



AIRPORTS COMPANY SOUTH AFRICA

PROJECT NUMBER: TBC

SCM Ref no. : ~~TBC~~ REC 11797

ENGINEERING PROFESSIONAL SERVICES APPOINTMENT FOR THE CONCLUSION OF STAGE FOUR (4), STAGE FIVE (5) AND SIX (6) FOR THE DESIGN OF HVAC MODIFICATION AND UPGRADE AT AIRPORTS COMPANY SOUTH AFRICA'S KING PHALO AIRPORT

NEC 3: PROFESSIONAL SERVICES CONTRACT (PSC)

Between **AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED**

Applicable at: KING PHALO AIRPORT

(Registration Number: 1993/004149/30)

and

(Registration Number:)

for **ENGINEERING PROFESSIONAL SERVICES APPOINTMENT FOR THE CONCLUSION OF STAGE FOUR (4), STAGE FIVE (5) AND SIX (6) FOR THE DESIGN OF HVAC MODIFICATION AND UPGRADE AT AIRPORTS COMPANY SOUTH AFRICA'S KING PHALO AIRPORT**

ENGINEERING PROFESSIONAL SERVICES APPOINTMENT FOR THE CONCLUSION OF STAGE FOUR (4), STAGE FIVE (5) AND SIX (6) FOR THE DESIGN OF HVAC MODIFICATION AND UPGRADE AT AIRPORTS COMPANY SOUTH AFRICA'S KING PHALO AIRPORT

NEC 3: PROFESSIONAL SERVICES CONTRACT (PSC)

Contents:	
Part C1	Agreements & Contract Data
C1.1	Form of Offer and Acceptance
C1.2a	Contract Data provided by the Employer
C1.2b	Contract Data provided by the Contractor
C1.3	Pro-forma Guarantee
Part C2	Pricing Data
Part C3	Scope of Work
Part C4	Site Information
C4.1	Site Information
C4.2	Insurance - Generic Conditions of Contract Insurance Clauses
C4.3	ACSA Special Requirements at an Operational Airport
C4.4	ACSA Occupational Health and Safety Specification
C4.5	ACSA Baseline HIRA
C4.6	ACSA Generic Hazards Assessment
C4.7	ACSA Service & Maintenance Contractor Environmental Terms and Conditions to Commence Work – EMS 048
C4.9	Environmental Management System Policy
C4.10	Environmental Management System

Part C1: Agreement 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 procurement of:

ENGINEERING PROFESSIONAL SERVICES APPOINTMENT FOR THE CONCLUSION OF STAGE FOUR (4), STAGE FIVE (5) AND SIX (6) FOR THE DESIGN OF HVAC MODIFICATION AND UPGRADE AT AIRPORTS COMPANY SOUTH AFRICA'S 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.

The tenderer, identified in the Offer signature block, has examined the draft contract as listed in the Acceptance section and agreed to provide this Offer.

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 **Consultant** 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:

(in words);

.....

R Including VAT (in figures)

Payment is calculated at

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 **Consultant** in the *conditions of contract* identified in the Contract Data.

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

(Insert name and address of organisation)

Name &
signature of
witness

Date

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 **Consultants** 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

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 **Consultant**) 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
Administration Office, 66 Settlers Way, 1st Floor,
East London, Eastern Cape, South Africa, 5201
Private Bag X109, East London,
Eastern Cape, South Africa
5201

(Insert name and address of organisation)

Name &
signature of
witness

Date

Schedule of Deviations

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

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

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

Part C1.2 Contract Data

The Conditions of contract are selected from the NEC3 Professional Services Contract, April 2013.

Each item of data given below is cross-referenced to the clause in the NEC3 Professional Services Contract which requires it.

Part one - Data provided by the *Employer*

1	General
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The *conditions of contract* are the core clauses and the clauses for Main Option A: Activity Schedule

Dispute resolution Option clause: W1

Secondary Options

X1 Price Adjustment

X7 Delay damages

X9 Transfer of rights

X10 *Employer's Agent*

X11 Termination by the Employer

X13 Performance Bond

X18: Limitation of liability

Z: *Additional conditions of contract*

of the NEC3 Professional Services Contract , April 2013.

The *project stages* are:

<i>SACPCMP stage</i>		Key deliverable at end of each stage as described in the Scope and accepted by the <i>Employer</i>
No	Description	
4	Documentation and Procurement	As detailed in the scope of works Part C3
5	Construction	As detailed in the scope of works Part C3
6	Close -Out	As detailed in the scope of works Part C3

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

10.1	The <i>Employer</i> is: Airports Company South Africa SOC Limited, King Phalo Airport Administration Office, 66 Settlers Way, 1 st Floor, East London, Eastern Cape, South Africa, 5201 Private Bag X109, East London, Eastern Cape, South Africa 5201											
11.2(9)	The <i>services</i> are provision of professional services for conclusion of stage four (4), five (5) and six (6) to upgrade and modify of HVAC system at King Phalo Airport.											
11.2(10)	The following matters will be included in the Risk Register <ul style="list-style-type: none">• Availability of as -built drawings/information• Access to site• Statutory approvals and ACSA approvals• Site Constraints and constructability• Notification of claims• Financial and Procurement• Impact on Operations• Time delays• Stakeholder Management											
11.2(11)	The Scope is in the document called Part 3: Scope of Work											
12.2	The <i>law of the contract</i> is the law of the Republic of South Africa											
13.1	The <i>language of this contract</i> is English											
13.3	The <i>period for reply</i> is 7 working days											
13.6	The <i>period for retention</i> is 1 year following Completion or earlier termination											
2	The Parties' main responsibilities											
2.2	<table><tr><td colspan="2">The <i>Employer</i> provides access to the following persons, places and things</td></tr><tr><td>access to</td><td>access date</td></tr><tr><td>as built information and existing services</td><td>Upon award of the project(s)</td></tr><tr><td>airside and landside safety procedure</td><td>Upon award of the project(s)</td></tr><tr><td>access to airside and landside</td><td>Upon award of the project(s)</td></tr></table>		The <i>Employer</i> provides access to the following persons, places and things		access to	access date	as built information and existing services	Upon award of the project(s)	airside and landside safety procedure	Upon award of the project(s)	access to airside and landside	Upon award of the project(s)
The <i>Employer</i> provides access to the following persons, places and things												
access to	access date											
as built information and existing services	Upon award of the project(s)											
airside and landside safety procedure	Upon award of the project(s)											
access to airside and landside	Upon award of the project(s)											
3	Time											
31.2	The <i>starting date</i> is on signing of the contract by both parties. How are you going to pay them if IT decided to upgrade the system.											
11.2(3)	The <i>completion date for the whole of the services</i> is 36 months after start date.											

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11.2(6)	The key dates and the <i>conditions</i> to be met are:		
	Condition to be met	key date	
1	Documentation and Procurement	4 weeks after issuing of purchase order	
2	Contract Administration and Inspections	16 weeks after issuing of purchase order	
3	Close out report	4 weeks after completion	

31.1	The <i>Consultant</i> is to submit a first programme for acceptance within 2 weeks of the Contract Date.
32.2	The <i>Consultant</i> submits revised programmes at intervals of 4 weeks.
4	Quality
40.2	The quality policy statement and quality plan are provided within 2 weeks of the Contract Date.
41.1	The <i>defects date</i> is 52 weeks after Completion of the whole of the <i>services</i> .
5	Payment
50.1	The <i>assessment interval</i> ends and starts at 12h00 on the 25 th day of each successive month.
51.1	The period within which payments are made is 4 weeks, after the receipt of the tax invoice.
51.2	The <i>currency of this contract</i> is the South African Rand (ZAR).
51.5	The <i>interest rate</i> is the prime lending rate of Standard Bank at any given time.

6	Compensation events
	No data required for this section of the <i>conditions of contract</i> .
7	Rights to material
	No data required for this section of the <i>conditions of contract</i> .

8	Indemnity, insurance and liability
	Refer to Part C4.2- GENERIC CONDITIONS OF CONTRACT INSURANCE CLAUSES

81.1	The amounts of insurance and the periods for which the <i>Consultant</i> maintains insurance are		
	Event	Cover	Period following Completion of the whole of the services or earlier termination
	failure by the <i>Consultant</i> to use the skill and care normally used by professionals providing services similar to the <i>services</i>	Refer to PartC1.4	(The period is the contract period plus latent defect period = total)
	death of or bodily injury to a person (not an employee of the <i>Consultant</i>) or loss of or damage to property resulting from an action or failure to take action by the <i>Consultant</i>	Refer to PartC1.4	
	death of or bodily injury to employees of the <i>Consultant</i> arising out of and in the course of their employment in connection with this contract	Refer to PartC1.4	

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

81.1	The <i>Employer</i> provides insurance cover for the project
82.1	Deductibles: <ul style="list-style-type: none"> In the event where the consultant defaults in its insurance obligations, the employer may take insurance on their own and then deduct the monthly premiums from the consultant. Refer to Part C1.4
9	Termination Refer to Secondary Clause X11.
10	Data for main Option clause
21.3	The <i>Consultant</i> prepares forecasts of the total of the <i>expenses</i> at intervals of no longer than 4 weeks.
11	Data for Option W1
W1.1	The <i>Adjudicator</i> is the person selected by the Parties as and when a dispute arises in terms of the relevant Z Clause, from the Panel of Adjudicators provided under the relevant Z clause
W1.2(3)	The <i>adjudicator nominating body</i> is the current Chairman of the Johannesburg Advocates' Bar Council.
W1.4(2)	The <i>tribunal</i> is Arbitration
W1.4(5)	The <i>arbitration procedure</i> is as set out in The Rules for Conduct of Arbitrations 2013 Edition published by The Association of Arbitrators (Southern Africa) or its successor body. Shortened rules of Arbitration.
	 The place where arbitration is to be held is Johannesburg South Africa. The person or organisation who will choose an arbitrator if the Parties cannot agree a choice or if the <i>arbitration procedure</i> does not state who selects an arbitrator, is the Chairman of the Association of Arbitrators (Southern Africa) or its successor body
12	Data for secondary Option clauses
X7	Delay Damages Delay damages for each section of the work are Amount per day 2%, to the maximum of 10% of the contract value.
X10	The <i>Employer's Agent</i>
X10.1	The <i>Employer's Agent</i> is Name: Samkelo Luyenge Address: Airports Company South Africa SOC Limited, King Phalo Airport Administration Office, 66 Settlers Way, 1st Floor, East London, Eastern Cape, South Africa, 5201 Private Bag X109, East London, Eastern Cape, South Africa 5201

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

The authority of the *Employer's Agent* is Project Manager.

X11	Termination by Employer
X11.1	The Employer may terminate the Consultant's obligation to Provide the services for a reason not stated in this contract by notifying the Consultant.
X13	Performance Bond
X13.1	The performance bond shall be 10% of the contract value and shall be provided as detailed in part C1.3
X18	Limitation of liability
X18.1	<p>The <i>Consultant's</i> liability to the <i>Employer</i> for indirect or consequential loss is Nil</p> <p>The <i>Employer's</i> liability to the <i>Consultant</i> for indirect or consequential loss is Nil</p> <p>The total Direct liability does not exceed 100% of the contract value cumulative total for either party</p>
X18.2	The <i>Consultant's</i> liability to the <i>Employer</i> for Defects that are not found until after the <i>defects date</i> is capped at the total of the contract price.
X18.3	The <i>end of liability date</i> is 1 years after Completion of the whole of the <i>services</i> .

ADDITIONAL CONDITIONS OF CONTRACT

Z1 Estimation of fees

It is specifically recorded that the fees charged by the consultant for services rendered in connection with and/or under this Contract shall be in terms of:

Z2 Tax invoices

The *Consultant's* invoice.

Delete the first sentence of core clause 50.2 and replace with:

Invoices submitted by the *Consultant* to the *Employer* include

- the details stated in the Scope to show how the amount due has been assessed, and
- the details required by the *Employer* for a valid tax invoice.

Delete the first sentence of core clause 51.1 and replace with:

Each payment is made by the *Employer* within four weeks of receiving the *Consultant's* invoice showing the details which this contract requires or, if a different period is stated in the Contract Data, within the period stated.

Z3 Communications and Notices

Z3.1 Add to the end of the first sentence in core Clause 13.1:

All notices, notifications, requests, demands or other communications shall be deemed to have reached the other Party –

- if delivered by hand, on the date of delivery;
- if posted by ordinary mail or registered post, on the 5th (fifth) calendar day following the date of such posting;
- if transmitted by facsimile or any other electronic medium acceptable to both Parties, on the first Business Day following the date of transmission / publication / delivery.

Z4 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 reyneke@duma.nokwe.co.za
Mr. Emeka Ogbugo (Quantity Surveyor)	Pretoria	+27 12 349 2027 emeka@gosiame.co.za

Z4.1 Appointment of the Arbitrator

An Arbitrator is appointed when a dispute arises from the Panel of Arbitrators below. The referring party nominates an Arbitrator, which nomination is either rejected or accepted by the either 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. An appointed Arbitrator shall provide his written award no later than 30 days following the last day of closing arguments.

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 reyneke@duma.nokwe.co.za
Mr. Emeka Ogbugo (Quantity Surveyor)	Pretoria	+27 12 349 2027 emeka@gosiame.co.za

Z5

Interpretation of the law

Add to core clause 12.3: Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Project Manager*, the *Supervisor*, or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z6

Providing the Works: Delete core clause 20.1 and replace with the following:

The *Consultant* will supervise the works in accordance with the Works Information and warrants that the results of the Works done in accordance with the drawings and specifications, when complete, shall be fit for their intended purpose.

Z7

Extending the defects date: add the following as a new core clause 46:

Z7.1

If the *Employer* cannot use the *works* due to a Defect, which arises after Completion and before the *defects date*, the *defects date* is delayed by a period equal to that during which the *Employer*, due to a Defect, is unable to use the *works*.

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

- Z7.2 If part of the *works* is replaced due to a Defect arising after Completion and before the *defects date*, the *defects date* for the part of the *works* which is replaced is delayed by a period equal to that between Completion and the date by when the part has been replaced.
- Z7.3 The *Project Manager* notifies the *Consultant* of the change to a *defect date* when the delay occurs. The period between Completion and an extended *defects date* does not exceed twice the period between Completion and the *defects date* stated in the Contract Data.
- Z8 **Termination**
- Z8.1 **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”.
- Z9 **Cession, delegation and assignment**
- Z9.1 The *Consultant* shall not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*, which consent shall not be unreasonably withheld.
- Z9.2 The *Employer* may, on written notice to the *Consultant*, cede and delegate its rights and obligations under this contract to any person or entity.
- Z10 **Ethics**
- Z10.1 The *Consultant* undertakes:
- Z10.1.1 not to give or cause 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 *Employer* is subject, including but not limited to the Prevention and Combating of Corrupt Activities Act, 12 of 2004.
- Z10.2 The *Consultant's* breach of this clause constitutes grounds for terminating the *Consultant's* obligation to Provide the Works or taking any other action as appropriate against the *Consultant* (including civil or criminal action). However, lawful inducements and rewards shall not constitute grounds for termination.
- Z10.3 If the *Consultant* 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 *Employer*, the *Employer* 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 *Consultant* 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 *Project Manager* or the *Employer*, which consent shall not be unreasonably withheld.
- Z11.2. If the *Consultant* is uncertain about whether any such information is confidential, it is to be regarded as such until otherwise notified by the *Project Manager*.
- Z11.3. This undertaking shall not apply to –
- Z11.3.1. Information disclosed to the employees of the *Consultant* for the purposes of the implementation of this agreement. The *Consultant* 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 *Consultant* is required by law to disclose, provided that the *Consultant* notifies the *Employer* prior to disclosure so as to enable the *Employer* to take the appropriate action to protect such information. The *Consultant* 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; and
- Z11.3.3. Information which at the time of disclosure or thereafter, without default on the part of the *Consultant*, enters the public domain or to information which was already in the possession of the *Consultant* 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 *works* or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the *Project Manager*. All rights in and to all such images vests exclusively in the *Employer*.
- Z11.5. The *Consultant* ensures that all his Sub-Consultants abide by the undertakings in this clause.

Z12. Employer's Step-in rights

- Z12.1. If the *Consultant* 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 *Project Manager*, the *Employer*, 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 sub-Consultant or supplier of the *Consultant*) to do so on his behalf. The reasonable costs of such remedial works shall be borne by the *Consultant*.
- Z12.2. The *Consultant* co-operates with the *Employer* 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 *Consultant* under the contract or otherwise for and/or in connection with the *works*) and generally does all things required by the *Project Manager* to achieve this end.

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

Z13. Intellectual Property

- Z13.1 Intellectual Property ("IP") rights means 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.
- Z13.2 IP rights remain vested in the originator and shall not be used for any reason whatsoever other than carrying out the *works*.
- Z13.3 The *Consultant* 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.
- Z13.4 The *Consultant* 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:
- Z13.4.1 the *Consultant's* design, manufacture, construction or execution of the Works;
- Z13.4.2 the use of the *Consultant's* Equipment, or
- Z13.4.3 the proper use of the Works.
- Z13.5 The *Employer* shall, at the request and cost of the *Consultant*, assist in contesting the claim and the *Consultant* may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it.

Z14 Dispute resolution: The following amendments are made to Option W1:

- Z14.1 **Under clause W1.3, in the fourth row of the first column of the adjudication table, the following words are added after the words "any other matter": "excluding disputes relating to termination of the contract".**
- Z14.2 **The following clauses are added at the end of clause W1.3:**
- Z14.2.1 "The Adjudicator shall decide the dispute solely on the written submissions of the parties. No oral submissions shall be heard during adjudication."
- Z14.2.2 "Disputes relating to or arising from termination of the Contract shall not be determined by an adjudicator. Any such dispute shall be referred directly to arbitration."
- Z15 The *Consultant* 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.

Part C1.2 Contract Data

The conditions of contract are the NEC3 Professional Service Contract, April 2013

Each item of data given below is cross-referenced to the clause in the NEC3 Professional Service Contract to which it mainly applies.

Part two - Data provided by the *Consultant*

Clause	Statement
10.1	<p>The <i>Consultant</i> is (Name):</p> <p>Address:</p> <p>Tel No.:</p> <p>Cell No.:</p> <p>Email:</p>
22.1	<p>The <i>Consultant's</i> key persons are:</p> <p>1. Name:</p> <p>Job Title (for this project):</p> <p>Responsibilities:</p> <p>Qualifications:</p> <p>Experience:</p> <p>2. Name:</p> <p>Job Title (for this project):</p> <p>Responsibilities:</p> <p>Qualifications:</p>

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

Experience:

3. Name:

Job Title (for this project):

Responsibilities:

Qualifications:

Experience:

4. Name:

Job Title (for this project):

Responsibilities:

Qualifications:

Experience:

11.2(3) The *completion date* for the whole of the *services* is As required by ACSA

11.2(10) The following matters (if any) will be included in the Risk Register

- Availability of As-Built Information
- Access to Site
- Progress vs Programme
- Cash Flow Management

11.2(13) The *staff rates* are as stated in the Pricing Data

25.2 The *Employer* provides access to the following persons, places and things

access to**access date**

1 All As-built Information & existing services

On signing of contract by both parties.

2 Relevant Engineering, Operational and Maintenance Personnel of ACSA

On signing of contract by both parties.

A Priced contract with activity schedule

11.2(14) The *activity schedule* is in the Pricing Data

11.2(18) The tendered total of the Prices is in the Form of Offer and Acceptance

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.

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

Signed at _____ on _____ 20....

For:

Registration Number:

Name & Position

As witnesses:

1. _____

2. _____

Part C1.4 Insurance Schedule

INSURANCE CLAUSES FOR AIRSIDE 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 ;

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 tunneling 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) **Aviation 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 **R2,000,000,000** in respect of any one occurrence or series of occurrences consequent on or to one source or original cause.

This insurance is in respect of liability relating to aircrafts.

- d) **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 .

c) Aviation Liability Insurance ;

In respect of each and every loss or damage or injury - **US\$250,000**.

d) 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 co-operate 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 1.6 (a),(c) and (d) 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) **Aviation Liability** insurances in excess of the Employers Aviation Liability insurances as stated under clause 1.1(c).

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

i) **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 Sub-Contractor 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.zaBuhle.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 _____

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

Details of other property damaged _____

Names and address of witnesses _____

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 _____

Part C2: Pricing Data

C2.1 Pricing Instructions

Remuneration for Professional Services

Remuneration for professional services will be on **Priced Contract with Activity Schedule** as outlined in the document below.

The pricing structure is as per the signed Terms of Reference.

1. DISBURSEMENT 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 purposes of 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 phone calls
 - Computer costs
 - Telefaxes (outgoing or incoming)
 - Email (sent or received)

Above expenses by the Consultant are deemed to be inclusive in their professional fees.

C2.2 Price Schedule

Pricing structure per activity, as per the proposal submitted.

Item No.	Program Stage	Activity Description	Price
1	Stage 4	Documentation and Procurement refer on Part C3	R
2	Stage 5	Contract Administration and Inspection, refer on Part C3	R
3	Stage 6	Close-out Report, refer on Part C3	R
4	Disbursements	Disbursements	R
Sub- Total 1			R
10 % Contingency			R
Total Fees (Excluding VAT)			R
VAT @ 15%			R
*TOTAL FEES (Including VAT)			R

This amount shall be carried over to form of offer Part C1.1

Part C3: Scope of work

C3.1: EMPLOYER'S SCOPE

ENGINEERING PROFESSIONAL SERVICES APPOINTMENT FOR THE CONCLUSION OF STAGE FOUR (4), STAGE FIVE (5) AND SIX (6) FOR THE DESIGN OF HVAC MODIFICATION AND UPGRADE AT AIRPORTS COMPANY SOUTH AFRICA'S KING PHALO AIRPORT

Description of the *services*

Executive overview

In brief, the *Consultant* will be responsible for

The HVAC systems shall include but not limited to chiller plant, chilled water pumps and distribution pipelines, air handling units, controls, electrical, split units, variable refrigerant flow:

The scope shall include HVAC systems in the following areas:

- Terminal building including offices and restaurants.
- Chiller plant
- Car rental building
- Ramp Handling building
- Electrical substations at Electrical Complex and 11 Substation
- Fire and Rescue Building.

The project shall be delivered in stages and in line with the terms of reference and project stages are:

- Documentation
- Contract Administration and inspections
- Close-Out

The scope and specifications of services will be split into stages (the stages are as per the Government Gazette No. 39480, 2015):

Stage 4: Documentation

1. Verify and prepare documentation for contractor procurement.
2. Review designs, drawings and schedules for compliance with approved budget.
3. Call for tenders and or negotiation of prices and or assist the Employer where relevant.
4. Liaise, co-operate and provide necessary information to the Employer as required.
5. Assist in evaluation of tenders.
6. Assess samples and products for compliance and design intent.

Deliverables for this phase will include:

- Specifications.
- Service co-ordination.
- Working drawings.
- Budget construction cost.

- Tender documentation.
- Tender evaluation report.
- Tender recommendations.
- Priced contract documentation.

Stage 5: Contract Administration

1. Attend site handover.
2. Issue construction documentation in accordance with the documentation schedule including, in the case of structural engineering, reinforcing bending schedules and detailing and specifications of structural steel sections and connections.
3. Carry out contract administration procedures in terms of the contract.
4. Prepare schedules of predicted cashflow.
5. Prepare pro-active estimates of proposed variations for client decision making.
6. Attend regular site, technical and progress meetings.
7. Review the Contractor's quality control programme and advise and agree on quality assurance plan.
8. Inspect the works for quality and conformity to contract documentation, on average once every 2 weeks during the course of the works as described in more detail in 3.3.2 for Level 1: periodic construction monitoring.
9. Review the outputs of quality assurance procedures and advise the contractor and Employer on the adequacy and need for additional controls, inspections and testing.
10. Adjudicate and resolve financial claims by the contractor(s).
11. Assist the resolution of contractual claims by the contractor.
12. Establish and maintain a financial control system.
13. Clarify details and descriptions during construction as required.
14. Prepare valuations for payment certificates to be issued by the principal agent.
15. Instruct witness and review all tests and mock ups carried out on and off site.
16. Check and approve contractor drawings for design intent.
17. Update and issue drawings register.
18. Issue contract instructions as and when required.
19. Review and comment on operation and maintenance manuals, guarantee certificates and warranties.
20. Inspect the works and issue practical completion and defects lists.
21. Arrange for delivery of all test certificates, statutory (regulatory) and other approvals, as built drawings and operating manuals.

Deliverables for this phase will include:

- Schedules of predicted cashflow.
- Construction documentation
- Drawings Register.
- Estimates for proposed variations.

- Contract instructions.
- Financial control reports.
- Valuations for payment certificates.
- Progressive and draft final accounts.
- Practical completion and defects list.
- All statutory certification and certificates of compliance by the Local and other authorities.

Stage 6: Close-out

1. Inspect and verify the rectification of defects.
2. Receive, comment, and approve relevant payment valuations and completion certificates.
3. Facilitate and /or procure final operations and maintenance manuals, guarantees and warranties.
4. Prepare and /or procure as-built drawings and documentation.
5. Conclude the final accounts where relevant.

Deliverables for this phase will include:

- Valuations for payment certificates.
- Works and final completion lists.
- Operations and manuals guarantee and warranties.
- As-built drawings and documentation.
- Final account.
- Written report that will have all learnings and future recommendations.

Design Specifications and Standards

- OHS Act (Occupational Health and Safety Act 85 of 1993)
- SANS 10254: The installation, maintenance, replacement, and repair of fixed electric storage water heating systems.
- SANS 10147: Refrigeration systems including plants associated with air-conditioning systems.
- SANS 1424: Filters for use in air-conditioning and general ventilation
- SANS 10173: The installation, testing, and balancing of air-conditioning duct work.
- SANS 10400: National building regulations.
- SANS 10142-1: The wiring of premises Part 1: Low-voltage installation
- SANS 1238: Air-conditioning duct work.
- ASHRAE guidelines for best practice.

Objectives and Scope of Works:

Drawing requirements

All drawings shall bear accepted contract references using a project title block which is accepted by the Employer. Detailed revision blocks and drawing numbers are suffixed accordingly.

All drawings, particularly layout drawings, submitted for acceptance shall be to a scale acceptable to the Employer. All drawings are to be made to scale and fully detailed and dimensioned. All dimensions marked on the drawings are to be considered correct, although measurements by scale may differ therefrom. The material from which each part is to be made shall be indicated.

The drawings include tolerances for manufacture and installation. The tolerances are suitable and of sufficient accuracy to provide safe and trouble free construction and operation over the life of the component.

All copies of drawings submitted to the Employer are to be provided in the form of 4 prints on white paper with black lines. The drawing size is A3 unless the use of another size is unavoidable. All native electronic format documents are also provided.

All drawings shall be dimensioned in metric units unless the use of another unit is required and/or recommended, e.g. imperial sizes for flange holes, studs, etc. Where applicable, drawings shall show a graphic scale key plan and north arrow. Dates on drawings shall be reflected in the following format: dd/mm/ccyy. Revisions shall be designated R0, R1, R2, R3, etc., commencing with the first issue. All revisions shall be clearly described in the revision column bearing the revision number.

All drawings as built and CAD data produced for this project adhere to the standards and requirements set out in the ACSA CAD Standards and ensure that throughout the project life a complete set of drawings is updated with "As-built" information in the required format.

ACSA CAD Standards:

- Title block should clearly specify the project name & number; status of the project, i.e. (Approval/construction/as-builds) and the dates of any up-dating done in the drawing. The contractors/consultants will be issued with the ACSA drawing Logo.
- Title block should clearly specify the consultant/contractor working in the project; their contact details physical address and also the responsibilities of the consultant/contractors. This will help the tracking and tracing the project data if if we might need in the future and references.
- Line scale and line type must be clear.
- The components in the drawings should be in their own layers and we should be able switch them on/off. They should be indicated on the plans specially and must attribute date to identify them. This makes it easy to work on and extract only specific layers needed.
- If XREF's are used, they should be attached/bind on the drawing.
- The text type dimensions must be in ISO Standard and ; also in their own layers.
- All As-built drawings should be issued in Auto-CAD; electronic format and in 3 X discs, accompanied by the drawing register.
- The issued As-built drawing, depending on the scope of the project should include: Services drawings; Architect drawings; Close-out Reports and Certificates of compliance. Close-out Reports and Certificates of compliance must be in pdf.
- At the hand over stage, 3 X discs with as-built must be issued by the contractor/consultant to the ACSA project manager, who will then issue 1 X discs/CD directly to the Assets Information Management Office/GIS

Please note that all service providers are requested to submit all As-built drawings to the CAD office at the airports within 14 working days after completion of the project. The As-builts must be submitted in AutoCAD and PDF format as indicated on the above points.

Design Software and Programmes or Methodologies to be utilised.

Latest version of AutoCAD,

Constraints on how the *Consultant* Provides the Services.

Management meetings

To be able to manage the contract, the Employer and Consultants will have various meetings, to proactively and jointly manage and minimise adverse risks to the project. The attendees shall have the necessary delegated authority to make decisions in respect of matters discussed at such meetings.

Regular meetings of a general nature may be convened and chaired by the *Employer's Agent* as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk register and compensation events	Every two weeks	To be confirmed	<i>Employer's Agent, Consultant</i>
Overall contract progress and feedback	Monthly	To be confirmed	<i>Employer's Agent, Consultant</i>

Meetings of a specialist nature may be convened as specified elsewhere in this Scope or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the *services*. Records of these meetings shall be submitted to the *Employer's Agent* 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.

Consultant's key persons

The *Consultant* is required to nominate a senior partner or director who will have overall responsibility for this project and other senior personnel responsible for the execution of the project. No change may be made without prior consultation with and approval by the *Employer*.

The *Consultant* is required to submit an organogram showing the key persons and their lines of authority / communication.

Work Plan

Objectives

The project shall be done firstly in accordance with the Employer's objective as per his appointed NEC Scope of Works Briefing with detail tasks and deliverables for each of the project stages, i.e. Scoping and Brief Stage, Preliminary Design Stage, Detail Design and Bid Stage, Working Drawing Stage and Construction Stage.

ISO Quality management System

All projects shall be managed in accordance with strict ISO 9001 quality system ensuring quality in design, administration, reports and site administration. Consultants must be accredited with ISO9001 compliance and

each project shall be administrated with respect to quality and technical compliance, in accordance with these strict international Quality Procedures.

Programme and monthly feedback

A detailed programme for each project needs to be submitted within 14days of appointment and updated regularly/monthly.

Consultation and Client Feedback

Detailed consultation with the designated ACSA representative and on-going feedback and reporting during feasibility preliminary design, detailed design and construction stages will be essential in delivering optimal and acceptable solutions which are in line with ACSA specifications and budget allocations. A monthly progress and cost report shall be done from detail design stage onwards till construction ends.

Understanding the Works

The Employer is not responsible for the failure of the Consultant to understand the precise nature of his undertaking under this contract or for any erroneous interpretation concerning the conditions affecting his performance, it being recognized that the Employer provided the Consultant sufficient opportunity to ask the Employer for clarification of the terms and conditions of this contract prior to submission of his tender to provide the services.

Compliance with Laws

The Consultant keeps himself fully informed of, and complies with all laws which apply to the Works and/or Services and/or to Providing the Works and/or Services (including laws which apply to persons employed to provide the Services and/or Works). "Laws" includes all national and provincial legislation, statutes ordinances and other laws and regulations and by-laws, orders and decrees of government or other legally constituted public authority and the common law.

Compliance with Codes & Standards

The Services comply with the codes and standards stated in the Scope. To the extent not stated, the Services comply with internationally recognised codes and standards which are accepted by the Employer.

In case of conflict between national, international codes, standards or guidelines and/or the requirements specified in this Scope, and unless otherwise instructed by the Employer, the more onerous one takes precedence; provided always that the Services comply as a minimum and in any event, with applicable law and mandatory South African national codes, standards and guidelines.

Health and safety

The *Consultant* shall at all times comply with the health and safety requirements prescribed by law as they may apply to the *services*.

The *Consultant* shall comply with the Health and Safety requirements contained in C 4.4.

Working on the Employer's property

Work done on or near an active airport is subject to several special requirements and conditions to ensure the safe operation of the airport at all times. Various limitations and requirements are to be taken cognisance of during the preparation of the tender and construction programme.

This work will be on the Landside area of the airport and the normal operations must be able to continue for the duration of the contract.

Please also refer to Annexure B: **SPECIAL REQUIREMENTS AT AN OPERATIONAL AIRPORT.**

People restrictions, hours of work, conduct and records.

The work under this contract is to be carried out under operational conditions of the airport and is therefore subject to several special requirements and conditions to always ensure the safe operation of the airport.

The *Consultant* keeps records of his people working on the *Employer's* property, including those of his Sub-consultants, and the *Employer's Agent* shall have access to these records at any time.

Cooperating with and obtaining acceptance of Others

Whenever work being done by Others on the project is dependent on or adjacent or related to the Services, the interface and sequence of such works and the Services should be such that the least interference possible will result to the Consultant and to Others and such sequence is determined by the Employer. Cooperation is required between the *Consultant* and Others to ensure the completion of the Services and other project works within the programme for the project as a whole.

As may be required from time to time or as per statutory requirements, the *Consultant* will liaise with and obtain acceptance from statutory authorities and avail themselves for any inspections that would be required.

At the earliest possible date, detailed programmes prepared for all other project works having interfaces with the Services are discussed by the Employer with the Consultant in order that the phasing, duration, use of working areas, attendance work etc. can be drawn into overall programmes for the project works.

Things provided by the Employer

The *Employer* will issue to the *Consultant* available information that will assist in the carrying out of the services. This information may include Base plans to indicate existing services, Traffic Impact Assessments and other available information.

The providing of this information does not relieve the *Consultant* of their professional responsibility to verify information that will be used as a basis for their designs.

Part C4.1: Site Information



Part C4.3 - SPECIAL REQUIREMENTS AT AN OPERATIONAL AIRPORT

Work done on or near an active airport is subject to several special requirements and conditions to ensure the safe operation of the airport at all times.

The work under this contract is to be carried out under operational conditions. Various limitations and requirements are to be taken cognizance of during the preparation of the tender and the construction programme. These limitations will not entitle the contractor to claim for extension of time.

1. Airports Manager

The Airports Manager is at all times responsible for the effective and safe operation of the airport. The Airports Manager or his designated representative will represent the Employer at the airport and he has full authority to act on behalf of the Employer, as set out in the contract documents.

The Airport manager will issue the necessary application forms to those who apply to the airport management for an airside vehicle permit and/or an Airport Security Permit and will decide, on receipt of the completed forms, whether or not to issue permits.

The Airport Management may at any time withdraw or suspend an Airside vehicle Permit or any Airside Security Permit.

All negotiations between the Contractor and the airport management shall be through the Engineer.

2. Airport Security and Safety

All personnel of the Engineer or Contractor will have to undergo a Security and Safety Awareness Programme before the start of the contract.

The Engineer/Contractor shall ensure that airport security is at all times complied with by his own personnel, all subcontractors and their personnel as well as all suppliers.

Access to the security area for personnel, vehicles and construction plant can only be obtained with permission from the Employer. Permits may be required for personnel and vehicles frequently moving through the security check points and shall at all times be visibly displayed while a person or vehicle is within the security area. Identity Documents must be available and presented on request.

Permits are only valid for a specific area inside the security area and the responsibility rests with the Contractor to control the movement of personnel, plant and vehicles to ensure their compliance with this requirement. A Prime Cost Sum has been provided for the cost of any permits required.

The Contractor will be required to provide permits for each and every material delivery vehicle entering the site, and they are to be escorted by a permit and radio license holder. The Employer may withdraw any or all permits without prior notice in the case of misuse, in which case the Contractor will have no claim against the Employer.

The Contractor shall make specific arrangements with the Employer, through the Engineer, to ensure the expedient delivery of time-dependent materials such as asphalt. If required, the Contractor shall supply additional security personnel, approved by the Airport Manager to assist with security control. If, due to the extra volume of construction traffic that has to pass through security, additional entrance facilities have to be provided, it shall be done in consultation with the Airport Manager and Engineer. These facilities and personnel have to be provided by the Contractor.

3. **Responsibilities of Consulting Engineers/Contractor**

As a condition of approval of an application for an Airside Vehicle Permit, the Consulting Engineer/Contractor shall ensure that all vehicles and drivers are covered by the Contract Works, Public Liability and SASRIA Special Risks Insurance.

When a vehicle is no longer required for airside use, the Engineer/ Contractor must upon removing it from airside use, remove and return the Airside Vehicle Permit to the airport manager.

The Engineer/Contractor shall immediately report to the airport manager all notifiable accidents and shall ensure that arrangements are in place for the rapid removal and/or repair of its vehicles should they become immobilised on movement areas.

Plant, equipment and personnel of the Engineer/Contractor shall at all times operate and remain 50m clear of all active runways and taxiways (measured from nearest edge of facilities). In Cat 2 conditions the 50m increases to 100m.

4. **Accident/Penalties**

The Engineer/Contractor shall report to the Airport Manager any accident involving vehicle or plant under their control where the accident has involved injury or damage to another vehicle, aircraft or airport property; or where there is injury to driver(s) or passenger(s) in the vehicle. The prescribed accident report shall be used for this purpose.

Distinction will be made between the following types of accidents:

- (i) Accidents of minor nature not having effect on the operational efficiency of the involved vehicles, building or airport property.
- (ii) Accidents causing property damage affecting the operational efficiency of vehicles or infrastructure or causing injury to persons traveling in vehicles.

Accidents in the first category must be reported to the Airport Manager within 24 hours. Accidents in the second category must be reported to the Airport Manager immediately and the South African Police Services (SAPS) shall be called to the accident site to investigate and report on the causes of the accident. Where possible neither the driver, the passenger or vehicles should leave the accident site before the arrival of the SAPS.

The parties involved must ensure that adequate arrangements are made for the rapid removal or repair of the immobilised vehicles on **operational** areas.

All accidents/incidents, irrespective of the seriousness thereof, affecting aircraft or loading bridges, must be reported immediately to the AM.

The Airport Manager reserves the right to:

- Withdraw any airport security permit.
- Withdraw any airside vehicle permit, if it is considered necessary tow away vehicles when parked incorrectly.

5. **Identification and Warning Lights**

All construction vehicles and self-propelled plant used inside the security area shall be properly marked to promote easy identification. A register of all identification numbers for all vehicles shall be kept up to date by the Contractor and shall at all times be available for inspection by the Airport Manager or Engineer. Each vehicle or self-propelled plant item, as required by the Engineer, shall be fitted with an approved amber rotating warning light which shall be in continuous operation while the vehicle is moving in the security area. The Contractor will be responsible for all costs involved in this item.

6. **Additional Security Measures**

- No cameras or the taking of photos will be allowed within the security area without written approval from the Airport Manager. No fire-arms, explosives or any other weapons may be brought into the security area.
- Smoking and the making of fires are prohibited in certain areas of the airport. Open fires may only be made in designated areas after written permission has been obtained from the Airport Manager, who will also supervise such fires. No smoking is allowed in the apron areas.
- No accommodation of personnel will be allowed in the security area of the airport.
- No drawings, sketches, diagrams, information, etc. pertaining to the works, airport, accidents, etc. may be made, reproduced or registered, except when it is necessary for the execution of the contract. No information regarding accidents, airport activities, reports, etc. shall be given to anybody and no press release shall be made or interview may be given to anybody without the written permission from the Airport Manager.
- Any interference with airport personnel, equipment or aircraft will be considered as an infringement of this clause. The Contractor will be held responsible for any damage, direct or indirect, to any airport equipment, aircraft, etc. caused by his own personnel or those of his subcontractors or suppliers whether on duty or not. The Contractor shall make good all costs necessary to remedy the situation including re-calibration of equipment where necessary. The Contractor shall note that especially navigation equipment is extremely sensitive and may be disturbed by sitting or leaning on it.
- No aircraft may be touched or moved by any member of the construction team. In case of an aircraft accident, no assistance what so ever may be given by the Contractor unless specifically requested and all staff must stay away from any part of an accident scene for a distance of at least 300m.

If the Contractor is found lacking in any of the security measures or requirements, it will be sufficient cause for the termination of all construction activities until the matter has been rectified to the satisfaction of the Airport Manager.

No claim resulting from inadequate security and safety measures will be considered.

7. **Compliance with Instructions**

If the Contractor does not promptly comply with all instructions of the Airport Manager and Engineer, the Employer has the right to amend the working schedule in aid of safety. The Engineer also retains the right to suspend all works until the Contractor, in the opinion of the Engineer, complies with the requirements.

8. **Delays Caused by Airport Management**

If delays, leading to an extension of time, are caused by aspects such as airport requirements, a reasonable claim for extension of time may be considered. However, if such delays coincide with delays caused by other circumstances, such as weather conditions, no claim for extension of time caused by requirements of airport management will be considered.

9. **General Requirements for Execution of the Work**

At the end of each work period, all plant, vehicles, material and obstructions must be removed to a demarcated safe area. The cost of removal of plant and materials and cleaning operations shall be deemed to be included in the relevant work items or in the general items. The Engineer reserves the right to ban any item of plant or equipment which leaks excessive amounts of fuel or oil. In addition all significant spillages of fuels and oils will be cleared immediately to the satisfaction of the Engineer failing which the Engineer reserves the right to have this work carried out by a third party to the cost of the Contractor.

The Employer retains the right to clean any of the mentioned areas if the Contractor neglects to do so to his satisfaction. In such a case the costs incurred by the Employer will be recovered from the Contractor at a rate of R400,00 per hour or part thereof taken by the sweeping machine of the Employer to do the work. This cost will be deducted from any monies payable to the Contractor.

If night work has to be done only suitable power and lighting units, approved by the Engineer, complying with the requirements of the Occupational Health and Safety Act No. 85 of 1993, SABS 0142-1981 and ICAO Annex 14 regulations shall be used.

10. Times for the Execution of the Works

Most of the work on this contract must be executed minimizing disruptions to airport operations. If, due to airport requirements, certain aspects of the work have to be done during night time, the following will apply:

- The Contractor shall supply sufficient lighting facilities to enable him and his subcontractors to perform the work according to the requirements of the specification.
- At the end of the night's work all lights, power plants, etc. must be removed to a safe area indicated by the Engineer and the Airport Manager. Remuneration for the acquisition, transport, erection and maintenance of lighting and power plants shall be included in the items provided and shall be all-inclusive. Power plants that spill fuel or oil will not be allowed on the works.

11. Movement on the Airport, Barriers, Lights and Marks

It is the responsibility of the Contractor to properly control the movement of personnel, vehicles and plant connected to the contract. The Contractor shall erect, remove and maintain all temporary barriers, warning lights and marks as required by the Airport Manager.

These control and limitations to movement of the Contractor will not be paid for separately and sufficient provision for it shall be made in the tendered items. Delays and disruption of the contractor's programme or progress as a result of the above requirements will not constitute reason for a claim of whatever nature.

12. Dust and Pollution Control

The Contractor shall limit dust pollution to the minimum as required by the Airport Manager. During windy conditions, the Engineer may temporarily suspend all work where dust pollution creates unacceptable conditions until such time that conditions return to normal.

In the case of working areas alongside the taxiways it shall be a definite requirement that at all times, weekends included, exposed areas are kept damp and free from dust and loose material which may be sucked into the engines of passing aircraft. The taxiways adjacent to the works shall be swept as required but at least daily.

All costs involved in dust and pollution control shall be borne by the Contractor.

13. Storing of Vehicles, Plant and Materials

It is a requirement that, at the end of each work period, all vehicles and plant are returned to the designated camp area allocated to the Contractor. With the approval of the Project Manager / Engineer, certain equipment may remain on or near the work area if the area is properly demarcated.

If material is temporarily stored outside the designated campsite, stockpiles shall be limited to a height of 1, 0 m above natural ground level.

14. Fires

No open fires whatsoever will be allowed. All necessary precautions must be taken to prevent veld or other unauthorized fires.

In the case of fire, including veld fires, the Contractor must instruct his employees to assist the airport management in extinguishing the fire if requested to do so.

The Contractor shall indemnify the Employer against claims that may arise from fires due to negligence by the Contractor or his operations. If it is required by the Employer to extinguish any fires caused by the Contractor, the cost thereof will be for the Contractor.

In case of a fire caused by air traffic activities, the area involved shall immediately be evacuated by the Contractor to an area beyond a radius of 300 m from the fire.

15. Environmental

The Airports Company South Africa (ACSA) recognises the impacts airport expansion projects have on the environment during the planning, design and construction phase of new projects and embraces the obligations of corporate environmental responsibility to manage and minimise these impacts as far as possible.

Design consultants are encouraged to explore and implement (where possible) feasible opportunities for minimising environmental impacts in the form of storm water, soil and groundwater pollution, resource and raw material utilisation, as well as energy and water conservation measures.

C4.4 - OCCUPATIONAL HEALTH & SAFETY SPECIFICATION FOR ACSA

HEALTH & SAFETY SPECIFICATIONS

TABLE OF CONTENTS

Introduction

1. Scope and Description of Project
2. Definitions
3. Notification of Construction
4. Duties of the Principal Contractor and Contractor
5. Management and Supervision of Construction work
6. Registration with The Workmen's Compensation or Licensed Insurer
7. Mandatary Agreement
8. Assigned Person in terms of Occupational Health & Safety Act of 1993 & Applicable Regulations
9. Health and Safety Documentation
10. Risk Assessment
11. Fall Protection Plan
12. Administrative Controls and the Occupational Health And Safety file
13. Health and Safety Representatives
14. Health and Safety Training
15. Fire Prevention and Protection
16. Emergency Preparedness
17. Incidents/Accidents Reporting and Investigation
18. Personal Protective Clothing/Equipment
19. Fall Protection
20. Risk Assessment for Construction Work
21. Structures
22. Temporary Work
23. Excavations (***not applicable to the scope of work***)
24. Demolition Work
25. Scaffolding (***not applicable to the scope of work***)
26. Suspended Platforms (***not applicable to the scope of work***)
27. Explosive Actuated Fastening Devices (***not applicable to the scope of work***)
28. Cranes
29. Lifting Equipment, Tackle, Material Hoist and Cranes
30. Construction Vehicles & Mobile Plant
31. Electrical Installations and Machinery on Construction Sites
32. Use of Temporary Storage of Flammable Liquids on Construction Sites(***not applicable to the scope of work***)
33. Housekeeping and General Safeguarding on Construction Site
34. Stacking and Storage on Construction Sites
35. Fire Precautions on Construction Sites
36. Construction Employees' Facilities
37. Ladders (***not applicable to the scope of work***)

46 of 77

C4.4 - OCCUPATIONAL HEALTH & SAFETY SPECIFICATION FOR ACSA

SCM Ref no.: **TBC** Project Number **TBC**

- 38. Pressure Equipment (*not applicable to the scope of work*)
- 39. Employees Exposed to Excessive Noise
- 40. Public Safety and Security
- 41. Night Work
- 42. Hot Work (*not applicable to the scope of work*)
- 43. Hired Plant and Machinery
- 44. Road Construction Work (*not applicable to the scope of work*)
- 45. Edge Protection and Penetration (*not applicable to the scope of work*)
- 46. Batch Plants(*not applicable to the scope of work*)
- 47. Confined Space Entry (*not applicable to the scope of work*)
- 48. Liquor, Drugs, Dangerous Weapons, Firearms
- 49. Internal/External Audits
- 50. Penalties

1. SCOPE AND DESCRIPTION OF PROJECT

2. DEFINITIONS

The definitions as listed in the OHS Act and Construction Regulations 84 of 7 February 2014 shall apply. Therefore all references to the old Construction Regulations will change to the new Construction Regulations.

Client: means any person for whom construction work is being performed.

Principal Contractor: means an employer appointed by the client to perform construction work

Contractor: means an employer who performs construction work;

Construction work: means any work in connection with,

- the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or
- the construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system; or the moving of earth, clearing of land, the making of excavation, piling, or any similar civil engineering structure or type of work;

Competent person: means a person who,

- a) has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and
- b) is familiar with the Act and with the applicable regulations made under the Act;

Designer: means

- (a) competent person who
 - i.) prepares a design;
 - ii.) checks and approves a design; or
 - iii.) arranges for any person at work under his or her control to prepare a design
 - iv.) including an employee of that person where he/she is the employer or
 - v.) designs temporary work, including its components,
- (b) an architect or engineer contributing to, or having overall responsibility for a design;
- (c) a building services engineer designing details for fixed plant;
- (d) a surveyor specifying articles or drawing up specifications;
- (e) A Contractor carrying out design work as part of a design and building project; or
- (f) an interior designer, shop-fitter or landscape architect;

Fall prevention equipment: means equipment used to prevent persons from falling from a fall risk position, including personal equipment, a body harness, lanyards, lifelines or physical equipment such as guardrails, screens, barricades, anchorages or similar equipment;

Fall arrest equipment: means equipment used to arrest a person in a fall, including personal equipment such as body harness, lanyards, deceleration devices, lifelines or similar equipment.

Hazard: means a source of or exposure to danger

Hazard identification: means the identification and documenting of existing or expected hazards to the health and safety of persons, which are normally associated with the type of construction work being executed or to be executed

Risk assessment: means the process contemplated in paragraph 10 of the specifications.

Excavation work: means the making of any man-made cavity, trench, pit or depression formed by cutting, digging or scooping;

Ergonomics: means the application of scientific information concerning humans to the design of objects, systems and the environment for human use in order to optimise human well-being and overall system performance;

3. NOTIFICATION OF CONSTRUCTION

(Construction Regulation 4)

The Principal Contractor who intends to carry out any construction work must at least 7 days before that work is to be carried out notify the provincial director in writing in a form similar to Annexure 2 if the intended construction work will—

- (a) include excavation work;
- (b) include working at a height where there is risk of falling;
- (c) include the demolition of a structure; or
- (d) Include the use of explosives to perform construction work.

4. DUTIES OF THE PRINCIPAL CONTRACTOR AND CONTRACTOR

(Construction Regulation 7)

The Principal Contractor must:

- (a) Provide and demonstrate to the client a suitable, sufficiently documented and coherent site specific health and safety plan, based on the client's documented health and safety specifications. The plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the Principal Contractor as work progresses;
- (b) Open and keep on site a health and safety file, which must include all documentation required in terms of the Act and this specification, which must be made available on request to an inspector, the client, the client's agent or Contractor; and
- (c) On appointing any other Contractor, in order to ensure compliance with the provisions of the Act—
 - i.) Provide contractors who are tendering to perform construction work for the Principal Contractor, with the relevant sections of the health and safety specifications pertaining to the construction work which has to be performed;
 - ii.) Ensure that potential contractors submitting tenders have made sufficient provision for health and safety measures during the construction process;
 - iii.) Ensure that no contractor is appointed to perform construction work unless the Principal Contractor is reasonably satisfied that the contractor that he/she intends to appoint, has the necessary competencies and resources to perform the construction work safely;
 - iv.) Ensure prior to work commencing on the site that every contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993;
 - v.) Appoint each contractor in writing for the part of the project on the construction site;
 - vi.) Take reasonable steps to ensure that each contractor's health and safety plan is implemented and maintained on the construction site;
 - vii.) Ensure that the periodic site audits and document verification are conducted at intervals mutually agreed upon between the Contractor and Principal Contractor, but at least once every 30 days;
 - viii.) Stop any contractor from executing construction work which is not in accordance with the client's health and safety specifications and the Principal Contractor's health and safety plan or which poses a threat to the health and safety of persons;
 - ix.) Where changes are brought about to the design and construction, make available sufficient health and safety information and appropriate resources to the contractor to execute the work safely; and
 - x.) Discuss and negotiate with the contractor the contents of the health and safety plan and must thereafter finally approve that plan for implementation;
- (d) Ensure that a copy of his or her health and safety plan, as well as the contractor's health and safety plan is available on request to an employee, an Inspector, a Contractor, the Client or the Client's Agent;
- (e) Hand over a consolidated health and safety file to the client upon completion of the construction work and must, in addition to the documentation include a record of all drawings, designs, materials used and other similar information concerning the completed structure;
- (f) In addition to the documentation required in the health and safety file, include and make available a comprehensive and updated list of all the Contractors on site accountable to the Principal Contractor, the agreements between the parties and the type of work being done; and
- (g) Ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.

The Principal Contractor must take reasonable steps to ensure co-operation between all contractors appointed by the Principal Contractor to enable each of those contractors to comply with this specification.

No contractor may allow or permit any employee or visitor to enter the site, unless that employee or visitor has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry and must ensure all have the necessary personal protective equipment.

The Contractor must prior to performing any construction work:

- (a) Provide and demonstrate to the Principal Contractor a suitable and sufficiently documented health and safety plan, based on the relevant sections of the client's health and safety specification. The aforementioned plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the contractor as work progresses;

- (b) Open and keep on site a health and safety file, which must include all documentation required in terms of the Act and this specification, and which must be made available on request to an Inspector, the Client, the Client's Agent or the Principal Contractor;
- (c) Before appointing another contractor to perform construction work, be reasonably satisfied that the contractor that he/she intends to appoint has the necessary competencies and resources to perform the construction work safely;
- (d) Co-operate with the Principal Contractor as far as is necessary ensuring all comply with the provisions of the Act; and
- (e) As far as is reasonably practicable, promptly provide the contractor with any information which might affect the health and safety of any person at work carrying out construction work on the site, any person who might be affected by the work of such a person at work, or which might justify a review of the health and safety plan.

Where the contractor appoints another contractor to perform construction work, the duties determined in **section 5** of this document applies to the contractor as if he/she were the Principal Contractor.

A Contractor must at all times keep records of the health and safety induction training and such records must be made available on request to an inspector, the client, the client's agent or the principal contractor.

A Contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.

5. MANAGEMENT AND SUPERVISION OF CONSTRUCTION WORK

(Construction Regulation 8)

The Principal Contractor must in writing appoint one full-time competent person as the Construction Manager with the duty of managing all the construction work on a single site, including the duty of ensuring Occupational Health and Safety compliance, and in the absence of the Construction Manager an alternate must be appointed by the Principal Contractor.

The Principal Contractor must upon having considered the size of the project, in writing appoint one or more assistant Construction Managers for different sections thereof: Provided that the designation of any such person does not relieve the Construction Manager of any personal accountability for failing in his or her management duties in terms of this regulation.

No Construction Manager appointed under paragraph 6 above may manage any construction work on or in any construction site other than the site in respect of which he/she has been appointed.

A Contractor must, after consultation with the client and having considered the size of the project, the degree of danger likely to be encountered or the accumulation of hazards or risks on the site, appoint a full-time or part-time construction health and safety officer in writing to assist in the control of all health and safety related aspects on the site.

No Contractor may appoint a Construction Health and Safety Officer to assist in the control of health and safety related aspects on the site unless he/she is reasonably satisfied that the construction health and safety officer that he/she intends to appoint has necessary competencies and resources to assist the Principal Contractor

A Construction Manager must in writing appoint Construction Supervisors responsible for construction activities and ensuring Occupational Health and Safety compliance on the construction site.

A Contractor must, upon having considered the size of the project, in writing appoint one or more competent employees for different sections thereof to assist the Construction Supervisor contemplated in **paragraph 6** above, and every such employee has, to the extent clearly defined by the Principal Contractor in the letter of appointment, the same duties as the Construction Supervisor: Provided that the designation of any such employee does not relieve the Construction Supervisor of any personal accountability for failing in his or her supervisory duties in terms of this section in the specification..

No Construction Supervisor appointed under paragraph 6 above may supervise any construction work on or in any construction site other than the site in respect of which he/she has been appointed: Provided that if a sufficient number of competent employees have been appropriately designated on all the relevant construction sites, the appointed Construction Supervisor may supervise more than one site.

6. REGISTRATION WITH THE WORKMEN'S COMPENSATION OR LICENSED INSURER

The Principal Contractor(s) must ensure that ACSA is provided with a valid letter of good standing, including a registration number with the Compensation for Occupational Injury and Diseases Fund or an alternative scheme approved in writing by the Commissioner to the COID Fund, at least 10 days prior commencement of construction work. It must remain the Principal Contractor's responsibility to furnish ACSA with a valid letter of good standing or keep a copy available for perusal by a Client, Client Representatives or any other person authorised thereto.

7. MANDATARY AGREEMENT

A duly signed mandatory form also referred to as OHS Act section 37.2' must be obtained from ACSA Safety Department. It must be signed and returned to ACSA by the Principal Contractor at least 10 days prior to commencement of construction work. The Principal Contractor must ensure that all its contractors have completed a similar document and a proof of such signed documents is submitted to ACSA for reference purposes.

8. ASSIGNED PERSON IN TERMS OF OCCUPATIONAL HEALTH & SAFETY ACT OF 1993 & APPLICABLE REGULATIONS

A written letter of appointment must be forwarded to ACSA duly signed by responsible persons at least 3 days prior commencement of construction work for the following duties: **(Further appointments could become necessary as the project progresses and as per the requirements of OHS Act 85/1993)**

- (a) Person assigned duties in terms of the 16.2 appointees of the Act
- (b) Construction Manager CR8(1)
- (c) Assistant Construction Manager CR8(2) - *where applicable*
- (d) Full-time or part-time Construction Safety Officer CR8(5)
- (e) Construction Supervisor CR8(7))
- (f) Assistant Construction Supervisor CR8(8) - *where applicable*
- (g) Risk Assessor CR9(1)
- (h) Fall Protection Developer/Planner CR10(1) - *where applicable*
- (i) Temporary Works Designer CR11(1) - *where applicable*
- (j) Temporary Works Supervisor CR11(2) - *where applicable*
- (k) Excavation Supervisor CR13(1)a) - *where applicable*
- (l) Demolition Work Supervisor and Controller CR14(1) - *where applicable*
- (m) Scaffolding Supervisor CR16(1) - *where applicable*
- (n) Scaffolding Team leader CR16(1) - *where applicable*
- (o) Scaffolding Inspector CR16(1) - *where applicable*
- (p) Scaffolding Erector CR16(1) - *where applicable*
- (q) Suspended Platforms Supervisor CR17(1) - *where applicable*
- (r) Rope Access Supervisor CR18(1)a) - *where applicable*
- (s) Rope Access Fall Protection Plan Developed (R18(2)b) - *where applicable*
- (t) Material Hoist Inspector CR19(8)a) - *where applicable*
- (u) Bulk Mixing Plant Supervisor CR20(1) - *where applicable*
- (v) Explosive Actuated Fastening Device Operator CR21(2)b) - *where applicable*
- (w) Explosive Actuated Fastening Device Controller CR21(2)g(i) - *where applicable*
- (x) Construction Vehicles and Mobile Plant Operator CR23(1)d(i) - *where applicable*
- (y) Temporary Electrical Installations Controller CR24(c) - *where applicable*
- (z) Portable Electrical Equipment Supervisor CR24(d) - *where applicable*
- (aa) Fire Equipment Inspector CR29(h) - *where applicable*
- (bb) First Aider GSR3(4) -- *where applicable*
- (cc) Stacking Supervisor (CR28(a)) (GSR2(a))
- (dd) Competent Person in Confined Space Entry GSR5(1) - *where applicable*
- (ee) Gas Cutting/Welding Supervisor (GSR9(a) - *where applicable*
- (ff) Ladder Supervisor and Inspector (GSR13(a) - *where applicable*
- (gg) Lifting Machine Inspector (DMR18(7) - *where applicable*
- (hh) Lifting Tackle Inspector (DMR18(10)e) - *where applicable*
- (ii) Lifting Machine Supervisor (DMR18(11) - *where applicable*
- (jj) Supervisor of Machinery (GMR1) - *where applicable*
- (kk) Safety Representatives (OHS Act Sec.17 - *where applicable*
- (ll) Hazardous Chemical Substances Controller/Co-ordinator HCSR10 - *where applicable*
- (mm) Incident Investigator (GAR9(2))
- (nn) Blasting Supervisor (Supervision Of Explosives Workplace ER12) - *where applicable*

9. HEALTH AND SAFETY DOCUMENTATION

The Principal Contractor must provide and demonstrate to ACSA a suitable, sufficiently documented and coherent site specific health and safety plan, based on ACSA's documented health and safety specifications. The health and safety plan must include but not limited to the following during tendering process, before commencement of construction work and during construction:

Principal Contractor's Health & Safety Policy

The Principal Contractor must provide a health & safety policy signed by the Chief Executive Officer (CEO) which outlines Principal Contractor's commitment towards health and safety

Health and Safety Organogram

The Principal Contractor must provide a health & safety organogram which outlines related appointments in terms of the OHS Act and applicable Regulations. Contact numbers should also be provided for easy reference.

10. RISK ASSESSMENT

(Construction Regulation 9)

A Contractor must, before the commencement of any construction work and during such construction work, have risk assessments performed by a competent person appointed in writing, which risk assessments form part of the health and safety plan to be applied on the site, and must include—

- (a) the identification of the risks and hazards to which persons may be exposed to;
- (b) an analysis and evaluation of the risks and hazards identified based on a documented method;
- (c) a documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- (d) a monitoring plan; and
- (e) a review plan.

A Contractor must ensure that:

- (f) as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in the risk assessment
- (g) that all employees under his or her control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures and or control measures before any work commences, and thereafter at the times determined in the risk assessment monitoring and review plan of the relevant site
- (h) Principal Contractor must ensure that all Contractors are informed regarding any hazard that is stipulated in the risk assessment before any work commences, and thereafter at the times that may be determined in the risk assessment monitoring and review plan of the relevant site
- (i) consult with the health and safety committee or, if no health and safety committee exists, with a representative trade union or representative group of employees, on the monitoring and review of the risk assessments of the relevant site
- (j) copies of the risk assessments of the relevant site are available on site for inspection by an inspector, the client, the client's agent, any Principal Contractor, any employee, a representative trade union, a health and safety representative or any member of the health and safety committee
- (k) review the relevant risk assessment—
 - i. where changes are effected to the design and or construction that result in a change to the risk profile; or
 - ii. when an incident has occurred.

11. FALL PROTECTION PLAN

(Construction Regulation 10)

A Contractor must

- (a) designate a competent person to be responsible for the preparation of a fall protection plan;
- (b) ensure that the fall protection plan contemplated above is implemented, amended where and when necessary and maintained as required; and
- (c) take steps to ensure continued adherence to the fall protection plan.

The Fall Protection Plan must include

- (a) a risk assessment of all work carried out from a fall risk position and the procedures and methods used to address all the risks identified per location;
- (b) the processes for the evaluation of the employees' medical fitness necessary to work at a fall risk position and the records thereof;
- (c) a programme for the training of employees working from a fall risk position and the records thereof;
- (d) the procedure addressing the inspection, testing and maintenance of all fall protection equipment; and
- (e) a rescue plan detailing the necessary procedure, personnel and suitable equipment required to affect a rescue of a person in the event of a fall incident to ensure that the rescue procedure is implemented immediately following the incident.

A Contractor must ensure that:

- (a) **The Construction Manager** appointed under **Construction Regulation 8(1)** is in possession of the most recently updated version of the fall protection plan.
- (b) all unprotected openings in floors, edges, slabs, hatchways and stairways are adequately guarded, fenced or barricaded or that similar means are used to safeguard any person from falling through such openings;
- (c) no person is required to work in a fall risk position, unless such work is performed safely as contemplated in above;
- (d) fall prevention and fall arrest equipment are
 - (i) approved as suitable and of sufficient strength for the purpose for which they are being used, having regard to the work being carried out and the load, including any person, they are intended to bear; and
 - (ii) securely attached to a structure or plant, and the structure or plant and the means of attachment thereto are suitable and of sufficient strength and stability for the purpose of safely supporting the equipment and any person who could fall; and
- (e) fall arrest equipment is used only where it is not reasonably practicable to use fall prevention equipment.

Where roof work is being performed on a construction site, the Contractor must ensure that, in addition to the requirements set out above, it is indicated in the fall protection plan that:

- (a) the roof work has been properly planned;
- (b) the roof erectors are competent to carry out the work;
- (c) no employee is permitted to work on roofs during inclement weather conditions or if any conditions are hazardous to the health and safety of the employee;
- (d) all covers to openings and fragile material are of sufficient strength to withstand any imposed loads;
- (e) suitable and sufficient platforms, coverings or other similar means of support have been provided to be used in such a way that the weight of any person passing across or working on or from fragile material is supported; and
- (f) suitable and sufficient guard-rails, barriers and toe-boards or other similar means of protection prevent, as far as is reasonably practicable, the fall of any person, material or equipment.

Principal Contractor / Contractor - Competency Assessment

(Construction Regulation 7)

The Principal Contractor must be reasonably satisfied that the sub-contractors he intends to appoint also have the necessary competencies and resources to safely conduct the work they will be appointed for. This must be established at tender stage and before appointments are made.

In order to ensure this, the Principal Contractor must demonstrate to the Client that it has a suitable and sufficiently.

12. ADMINISTRATIVE CONTROLS AND THE OCCUPATIONAL HEALTH & SAFETY FILE

(Construction Regulation 7)

The Occupational Health and Safety File

The Principal Contractor will keep an Occupational Health and Safety File on site containing the following documents (where applicable) as a minimum:

- Accident/Incident Register. (Annexure 1 of the General Admin Regulations)
- Health and safety Representatives Inspections Register.
- Construction Vehicles & Mobile Plant Inspection.
- Daily Inspection of Vehicles.
- Plant and other Equipment by the Operator/Driver/User.
- Demolition Inspection Register.
- Electrical Installations, Equipment & Appliances. (including Portable Electrical Tools)
- Excavations Inspection.
- Explosive Powered Tool Inspection/Maintenance/Issue/Returns Register. (incl. cartridges & nails)
- Fall Protection Inspection Register.
- First Aid Box Contents.
- Fire Equipment Inspection & Maintenance.
- False work Inspections.
- Hazardous Chemical Substances Record.
- Ladder Inspections.
- Lifting Equipment Register.
- Machinery Safety Inspection Register. (incl. machine guards, lock-outs etc.)

- Scaffolding Inspections.
- Stacking & Storage Inspection.
- Inspection of Structures.
- Inspection of Pressure Equipment.
- Welding Equipment Inspections.
- All other applicable records.
- An equipment inventory register, detailing all major items of equipment such as Construction Vehicles and Mobile Plant etc...

If any work is to be performed on Airside. The contractor must performing such work must provide ACSA with an airside safety plan.

On completion of the project or on completion of the contractors work each contractor must surrender the completed OHS file to the Principal Contractor for consolidation into one "Master File". **A Principal Contractor must** hand over a consolidated health and safety file to ACSA upon completion of the construction work and must, in addition to the documentation referred to in **paragraph 5** of this document include a record of all drawings, designs, materials used and other similar information concerning the completed structure. (These records will then be archived by ACSA for future reference purposes)

13. HEALTH AND SAFETY REPRESENTATIVES

The Principal Contractor must ensure that Health and Safety Representative(s) is/are elected and delegated in writing and necessary training has been provided by a competent person where there are more than 20 employees at the work place. A proof of training certificate must be provided to ACSA.

Health and Safety Representatives must conduct monthly inspections by completing a checklist developed by the Principal Contractor. Safety defects noted must be recorded and reported to the supervisor for remedial action. Health and Safety Representative Inspection findings must be made available to ACSA for reference for audits purposes.

Health and Safety Representatives and their reports must form part of the safety committee which must meet on a monthly bases.

The Principal Contractor must hold health and safety committee meetings on site. Minutes of such meetings and action taken by management must be kept on file and made available to ACSA for reference purposes. Members of the committee must receive proper training and a proof of such training must be made available.

The Committee must consider, at least, the Following Agenda:

- Opening & Welcome
- Present/ Apologies/ Absent
- Minutes of previous Meeting
- Matters Arising from the previous Minutes
- OH&S Reps Reports
- Incident Reports & Investigations
- Incident /Injury Statistics
- Other Matters
- Endorsement of Registers and other statutory documents by a representative of the Principal Contractor
- Close/Next Meeting

The Principal Contractor must ensure that ACSA Safety Department is invited to such meetings. These meetings do not substitute for Principal Contractor's Site meetings.

14. HEALTH & SAFETY TRAINING

Environmental Health and Safety Induction

The Principal Contractor must conduct an induction training session prior commencement of construction work. An attendance register must be kept in the Principal Contractor's health and safety file.

For any construction work to be conducted on the Airside, Airside Induction training (AIT) must be attended by all persons entering who are to enter Airside and a course fee determined by ACSA must be paid by the Principal Contractor. A security permit to access airside must be issued on production of proof of attendance.

Induction Conducted by the Principal Contractor and Competent Person

A manual /copy of such training must be provided to ACSA for reference purposes. As determined by the risk assessment. The Principal Contractor must ensure that all employees under his/her control are trained by a competent person and a proof of such training is kept on file for reference.

Toolbox Talks

The Principal Contractor must ensure that employees attend a formal Toolbox Talk to be held at least once a week. Toolbox Talks must cover a wide variety of topics related to health and safety. An attendance register must be completed by employees who attended such talks. The register must indicate the topic covered presenter, date and signatures of employees attended. Records for Toolbox Talks must be kept in a health and safety file and be made available to ACSA for perusal.

First Aid Training

The Principal Contractor must appoint competent First Aider(s) in writing where more than 10 employees are employed. A letter of appointment must be kept on file for reference made available to ACSA Safety. Duly designated First Aider(s) must have attended training at an accredited institution prior commencement of construction work and a proof of certificate be submitted to ACSA for reference.

The Principal Contractor must ensure that the first aid box(s) is/are controlled by qualified First Aider(s) and kept fully stocked with necessary first aid contents related to the hazards and risks identified. A first aid box(s) must be accessible and location of such box(s) is clearly displayed on site.

15. FIRE PREVENTION AND PROTECTION

The Principal Contractor must ensure that adequate fire equipment is provided in strategic places (that is, where there is a mobile distribution board, flammable liquids, pressure equipment, confined spaces, hot work). The Principal Contractor must ensure that such equipment is inspected by a competent person on a monthly basis and such inspections are recorded on a register. The Principal Contractor must ensure that all fire equipment is serviceable and person(s) have been properly trained on how to use the equipment. A proof of such training must be provided prior commencement of construction work.

16. EMERGENCY PREPAREDNESS

The Principal Contractor must provide ACSA with an emergency plan and procedure which will include, but not limited to emergencies such as fire, bomb threat, civil unrest, medical treatment, environmental incidents, accidents to employees and other persons other than their employees.

Emergency procedure must be communicated to employees and a proof of such training must be kept on file for reference. A list of emergency contact numbers must be conspicuously displayed on site for ease reference. An evacuation plan must be displayed in strategic places.

In case of medical and/or fire emergency contact ACSA Fire & Rescue Services:

The Principal Contractor must provide ACSA Safety with a full record of any incidents which may occur on site.

17. INCIDENTS/ACCIDENTS REPORTING AND INVESTIGATION

The Principal Contractor must ensure that all incidents/accidents (this includes near miss, first aid cases and section 24 cases) are reported by employees immediately to the Construction Manager for further investigation and remedial action. The Principal Contractor must ensure that all OHS Act section 24 incidents/accidents are reported to the Department of Labour immediately and preliminary investigation is conducted by a competent person within seven days. If construction work will be finished within 3 days after occurrence, an investigation must be conducted before such construction work is completed. Proof of such investigation must be submitted to ACSA immediately or within 24 hours after investigation.

18. PERSONAL PROTECTIVE CLOTHING/EQUIPMENT

The Principal Contractor must ensure that personal protective equipment or clothing needs analysis is conducted and incorporated into the risk assessment. Records must be provided by the Principal Contractor prior to the commencement of construction work. The Principal Contractor must ensure that SABS approved personal protective equipment or clothing is provided to personnel. The Principal Contractor must ensure that no personnel are allowed to work on site without necessary personal protective equipment or clothing. The Principal Contractor must ensure that PPE or Clothing is kept in good working order and clearly stipulate procedures to be followed when PPE or Clothing is lost or stolen, worn or damaged. ACSA will remove any person from the construction site who is working without necessary personal protective equipment and/or clothing. Worn or tattered personal protective clothing will not be permitted on airport premises

19. FALL PROTECTION (WORKING IN ELEVATED POSITIONS)

(Construction Regulation 10)

A pre-emptive Risk Assessment will be required for any work to be carried out above two metres from the ground or any floor level and will be classified as "Work in Elevated Positions".

As far as is practicable, any person working in an elevated position will work from a platform, ladder or other device that is at least as safe as if he/she is working at ground level and whilst working in this position be wearing and using a full body harness that will be worn to prevent the person falling from the platform, ladder or other device utilised.

This safety harness will be, as far as is possible, secured to a point away from the edge over which the person might fall and the double lanyard must be of such a length that the person will not be able to move over the edge. In addition any platform, slab, deck or surface forming an edge over which a person may fall must be fitted with guard rails at two different heights as prescribed in SABS 085' Code of Practice for the Design, Erection, Use and Inspection of Access Scaffolding

Workers working in elevated positions must be trained to do this safely and without risk. Proof of training must be maintained on the contractors site safety file. Medical certificates of fitness for all employees working in elevated positions must be available on site. This must be issued by an Occupational Health Practitioner.

Where work on roofs are carried out, the Risk Assessment must take into account the possibility of persons falling through fragile material, skylights, soffits and openings in the roof, steel support work trusses and purlins so designed as to support the roof structure.

The Risk Assessments shall place specific emphasis on the placing and handling of roofing materials such as Inverted Box Rib Sheeting (IBR sheeting) or similar materials, (including contingency safety measures), which when exposed to windy conditions represents a serious safety hazard.

20. RISK ASSESSMENT FOR CONSTRUCTION WORK

(Construction Regulation 9)

Every Contractor performing Construction work shall, before the commencement of any construction work and during such work, have a Risk Assessment performed by a competent person, appointed in writing, and the Risk Assessment shall form part of the OH&S Plan.

Each activity must define individual tasks associated with that identified activity. These and all associated hazards must be identified and listed in the risk assessment. This ensures that critical tasks and associated hazards are not missed.

The Risk Assessment must include:

- The identification of the risks and hazards to which persons may be exposed to
- The analysis and evaluation of the risks and hazards identified
- A documented plan and applicable safe work procedures (SWP) to mitigate, reduce or control the risks and hazards that have been identified
- A monitoring plan and
- A review plan

A Contractor must ensure that:

- As far as is reasonably practicable ergonomic related hazards are analysed, evaluated and addressed.
- All employees under his/her control are informed, instructed and trained by a competent person regarding any hazards
- A Principal Contractor must ensure all Contractors are informed regarding any hazard as stipulated in the risk assessment before any work commences.
- Consult with health and safety committee on monitoring and review risk assessment on site.
- Ensure a copy of risk assessments is available for inspection.
- Review relevant risk assessments where changes are affected to the design or construction that result in a change to the risk profile or when an incident occurred.

N.B. A risk assessment will be performed for all unplanned work and submitted to ACSA for approval prior to work commencing.

21. STRUCTURES *(not applicable to the scope of work)*

(Construction Regulation 11)

The Contractor will ensure that in terms of Construction Regulation 11 the following is adhered to:

- That the structure on/in which works are to be performed has been inspected by a certified structural engineer declaring the structure to be safe for construction/demolition/renovations work processes.
- Steps are taken to ensure that no structure becomes unstable or poses a threat of collapse due to demolition and construction work being performed on it, or in the vicinity of it.
- No structure is overloaded to the extent where it becomes unsafe; if uncertainty arises then the structural engineer is to be consulted.
- He/she has received from the designer the following information:

- Information on known or anticipated hazards relating to the construction/demolition work and the relevant information required for the safe execution of the construction/demolition work.
- A geo-scientific report (where applicable).
- The loading the structure is designed to bear.
- The methods and sequence of the construction/demolition process.
- All drawings pertaining to the design are on site and available for inspection.

The structural engineer shall carry out inspections at appropriate and sufficient intervals of the construction work involving the design of the relevant structure to ensure compliance with the design and record the results of these inspections in writing.

22. TEMPORARY WORK

(Construction Regulation 12)

Temporary work must be carried out under the supervision of a competent person designated in writing.

Temporary works structures must be so designed, erected, supported, braced and maintained such that it will be able to support any vertical or lateral loads that may be applied.

No load is to be imposed onto the structure that the structure is not designed to carry.

Temporary works must be erected in accordance with the structural design drawings for that temporary works and, if there is any uncertainty, the designer must be consulted before proceeding with the erection/use of the temporary works.

All design drawings pertaining to the temporary works must be kept available on site.

All equipment used in the erection of temporary works must be checked by a competent person before use.

The foundation or base upon which temporary works is erected must be able to bear the weight and keep the structure stable.

Employees erecting temporary works must be trained in the safe work procedures for the erection, moving and dismantling of temporary works.

Safe access/egress (and emergency escape) must be provided for workers.

A competent person must inspect temporary works structures that have been erected before, during and after pouring of concrete or the placing of any other load and thereafter daily until the temporary works is stripped.

The results of all inspections must be recorded in a register kept on site.

The temporary works must be left in place until the concrete has reached sufficient strength to bear its own weight plus any additional weight that may be imposed upon it and not until the designated competent person has authorised its stripping in writing.

Any damaged temporary works must be repaired/rectified immediately Deck panels must be secured against displacement.

The contractor must ensure that no employee is exposed, or required to work on slippery and dangerous surfaces. Person's health must be protected when use is made of solvents, oils or other similar substances.

Ensuring that the OEL (Occupational Exposure Limit) for any substances that they may be exposed to does not exceed the legal limits and that the necessary PPE is used.

23. EXCAVATIONS (*not applicable to the scope of work*)

(Construction Regulation 13)

The Principal Contractor must ensure excavation work is conducted under supervision of a competent person who has been appointed in writing. A letter of appointment must be provided to ACSA Safety prior commencement of work. A risk assessment outlining safe work procedures to be adhered to if excavation is more than 1.0m deep must be provided to ACSA prior commencement of work. The Principal Contractor must ensure that no person works in an excavation which is not adequately braced or shored.

The Principal Contractor must ensure that every excavation including bracing and shoring are inspected daily prior each shift starts and such records are kept on site for reference.

The Principal Contractor must ensure that all precautionary measure as stipulated for confined spaces as stated in the General Safety Regulation of OHS Act 85/1993 are complied with when entering any excavation. The Principal Contractor must ensure that warning signs are conspicuously displayed where excavation work involves the use of explosives and a method statement developed by a competent person is provided to ACSA prior commencement.

The Principal Contractor must ensure that safe and convenient means of access is provided to every excavation when required. Such access must not be further than 6m from the point where any worker within the excavation is working.

The Principal Contractor must communicate, train and enforce safe work procedures pertaining to excavation work to his/her employees.

24. DEMOLITION WORK (*not applicable to the scope of work*)

(Construction Regulation 14)

The Principal Contractor must ensure that a detailed structural engineering survey is conducted by a competent person and a method statement on the procedure to be followed is provided to ACSA Safety. The Principal Contractor must ensure that demolition work is conducted under the supervision of a competent person appointed in writing.

The Principal Contractor must ensure that safety precautionary measures stipulated in Asbestos Regulations is adhered to if demolition work involves asbestos material and that asbestos work is conducted under the supervision of a registered Asbestos Principal Contractor.

25. SCAFFOLDING

(Construction Regulation 16)

Access Scaffolding must be erected, used and maintained safely in accordance with Construction Regulation 16 and SA Bureau of Standards Code of Practice, SANS 10085/1 entitled, "The Design, Erection, and Use & Inspection of Access Scaffolding.

Detailed consideration must be given to all scaffolding to ensure that it is properly planned to meet the working requirements, designed to carry the necessary loadings and maintained in a sound condition. It must also be ensured that there is sufficient material available to erect the scaffolding properly.

Scaffolding may only be erected, altered or dismantled by a person who has the appropriate training and experience in this type of work or under the supervision of such a person

Specific attention must be given to the appointment of Scaffolding Inspectors and Scaffolding Erectors who shall not be the same person. The continuous inspection of scaffolding structures must be recorded on the applicable Scaffold register.

Tagging/Signs reflecting the status of the scaffold must be used and fixed to the structure at all times. (Safe to use / Scaffold not Safe)

On completion of the erection, the Supplier will inspect the structure and will ensure it is in sound working order and complies with all statutory regulations. The Supplier will then issue a Handover Certificate, Drawings, design and specifications shall be signed by a registered professional engineer.

An inspection of the completed scaffold shall also be inspected by the registered professional engineer for approval prior to use. Should any additional load i.e. a hoist or advertising banners be added to the scaffold at a later stage, the professional engineer must approve the modification.

26. SUSPENDED PLATFORMS (*not applicable to the scope of work*)

(Construction Regulation 17)

The Contractor to design, erect, use and maintain suspended platforms in accordance with the requirements of Construction Regulation 17.

27. EXPLOSIVE ACTUATED FASTENING DEVICES (*not applicable to the scope of work*)

(Construction Regulation 21)

Every Explosive Powered Tools (EPT) must be:

- Provided with a guard around the muzzle to confine flying fragments or particles
- A firing mechanism that will prevent the EPT from firing unless it is pushed against the surface and at a right angle (where the EPT is fitted with an intermediate piston between the charge and the nail this requirement is waived)
 - The Contractor or user must ensure that:
 - Only the correct type of cartridge is used (product specific)
 - The EPT is cleaned and inspected daily before use by an appointed competent person who maintains a register with the findings of his inspection and the details of cleaning, service and repairs
 - The safety devices are in good working order before the EPT is used
 - When the EPT is not being used it is stored in an unloaded condition together with the cartridges in a safe/secure place inaccessible to unauthorised persons
 - A warning notice is displayed at the point where the EPT is in use
 - The issue and return of cartridges must be controlled by maintaining the issue/returns register signed by both issuer and user and empty cartridge cases must be returned with unspent cartridges.
 - Users/operators of the EPT have received the necessary training and have been authorised as being competent to use/operate the EPT
 - Users/operators must wear the prescribed PPE whilst using/operating the tool

28. CRANES

(Construction Regulation 22)

A Crane permit must be obtained from ACSA and submitted before erection of crane.

A contractor must, in addition to compliance with the Driven Machinery Regulations, 1988 ensure that where tower cranes are used—

- (a) they are designed and erected under the supervision of a competent person;
- (b) a relevant risk assessment and method statement are developed and applied;
- (c) the effects of wind forces on the crane are taken into consideration and that a wind speed device is fitted that provides the operator with an audible warning when the wind speed exceeds the design engineer's specification;
- (d) the bases for the tower cranes and tracks for rail-mounted tower cranes are firm, level and secured;
- (e) the tower crane operators are competent to carry out the work safely; and
- (f) the tower crane operators have a medical certificate of fitness to work in such an environment, issued by an occupational health practitioner in the form of Annexure 3.

29. LIFTING EQUIPMENT, TACKLE, MATERIAL HOIST AND CRANES

The Principal Contractor must ensure that all lifting equipment and tackle are inspected before use and a monthly register is completed by a competent person. Proof of such inspections must be recorded and kept on file for reference. The Principal Contractor must ensure that a safe working load is conspicuously displayed on lifting equipment and tackle and service certificate is provided prior commencement of work. The Principal Contractor must ensure operators are properly trained on how to operate the above mentioned equipment and a proof of competency is provided prior commencement of work.

The Principal Contractor must provide information on procedures to be followed in the case of:

- (a) Malfunctioning of equipment; and
- (b) Discovery of a suspected defect in the equipment

The Principal Contractor must ensure that safety measures stipulated in Driven Machinery Regulation and Construction Regulation with regard to above equipment are adhered to at all times.

30. CONSTRUCTION VEHICLES & MOBILE PLANT

(Construction Regulation 13)

Construction Vehicles and Mobile Plant may be inspected by ACSA prior to being allowed on a project site and suppliers of hired vehicles, plant and equipment will be required to comply with this specification as well as the OHS Act and Regulations.

Construction Vehicles and Mobile Plant (CV & MP) to be:

- of acceptable design and construction
- maintained in good working order
- used in accordance with their design and intention for which they were designed
- Operated/driven by trained, licensed competent and authorised operators/drivers. No unauthorised persons to be allowed to drive or operate CV & MP
- Operators and drivers of CV & MP must be in possession of a valid medical certificate declaring the operator/driver physically and psychologically fit to operate or drive CV & MP.
- fitted with adequate signalling devices to make movement safe including reversing
- excavations and other openings must be provided with sufficient barriers to prevent CV & MP from falling into same
- Provided with roll-over protection, appropriate seat fitted which shall be used during CV & MP operations.
- inspected daily before start-up by the driver/operator/user and the findings recorded in a register/log book
- CV & MP to be fitted with two head and two taillights whilst operating under poor visibility conditions, in addition they shall be equipped with 'hazard warning' lights, which must be used whenever the CV & MP is on site.
- No loose tools, material etc. is allowed in the driver/operators compartment/cabin nor in the compartment in which any other persons are transported
- CV & MP used for transporting persons must have seats firmly secured and sufficient for the number of persons being transported

59 of 77

C4.4 - OCCUPATIONAL HEALTH & SAFETY SPECIFICATION FOR ACSA

SCM Ref no.: **TBC** Project Number **TBC**

- Operators to be issued with Personal Protective Equipment as required and identified by the Risk Assessments
- Only licensed and road worthy vehicles will be allowed on the public roads

No person may ride on a CV & MP except in a safe place provided by the manufacturer for this purpose. The construction site must be organized to facilitate the movement of CV & MP so that pedestrians and other vehicles are not endangered. Traffic routes are to be suitable, sufficient in number and adequately demarcated. CV & MP left unattended after hours adjacent to roads and areas where there is traffic movement must be fitted with lights reflectors or barricades to prevent moving traffic coming into contact with the parked CV & MP. In addition CV & MP left unattended after hours must be parked with all buckets, booms etc. fully lowered, the emergency brakes engaged and, where necessary, the wheels chocked, the transmission in neutral and the motor switched off and the ignition key removed and stored safely. Workers employed adjacent to, or on public roads must wear reflective safety vests. All CV & MP inspection records must be kept in the OH&S File.

31. ELECTRICAL INSTALLATIONS AND MACHINERY ON CONSTRUCTION SITES

(Construction Regulation 24)

The Principal Contractor must, in addition to compliance with the Electrical Installation Regulations, 2009, and the Electrical Machinery Regulations, 1988, promulgated by Government Notice No. R. 1593 of 12 August 1988, ensure that—

- before construction commences and during the progress thereof, adequate steps are taken to ascertain the presence of and guard against danger to workers from any electrical cable or apparatus which is under, over or on the site;
- all parts of electrical installations and machinery are of adequate strength to withstand the working conditions on construction sites;
- the control of all temporary electrical installations on the construction site is designated to a competent person who has been appointed in writing for that purpose;
- all temporary electrical installations used by the contractor are inspected at least once a week by a competent person and the inspection findings are recorded in a register kept on the construction site; and
- all electrical machinery is inspected by the authorized operator or user on a daily basis using a relevant checklist prior to use and the inspection findings are recorded in a register kept on the construction site.

The Principal Contractor must ensure that prior notice is given to ACSA Electrical Department of any work involving electrical installation. A lock-out certificate must be issued to the relevant Principal Contractor. The Principal Contractor must ensure that a lock-out procedure is adhered to by his/her employees whenever required. The Principal Contractor must ensure that safety measures stipulated in the Electrical Installation Regulations, Machinery Regulations, General Machinery Regulations and Construction Regulations are adhered to at all times.

32. USE AND TEMPORARY STORAGE OF FLAMMABLE LIQUIDS ON CONSTRUCTION SITES (*not applicable to the scope of work*)

(Construction Regulation 25)

The Principal Contractor to ensure that:

- No person is required or permitted to work in a place where there is the danger of fire or an explosion due to flammable vapours being present.
- No flammable substance is used or applied e.g. in spray painting, unless in a room or cabinet or other enclosure specially designed and constructed for that purpose, unless due to imposed controls that the ventilation provided is sufficient to ensure that the Lower Explosive Limit and Lower Fire Limit are not exceeded. Furthermore that the risk assessments are reviewed to ensure that all the related hazards have been addressed and that adequate P.P.E. is provided.
- The workplace is effectively ventilated. Where this cannot be achieved:
- Employees must wear suitable respiratory equipment
- No smoking or other sources of ignition is allowed into the area
- The area is conspicuously demarcated as "flammable materials"
- Flammables stored on a construction site are stored in a well-ventilated, reasonably fire-resistant container approved by the local Fire Department, cage or room that is kept locked with access control measures in place and sufficient firefighting equipment installed and fire prevention methods practised e.g. proper housekeeping

- Flammables stored in a permanent flammables store are stored so that no fire or explosion is caused i.e.: stored in a locked well-ventilated reasonably fire resistant container, cage or room conspicuously demarcated as "Flammable Store -No Smoking or Naked Lights"
- Adequate and suitable firefighting equipment installed around the flammables store and marked with the prescribed signs
- All electrical switches and fittings to be of a flameproof design, or where necessary, intrinsically safe.
- Any work done with tools in a flammables store or work areas to be of a non-sparking nature
- No Class A combustibles such as paper, cardboard, wood, plastic, straw etc. to be stored together with Flammables
- The flammable store to be designed and constructed so that in the event of spillage of liquids in the store, it will contain the full quantity + 10% of the amount liquid stored.
- Where the use of Bulk Storage facilities is contemplated, the contractor must ensure compliance to the local Authority bylaws.
- A sign indicating the capacity of the store to be displayed on the door
- Containers (including empty containers) to be kept closed to prevent fumes/vapours from escaping and accumulating in low lying areas
- Metal containers to be bonded to earth whilst decanting to prevent build-up of static electricity
- Welding and other flammable gases to be stored and segregated as to type of gas and empty and full cylinders
- All permanently installed storage facilities to comply with SANS 10089.

33. HOUSEKEEPING AND GENERAL SAFEGUARDING ON CONSTRUCTION SITES

(Construction Regulation 27)

The Principal Contractor must ensure that suitable housekeeping is continuously implemented on each construction site, including—

- (a) the proper storage of materials and equipment;
- (b) the removal of scrap, waste and debris at appropriate intervals;
- (c) ensuring that materials required for use, are not placed on the site so as to obstruct means of access to and egress from workplaces and passageways;
- (d) ensuring that materials which are no longer required for use, do not accumulate on and are removed from the site at appropriate intervals;
- (e) ensuring that construction sites in built-up areas adjacent to a public way are suitably and sufficiently fenced off and provided with controlled access points to prevent the entry of unauthorized persons; and
- (f) ensuring that a catch platform or net is erected above an entrance or passageway or above a place where persons work or pass under, or fencing off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe in the case of danger or possibility of persons being struck by falling objects.

The Principal Contractor must ensure that safety precautionary measures stipulated in Environmental Regulations for Workplaces and Construction Regulations and Construction Environmental Specification are adhered to at all times.

34. STACKING AND STORAGE ON CONSTRUCTION SITES

(Construction Regulation 28)

The Principal Contractor must ensure contractor must ensure that:

- (a) a competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;
- (b) adequate storage areas are provided;
- (c) there are demarcated storage areas; and
- (d) storage areas are kept neat and under control a competent person is appointed in writing with a duty of supervising all stacking and storage on a construction work or site. A proof of such appointment must be provided prior commencement of construction work. The Principal Contractor must ensure that stacking is conducted under supervision and good housekeeping is maintained at all times.

35. FIRE PRECAUTIONS ON CONSTRUCTION SITES

(Construction Regulation 29)

The Principal Contractor must ensure that:

- (a) all appropriate measures are taken to avoid the risk of fire;
- (b) sufficient and suitable storage is provided for flammable liquids, solids and gases;
- (c) smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
- (d) in confined spaces and other places in which flammable gases, vapours or dust can cause danger—
 - (i) only suitably protected electrical installations and equipment, including portable lights, are used;
 - (ii) there are no flames or similar means of ignition;
 - (iii) there are conspicuous notices prohibiting smoking;
 - (iv) oily rags, waste and other substances liable to ignite are without delay removed to a safe place; and
 - (v) adequate ventilation is provided;
- (e) combustible materials do not accumulate on the construction site;
- (f) welding, flame cutting and other hot work are done only after appropriate precautions have been taken to reduce the risk of fire;
- (g) suitable and sufficient fire-extinguishing equipment is placed at strategic locations or as may be recommended by the Fire Chief or local authority concerned, and that such equipment is maintained in a good working order;
- (h) the fire equipment contemplated in paragraph (g) is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof;
- (i) a sufficient number of workers are trained in the use of fire-extinguishing equipment;
- (j) where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire;
- (k) the means of escape is kept clear at all times;
- (l) there is an effective evacuation plan providing for all—
 - (i) persons to be evacuated speedily without panic;
 - (ii) persons to be accounted for; and
 - (iii) plant and processes to be shut down; and
- (m) a siren is installed and sounded in the event of a fire.

36. CONSTRUCTION EMPLOYEES' FACILITIES*(Construction Regulation 30)*

A Contractor must provide at or within reasonable access of every construction site, the following clean, hygienic and maintained facilities:

- (a) Shower facilities after consultation with the employees or employees' representatives, or at least one shower facility for every 15 persons;
- (b) at least one sanitary facility for each sex and for every 30 workers;
- (c) changing facilities for each sex; and
- (d) sheltered eating areas.

A Contractor must provide reasonable and suitable living accommodation for the workers at construction sites who are far removed from their homes and where adequate transportation between the site and their homes, or other suitable living accommodation, is not available.

37. LADDERS

The Principal Contractor must ensure that all ladders are numbered, inspected before use and monthly inspections are recorded in a register. The Principal Contractor must ensure that a competent person who carries the above inspections is appointed in writing.

38. PRESSURE EQUIPMENT (*not applicable to the scope of the work*)

The Principal Contractor must ensure that pressure equipment is identified, numbered and entered in a register. Furthermore he/she must ensure that inspections are carried out and certificates of testing are available and kept on file as per the Regulations.

39. EMPLOYEES EXPOSED TO EXCESSIVE NOISE

The Principal Contractor must ensure that all employees exposed to excessive noise, equal or above 85 dB(A), have undergone a baseline audiometric test prior commencement of construction work and SABS approved ear protection is provided and worn at all times.

40. PUBLIC SAFETY AND SECURITY

The Principal Contractor must ensure that notices and signs are conspicuously displayed at the entrance and along the perimeter fence indicating "No Unauthorized Entry", "Visitors to report to office", "helmet and safety shoes" etc.

Health and safety signage must be well maintained throughout the project. This must entail cleaning, inspection and replacement of missing or damaged signage.

Furthermore the Principal Contractor must ensure that:

- a) Nets, canopies, fans etc. are provided to protect the public passing or entering the site
- b) A security guard is provided where necessary and provided with a way of communication and an access control measures or register is in place
- c) All visitors to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site.

41. NIGHT WORK

The Principal Contractor must ensure that necessary arrangements have been made with ACSA before conducting any night work and that there is adequate lighting for any work to be conducted and failure to do so will result in work being stopped.

42. HOT WORK (*not applicable to the scope of the work*)

The Principal Contractor must ensure that ACSA Fire & Rescue Department is notified of any hot work to be conducted during construction work. A hot work permit accompanied with a gas free certificate must be issued to the relevant Principal Contractor by ACSA Fire & Rescue Department when satisfied that the area is safe and that the Principal Contractor understands the procedure. The Principal Contractor must ensure that a hot work procedure is adhered to at all time by his/her employees.

43. HIRED PLANT AND MACHINERY

The Principal Contractor must ensure that any hired plant and/or machinery brought to site is inspected by a competent person before use and records confirming that it is safe for use are provided prior usage of such equipment. Such plant or machinery complies at all times with the requirements of the Occupational Health & Safety Act.

The Principal Contractor must ensure that hired operators receive induction prior commencement of work and that said hired operators have proof of competency.

The Principal Contractor must provide information on procedures to be followed in the case of:

- (a) Malfunctioning of equipment; and
- (b) Discovery of a suspected defect in the equipment

44. ROAD CONSTRUCTION WORK (*not applicable to the scope of work*)

The Principal Contractor must ensure that construction work conducted on the public road all necessary caution signage, cones, flag man etc. are provided as stipulated in the Road Traffic Ordinance is adhered to. The caution signage to be conspicuously displayed to warn the drivers of any construction work ahead must be provided at least at 75 m away from the cones; flag man; actual construction work etc.

45. EDGE PROTECTION AND PENETRATION (*not applicable to the scope of work*)

The Principal Contractor must ensure that all exposed edges and floor openings are guarded and demarcated at all times until permanent protection has been erected. Guardrails used for edge protection must be 500mm and 900mm apart (double railing) above the platform/ floor surface.

The Principal Contractors fall protection plan must include the procedure to be followed regarding the management of edge protection and penetration.

46. BATCH PLANTS (*not applicable to the scope of work*)

Should a batch plant be used, it must conform to the requirements as set out on Construction Regulation (February 2014) of OHS Act 85/93. These must include but not limited to appointment of a competent person to operate and supervise batch plant operations.

47. CONFINED SPACE ENTRY (*not applicable to the scope of work*)

The Principal Contractor must ensure that all necessary health and safety provisions prescribed in the General Safety Regulations are complied with when entering confined spaces.

48. LIQUOR, DRUGS, DANGEROUS WEAPONS, FIREARMS

The Principal Contractor must ensure that no person is allowed on site that appears to be under the influence of intoxicating liquor or drugs.

The Principal Contractor must encourage his/her workforce to disclose the medication that poses a health and safety threat towards his/her fellow employees. No person must be allowed to enter the site and work if the side effects of such medication do constitute a threat to the health or safety of the person concerned or others at such workplace.

No dangerous weapons or firearms allowed on the construction site.

49. INTERNAL/EXTERNAL AUDITS

The Principal Contractor must conduct monthly safety, health and environment audits and such records must be kept on site. The Principal Contractor must ensure that corrective measures are taken to ensure compliance.

ACSA must conduct monthly audits and defects noted must be reported to the relevant Principal Contractor for remedial action. Inspections must be conducted by ACSA and non-conformances noted must be recorded and provided to the relevant Principal Contractor for remedial action. ACSA must stop any Principal Contractor from executing any construction work which is not in accordance with the health and safety plan.

The Principal Contractor must ensure that all necessary documents stipulated in this document are kept on the health and safety file and made available when requested.

50. PENALTIES

Penalties will be imposed by ACSA on Principal Contractors who are found to be infringing these specifications, legislation and safety plans.

The Principal Contractor will be advised in writing of the nature of the infringement and the amount therefor. The Principal Contractor must determine how to recover the fine from the relevant employee and/or sub-contractor.

The Principal Contractor must also take the necessary steps (e.g. training) to prevent a recurrence of the infringement and must advise ACSA accordingly. The Principal Contractor is also advised that the imposition of penalties does not replace any legal proceedings.

Penalties will be between R200 and R20 000, depending upon the severity of the infringement. The decision on how much to impose will be made by the ACSA SHE Representative, and will be final. In addition to the penalties, the Principal Contractor must be required to make good any damage caused as a result of the infringement at his/her own expense.

The preliminary list below outlines typical infringements against which ACSA may raise penalties; however this list must not be construed as final:

- Failure to keep a copy of OHSACT on site.
- Failure to maintain an up-to-date letter of good standing with the Compensation Commissioner / FEM.
- Working on site without attending Safety Induction Training.
- Failure to conduct Safety Induction for personnel and visitors on site.
- Failure to issue and wear Personal Protective Clothing and Equipment.
- Failure to fully stock first aid box in accordance to the risks identified.
- Failure to disclose or report first aid cases and /or minor/major/fatalities as prescribed by the OHSACT.
- Failure to adhere to written safe work procedure as stipulated in the Hazard Identification and Risk Assessment and safety plan.
- Failure to maintain records and registers as per the OHS Act of 1993 and its regulations.
- Failure to conduct audits and inspections as required by legislation.
- Keeping un-serviced fire equipment on site.
- Failure to make use of ablution facilities.
- Failure to remove personnel on site who appears to be under the influence of intoxicating liquor or drugs.
- Failure to close out previously raised non-conformances.
- Failure to make and update legislative appointments.
- Failure to adhere to the OHS Act of 1993 and its regulations.

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

Signed: _____

On this date: _____ (dd/mm/yyyy)

At: _____ (Airport Name)

C4.5 Baseline HIRA - Risk Assessment

Baseline Risk Assessment	
Project Name:	ENGINEERING PROFESSIONAL SERVICES APPOINTMENT FOR THE CONCLUSION OF STAGE FOUR (4), STAGE FIVE (5) AND SIX (6) FOR THE DESIGN OF HVAC MODIFICATION AND UPGRADE AT AIRPORTS COMPANY SOUTH AFRICA'S KING PHALO AIRPORT
Document Number: HIRA 1	Revision Number: 001

Risk Severity Definition	Description: Consequence (can lead to)...	Examples of what to look out for...
Category A Catastrophic	One or more multiple deaths and complete loss or destruction of equipment	A major accident
Category B Hazardous	Serious injuries or major damage to equipment	Large reduction in safety margins, physical distress or workload such that the operators cannot be relied upon to perform their tasks accurately or completely
Category C Major	Minor injuries or minor equipment damage	A significant reduction in safety margins, a reduction in the ability of the operators to cope with adverse operating conditions as a result of conditions impairing their efficiency
Category D Minor	Incidents	Operating limitations are breached. Procedures are not used correctly
Category E Negligible	Negligible or Inconvenience	Few consequences. No safety consequences. Nuisance

C4.6 Generic Hazard Assessment

Likelihood Probability	Description	Examples of what to look out for...
Category 1	Extremely Improbable (Rare)	Almost inconceivable that the event shall occur
Category 2	Improbable (Seldom)	Very unlikely that the event shall occur. It is not known that it has ever occurred before
Category 3	Remote (Unlikely)	Unlikely but could possibly occur. Has occurred rarely.
Category 4	Occasional	Likely to occur sometimes. Has occurred infrequently.
Category 5	Frequent	Likely to occur many times or regularly. Has occurred frequently or regularly

		Catas-trophic	Hazardous	Major	Minor	Negligible
		A	B	C	D	E
Frequent	5	5A	5B	5C	5D	5E
Occasional	4	4A	4B	4C	4D	4E
Remote	3	3A	3B	3C	3D	3E
Improbable	2	2A	2B	2C	2D	2E
Extremely Improbable	1	1A	1B	1C	1D	1E

Annexure C3 – Generic Hazard assessment

Generic Hazard	Specific component of Hazard	Hazard related consequence	Existing defences to control risk	Safety Risk Index
Site establishment	Delivering of containers and materials; increased vehicle movements and location of services	Operational disruptions, incidents and service disruptions	Site plan location requires prior approval, services to be identified by ACSA representatives and drivers to be competent and vigilant of other road users. Vehicle inspections are to be conducted daily	2D
Site Access	Access is to be controlled and movement of vehicles and staff are to be monitored to reduce impact on operations	Injuries to Airport users, traffic build up, operational delays, vehicle incidents	Site is to be access controlled. All visitors to site are to report to the site office. Entrance to site camp is to be kept clean, swept after truck deliveries to minimize impact to operations.	2D
Persons on airside	Accidents and injuries	Injury to persons/Fatality	All staff wishing to work on the Airside are to go for Airside induction training. These staff members are to have valid Permits with them at all times. Personal protective equipment required for Airside includes but is not limited to high visibility jackets (as per the procedure , hearing protection, safety shoes & hard hats (if required). An airside safety plan must be submitted before commencement of work.	3A

Vehicles on airside	Accidents and injuries	Damage to aircraft/vehicles/property/persons	All vehicles operating on the Airside are to be fitted with a strobe light, appropriate signage in the form of a prefix, have the necessary vehicle permit in place, to be fitted with a fire extinguisher and is to be serviceable. Vehicles are to be checked by Airside Safety prior to be granted Airside access	4A
Driving on airside	Incidents	Damage to aircraft/vehicles/property/persons	Airside induction is required for all persons entering the Airside. For persons wishing to drive on the Airside Service Road an AVOP 2 permit is required. Where work is to be conducted on the Airfield, then contractors are required to be under escorts or have undergone Radio Licence training and be in the possession of an AVOP 3 permit. The speed limit on the Apron Service Roads is 30km/h, 15km/h at the back of stand and 60km/h on the Perimeter Road. During period of Low Visibility (LVP) will be effected and no vehicular movements are allowed on the Airfield. Low visibility procedures will be in place	4A
Driving on runways and taxiways without permission	Incursion (include definition)	Collision with aircraft/property damage or fatalities	Runway and taxiway markings are indicated as per ICAO Annex 14. Permission is required from Air Traffic Control when crossing runways and taxiways. Signage indicating movement areas are painted on the ground or by means of illuminated signage boxes. Only persons in possession of a valid Airside Vehicle Operators Permit with the necessary radio licence (Partac training) will be permitted to drive in restricted areas. Vehicles under escort must follow at reasonable distance.	3A

Noise	Health Risks	Noise induced hearing loss	Baseline and annual audiograms are to be conducted. Contractors are to implement a hearing conservation programme and issue staff with hearing protection and provide the necessary training in this regard. Contractors to identify noisy operations in passenger areas and are to conduct noise generating operations at off peak times where possible or if unavoidable with ACSA's Project Leaders written permission.	3B
Jet blast	Potential injuries and property	Damage to vehicles/property/persons	Signage warning against jetblast is installed at high risk areas. Risks associated with jetblast are covered during Airside Induction Training. Caution to be taken around aircraft when the anti-collision lights are activated in the Apron bays. 75 meter clearance behind aircraft to be observed to prevent jetblast. Contractors to be aware of aircraft movements	4C
Perimeter fence breach	Security risk	National Key Point Violation	Access and egress points are strictly enforced. Contractors are only to use the entry points as provided by the ACSA Project Leader. No materials are to be stored within 3meter of the perimeter fence.	3B
Crane operations	Height of crane	Flight path obstruction/collision with aircraft	30 meter height restriction procedure – refer to Airfield Operation Department for further information	2A
Weather	Adverse weather conditions	Damage to aircraft/vehicles/equipment	Weather warnings are issued by the Airside Safety Department as and when required. All equipment on the Airside is to be secured	4A

Construction works	Foreign Object Debris (FOD)	Ingestion into aircraft engine	Airside induction is required for all staff working on the Airside, FOD bins are to be used for any FOD found lying on the ground. All waste to be secured to prevent it from becoming airborne (refer to Environmental Terms and Conditions)	4B
Construction works	Working at Height	Injury /fatality	Fall protection plan to be devised by the contractors in line with the Construction Regulations 2014. Rescue plans are to be included	3A
Construction works	Storage of hazardous chemicals substances	Contamination/fire/ injury to persons/ environmental impact	ACSA's Environmental terms and conditions are to be adhered to. All relevant legislation and bylaws are to be adhered to. All necessary permits are to be applied for by the contractor such as transport permits, possession permits and flammable certificates. ACSA Environment and Fire and Rescue to be notified where a spill occurs.	4B
Construction works	Waste	Attracts rodents and birds which leads to bird strikes and adds to FOD	Waste management to be implemented in line with ACSA's Environmental Terms and Conditions	4B
Construction works	Spillages (fuels/oils/hydraulics/chemicals/ human waste)	Contamination/Pollution /injury to persons/adverse health effects	ACSA's Environmental terms and conditions and applicable legislative controls are to be adhered to. ACSA Environment and Fire and Rescue to be notified where a spill occurs	4B
Construction works	Dust	Damage to aircraft/injury to persons/adverse health effects/	Dust suppression measures are to be implemented and PPE used where required	4A

Construction works/ Trenching	Damage to underground services. Interruption of critical services	Electrocution, loss of critical services, damage to property, major injuries, aircraft diversions	Consult as-built plans. Scan area before trenching. Trenching to be done under competent supervision.	4A
Delivery of materials	Falling materials or stones or sand	Vehicle/pedestrian accidents	Materials are to be delivered within specified time frames, flagman to be utilised during deliveries, load limitations to be observed, netting is to be used, contractors to clean road after deliveries	4E
Lack of signage – warning signs	Injuries and accidents	Injuries and accidents	Contractors to install sufficient demarcations around construction sites along with the necessary warning signs and beacon lights (refer to Construction Regulations and Traffic Act) No signs are to be removed without prior permission and notification. Temporary way finding signage is required if signage has been disturbed	2D
Road crossing Central Boulevard	Not using the tunnel for crossing	Vehicle and pedestrian accidents	Contractor staff are to cross the Boulevard via the North or South tunnels	4B
Waste management	Environmental impact	Illegal dumping	Temporary laydown areas to be identified and no illegal dumping is permitted.	3C
Trolleys	Damaging trolleys through misuse	Injuries and property damage	Contractors to provide their own trolleys. ACSA's trolleys are for passenger use only	5D
Golf carts	Misuse of golf carts	Injuries and property damage	Contractor staff to be aware of golf cart movements on the Landside. Golf cart use for airport users only and not for contractor use for transporting materials. Golf cart operate in predetermined routes – contractors to be aware thereof	3D

Fire equipment	Use and abuse of fire equipment	Injuries and property damage	Fire equipment is only to be used during emergencies. Contractors to provide their own fire equipment. No materials to be stored in ACSA fire cabinets. Emergency exits are to be kept clear at all times	2B
Unattended bags	Security risk	injuries/fatality to Airport users/stakeholders/ACSA employees. Bomb threat-damage to property, vehicle. Operational disruptions	Contractors are not permitted to leave bags unattended as they will be removed and will be handed to SAPS	5C
Speed limits	Car accidents	Injuries and vehicle damage	Speed limits on the Central Boulevard and Elevated Road are 40km/h, exiting the road networks is 50km/h, Tower Road is 50km/h and Freight Road is 50km/h. Speed humps are installed along Tower Road and Freight Road to reduce speeding	3C
Deliveries	Elevated Road	Disrupt traffic flow and passenger movements	No trucks allowed, deliveries to be done via North or South Delivery Yards, delivery notes are required and delivery times are to be specified.	2C
Overhead works	Falling items	Injuries, vehicles, property damage	Fall protection plan required as per the Construction Regulations 2014.	5C
General housekeeping	Damage to escalators	Injuries, property damages	Escalators are not be used to transport heavy items in the Parkade	4C

C4.7 – ACSA Service & Maintenance Contractors Environmental Terms and Conditions to Commence Work - 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 (see attached Environmental Policy).
Storm water, Soil and Groundwater Pollution	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> All reasonable measures shall be taken to minimise noise generated on site as a result of work operations. The Contractor shall comply with the applicable regulations with regard to noise.
Waste Management	<ul style="list-style-type: none"> 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 at all times in their work area. Contractors must keep on file: <ol style="list-style-type: none"> 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 <p>This information must be available during audits and inspections.</p>
Handling & Storage of Hazardous Chemical Substances (HCS)	<ul style="list-style-type: none"> 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 with regard to 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.
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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 as a result of the infringement at his/her own expense.

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).

C4.9 – ACSA Environment Policy

Confidential



INTEGRATED ENVIRONMENTAL MANAGEMENT POLICY STATEMENT

Airports Company South Africa SOC Limited (ACSA), as a world-class airport operator, acknowledges that airport activities and operations may have diverse impacts on the environment. It therefore accepts its stewardship role of responsible care for the environment in order to reduce its environmental impact.

Airports Company South Africa SOC Limited is committed to:

- Maintain an Environmental Management System based on the requirements of ISO 14001:2015.
- Conduct regular audits of the system to ensure its adequacy and effectiveness.
- Monitor and measure significant environmental aspects of airport activities and operations, and provide a framework for the setting and reviewing of environmental objectives and targets.
- Ensure employees, operators, tenants, service providers, contractors and supply chain that fall within the scope of the Environmental Management System are aware of the environmental aspects associated with their activities and operations, and of the requirements of the Environmental Management System.
- Report its environmental performance indicators in the integrated annual report.
- Continually improve environmental performance.
- Seek opportunities to reduce the impact of aircraft noise by engaging with industry stakeholders.
- Monitor aircraft noise at Cape Town International Airport, King Shaka International Airport and O R Tambo International Airport in accordance with SACAA requirements.
- Actively seeking out opportunities to reduce energy consumption from non-renewable energy sources.
- Measure the carbon footprint at Cape Town, King Shaka, O R Tambo and Chief Dawid Stuurman International Airports, while actively seeking out opportunities to reduce its overall carbon footprint.
- Monitor air quality at Cape Town International Airport, King Shaka International Airport and O R Tambo International Airport in accordance with SACAA requirements..
- Actively seek opportunities to reduce water consumption.
- Avoid the pollution of storm water and/or groundwater as a result of airport operations.
- Ensure that all waste is minimised, or otherwise reduced, re-used and/or recycled.
- Conserve biodiversity where feasible on its property.
- Collaborating with and engaging surrounding communities to seek opportunities to minimise the environmental impact of airport operations on the environment.
- Comply with relevant environmental legal obligations.
- Where Airports Company South Africa SOC Limited does not directly control the impacts at the Corporate Office or at airports, the Group shall work in partnership with operators, contractors, tenants, service providers and supply chain management to improve performance.

This Integrated Environmental Management Policy is applicable to Airports Company South Africa SOC Limited infrastructure, and the geographical areas within which the organisation operates its aeronautical business of running airports, developing airports, and growing our footprint. This is centred around the nine airports and Corporate Office, and includes the associated employees, stakeholders, service providers, and contractors.

ACSA managers and staff acknowledge that the implementation of this Environmental Policy is their responsibility and are committed to it. This policy statement shall be reviewed by Management every three (3) years and made available to any interested parties upon request.

Signed:


Mpumi Mpofo
Chief Executive Officer

Date: 11/08/22

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Confidential

