

Confidential



KING PHALO AIRPORT

TENDER NO.: ELA8257/2026/RFP

UPGRADE OF MV SWITCHGEAR AND MV CABLING AT KING PHALO AIRPORT

CONTRACT

VOLUME 2

ELS ---/2018

Cover Page
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AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

PROJECT NAME: UPGRADE OF MV SWITCHGEAR AND MV CABLING AT KING PHALO AIRPORT

PROJECT NUMBER: ELS 17/09/AB

NEC 3: ENGINEERING AND CONSTRUCTION CONTRACT (ECC)

Between AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

Applicable at KING PHALO AIRPORT

(Registration Number: 1993/004149/30)

and _____

(Registration Number: _____)

for **UPGRADE OF MV SWITCHGEAR AND MV CABLING AT EAST LONDON
AIRPORT.**

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Part C1: Agreements and Contract Data
C1.1: Form of Offer and Acceptance

OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the Upgrade of MV Switchgear and MV Cabling at East London Airport. The contract includes supply, delivery, installation, commissioning and testing of installed electrical equipment at King Phalo Airport.

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

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

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VAT IS:

R..... (in figures)

.....

..... (in words);

THE OFFERED PRICES ARE AS STATED IN THE PRICING SCHEDULE

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
Bidder:**

.....
(Insert name and address of organisation)

Date

Name &
signature of
witness



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. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the tenderer (now **Contractor**) within five 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**

Airports Company South Africa SOC Limited,
King Phalo Airport
66 Settlers Way,
East London,
5201

Name &
signature of
witness

Date

**Schedule of Deviations**

1 Subject	.....
Details	.....
	
	
2 Subject	.....
Details	.....
	
	
3 Subject	.....
Details	.....
	
	
4 Subject	.....
Details	.....
	
	
	

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

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

For the Employer**For the Contractor**

Signature (s)	.....	.....
Name (s)	.....	.....
Capacity	.....	.....
Name and Address	Airports Company South Africa SOC Limited, King Phalo Airport 66 Settlers Way, East London, 5201	
		
	<i>(Insert name and address of organisation)</i>	<i>(Insert name and address of organisation)</i>
 Name & Signature of witness	.....	.....
Date	.....	.....

**Part C1.2a Contract Data****Part one – Data provided by the Employer**

The Conditions of contract are selected from the NEC3 Engineering and Construction Contract, April 2013.

Each item of data given below is cross-referenced to the NEC3 Engineering Construction Contract which requires it.

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for	
	Main Option	A: Priced contract with Activity Schedule
	Dispute resolution Option	W1: Dispute resolution procedure
	Secondary Options (incorporating amendments)	X1: Price Adjustment X2: Changes in the law X7: Delay damages X13: Performance Bond X16: Retention X17: Low service damages X18: Limitation of liability Z: Additional conditions of contract of the NEC3 Engineering and Construction Contract, April 2013
10.1	The <i>Employer</i> is (Name)	Airports Company South Africa SOC Limited, applicable at KING PHALO AIRPORT
	Address	Airports Company South Africa SOC Limited King Phalo Airport 66 Settlers Way, East London, 5201
10.1	The <i>Project Manager</i> is	Samkelo Luyenge
	Address	Address: Airports Company South Africa SOC Limited King Phalo Airport 66 Settlers Way, East London, 5201
	Telephone	+27 43 706 0358
	E-mail address	Sam.Luyenge@airports.co.za



AIRPORTS COMPANY SOUTH AFRICA

10.1	The <i>Supervisor</i> is	Botwe Nkonki
	Address	62 Devereux Ave Vincent 5247 East London,
	Telephone	+27 43 743 8266
	E-mail address	botwe@carifro.com
11.2	The <i>works</i> are	Upgrade Of MV Switchgear And Mv Cabling At East London Airport as fully detailed in the Scope of Work Part C3.
11.2	The following matters will be included in the Risk Register	• Availability of As-Built information • Access to Site • Statutory approvals and ACSA approvals • Site Constraints and Constructability • Notification of Claims • Financial and Procurement
11.2	The <i>Works Information</i> is in	Part C3 'Scope of Works' section of this contract
11.2	The <i>Site Information</i> is in	Part C4 'Works Information' section of this contract
11.2	The <i>boundary of the site</i> is	King Phalo Airport
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 of reply</i> is	7(seven) business days
3	Time	
31.2	The <i>starting date</i> is	On signing of the Contract by both parties
11.2	The <i>completion date</i> is	12 (Twelve) months after contract <i>starting date</i>
30.1	The <i>access date</i> is	to be agreed with Employer before contract start date.
31.1	The <i>Contractor</i> submits a first (preliminary) programme with the tender by	the tender closing date
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	4 (four) weeks
35.1	The <i>Employer</i> is not willing to take over the works before the <i>completion date</i>	The <i>Employer</i> and Others will have access to the <i>works</i> during construction or prior to completion. Such access by the Employer and Others shall not relieve the <i>Contractor</i> from liability for the completion of the <i>works</i> in accordance with the Works Information and in terms of this contract.

4	Testing and Defects																																
42.2	The <i>defects date</i> is		12 (twelve) months after Completion of the whole of the <i>works</i>																														
43.2	The <i>defects correction period</i> is		2 (two) weeks																														
5	Payment																																
50.1	The <i>assessment interval</i> is		15th day of each successive month																														
50.1	The <i>currency of this contract</i> is the		South African Rand																														
51.2	The period within which payment is made is		4 (four) weeks																														
51.4	The <i>interest rate</i> is		The prime lending rate of the Nedbank Bank. as determined from time to time																														
6	Compensation events																																
60.1	The <i>weather measurements</i> to be recorded for each calendar month are		the cumulative rainfall (mm) the number of days with rainfall more than 10 mm the number of days with minimum air temperature less than 0 degrees Celsius																														
60.1	The place where weather is to be recorded (on the Site) is		At the Construction Site Office and the records to be kept on site in a file clearly marked for this purpose																														
60.1	Assumed values for the ten-year return <i>weather data</i> for each <i>weather measurement</i> for each calendar month are		<table><tr><td>Month</td><td>Days</td><td>Month</td><td>Days</td></tr><tr><td>January</td><td>3</td><td>July</td><td>1</td></tr><tr><td>February</td><td>1</td><td>August</td><td>1</td></tr><tr><td>March</td><td>1</td><td>September</td><td>1</td></tr><tr><td>April</td><td>2</td><td>October</td><td>1</td></tr><tr><td>May</td><td>1</td><td>November</td><td>2</td></tr><tr><td>June</td><td>1</td><td>December</td><td>1</td></tr></table>			Month	Days	Month	Days	January	3	July	1	February	1	August	1	March	1	September	1	April	2	October	1	May	1	November	2	June	1	December	1
Month	Days	Month	Days																														
January	3	July	1																														
February	1	August	1																														
March	1	September	1																														
April	2	October	1																														
May	1	November	2																														
June	1	December	1																														
7	Title		No data required for this section of the <i>conditions of contract</i>																														
8	Risks and Insurance																																
84.1	The <i>Employer</i> provides these insurances		Refer to the Insurance Clauses which is attached at the end of the Contract Data																														
84.2	The <i>Contractor</i> provides the insurance stated in		The Insurance Clauses which is attached at the end of the Contract Data. The insurances are in the joint names of the Parties and provide cover for events which are at the Contractor's risk from the starting date until the Defects Certificate or a termination certificate has been issued.																														
	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the Contractor arising out of and in the course of their employment in connection with this contract for any one event is:		As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993																														
9	Termination		No data required for this section of the <i>conditions of contract</i>																														
10	Data for Main Options																																
A	Priced contract with Activity Schedule		as detailed in Part C2																														
11	Data for Option W1																																



W1.1	The <i>Adjudicator</i> is	The person appointed jointly by the parties from the list of adjudicators contained below
W1.2	The <i>Adjudicator nominating body</i> is	The current Chairman of Johannesburg Advocate's Bar Council
W1.4	The <i>tribunal</i> is	Arbitration
W1.4	If the <i>tribunal</i> is arbitration, the arbitration procedure is	The <i>arbitration procedure</i> is set out in The Rules for the Conduct of Arbitrations 2013 Edition, 7th Edition, published by The Association of Arbitrators, (Southern Africa)
W1.4	The place where arbitration is to be held is	Johannesburg, South Africa.
W1.4	The person or organisation who will choose an arbitrator	The Arbitrator is the person selected by the Parties as and when a dispute arises in terms of the relevant Z Clause, from the Panel of Arbitrators provided under the relevant Z clause if the arbitration procedure does not state who selects an arbitrator. The Arbitrator nominating body is the Chairman of the Johannesburg Advocates Bar Council.
12	Data for Secondary Option Clauses	
X7	Delay Damages	
	Delay damages of the <i>works</i> are	amount per day is 0.5%, to the maximum of 10% of the Contract value
X13	Performance bond	
X13.1	The amount of the performance bond is	10% of the contract value. Pro-forma draft of a performance bond to be used is attached to this contract.
X16	Retention	
X16.1	The <i>retention period of the performance bond</i>	52 weeks after completion of the whole of the works
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	Nil - Neither Party is liable to the other for any consequential or indirect loss, including but not limited to loss of profit, loss of income or loss of revenue
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 Total losses incurred and/or damages suffered to the Employer's Property
X18.3	The <i>Contractor's</i> total liability to the Employer for defects due to his design which are not listed on the Defects Certificate is limited to	The Total losses incurred and/or damages suffered to the Employer's Property



- 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 *Contractor's* total direct liability to the *Employer* for all matters arising under or in connection with this contract, other than the excluded matters, is limited to the total losses incurred and/or damages suffered to the *Employer's* Property and applies in contract, tort or delict and otherwise to the extent allowed under the law of the contract.

The e excluded matters are amounts payable by the *Contractor* as stated in this contract for

- Loss of or damage to the *Employer's* property,
- Delay damages,
- Defects liability,
- Insurance liability to the extent of the *Contractor's* risks
- loss of or damage to property (other than the *works*, Plant and Materials),
- death of or injury to a person;
- damage to third party property; and
- infringement of an intellectual property right

Z	The <i>Additional conditions of contract</i> are	Z1 – Z20
	Amendments to the Core Clauses	
Z1	Interpretation of the law	
Z1.1	Add to core clause 12.3: Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the <i>Project Manager</i> , the <i>Supervisor</i> , or the <i>Adjudicator</i> 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.	
Z2	Providing the Works:	
Z2.1	Delete core clause 20.1 and replace with the following: The <i>Contractor</i> provides the works in accordance with the Works Information and warrants that the results of the Works, when complete, shall be fit for their intended purpose	
Z3	Other responsibilities:	
Z3.1	Add the following at the end of core clause 27: The <i>Contractor</i> shall have satisfied himself, prior to the Contract Date, as to the completeness, sufficiency and accuracy of all information and drawings provided to him as at the Contract Date	
Z3.2	The <i>Contractor</i> shall be responsible for the correct setting out of the <i>Works</i> in accordance with the original points, lines and levels stated in the <i>Works</i> Information or notified by the <i>Project Manager</i> , <i>Supervisor</i> or the <i>Employer</i> . Any errors in the positioning of the <i>Works</i> shall be rectified by the <i>Contractor</i> at the <i>Contractor's</i> own costs.	
Z4	Extending the defects date:	
Z4.1	Add the following as a new core clause 46: If the <i>Employer</i> cannot use the <i>works</i> due to a Defect, which arises after Completion and before the <i>defects date</i> , the <i>defects date</i> is delayed by a period equal to that during which the <i>Employer</i> , due to a Defect, is unable to use the <i>works</i>	
Z4.2	If part of the <i>works</i> is replaced due to a Defect arising after Completion and before the <i>defects date</i> , the <i>defects date</i> for the part of the <i>works</i> which is replaced is delayed by a period equal to that between Completion and the date by when the part has been replaced	
Z4.3	The <i>Project Manager</i> notifies the <i>Contractor</i> of the change to a <i>defect date</i> when the delay occurs. The period between Completion and an extended <i>defects date</i> does not exceed twice the period between Completion and the <i>defects date</i> stated in the Contract Data	
Z5	Termination	



Z5.1	Add the following to core clause 91.1, at the second main bullet, fifth sub-bullet point, after the words “assets or”: “business rescue proceedings are initiated, or steps are taken to initiate business rescue proceedings”.
Amendment to the Secondary Option Clauses	
Z6	Performance Bond
Z6.1	Amend the first sentence of clause X13.1 to read as follows: The <i>Contractor</i> gives the <i>Employer</i> an unconditional, on-demand performance bond, provided by a bank which the <i>Project Manager</i> and the <i>Employer</i> have accepted, for the amount stated in the Contract Data and in the form set out in Annexure C.ii of this Contract Data.
Z6.2	Add the following new clause as Option X13.2: The <i>Contractor ensures</i> that the performance bond is valid and enforceable until the end of the <i>contract period</i> . If the terms of the performance bond specify its expiry date and the end of the <i>contract period</i> does not coincide with such expiry date, four weeks prior to the said expiry date, the <i>Contractor</i> extends the validity of the performance bond until the end of the <i>contract period</i> . If the <i>Contractor</i> fails to so extend the validity of the performance bond, the <i>Employer</i> may claim the full amount of the performance bond and retain the proceeds as cash security
Z7	Limitation of liability:
Z7.1	Insert the following new clause as Option X18.6: The <i>Employer's</i> liability to the <i>Contractor</i> for the <i>Contractor's</i> indirect or consequential loss is limited to R0.00
Z7.2	Notwithstanding any other clause in this contract, any proceeds received from any insurances or any proceeds which would have been received from any insurances but for the conduct of the <i>Contractor</i> shall be excluded from the calculation of the limitations of liability listed in the contract
Additional Z Clauses	
Z8	Cession, delegation and assignment
Z8.1	The <i>Contractor</i> shall not cede, delegate or assign any of its rights or obligations to any person without the written consent of the <i>Employer</i> , which consent shall not be unreasonably withheld. This clause shall be binding on the liquidator/business rescue practitioner /trustee (whether provisional or not) of the <i>Contractor</i>
Z8.2	The <i>Employer</i> may cede and delegate its rights and obligations under this contract to any person or entity
Z9	Joint and several liabilities
Z9.1	If the <i>Contractor</i> constitutes a joint venture, consortium or other unincorporated grouping of two or more persons, these persons are deemed to be jointly and severally liable to the <i>Employer</i> for the performance of the Contract.
Z9.2	The <i>Contractor</i> shall, within 1 week of the Contract Date, notify the <i>Project Manager</i> and the <i>Employer</i> of the key person who has the authority to bind the <i>Contractor</i> on their behalf.
Z9.3	The <i>Contractor</i> does not materially alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without prior written consent of the <i>Employer</i> .
Z10	Ethics
Z10.1	The <i>Contractor</i> undertakes:
Z10.1.1	not to give any offer, payment, consideration, or benefit of any kind, which constitutes or could be construed as an illegal or corrupt practice, either directly or indirectly, as an inducement or reward for the award or in execution of this contract;
Z10.1.2	to comply with all laws, regulations or policies relating to the prevention and combating of bribery, corruption and money laundering to which it or the <i>Employer</i> is subject, including but not limited to the Prevention and Combating of Corrupt Activities Act, 12 of 2004.
Z10.2	The <i>Contractor's</i> breach of this clause constitutes grounds for terminating the <i>Contractor's</i> obligation to Provide the Works or taking any other action as appropriate against the <i>Contractor</i> (including civil or criminal action). However, lawful inducements and rewards shall not constitute grounds for termination.



Z10.3	If the <i>Contractor</i> is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices, including but not limited to the making of offers (directly or indirectly), payments, gifts, gratuity, commission or benefits of any kind, which are in any way whatsoever in connection with the contract with the <i>Employer</i> , the <i>Employer</i> shall be entitled to terminate the contract in accordance with the procedures stated in core clause 92.2. the amount due on termination is A1.
Z11	Confidentiality
Z11.1	All information obtained in terms of this contract or arising from the implementation of this contract shall be treated as confidential by the <i>Contractor</i> and shall not be used or divulged or published to any person not being a party to this contract, without the prior written consent of the <i>Project Manager</i> or the <i>Employer</i> , which consent shall not be unreasonably withheld.
Z11.2	If the <i>Contractor</i> is uncertain about whether any such information is confidential, it is to be regarded as such until otherwise notified by the <i>Project Manager</i> .
Z11.3	This undertaking shall not apply to –
Z11.3.1	Information disclosed to the employees of the <i>Contractor</i> for the purposes of the implementation of this agreement. The <i>Contractor</i> undertakes to procure that its employees are aware of the confidential nature of the information so disclosed and that they comply with the provisions of this clause;
Z11.3.2	Information which the <i>Contractor</i> is required by law to disclose, provided that the <i>Contractor</i> notifies the <i>Employer</i> prior to disclosure so as to enable the <i>Employer</i> to take the appropriate action to protect such information. The <i>Contractor</i> may disclose such information only to the extent required by law and shall use reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed;
Z11.3.3	Information which at the time of disclosure or thereafter, without default on the part of the <i>Contractor</i> , enters the public domain or to information which was already in the possession of the <i>Contractor</i> at the time of disclosure (evidenced by written records in existence at that time);
Z11.4	The taking of images (whether photographs, video footage or otherwise) of the <i>works</i> or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the <i>Project Manager</i> . All rights in and to all such images vests exclusively in the <i>Employer</i>
Z11.5	The <i>Contractor</i> ensures that all his Subcontractors abide by the undertakings in this clause.
Z12	Employer's Step-in rights
Z12.1	If the <i>Contractor</i> defaults by failing to comply with his obligations and fails to remedy such default within 2 weeks of the notification of the default by the <i>Project Manager</i> , the <i>Employer</i> , without prejudice to his other rights, powers and remedies under the contract, may remedy the default either himself or procure a third party (including any subcontractor or supplier of the <i>Contractor</i>) to do so on his behalf. The reasonable costs of such remedial works shall be borne by the <i>Contractor</i>
Z12.2	The <i>Contractor</i> co-operates with the <i>Employer</i> and facilitates and permits the use of all required information, materials and other matter (including but not limited to documents and all other drawings, CAD materials, data, software, models, plans, designs, programs, diagrams, evaluations, materials, specifications, schedules, reports, calculations, manuals or other documents or recorded information (electronic or otherwise) which have been or are at any time prepared by or on behalf of the <i>Contractor</i> under the contract or otherwise for and/or in connection with the <i>works</i>) and generally does all things required by the <i>Project Manager</i> to achieve this end.
Z13	Liens and Encumbrances
Z13.1	The <i>Contractor</i> keeps the Equipment used to Provide the Services free of all liens and other encumbrances at all times. The <i>Contractor</i> , vis-a-vis the <i>Employer</i> , waives all and any liens which he may from time to time have, or become entitled to over such Equipment and any part thereof and procures that his Subcontractors similarly, vis-a-vis the <i>Employer</i> , waive all liens they may have or become entitled to over such Equipment from time to time
Z14	Intellectual Property
Z14.1	Intellectual Property ("IP") rights mean all rights in and to any patent, design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works.



- Z14.2** IP rights remain vested in the originator and shall not be used for any reason whatsoever other than carrying out the *works*.
- Z14.3** The *Contractor* gives the *Employer* an irrevocable, transferrable, non-exclusive, royalty free licence to use and copy all IP related to the *works* for the purposes of constructing, repairing, demolishing, operating and maintaining the works
- Z14.4** The written approval of the *Contractor* is to be obtained before the *Contractor's* IP made available to any third party which approval will not be unreasonably withheld or delayed. Prior to making any *Contractor's* IP available to any third party the *Employer* shall obtain a written confidentiality undertaking from any such third party on terms no less onerous than the terms the *Employer* would use to protect its IP
- Z14.5** The *Contractor* shall indemnify and hold the *Employer* harmless against and from any claim alleging an infringement of IP rights ("**the claim**"), which arises out of or in relation to:
- Z14.5.1** the *Contractor's* design, manufacture, construction or execution of the Works
- Z14.5.2** the use of the *Contractor's* Equipment, or
- Z14.5.3** the proper use of the Works.
- Z14.6** The *Employer* shall, at the request and cost of the *Contractor*, assist in contesting the claim and the *Contractor* may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it.

Z16 Dispute resolution:

Z16.1 Appointment of the Adjudicator

An *Adjudicator* is appointed when a dispute arises, from the Panel of Adjudicators below. The referring party nominates an Adjudicator, which nomination is either accepted or rejected by the other party. In the instance of a rejection of the nominated *Adjudicator*, the referring Party refers the appointment deadlock to the Chairman of the Johannesburg Bar Council, who appoints an *Adjudicator* listed in the Panel of Adjudicators below

The Parties appoint the *Adjudicator* under the NEC3 Adjudicator's Contract, April 2013

Panel of Adjudicators

Name	Location	Contact details (phone & e mail)
Adv. Ghandi Badela	Gauteng	+27 11 282 3700 ghandi@badela.co.za
Mr. Errol Tate Pr. Eng.	Durban	+27 11 262 4001 Errol.tate@mweb.co.za
Adv. Saleem Ebrahim	Gauteng	+27 11 535-1800 salimebrahim@mweb.co.za
Mr. Sebe Msutwana Pr. Eng.	Gauteng	+27 11 442 8555 sebe@civilprojects.co.za
Mr. Sam Amod	Gauteng	sam@samamod.com
Adv. Sias Ryneke SC	Gauteng	083 653 2281 ryneke@duma.nokwe.co.za
Mr. Emeka Ogbugo (Quantity Surveyor)	Pretoria	+27 12 349 2027 emeka@gosiame.co.za

Z16.2 Appointment of the Arbitrator



AIRPORTS COMPANY SOUTH AFRICA

An *Arbitrator* is appointed when a dispute arises from the Panel of Arbitrators below. The referring party nominates an Arbitrator, which nomination is either accepted or rejected by the other party. In the instance of a rejection of the nominated *Arbitrator*, the referring Party refers the appointment deadlock to the Chairman of the Johannesburg Bar Council, who appoints an *Arbitrator* listed in the Panel of Arbitrators below

Panel of Arbitrators

Name	Location	Contact details (phone & e mail)
Adv. Ghandi Badela	Gauteng	+27 11 282 3700 ghandi@badela.co.za
Mr. Errol Tate Pr. Eng.	Durban	+27 11 262 4001 Errol.tate@mweb.co.za
Adv. Saleem Ebrahim	Gauteng	+27 11 535-1800 salimebrahim@mweb.co.za
Mr. Sebe Msutwana Pr. Eng.	Gauteng	+27 11 442 8555 sebe@civilprojects.co.za
Mr. Sam Amod	Gauteng	sam@samamod.com
Adv. Sias Ryneke SC	Gauteng	083 653 2281 revneke@duma.nokwe.co.za
Mr. Emeka Ogbugo (Quantity Surveyor)	Pretoria	+27 12 349 2027 emeka@gosiame.co.za

Z17 Notification of a compensation event

- Z17.1** Delete "eight weeks" in clause 61.3 and replace with "four weeks". Delete the words "unless the event arises from the Project Manager or the Supervisor giving an instruction, issuing a certificate, changing an earlier decision or correcting an assumption."

Z18 BBEE Certificate

- Z18.1** The *Contractor* shall be expected to annually present a compliant BEE Certificate. Failure to do adhere to these requirements shall be considered a material breach of the conditions of this Contract, the sanction for which may be a cancellation of this Contract.

Z19 Communication

- Z19.1** **Add a new Core Clause** 14.5 and 14.6 to read as follows:
The *Project Manager* requires the written consent of the Employer if an action will result in a change to the design, scope, and Works information that is 5% or more
- Z19.2** The *Project Manager* requires the written consent of the Employer if an action will result in the Completion Date being extended by more than 30 days.

Z20 Delegation

As stipulated by Section 37(2) of the Occupational Health and Safety Act No. 85 of 1993 as amended the *Contractor* agrees to the following:

- Z20.1** As part of this contract the *Contractor* acknowledge that it (mandatory) is an employer in its own right with duties as prescribed in the Occupational Health and Safety Act No 85 of 1993 as amended and agree to ensure that all work being performed, or Equipment, Plant and Materials being used, are in accordance with the provisions of the said Act, and in particular with regard to the Construction Regulations

**PART C1.2b CONTRACT DATA****PART TWO – DATA PROVIDED BY THE CONTRACTOR**

Clause	Statement	Data
10.1	The Contractor is (Name): Address: Telephone No. Fax No.	
11.2	The <i>working areas</i> are	Landside Area
24.1	The <i>Contractor's Key people</i> are:	CV's to be appended to Tender Schedule
	Name:	
	Job Title for this Project:	
	Responsibility:	
	Qualifications:	
	Experience:	
	Name:	
	Job Title for this Project:	
	Responsibility:	
	Qualifications:	
	Experience:	
	Name:	
	Job Title for this Project:	
	Responsibility:	
	Qualifications:	
	Experience:	



Name:

Job Title for this Project:

Responsibility:

Qualifications:

Experience:



Part C1: Agreements and Contract Data
C1.3: Form of Guarantee

PRO FORMA FOR PERFORMANCE BOND

PERFORMANCE BOND

[TO BE REPLICATED ON BANK'S LETTERHEAD]

Brief description of contract.....

Name and address of Beneficiary.....

..... (whom the contract defines as the Contractor).

We, the undersigned and..... in our capacities as Guarantor's..... of (**Registration Number:**) (hereinafter called "the Bank") have been informed that hereinafter called the 'Principal') is your Contractor under such contract, which requires him to obtain an irrevocable, unconditional performance security.

At the request of the Principal, we(name of bank) hereby irrevocably undertake to pay you, the Employer, any sum or sums not exceeding in total the amount of(the "Guaranteed Amount") upon receipt by us of your first written demand stating that such an amount (or lesser amount) as may be claimed is due and payable to the Employer.

This guarantee constitute an irrevocable, unconditional, non-negotiable and non-transferable undertaking to pay in accordance with the above, subject to the proviso that this Letter will not be interpreted as extending the Bank's liability to anything more than the Guaranteed Amount.

Notwithstanding anything to the contrary herein contained, the Bank's obligation shall be construed as principal and not as accessory to the contract and shall not be delayed or discharged by the fact that a dispute exists between the Employer and the Contractor.

We undertake to pay you such Guaranteed Amount upon receipt by us, within such period of 14 days, of your first written demand stating that such an amount (or lesser amount) as may be claimed is due and payable to the Employer.

The guarantee shall be governed by and construed in accordance with the laws of the Republic of South Africa

Signed at _____ on _____ 20....

For:

Registration Number:

Name & Position

As witnesses:

1. _____

2. _____

PART C1: AGREEMENTS AND CONTRACT DATA
C1.4: ACSA INSURANCE CLAUSES
SECTION A: DEFINITIONS

Landside refers to:

- Areas of the airport before the security points, and
- The restricted area beyond the security points but, within the perimeter of gatehouses, passenger terminals and cargo buildings

Airside refers to:

- The Apron / manoeuvring areas
- Area within the airside boundary/perimeter fence, excluding the internal areas of the passenger terminals, perimeter gatehouses and cargo building.

INSURANCE CLAUSES FOR LANDSIDE CONSTRUCTION CONTRACTS WHERE THE AWARDED CONTRACT VALUE DOES NOT EXCEED R150 MILLION, AND THE CONSTRUCTION PERIOD DOES NOT EXCEED 36 MONTHS, AND THE DEFECTS LIABILITY PERIOD DOES NOT EXCEED 24 MONTHS

Each Party shall be responsible for effecting and maintaining the relevant insurances as specified below and to the extent relevant to the Contract.

1. Insurance Effected By The Employer (Principle Controlled Insurance ("PCI"))

1.1 Notwithstanding anything elsewhere contained in this Contract and without limiting the obligations, liabilities or responsibilities of the Contractor in anyway whatsoever (including but not limited to any requirement for the provision by the Contractor of any other insurances) the **Employer** shall effect and maintain for the duration of the construction and maintenance periods of the Contract - as appropriate in the joint names of the Employer, the Contractor and where relevant Sub-Contractors the following insurances which are subject to the terms, limits, exceptions and conditions of the Policy:

a) Contract Works/Contractors Public Liability/ Removal Of Lateral Support Liability

SECTION 1 OF THE POLICY – CONTRACT WORKS

Contract Works Insurance for the full value of the Works to provide cover against accidental physical loss of or damage to the Works, Temporary Works and materials intended for incorporation in the Works all being the subject matter of this Contract including to the extent provided for in the policy whilst in transit or temporarily stored at any premises en route to or from the Site (other than where this is a continuation of Marine Transit) within the territorial limits of the policy.

This insurance may specifically exclude any cost necessary to replace or rectify any of the property insured, which is in a defective condition due to defect in design, plan specification, material or workmanship.

This insurance contains the following limitations and warranties;

1.1 Open Trench Limitation

In respect of loss or damage to open trenches and pipes, conduits or cables laid therein, caused directly or indirectly by rain, inundation or flood, Insurers liability shall be limited in respect of the aggregate length of open trenches at any one time to 2,500 meters.

Exposed Layer Works (applicable to works involving paving, roadways, bulk earthworks and runways and taxiways)

In respect of loss or damage to Exposed Layer Works relating to paving, roadways and runways (including taxiways) caused directly or indirectly by rain, inundation or flood, Insurers liability shall be limited in respect of the aggregate length of Exposed Layer Works at any one time to 2,500 meters.

SECTION II OF THE POLICY – CONTRACTORS PUBLIC LIABILITY

Public Liability Insurance which provides indemnity against legal liability in the event of accidental death of or injury to persons and/or loss of or damage to property (other than the Works the subject matter of this Contract) arising from the execution of the Contract with a limit of indemnity of **R100,000,000** in respect of any one occurrence or series of occurrences consequent on or attributable to one source or original cause.

SECTION III OF THE POLICY – REMOVAL OF LATERAL SUPPORT LIABILITY

Removal Of Lateral Support Liability which provides indemnity against legal liability in the event of accidental death of or injury to persons and/or loss of or damage to property (other than the Works the subject matter of this Contract) arising out of or in connection with shock or vibration or the removal or weakening of or interference with support to property in the vicinity of the Contract Site and arising out of or in connection with the Insured Contract (but not in respect of tunnelling works) and occurring during the Period of Insurance.

The Limit of Indemnity being limited to R50,000,000 attributable to one source or original cause

- b) Contract Works SASRIA** – Providing physical loss of or damage to the Works, Temporary Works and materials intended for incorporation in the Works as covered by the underlying Contract Works policy as noted in (a) above due to perils as covered in terms of the SASRIA Contract Works wording as issued by SASRIA SOC.

The Contract Works SASRIA cover excludes consequential or indirect loss or damage of any kind or description whatsoever.

The SASRIA Contract Works policy is limited to **R500,000,000 (Incl VAT)** in the aggregate during the policy period of insurance.

The Contract Works SASRIA policy wording can be obtained from the SASRIA website <http://www.sasria.co.za/> which notes the covers and policy exclusions.

- c) Design & Construct Professional Indemnity Insurance** which provides indemnity against legal liability to pay compensation as a result of any actual or alleged negligent act, error or omission in the performance of the Professional Duties of the insured and arising from the execution of this project. The limit of indemnity under this insurance shall be ***R25,000,000 in the aggregate during the annual policy period of insurance that ACSA effect such cover during the policy period from 1 April to 31 March during each policy period of insurance.**

****The limits of indemnity applies to all ACSA contracts as a whole and does not apply specifically to this contract. The aggregate limit could be exhausted by claims under other ACSA contracts and there is no guarantee that this insurance cover will provide sufficient cover to this specific contract should the aggregate limit be exhausted.***

The Policy only covers the rectification of the works and excludes all consequential losses.

Professional Duties do not include:

- a) Labour and construction work which would normally be the responsibility of the building or engineering contractor.
- b) Supervision of the construction works usually undertaken by a building or engineering contractor.

1.2 The **Contractor** shall familiarise itself fully with the details of such insurance effected by the Employer. The Contractor shall comply to all the terms and conditions of the Employer arranged policies and the Contractor shall be deemed to be fully aware of all the conditions, limits, limitations, exclusions/exceptions and deductibles that are contained in the Employer arranged policies. Copies of the Employer arranged policies are obtainable on request from the Employer and if the Contractor is of the opinion that additional insurance is required, such shall be for the Contractors account.

1.3 The Employer shall pay the premium in connection with the insurances effected by the Employer. The Employer is entitled to all return premiums, dividends, discounts, or adjustments in connection with the insurances effected by the Employer.

1.4 The Contractor shall not include any premium charges for this insurance except to the extent, which he may deem necessary in his own interests to effect supplementary insurance to the insurance effected by the Employer. The Employer reserves the right to call for full information regarding insurance costs included by the Contractor.

In the event that the Contractor purchases any insurances in addition to those indicated above, the premium and taxes, duties, etc. shall be borne entirely by the contractor.

1.5 Any further clarification of the scope of cover provided by the Policies arranged by the Employer should be obtained from the Employer.

1.6 The Contractor and/or any other party who obtains indemnity under the policies effected under 1.1 shall become liable for the deductibles (first amount payable) which are applicable in respect of each and every occurrence or series of occurrences attributable to one source or cause giving rise to loss or damage or indemnifiable liability. The deductibles applicable to the policies effected under 1.1 are as follows:

a) Contract Works/Contractors Public Liability/ Removal Of Lateral Support Liability

Unless stated otherwise in the Policy Extensions the Deductibles shall be as follows which will apply in respect of each and every occurrence or series of occurrences arising out of or in connection with any one event giving rise to loss or damage:

SECTION 1 OF THE POLICY – CONTRACT WORKS

In respect of all loss or damage **R150,000** but increased to **R250,000** in respect of loss or damage arising out of or in connection with testing and commissioning.

Section 2 Of The Policy – Contractors Public Liability

R75,000 each and every claim in respect of Property Damage.

Section 3 Of The Policy – Removal Of Lateral Support Liability

R75,000 each and every claim.

B) CONTRACT WORKS SASRIA

In respect of theft as a result of the SASRIA perils insured - **R25,000** each and every occurrence .

2 DESIGN & CONSTRUCT PROFESSIONAL INDEMNITY INSURANCE

- a) In respect of contracts under R50 million at award – **R5,000,000.**
- b) In respect of contracts over R50 million at award – **R10,000,000**

1.7 In the event of any occurrence which is likely to give rise to a claim under the insurance arranged by the Employer, the Contractor shall:

- a) In addition to any statutory requirement or other requirements contained in the Contract immediately notify the Employer and the Employer's Insurance Brokers by telephone, mobile phone or email giving the circumstances, nature and an estimate of the loss or damage or liability. The Contractor must also complete the Claim Advice Form (Appendix "A").

The following persons/insurers must be advised immediately on the occurrence of a claim on site or even a possibility of a claim arising due to an incident occurring on site:

Airports Company South Africa :

Nokulunga Masiza
Tel: +27 (0)11 723 1400
M: +27 (0)79 512 0532

Nokulunga.Masiza@airports.co.za

Buhle Mnguni
D: +27 (0)11 723 1400
M: +27 (0)74 535 9075

Buhle.Mnguni@airports.co.za

- b) Preserve damage and make it available for inspection by a representative of the Insurers.
- c) Wherever possible, photographs of damage should be taken.
- d) Inform the police authorities promptly in the event of loss or damage by theft, burglary or any malicious persons(s) for the purpose of recovering any property so lost, discovering the guilty person or persons, and having him, her or them duly prosecuted.

- e) Advise the Insurers of any other insurance(s) which may cover the same loss, damage or injury, or any part thereof.
- f) Give to the Insurers every assistance to enable the Insurers to settle or resist any claim against the Insured, or institute any proceedings;
- g) On completion the Claims Advice Form, the form must be sent to the Employers Insurance Brokers for further action (the original may be emailed to the Employers Insurance Broker). (Please do not remove the Claims Advice Form out of this document. Rather photocopy the form and send the copy to the Employers Insurance Brokers).
- h) The Employer and the employers Insurance brokers / Insurers or their appointed loss adjusters shall have the right to make all and any enquiry's on the Site of the Works or elsewhere as to the cause and results of any such occurrence and the Contractor shall cooperate in carrying out such enquiry's.
- i) The Contractor, Project Managers and Consultants must allow free access to Insurers' assessors for the purpose of investigating and assessing the loss or damage.
- j) **The Contractor must not proceed with the making good any off the loss without the prior authorisation of the Insurers.**
- k) The Contractor must keep separate records of the costs involved in making good any loss or damage and these records should be available at all times for inspection by Insurers. Such records should include inter alia the entire cost of labour, materials, transport and equipment.
- l) Where required by the Employer, negotiate the settlement of claims with the Insurer or their appointed loss adjusters through the Employer's Insurance Brokers and shall obtain the Employer's approval of such settlement.
- m) Once the amount of a claim is agreed by the Insurers and the Contractor, an "Agreement of Loss" form must be signed by the Contractor and if required this shall be counter signed by the Employer or the Project Managers.
- n) The proceeds of such claim will, if required by the Employer, be paid net of any Deductible applicable under the policy by the Insurers to the Employer who on receipt thereof will arrange for payment to be made in terms of the Conditions of Contract. In the event that it is agreed by the Employer that such claims payment be made directly to the Contractor, the Contractor shall arrange for the Employer to endorse the "Agreement of Loss" to this effect.

2. Insurance Effected by the Contractor.

In addition to Clause 1.1 in respect of the insurances effected by the Employer the following Insurances to be effected by the Contractor :

- 2.1 Without limiting the Contractor's obligations, responsibilities and liabilities, the Contractor and Sub-contractor shall maintain at the Contractor's and Subcontractor's expense and where applicable provide as a minimum the following insurances:

- a) Insurance of Construction Plant and Equipment** (including tools offices and other temporary structures and contents) and other things (except those intended for incorporation into the Works) brought onto the site for a sum sufficient to provide for their replacement.

The Employer shall be named as additional insured and a waiver of subrogation shall be provided to the Employer.

b) Contractor's Common Law Liability/ Worker's Compensation Insurance

The Contractor shall take out and maintain employer's liability insurance with a limit of indemnity of not less than **R20,000,000** and/or workmen's compensation insurance covering personal injury to or death of the employees of the Contractor engaged in connection with the Works to the minimum value required by applicable law.

The Contractor shall procure that its Subcontractors take out and maintain similar insurance in respect of its Subcontractor's personnel performing the Works.

In the event that a claim is made against the Employer in connection with such insurance, the Contractor shall indemnify and hold harmless the Employer against any such claim. The Employer shall be named as additional insured and a waiver of subrogation shall be provided to the Employer.

- c) Motor Vehicle Liability Insurance** comprising (as a minimum) "Balance of Third Party" Risks including Passenger Liability indemnity with a limit of indemnity of not less than **R5 000 000** for all owned, non-owned, leased and hired vehicles.

d) Insurance For Buy-Down Cover Of Employer's Deductibles

Should the Contractor believe that the Employer effected Contract Works, Public Liability and Design & Construct Professional Indemnity deductibles as noted in Clause 1.1 (a) and (c) be considered to be unacceptable to the Contractor, then the Contractor must obtain Buy Down cover for these deductibles to a deductible considered by the Contractor as being acceptable in respect of the works being undertaken.

- e)** Where the Contract involves manufacturing and/or fabrication of the Works or parts thereof at premises other than at the Contract Site the Contractor shall satisfy the Employer that all materials and equipment for incorporation in the Works are adequately insured during manufacture and/or fabrication. In the event of the Employer having an insurable interest in such Works during manufacture or fabrication then such interest shall be noted by endorsement to the relevant Policies of Insurance.

Such insurance shall name Employer as an additional insured, and shall be primary to any insurance maintained by the Employer.

- f) Public Liability** insurances in excess of the Employers Public Liability insurances as stated under clause 1.1(a).

- g) Contractor's Professional Indemnity Insurance** in excess of the Employers Design & Construct Professional Indemnity insurances as stated under clause 1.1(c) and if applicable to cover the deductible that applies to the Employer effected insurance.

h) Marine Cargo Insurance (If Applicable)

Cover : Imports of cargo, equipment, goods, plant, machinery and materials ("**Insured Property**") to the site where the Permanent Works will be constructed.

Sum Insured: Not less than the value of the largest single cargo shipment, conveyance or the value in storage, whichever is the greater (CIF plus 10%).

Marine / Air Cargo Insurance covering the Insured Property against all risks of physical loss or damage while in transit by land, sea or air from country of origin anywhere in the world to the site where the Permanent Works will be constructed including loading, or vice versa, from the commencement of the time the insured items are loaded prior leaving the warehouse or factory for shipment to the said site.

The insured parties are the Employer, the Contractor and its Subcontractors, and all their personnel involved in the execution of any Works on the construction site.

j) **Miscellaneous Insurance**

Other insurance as is customary, desirable or necessary to comply with applicable Laws in the Country.

2.2 The insurances to be provided by the Contractor and his Sub-contractor shall be effected with Insurers and on terms approved by the Employer (which approval shall not be unreasonably withheld) and shall be maintained in force for the duration required (including any period of maintenance/defects liability period). The Contractor shall within twenty eight (28) days of commencement of the contract produce to the Employer the relevant Policy or Policies of Insurance.

2.3 In the event that the Contractor or his Sub-contractor receives any notice of cancellation or restrictive modification to the insurance provided to them they shall immediately notify the Employer in writing of such cancellation or restriction and shall advise what action the Contractor or his Sub-contractor will take to remedy such action.

If the Contractor fails to effect and keep in force the insurances referred to then the Employer may effect and keep in force any such insurances and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount paid by the Employer from any monies due or which may become due to the Contractor or recover same as a debt from the Contractor.

2.4 Sub-Contractors.

The Contractor shall:

- a) ensure that all potential and appointed Sub-contractors are aware of the whole contents of these Insurance Clauses, and
- b) enforce the compliance by sub contract agreement between the Contractor and SubContractor and where applicable that the Sub Contractor effect similar insurance relating to the insurances required to be effected by the Contractor under Clause 2 (Contractor effected insurances).

APPENDIX A

CONTRACTORS CLAIMS ADVICE FORM - FOR ACSA INSURED CONTRACTS UNDER THE ANNUAL POLICY

Send to: Airports Company South Africa

*

E-Mail The Following People:

Nokulunga.Masiza@airports.co.za

Buhle.Mnguni@airports.co.za

.....

.....

.....

.....

* (Please provide name of contracting company, site address, telephone numbers and e-mail address).

RE :ACSA CONTRACTORS : CAR/PL/PI : CLAIM

Date of loss :

Reported to site agent by :

Date :

Reported to Insurance Broker by :

Date :

Locality of Incident

How did the loss occur (cause)?

Details and nature of loss or damage to Contract Works

Details of other property damaged

.....
address of witnesses

Names and

Estimated cost of repairs (Separate records of all costs must be kept) R

Person whom assessor should contact

Telephone/Mobile Numbers of Contact Person

Email Address of Contact Person

**INSURANCE CLAUSES FOR AIRSIDE OR LANDSIDE CONSTRUCTION CONTRACTS WHERE THE
AWARDED CONTRACT VALUE EXCEED R150 MILLION, OR THE CONSTRUCTION PERIOD EXCEEDS 36 MONTHS, OR
THE DEFECTS LIABILITY PERIOD EXCEEDS 24 MONTHS**

Please inform the Insurance Department before publishing the tender document.

Nokulunga.Masiza@airports.co.za

PART C2: PRICING DATA

C2.1. Pricing Assumptions: Option A

Amplification of or assumptions about measurement items

For the avoidance of doubt 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.

- The contractor must plan the work in this contract as a set of activities. These should be the same activities as he shows on his programme.
- This schedule covers the items that will be measurable. A lump sum price for each activity shall be entered and no other items will be measured. Costs not covered by the items may be included in the most appropriate items listed. The Contractor has the liberty to insert items, quantities and rates of his own choosing in the said schedule as a separate line item.
- The pricing schedule as completed by the Contractor shall be **VAT exclusive** prices and shall cover, "inter alia" all general risks, liabilities, obligations, profit, expenses, costs, bonuses, all allowances such as shift and standby allowances, sick-leave, other leave, brackets, fixings, incidentals, consumables etc. that will be required to successfully complete this contract as set forth or as implied in the documents on which this Contract is based.
- The contractor is to take note that payment is made for each activity only when it is complete. "Complete" as it is used in this schedule means the complete system or unit as specified in the particular document.
- Unless a separate rate for the supply and for the installation of any item is specifically called for, the supply and installation costs of any item shall be fully included in the price.
- The description of each item shall, unless otherwise stated herein, be held to include making, conveying and delivering, unloading, storing, unpacking, hoisting, setting, fitting and fixing in position, cutting and waste, patterns, models and templates, plant, temporary works, return of packaging, establishment charges, profit and all other obligations arising out of the contractual conditions.
- No alterations to the original text shall be allowed. If any alterations are made, it shall be ignored, and the original wording will apply.
- Variations in the scope and extent of the work shall be allowed to meet the Engineer's requirements and shall be measured and priced at the rates entered in the Activity Schedule, where appropriate, and shall form an addition to or deduction from the total of the Accepted Contract Amount. Any items or variations for which rates have not been included in the Activity Schedule shall be agreed and priced as non-scheduled items.
- All provisional sums and contingency amounts shall be expended as directed by the Engineer and any balance remaining shall be deducted from the contract sum.
- All items described as "provisional" shall be measured as executed and paid for according to prices in the Activity Schedule and any amounts not spent shall be deducted from the contract price. No work for which "provisional" items are provided shall, be commenced without written instructions from the Project Manager.
- No commitment to expending any portion of the contingency amounts and/or provisional sums are made or implied by the Employer.
- The Contractor shall not be entitled to any claim in instances where provisional sums are partially or in total removed from the contract.

DISBURSMENT SCHEDULE

- (a) Only project related costs listed below and presented to ACSA will be compensated by ACSA.
- (b) Any disbursement costs related to travelling to and from the airport or accommodation for the purpose of the project(s) is deemed to be inclusive in the agreed fee structure, unless otherwise agreed in writing by both parties. Disbursement costs not mentioned below (including under note (e)) may be brought to the attention of the ACSA project representative for approval and agreement on the recoverable amount, prior to incurring such cost.
- (c) All rates are exclusive of VAT
- (d) Health and Safety Agent will be recovered through Disbursements.
- (e) No mark-up on any disbursement cost will be paid.
- (f) No payment for disbursement will be made for the following:
 - Travelling (except for on-site travelling) and accommodation
 - Typing of correspondence, payment certificates, variation orders, progress reports or financial reports
 - Telephone calls
 - Cellular calls
 - Computer costs
 - Telefaxes (outgoing or incoming)
 - Email (sent or received)

C2.2. The Activity Schedule

Bill NO:1	PRELIMINARY AND GENERAL		UNIT	QTY	Rate	Total
ITEM No.	DRW No.	DESCRIPTION				
A						
A.1	Site Establishment:	The Contractor shall establish the site camp and maintain throughout the construction period and allow for removal of such upon completion of Works. The ACSA Representative reserves the right to negotiate the rates for rental arrangements.				
A.1.1.		Office and Meeting Room complete as per P&G's Guideline	Sum	100%		
A.1.2.		Stores	Sum	100%		
A.1.3.		Sanitation	Sum	100%		
A.1.4.		Electricity	Sum	100%		
A.1.5.		Supply and Install Diamond mesh fencing at 1.8 meters high	m	100		
A.1.6.		Supply and Install Diamond mesh Lockable Gate 1.8m high x 3.6m wide	each	1		
A.2.	Sign Board Labour					
A.2.1		Contractor shall erect on site, maintain throughout the construction duration	each	1		
A.3.	Sample Board and Stubby Line					
A.3.1		Construct a sample board	Sum	100%		
A.4.	Health and Safety measures (In terms of 34-333)	Safety & Health, Environmental				
A.4.1		Compliance with OH&S Act & Construction Regulations.	Sum	100%		
A.5.	As Built					
A.5.1		The Contractor shall maintain and update an as-built drawings as per detailed specifications	No charge			
A.6.	Construction Plan					
A.6.1.		Contractors must allow for the preparation of a detailed programme reflecting the outage dates.	No charge			
A.7.	Contractual requirements	Comply ,maintain all insurance and statutory contributions, etc.				
A.7.1		Allowance to Comply, maintain all insurance and statutory contributions, etc. (Actual cost will be paid at the end of the project)	Sum	1		
A.8.	Miscellaneous					

		<u>MV EQUIPMENT</u>	-			
1	Item 2.1.5.1 Specification	Ring connected GIS switchgear complete with CTs, VTs, busbars, 630A vacuum circuit breaker, enclosure, etc. as per specifications. Including delivery, rigging, etc. <u>Free issue omit material rate.</u>	No	2		
2	Item 2.1.5.2 Specification	Electronic Relay for Ring connected GIS switchgear, with IEC 61850 communication protocol, including cabling, terminations, etc. as per specifications. Including delivery, rigging, etc. <u>Free issue omit material rate.</u>	No	2		
3	Item 2.1.5.3 Specification	Transformer feeder GIS switchgear complete with CTs, VTs, busbars, 630A vacuum circuit breaker, enclosure, etc. as per specifications. Including delivery, rigging, etc. <u>Free issue omit material rate.</u>	No	2		
4	Item 2.1.8 specification	Electronic Relay for transformer feeder GIS switchgear, with IEC 61850 communication protocol, including cabling, terminations, etc. as per specifications. Including delivery, rigging, etc.	No	2		
		-	-			
		<u>Battery Tripping Unit (BTU), as per specifications. Including cabling and cable containment, etc.</u>	-			
5	Item 2.1.6 specification	110VDC battery tripping unit including battery charger, etc. as per specifications, including cabling and cable containment to MV protection equipment	No	1		
		-	-			
		<u>Transformers</u>	-			
6	Item 2.1.2 specification	500 kVA Cast Resin Encapsulated Transformer complete with enclosure, temperature sensors, etc. as per specifications including delivery, rigging, etc. <u>Free issue omit material rate.</u>	No	2		
		-	-			
		<u>Cabling</u>	-			
7	Item 2.3 specification (from item 7-13)	70mm ² 3-Core XLPE MV cable installed in trenches	m	60		
8		70mm ² 3-Core XLPE MV cable terminations	No	6		

		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
9		70mm ² 3-Core XLPE MV cable joints	No	2		
10		185mm ² 4-Core Cu PVC SWA armoured 600V/1000V cable	m	60		
11		185mm ² 4-Core Cu PVC SWA armoured 600V/1000V cable terminations	No	12		
12		70mm ² BCEW	m	120		
13		70mm ² BCEW terminations	No	36		
		-	-			
		<u>Fire Detection installation</u>	-			
14	Item 2.3 specification (from item 14-16)	Terminations of existing Fibre Optic Cable between Substation 11 to main substation building	No	1		
15		Smoke detection installation including fire panel, metallic conduits, fire detectors, etc.	No	1		
16		Integration into main fire panel located in main substation building	No	1		
		-	-			
		<u>Earth Resistance test</u>	-			
17	Item 6.18.3 specification	Testing and reporting on the resistance on the existing earthing installation	No	1		
		-	-			
		<u>Cable test</u>	-			
18		11kV Cable Pressure test	No	2		
		<u>Main DB</u>				
19	Item 6.17.2 specification	Repositioning of Main DB, including extension of cables and wiring, as required. All shutdown to be arranged and agreed upon by ACSA	No	1		
		<u>LED Light Fittings</u>				

20	Item 6.16.2 specification	Surface Mounted LED light fittings rated IP 65 or greater, 4800-5400 lumens, with a minimum of 100 lumens/watt, SABS certified.	No	26		
21		Recessed 2-way, one lever light switch	No	4		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
22	Item 6.16.2 specification	Conduit and wiring for light fittings and light switches, including terminations, chasing, etc.	Item	1		
		<u>Commissioning of installation</u>				
23		Commissioning of equipment including CoC	No	1		
		TOTAL (Excluding VAT) - CARRIED TO FINAL SUMMARY				

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<u>BILL NO. 3</u>				
		<u>SUBSTATION 11 Building Works</u>	-			
		<u>PART 1: ALTERATIONS</u>				
		<u>PREAMBLES</u>				
		For preambles see "Model Preambles for Trades"				

		SUPPLEMENTARY PREAMBLES				
		<u>View site</u>				
	Item 2.1.1 specification	Before submitting his tender the contractor shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained				
		<u>Alterations</u>				
		In taking down and removing existing work the utmost care shall be observed to prevent any structural or other damage to remaining portions of the building. The Contractor shall ensure the stability of all structures during alteration work				
		Special care shall be exercised during the progress of the work to ensure that any electrical installations, water supply pipes, telephone and other services which may be encountered are not interfered with and notice shall be given to the principal agent if any disconnection or alterations become necessary				
		The Contractor shall take all precautions necessary to prevent any nuisance from dust whilst carrying out the work				
		Items described as "removed", "removal", "removing", etc shall include for removal from its original position on the premises and carting away from the site and disposal at the contractor's cost				
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				

		Materials described as set aside for re-use shall be carefully dismantled where necessary, cleaned, neatly stored under cover and protected from damage until required for re-use. Any damage caused to such materials during removal, storage or re fixing shall be made good at the Contractor's expense				
		Descriptions for removal of brickwork, concrete, partitions, etc., shall include all finishes to such items				
		<u>Disposal of debris</u>				
		The Contractor shall be responsible for the removal from the site and disposal of all materials, debris and rubbish resulting from the alterations				
		<u>Cleaning and making good existing surfaces</u>				
		The Contractor shall clean and remove all projections, glue coverings, doors, frames, etc have been removed marks, etc to existing work where walls, ceilings, floor				
		<u>General</u>				
		The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent.				
		Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the principal agent				

		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc				
		Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing				
		<u>PREPARATORY WORK TO EXISTING SURFACES</u>				
		<u>Making good walls where concrete beds were removed</u>				
		Against walls where surface bed was removed	m ²	2,00		
		Hack-up and remove concrete surface beds	m ³	5,00		
		Hack-up and remove brick work to prepare to receive new duct	m ²	8,00		
		<u>Take out and remove existing full bore outlets and pipes and remove from site</u>				
		Full-bore outlets	No	2,00		
		Take down and remove half brick wall	m ²	30,00		
		Take out and remove existing double door and frame	No	2,00		
		<u>DEMOLITIONS ETC</u>				
		<u>Demolishing and removing</u>				
		Roof Canopy 1200 x 2500mm	No	2,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				

		<u>PART 2: EARTHWORKS</u>				
		<u>PREAMBLES</u>				
		For preambles see "Model Preambles for Trades"				
		<u>SUPPLEMENTARY PREAMBLES</u>				
		<u>Nature of ground</u>				
		Use "assumed to be" if no trial holes, soils investigations, etc., have been carried out - discuss with engineer. Use "Trial holes indicate that" where the ground has been investigated by means of trial holes				
		<u>Carting away of excavated material</u>				
		Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site				
		<u>SITE CLEARANCE ETC</u>				
		<u>Site clearance</u>				
		Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m ²	72,00		
		<u>Keeping excavations free of water</u>				
		Keeping excavations free of all water other than subterranean water	Item	1,00		
		<u>EXCAVATION FOR FOUNDATIONS</u>				
		<u>Excavation in earth not exceeding 2m deep</u>				
		Trenches	m ³	13,00		
		Extra over all excavations for carting away				

		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor at no extra cost to the client	m ³	8,00		
		<u>Risk of collapse of excavations</u>				
		Sides of trench excavations exceeding 1,5m deep	m ²	39,00		
		<u>FILLING ETC</u>				
		G7 Earth filling supplied by the contractor compacted in layers of 150mm to 95% Mod AASHTO density				
		Backfilling to trenches, holes, etc	m ³	7,00		
		<u>EXCAVATION FOR DUCTS</u>				
		<u>Excavation in earth not exceeding 2m deep</u>				
		Trenches	m ³	12,00		
		<u>Extra over all excavations for carting away</u>				
		Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor at no extra cost to the client	m ³	12,00		
		<u>Risk of collapse of excavations</u>				
		Sides of trench Duct excavations exceeding 1,5m deep	m ²	24,00		
		<u>SOIL POISONING</u>				
		<u>Soil insecticide in accordance with SANS 5859</u>				

		Under floors etc, including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m ²	63,00		
		To bottoms and sides of trenches etc	m ²	94,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>PART 3: CONCRETE, FORMWORK AND REINFORCEMENT</u>				
		<u>PREAMBLES</u>				
		For preambles see "Model Preambles for Trades"				
		<u>SUPPLEMENTARY PREAMBLES</u>				
		<u>Formwork</u>				
		Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use				
		The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.				
		Formworks to soffits of solid etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described				

		Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
		<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>10MPa/19mm concrete</u>				
		50mm Surface blinding under footings and bases	m³	2,00		
		<u>20MPa/19mm concrete</u>				
		Surface beds cast in trenches in existing building	m³	5,00		
		<u>30MPa/19mm concrete</u>				
		Strip Footings	m³	3,00		
		<u>REINFORCED CONCRETE CAST ON/IN FORMWORK</u>				
		<u>30MPa/19mm concrete</u>				
		Roof Slabs (170mm) including beams and inverted beams	m³	8,00		
		<u>TEST CUBES</u>				
		Making and testing 150 x 150 x 150mm concrete strength test	No	5,00		
		cubes (Set of 3)				
		<u>CONCRETE SUNDRIES</u>				
		<u>Finishing top surfaces of concrete smooth with a steel trowel</u>				

		Surface beds, slabs, etc	m ²	39,00		
		<u>SMOOTH FORMWORK (OFF SHUTTER)</u>				
		<u>Smooth formwork to soffits</u>				
		Roof slabs propped up exceeding 1.5m and not exceeding 3.5m high	m ²	39,00		
		<u>Smooth formwork to sides</u>				
		Upstand Beams	m ²	16,00		
		Edges exceeding 300mm high	m ²	4,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>REINFORCEMENT</u>				
		<u>Reinforcement</u>				
		All reinforcement to concrete items	t	1,92		
		<u>Fabric reinforcement</u>				
		Type 617 fabric reinforcement in concrete surface beds, slabs, etc.	m ²	69,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>PART 4: MASONRY</u>				
		<u>PREAMBLES</u>				
		For preambles see "Model Preambles for Trades"				
		<u>SUPPLEMENTARY PREAMBLES</u>				
		<u>BRICKWORK</u>				
		<u>Sizes in descriptions</u>				

		Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick				
		<u>Face bricks</u>				
		Bricks shall be ordered timeously to obtain uniformity in size and colour				
		<u>Pointing</u>				
		Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
		<u>FOUNDATIONS</u>				
		<u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar</u>				
		One and a half brick hollow walls	m ²	21,00		
		One brick walls for ducting	m ²	32,00		
		<u>SUPERSTRUCTURE</u>				
		<u>Brickwork of NFP bricks in class II mortar</u>				
		One and a Half brick hollow walls	m ²	87,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>Brickwork reinforcement</u>				
		75mm Wide reinforcement built in horizontally	m	341,00		
		150mm Wide reinforcement built in horizontally	m	482,00		
		<u>Prestressed fabricated lintels</u>				
		110 x 75mm Lintels in lengths not exceeding 3m	m	10,00		

		<u>BRICKWORK SUNDRIES</u>				
		Closing 50mm cavity of hollow wall vertically with brickwork half	m	28,00		
		brick wide				
		<u>Galvanised wire ties etc</u>				
		4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	20,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>PART 5: WATERPROOFING</u>				
		<u>PREAMBLES</u>				
		For preambles see "Model Preambles for Trades"				
		<u>SUPPLEMENTARY PREAMBLES</u>				
		<u>Waterproofing</u>				
		Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs				
		<u>DAMP-PROOFING OF WALLS AND FLOORS</u>				
		<u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course</u>				
		In walls	m ²	8,00		
		<u>One layer of 250 micron "Consol Plastics Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>				

		Under surface beds	m ²	78,00		
		On bottoms and sides of ducts	m ²	28,00		
		<u>WATERPROOFING TO ROOFS, BASEMENTS, ETC</u>				
		One layer 1.7mm self-adhesive fully bonded waterproof membrane comprising 1.4mm rubberised asphalt and a layer of heat resistant woven polypropylene mesh, laid with 75mm side and 100mm end laps				
		On flat roofs	m ²	40,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>PROTECTIVE ROOFING PAINT</u>				
		<u>Malthoid or similar approved asphaltic waterproofing membrane incorporating a fibre felt carrier</u>				
		Malthoid under roof slab and one brick wall not exceeding 300mm wide between concrete roof and brickwork	m	18,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>PART 6: CARPENTRY AND JOINERY</u>				
		<u>PREAMBLES</u>				
		For preambles see "Model Preambles for Trades"				
		<u>SUPPLEMENTARY PREAMBLES</u>				
		<u>Joinery:</u>				

		Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc				
		Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes				
		<u>Fixing</u>				
		Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete. All fixings to be HDG				
		<u>DOORS ETC</u>				
		<u>Bitcon Industries fire doors</u>				
		Bitcon class B single fire door 900 x 2400mm high including 1.6mm gauge primed mild steel frame for one brick wall and preparing frame for door closer and lock	No	2,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>PART 7: IRONMONGERY</u>				
		<u>PREAMBLES</u>				
		For preambles see "Model Preambles for Trades"				
		<u>SUPPLEMENTARY PREAMBLES</u>				
		<u>Finishes to ironmongery</u>				
		Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list:				
		BS Satin bronze lacquered CH Chromium plated				
		SC Satin chromium plated				
		SE Silver enamelled				
		GE Grey enamelled				
		AS Anodised silver				

		AB Anodised bronze				
		AG Anodised gold				
		ABL Anodised black				
		PB Polished brass				
		PL Polished and lacquered				
		PT Epoxy coated				
		SD Sanded				
		<u>LETTERS, NAMEPLATES, ETC</u>				
		<u>Geze</u>				
		160 x 160 x 0.9mm Thick Stainless steel push plate with engraved arrow symbol	No	2,00		
		160 x 160 x 0.9mm Thick Stainless steel push plate with engraved Fire Hose Reel symbol (code: 079/160E/FHR)	No	3,00		
		160 x 160 x 0.9mm Thick Stainless steel push plate with engraved Running Man symbol	No	4,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>PART 8: STRUCTURAL STEELWORK</u>				
		<u>PREAMBLES</u>				
		For preambles see "Model Preambles for Trades"				
		<u>SUPPLEMENTARY PREAMBLES</u>				
		<u>Descriptions</u>				
		Descriptions of bolts shall be deemed to include nuts and washers				
		Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete				

		Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete				
		Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete. Where anchor bolts are described as embedded in sides or soffits of concrete it shall be deemed to include holes through formwork.				
		Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete				
		<u>STEEL COLUMNS AND BEAMS</u>				
		<u>Welded columns in single lengths with flat section base, top, bearer and connection plates bolted to concrete</u>				
		152 x 152mm x 37kg/m I-section universal columns	kg	296,00		
		<u>Bolts to columns, beams, etc</u>				
		High tensile bolts	No	8,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		152 x 152mm x 37kg/m I Section beam resting on existing brickwork	kg	389,00		
		100 x 100 x 8mm x 12.2 kg/m L-Section fixed to existing concrete beam with M16 HILTI HIT- V rod with HIT-HY 200 mortar placed at 200mm c-c	kg	128,00		
		<u>Plates to purlins, girts, bracing etc</u>				
		Base plate.400 x 400 x 20mm thick non-shrink structural grout below base plate.	No	2,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				

ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>PART 9 METALWORK</u>				
		<u>SUPPLEMENTARY PREAMBLES</u>				
		<u>Descriptions</u>				
		Descriptions of bolts shall be deemed to include nuts and washers				
		Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete				
		Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres				
		<u>PRESSED STEEL TRANSFORMER ROOM DOORS AND FRAMES</u>				
		<u>GALVANIZED PRESSED STEEL TRANSFORMER ROOM DOORS AND FRAMES</u>				
		<u>Bitcon industries transformer room doors</u>				
		Type transformer double door 900 x 1511mm high with rebated frame suitable for 270mm wall	No	2,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>SUNDRY GALVANIZED STEELWORK</u>				
		<u>Floor duct covers</u>				
		Vastrap Hot rolled patterned weldable floor plate in coil	H4			

		6mm "Vastrap" plate duct covers in approximately 600mm widths and suitable lengths laid loose in framing	m ²	9,00		
		40 x 40 x 4mm Angle section framing with 100mm x 20mm wide to lugs at 500mm coc split at 50mm in 2 directions welded to L-section and cast into concrete	m	32,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>PART 10: PLASTERING</u>				
		<u>PREAMBLES</u>				
		For preambles see "Model Preambles for Trades"				
		<u>SCREEDS</u>				
		<u>1:3 Cement plaster screeds wood floated on concrete</u>				
		Self leveling screed with compressive strength of 25Mpa	m ²	78,00		
		<u>3:1 Cement plaster screeds steel trowelled on roof insulation</u>				
		On roofs average 100mm thick	m ²	40,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>PART 11: PLUMBING AND DRAINAGE</u>				
		<u>PREAMBLES</u>				
		For preambles see "Model Preambles for Trades"				
		<u>FULBORE , ETC</u>				

		<u>Galvanised mild steel</u>				
		80mm fulbore vertically embedded in concrete roof slab	No	2,00		
		80mm pipe fixed to walls	m	6,00		
		80mm Bend	No	2,00		
		SUBSTATION 11 ELECTRICAL - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>PART 12: PAINTWORK</u>				
		<u>PREAMBLES</u>				
		For preambles see "Model Preambles for Trades"				
		<u>SUPPLEMENTARY PREAMBLES</u>				
		All painting shall be done in accordance strictly with "Plascon" specifications only and including a "Certificate of Compliance"				
		Note: Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a doser hygrometer (or equivalent) of BD 2 scale - 8% or less.				
		<u>ON METAL</u>				
		<u>One coat metal primer, one coat universal undercoat and two coats oil based enamel "Plascon Rhine castle" or similar approved</u>				
		Transformer room door	m ²	13,00		
		<u>Fire Doors</u>				
		900 x 2100mm Fire doors	m ²	8,00		
		TOTAL (Excluding VAT) - CARRIED TO FINAL SUMMARY				

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<u>BILL NO. 4</u>				
		<u>TRANSMITTER/RECIEVER SUBSTATION</u>	-			
		-	-			
		<u>MV EQUIPMENT</u>	-			
1	Item 2.1.5.1 Specification	Ring connected GIS switchgear complete with CTs, VTs, busbars, 630A vacuum circuit breaker, enclosure, etc. as per specifications. Including delivery, rigging, etc.	No	2		
2	Item 2.1.5.2 Specification	Electronic Relay for Ring connected GIS switchgear, with IEC 61850 communication protocol, including cabling, terminations, etc. as per specifications. Including delivery, rigging, etc.	No	2		
3	Item 2.1.5.2 Specification	Transformer feeder GIS switchgear complete with CTs, VTs, busbars, 630A vacuum circuit breaker, enclosure, etc. as per specifications. Including delivery, rigging, etc.	No	2		
4	Item 6.3.3 Specification	Electronic Relay for transformer feeder GIS switchgear, with IEC 61850 communication protocol, including cabling, terminations, etc. as per specifications. Including delivery, rigging, etc.	No	2		
		-	-			
		<u>Battery Tripping Unit (BTU), as per specifications. Including cabling and cable containment, etc.</u>	-			
5	Item 2.1.6 specification	110VDC battery tripping unit including battery charger, etc. as per specifications, including cabling and cable containment to MV protection equipment	No	1		
		-	-			
		<u>Transformers</u>	-			
6	Item 2.1.2 specification	50 kVA Cast Resin Encapsulated Transformer ocomplete with temperature sensors, etc. as per specifications including delivery, rigging, etc.	No	2		
		-	-			
		<u>Cabling</u>	-			

7	Item 2.3 specification (from item 7-13)	70mm ² 3-Core XLPE MV cable installed in trenches	m	-		
8		70mm ² 3-Core XLPE MV cable terminations	No	6		
		TRANSMITTER/RECIEVER SUBSTATION - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
9		70mm ² 3-Core XLPE MV cable joints	No	-		
10		25mm ² 4-Core Cu PVC SWA armoured 600V/1000V cable	m	20		
11		25mm ² 4-Core Cu PVC SWA armoured 600V/1000V cable terminations	No	4		
12		70mm ² BCEW	m	120		
13		70mm ² BCEW terminations	No	36		
		-	-			
		<u>Fire Detection installation</u>	-			
14	Item 2.3 specification (from item 14-16)	Terminations of existing Fibre Optic Cable between Trans/Receiver Substation to main substation building	No	1		
15		Smoke detection installation including fire panel, metallic conduits, fire detectors, etc.	No	1		
16		Integration into main fire panel located in main substation building	No	1		
		-	-			
		<u>Earth Resistance test</u>	-			
17	Item 6.18.3 specification	Testing and reporting on the resistance on the existing earthing installation	No	1		
		-	-			
		<u>Cable test</u>	-			
18		11kV Cable Pressure test	No	2		
		<u>Main DB</u>				

19	Item 6.17.2 specification	Replace existing change-over switch with automatic change-over switch, 3-pole, 80A, 400V	No	1		
		<u>Building Works</u>				
20	Item 2.1.1 specification	Installation of new substation main entrance door	No	1		
		TRANSMITTER/RECIEVER SUBSTATION - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
		<u>LED Light Fittings</u>				
21	Item 6.16.2 specification	Surface Mounted LED light fittings rated IP 65 or greater, 4800-5400 lumens, with a minimum of 100 lumens/watt, SABS certified.	No	4		
22	Item 6.16.2 specification	Conduit and wiring for light fittings, including terminations, chasing, etc.	Item	1		
		<u>Commissioning of installation</u>				
23		Commissioning of equipment including CoC	No	1		
		TOTAL (Excluding VAT) - CARRIED TO FINAL SUMMARY				

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<u>BILL NO. 5</u>				
		<u>VOR SUBSTATION</u>	-			

		-	-			
		<u>MV EQUIPMENT</u>	-			
1	Item 2.1.5.1 Specification	Ring connected GIS switchgear complete with CTs, VTs, busbars, 630A vacuum circuit breaker, enclosure, etc. as per specifications. Including delivery, rigging, etc. <u>Free issue omit material rate.</u>	No	2		
2	Item 2.1.5.2 Specification	Electronic Relay for Ring connected GIS switchgear, with IEC 61850 communication protocol, including cabling, terminations, etc. as per specifications. Including delivery, rigging, etc. <u>Free issue omit material rate.</u>	No	2		
3	Item 2.1.5.2 Specification	Transformer feeder GIS switchgear complete with CTs, VTs, busbars, 630A vacuum circuit breaker, enclosure, etc. as per specifications. Including delivery, rigging, etc. <u>Free issue omit material rate.</u>	No	1		
4	Item 6.3.3 Specification	Electronic Relay for transformer feeder GIS switchgear, with IEC 61850 communication protocol, including cabling, terminations, etc. as per specifications. Including delivery, rigging, etc. <u>Free issue omit material rate.</u>	No	1		
		-	-			
		<u>Battery Tripping Unit (BTU), as per specifications. Including cabling and cable containment, etc.</u>	-			
5	Item 2.1.6 specification	110VDC battery tripping unit including battery charger, etc. as per specifications, including cabling and cable containment to MV protection equipment	No	1		
		-	-			
		<u>Transformers</u>	-			
6	Item 2.1.2 specification	50 kVA Cast Resin Encapsulated Transformer complete with weatherproof enclosure, temperature sensors, etc. as per specifications including delivery, rigging, etc. <u>Free issue omit material rate.</u>	No	1		
		-	-			
		<u>Cabling</u>	-			
7	Item 2.3 specification (from item 7-13)	70mm ² 3-Core XLPE MV cable installed in trenches	m	-		
8		70mm ² 3-Core XLPE MV cable	No	4		

		terminations				
		TRANSMITTER/RECIEVER SUBSTATION - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
9		70mm ² 3-Core XLPE MV cable joints	No	-		
10		25mm ² 4-Core Cu PVC SWA armoured 600V/1000V cable	m	20		
11		25mm ² 4-Core Cu PVC SWA armoured 600V/1000V cable terminations	No	2		
12		70mm ² BCEW	m	120		
13		70mm ² BCEW terminations	No	36		
		-	-			
		<u>Fire Detection installation</u>	-			
14	Item 2.3 specification (from item 14-16)	Terminations of existing Fibre Optic Cable between VOR Substation to main substation building	No	1		
15		Smoke detection installation including fire panel, metallic conduits, fire detectors, etc.	No	1		
16		Integration into main fire panel located in main substation building	No	1		
		-	-			
		<u>Earth Resistance test</u>	-			
17	Item 6.18.3 specification	Testing and reporting on the resistance on the existing earthing installation	No	1		
		-	-			
		<u>Cable test</u>	-			
18		11kV Cable Pressure test	No	2		
		<u>Building Works</u>				
19		Installation of new substation main entrance door	No	1		
		<u>LED Light Fittings</u>				

20	Item 6.16.2 specification	Surface Mounted LED light fittings rated IP 65 or greater, 4800-5400 lumens, with a minimum of 100 lumens/watt, SABS certified.	No	2		
		TRANSMITTER/RECIEVER SUBSTATION - CARRIED FORWARD				
ITEM		DESCRIPTION	UNIT	QTY		AMOUNT
		Brought Forward				
21	Item 6.16.2 specification	Conduit and wiring for light fittings, including terminations, chasing, etc.	Item	1		
		<u>Commissioning of installation</u>				
22		Commissioning of equipment including CoC	No	1		
		TOTAL (Excluding VAT) - CARRIED TO FINAL SUMMARY				

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<u>BILL NO. 6</u>				
		<u>BAC Miniature substation</u>	-			
		-	-			
		<u>Miniature Substation</u>	-			

1	Item 6.8.1 specification	Refurbishment of 500kVA Miniature substation as per specification and drawings including enclosure, MV switchgear, transformer, LV distribution panel, etc.	No	1		
		-	-			
		<u>Miniature Substation Plinth</u>	-			
2	Item 6.8.1 specification	Demolishing of existing plinth	Item	1		
3	Item 6.8.1 specification	Plinth for new miniature substation according to layout and weight requirements	Item	1		
		-	-			
		<u>Cabling</u>	-			
4	Item 2.3 specification (from item 4-12)	70mm ² 3-Core XLPE MV cable installed in trenches	m	-		
5		70mm ² 3-Core XLPE MV cable terminations	No	2		
6		25mm ² 4-Core Cu PVC SWA armoured 600V/1000V cable terminations	No	7		
7		16mm ² 4-Core Cu PVC SWA armoured 600V/1000V cable terminations	No	2		
8		10mm ² 4-Core Cu PVC SWA armoured 600V/1000V cable terminations	No	1		
9		70mm ² BCEW terminations	No	2		
10		16mm ² BCEW terminations	No	7		
11		10mm ² BCEW terminations	No	2		
12		6mm ² BCEW terminations	No	1		
		-	-			
		<u>Earth Resistance test</u>	-			
13	Item 6.18.3 specification	Testing and reporting on the resistance on the existing earthing installation	No	1		
		-	-			
		<u>Cable test</u>	-			
14		11kV Cable Pressure test	No	2		

Part C2
Confidential

2		Allow for profit and attendance	%	10		
		<u>PROVISIONAL SUMS</u>	-			
3		Provisional sum for remedial work on earthing installation	Item	1		
4		Allow for profit and attendance	%	10		
5	Item 6.7.3 specification	Provisional sum for remedial work on VOR substation lightning protection installation	Item	1		
6		Allow for profit and attendance	%	10		
7		Provisional sum for remedial work MV cable installation	z	1		
8		Allow for profit and attendance	%	10		
9		Detection and marking of existing MV Cabling for the entire MV network.	Sum	1,00		
10		Provide a surveyed CAD drawing with an embedded GIS, for the entire MV network belonging to King Phalo Airport	Sum	1,00		
11		Note: The Contractors listed below shall be domestic subcontractors to the Main Contractor and shall be employed under the same conditions as the Main Contractor.				
11.1		Allow a Provisional Sum for the Employing of Protection Specialist Sub-Contractor to verify the Protection proposals contained in this Specification, produce a short Design Report, assist with the Protection Installation, carry out Protection Settings, assist with SCADA configuration, Test and Commission the complete Protection System for the MV Switch Room Extensions. Design Report to include Fault calculations and Load tests and Provisional Protection settings as well as Protection Schematic.	Sum	1,00		
11.2		Profit & Attendance on item 11.1	%	10,00%		
		TOTAL (Excluding VAT) - CARRIED TO FINAL SUMMARY				

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ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<u>BILL NO. 8</u>				
		<u>11 Substation to 29 Localizer M/S to VOR Substation MV Cable</u>	-			
			-			
		<u>Cabling</u>	-			
1	Item 2.3 specification	70mm ² 3-Core XLPE MV cable installed in trenches	m	1700		
2	Item 2.3 specification	70mm ² 3-Core XLPE MV cable terminations	no.	12		

		<u>Ring Main Unit</u>				
3	Item 2.3 specification	RMU 11kV 630A 1D-1R N/EXT CSTL O/D D8060	no.	5		
4	Item 2.3 specification	70mm ² 3-Core XLPE MV cable terminations	no.	30		
		<u>MV Cable Detection and Survey</u>				
6	Item 2.3 specification	Detection and marking of existing MV Cabling between VOR to 29 Localizer and 29 Localizer to 11 Substation	m	1600		
		MV cabling survey	m	1600		
		<u>Decommissioning, Removal and Disposing of site existing MV Cabling</u>				
7	Item 2.3 specification	Decommissioning, Removal and Disposing of existing MV Cabling between VOR to 29 Localizer and 29 Localizer to 11 Substation	m	1600		
		<u>Taxiway Crossings</u>				
8	Item 2.3 specification	Cutting of Taxiway crossing 1&2 between point 1 to 2 and points 3 to 4 and dig 800 deep x 600mm wide trench	m	70		
9		Supply and install 110m kabelflex sleeves c/w bends etc	m	140		
10	Item 2.3 specification	Reinstate tarred surface after sleeve installation inline with the existing ACSA specification	m	70		
		<u>Testing, Commissioning & Documentation</u>				
11		Insulation resistance tests (100% of cable runs)		6		
12		Voltage withstand / HV test (per cable run)		6		
13		Continuity & phasing tests, recording and test certificates		6		
14		As-built drawings, GPS route mapping and O&M documentation		6		
		TOTAL (Excluding VAT) - CARRIED TO FINAL SUMMARY				

*This amount should be carried over to the form of offer PartC1. The total tendered amount shall be fixed, and it is not subject to fluctuation as a result of inflation, foreign, exchange rate variation, etc.

PART C3: SCOPE OF WORK

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

C3.1: EMPLOYER'S WORKS INFORMATION

1. Description of the works

The East London Airport utilises 11kV rings to distribute its electrical power across the airport. The 11kV rings are all fed from the main substation building located to the north-east of the terminal building and utilises 70 mm² XLPE conductors. All the substations that form part of the scope of works are located on the airside of the airport, with the exception of the BAC miniature substation that is located on the landside. The project scope includes the replacement of MV switchgear, which has reached their end of life, with modern gas-insulated switchgear (GIS), with vacuum breakers.

The relays are also to be replaced and must conform to IEC 61850 and be able to integrate seamlessly into the existing SCADA installation. The battery tripping units (BTU) are to be replaced with new units, operating at a voltage of 110 V.

The oil-filled transformers are to be replaced with resin cast, dry-type transformers.

All new switchgear and transformers are to comply with maximum size restrictions listed in this document in order to ensure adequate clearances around the equipment.

Over and above the upgrade of existing medium voltage switchgear the scope of works will also include the upgrade of faulty MV cabling between two substations via a localizer RMU.

2. Contract Management

Management meetings²

The Contractor will be expected to attend meetings relating to operations, contract management and other issues that may arise from time to time. As far as is practicable, the Contractor will make all required persons available for these meetings. The Contractor shall not submit claims for payment for staff attending any of these meetings.

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

Title and purpose	Approximate time & interval	Location	Attendance by:
Project progress meeting and safety inspections	Bi-Weekly	Onsite	Contractor, Supervisor and Employer's safety officers
Overall contract progress and feedback	Monthly	Onsite/telecon/skype	Project Manager, Contractor and Supervisor

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 The information in this section is required by the contract. Do not delete.

Health and safety risk management

The *Contractor* shall comply with the health and safety requirements contained in this document.

The Project Manager shall be entitled to fine the Contractor an amount of **R3000.00** for each non-conformance to Health and Safety matters. This shall not transfer any of the Contractor's responsibilities in this regard to the Employer by any means.

The Contractor shall be fully responsible for compliance to the Occupational Health and Safety Act for all persons, equipment and installations relating to this Contract. The Contractor is expected to sign the undertaking in this regard as attached in the annexes.

It shall be the Contractor's responsibility to ensure that all relevant labour and safety legislation is adhered to in rostering staff.

All persons on company premises shall obey all health and safety rules, procedures and practices. In particular, NO SMOKING signs and the prohibition of the carrying of smoking materials in designated areas shall always be obeyed. A copy of the Safety Rules booklet is available on request from the ACSA Safety Department.

All the applicable requirements of the Occupational Health and Safety Act (1993) and Regulations and any amendments thereto, shall be met. Where the OHS Act prescribes certification of competency of persons performing certain tasks, proof of such certification shall be provided to the Project Manager.

The contractor's Workmen's Compensation fees must be up to date. A copy of the Contractor's WCA registration shall be produced on request.

The following areas in the company are declared as "HOT WORKS PERMIT" areas:

All airside areas

All basement areas

All areas accessible to the public

All enclosed areas

The terminal building.

Any process in the above-mentioned areas involving open flames, sparks, or heat shall be authorised by the issue of a permit to work - obtainable from the ACSA Safety department. Any work done under the protection of a permit to work shall be in strict compliance with every prescription regarding the permit.

Safety equipment shall be used where applicable (e.g. safety, goggles, boots, harness, etc.) The Contractor, at his/her own expense shall provide such equipment, for his/her employees. The Contractor shall apply the necessary discipline and control to ensure compliance by his workers.

All Contractors must ensure that his/her employees are familiar with the existing emergency procedures and must co-operate in any drills or exercises, which might be held. Emergency / fire equipment and extinguishers shall not be obstructed at any time.

No person shall perform an unsafe / unhygienic act or operation whilst on Company premises.

No unsafe/dangerous equipment or tools may be brought onto or used on Company premises. The Company reserves the right to inspect all equipment/tools at any time and to prevent/prohibit their use, without any penalty to the Company and without affecting the terms of the Contract in any way.

The Company reserves the right to act in any way to ensure the safety/security of any persons, equipment or goods on its premises and will not be liable for any cost or loss evoked by the action. This includes the right to search all vehicles and persons entering, leaving or on the premises and to inspect any parcel, package, handbag and pockets. Persons who are not willing to permit such searches may not bring any such items or vehicles onto the premises.

The Contractor shall maintain good housekeeping standards in the area where he is working for the duration of the contract.

At no time must the Contractor interfere with, or put at risk, the functionality of any fire prevention system. Care must also be taken so as to prevent fire hazards.

The Contractor is required to issue all staff with standard uniforms. This shall as a minimum include: safety shoes, overalls (clearly marked with Contractor's company logo) and numbered reflective jackets (as per Airport requirements). All costs relating to uniforms shall be for the Contractor's account.

Environmental constraints and management

The Contractor shall comply with the environmental criteria and constraints stated in Annexure [B] to this Works Information

Quality assurance requirements

All work must be executed in accordance with prevailing industry norms and standards relating to quality, such as ISO9001.

Within the period stated in the Contact Data, the *Contractor* submits his complete quality control and assurance system (with all quality control and assurance procedures and manuals) for review and acceptance by the *Employer*. The manual includes pro-forma checklists for all requirements of the *Contractor's* quality control and assurance program and those called for in the Scope.

Acceptance by the *Employer* of the *Contractor's* quality assurance programme, quality plans and/or inspection and/or test plans, or of those of his Subcontractors will not relieve the *Contractor* of his obligation to provide services which meet the requirements of the Contract.

Invoicing and payment

Within two days 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 the following Address,

Airports Company South Africa SOC Limited
KING PHALO AIRPORT
66 Settlers Way,
East London,
5201

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 4930138393;

Description of work done by cross reference to *Project Manager's* certificate;

Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;

Quote purchase order number as a reference

The Contractor should arrange with ACSA's finance department for making all payments electronically.

Invoices should be submitted via email to Invoices.Acsa@airports.co.za

Provision of bonds and guarantees.

The form in which a bond or guarantee required by the *conditions of contract* (if any) is to be provided by the *Contractor* is given in Part 1 Agreements and Contract Data, document C1.3, Sureties.

The *Employer* may withhold payment of amounts due to the *Contractor* until the bond or guarantee required in terms of this contract has been received and accepted by the person notified to the *Contractor* by the *Project Manager* to receive and accept such bond or guarantee. Such withholding of payment due to the *Contractor* does not affect the *Employer's* right to termination stated in this contract.

3. Specifications of the works

Employer's Specifications

3.1 General Specifications

The following are the minimum specifications:

MV Switchgear General Specifications	
Type	Single phase solid insulation in a non-accessible main compartment combined with separate metal enclosed cable compartments
Indication	Black and white mimic diagram on front for position indication of the change-over switch
Power System Supply Voltage (Nominal)	11kV
Power System Supply Voltage (Maximum)	12kV
Impulse Withstand Voltage	95kV
Rated Frequency	50Hz
Number of phases	3
System rated short time withstand current	21kA (3s)
Insulation Medium	Gas Insulated (SF ₆)
Internal Arc Rating	21kA (1s)
Rated normal busbar current	630A
Maintenance	Maintenance free design

3.2. Circuit Breaker Specification

MV Circuit Breaker Specifications	
Circuit breaker type	Vacuum
Breaker type	Fixed
Breaking Capacity	630A

3.3 Protection relay Specification

Protection Relay Specifications	
Communication protocol	IEC 61850
Communication ports	RS232 (local), RS-485
Differential Protection	Required (future use only)
Directional Protection	Required (ring feeders)
Over current Protection	Required
Earth-fault Protection	Required
Instantaneous earth-fault protection	Required
Arc flash detection	Required (transformer feeders)
Definite-time delay	adjustable
IDMT O/C and E/F inverse curves	All curve-types selectable

3.4 Differential Protection Current Transformer Specification

Differential protection CT Specifications	
Class	CLX
Ratio	400/1 (for all phases)

3.5 Over Current Protection Current Transformer Specifications

O/C and E/F CT Specifications	
Class	CL5P20
Ratio	400/1 (for all phases) for ring feeders 100/1 (for all phases) for transformer feeders

4. Applicable Standards and norms:

The below list should be used as a guide; however, it is not exhaustive. The Contractor shall ensure compliance to current and relevant industry standards and norms pertaining to the Works.

Note: in a case where a stringent standard was used than the below mentioned, a stringent standard shall take precedence.

- Occupational Health and Safety Act of 1993
- SANS 10142-1: The wiring of premises part1: Low-voltage installations
- SANS 10142-2: The wiring of premises part2: Medium-voltage installations above 1 kV a.c. not exceeding 22 kV a.c. and up to and including 3 000 kW installed capacity
- IEC62271: Standards for MV-Switchgear
- SANS 1507: Electrical Cables with Extruded Solid Dielectric Insulation for Fixed Installations
- SANS 97: Electrical Cables – Impregnated Paper Insulated Metal-sheathed Cables for rated voltages 3,3/3,3 kV to 19/33 kV
- SANS 1339: Electrical Cables – Cross-Linked Polyethylene insulated cables for rated voltages 3,8 kV to 19/33 kV
- SANS 780: Distribution Transformers
- SANS-IEC 60076: Power Transformers
- SANS 10400: The application of the National Building Regulations
- IEC 60529: International Protection Marking

5 Personnel

A schedule of key personnel to this Contract will be provided to the Project Manager at commencement of this Contract. This will, as a minimum, include all persons from technician/artisan level to management level. For the full duration of this Contract, none of these persons will be replaced by a person of lesser ability or qualification. All on-site staff leaves shall be reported and agreed with the Project Manager. The Project Manager may request the replacement of any person with unsatisfactory performance or fails to comply with this contract.

It is the contractor's responsibility to ensure that there is always sufficient competent staff to perform the works as planned. It shall be the Contractor's responsibility to ensure that all relevant labour and safety legislation is adhered to in rostering staff.

The following table is not all inclusive, but is provided for illustration purposes:

Permit	Required by/for	Department
AVOP – Airside Vehicle Operator permit	All drivers of vehicles on airside	ACSA Safety
Airside Vehicle Permit	All vehicles that enter airside	ACSA Safety
Basement Parking permit	All vehicles allowed to enter the delivery basement	ACSA Parking
Personal permit	All persons employed on the airport	ACSA Security
Cell phone permit	All persons taking cell phones to airside	ACSA Security
Lap top permit	All persons taking lap top computers to airside	ACSA Security
Camera permit	All persons taking cameras or camera equipment to airside	ACSA Security
Hot Works Permit	All welding and/metal cutting work	ACSA Safety

Subcontracting

Should any part of the works be subcontracted, the Contractor will be responsible for all Works as if it was done so by the Contractor.

No casual labour (i.e., “off the street” labour) may be employed by the Contractor unless pre-arranged with ACSA. Whenever this is required, the Contractor shall come to a suitable arrangement with ACSA regarding sourcing and screening of such individuals.

6 Annexes to the Scope of Work

6.1 Annexures issued by the *Employer*.

[This is the list of Annexure to the Scope of Works issued by the Employer at or before the Contract Date and which apply to this contract]

Annexure	Revision	Title
Annexure A	1	Occupational Health and Safety Agreement
Annexure B	2	Environmental Terms and Condition
Annexure C	3	Service Level table

OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH & SAFETY ACT (ACT 85 OF 1993) & CONSTRUCTION REGULATION 5.1(k)

OBJECTIVES

To assist Airport Company South Africa (ACSA) in order to comply with the requirements of:

1. The Occupational Health & Safety (Act 85 of 1993) and its regulations and
2. The Compensation for Occupational Injuries & Diseases Act (Act 130 of 1993) also known as the (COID Act).

To this end an Agreement must be concluded before any contractor/ subcontracted work may commence

The parties to this Agreement are:

Name of Organisation: AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED KING PHALO AIRPORT
Physical Address: Airport Company South Africa SOC Limited KING PHALO AIRPORT 66 Settlers Way, East London, 5201

Hereinafter referred to as “Client”

Name of organisation:
Physical Address

Hereinafter referred to as “the Mandatory/ Principal Contractor”

MANDATORY’S MAIN SCOPE OF WORK

GENERAL INFORMATION FORMING PART OF THIS AGREEMENT

1. The Occupational Health & Safety Act comprises of SECTION 1-50 and all unrepealed REGULATIONS promulgated in terms of the former Machinery and Occupational Safety Act No.6 of 1983 as amended as well as other REGULATIONS which may be promulgated in terms of the Act and other relevant Acts pertaining to the job in hand.
2. “Mandatory” is defined as including as agent, a principal contractor or a contractor for work, but WITHOUT DEROGATING FROM HIS/HER STATUS IN HIS/HER RIGHT AS AN EMPLOYER or user of the plant
3. Section 37 of the Occupational Health & Safety Act potentially punishes Employers (PRINCIPAL CONTRACTOR) for unlawful acts or omissions of Mandatories (CONTRACTORS) save where a Written Agreement between the parties has been concluded containing arrangements and procedures to ensure compliance with the said Act BY THE MANDATARY.
4. All documents attached or refer to in the above Agreement form an integral part of the Agreement.
5. To perform in terms of this agreement Mandatories must be familiar and conversant with the relevant provisions of the Occupational Health & Safety Act 85 of 1993 (OHS Act) and applicable Regulations.
6. Mandatories who utilise the services of their own Mandatories (contractors) must conclude a similar Written Agreement with them.
7. Be advised that this Agreement places the onus on the Mandatory to contact the CLIENT in the event of inability to perform as per this Agreement.
8. This Agreement shall be binding for all work the Mandatory undertakes for the client.
9. All documentation according to the Safety checklist including a copy of the written Construction Manager appointment in terms of construction regulation 8, must be submitted 7 days before work commences.

THE UNDERTAKING

The Mandatary undertakes to comply with:

INSURANCE

1. The Mandatary warrants that all their employees and/or their contractor's employees if any are covered in terms of the COID Act, which shall remain in force whilst any such employees are present on the Client's premises. A letter is required prior commencing any work on site confirming that the Principal contractor or contractor is in good standing with the Compensation Fund or Licensed Insurer.
2. The Mandatary warrants that they are in possession of the following insurance cover, which cover shall remain in force whilst they and /or their employees are present on the Client's premises, or which shall remain in force for that duration of their contractual relationship with the Client, whichever period is the longest.
 - a. Public Liability Insurance Cover as required by the Subcontract Agreement.
 - b. Any other Insurance cover that will adequately makes provision for any possible losses and/or claims arising from their and /or their Subcontractors and/or their respective employee's acts and/or omissions on the Client's premises.

COMPLIANCE WITH THE OCCUPATIONAL HEALTH & SAFETY ACT 85 OF 1993

The Mandatary undertakes to ensure that they and/or their subcontractors if any and/or their respective employees will at all times comply with the following conditions:

1. All work performed by the Mandatary on the Client's premises must be performed under the close supervision of the Mandatary's employees who are to be trained to understand the hazards associated with any work that the Mandatary performs on the Client's premises.
2. The Mandatary shall be assigned the responsibility in terms of Section 16(1) of the OHSAct 85 of 1993, if the Mandatary assigns any duty in terms of Section 16(2), a copy of such written assignment shall immediately be forwarded to the Client.
3. The Mandatary shall ensure that he/she familiarise himself/herself with the requirements of the OHSAct 85 of 1993 and that s/he and his/her employees and any of his subcontractors comply with the requirements.
4. The Mandatary shall ensure that a baseline risk assessment is performed by a competent person before commencement of any work in the Client's premises. A baseline risk assessment document will include identification of hazards and risk, analysis and evaluation of the risks and hazards identified, a documented plan and safe work procedures to mitigate, reduce or control the risks identified, and a monitoring and review plan of the risks and hazards.
5. The Mandatary shall appoint competent persons who shall be trained on any Occupational Health & Safety aspect pertaining to them or to the work that is to be performed.
6. The Mandatary shall ensure that discipline regarding Occupational Health & Safety shall be strictly enforced.
7. Any personal protective equipment required shall be issued by the Mandatary to his/her employees and shall be worn at all times.
8. Written safe working practices/procedures and precautionary measures shall be made available and enforced and all employees shall be made conversant with the contents of these practises.
9. No unsafe equipment/machinery and/or articles shall be used by the Mandatary or contractor on the Client's premises.
10. All incidents/accidents referred to in OHSAct shall be reported by the Mandatary to the Provincial Director: Department of Labour as well as to the Client.
11. No user shall be made by the Mandatary and/or their employees and or their subcontractors of any of the Client's machinery/article/substance/plant/personal protective equipment without prior written approval.
12. The Mandatary shall ensure that work for which the issuing of permit is required shall not be performed prior to the obtaining of a duty completed approved permit.
13. The Mandatary shall ensure that no alcohol or any other intoxicating substance shall be allowed on the Client's premises. Anyone suspected to be under the influence of alcohol, or any other intoxicating substance shall not be allowed on the premises. Anyone found on the premises suspected to be under the influence of alcohol or any other intoxicating substance shall be escorted off the said premises immediately.
14. Full participation by the Mandatary shall be given to the employees of the Client if and when they inquire into Occupational Health & Safety.

FURTHER UNDERTAKING

1. Only a duly authorised representative appointed in terms of Section 16.2 of the OHS Act is eligible to sign this agreement on behalf of the Mandatary. The signing power of this representative must be designated in writing by the Chief Executive Officer of the Mandatary. A copy of this letter must be made available to the Client.
2. The Mandatary confirms that he has been informed that he must report to the Client's management, in writing anything he/she deems to be unhealthy and /or unsafe. He has versed his employees in this regard.
3. The Mandatary warrants that he/she shall not endanger the health & safety of the Client's employees and other persons in any way whilst performing work on the Client's premises.
4. The Mandatary understands that no work may commence on the Client's premises until this procedure is duly completed, signed and received by the Client.
5. Non-compliance with any of the above clauses may lead to an immediate cancellation of the contract.

ACCEPTANCE BY MANDATARY

In terms of section 37(2) of the Occupational Health & Safety Act 85 of 1993 and section 5.1(k) of the Construction Regulations 2014,

I a duly authorised 16.2 Appointee acting for and on behalf of(company name) undertake to ensure that the requirements and the provision of the OHSAct 85 of 1993 and its regulations are complied with.

Mandatary – WCA/ Federated Employers Mutual No.....

Expiry date

SIGNATURE ON BEHALF OF MANDATARY
(Warrant his authority to sign)

DATE

SIGNATURE ON BEHALF OF THE CLIENT
AIRPORT COMPANY SOUTH AFRICA

DATE

ANNEXURE B:

ENVIRONMENTAL TERMS AND CONDITIONS - EMS 048

The following Environmental Terms and Conditions shall be strictly adhered to by all contractors when conducting works for ACSA. ACSA shall audit contractor activities, products and services on an ad hoc basis to ensure compliance to these environmental conditions. Any pollution clean-up costs shall be borne by the contractor.

ISSUE	REQUIREMENT
Environmental Policy	ACSA's Environmental Policy shall be communicated, comprehended and implemented by all ACSA appointed contractor staff.
Storm water, Soil and Groundwater Pollution	- No solid or liquid material may be permitted to contaminate or potentially contaminate storm water, soil or groundwater resources. - Any pollution that risks contamination of these resources must be cleaned-up immediately. Spills must be reported to ACSA immediately. Contractors shall supply their own suitable clean-up materials where required. - Washing, maintenance and refuelling of equipment shall only be allowed in designated service areas on ACSA property. It is the contractor's responsibility to determine the location of these areas. - No leaking equipment or vehicles shall be permitted on the airport.
Air Pollution	- Dust: Dust resulting from work activities that could cause a nuisance to employees or the public shall be kept to a minimum. - Odours and emissions: All practical measures shall be taken to reduce unpleasant odours and emissions generated from work related activities. - Fires: No open fires shall be permitted on site.
Noise Pollution	- All reasonable measures shall be taken to minimize noise generated on site due to work operations. - The Contractor shall comply with the applicable regulations regarding noise.
Waste Management	- Waste shall be separated as general or hazardous waste. - General and hazardous waste shall be disposed of appropriately at a permitted landfill site should recycling or re-use of waste not be feasible. - Under no circumstances shall solid or liquid waste be dumped, buried or burnt. - Contractors shall maintain a tidy, litter free environment always in their work area. - Contractors must keep on file: - The name of the contracting waste company - Waste disposal site used - Monthly reports on quantities – separated into general, hazardous and recycled - Maintained file of all Waste Manifest Documents and Certificates of Safe Disposal - Copy of waste permit for disposal site This information must be available during audits and inspections.
Handling & Storage of Hazardous Chemical Substances (HCS)	- All HCS shall be clearly labelled, stored and handled in accordance to Materials Safety Data Sheets. - Materials Safety Data Sheets shall be stored with all HCS. - All spillages of HCS must be cleaned-up immediately and disposed of as hazardous waste. (HCS spillages must be reported to ACSA immediately). - All contractors shall be adequately informed with regards to the handling and storage of hazardous substances. - Contractors shall comply with all relevant national, regional and local legislation regarding the transport, storage, use and disposal of hazardous substances.
Water and Energy Consumption	ACSA promotes the conservation of water and energy resources. The contractor shall identify and manage those work activities that may result in water and energy wastage.
Training & Awareness	The conditions outlined in this permit shall be communicated to all contractors and their employees prior to commencing works at the airport.

Penalties

Penalties shall be imposed by ACSA on Contractors who are found to be infringing these requirements and/or legislation. The Contractor shall be advised in writing of the nature of the infringement and the amount of the penalty. The Contractor shall take the necessary steps (e.g. training/remediation) to prevent a recurrence of the infringement and shall advise ACSA accordingly.

The Contractor is also advised that the imposition of penalties does not replace any legal proceedings, the Council, authorities, land owners and/or members of the public may institute against the Contractor.

Penalties shall be between R200 and R20 000, depending upon the severity of the infringement. The decision on how much to impose will be made by ACSA's Airport Environmental Management Representative in consultation with the Airport Manager or his/her designate and will be final. In addition to the penalty, the Contractor shall be required to make good any damage caused due to the infringement at his/her own expense.

I, of agree to the above conditions and acknowledge ACSA's right to impose penalties should I or any of my employees or sub-contractors fail to comply with these conditions.

Signed: on this date: (dd/mm/yyyy)

at:

ANNEXURE C:

SERVICE CATEGORY	PERFORMANCE STANDARD	METHOD OF MEASUREMENT	TARGET	Low Service Damages (Penalties)
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Uniforms and staff personal protective equipment	Use of correct Personal Protective Equipment	No incidents related to non-use of PPE	100% compliance	Contractor pays R500 per staff member if staff members found non-compliant
Airport permits	Airport permits must always be displayed by the staff.	Random inspections by ACSA staff member	100 % compliance	Contractor pays R500 per staff member if staff members found non-compliant
Installation of Light Fittings	Weather permitting, contractor is expected to commence with activities within 48hours after delivery and acceptance of test certificate	Number of days to complete the work order	100 % compliance	Contractor pays 10% per day exceeded after 48 hours.
Notices displayed	Display relevant notices per section during activities	No incidents related to non- displaying of notices	100 % compliance	Contractor pays R1000 for failing to display Notices
Interaction with the employer	Attend Bi Weekly meetings	Complete attendance register	100% compliance	Contractor pays R1500 per scheduled meeting not attended

Parties agree to the following low service table. The low service damages does not influence the calculation of the contract sum/value.

I, _____ (name & surname) of _____
_____ (company) agree to the above conditions and acknowledge ACSA's right to impose penalties should I or any of my employees or sub-contractors fail to comply with these conditions.

Signed: _____ on this date: _____ (dd/mm/yyyy)

at: _____ (airport name).

C3.2 CONTRACTOR'S WORKS INFORMATION

The Contractor should include information such as the Contractor's design and Plant and Materials specifications and schedules etc

PART C4: SITE INFORMATION

The site is located outside of East London, Eastern Cape at East London Airport. The substations and main substation are located on the airside of the airport, with the BAC miniature substation located on the landside, as shown in the figure below.

