the Department of Public Works (<http://www.epwp.gov.za/>).

Items scheduled for labour-intensive construction are marked with the letters "LI" in the bill of quantities in the manner described in C2.1 Pricing Assumptions.

Contractors shall note that they shall employ in labour-enhanced works only the following supervisory and management staff that have completed the required Skills Programme in terms of Appendix C of the aforementioned guidelines:

- (a) Foremen / Supervisors at NQF level 4 "National Certificate: Supervision of Civil Engineering Construction Processes";
- (b) Site Agent / Construction Manager at NQF level 5 "Manage Labour-Enhanced Construction Processes" or equivalent Quality Council for Trades and Occupations (QCTO) qualifications at NQF level 5 or 7.

In addition to their normal supervisory and management functions, the aforementioned supervisory and management staff shall also be responsible for setting the workers' daily tasks in accordance with labour-enhanced construction principles, and for ensuring that the EPWP job creation reporting data is accurately recorded on a daily basis and compiled and submitted to the Employer each month in accordance with clause E4 of this PART E.

E2.2 Labour laws applicable to the Expanded Public Works Programme (EPWP)

The work to be undertaken on this contract by unskilled or semi-skilled workers under the Expanded Public Works Programme (EPWP) shall be implemented in accordance with:

- (a) the Code of Good Practice for Employment and Conditions of Work for Expanded Public Works Programmes (EPWP), issued in terms of the Basic Conditions of Employment Act of 1997 by the

Minister of Labour in Government Notice No. 129 of 18 February 2011 (Government Gazette No. 34032 of 18 February 2011); and

- (b) 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 4 May 2012.

The aforementioned Government Notice No. R347 contains the standard terms and conditions for workers employed in elementary occupations on an Expanded Public Works Programme (EPWP). These terms and conditions do not apply to persons employed in the supervision and management of an Expanded Public Works Programme (EPWP).

The above documents can be downloaded from the EPWP website of the Department of Public Works (<http://www.epwp.gov.za/>).

E2.3 Persons to be employed under the Expanded Public Works Programme (EPWP)

All local labour required for the execution of labour-enhanced works shall be engaged strictly in accordance with prevailing legislation.

The Contractor shall, through the Project Liaison Committee (PLC) and with the assistance of the Community Liaison Officer (CLO), inform the local community of the labour-enhanced works proposed and the employment opportunities thereby presented.

The Contractor shall determine the minimum education level / skills required to undertake the works specified. In consultation with the PLC and the War Room convener for each relevant ward, selection of the local labour shall be made from households on the Operation Sukuma Sakhe (OSS) database profiled through the War Room for each ward. The list obtained from the OSS database must be accompanied by a letter from the War Room convener confirming that all the information provided was sourced from the War Room and that all listed incumbents reside within the relevant ward. The Contractor must maintain records of household profiles as part of the portfolio of evidence for selection. Selection shall be based on the minimum education level / skills required and the most-needy households, as determined by the household profiling. Preference shall be given for at least one person from each household in the community to be employed before further persons are considered for selection.

The Contractor shall endeavour to ensure that the number of temporary jobs using local labour (unskilled or semi-skilled), recruited from the local community, who are South African Citizens or foreigners in possession of a work visa issued by the Department of Home Affairs (only one such foreigner may be employed on any project), shall include for a minimum allocation of:

- (a) 60% women;
- (b) 55% youth who are between the ages of 18 and 35; and
- (c) 2% persons with disabilities.

All labour recruitment, employment and associated risks shall remain the sole responsibility of the contractor.

The contractor shall comply with the minimum supervisor to worker ratio stated below, required to ensure the effective supervision of the labour-enhanced works for all LI activities undertaken on this project:

Minimum supervisor to worker ratio = 1:10

E2.4 Contract of employment with persons employed under the Expanded Public Works Programme (EPWP)

The Contractor shall enter into a formal contract of employment with each person employed under the Expanded Public Works Programme (EPWP), using the pro forma contract of employment attached at the end of this PART E of section 3.3 Particular Specifications.

The Contractor shall note that all such formal contracts of employment entered into with persons employed under the Expanded Public Works Programme (EPWP) shall expire on 31 March each year, and the
CIDB OPEN TENDER : Contract Ver 16-04-2025: COTO

Contractor shall therefore be required to enter into new contracts with such persons as of 1 April each year.

E2.5 Employment of targeted labour under the Expanded Public Works Programme (EPWP)

The Contractor shall be contractually obliged to:

- (a) brief EPWP workers on the conditions of employment;
- (b) enter into a formal contract of employment with each EPWP worker, which contract will form part of the Employment Agreement;
- (c) keep personnel files for all EPWP workers and make copies available to the Employer if and when requested; and
- (d) ensure that payments to EPWP workers are made in accordance with Government Notice No. R347.

The rate of pay for persons employed under the Expanded Public Works Programme (EPWP) shall be the gazetted rate:

- (i) per task (for task-rated workers); or
- (ii) per day (for time-rated workers).

During those periods when an EPWP worker is engaged in formal classroom training (other than in-service training), the rate of pay shall be equal to the minimum wage rate as set on an annual basis in the Ministerial Determination for the Expanded Public Works Programme.

Tasks set by the Contractor shall be such that:

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

The Contractor shall revise the time taken to complete a task whenever it is established that the time taken per week to complete the tasks set does not fall within the limits indicated in (a) and (b) above.

E2.6 Training of persons employed under the Expanded Public Works Programme (EPWP)

The training of persons employed under the Expanded Public Works Programme (EPWP) is described in clause E4 below.

E2.7 Contractor's obligations towards persons employed under the Expanded Public Works Programme (EPWP)

Over and above implementing in accordance with Government Notice Nos. 129 and R347 the EPWP work to be undertaken on this contract, it shall be the responsibility of the Contractor to carry out the following functions with respect to the EPWP workers:

- (a) ensure that all participants are covered by the Compensation for Occupational Injuries and Diseases Act, 1993, for as long as they are contracted to the Contractor, and pay in full to the Compensation Commissioner such amounts as are due in terms of the Act;
- (b) pay in full to the Unemployment Insurance Fund for all participants such UIF contribution amounts as are due in terms of the Unemployment Insurance Act, 2001, as amended, and the Unemployment Insurance Contributions Act, 2002, as amended, and provide proof of such UIF payments upon request;
- (c) ensure that all participants are paid their wages on time through the pre-agreed payment method as stipulated in the participant contract of employment;
- (d) implement health and safety procedures with respect to the participants, ensuring that the health and safety regulations are adhered to;
- (e) ensure that all participants receive induction on site safety prior to commencing with work on site;

- (f) provide all participants with the necessary protective clothing and equipment as required by law for the specific tasks in which the participants are involved, in addition to the branded overalls stipulated for EPWP workers;
- (g) provide safe on-site storage facilities for apparel and tools issued to the participants;
- (h) assist in the assessment of participants with regard to their competencies;
- (i) provide overall supervision and day-to-day management of participants; and
- (j) implement strict quality control to ensure that the work carried out by the participants is of the required standard, and, where necessary, to train and mentor the participants to assist them in achieving the standards required.

E2.8 Apparel and tools for persons employed under the Expanded Public Works Programme (EPWP)

The Contractor shall provide Personal Protective Equipment (PPE) to all EPWP workers in accordance with the requirements arising from PART D: OHS 1993 Health and Safety Specification and the Contractor's site-specific health and safety plan and accompanying risk assessments.

Where indicated below, certain items of the PPE issued by the Contractor to the EPWP workers shall include branded EPWP markings in accordance with the attached branding requirements.

PPE shall comprise the following:

- (a) Compulsory PPE issued to all EPWP workers for use during general work activities:
 - (i) Protective overalls (two sets), Pentone Yellow in colour, with EPWP branding;
 - (ii) Lime green reflective safety vest with EPWP branding;
 - (iii) Protective footwear; and
 - (iv) Protective gloves.
- (b) PPE issued to EPWP workers for specific activities where required in terms of the Contractor's site-specific health and safety plan and accompanying risk assessments, such as:
 - (i) Protective headwear, green in colour, with EPWP branding;
 - (ii) Protective eyewear such as spectacles and goggles;
 - (iii) Protective face shields;
 - (iv) Protective earplugs and earmuffs;
 - (v) Respiratory masks;
 - (vi) Disposable safety apparel;
 - (vii) Kidney belts;
 - (viii) Safety harnesses; and
 - (ix) Any other protective equipment identified.

The Contractor shall replace any item of issued PPE that becomes unserviceable.

The Contractor shall not charge any fee to the EPWP workers for the prescribed PPE issued except under the following circumstances:

- (i) where the employee requests the issue of additional PPE in excess of what is prescribed;
- (ii) where the employee has patently abused or neglected the issued PPE leading to early failure; or
- (iii) where the employee has lost the issued PPE.

The Contractor shall instruct and train the EPWP workers in the use of all PPE issued, and shall ensure that they use the prescribed equipment.

EPWP workers shall not have the right to refuse to use or wear the equipment prescribed by the Contractor. If it is not possible for an EPWP worker, through health or any other reason, to use or wear the prescribed PPE issued, such employee shall not be allowed to continue working under the hazardous conditions for which the equipment was prescribed. Under such circumstances an alternative solution shall be found, and this may include relocating or discharging the employee.

The Contractor shall provide each EPWP worker with hand tools of adequate quality and of the type required to carry out the assigned tasks safely and efficiently.

The Contractor shall instruct and train the EPWP workers in the safe and efficient use of all hand tools issued.

The Contractor shall maintain the issued tools in a serviceable and safe working condition.

The EPWP workers shall be responsible for the safe on-site storage of all PPE and tools issued to them, using the storage facilities provided on site by the Contractor.

No separate payment shall be made for providing the EPWP workers with PPE, or for providing relevant items of PPE in the specified colours with branded EPWP markings. Furthermore, no separate payment shall be made for providing the EPWP workers with hand tools or for providing them with safe storage facilities on site for PPE and tools. The Contractor shall therefore make provision for all costs related to providing the PPE, tools and safe storage facilities in the tendered rates and prices for the various items of work scheduled throughout the bill of quantities.

E2.9 EPWP contract signboard

The Contractor will be required to erect a contract signboard displaying the EPWP logo, indicating that this project is part of the Expanded Public Works Programme (EPWP). Provision for the costs related to the provision, erection and subsequent removal of the contract signboard is made in pay item provided in chapter 1.3 of the bill of quantities for this purpose.

E2.10 Payment matters relating to the EPWP work

E2.10.1 General

No separate pay items shall be provided in terms of PART E of the bill of quantities for the construction work activities carried out by EPWP participants. Payment for such work activities shall be made only indirectly, in terms of the pay items scheduled for the work activities in which such persons are engaged.

Furthermore, no direct payment will be made to cover the Contractor's costs associated with implementing the on-site work programme for the EPWP participants, for planning, organising, directing, controlling and administering their day to day activities, including the setting of daily tasks, record keeping and any on-site liaison, training and mentoring required, and for the associated job creation reporting, and such costs shall therefore be built into the rates tendered for the various items of work scheduled throughout the bill of quantities.

E2.10.2 Payment for labour-enhanced components of the work

Payment will be made for items which are designated for labour-enhanced construction in the bill of quantities only in those instances where such items are constructed using labour-enhanced methods.

Any unauthorised use of construction equipment to carry out work which was scheduled to be carried out using labour-enhanced methods will not be condoned and any Works so constructed will not be certified for payment. Any non-payment for such Works shall not relieve the Contractor in any way from his obligations either in contract or in delict.

During the course of construction, as a result of unforeseen site conditions or operating conditions encountered, it may happen that an item designated for labour-enhanced construction can no longer be carried out in a safe and economically feasible manner, either in full or in part, using labour-enhanced methods. In such instances the Employer's Agent shall, where necessary, order a variation in terms of clause 6.3 of the of the General Conditions of Contract 2015 with respect to that portion of the item quantity that cannot be carried out using labour-enhanced methods.

E2.11 Penalty applicable to any shortfall in the local labour content achieved

The amount spent on wages for local labour (excluding VAT) for this project, as certified by the Employer's Agent, shall equal or exceed the specified minimum percentage of the contract amount which is the Contract Price (adjusted to exclude penalties and value added tax).

The Contractor is obliged to commit to or exceed the specified minimum percentage of local labour content stated in section C1.2.2 Data Provided by the Employer.

In the event that the Contractor fails to substantiate that any failure to achieve the minimum required local labour content for this project is due to quantitative underruns, the elimination of items contracted to local labour, or any other reason beyond the Contractor's control which may be acceptable to the Employer, the Contractor shall be liable for a financial penalty as prescribed in clause SCC 4.1.1 of section C1.2.1.2 Special Conditions of Contract. The financial penalty shall be calculated as follows:

$$P = 0.005 \times [(E - E_o)/100] \times C_A$$

where:

E is the specified minimum percentage for local labour content

E_o is the local labour content percentage which the Employer's Agent certifies as being achieved upon completion of the contract

C_A is the contract amount which is the Contract Price (adjusted to exclude penalties and value added tax)

P is the monetary value of penalty payable

The penalty shall not apply to shortfalls in the allocations to the individual target groups (i.e., Women/Youth/Disabled as per clause F1.3 above), only to shortfalls in the total local labour content achieved.

The evaluation of the Contractor's achievement of the local labour content percentage shall be undertaken monthly by the Employer's Agent, based on the accumulative achievements in comparison to the programmed utilisation of local labour, as a means of monitoring the Contractor's performance in achieving the Contract Participation Goal.

Failure by the Contractor to achieve the Contract Participation Goal target by the time of Practical Completion, shall result in the financial penalty being applied as prescribed in this clause. The Employer's Agent shall make a final determination of the Contractor's achievement of the Contract Participation Goal based on the value of the Final Payment Certificate.

E3. NATIONAL YOUTH SERVICE (NYS) NOT APPLICABLE TO THIS PROJECT. PLEASE IGNORE

E3.1 The National Youth Service (NYS) programme

The National Youth Service (NYS) programme aims to train young people and provide them with practical onsite work experience. The NYS shall only be applicable to projects with a duration of 12 months and above.

The Contractor shall not be required to directly employ and provide theoretical training to NYS workers in terms of this contract. An NYS Service Provider has been employed by the Employer to facilitate all the necessary employment and training of NYS participants. The Contractor shall be expected to liaise with the NYS Service provider and shall be expected to provide any practical training requirements on the project as may be required by the NYS Service Provider/Employer to fulfil the NYS programme requirements or other accredited training programme requirements. This may include work suitable for both unskilled or semi-skilled workers.

No additional payments shall be made for medical assessments pertaining to the NYS workers. The medical assessments for the NYS workers shall be covered under Payment item C1.2.5. Therefore, the tendered rates shall include the medicals for the number of NYS workers as indicated in E3.2.

E3.2 Persons to be employed under the NYS programme

For purposes of this contract, the Contractor shall be required to provide practical training opportunities to 10 youths at a given time aged between 18 and 35 for a period of 12 months each under the NYS programme.

E3.3 Payment matters relating to the NYS work

No direct or additional payment will be made to cover the Contractor's costs associated with implementing the on-site work programme for the NYS workers, for planning, organising, directing, controlling and administrating their day to day activities, including the setting of daily tasks, record keeping and any on-site liaison, training and mentoring required, and for the associated job creation reporting, and such costs shall therefore be built into the rates tendered for the various items of work scheduled throughout the bill of quantities for the number of NYS workers as indicated in E3.2.

E3.4 Contractor's obligations towards persons employed under the NYS programme

Over and above implementing in accordance with Government Notice Nos. 129 and R347 the NYS programme work to be undertaken on this contract, it shall be the responsibility of the Contractor to carry out the following functions with respect to the NYS programme workers:

- (a) implement health and safety procedures with respect to the participants, ensuring that the health and safety regulations are adhered to;
- (b) ensure that all participants receive induction on site safety prior to commencing with work on site;
- (c) provide safe on-site storage facilities for apparel and tools issued to the participants;
- (d) assist in the assessment of participants with regard to their competencies in their respective trades;
- (e) provide overall supervision and day-to-day management of participants; and
- (f) implement strict quality control to ensure that the work carried out by the participants is of the required standard, and, where necessary, to train and mentor the participants to assist them in achieving the standards required.

E3.5 EPWP-NYS contract signboard

Where work takes place under the National Youth Service (NYS) programme, the NYS logo shall also be displayed on the EPWP contract signboard referred to in clause F2.9 above, indicating that this project is part of both the Expanded Public Works Programme (EPWP) and the NYS programme. Provision for the costs related to the provision, erection and subsequent removal of the contract signboard in the pay item provided in chapter 1.3 of the bill of quantities for this purpose.

E4. JOB CREATION REPORTING FOR EPWP

In order to assist the Employer in complying with the goal of creating EPWP job opportunities, the Contractor must provide the information specified in clause E4.1 below for reporting purposes.

In addition, the Contractor's payment certificates shall be accompanied by the information specified in clause E4.2 below.

E4.1 Type of project data required per project

Every EPWP project shall collect and keep specific project data for the purpose of EPWP progress reporting on a monthly basis, using the EPWP Data Collection Tool template (this will be made available to the Contractor in Microsoft Excel format - refer to the pro forma spreadsheets at the end of this PART E of the Particular Specifications).

The data that is required to be kept, maintained and reported on a monthly basis for each project includes:

E4.1.1 Participant (local labour) data

A participant list of the local labour employed must be maintained for every EPWP project. The data required in this participant list is indicated below. This data shall be recorded, checked and signed off by the

Contractor, and shall be submitted to the Employer at each monthly site meeting. The participant list shall contain the following data and shall be kept and maintained on site for audit purposes:

- (a) Participant identity – name, surname, initials, date of birth and identity number (or other unique identifier) plus certified copy of ID book.
- (b) Participant profiles – nationality, gender, age, education level and disability status.
- (c) Work data for participants – daily wage to be received, number of calendar days training attended and number of calendar days worked.
- (d) Records of training – as required in terms of the EPWP Data Collection Tool template.

In addition, the signed contracts of employment between the Contractor and each EPWP participant shall be kept and maintained on site for audit purposes.

E4.1.2 Project work data

The project work data generally seeks to confirm the number of people at work daily on the project. This data shall be recorded, checked and signed off by the Contractor, and shall be submitted to the Employer at each monthly site meeting. The data shall be maintained on site by the Contractor, in order that it can be provided by the Employer to the National Department of Public Works upon request when the latter is undertaking sample auditing. These records shall be kept by the Contractor for a period of three years after contract completion should they be required for audit purposes.

The data shall include:

- (a) Daily attendance register – register for each day showing all the workers that were registered as being at work on that day. Attendance registers shall be completed on site on a daily basis and signed off by the Contractor on a weekly basis. Refer to pro forma attendance register attached at the end of this PART E of section 3.3.
- (b) Summary of monthly attendance.

E4.1.3 Project payment data

The project payment data generally seeks to confirm what was paid, for how much work and to whom. This data shall be recorded, checked and signed off by the Contractor, and shall be submitted to the Employer at each monthly site meeting.

It is required that the Contractor adopt one of the following methods as standard procedure for recording and maintaining this information:

- (a) Payment register – this is a list of the workers showing the wages paid to each worker, and signed off by each worker as proof of receipt and acceptance of payment. Information on this register must include the name of the worker, either an identity number or other unique identifier, the number of calendar days that the pay period covers, the wage rate and the total wages paid; or
- (b) Bank records showing the transfers to each worker account, signed off by the Contractor as proof of payment – these bank records must specifically show the name of the worker, either an identity number or other unique identifier, the period which the pay covers and the total wages paid.

The project payment data, as recorded and maintained by the Contractor in terms of either (a) or (b) above, must be available and applicable for the entire period for which the Employer claims an incentive reward for person-days of work created in terms of the project.

E4.1.4 Employment output data

The Contractor shall submit to the Employer at each monthly site meeting a progress report detailing production output compared to the programme of works, together with the data necessary to enable the

Employer to calculate the following employment output data in accordance with the EPWP Data Collection Tool template:

- (a) Number of work opportunities created (where one work opportunity = paid work created for one individual on an EPWP project, for any period of time).
- (b) Number of person-days of work created (where one person-day = one day of work carried out by one individual). The total number of person-days of work created on a particular EPWP project shall be obtained by summing the total number of person-days worked by each individual employed during the course of that EPWP project.
- (c) Number of Full Time Equivalent (FTE) created (= total number of person-days of work created on the EPWP project divided by 230 working days). In terms of EPWP policy, one year of work created for one individual is assumed to comprise a total of 230 days of paid work carried out by that individual.
- (d) Average duration of work opportunities created (= total number of person-days of work created on the EPWP project divided by the number of work opportunities created on that EPWP project).
- (e) Average daily wage rates paid (= accumulated total of the wages paid to all individuals employed on an EPWP project divided by the total number of person-days of work created on that EPWP project).
- (f) Training information.

E4.2 Project data to be submitted with the Contractor's payment certificates

The Contractor's payment certificates shall be accompanied by labour returns providing the labour information for the corresponding period in a format specified by the Employer.

Should the Contractor choose to delay submitting payment certificates, the labour returns shall nevertheless still be submitted as per the frequency and timeframes stipulated by the Employer. The Contractor's payment certificates shall not be paid by the Employer until all pending labour information has been submitted.

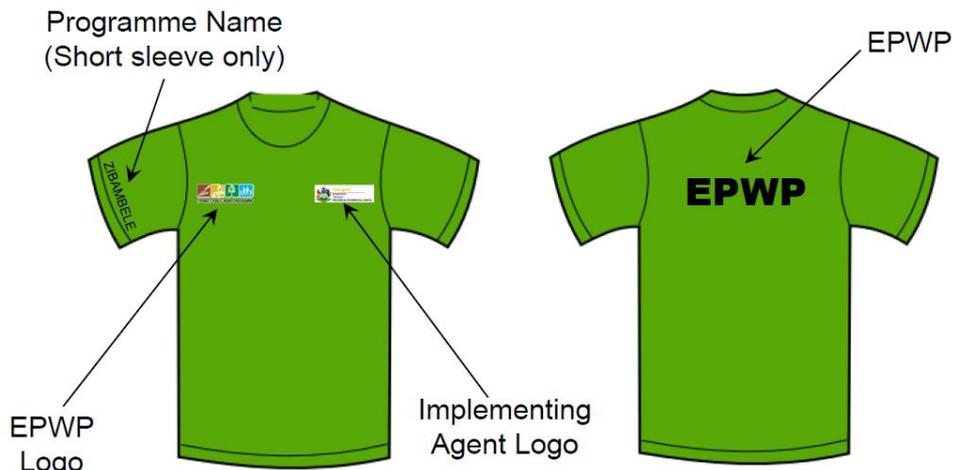
The following information shall be maintained on site and submitted with each payment certificate in the format specified by the Employer:

- (a) Copies of the signed contracts between the Contractor and any new EPWP participants (the Contractor shall note that all such formal contracts of employment entered into with persons employed under the Expanded Public Works Programme (EPWP) shall expire on 31 March each year, and the Contractor shall therefore be required to enter into new contracts with such persons as of 1 April each year, and shall be required to submit copies of all such new contracts with the first payment certificate thereafter);
- (b) Certified ID copies of all local labour employed as EPWP participants;
- (c) Attendance registers for the EPWP participants;
- (d) Proof of payment of EPWP participants; and
- (e) Information as required in terms of the EPWP Data Collection Tool template.

Expanded Public Works Programme: PPE BRANDING For EPWP Projects



T-Shirt/Overall/Safety Vest Branding



Logo Options

Implementing Agent Examples

National Projects



Provincial Department Projects



Municipal Projects



Contains National Coat Of Arms and name

Contains Provincial Coat Of Arms and name

EPWP LOGO



EXPANDED PUBLIC WORKS PROGRAMME

The Logo shall not be disproportionately stretched. A monochrome black logo may be used on approval only.

The above logo is the current logo. Logos with green text below the words EXPANDED PUBLIC WORKS PROGRAMME are old logos and should not be utilised.

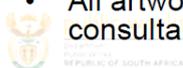


PLEASE VERIFY WHICH LOGO NEEDS TO USED

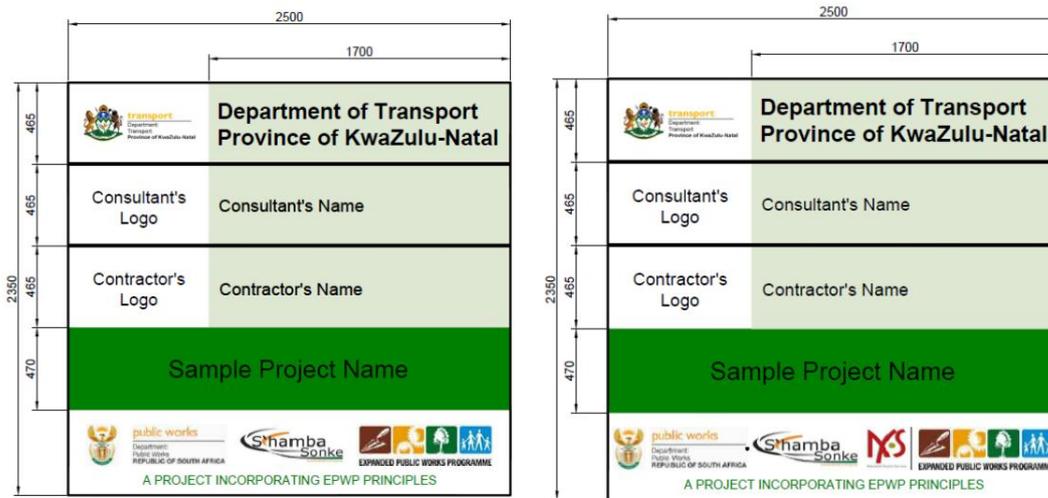
Printing on PPE

PPE (Overalls) shall be Pantone Green with/without reflective tape and shall be branded as follows:

- Implementer's Logo (printed or embroidered) on the left front pocket location ie over the heart position. (full colour)
- EPWP logo on the right front pocket (printed or embroidered) location (full colour)
- The letters EPWP on the back of the PPE in BLACK
- The program name eg Vuk'uphile is to be printed on the right sleeve of short sleeved apparel and need not be placed on long sleeved apparel.
- Where required, lime green safety vests are to be branded with similar specification above. In this instance the Overalls may not necessarily be branded provided that the use of high visibility vests is mandatory.
- All artwork and PPE samples shall be approved and signed off by the consultant prior to printing/embroidering.



Project Signboard



For further information contact:

Petronella Sithebe

Petronella.Sithebe@Kzntransport.gov.za

033-355-8023



PRO FORMA EPWP CONTRACT OF EMPLOYMENT

Contractor's
Logo



EXPANDED PUBLIC WORKS PROGRAMME

This contract must be read in conjunction with the standard terms and conditions of employment on EPWP attached herein.

EPWP CONTRACT OF EMPLOYMENT between

Employer Details

Name	Click or tap here to enter text.	Address	Click or tap here to enter text.
Telephone	Click or tap here to enter text.		
Email	Click or tap here to enter text.		
Contact	Click or tap here to enter text.		

And

Employee Details

Name	Click or tap here to enter text.	Surname	Click or tap here to enter text.
ID:	Click or tap here to enter text.	Cell	Click or tap here to enter text.
Sex (M/F)	Male <input type="checkbox"/> Female <input type="checkbox"/>	Disability	Yes <input type="checkbox"/> No <input type="checkbox"/>
Primary Language	Click or tap here to enter text.	Physical Address	Click or tap here to enter text.
Other Languages	Click or tap here to enter text.		
Highest Education Level Achieved	Click or tap here to enter text.	Local Municipality	Click or tap here to enter text.
Other qualifications	Click or tap here to enter text.	Ward	Click or tap here to enter text.
Grant Received (Y/N)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Grant type:	

Employment Details

Name of project:	Click or tap here to enter text.		
Job Title:	Click or tap here to enter text.		
Duties:	Click or tap here to enter text.		
Contract Start Date	Click or tap here to enter text.	Contract Finish Date	Click or tap here to enter text.
The wage per task/day is:	R Click or tap here to enter text. / Hour/Day/task <i>(Specifier to select correct rate)</i>		

Special Conditions

<p>You must be aware that this employment contract is a limited term contract and not a permanent job. This employment contract may be terminated for any one of the following reasons:</p> <ul style="list-style-type: none"> a) The contractor does not get additional contracts from the EPWP. b) Funding for the programme in your area comes to an end. c) Underperformance: first offence – final written warning. Second offence – dismissal. 	<p>Payment</p> <ul style="list-style-type: none"> a) You will be paid a fixed amount stipulated above for completing a fixed amount of work. b) The amount of work required for the agreed rate of pay will vary from task to task. You will be informed at the beginning of each task or group of tasks how much work you are expected to complete per day. c) You will only be paid for work completed. d) Payment during classroom training shall be R /day
<p>Personal Protective Clothing will be supplied to the employee by the employer depending on the work to be performed, and will remain the property of the employee provided that the employee has worked for at least 3 months.</p>	

Acceptance

Employer Name:	Employer Signature:	Employee Name:	Employee Signature:
Witness 1 Name:	Witness 1 Signature:	Witness 2 Name:	Witness 2 Signature:

APPENDIX E – Conditions of Service

1. Introduction

1.1. This document contains the standard terms and conditions for workers employed in elementary occupations on an Expanded public Works Programme (EPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of an EPWP.

1.2. In this document –

- a) “department” means any department of the State, implementing agent or contractor;
- b) “employer” means any department, implementing agency or contractor that hires workers to work in elementary occupations on an EPWP;
- c) “worker” means any person working in an elementary occupation on an EPWP;
- d) “elementary occupation” means any occupation involving unskilled or semi-skilled work;
- e) “management” means any person employed by a department or implementing agency to administer or execute an EPWP;
- f) “task” means a fixed quantity of work;
- g) “task-based work” means work in which a worker is paid a fixed rate for performing a task;
- h) “task-rated worker” means a worker paid on the basis of the number of tasks completed;
- i) “time-rated worker” means a worker paid on the basis of the length of time worked.

2. Terms of Work

- 2.1. Workers on an EPWP are employed on a temporary basis.
- 2.2. A worker may NOT be employed for longer than 24 months in any five-year cycle on an EPWP.
- 2.3. Employment on an EPWP does not qualify as employment as a contributor for the purposes of the Unemployment Insurance Act 30 of 1966.

3. Normal Hours of Work

- 3.1. An employer may not set tasks or hours of work that require a worker to work–
 - a) more than forty hours in any week
 - i. on more than five days in any week; and
 - ii. for more than eight hours on any day.
- 3.2. An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.
- 3.3. A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker.

4. Meal Breaks

- 4.1. A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.
- 4.2. An employer and worker may agree on longer meal breaks.
- 4.3. A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.
- 4.4. A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

5. Special Conditions for Security Guards

- 5.1. A security guard may work up to 55 hours per week and up to eleven hours per day.
- 5.2. A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

6. Daily Rest Period

Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

7. Weekly Rest Period

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work (“emergency work”).

8. Work on Sundays and Public Holidays

- 8.1. A worker may only work on a Sunday or public holiday to perform emergency or security work.
- 8.2. Work on Sundays is paid at the ordinary rate of pay.
- 8.3. A task-rated worker who works on a public holiday must be paid –
 - a) the worker’s daily task rate, if the worker works for less than four hours;
 - b) double the worker’s daily task rate, if the worker works for more than four hours.
- 8.4. A time-rated worker who works on a public holiday must be paid –
 - a) the worker’s daily rate of pay, if the worker works for less than four hours on the public holiday;
 - b) double the worker’s daily rate of pay, if the worker works for more than four hours on the public holiday.

9. Sick Leave

- 9.1. Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.
- 9.2. A worker who is unable to work on account of illness or injury is entitled to claim one day’s paid sick leave for every full month that the worker has worked in terms of a contract.
- 9.3. A worker may accumulate a maximum of twelve days’ sick leave in a year.
- 9.4. Accumulated sick-leave may not be transferred from one contract to another contract.
- 9.5. An employer must pay a task-rated worker the worker’s daily task rate for a day’s sick leave.
- 9.6. An employer must pay a time-rated worker the worker’s daily rate of pay for a day’s sick leave.
- 9.7. An employer must pay a worker sick pay on the worker’s usual payday.
- 9.8. Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is –
 - a) absent from work for more than two consecutive days; or
 - b) absent from work on more than two occasions in any eight-week period.
- 9.9. A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.
- 9.10. A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

Employer	Employee
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10. Maternity Leave

- 10.1. A worker may take up to four consecutive months' unpaid maternity leave.
- 10.2. A worker is not entitled to any payment or employment-related benefits during maternity leave.
- 10.3. A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.
- 10.4. A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.
- 10.5. A worker may begin maternity leave –
 - a) four weeks before the expected date of birth; or
 - b) on an earlier date –
 - i. if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or
 - ii. if agreed to between employer and worker; or
 - 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.
- 10.6. A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.
- 10.7. A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months employment, unless the EPWP on which she was employed has ended.

11. Family responsibility leave

- 11.1. Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances -
 - a) when the employee's child is born;
 - b) when the employee's child is sick;
 - c) in the event of a death of –
 - i. the employee's spouse or life partner;
 - ii. the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

12. Statement of Conditions

- 12.1. An employer must give a worker a statement containing the following details at the start of employment –
 - a) the employer's name and address and the name of the EPWP;
 - b) the tasks or job that the worker is to perform; and
 - c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;
 - d) the worker's rate of pay and how this is to be calculated;
 - e) the training that the worker will receive during the EPWP.
- 12.2. An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.
- 12.3. An employer must supply each worker with a copy of these conditions of employment.

13. Keeping Records

- 13.1. Every employer must keep a written record of at least the following –
 - a) the worker's name and position;
 - b) in the case of a task-rated worker, the number of tasks completed by the worker;
 - c) in the case of a time-rated worker, the time worked by the worker;
 - d) payments made to each worker.
- 13.2. The employer must keep this record for a period of at least three years after the completion of the EPWP.

14. Payment

- 14.1. An employer must pay all wages at least monthly in cash or by cheque or into a bank account.
- 14.2. A task-rated worker will only be paid for tasks that have been completed.
- 14.3. An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.
- 14.4. A time-rated worker will be paid at the end of each month.
- 14.5. Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.
- 14.6. Payment in cash or by cheque must take place –
 - a) at the workplace or at a place agreed to by the worker;
 - b) during the worker's working hours or within fifteen minutes of the start or finish of work;
 - c) in a sealed envelope which becomes the property of the worker.
- 14.7. An employer must give a worker the following information in writing –
 - a) the period for which payment is made;
 - b) the numbers of tasks completed or hours worked;
 - c) the worker's earnings;
 - d) any money deducted from the payment;
 - e) the actual amount paid to the worker.
- 14.8. If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it
- 14.9. If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

15. Deductions

- 15.1. An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.
- 15.2. An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.
- 15.3. An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.
- 15.4. An employer may not require or allow a worker to –
 - a) repay any payment except an overpayment previously made by the employer by mistake;
 - b) state that the worker received a greater amount of money than the employer actually paid to the worker; or
 - c) pay the employer or any other person for having been employed.

16. Health and Safety

- 16.1. Employers must take all reasonable steps to ensure that the working environment is healthy and safe.
- 16.2. A worker must –
 - a) work in a way that does not endanger his/her health and safety or that of any other person;
 - b) obey any health and safety instruction;
 - c) obey all health and safety rules of the EPWP;
 - d) use any personal protective equipment or clothing issued by the employer;
 - e) report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

17. Compensation for Injuries and Diseases

Employer	Employee
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- 17.1. It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on an EPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.
- 17.2. A worker must report any work-related injury or occupational disease to their employer or manager.
- 17.3. The employer must report the accident or disease to the Compensation Commissioner.
- 17.4. An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

18. Termination

- 18.1. The employer may terminate the employment of a worker for good cause after following a fair procedure.
- 18.2. A worker will not receive severance pay on termination.
- 18.3. A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.
- 18.4. A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.
- 18.5. A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

19. Certificate of Service

- 19.1. On termination of employment, a worker is entitled to a certificate stating –
 - a) the worker's full name;
 - b) the name and address of the employer;
 - c) the EPWP on which the worker worked;
 - d) the work performed by the worker;
 - e) any training received by the worker as part of the EPWP;
 - f) the period for which the worker worked on the EPWP;
 - g) any other information agreed on by the employer and worker.Either party can terminate this agreement with four weeks written notice. In the case where an employee is illiterate notice may be given by that employee verbally.

Employer	Employee
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**EPWP DATA COLLECTION TOOL TEMPLATE
(PRO FORMAS OF MICROSOFT EXCEL SPREADSHEETS)**

EPWP REGISTRATION FORM		
Field requested	Description if needed	Please complete the sections in white
Project Details		
Profile ID	<i>Generated by the system</i>	
Project Name	<i>The name of the project</i>	
Project Reference Number	<i>Contract number</i>	
Project description	<i>Full description of what is happening in the project (as per the appointment letter) and the community benefiting from the project</i>	
Duration		
Project Start Date	<i>Planned Start date of the particular contract</i>	
Project End Date	<i>Planned End date of the particular contract</i>	
Estimated Budget	<i>Overall Contract budget (excluding professional fees) for Current Financial Year</i>	
Project Location		
Province	<i>In which province is the project implemented?</i>	KZN
District Municipality	<i>Under which District Municipality does this project falls?</i>	
Local Municipality	<i>Under which Local Municipality does this project falls?</i>	
Latitude (in decimal format)	<i>Is generated by the system</i>	
Longitude (in decimal format)	<i>Is generated by the system</i>	
Project Location per site		
Locality name	<i>Where exactly is the project implemented? (Ward name)</i>	
Subplace	<i>Town / Village</i>	
Ward	<i>The project site is located in which ward?</i>	
Government facility	<i>Landmark near the project (Post office/school/clinic/library)</i>	
Spatial Data Type	<i>Geopoint (structure)/ Line (road)/ Polygon(area)</i>	
Site physical address	<i>Physical address of the site office</i>	
Public Body Details		
Public body sphere	<i>In which sphere is the project implemented? (National, Provincial or Municipal)</i>	Provincial
Reporting public body that is the project owner (and will report on the project)	<i>Which Institution or Department that owns / approved this project (Education, Health, City of Tshwane Metro etc.)</i>	KZN Department of Transport
Department in the Public body that is responsible for the project	<i>Which department /unit is responsible for this project? (e.g. Roads & storm water, Education, Community safety etc.)</i>	KZN Department of Transport
Implementing public body type	<i>In which sphere is this project implemented? (Metro, Distr, Mun, National or Provincial Dept.)</i>	Provincial
Public body that will implement the project	<i>Which institution that implements the project?</i>	KZN Department of Transport
Project Implementation		
Is this the project on the municipal IDP	<i>Yes / No</i>	N/A
IDP reference number allocated to the project	<i>The number reflected in your Municipal IDP document</i>	N/A
EPWP Details		
EPWP Sector	<i>The project is implemented in which sector? (Infrastructure, Environment & culture, Non-state or Social)</i>	Infrastructure
EPWP Programme	<i>The project is implemented under which programme?</i>	
EPWP Sub Programme	<i>The project is implemented under which sub-programme?</i>	

EPWP BUSINESS FORM		
Field requested	Description if needed	Please complete the sections in white
Project Details		
Profile ID	<i>Generated by the system</i>	
Project Name	<i>The name of the project</i>	
Project Reference Number	<i>Contract number</i>	
Project description	<i>Full description of what is happening in the project (as per the appointment letter) and the community benefiting from the project</i>	
Duration		
Project Start Date		
Project End Date		
Estimated Budget	<i>Project Budget</i>	
Project Location		
Province		KZN
District Municipality	<i>Under which District Municipality does this projects falls</i>	
Local Municipality	<i>Under which Local Municipality does this projects falls</i>	
Latitude (in decimal format)	<i>GPS coordinates</i>	
Longitude (in decimal format)		
Public Body Details		
Public body sphere	<i>Such as Municipal or Provincial</i>	Provincial
Reporting public body that is the project owner (and will report on the project)	<i>Which Department approved the project in (education, Health etc.)</i>	KZN Department of Transport
Department / Unit in the Public body that is responsible for the project	<i>Which Department budgeted for the project e.g. Education, Health Directorate</i>	KZN Department of Transport
Implementing public body type	<i>Example(Local Municipality, Distr. Mun or Provincial Dept.</i>	Provincial
Public body that will implement the project	<i>Infrastructure, Environment or Social</i>	KZN Department of Transport
Is this project on the Municipal IDP	<i>Municipal projects</i>	N/A
IDP reference number allocated to the project		N/A

EPWP Details		
EPWP Sector	<i>The project is implemented in which sector? (Infrastructure, Environment & culture, Non-state or Social)</i>	Infrastructure
EPWP programme	<i>The project is implemented under which programme?</i>	
EPWP Sub Programme	<i>The project is implemented under which sub-programme?</i>	
Budget Amount-(Allocations for the project duration)		
Funding Body	<i>Which Dept. is funding the project</i>	KZN Department of Transport
Funding Year	<i>Financial year/s for the project</i>	
Total Budget Amount	<i>(Exclude Professional Fees)</i>	
Incentive Grant(e.g. landcare / EPWP grant)	<i>Grant funding received</i>	
Total wages paid for the duration of the projects	<i>What amount will be spent on wages during the duration of the project</i>	
Wage Rate	<i>Daily Wage rate to be paid during productive work</i>	
Stipend Rate	<i>Daily wage rate to be paid during training</i>	
UIF	<i>The amount being paid to UIF (if applicable)</i>	
COIDA	<i>The amount being paid to COIDA(if applicable)</i>	
Training	<i>What amount will be spent on training</i>	
Administration	<i>The Administration costs</i>	
Equipment and materials	<i>Budget for Materials and Equipment</i>	
Other	<i>If other where chosen describe the other Such as Professional fees)</i>	
Describe other		
Project Outputs and Training		
Planned Primary Output	<i>eg walkways, gabions, kerb * channel, km of road constructed</i>	
Description of Planned Primary Output	<i>Describe the project output (end product and not the milestone) (e.g. kms of tar road constructed) Start with the unit of measure such as number of, kms, ha, sqms etc</i>	
Unit of measure of primary output	<i>Eg. m, m², m³, km, no, ha etc</i>	
Planned primary output quantity	<i>Specify the quantity of output planned</i>	
Number of persons to be trained	<i>How many persons are targeted for on job training</i>	

Contact person		
Title	Person responsible for the Project in the Public Body (Project Manager)	
Initials		
First Name		
Surname		
Email		
Tel (Office)		
Fax Number		
Cell Number		
Physical Address 1		
Physical Address 2		
Physical Address 3		
Physical Address 4		
Postal Address 1		
Postal Address 2		
Postal Address 3		
Postal Address 4		
Position of person		

EPWP Monthly Progress Form		
Field requested	Description if needed	Please complete the sections in white
Project Details		
Profile ID	<i>full descripton of what is happening in the project (as per the appointment letter) and the community benefiting from the project</i>	
Project Name	<i>The name of the project</i>	
Project Reference Number	<i>Contract number</i>	
Project description	<i>Full descripton of what is happening in the project (as per the appointment letter) and the community benefiting from the project</i>	
Month		
Reporting Month		April
Budget Expenditure		
Cumulative Expenditure Amount	<i>What is the Overall amount spend on this project?</i>	
Current Expenditure Amount	<i>What is the amount spend including all grants for this month?</i>	
Wages	<i>How much paid on wages for this month only?</i>	
UIF	<i>How much paid on UIF for this month only?</i>	
COIDA	<i>How much paid on COIDA for this month only?</i>	
Stipends for training	<i>Amount paid to participants whilst on training (this month only)</i>	
Amount spent on service providers for training	<i>How much paid to service providers for training for this month only?</i>	
Training	<i>Total Cost of training for this month? (number captured on ERS)</i>	
Administration	<i>How much paid on administration for this month only?</i>	
Equipment and materials	<i>How much paid on equipment and materials for this month only?</i>	
Other	<i>How much paid on other?</i>	
Describe other	<i>Be specific e.g. Consulting fees, Transport etc.</i>	
Project output description	<i>Describe the project output (end product and not the milestone) (e.g. kms of tar road constructed) Start with the unit of measure such as number of, kms, ha, sqms etc</i>	
Unit of measure of primary output	<i>Eg. m, m², m³, km, no, ha etc</i>	
Cumulative primary output achieved	<i>Since the onset of the project</i>	
Quantity Achieved	<i>enter numeric output for this month only</i>	
Percentage achieved	<i>How much work done / achieved in percentages?</i>	
EPWP Branding		
Branding compliant	<i>Yes / No</i>	
Date that the branding was provided	<i>When was the project branded?</i>	
Has a photo of project branding been provided?	<i>Yes / No</i>	
First name of Official Who Branded Project	<i>Official Name</i>	
Surname of Official Who Branded Project	<i>Official Surname</i>	
Phone number of official who erected branding for the project	<i>Official contact number</i>	
Give the public body reference and name, and organisational details of the person that provided branding.	<i>Public body details (reference & name)</i>	



The Attendance Register for on-site Workers

GR

Project Name: _____

Contract no: _____

Surname: _____

First Name: _____

IDENTITY NUMBER:

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

Day	Date	Time In	Signature	Time Out	Signature	Report On Any Formal Training Provided In The Reporting Month
WEEK 1						
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY						
WEEK 2						
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY						
WEEK 3						
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY						
WEEK 4						
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY						
WEEK 5						
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY						
Total Days worked						

PART C4: SITE INFORMATION

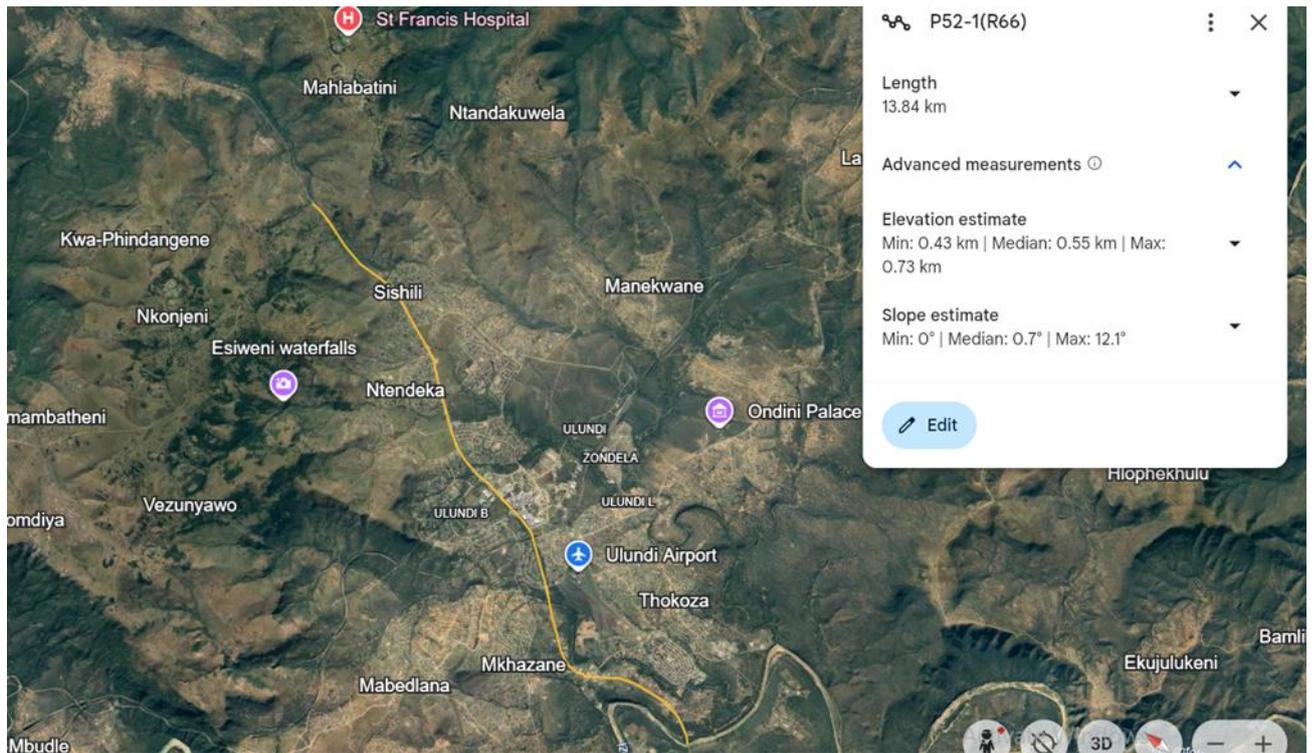
	Page
C4.1 LOCALITY PLAN	C207
C4.2 EXAMPLE OF CONTRACT SIGNBOARD DETAILS	C208
C4.3 EXISTING SERVICES REPORT	C210
C4.4 CONDITIONS ON SITE: MATERIALS INFORMATION	C211

C4.1 LOCALITY PLAN

GIS Map with the surrounding road network



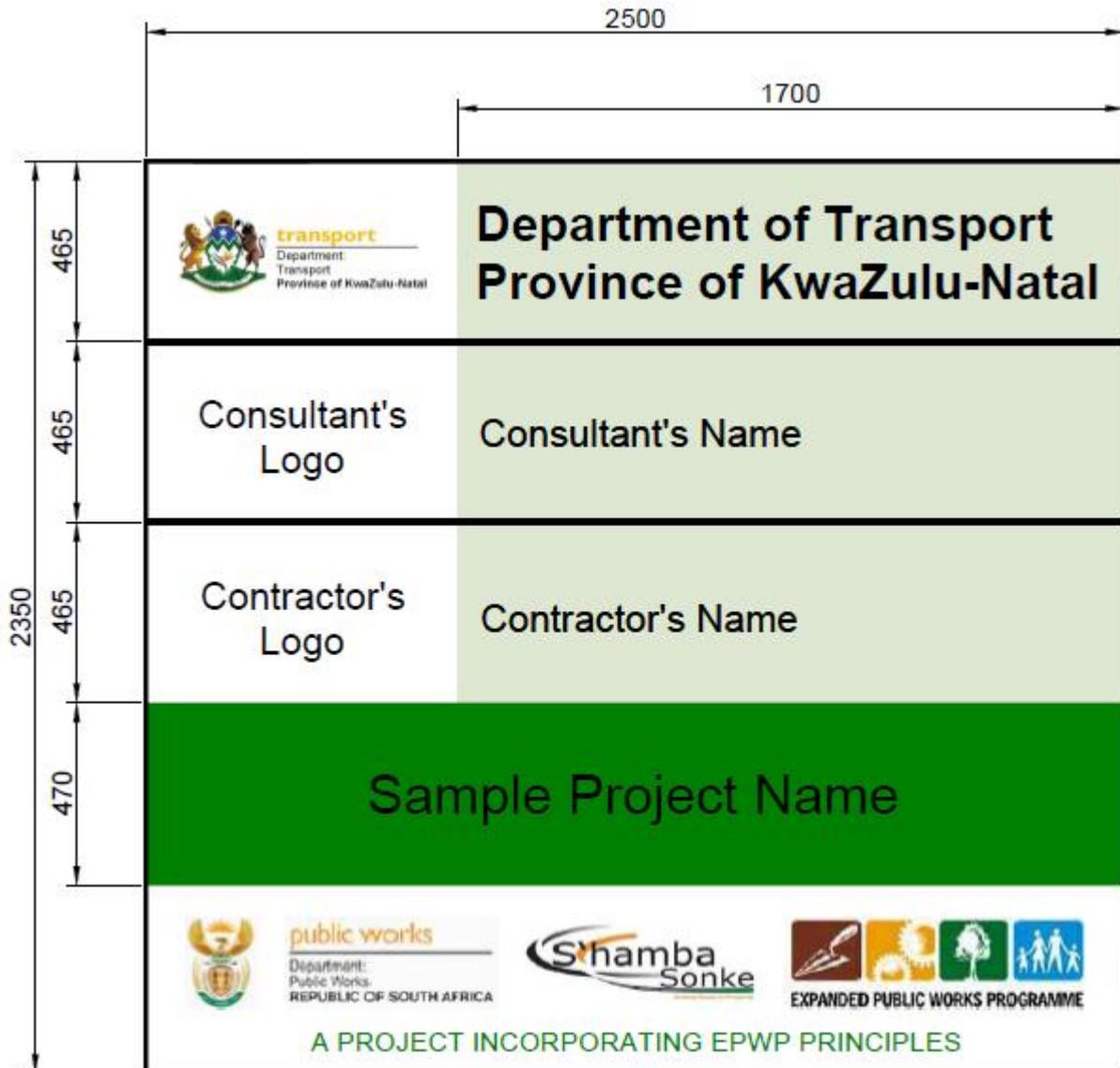
Google Map with surrounding Areas
The length of the road is 13.7 km



C4.2 EXAMPLE OF CONTRACT SIGNBOARD DETAILS

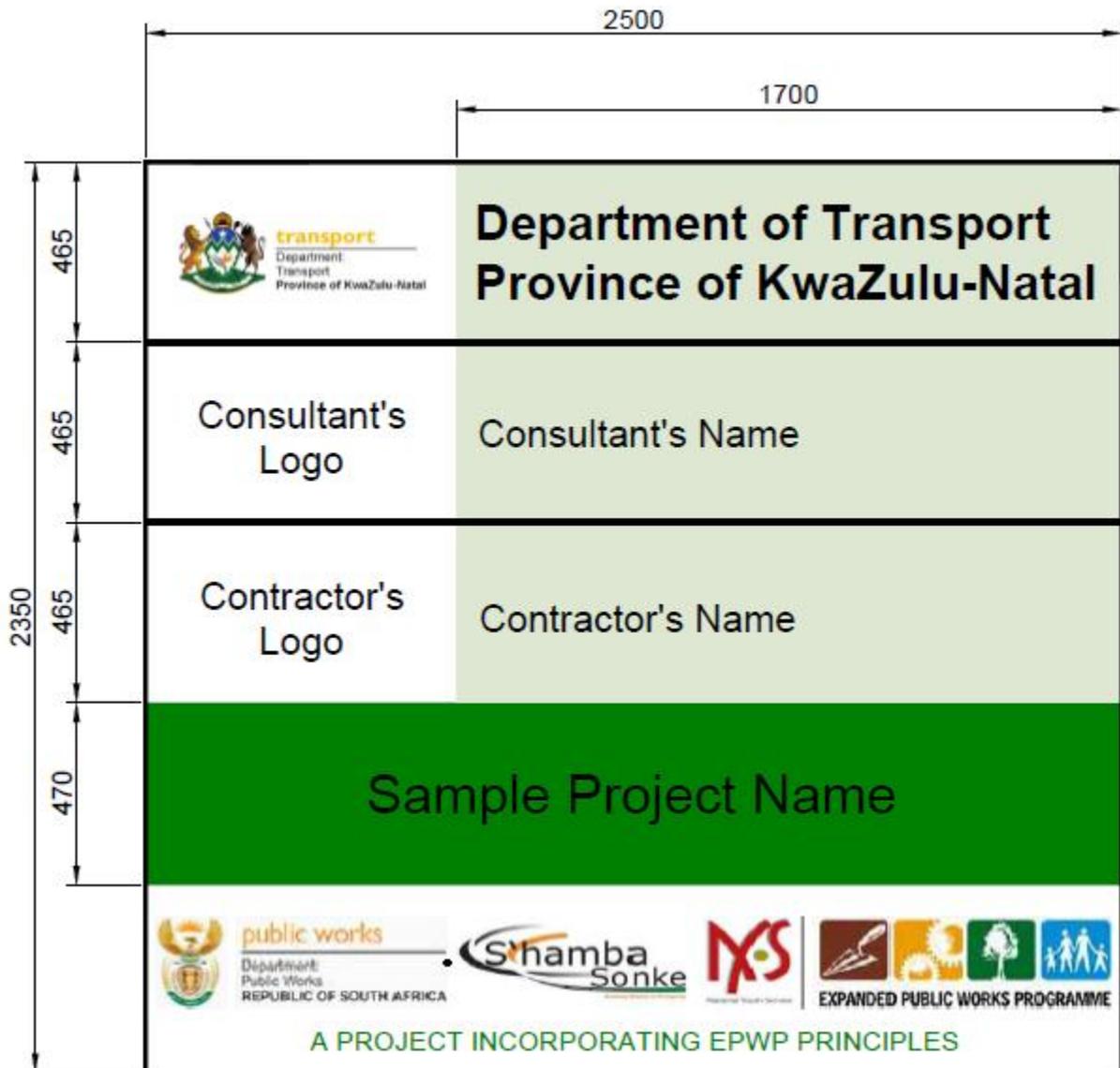
C4.2.1 CONTRACT SIGNBOARD FOR USE WHEN THE NYS PROGRAMME IS NOT REQUIRED:

Note: The "S'hamba Sonke" logo, as indicated below, shall appear on the signboard for Provincial Road Maintenance Grant (PRMG) contracts only. In all other cases it shall be omitted.



C4.2.2 CONTRACT SIGNBOARD FOR USE WHEN THE NYS PROGRAMME IS REQUIRED:

Note: The “S’hamba Sonke” logo, as indicated below, shall appear on the signboard for Provincial Road Maintenance Grant (PRMG) contracts only. In all other cases it shall be omitted.



C4.3 EXISTING SERVICES REPORT

1. Location of services

The known services on the site include:

Before any work can commence the Contractor shall verify the actual position of each known existing service and bring to the attention of the Engineer any previously unknown service that is not recorded in the existing as-built or wayleave records or indicated in the Contract Documentation.

It is also expected that unknown buried domestic services crossings requiring relocation or protection may be encountered along the route as the work proceeds. The Contractor shall therefore make every effort to establish the location of any such unknown services in a particular area prior to excavations commencing in that area. Such efforts shall include the Contractor conducting a thorough visual surface inspection for services in the area, and also diligently enquiring of local landowners as to whether there are any known services which have not been shown on the drawings but which may be affected by the construction activities in that area, and any such services shall be brought to the attention of the Employer's Agent immediately. Exploratory hand excavation trenching work shall be carried out where necessary to establish the exact position of buried services.

The Contractor shall take note of the requirements of clause A2.1 of the COTO 2020 DS standard specifications with regard to services.

2. Liaison with service owners

Immediately after the site has been handed over to the Contractor and prior to the commencement of any construction work on the site, the Contractor shall arrange a meeting with the relevant authorities to establish the exact location of the various services affected (if any), to plan the necessary services relocations (if required) and to obtain contact details for the service owners' technical and emergency staff.

Where services relocations are required, the Contractor shall arrange regular planning meetings with the service owners until such time as the services have been relocated and commissioned and the existing services uplifted and removed.

3. Protection of existing services

Prior to the commencement of any construction work on the site, the Contractor shall establish markers at 50 m centres (or closer where necessary), clearly delineating the routes traversed by the services within the road reserve as confirmed by the service owners.

Excavation operations shall commence only after the existing services within or in the near vicinity of the excavations have been suitably protected against damage.

The Contractor shall take particular care when carrying out blasting, pneumatic or mechanical breaking, and general excavation operations in the vicinity of the services, and subcontractors, foremen and plant operators shall be fully briefed on precautionary measures to be taken before excavation commences in these areas.

4. Relocation of services

Should any services need to be relocated, the Contractor shall be required to assist the service owner with programming, organising and carrying out the relocation work, in order to minimise any delays in the construction.

5. Payment for the services relocation work

A provisional sum has been provided under section C2.1 of the bill of quantities to cover the costs of any protection, relocation, realignment, removal or replacement of services that may arise.

C4.4 CONDITIONS ON SITE: MATERIALS INFORMATION

CONTENTS	PAGE
C4.4.1 DISCLAIMER.....	C212
C4.4.2 GENERAL DESCRIPTION OF ROAD	C212
C4.4.3 BORROW PIT INVESTIGATION.....	C212
C4.4.4 MATERIALS FOR CONSTRUCTION	C212

C4.4.1 DISCLAIMER

The information in this document records the results of investigations done and various tests carried out on materials encountered in the existing road. The results are given in good faith and there is no warranty that the results are entirely representative of all the materials that may be encountered, the intention being to give an indication of the materials likely to be encountered.

No responsibility for any consequence arising from variation between the actual material properties and those indicated in this document will be accepted.

The specification and contract drawings shall always overrule this part of the contract documents.

C4.4.2 GENERAL DESCRIPTION OF ROAD

The P52-1 is a provincial road with lanes located in Ulundi, featuring a nominal width of 10.4 meters. The total length is approximately 25.7 km, with 12 km covered in this document.

This contract begins at km 13.7 before the Mfolozi River Bridge and ends at km 25.7, at the start of road P52-2 in the Mayiwane area. The road passes through wards 21, 18, 11, 21,18,11,12,8, and 9 within KwaMpungose Tribal Authority.

C4.4.3 BORROW PIT INVESTIGATION

All commercial sources

C4.4.4 MATERIAL FOR CONSTRUCTION

- 60% Anionic stable grade emulsion (Diluted 50% Emulsion/ 50% Water)
- Hot-mix asphalt continuous or semi-gap graded
- water borne paint

C4.4.4.2 Crushed stone base

Crushed stone base of G1, G2 or G3

C4.4.4.3 Concrete and surface seal aggregate, gabion stone and stone for erosion protection works (n/a)

C4.4.4.5 Water

No specific source of water for construction purposes is identified. The Contractor will have to make his own arrangements in this regard. Water may be available from local rivers and streams but the Contractor will have to make suitable arrangements for access as required as well as for the necessary testing to prove its suitability

