



NEC3 Engineering & Construction Contract

Between

**ESKOM HOLDINGS SOC Ltd
(Reg No. 2002/015527/30)**

and

(Reg No. _____)

for

**CONSTRUCTION OF REMOVABLE BUNDWALL AT
APOLLO SUBSTATION**

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Tender No. CORP5619

Part C1: Agreements & Contract Data

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C1.1 Form of Offer & Acceptance

Offer

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

CONSTRUCTION OF REMOVABLE BUNDWALL AT APOLLO SUBSTATION

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 B	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 ¹	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
Name & organisation)

signature of
witness

Date

Tenderer's CIDB registration number (if applicable)

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

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)

Capacity

for the
Employer

Name & signature of witness
(Insert name and address of organisation)
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		
2		
3		
4		
5		
6		
7		

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.

	For the tenderer:	For the Employer
Signature	_____	_____
Name	_____	_____
Capacity	_____	_____
On behalf of	_____ <i>(Insert name and address of organisation)</i>	_____ <i>(Insert name and address of organisation)</i>
Name & signature of witness	_____	_____
Date	_____	_____

C1.2 ECC3 Contract Data

Part one - Data provided by the *Employer*

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
	dispute resolution Option	B: Priced contract with bill of quantities
	and secondary Options	W1: Dispute resolution procedure
		X2 Changes in the law
		X7: Delay damages
		X15: Limitation of <i>Contractor's</i> liability for design to reasonable skill and care
		X16: Retention
		X18: Limitation of liability
		Z: <i>Additional conditions of contract</i>
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)	
10.1	The <i>Employer</i> is (Name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
10.1	The <i>Project Manager</i> is: (Name)	
	Address	
	Tel	
	Fax	
	e-mail	

10.1 The *Supervisor* is: (Name)

Address

Tel No.

Fax No.

e-mail

11.2(13) The *works* are

Storage Yard 1

- Demolish existing bundwalls in front of transformers - 8 x 3.7m
- Construct removable bundwalls – 13 x 3.7m

Storage Yard 2

- Construct removable bundwalls at entrance – 1 x 10.7m
- Demolish existing bundwalls in front of transformers - 5 x 5.3m
- Construct removable bundwalls – 12 x 5.3m

Storage yard 3(DC side)

- Demolish existing bundwalls in front of transformers - 4 x 4m

Construct removable bundwalls – 7 x 4m

11.2(14) The following matters will be included in the Risk Register

- Weather: Abnormally cold, windy or heavy rain may be experienced and extremely hot and humid weather conditions. The contractor needs to take precautions when planning the sequence and resources for the work.
- Industrial action
- Hijacking: Be vigilant when driving
- Theft: The site and working area are to be guarded to ensure that no theft can take place that will affect the continuity of supply or loss to the employer's existing assets
- Community protest: labour issues to be managed if the local labour is to be hired to limit any disruption of the work by local residents.
- Health and Safety: The contractor to include proper PPE and note where the nearest health care facilities are and the response time of emergency medical rescue service providers in case of an emergency.

11.2(15)	The <i>boundaries of the site</i> are	Perimeter of Apollo AC substation	
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 weeks	
2	The Contractor's main responsibilities	Data required by this section of the core clauses is provided by the Contractor in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.	
3	Time		
11.2(3)	The <i>completion date</i> for the whole of the works is	30 June 2022.	
11.2(9)	The <i>key dates and the conditions</i> to be met are:	Condition to be met	key date
		1 Site establishment	17 January 2022
30.1	The <i>access dates</i> are: The Supplier shall request access to the Employer's site, from the Project Manager, at least two weeks prior to access being required. Access to site shall be granted at any time during the calendar days. Access to site may be granted at other times, on request, at the Project Manager's sole discretion.	Part of the Site	Date
		1	
31.1	The Contractor is to submit a first programme for acceptance within	Two weeks of the Contract Date.	
31.2	The <i>starting date</i> is	01 January 2021	
32.2	The Contractor submits revised programmes at intervals no longer than	Two weeks.	
35.1	The Employer is not willing to take over the works before the Completion Date.	The works will be taken from the Contractor as when is completed.	
4	Testing and Defects		
42.2	The <i>defects date</i> is	52 weeks after Completion of the whole of the works.	
43.2	The <i>defect correction period</i> is	Four weeks	
5	Payment		
50.1	The <i>assessment interval</i> is	between the 25 day of each successive month.	

51.1	The <i>currency of this contract</i> is the	South African Rand.
51.2	The period within which payments are made is	Four weeks.
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>

6 Compensation events

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</p>	<p>Apollo substation</p> <p>the cumulative rainfall (mm)</p> <p>the number of days with rainfall more than 10 mm</p> <p>the number of days with minimum air temperature less than 0 degrees Celsius</p> <p>the number of days with snow lying at 09:00 hours South African Time</p> <p>and these measurements:</p> <p>South African Weather bureau</p>
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were recorded at:

Apollo Substation

and which are available from:

the South African Weather Bureau and included in Annexure A to this Contract Data provided by the Employer

7	Title	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.
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	1. EMP to be considered when using hazardous chemical substances 2. Foundations, earthworks, restricted excavation, , Be alert when entering a HV yard, Control rooms and comply with instructions as per the signposting 3. More risk on the baseline risk assessment
9	Termination	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.
10	Data for main Option clause	
B	Priced contract with bill of quantities	
60.6	The <i>method of measurement</i> is	In accordance with the latest amendment to SAN 1200 and "standard system of measuring builders work" 6 th Edition, issued by the Association of South African Quantity Surveyors and amended as stated in Part C2.1
11	Data for Option W1	
W1.1	The <i>Adjudicator</i> is	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 www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
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 www.ice-sa.org.za) or its successor body.
W1.4(2)	The <i>tribunal</i> is:	arbitration.
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	Gauteng, Johannesburg 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 of the Association of Arbitrators (Southern Africa) or its successor body.
	- if the arbitration procedure does not state who selects an arbitrator, is	
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.
X7	Delay damages (but not if Option X5 is also used)	
X7.1	Delay damages for Completion of the whole of the works are	0.1% per day up to 10% of the contract value.
X15	Limitation of the Contractor's 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%
X18	Limitation of liability	
X18.1	The Contractor's liability to the Employer for indirect or consequential loss is limited to:	R0.0 (zero Rand)
X18.2	For any one event, the Contractor's liability to the Employer for loss of or damage to the Employer's property is limited to:	the amount of the deductibles relevant to the event
X18.3	The Contractor's 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"> the total of the Prices at the Contract Date and the amounts excluded and unrecoverable from the Employer's assets policy for correcting the Defect (other than the resulting physical damage which is not excluded) plus the applicable deductible as at contract date.
X18.4	The Contractor's total liability to the Employer 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 Contractor's total liability for the

		<p>additional excluded matters is not limited.</p> <p>The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for</p> <ul style="list-style-type: none"> • Defects due to his design which arise before the Defects Certificate is issued, • Defects due to manufacture and fabrication outside the Site, • loss of or damage to property (other than the <i>works</i>, Plant and Materials), • death of or injury to a person and • infringement of an intellectual property right.
X18.5	The end of liability date is	<p>(i) Seven 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.</p> <p>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>
Z	The Additional conditions of contract are	Z1 to Z15 always apply.
Z1	Cession delegation and assignment	
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.	

Z2 Joint ventures

- Z2.1 If the *Contractor* 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 *Employer* for the performance of this contract.
- Z2.2 Unless already notified to the *Employer*, the persons or organisations notify the *Project Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Contractor* 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 minimum limit of indemnity
Loss of or damage to the <i>works</i> , Plant and Materials	The replacement cost where covered by the <i>Employer's</i> insuranc The <i>Employer's</i> policy deductible, at Contract Date, where covered the <i>Employer's</i> insurance
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	<u>Loss of or damage to property</u> <u>Employer's property</u> The replacement cost where covered by the <i>Employer's</i> insuranc The <i>Employer's</i> policy deductible, at Contract Date, where covered the <i>Employer's</i> insurance <u>Other property</u> The replacement cost <u>Bodily injury to or death of person</u> The amount required by applica 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
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Z 13.2

Replace core clause 87 with the following:

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

INSURANCE TABLE B

Insurance against or name of policy	Minimum amount of cover or minimum of indemnity
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:

AAIA	means approved asbestos inspection authority.
ACM	means asbestos containing materials.
AL	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.
Ambient Air	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.
Compliance Monitoring	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.
OEL	means occupational exposure limit.
Parallel Measurements	means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.
Safe Levels	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.
Standard	means the <i>Employer's Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.</i>
SANAS	means the South African National Accreditation System.
TWA	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 station]

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.

Month	Weather measurement				
	Cumulative rainfall (mm)	Number of days with rain more than 10mm	Number of days with min air temp < 0 deg.C	Number of days with snow lying at 08:00 CAT	[Other measurements if applicable]
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					

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

Part two - Data provided by the Contractor

Clause	Statement	Data
10.1	The Contractor is (Name): Address Tel No. Fax No.	
11.2(8)	The direct fee percentage is The subcontracted fee percentage is	% %
11.2(18)	The working areas are the Site and	
24.1	The Contractor's 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 completion date for the whole of the works is	
11.2(14)	The following matters will be included in the Risk Register	
11.2(19)	The Works Information for the Contractor's design is in:	
31.1	The programme identified in the Contract Data is	
B	Priced contract with bill of quantities	
11.2(21)	The bill of quantities is in	

11.2(31)		The tendered total of the Prices is	(in figures)		
			(in words), excluding VAT		
B		Priced contract with bill of quantities	Data for the Shorter Schedule of Cost Components		
41 SSCC	in	The percentage for people overheads is:	%		
21 SSCC	in	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	Minus %		
22 SSCC	in	The rates of other Equipment are:	Equipment	Size or capacity	Rate
61 SSCC	in	The hourly rates for Defined Cost of design outside the Working Areas are Note: Hourly rates are estimated 'cost to company of the employee' and not selling rates. Please insert another schedule if foreign resources may also be used	Category of employee		Hourly rate
62 SSCC	in	The percentage for design overheads is	%		
63 SSCC	in	The categories of design employees whose travelling expenses to and from the Working Areas are included in Defined Cost are:			

PART 2: PRICING DATA
ECC3 Option B

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option B	
C2.2	The <i>bill of quantities</i>	

C2.1 Pricing assumptions: Option B

How work is priced and assessed for payment

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

Identified and defined terms 11
11.2

(21) The Bill of Quantities is the *bill of quantities* as changed in accordance with this contract to accommodate implemented compensation events and for accepted quotations for acceleration.

(28) The Price for Work Done to Date is the total of

- the quantity of the work which the *Contractor* has completed for each item in the Bill of Quantities multiplied by the rate and
- a proportion of each lump sum which is the proportion of the work covered by the item which the *Contractor* has completed.

Completed work is work without Defects which would either delay or be covered by immediately following work.

(31) The Prices are the lump sums and the amounts obtained by multiplying the rates by the quantities for the items in the Bill of Quantities.

This confirms that Option B is a re-measurement contract and the bill comprises only items measured using quantities and rates or stated as lump sums. Value related items are not used. Time related items are items measured using rates where the rate is a unit of time.

Function of the Bill of Quantities

Clause 55.1 in Option B states, "Information in the Bill of Quantities 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 Bill, 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 Bill of Quantities. The Bill of Quantities is only a pricing document.

Guidance before pricing and measuring

Employers preparing tenders or contract documents, and tendering contractors are advised to consult the sections dealing with the bill of quantities in the NEC3 Engineering and Construction Contract Guidance Notes before preparing the *bill of quantities* or before entering rates and lump sums into the *bill*.

There is no general provision in Option B for payment for materials on Site before incorporation into the *works*. If secondary Option X14 Advanced payment has not been used then the tendering contractor may obtain the same effect by inserting appropriate items in the method related charges where the *method of measurement* allows, or alternatively making allowance in the rates of the *bill of quantities* for the financing of Plant and Materials until they are incorporated in the *works*.

When compensation events arise, the default position is that the Bill of Quantities is not used to calculate the cost effect of the event. Defined Cost and the resulting Fee is used and Defined Cost includes all components of cost which the *Contractor* is likely to incur, including so called P & G items. Rates and lump sums from the Bill of Quantities, or from any other source, may be used instead of Defined Cost and the Fee only if the *Contractor* and *Project Manager* agree. If they are unable to agree, then Defined Cost plus Fee is used.

Measurement and payment

Symbols

The units of measurement described in the Bill of Quantities are metric units abbreviated as follows:

Abbreviation	Unit
%	percent
h	hour
ha	hectare
kg	kilogram
kl	kilolitre
km	kilometre
km-pass	kilometre-pass
kPa	kilopascal
kW	kilowatt
l	litre
m	metre
mm	millimetre
m ²	square metre
m ² -pass	square metre pass
m ³	cubic metre
m ³ -km	cubic metre-kilometre
MN	meganewton
MN.m	meganewton-metre
MPa	megapascal
No.	number
sum	Lump sum
t	tonne (1000kg)

General assumptions

Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made in the quantities for waste.

The Prices and rates stated for each item in the Bill of Quantities shall be treated as being fully inclusive of all work, risks, liabilities, obligations, overheads, profit and everything necessary as incurred or required by the *Contractor* in carrying out or providing that item.

An item against which no Price is entered will be treated as covered by other Prices or rates in the *bill of quantities*.

The quantities contained in the Bill of Quantities may not be final and do not necessarily represent the actual amount of work to be done. The quantities of work assessed and certified for payment by the *Project Manager* at each assessment date will be used for determining payments due.

The short descriptions of the items of payment given in the *bill of quantities* are only for the purposes of identifying the items. Detail regarding the extent of the work entailed under each item is provided in the Works Information.

Departures from the *method of measurement*

Amplification of or assumptions about measurement items

The following is provided to assist in the interpretation of descriptions given in the *method of measurement*. In the event of any ambiguity or inconsistency between the statements in the *method of measurement* and this section, the interpretation given in this section shall be used.

C2.2 the *bill of quantities*

Use this page as a summary page or as a cover page to the *bill of quantities*.

CONSTRUCTION OF REMOVABLE BUNDWALLS AT APOLLO SUBSTATION

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
PRELIMINARIES AND GENERAL					
Fixed Costs					
1	Conditions of contract	Sum	1,00		
2	Site Establishment	Sum	1,00		
3	SHEQ compliance, as per Eskom and all other statutory requirements.	Sum	1,00		
4	Tools and Equipment	Sum	1,00		
5	Consumables	Sum	1,00		
6	Security during construction	Sum	1,00		
7	Site De-establishment	Sum	1,00		
Time Related Costs					
8	Accommodation(including supervisor)	Month	2,00		
9	Supervision and Management during construction.	Month	2,00		
10	Company and head office overheads cost (i.e ablutions , access, storage etc), during construction.	Month	3,00		
11	SHEQ compliance, as per Eskom and all other statutory requirements.	Month	3,00		
12	Tools and Equipment	Month	2,00		
13	Other time related obligations (Transport)	Month	2,00		
Section No.2					
Bill No.1					
Alterations (Provisional)					
Removal of existing works					
NOTE: Removed material to be handed over to Eskom representative and all other rubble to be disposed off at a registered dump site.					
Storage Yard 1A					
14	Carefully demolish and remove the exist 3,7m bundwall including making good face brickwork finish.	m	29,60		
Storage Yard 1B					
15	Carefully demolish and remove the exist 5,3m including making good face brickwork finish.	m	26,50		
Storage Yard 3(DC Yard)					
16	Carefully demolish and remove the exist 4m bundwall including making good face brickwork finish.	m	16,00		
Rubble disposal.					
17	Transport all rubble from demolitions and the works to a nearby registered dumping site according to environmental requirements	Item	1,00		

Supply and Construction of the removable bundwall at Apollo Substation.				
Reinforced Precast Concrete				
<u>Storage Yard 1A</u>				
18	Supply and construct 3,7m adjustable removable bundwall finished smooth as per specification on drawing number: Apo20P25-SE-D53	m	48,10	
<u>Storage Yard 1B</u>				
19	Supply and construct 5,3m adjustable removable bundwall finished smooth as per specification on drawing number: Apo20P25-SE-D53	m	63,80	
<u>Storage Yard 2</u>				
20	Supply and construct 10,7m adjustable removable bundwall finished smooth as per specification on drawing number: Apo20P25-SE-D53	m	10,70	
<u>Storage Yard 3(DC Yard)</u>				
21	Supply and construct 4m adjustable removable bundwall finished smooth as per specification on drawing number: Apo20P25-SE-D53	m	28,00	
Provisional Sum				
Brickwork of Facebrick in class 1 mortar				
22	One brick walls	m2	11,47	
23	Extra over brickwork for face brickwork	m2	11,47	
24	Cutting toothings and bonding new face brickwork to existing	m2	6,80	
TOTAL AMOUNT (EXCL VAT)				

Document reference	Title	No pages	of
	This cover page	1	
C3.1	<i>Employer's Works Information</i>	17	
C3.2	<i>Contractor's Works Information</i>		
	Total number of pages		

C3.1: EMPLOYER'S WORKS INFORMATION

1 Description of the works

1.1 Executive overview

This scope of work captures the work required at Apollo Substation transformer storage area. This scope entails all work required to achieve the activities as set out in the substation user requirements specifications.

At Apollo substation, a portion of bundwalls are demolished during transformer removals and needs to be reinstated. This is a costly exercise and thus the need for a removal bundwalls.

1.2 Employer's objectives and purpose of the works

The objective of the project is to safe coat and having removable bundwalls will achieve that. Apollo Substation contains three transformer storage yards. The first two yards are located next to one another while the third yard is located on the eastern side of the yard close to the DC generators. The following work is required

Scope of work is as follows:

Storage Yard 1

Demolish existing bundwalls in front of transformers - 8 x 3.7m

Construct removable bundwalls – 13 x 3.7m

Storage Yard 2

Construct removable bundwalls at entrance – 1 x 10.7m

Demolish existing bundwalls in front of transformers - 5 x 5.3m

Construct removable bundwalls – 12 x 5.3m

Storage yard 3(DC side)

Demolish existing bundwalls in front of transformers - 4 x 4m

Construct removable bundwalls – 7 x 4m

NB

The Contractor to have SACPCMP certificate for Candidate of professional Project Manager.
Schedule to be done on Ms Project and Method statement to be part of the tender returnable

1.3 Interpretation and terminology

The following abbreviations are used in this Works Information:

Abbreviation	Meaning given to the abbreviation
AFC	Approved for construction

OBL	Outside battery limits
PM	Project Manager
EA	Engineering Assistance
QS	Quantity Surveyor
ACB	Access Control Building

2 Management and start up.

2.1 Management meetings

Site Inaugural meeting will be held on site two (2) weeks prior to commencement of site activities and the contractor shall avail safety file for auditing purposes.

Project progress meetings will be held once every fortnight on site in order to track work progress, safety, environmental and other issues. A contractor must avail himself to these meetings.

Meetings of a specialist nature may be convened at times and locations to suit the Parties, the nature and the progress of the works. Records of these meetings shall be submitted to the *Project Manager* by the person convening the meeting within five days of the meeting.

Regular meetings of a general nature may be convened and chaired by the Project Manager as follows:

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the conditions of contract to carry out such actions or instructions.

Meetings of a specialist nature may be convened as specified elsewhere in this Works Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the works. Records of these meetings shall be submitted to the Project Manager by the person convening the meeting within five days of the meeting.

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

2.2 Documentation control

The documentation supplied by the Contractor shall include be in both hard copy and electronic form. A minimum of three hard copies will be provided. Each document shall include, at a minimum, the following information:

- Title
- Status
- Revision
- References
- Purpose
- Description

2.3 Health and safety risk management

The Contractor shall at all times comply with the health and safety requirements prescribed by law as they may apply to the works. The Contractor shall comply with the health and safety requirements contained in in the following documents:

- SHEQ policy – 32 727
- Eskom Procurement and supply chain management procedure – 32-1034
- SHE Requirements for the Eskom Commercial process – 32- 726
- Contractor health and safety requirements – 32-136
- Integrated SHE organisation: roles and responsibilities and statutory appointments – 32-296
- Lifesaving rules – 240-62196227
- Working at heights – 32-418
- Eskom Vehicle safety specification – 32-345
- Employer's Health and Safety requirements - TST32-136
- COVID 19 PPE

The authorization procedure for a permit to work shall be followed by the Contractor before commencing work on site. It is the Contractor's responsibility to ensure that a permit to work is obtained before access to the work can be given. It is the Contractor's responsibility to also ensure that the safety file has been audited by the Health and Safety Representatives before establishing site.

The Contractor must be in possession of current first aid certificate. The Contractor's trucks must have a valid and current crane test certificate with the truck driver and crane operator's certificate. All tools must have valid and current test certificates, which must be produced two weeks before site establishment.

The Contractor will only leave site once a written site instruction has been issued by an Eskom site representative. Working hours will be from 08h00 to 16h00 during week days (as per outages) ,weekend work to be carried out only on request by Eskom.

The Contractor is to have an Eskom certified and authorized person available in each area where work is being performed at all times in accordance with Eskom transmission standard TST32-136 contractor safety in a high voltage environment.

A complete safety and risk assessment must be done before the contractor starts works on site. The Site Supervisor will be monitoring the works continuously to ensure strict adherence to Safety rules. If needed, the contractor is to visit the site at the Contractor's own cost before work commences to familiarize with the scope of works and to assess any safety issues.

Before any excavation is commenced, it will be the responsibility of the Contractor to ascertain from the Site Supervisor the position of any existing services on site. Once these are indicated to the contractor they shall be deemed "known". Any costs incurred for repairs to any "known" services shall be for the contractor's account.

The Contractor shall allow safe access for other contractors and Eskom personnel when required.

The Contractor shall establish a refuse control system. All waste is to be collected and disposed of as required by Eskom and the local authority.

The Contractor shall make his own arrangements for the provision of accommodation for his employees.

2.4 Environmental constraints and management

The Contractor is required to ensure that all goods, services or works supplied in terms of the tender/contract/order conform to all applicable environment legislation, Authorisations, EPC32-727: Eskom SHEQ Policy, ST32-726: SHE Requirements for the Eskom Commercial Process (additional requirements) and Project Specific Environmental Management Plan (EMP).

The Contractor shall control his activities and processes in accordance with Eskom's Environmental Policies: TST41-120 (rev 2). The Eskom EMP provides the Aspects and Impacts that will require management and must be followed strictly. The Contractor shall prepare a separate mitigation plan for all environmental

concerns raised through the EMP and in any other relevant forum. The contractor must develop method statements based on the EMP. All developed method statements must be approved by the Employer.

Any changes to the approved EMP shall be reported and approved by (BUER) and Project Manager prior to the commencement of work and during construction. The supplier must ensure that all sub-contractors' environmental management programmes comply with the contract shall define the specific system elements applicable to the subcontractor's scope of work or supply.

Environmental meetings between Eskom and the Contractor may be held regularly and copies of the minutes may be submitted to Eskom on request. The contractor is to send a flash report for any environmental incidences that has occurred on site as soon as possible or within 24 hours to the SS /Grid Environmental and PM clearly stating any impact to the environment.

Contractor must now sign-off TRM-FM-0038 – Eskom Holdings Transmission division contractor environmental compliance Proformas.

If waste is generated during project, it must be disposed at a registered site and contractor shall retain records of disposal.

The contractor shall conform to requirements from the following documents:

- Eskom SHEQ Policy (EPC 32-727)
- Eskom Environmental Management plan
- TST41-120 rev 2 (Environmental Requirements for the Procurement of Assets, Goods and Services)
- Please attach ST32-726 for additional SHE requirements
- TRM-FM 0081 – Environmental Tender evaluation form
- TRM-FM 0038 – Contractor Environmental Compliance

The *Contractor* shall comply with the environmental criteria and constraints stated in the Eskom Environmental Management plan. Returnable shall include:

- End of life cycle of equipment (disposal method).
- Specification for the equipment and inform Eskom of any hazardous components/substances
- Refer to TRM-FM 0081 – Environmental Tender evaluation form for other tender returnable

2.5 Quality assurance requirements

The following standards contain provisions that, through reference in this text, constitute provisions of this specification. At the time of publication the revisions indicated were valid. All standards are subject to review, and parties entering into service agreements based on this specification are encouraged to investigate the possibility of applying the most recent revisions of the standards listed below. Information on currently valid national and international standards may be obtained from the Information Centre at Megawatt Park and Technology Standardisation Department.

In the event of conflict between documents invoked here and the contents of this specification, the contents of this specification shall be considered to have preference. Such conflict shall be pointed out to the Employer for confirmation.

- Eskom NWS 1674 - "Standard Specification for approval of drawings submitted by Contractors and Contractors."
- Project Quality plan

The Employer requires that the Contractor operate a quality management system as stated in the Scope. The Employer requires that the Contractor provide a quality policy statement and quality plan which complies with requirements stated in the Scope.

2.6 Programming constraints

The Contractor shall include all stages including deliverables per stage in the programme. The programme shall be submitted to the Employer for acceptance in MS Projects format.

2.7 Contractor's management, supervision and key people

Defined costs are actual costs incurred by the Contractor. These costs should not include profit or company overheads. All compensation events will only be paid on defined costs.

In an event of labour costs, the Contractor is required to provide pay slips of the employees used. The labour mark-up indicated in this contract will be added to these actual costs to form the final value of the compensation event.

In the event that the Contractor is required to supply anything other than people, the Contractor is required to provide a copy of his Contractors invoice. The profit and overhead mark-up indicated in this contract will be added to these actual costs to form the final value of the compensation event.

Copies of payslips and Contractors invoices are to accompany the requests for compensation events.

The Contractor shall under no circumstances refuse additional work on the basis of costs as defined above

2.8 Invoicing and payment

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 showing the amount due for payment equal to that stated in the *Project Manager's* payment certificate.

The *Contractor* shall address the tax invoice to Eskom Holdings SOC Ltd and include on each invoice the following information:

- Name and address of the *Contractor* and the *Project Manager*;
- The contract number and title;
- *Contractor's* VAT registration number;
- The *Employer's* VAT registration number 4740101508;
- Description of service provided for each item invoiced based on the Price List;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
- (add other as required)

Add procedures for invoice submission and payment (e. g. electronic payment instructions)

2.9 Contract change management

Defined costs are actual costs incurred by the Contractor. These costs should not include profit or company overheads. All compensation events will only be paid on defined costs.

In an event of labour costs, the Contractor is required to provide pay slips of the employees used. The labour mark-up indicated in this contract will be added to these actual costs to form the final value of the compensation event.

In the event that the Contractor is required to supply anything other than people, the Contractor is required to provide a copy of his Contractors invoice. The profit and overhead mark-up indicated in this contract will be added to these actual costs to form the final value of the compensation event.

Copies of payslips and Contractors invoices are to accompany the requests for compensation events.

The Contractor shall under no circumstances refuse additional work on the basis of costs as defined above

3 Engineering and the *Contractor's* design

3.1 *Employer's* design

No	Drawing Title	Drawing Number
1	Apollo adjustable removable bundwall	Apo2OP25-SE-D53

4 Procurement

4.1 People

4.1.1 Minimum requirements of people employed on the Site

All people employed on site by the Contractor shall have Police clearance before work on site can commence. The Contractor's employees shall be sober on site and may be subjected to random breathalyser tests

The Contractor shall comply with the Employer's site requirements in the use of labour for the works. Social distancing must be maintained at all times and have Covid 19 PPE.

4.1.2 BBBEE and preferencing scheme

The Contractor shall comply with the Employer's SDL requirement.

4.1.3 Accelerated Shared Growth Initiative – South Africa (ASGI-SA)

The *Contractor* complies with and fulfils the *Contractor's* obligations in respect of the Accelerated and Shared Growth Initiative - South Africa in accordance with and as provided for in the *Contractor's* ASGI-SA Compliance Schedule stated below

[Insert the agreed ASGI-SA Compliance Schedule here]

The *Contractor* shall keep accurate records and provide the *Project Manager* with reports on the *Contractor's* actual delivery against the above stated ASGI-SA criteria. [Elaborate on access to and format of records and frequency of submission etc.]

The *Contractor's* failure to comply with his ASGI-SA obligations constitutes substantial failure on the part of the *Contractor* to comply with his obligations under this contract.

4.2 Subcontracting

4.2.1 Preferred subcontractors

The Employer reserves the right to approve all subcontractors that the Contractor intends to enter into subcontracts with in order to make sure that the subcontractor complies with operational standards. The Contractor shall not subcontract more than twenty five percent (25%) of the whole of the contract

4.2.2 Subcontract documentation, and assessment of subcontract tenders

The principal contractor shall do safety audit for the subcontractor and submit the audit to the Project Manager. The NEC system is compulsory for all subcontract documentation.

4.2.3 Limitations on subcontracting

Subcontracting is limited to 25% of the contract value.

4.2.4 Attendance on subcontractors

The *Contractor* is responsible for providing the Works as if he had not subcontracted.

4.3 Plant and Materials

4.3.1 Quality

The *Contractor* shall control his activities and processes in accordance with Eskom's Quality Requirements for Procurement of Assets, Goods & Services TST41-168, as amended

4.3.2 Contractor's procurement of Plant and Materials

Contractor to provide all equipment necessary to complete the full scope of work and the contractor is responsible for the safe keeping of the equipment and material.

4.4 Tests and inspections before delivery

Steelwork to be inspected by the Quality person before delivery

5 Construction

5.1 Temporary works, Site services & construction constraints

5.1.1 Employer's Site entry and security control, permits, and Site regulations

Entry to the site is governed by the Grid's Engineering Assistant and the Contractor shall adhere to all regulations given.

All employees are to sign the Workers declaration on entering and leaving the working area. The Contractor is to have an Eskom certified and authorized ORHVS person available on site at all times in accordance with Eskom's Construction Safety, Health and Environmental Management 32-136. The authorized ORHVS person is to have a valid first aid level 2 certificate. The authorization procedure for a permit to work shall be done before the Contractor commences work on site. It is the Contractor's responsibility to ensure that the authorization procedure for a permit to work is obtained before access to the work can be given. Project Manager will make arrangement for Grid authorization.

The Contractor will be required to have an Eskom certified and authorized ORHVS person available in each area where work is being performed.

5.1.2 Restrictions to access on Site, roads, walkways and barricades

Access on site is restricted to the area in which the Contractor is working and which has been barricaded. Strictly no movement outside the barricaded working area unless escorted by authorized HV Plant personnel.

The majority of the work is to be performed in the live HV Yard and the contractor will take all necessary precautions and work in conjunction with Eskom personnel.

5.1.3 People restrictions on Site; hours of work, conduct and records

The Contractor is to supply Eskom with Police clearance for all the employees on site before Work commences.

The normal working hours shall be from 07:30 am to 04:30 pm. Any work done outside this duration must be arranged through the senior HV Plant supervisor.

The maximum speed limit on site is 40 km/h.

5.1.4 Health and safety facilities on Site

The Contractor is to provide his own toilet facilities on site and ensure that these facilities are kept in a clean condition to Eskom's satisfaction. No work on site will be allowed to commence before the toilet facilities are available on site. The Contractor to bring his/her own drinking water.

5.1.5 Environmental controls, fauna & flora, dealing with objects of historical interest

The Contractor shall control his activities and processes in accordance with Eskom's Environmental Requirements TST41-120.

The Contractor shall establish a refuse control system. All waste is to be collected and disposed of as required by Eskom and the Local Authority.

5.1.6 Title to materials from demolition and excavation

Rubble to be taken to a registered land-fill.

5.1.7 Cooperating with and obtaining acceptance of others

The Contractor's attention is drawn to the fact that other contractors will be on site and access and interfacing with them will be required. The Contractor shall allow safe access for other contractors and Eskom personnel when required.

5.1.8 Publicity and progress photographs

Warning signs and notices must be clearly displayed at all sites where work is taking place. It is the responsibility of the Contractor to ensure that all its workers and visitors adhere to all signs.

No photographs are to be taken without the permission of the E.A.

5.1.9 Contractor's Equipment

All equipment must be registered in the equipment register and as per 32-136. The Contractor is responsible for his own insurance of his equipment. The Contractor is to take stock of his material and equipment on a regular basis and any shortage to be reported to the Project Manager immediately, stating if it is hired or owned.

5.1.10 Site services and facilities

All the water necessary for construction and drinking purposes must be provided for by the Contractor. Electricity is available on site. The Contractor shall provide all connections, extensions and additional supply points necessary for the works. Any measures which the Contractor may require to maintain continuity and quality of supply shall be arranged by him at his own expense.
The Contractor shall provide everything else necessary for providing the Works.

5.1.11 Facilities provided by the Contractor

The Contractor supplies all plant and materials required for providing the Works.

There are no Office or Telephone facilities available on site. The Contractor is to provide his own facilities on site and ensure that these facilities are kept in a clean condition to Eskom's satisfaction.

There are no Toilet facilities available on site. The Contractor is to provide his own toilet facilities on site and ensure that these facilities are kept in a clean condition to Eskom's satisfaction. No work on site will be allowed to commence before the toilet facilities are available on site.

5.1.12 Existing premises, inspection of adjoining properties and checking work of Others

The contractor will be working in HV yard and should be confined to the barricaded area.

5.1.13 Survey control and setting out of the works

The Contractor is responsible for setting out the works.

5.1.14 Excavations and associated water control

All necessary precautions shall be taken to ensure that deep excavations are safe and that the sides are stable, if not they shall be battered. All excavations are to be properly barricaded at all times.

5.1.15 Underground services, other existing services, cable and pipe trenches and covers

Before any excavation is commenced, it will be the responsibility of the Contractor to ascertain from the "Engineering Assistant" the position of any existing services on site. Once these are indicated to the Contractor they shall be deemed "known". Any costs incurred for repairs to any "known" services shall be for the Contractor's account.

5.1.16 Control of noise, dust, water and waste

The Contractor shall control his processes and procedures so as to minimise noise and dust. All waste is to be collected and disposed of as required by Eskom and the Local Authority.

5.1.17 Sequences of construction or installation

Demolish old bundwall and install new removable once.

5.2 Completion, testing, commissioning and correction of Defects

5.2.1 Work to be done by the Completion Date

The Contractor shall have done everything required to provide the works except by the Completion Date.

5.2.2 Use of the *works* before Completion has been certified

Works will be taken from the Contractor as and when is completed.

5.2.3 Take over procedures

Takeover is after Completion. The Employer shall require the Contractor to provide training to Employer personnel.

5.2.4 Access given by the *Employer* for correction of Defects

The Project Manager arranges the Contractor access to and use of a part of the works which has been taken over if needed to correct a Defect. After the works have been put into operation, Entry to the site is governed by the Grid's Engineering Assistant and the Contractor shall adhere to all regulations given.

5.3 Civil engineering and structural works

Title	Date or revision	or Tick if publicly available
Eskom Standard Specifications		
Construction Safety, Health and Environmental Management 32-136	Latest Rev.	✓
Eskom Cardinal Rules 32-421	Latest Rev.	✓
Safety, Health and Environmental (SHE) Policy 32-94	Latest Rev.	✓
Smoking Procedure 32-36	Latest Rev.	✓
Vehicle and Driver Safety Management 32-93	Latest Rev.	✓
Eskom Vehicle Safety 32-345	Latest Rev.	✓
Working at Heights 32-418	Latest Rev.	✓
TST41-120 Environmental Requirements for the Procurement of Assets, Goods and Services.	Latest Rev.	✓
TST0015 Training, assessment and authorization of persons for the operation & maintenance of the Power System Contractor Safety in a High Voltage Environment	Latest Rev.	✓
TPC41-283 Non Conformance Procedure	Latest Rev.	✓
Occupational Health and Safety Act No. 85 of 1993	Latest Rev.	✓
TST41-168 Quality Requirements for Procurement of Assets, Goods & Services.	Latest Rev.	✓
Eskom Particular Specifications		
EPS 1 Specification for Earthmat	Attached	
240-82736997 Stringing, Cabling, Earthing & erection Specification for Transmission Substations	Latest Rev.	✓

5.4 Electrical & mechanical engineering works

Requirements are specified in the following standard: 240-82736997 Stringing, Cabling, Earthing & erection Specification for Transmission Substations

6 List of drawings

6.1 Drawings issued by the *Employer*

This is the list of drawings issued by the *Employer* at or before the Contract Date and which apply to this contract.

Note: Some drawings may contain both Works Information and Site Information.

Drawing number	Revision	Title
APO20P25-SE-D53	0	Apollo adjustable removal bundwall

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

This section could also be compiled as a separate file.

PART 4: SITE INFORMATION

Document reference	Title	No of pages
C4	This cover page	1
	Site Information	1
Total number of pages		

Part 4: Site Information

General description

The Apollo Substation is to the South East of Pretoria near the Rietvlei Dam Nature Reserve in Gauteng Province. Coordinates for Apollo substation are -25.918889S 28.276389E. All persons requiring access to site shall notify the Project Manager two (2) weeks before such access is required. The applicant shall provide proof of identification to the Project Manager with the site access application. A permit shall be issued and all contractors/visitors are required to visibly retain the permit at all times. All contractors must attend safety training and familiarization which will be provided by the Employers safety officer before commencement of any work on site. All contractors working at Apollo substation need to be security vetted.

Access to the site is via an existing tarred road which is in serviceable condition.

Existing buildings, structures, and plant & machinery on the Site

The contractor will work within yard 1, 2 AC side and 3 on the DC side, only within the barricaded area.

Subsoil information

The area is underlain by shale, siltstone, conglomerate in places and quartzite.

Hidden services

In the event that any services are found especially drainage pipes or cables, this must be reported to the Site Supervisor and Engineering Assistant immediately.

Other reports and publicly available information

N/A