



## NEC3 Engineering & Construction Contract

Between **ESKOM ROTEK INDUSTRIES SOC Ltd**  
(Reg No. 1990/006897/30)

and [Insert at award stage]  
(Reg No. \_\_\_\_\_)

for **Dismantling and removal of existing defunct sewage plants and septic tanks including design, supply, installation, testing and commissioning of new sewage plants at Vygeboom, Nooitgedaght/Wintershoek and Bosloop pump stations.**

<b>Contents:</b>	<b>No of pages</b>
<b>Part C1 Agreements &amp; Contract Data</b>	<b>25</b>
<b>Part C2 Pricing Data</b>	<b>2</b>
<b>Part C3 Scope of Work</b>	<b>49</b>
<b>Part C4 Site Information</b>	<b>1</b>

**CONTRACT No. [Insert at award stage]**

## Part C1: Agreements & Contract Data

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<b>Contents:</b>	<b>No of pages</b>
<b>C1.1 Form of Offer and Acceptance</b>	<b>3</b>
[to be inserted from Returnable Documents at award stage]	
<b>C1.2a Contract Data provided by the <i>Employer</i></b>	<b>15</b>
<b>C1.2b Contract Data provided by the <i>Contractor</i></b>	<b>5</b>
[to be inserted from Returnable Documents at award stage]	
<b>C1.3 Proforma Guarantees</b>	<b>3</b>

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# C1.1 Form of Offer & Acceptance

## 1.1 Offer

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

**Dismantling and removal of existing defunct sewage plants and septic tanks including design, supply, installation, testing and commissioning of new sewage plants at Vygeboom, Nooitgedaght/Wintershoek and Bosloop pump stations.**

### 2

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto 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.

Options A	The offered total of the Prices exclusive of VAT is	R [●]
	Sub total	R [●]
	Value Added Tax @ 15% is	R [●]
	The offered total of the amount due inclusive of VAT is <sup>1</sup>	R [●]
	(in words) [●]	

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

Signature(s)

Name(s)

Capacity

**For the  
tenderer:**

(Insert name and address of organisation)

Name &  
signature of  
witness

Date

Tenderer's CIDB registration number (if applicable)

<sup>1</sup> This total is required by the *Employer* for budgeting purposes only. Actual amounts due will be assessed in terms of the *conditions of contract*.

## 2.1 Acceptance

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

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: Works Information
Part C4	Site Information

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

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data 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 signed between them of this document, including the Schedule of Deviations (if any).

Unless the tenderer (now *Contractor*) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

Signature(s)

Name(s)

Sizo Myeni

Capacity

Bulk Material Services - General  
Manager

**for the  
Employer**

**Eskom Rotek Industries SOC Limited  
Lower Germiston Road  
Rosherville  
Johannesburg  
2022**

*(Insert name and address of organisation)*

Name &  
signature of  
witness

Date

Note: If a tenderer wishes to submit alternative tenders, use another copy of this Form of Offer and Acceptance.

Schedule of Deviations to be completed by the *Employer* prior to contract award

Note:

1. This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.
2. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
3. A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

No.	Subject	Details
1	<b>None</b>	<b>N/A</b>
2		
3		
4		
5		
6		

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only 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 confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

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

**2.1.1.1 For the tenderer:**

**2.1.1.2 For the Employer**

Signature	_____	_____
Name	_____	_____
Capacity	_____	Sizo Myeni
On behalf of	(Insert name and address of organisation)	Bulk Material Services - General Manager
Name & signature of witness	_____	<b>Eskom Rotek Industries SOC Limited</b>
Date	_____	<b>Lower Germiston Road</b>
		<b>Rosherville</b>
		<b>Johannesburg</b>
		<b>2022</b>

## C1.2 ECC3 Contract Data

### Part one - Data provided by the *Employer*

Clause	Statement	Data
1	<b>General</b>	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
	dispute resolution Option	<b>A: Priced contract with activity schedule</b>
	and secondary Options	<b>W1: Dispute resolution procedure</b>
		<b>X2 Changes in the law</b>
		<b>X5: Sectional Completion</b>
		<b>X7: Delay damages</b>
		<b>X15: Limitation of <i>Contractor's</i> liability for design to reasonable skill and care</b>
		<b>X16: Retention</b>
		<b>X18: Limitation of liability</b>
		<b>Z: <i>Additional conditions of contract</i></b>
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)	
10.1	The <i>Employer</i> is (Name):	<b>ESKOM ROTEK INDUSTRIES SOC Ltd (Reg No. 1990/006897/30), a state-owned company incorporated in terms of the company laws of the Republic of South Africa</b>
	Address	<b>Registered office at Lower Germiston Road Rosherville Johannesburg 2022</b>
10.1	The <i>Project Manager</i> is: (Name)	<b>Kefentse Letsoko</b>
	Address	<b>Eskom Rotek Industries SOC Limited Lower Germiston Road Rosherville Johannesburg 2022</b>
	Tel	<b>013 297 1100</b>
	Fax	<b>-</b>
	e-mail	<b>Letsokkwa@eskom.co.za</b>

10.1	The <i>Supervisor</i> is: Mpho Ntuli	Mpho Ntuli	
	Address:	Eskom Rotek Industries SOC Ltd Roshland Office Park Lower Germiston Road Rosherville	
	Tel No.	013 297 1100	
	e-mail	Ntulimg@eskom.co.za	
11.2(13)	The <i>works</i> are	Dismantling and removal of existing defunct sewage plants and septic tanks including design, supply, installation, testing and commissioning of new sewage plants at Vygeboom, Nooitgedacht/Wintershoek and Bosloop pump stations.	
11.2(14)	The following matters will be included in the Risk Register	1. Weather conditions 2. Road Conditions 3. Community Protests	
11.2(15)	The <i>boundaries of the site</i> are	Komati Water Scheme sites (Vygeboom, Bosloop and Nooitgedacht Pump stations)	
11.2(16)	The Site Information is in	Part 4: Site Information	
11.2(19)	The Works Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.	
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa	
13.1	The <i>language of this contract</i> is	English	
13.3	The <i>period for reply</i> is	Two (2) weeks	
<b>2</b>	<b>The Contractor's main responsibilities</b>	Data required by this section of the core clauses is provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.	
<b>3</b>	<b>Time</b>		
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is		
11.2(9)	The <i>key dates</i> and the <i>conditions</i> to be met are:	<b>Condition to be met</b>  1 Handover Nooitgedacht site	<b>key date</b>  30 November 2023
30.1	The <i>access dates</i> are:	<b>Part of the Site</b>  1 Nooitgedacht P/S	<b>Date</b>  October 2023

31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	<b>Two weeks of the Contract Date.</b>
31.2	The <i>starting date</i> is	<b>01 October 2023</b>
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	<b>Two (2) weeks.</b>
35.1	The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date.	<b>Two weeks of the Contract Date.</b>
<b>4</b>	<b>Testing and Defects</b>	
42.2	The <i>defects date</i> is	<b>52 weeks after Completion of the whole of the <i>works</i>.</b>
43.2	The <i>defect correction period</i> is	<b>One week</b>
	except that the <i>defect correction period</i> for	<b>safety related defects is immediately</b>
<b>5</b>	<b>Payment</b>	
50.1	The <i>assessment interval</i> is	<b>between the 25<sup>th</sup> day of each successive month.</b>
51.1	The <i>currency of this contract</i> is the	<b>South African Rand (ZAR)</b>
51.2	The period within which payments are made is	<b>4 weeks from date of invoice submission</b>
51.4	The <i>interest rate</i> is	<p>the publicly quoted prime rate of interest (calculated on a 365 day year) charged from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and</p> <p>(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption “Money Rates” in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted <i>mutatis mutandis</i> every 6 months thereafter and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.</p>
<b>6</b>	<b>Compensation events</b>	



60.1(13)	<p>The place where weather is to be recorded is:</p> <p>The <i>weather measurements</i> to be recorded for each calendar month are,</p> <p>The <i>weather measurements</i> are supplied by</p> <p>The <i>weather data</i> are the records of past <i>weather measurements</i> for each calendar month which were recorded at:</p> <p>and which are available from:</p>	<p><b>Komati Water Pipeline</b></p> <p><b>the cumulative rainfall (mm) as per Appendix A</b></p> <p><b>the number of days with rainfall more than 10 mm</b></p> <p><b>The Contractor</b></p> <p><b>The pump stations</b></p> <p><b>the South African Weather Bureau and included in Annexure A to this Contract Data provided by the <i>Employer</i></b></p>
60.1(13)	Assumed values for the ten year return <i>weather data</i> for each <i>weather measurement</i> for each calendar month are:	<p><b>As stated in Annexure A to this Contract Data provided by the <i>Employer</i>.</b></p> <p>Note: If this arrangement is used, delete the rows above for 60.1(13) and delete this note.</p>
<b>7</b>	<b>Title</b>	<b>There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.</b>
<b>8</b>	<b>Risks and insurance</b>	
80.1	These are additional <i>Employer's</i> risks	<p><b>1. Possible community unrest</b></p> <p><b>2. Poor Road conditions</b></p> <p><b>3 Weather Conditions</b></p>
<b>9</b>	<b>Termination</b>	<b>There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.</b>
<b>10</b>	<b>Data for main Option clause</b>	
<b>A</b>	<b>Priced contract with activity schedule</b>	<b>There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.</b>
<b>11</b>	<b>Data for Option W1</b>	
W1.1	The <i>Adjudicator</i> is	<b>the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a>). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).</b>

Address	TBC
Tel No.	[•]
Fax No.	[•]
e-mail	[•]

W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the London Institution of Civil Engineers. (See <a href="http://www.ice-sa.org.za">www.ice-sa.org.za</a> ) or its successor body.
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W1.4(2)	The <i>tribunal</i> is:	arbitration.
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W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	South Africa
	The person or organisation who will choose an arbitrator	
	- if the Parties cannot agree a choice or	the Chairman for the time being or his nominee
	- if the arbitration procedure does not state who selects an arbitrator, is	of the Association of Arbitrators (Southern Africa) or its successor body.

## 12 Data for secondary Option clauses

X2	Changes in the law	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
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X5	Sectional Completion			
X5.1	The <i>completion date</i> for each <i>section</i> of the <i>works</i> is:	<b>Section</b>	<b>Description</b>	<b>Completion date</b>
		1	Nooitgedacht site	30 November 2023
		2	Vygeboom site	31 January 2023
		3	Bosloop site	31 March 2023
X5 & X7	Sectional Completion and delay damages used together			
X7.1 X5.1	Delay damages for late Completion of the <i>sections</i> of the <i>works</i> are:	<b>section</b>	<b>Description</b>	<b>Amount per day</b>
		1	Nooitgedacht site	R 5 000.00
		2	Vygeboom site	R 5 000.00

		3	Bosloop site	R 5 000.00		
	Remainder of the <i>works</i>			R 0.00		
	The total delay damages payable by the <i>Contractor</i> does not exceed:	5% of the contract value				
X2	Changes in the law	Is a compensation event if it occurs after the Contract Date				
X5 &	Sectional Completion					
X7	Delay Damages	1% deductible per day, capped at 10% of the contract				
X15	Limitation of the <i>Contractor's</i> liability for his design to reasonable skill & care	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.				
X16	Retention (not used with Option F)					
X16.1	The <i>retention free amount</i> is	R0.				
	The <i>retention percentage</i> is	5%	<ul style="list-style-type: none"><li>50% will be released over the contract term upon completion certificate and 50% at end of defect liability period.</li></ul>			
X18	Limitation of liability					
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to:	R0.0 (zero Rand)				
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to:	the amount of the deductibles relevant to the event				
X18.3	The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate is limited to	The greater of <ul style="list-style-type: none"><li>the total of the Prices at the Contract Date and</li><li>the amounts excluded and unrecoverable from the <i>Employer's</i> assets policy for correcting the Defect (other than the resulting physical damage which is not excluded) plus the applicable deductible as at contract date.</li></ul>				
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to:	the total of the Prices other than for the additional excluded matters.  The <i>Contractor's</i> total liability for the additional excluded matters is not limited.  The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for				

		<ul style="list-style-type: none"> <li>• Defects due to his design which arise before the Defects Certificate is issued,</li> <li>• Defects due to manufacture and fabrication outside the Site,</li> <li>• loss of or damage to property (other than the works, Plant and Materials), <ul style="list-style-type: none"> <li>• death of or injury to a person and</li> <li>• infringement of an intellectual property right.</li> </ul> </li> </ul>
X18.5	The <i>end of liability date</i> is	<p>(i) Two (2) years after the <i>defects date</i> for latent Defects and</p> <p>(ii) the date on which the liability in question prescribes in accordance with the Prescription Act No. 68 of 1969 (as amended or in terms of any replacement legislation) for any other matter.</p> <p>A latent Defect is a Defect which would not have been discovered on reasonable inspection by the <i>Employer</i> or the <i>Supervisor</i> before the <i>defects date</i>, without requiring any inspection not ordinarily carried out by the <i>Employer</i> or the <i>Supervisor</i> during that period. If the <i>Employer</i> or the <i>Supervisor</i> do undertake any inspection over and above the reasonable inspection, this does not place a greater responsibility on the <i>Employer</i> or the <i>Supervisor</i> to have discovered the Defect.</p>
<b>Z</b>	<b>The <i>Additional conditions of contract</i> are</b>	<b>Z1 to Z15 always apply.</b>
<b>Z1</b>	<b>Cession delegation and assignment</b>	
Z1.1	The <i>Contractor</i> does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the <i>Employer</i> .	
Z1.2	Notwithstanding the above, the <i>Employer</i> may on written notice to the <i>Contractor</i> cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.	
<b>Z2</b>	<b>Joint ventures</b>	
Z2.1	If the <i>Contractor</i> constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the <i>Employer</i> for the performance of this contract.	
Z2.2	Unless already notified to the <i>Employer</i> , the persons or organisations notify the <i>Project Manager</i> within two weeks of the Contract Date of the key person who has the authority to bind the <i>Contractor</i> on their behalf.	

- Z2.3 The *Contractor* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Contractor* in writing.

## **Z3 Change of Broad Based Black Economic Empowerment (B-BBEE) status**

- Z3.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.
- Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Project Manager* within thirty days of the notification or as otherwise instructed by the *Project Manager*.
- Z3.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Works.
- Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

## **Z4 Confidentiality**

- Z4.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z4.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Project Manager*.
- Z4.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z4.4 The taking of images (whether photographs, video footage or otherwise) of the *works* or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the *Project Manager*. All rights in and to all such images vests exclusively in the *Employer*.
- Z4.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

## **Z5 Waiver and estoppel: Add to core clause 12.3:**

- Z5.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Project Manager*, the *Supervisor*, or the *Adjudicator* does not constitute a waiver of

rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

## **Z6 Health, safety and the environment: Add to core clause 27.4**

- Z6.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *works*. Without limitation the *Contractor*:
- accepts that the *Employer* may appoint him as the “Principal Contractor” (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) (“the Construction Regulations”) for the Site;
  - warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of *works*; and
  - undertakes, in and about the execution of the *works*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor’s* direction and control, likewise observe and comply with the foregoing.
- Z6.2 The *Contractor*, in and about the execution of the *works*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor’s* direction and control, likewise observe and comply with the foregoing.

## **Z7 Provision of a Tax Invoice and interest. Add to core clause 51**

- Z7.1 Within one week of receiving a payment certificate from the *Project Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer’s* procedures stated in the Works Information, showing the amount due for payment equal to that stated in the payment certificate.
- Z7.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z7.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer’s* VAT number 4740101508 on each invoice he submits for payment.

## **Z8 Notifying compensation events**

- Z8.1 Delete from the last sentence in core clause 61.3, “unless the *Project Manager* should have notified the event to the *Contractor* but did not”.

## **Z9 Employer’s limitation of liability**

- Z9.1 The *Employer’s* liability to the *Contractor* for the *Contractor’s* indirect or consequential loss is limited to R0.00 (zero Rand)

Z9.2 The *Contractor's* entitlement under the indemnity in 83.1 is provided for in 60.1(14) and the *Employer's* liability under the indemnity is limited.

**Z10 Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":**

Z10.1 or had a business rescue order granted against it.

**Z11 Addition to secondary Option X7 Delay damages (if applicable in this contract)**

Z11.1 If the amount due for the *Contractor's* payment of delay damages reaches the limits stated in this Contract Data for Option X7 or Options X5 and X7 used together, the *Employer* may terminate the *Contractor's* obligation to Provide the Works using the same procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table.

**Z12 Ethics**

For the purposes of this Z-clause, the following definitions apply:

**Affected Party** means, as the context requires, any party, irrespective of whether it is the *Contractor* or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,

**Coercive Action** means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,

**Collusive Action** means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,

**Committing Party** means, as the context requires, the *Contractor*, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractor or the Subcontractor's employees,

**Corrupt Action** means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,

**Fraudulent Action** means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,

**Obstructive Action** means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and

**Prohibited Action** means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.

Z12.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.

Z12.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court

or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor's* obligation to Provide the Services for this reason.

Z12.3 If the *Employer* terminates the *Contractor's* obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.

Z12.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation.

## Z13 Insurance

### Z 13.1 Replace core clause 84 with the following:

#### Insurance cover 84

- 84.1** When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.
- 84.2** The *Contractor* provides the insurances stated in the Insurance Table A.
- 84.3** The insurances provide cover for events which are at the *Contractor's* risk from the *starting date* until the earlier of Completion and the date of the termination certificate.

**INSURANCE TABLE A**

Insurance against	Minimum amount of cover or minimum limit of indemnity
Loss of or damage to the <i>works</i> , Plant and Materials	<p>The replacement cost where not covered by the <i>Employer's</i> insurance</p> <p>The <i>Employer's</i> policy deductible, as at Contract Date, where covered by the <i>Employer's</i> insurance</p>
Loss of or damage to Equipment	The replacement cost
Liability for loss of or damage to property (except the <i>works</i> , Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i> ) caused by activity in connection with this contract	<p><b><u>Loss of or damage to property</u></b></p> <p><b><u>Employer's property</u></b></p> <p>The replacement cost where not covered by the <i>Employer's</i> insurance</p> <p>The <i>Employer's</i> policy deductible, as at Contract Date, where covered by the <i>Employer's</i> insurance</p> <p><b><u>Other property</u></b></p>



	The replacement cost  <b><u>Bodily injury to or death of a person</u></b> The amount required by applicable law
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law

## Z 13.2

### Replace core clause 87 with the following:

The *Employer* provides the insurances stated in the Insurance Table B.

**INSURANCE TABLE B**

<b>Insurance against or name of policy</b>	<b>Minimum amount of cover or minimum of indemnity</b>
Assets All Risk	Per the insurance policy document
Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document
Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document
Cyber Liability	Per the insurance policy document
Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

## Z14 Nuclear Liability

- Z14.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.
- Z14.2 The *Employer* is solely responsible for and indemnifies the *Contractor* or any other person against any and all liabilities which the *Contractor* or any person may incur arising out of or resulting from nuclear damage, as defined in Act 44 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Contractor* or any other person or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z14.3 Subject to clause Z14.4 below, the *Employer* waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to

the unlawful intent of the *Contractor* or any other person, or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.

Z14.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 44 of 1999, or any replacement section dealing with the same subject matter.

Z14.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

## **Z15 Asbestos**

For the purposes of this Z-clause, the following definitions apply:

<b>AAIA</b>	means approved asbestos inspection authority.
<b>ACM</b>	means asbestos containing materials.
<b>AL</b>	means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.
<b>Ambient Air</b>	means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.
<b>Compliance Monitoring</b>	means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
<b>OEL</b>	means occupational exposure limit.
<b>Parallel Measurements</b>	means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.
<b>Safe Levels</b>	means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
<b>Standard</b>	means the <i>Employer's</i> Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.
<b>SANAS</b>	means the South African National Accreditation System.
<b>TWA</b>	means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.

Z15.1 The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous

period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.

- Z15.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z15.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.
- Z15.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z15.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
- Z15.5 The *Contractor's* personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.
- Z15.6 The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
- Z15.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

**Annexure A: One-in-ten-year-return *weather data* obtained from SA Weather Bureau for WEATHER BUREAU 2908025, RAINFALL STATION NO: 480/184 (515), CAROLINA.**

If any one of these *weather measurements* recorded within a calendar month, before the Completion Date for the whole of the *works* and at the place stated in this Contract Data is shown to be more adverse than the amount stated below then the *Contractor* may notify a compensation event.

Weather Measurements			
Month	Cumulative rainfall (mm)	Number of days with rain more than 10mm	[Other measurements if applicable]
January	<b>127.8</b>	<b>4</b>	
February	<b>91.2</b>	<b>3</b>	
March	<b>82.1</b>	<b>3</b>	
April	<b>40.8</b>	<b>2</b>	
May	<b>17.9</b>	<b>0</b>	
June	<b>10.2</b>	<b>0</b>	
July	<b>6.7</b>	<b>0</b>	
August	<b>11.7</b>	<b>0</b>	
September	<b>26.4</b>	<b>1</b>	
October	<b>79.3</b>	<b>3</b>	
November	<b>135.1</b>	<b>5</b>	
December	<b>117.5</b>	<b>4</b>	

Only the difference between the more adverse recorded weather and the equivalent measurement given above is taken into account in assessing a compensation event.

## C1.2 Contract Data

### 3 Part two - Data provided by the Contractor

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

3.1 Clause	3.2 Statement	3.3 Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is The <i>subcontracted fee percentage</i> is	% %
11.2(18)	The <i>working areas</i> are the Site and	
24.1	The <i>Contractor's</i> key persons are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job: Responsibilities: Qualifications: Experience:	CV's (and further key persons data including CVs) are appended to Tender Schedule entitled .
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	
11.2(14)	The following matters will be included in the Risk Register	
11.2(19)	The Works Information for the <i>Contractor's</i> design is in:	

31.1	The programme identified in the Contract Data is			
<b>A</b>	<b>Priced contract with activity schedule</b>			
11.2(20)	The <i>activity schedule</i> is in	<b>(in figures)</b> <b>(in words), excluding VAT</b>		
11.2(30)	The tendered total of the Prices is			
	<b>3.4 Data for Schedules of Cost Components</b>	<i>Note “SCC” means Schedule of Cost Components starting on page 60, and “SSCC” means Shorter Schedule of Cost Components starting on page 63 of ECC3 (April 2013).</i>		
<b>A</b>	<b>Priced contract with activity schedule</b>	<b>Data for the Shorter Schedule of Cost Components</b>		
41 in SSCC	The percentage for people overheads is:	<b>%</b>		
21 in SSCC	The published list of Equipment is the last edition of the list published by  The percentage for adjustment for Equipment in the published list is	<b>Minus      %</b>		
22 in SSCC	The rates of other Equipment are:	<b>Equipment</b>	<b>Size or capacity</b>	<b>Rate</b>
61 in SSCC	The hourly rates for Defined Cost of design outside the Working Areas are  <b>Note: Hourly rates are estimated ‘cost to company of the employee’ and not selling rates.</b>	<b>Category of employee</b>		<b>Hourly rate</b>
62 in SSCC	The percentage for design overheads is	<b>%</b>		
63 in SSCC	The categories of design employees whose travelling expenses to and from the Working Areas are included in Defined Cost are:			

# Pro forma Retention Money Guarantee (may be used when Option X16 applies)

(to be reproduced exactly as shown below on the letterhead of the Bank providing the Guarantee)

Eskom Rotek Industries SOC Ltd  
Roshland Office Park  
Lower Germiston Road  
Rosherville

Date:

Dear Sirs

Reference No. [●] [Drafting Note: Bank reference number to be inserted]

**Retention Money Guarantee:** [Drafting Note: Name of Contractor to be inserted]

Project [ ] : Contract Reference: [Drafting Note: Contractor contract reference number to be inserted]

---

1. In this Guarantee the following words and expressions shall have the following meanings:-
  - 1.1 "Bank" - means [●], [●] Branch, (Registration No. [●]); [Drafting Note: Name of Bank to be inserted]
  - 1.2 "Bank's Address" - means [●]; [Drafting Note: Bank's physical address to be inserted]
  - 1.3 "Contract" – means the written agreement relating to the Project, entered into between Eskom and the Contractor, on or about the [●] day of [●] 200[●] (Contract Reference No. .... as amended, varied, restated, novated or substituted from time to time; [Drafting Note: Signature Date and Contract reference number to be inserted])
  - 1.4 "Contractor" – means [●] a company registered in accordance with the laws of [●] under Registration Number [●]. [Drafting Note: Name and details of Contractor to be inserted]
  - 1.5 "Eskom" - means Eskom Holdings SOC Limited, a company registered in accordance with the laws of the Republic of South Africa under Registration Number 2002/015527/30
  - 1.6 "Expiry Date" - means the date on which the Defects Certificate is issued in terms of the Contract.
  - 1.7 "Guaranteed Sum" - means the sum of R [●] ([●] Rand); [Drafting Note: Insert amount of Retention Money Guarantee.].
  - 1.8 "Project" - means the.....
2. At the instance of the Contractor, we the undersigned \_\_\_\_\_ and \_\_\_\_\_, in our respective capacities as \_\_\_\_\_ and \_\_\_\_\_ of the Bank, and duly authorized thereto, confirm that we hold the Guaranteed Sum at the disposal of Eskom, as security for the proper performance by the Contractor of all of its obligations in terms of and arising from the Contract and hereby undertake to pay to Eskom, on written demand from Eskom received prior to the Expiry Date, any sum or sums not exceeding in total the Guaranteed Sum.
3. A demand for payment under this guarantee shall be made in writing at the Bank's address and shall:
  - 3.1 be signed on behalf of Eskom by a director of Eskom or his authorised delegate.
  - 3.2 state the amount claimed ("the Demand Amount");

- 3.3 state that the Contractor has failed to carry out his obligation(s) to rectify certain defect(s) for which he is responsible under the Contract (and the nature of such defect(s)) alternatively that the Demand Amount is payable to Eskom in the circumstances contemplated in the Contract.
4. Notwithstanding the reference herein to the Contract the liability of the Bank in terms hereof is as principal and not as surety and the Bank's obligation/s to make payment:
- 4.1 is and shall be absolute provided demand is made in terms of this bond in all circumstances; and
- 4.2 is not, and shall not be construed to be, accessory or collateral on any basis whatsoever.
5. The Bank's obligations in terms of this Guarantee:
- 5.1 shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum; and
- 5.2 shall not be discharged and compliance with any demand for payment received by the Bank in terms hereof shall not be delayed by the fact that a dispute may exist between Eskom and the Contractor.
6. Eskom shall be entitled to arrange its affairs with the Contractor in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the Contractor or any variation under or to the Contract.
7. Should Eskom cede its rights against the Contractor to a third party where such cession is permitted under the Contract, then Eskom shall be entitled to cede to such third party the rights of Eskom under this Guarantee on written notification to the Bank of such cession.
8. This Guarantee:
- 8.1 shall expire on the Expiry Date until which time it is irrevocable;
- 8.2 is, save as provided for in **Error! Reference source not found.** above, personal to Eskom and is neither negotiable nor transferable;
- 8.3 shall be returned to the Bank upon the earlier of payment of the full Guaranteed Sum or expiry hereof;
- 8.4 shall be regarded as a liquid document for the purpose of obtaining a court order; and
- 8.5 shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the Courts of the Republic of South Africa.
- 8.6 Any claim which arises or demand for payment received after expiry date will be invalid and unenforceable.
9. The Bank chooses domicilium citandi et executandi for all purposes in connection with this Guarantee at the Bank's Address.

Signed at \_\_\_\_\_

Date \_\_\_\_\_ Bank's seal or stamp

For and behalf of the Bank

Bank Signatory: \_\_\_\_\_

Bank Signatory: \_\_\_\_\_

Witness: \_\_\_\_\_

Witness: \_\_\_\_\_



## PART 2: PRICING DATA

### ECC3 Option A

## C2.1 Pricing assumptions: Option A

### How work is priced and assessed for payment

Clause 11 in NEC3 Engineering and Construction Contract, (ECC3) Option A states:

<b>Identified and defined terms</b>	11	
	11.2	(20) The Activity Schedule is the <i>activity schedule</i> unless later changed in accordance with this contract.
		(27) The Price for Work Done to Date is the total of the Prices for <ul style="list-style-type: none"><li>• each group of completed activities and</li><li>• each completed activity which is not in a group.</li></ul> A completed activity is one which is without Defects which would either delay or be covered by immediately following work.
		(30) The Prices are the lump sum prices for each of the activities on the Activity Schedule unless later changed in accordance with this contract.

This confirms that Option A is a lump sum form of contract where the work is broken down into activities, each of which is priced by the tendering contractor as a lump sum. Only completed activities are assessed for payment at each assessment date; no part payment is made if the activity is not completed by the assessment date.

### Function of the Activity Schedule

Clause 54.1 in Option A states: "Information in the Activity Schedule is not Works Information or Site Information". This confirms that specifications and descriptions of the work or any constraints on how it is to be done are not included in the Activity Schedule but in the Works Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Works in accordance with the Works Information". Hence the *Contractor* does **not** Provide the Works in accordance with the Activity Schedule. The Activity Schedule is only a pricing document.

### Link to the programme

Clause 31.4 states that "The *Contractor* provides information which shows how each activity on the Activity Schedule relates to the operations on each programme which he submits for acceptance". Ideally the tendering contractor will develop a high level programme first then resource each activity and thus arrive at the lump sum price for that activity both of which can be entered into the *activity schedule*.

### Preparing the *activity schedule*

Generally it is the tendering contractor who prepares the *activity schedule* by breaking down the work described within the Works Information into suitable activities which can be well defined, shown on a programme and priced as a lump sum.

The *Employer*, in his Instructions to Tenderers or in a Tender Schedule, may have listed some items that

he requires the *Contractor* to include in his *activity schedule* and be priced accordingly.

It is assumed that in preparing his *activity schedule* the *Contractor*:

- Has taken account of the guidance given in the ECC3 Guidance Notes pages 19 and 20;
- Understands the function of the Activity Schedule and how work is priced and paid for;
- Is aware of the need to link the Activity Schedule to activities shown on his programme;
- Has listed and priced activities in the *activity schedule* which are inclusive of everything necessary and incidental to Providing the Works in accordance with the Works Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk;
- Has priced work he decides not to show as a separate activity within the Prices of other listed activities in order to fulfil the obligation to complete the *works* for the tendered total of the Prices.
- Understands there is no adjustment to the lump sum Activity Schedule price if the amount, or quantity, of work within that activity later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event.

## C2.2 the *activity schedule*

Use this page as a cover page to the *Contractor's activity schedule*.

Item No.	Activity description	Price
1	Approval of safety file	
2	Design of the packaged sewage plants	
3	Review and acceptance of designs	
4	Purchase of sewage plants	
5	Purchase of associated equipment for the sewage plants installation	
6	Transportation of plants to sites which are Vygeboom, Bosloop, Nooitgedaght and Wintershoek	
7	Site establishment	
8	Waste removal (Liquids & Solids) at Vygeboom and issuing of disposal certificate	
9	Decommissioning of the old Plant at Vygeboom	
10	Installation of sewage plant, irrigation system & ancillary parts at Vygeboom	
11	Commissioning and testing of the plant at Vygeboom	
	Waste removal (Liquids & Solids) at Nooitgedaght/Wintershoek and issuing of disposal certificate	
12	Decommissioning of the old Plant at Nooitgedaght/Wintershoek	
13	Installation of sewage plant, irrigation system & ancillary parts at Nooitgedaght/Wintershoek	
14	Commissioning and testing of the plant at Nooitgedacht/Wintershoek	
15	Waste removal (Liquids & Solids) at Bosloop and issuing of disposal certificate	
16	Decommissioning of the old Plant at Bosloop	
17	Installation of sewage plant, irrigation system & ancillary parts at Bosloop	
18	Commissioning and testing of the plant at Bosloop	
19	Site de-establishment	
	<b>Total Amount</b>	



Document reference	Title	No of pages
	This cover page	1
C3.1	<i>Employer's</i> Works Information	
C3.2	<i>Contractor's</i> Works Information	
	Total number of pages	

## C3.1: EMPLOYER'S WORKS INFORMATION

### Contents

Offer .....	3
Acceptance .....	4
Part two - Data provided by the <i>Contractor</i> .....	21
Clause .....	21
Statement .....	21
Data .....	21
Data for Schedules of Cost Components .....	22
C3.1: Employer's works Information .....	2
1 Description of the <i>works</i> .....	5
1.1 Executive overview .....	Error! Bookmark not defined.
1.2 <i>Employer's</i> objectives and purpose of the <i>works</i> .....	Error! Bookmark not defined.
1.2.1 Objectives .....	Error! Bookmark not defined.
1.2.2 Purpose .....	Error! Bookmark not defined.
1.3 Interpretation and terminology .....	Error! Bookmark not defined.
1.3.1 Definitions .....	Error! Bookmark not defined.
1.3.2 Abbreviations .....	Error! Bookmark not defined.
1.3.3 General Requirements .....	Error! Bookmark not defined.
1.4 Project Execution Methodology .....	Error! Bookmark not defined.
2 Management and start up .....	Error! Bookmark not defined.
2.1 Management meetings .....	Error! Bookmark not defined.
2.2 Documentation control .....	Error! Bookmark not defined.
2.3 Health and safety risk management .....	Error! Bookmark not defined.
2.4 Environmental constraints and management .....	Error! Bookmark not defined.
2.5 Quality assurance requirements .....	Error! Bookmark not defined.
2.6 Programming constraints .....	Error! Bookmark not defined.
2.7 <i>Contractor's</i> management, supervision and key people .....	Error! Bookmark not defined.
2.8 Invoicing and payment .....	Error! Bookmark not defined.
2.9 Contract change management .....	Error! Bookmark not defined.
2.10 Records of Defined Cost, payments & assessments of compensation events to be kept by the <i>Contractor</i> .....	Error! Bookmark not defined.
2.11 Training workshops and technology transfer .....	Error! Bookmark not defined.
3 Engineering and the <i>Contractor's</i> design .....	Error! Bookmark not defined.
3.1 <i>Employer's</i> Requirements .....	Error! Bookmark not defined.
3.1.1 General .....	Error! Bookmark not defined.
3.1.2 System Overview .....	Error! Bookmark not defined.
3.1.3 Pump Station's Guard House .....	Error! Bookmark not defined.
3.1.4 Electrical <i>works</i> .....	Error! Bookmark not defined.
3.1.5 Civils work .....	Error! Bookmark not defined.
3.1.6 Security System Integration .....	Error! Bookmark not defined.
3.2 Parts of the <i>works</i> which the <i>Contractor</i> is to design .....	Error! Bookmark not defined.
3.2.1 General .....	Error! Bookmark not defined.
3.2.2 System Overview .....	Error! Bookmark not defined.
3.2.3 Pump Station's Guard House .....	Error! Bookmark not defined.
3.2.4 Electrical <i>works</i> .....	Error! Bookmark not defined.
3.2.5 Civil <i>works</i> .....	Error! Bookmark not defined.
3.3 Procedure for submission and acceptance of <i>Contractor's</i> design .....	Error! Bookmark not defined.
3.4 Other requirements of the <i>Contractor's</i> design .....	Error! Bookmark not defined.
3.5 Use of <i>Contractor's</i> design .....	Error! Bookmark not defined.
3.6 Design of Equipment .....	Error! Bookmark not defined.
3.7 Equipment required to be included in the <i>works</i> .....	Error! Bookmark not defined.
3.8 As-built drawings, operating manuals and maintenance schedules ...	Error! Bookmark not defined.
3.8.1 General .....	Error! Bookmark not defined.
4 Procurement .....	Error! Bookmark not defined.

4.1	People .....	Error! Bookmark not defined.
4.1.1	Minimum requirements of people employed on the Site .....	Error! Bookmark not defined.
4.1.2	Supplier Development & Localisation .....	Error! Bookmark not defined.
4.2	Subcontracting .....	Error! Bookmark not defined.
4.2.1	Preferred subcontractors .....	Error! Bookmark not defined.
4.2.2	Limitations on subcontracting .....	Error! Bookmark not defined.
4.2.3	Attendance on subcontractors .....	Error! Bookmark not defined.
4.3	Plant and Materials.....	Error! Bookmark not defined.
4.3.1	Quality .....	Error! Bookmark not defined.
4.3.2	Plant & Materials provided "free issue" by the <i>Employer</i> .....	Error! Bookmark not defined.
4.3.3	<i>Contractor's</i> procurement of Plant and Materials .....	Error! Bookmark not defined.
4.3.4	Spares and consumables .....	Error! Bookmark not defined.
4.3.5	Warrantees.....	Error! Bookmark not defined.
4.4	Tests and inspections before delivery .....	Error! Bookmark not defined.
4.4.1	Tender Demonstration Test .....	Error! Bookmark not defined.
4.4.2	Factory Acceptance Test .....	Error! Bookmark not defined.
4.4.3	Delivery to Site .....	Error! Bookmark not defined.
4.5	<i>Contractor's</i> Equipment (including temporary works). .....	Error! Bookmark not defined.
5	Construction .....	Error! Bookmark not defined.
5.1	Temporary works, Site services & construction constraints.....	Error! Bookmark not defined.
5.1.1	<i>Employer's</i> Site entry and security control, permits, and Site regulations..	Error! Bookmark not defined.
5.1.2	Restrictions to access on Site, roads, walkways and barricades	Error! Bookmark not defined.
5.1.3	People restrictions on Site; hours of work, conduct and records.	Error! Bookmark not defined.
5.1.4	Health and safety facilities on Site .....	Error! Bookmark not defined.
5.1.5	Publicity and progress photographs .....	Error! Bookmark not defined.
5.1.6	<i>Contractor's</i> Equipment .....	Error! Bookmark not defined.
5.1.7	Equipment provided by the <i>Employer</i> .....	Error! Bookmark not defined.
5.1.8	Site services and facilities .....	Error! Bookmark not defined.
5.1.9	Facilities provided by the <i>Contractor</i> .....	Error! Bookmark not defined.
5.1.10	Existing premises, inspection of adjoining properties and checking work of <i>Others</i> .....	Error! Bookmark not defined.
5.1.11	Excavations and associated water control.....	Error! Bookmark not defined.
5.1.12	Underground services, other existing services, cable and pipe trenches and covers .....	Error! Bookmark not defined.
5.1.13	Control of noise, dust, water and waste.....	Error! Bookmark not defined.
5.1.14	Sequences of construction or installation .....	Error! Bookmark not defined.
5.1.15	Giving notice of work to be covered up.....	Error! Bookmark not defined.
5.2	Completion, testing, commissioning and correction of <i>Defects</i> .....	Error! Bookmark not defined.
5.2.1	Work to be done by the Completion Date .....	Error! Bookmark not defined.
5.2.2	Use of the <i>works</i> before Completion has been certified .....	Error! Bookmark not defined.
5.2.3	Commissioning .....	Error! Bookmark not defined.
5.2.4	Start-up procedures required to put the <i>works</i> into operation .....	Error! Bookmark not defined.
5.2.5	Take over procedures .....	Error! Bookmark not defined.
5.2.6	Access given by the <i>Employer</i> for correction of <i>Defects</i> .....	Error! Bookmark not defined.
5.2.7	Performance tests after Completion .....	Error! Bookmark not defined.
5.2.8	Training and technology transfer .....	Error! Bookmark not defined.
5.2.9	Operational maintenance after Completion .....	Error! Bookmark not defined.
6	Plant and Materials standards and workmanship .....	Error! Bookmark not defined.
6.1	Investigation, survey and Site clearance .....	Error! Bookmark not defined.
6.2	Closed Circuit Television <i>works</i> .....	Error! Bookmark not defined.
6.2.1	General .....	Error! Bookmark not defined.
6.2.2	Pump Station's Guard House .....	Error! Bookmark not defined.
6.2.3	Electrical <i>works</i> .....	Error! Bookmark not defined.
6.2.4	Civils <i>works</i> .....	Error! Bookmark not defined.
6.3	Removal of existing CCTV Plant & equipment .....	Error! Bookmark not defined.
6.3.1	General .....	Error! Bookmark not defined.
6.3.2	Packaging .....	Error! Bookmark not defined.
6.3.3	Storage.....	Error! Bookmark not defined.
6.3.4	Transport.....	Error! Bookmark not defined.

7 List of drawings..... **Error! Bookmark not defined.**

7.1 Standards issued by the *Employer* ..... **Error! Bookmark not defined.**

7.2 Drawings issued by the *Employer*..... **Error! Bookmark not defined.**

Appendix A : Technical Specifications Index..... **Error! Bookmark not defined.**

Appendix B : Project Methodology ..... **Error! Bookmark not defined.**

Appendix C : SHE documents ..... **Error! Bookmark not defined.**

Appendix D : Quality Documents..... 6



## **1 Description of the works**

### **1.1 Executive Overview**

Eskom has three pump stations which are occupied by personnel and the current state of some of the sewage treatment plants is not up to standard. The pump stations in question are Wintershoek, Nooitgedacht, Bosloop and Vygeboom. The Wintershoek and Nooitgedacht pump stations are in the same place, that being Nooitgedacht pump station, and they are divided by a road inside the pump station.

The Nooitgedacht side of the pump station has an existing bio plant that treats the sewage that is generated from the single quarters as well as the ablution facilities on the Nooitgedacht side of the pump station. This bio plant does not have an irrigation system connected to it. The final effluent remains in the final chamber where it is collected by the honeysucker. The Nooitgedacht pumphouse has a septic tank that is located just outside the pumphouse, and this septic tank processes all the sewage that emanates from the toilets inside the pumphouse.

There is also an old defunct bio plant on the Nooitgedacht side of the pump station. This plant is no longer in operation and there is no sewage flowing to this plant at present.

The Wintershoek side of the pump station has a septic tank located just behind the pump house which collects all the sewage from the toilets in the pump house. This sewage flows underground once treated.

The Wintershoek pump station also has a septic tank and French drain system which processes the sewage from the security building located at the entrance of the pump station. Sewage flows into the septic tank and thereafter into French drain system and this is where the sewage is separated from the water. The perforated French drain pipework allows for the cleaner water to flow into topsoil. The sewage is treated by the septic tank, but the quality of the final effluent water does not meet the Department of Water and Sanitation (DWS) standards for disposal.

The Bosloop and Vygeboom pump stations have septic tanks installed near each of their respective pumphouse. These septic tanks treat the sewage the comes from the ablution facilities in the pumphouses.

These pump stations also have existing bio plants which have not been in operation for an extended period. There are existing inflows to these bio plant from the existing sewer lines which come from the ablution facilities on site. The sewage flows via existing pipework to these bio plants whereafter the sewage flows into contact tanks. The contact tanks are rusted and are no longer fit for purpose. The contact tanks have rotating drives which ensure that the sewage is aerated to improve the bio-digestion by the bacteria. The motor, discs, motor drive, short shaft, gear drive, beaming shaft that drive the rotating assemblies are also broken. The outlet chambers of the contact tanks are concrete structures with steel inlet and outlet pipes as well as outlet and inlet valves. The valves in these chambers no longer function and the outlet to these chambers go via their respective chlorination chambers which are also not operational.

Each of the respective bio plants have nearby junction boxes which are the termination points for the incoming power cable. The junction boxes and the power cables to the bio plants and these cables are no longer working.

The sewage plants at Bosloop, Vygeboom and Wintershoek pump stations have become inoperable as detailed above and need to be replaced with newer plants. The plants which are to be installed need to comply to General Authorisations in terms of section 39 of the national water Government Notice 665 for Irrigation of any land with waste or water containing waste generated through any industrial activity or by a waterwork.

### **1.2 Employer's objectives and purpose of the works**

#### **1.2.1 Objectives**

The *Employer's* objectives are to have packaged sewage plants at the respective sites which have all the necessary equipment contained within the plant to produce an effluent water quality that can be used for irrigation.

#### **1.2.2 Purpose**

The purpose of the works is to have sewage plants that comply to General Authorisations in terms of section 39 of the national water Government Notice 665 for Irrigation of any land with waste or water containing waste generated through any industrial activity or by a waterwork.

**APPENDIX A: QUALITY DOCUMENTS**

#	Folder	Document Number	Document Title
00	Quality Documents	240-105658000	<i>Supplier Quality Management Specification</i>
		240-126469599	<i>Method Statement Template</i>
		240-109253302	<i>ITP Template</i>
		240-109253698	<i>Typical Contract Quality Plan Template</i>
		240-12248652	<i>List of Returnables</i>
		240-68099512	<i>Form A</i>

## C3.2 **CONTRACTOR'S WORKS INFORMATION**

This section of the Works Information will always be contract specific depending on the nature of the *works*. It is most likely to be required for design and construct contracts where the tendering contractor will have proposed specifications and schedules for items of Plant and Materials and workmanship, which once accepted by the *Employer* prior to award of contract now become obligations of the *Contractor* per core clause 20.1.

Typical sub headings could be

- a) *Contractor's* design
- b) Plant and Materials specifications and schedules
- c) Other

## PART 4: SITE INFORMATION

### 4.1. General description

The *works* is situated at Nooitgedacht, Bosloop and Vygeboom Pump Stations in the Mpumalanga province of South Africa. Drawings of the general layout of the sites have been provided in Technical Specifications Supporting Documents in C3.1: EMPLOYER'S WORKS INFORMATION Appendix A.

The Pump Stations are access controlled. The *Project Manager* arranges site access on request from the *Contractor* prior to site establishment. The sites are accessible from public roads and dirt roads.

The Contractor confines his activities to designated sites unless he has made prior formal arrangements with the owners. The Contractor is liable for all claims resulting from damages caused by him.

The Employer expects the Contractor, his staff or agents to maintain good public relations with Land owners and members of the public at all times.

The Contractor maintains access to site in good order at his own expense during period of use. All workers will be subjected to do the induction before they can be given access.

All safety and covid19 rules will be strictly adhered to. Access control rules and Eskom procedure will be followed accordingly.

### 4.2. Existing buildings, structures, and plant & machinery on the Site

Existing infrastructure at the sites are shown on the layout and facilities drawings provided in C3.1: EMPLOYER'S WORKS INFORMATION Appendix A.

### 4.3. Subsoil information

The subsoil is estimated to have 85% soft soil, 10% medium soil and 5% hard soil including rocks.

### 4.4. Hidden services

The contractor must scan for any underground infrastructure prior to any digging is done. Any damage to infrastructure, caused by the Contractor, from access site or performing the *works* remains the responsibility of the Contractor to make good.