



NEC 3 Engineering & Construction Contract

Between **Airports Company South Africa**
(Registration no: 1993/004149/06)

and **[Insert at award stage]**
(Reg No. _____)

for

**Bid Reference No. RA8018/2025/RFP
SERVICE PROVIDER APPOINTMENT TO DESIGN,
SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-
ION BATTERIES AT KIMBERLEY AIRPORT AND
GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH
AFRICA FOR A PERIOD OF 36 MONTHS**

Contents:	No of pages
Part C1 Agreements & Contract Data	[•]
Part C2 Pricing Data	[•]
Part C3 Scope of Work	[•]
Part C4 Site Information	[•]

CONTRACT No. [REDACTED]

SERVICE PROVIDER APPOINTMENT TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT, KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

THE CONTRACT

C1.	Agreement and Contract Data	114
	C1.1 Form of Offer and Acceptance – Agreement.....	114
	C1.2 Contract Data	119
	C1.3 Pro forma Performance Guarantee	139
	C1.4 Pro forma or bond for unused material on site	142
	C1.5 Occupational Health and Safety Agreement	144
	C1.6 Retention Money Guarantee (Pro Forma)	145
	C1.7 Adjudicator's Agreement	147
C2.	Pricing Data.....	153
	C2.1 Pricing Instructions	153
	C2.2 Activity Schedule	156
C3.	Scope of Work	
	C3.1 Description of the Works	158
	C3.2 Engineering	162
	C3.3 Procurement	164
	C3.4 Construction	165
	C3.5 Management	169
	C3.6 Project Technical Specifications	173
	C7 Generic Specifications	201
C4.	Site Information.....	263

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: **A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 6 MONTHS AIRPORT.**

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

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

The offered total of the Prices for BESS Installation exclusive of VAT is	R
Sub total	R
Value Added Tax @ 15% is	R
The offered total of the amount due inclusive of VAT is ¹	R
(in words)	

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

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Tenderer's CIDB registration number:

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

Acceptance

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

The terms of the contract, are contained in:

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

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

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

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

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

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

Signature(s)

Name(s)

Capacity

**for the
Employer**

(Insert name and address of organisation)

Name &
signature of
witness

Date

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

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

Note:

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

No.	Subject	Details
1		
2		
3		
4		
5		
6		
7		

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

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

For the tenderer:**For the Employer**

Signature

Name

Capacity

On behalf
of*(Insert name and address of organisation)**(Insert name and address of organisation)*Name &
signature
of witness

Date

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: **A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 6 MONTHS AIRPORT.**

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

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

The offered total of the Prices for BESS Installation exclusive of VAT is	R
Sub total	R
Value Added Tax @ 15% is	R
The offered total of the amount due inclusive of VAT is ²	R
(in words)	

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

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Tenderer's CIDB registration number:

² This total is required by the *Employer* for budgeting purposes only. Actual amounts due will be assessed in terms of the *conditions of contract*.

Acceptance

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

The terms of the contract, are contained in:

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

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

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

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

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

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

Signature(s)

Name(s)

Capacity

**for the
Employer**

(Insert name and address of organisation)

Name &
signature of
witness

Date

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

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

Note:

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

No.	Subject	Details
1		
2		
3		
4		
5		
6		
7		

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

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

For the tenderer:**For the Employer**

Signature

Name

Capacity

On behalf
of*(Insert name and address of organisation)**(Insert name and address of organisation)*Name &
signature
of witness

Date

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: **A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 6 MONTHS AIRPORT.**

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

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

The offered total of the Prices for BESS Installation exclusive of VAT is	R
Sub total	R
Value Added Tax @ 15% is	R
The offered total of the amount due inclusive of VAT is ³	R
(in words)	

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

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Tenderer's CIDB registration number:

³ This total is required by the *Employer* for budgeting purposes only. Actual amounts due will be assessed in terms of the *conditions of contract*.

Acceptance

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

The terms of the contract, are contained in:

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

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

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

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

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

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

Signature(s)

Name(s)

Capacity

**for the
Employer**

(Insert name and address of organisation)

Name &
signature of
witness

Date

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

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

Note:

3. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
4. A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

No.	Subject	Details
1		
2		
3		
4		
5		
6		
7		

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

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

For the tenderer:**For the Employer**

Signature

.....

Name

.....

Capacity

.....

On behalf of (Insert name and address of organisation)

(Insert name and address of organisation)

Name & signature of witness

.....

Date

.....

Part C1.2 Contract Data

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

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

Part one - Data provided by the *Employer*

1 General

The *conditions of contract* are the core clauses and the clauses for Main Option: A (Priced contract with activity schedule) and Main Option E (Cost reimbursable contract).

Secondary Options

- X1: Price adjustment for inflation**
- X2 Changes in the law**
- X3: Multiple currencies**
- X4: Parent company guarantee**
- X5: Sectional Completion**
- X6: Bonus for early Completion**
- X7: Delay damages**
- X12: Partnering**
- X13: Performance Bond**
- X14: Advance payment to the *Contractor***
- X15: Limitation of *Contractor's* liability for design to reasonable skill and care**
- X16: Retention**
- X17: Low performance damages**

- X18: Limitation of liability**
- X20: Key performance indicators**
- Z: *Additional conditions of contract***

of the NEC3 Engineering and Construction Contract, April 2013 (ECC3).

10.1 The *Employer* is: Airports Company South Africa SOC

Address: Western Precinct, Aviation Park,
O.R. Tambo International Airport,
1 Jones Road, Kempton Park,
Gauteng, South Africa, 1632

Tel No: TBC

Fax No: n/a

Email: TBC

10.1	The <i>Project Manager</i> is:	Zethembe Biyase
	Address	Cape Town International Airport, Southern Office Block, 2nd Floor
	Tel	TBC
	Fax	N/A
	e-mail	zethembe.biyase@airports.co.za
10.1	The Supervisor's is:	TBC
	Address	TBC
	Tel	TBC
	Fax	TBC
	e-mail	TBC
11.2(13)	The <i>works</i> are	Part C3: Description of the Works section of this contract
11.2(14)	The following matters will be included in the Risk Register • Availability of as -built drawings/information • Access to site • Statutory approvals and ACSA approvals • All early warning matters notified by the Project Manager or the Contractor	
11.2(15)	The <i>boundaries of the site</i> are	., Kimberly Airport and George Airports
11.2(16)	The Site Information is in	Part 4: Site Information
11.2(19)	The Works Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period for reply</i> is	Two weeks
1	The Contractor's Main Responsibilities	
20.1	Access to Any Information.	Access Date Upon Contract Award.
2	Time	
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	06 Months following receipt of a signed contract by the Employer

11.2(9)	The <i>key dates</i> and the <i>conditions</i> to be met are:	Condition to be met	key date
		1 Delivery of Lithium-ion Batteries to .	20 March 2025
		2 Delivery of Lithium-ion Batteries to Kimberley Airport	20 March 2025
		3 Delivery of Lithium-ion Batteries to George Airport	20 March 2025
30.1	The <i>access dates</i> are:	Part of the Site	Date
		1 .	Upon signing contract
		2 Kimberley Airport	Upon Signing Contract
		3 George Airport	Upon Signing Contract
31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	Tender closing date.	
31.2	The <i>starting date</i> is	Upon signing the contract	
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	4 weeks.	
35.1	The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date.		
3	Testing and Defects		
42.2	The <i>defects date</i> is	52 weeks after Completion of the whole of the <i>works</i> .	
43.2	The <i>defect correction period</i> is	Three (3) weeks	
47	The Contractor submits a quality plan for acceptance within:	Four (4) weeks of the Contract Date.	
4	Payment		
50.1	The <i>assessment interval</i> is	Every four (4) weeks, on the 25th day of each successive month	
51.1	The <i>currency of this contract</i> is the	South African Rand.	
51.2	The period within which payments are made is	Four (4) weeks after the receipt of the tax invoice	
51.4	The <i>interest rate</i> is	(i) The publicly quoted prime rate of interest (calculated on a 365 day year) charged from time to time by Nedbank; and (ii) the exchange rate published by the South African Reserve Bank from time to time for amounts due in other currencies.	
5	Compensation events		
60.1(13)	The place where weather is to be recorded is:		

Weather recording stations closest to ., Kimberley, Airport and George Airport

The *weather measurements* to be recorded for each calendar month are,

the cumulative rainfall (mm)

the number of days with rainfall more than 10 mm

the number of days with minimum air temperature less than 0 degrees Celsius

the number of days with snow lying at 09:00 hours South African Time

and these measurements:

The *weather measurements* are supplied by

South African Weather Service

The *weather data* are the records of past *weather measurements* for each calendar month which were recorded at:

Weather recording stations closest to ., Kimberley, Airport and George Airport

and which are available from:

the South African Weather Bureau

60.1(13)	Assumed values for the ten-year return <i>weather data</i> for each <i>weather measurement</i> for each calendar month are:	As stated in Annexure A to this Contract Data provided by the <i>Employer</i> .
6	Title	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
7	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	None
81.1	The Contractor's Risk	Add: <i>Definition of Force Majeure -</i> <i>The following additional conditions must satisfied:</i> <i>(1) The Contractor has engaged with the persons responsible for the riot, commotion, disorder, strike or lockout; has met with the persons or leaders; and has recorded the persons or leaders details, their grievances, the organisations involved, all threats made; and has requested the persons or leaders to cease all unlawful conduct; and</i> <i>(2) The Contractor has obtained proof of the riot, commotion, disorder, strike or lockout, and of any unlawful conduct; and</i> <i>(3) The Contractor has reported all threats and unlawful conduct to the South African Police Service; and</i> <i>(4) The Contractor has brought an urgent application to the court on an ex parte basis that correctly identify the respondents and define the unlawful conduct to be interdicted; and</i>

		<i>(5) The Contractor has ensured that the court order is enforced.</i>
84.1	The <i>Employer</i> provides these insurances from the Insurance Table	See Annexure C to this Contract Data provided by the Employer.
84.1	The <i>Employer</i> provides these additional insurances	None
84.1	The <i>Contractor</i> provides these additional insurances	The Insurance Clauses which are attached at the end of the Contract Data. The insurances are in the joint names of the Parties and provide cover for events which are at the Contractor's risk from the starting date until the Defects Certificate or a termination certificate has been issued
84.2	The minimum limit of indemnity for insurance in respect of loss of or damage to property (except the <i>works</i> , Plant, Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) caused by activity in connection with this contract for any one event is	Whatever the <i>Contractor</i> deems necessary in addition to that provided by the <i>Employer</i> .
84.2	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract for any one event is	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the <i>Contractor's</i> common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R 20 000 000.00.
8	Termination	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
9	Data for main Option clause	
A	Priced contract with activity schedule	Refer to Part 2: Pricing Data section of this contract
10	Data for Option W1	
W1.1	The <i>Adjudicator</i> is (Name)	The person selected from the panel of adjudicators listed in Annexure C of this Contract Data, by the party intending to refer a dispute to him.
W1.2(3)	The <i>Adjudicator nominating body</i> is:	The Chairman of the Johannesburg Society of Advocates, or his successor or his nominee.
W1.4(2)	The <i>tribunal</i> is:	Arbitration.
W1.4(5)	The <i>arbitration procedure</i> is	The latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	In the city where the Site is located, within South Africa.

	The person or organisation who will choose an arbitrator		
	- if the Parties cannot agree a choice or - if the arbitration procedure does not state who selects an arbitrator, is	the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.	
Data for secondary Option clauses			
X7.1	Delay damages for Completion of the whole of the <i>works</i> are	R 10 000 per day up to a limit of 5% of the contract value	
X13	Performance bond		
X13.1	The amount of the performance bond is	10% of the contract value	
X15	Limitation of the <i>Contractor's</i> liability for his design to reasonable skill & care	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.	
X16	Retention (not used with Option F)		
X16.1	The <i>retention free amount</i> is The <i>retention percentage</i> is	R 0.00 10% of the amount due to the contract each month up to a maximum of 5% of the contract value. 2.5% will be released at Completion of the works and the remaining 2.5% will be released after the Defects Period	
X17	Low performance damages		
X17.1	The amounts for low performance damages are:	Amount	Performance level
		R 200 000.00	for failure to deliver Lithium-ion batteries to . by 20 March 2025
		R 200 000.00	for failure to deliver Lithium-ion batteries to Kimberley Airport by 20 March 2025
		R 200 000.00	for failure to deliver Lithium-ion batteries to George Airport by 20 March 2025
X18	Limitation of liability		
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to:	Nil - Neither Party is liable to the other for any consequential or indirect loss, including but not limited to loss of profit, loss of income or loss of revenue	
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to:	The total of prices	
X18.3	The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate is limited to	The total of prices	
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> for all matters arising under or in	The total of the Prices other than for the additional excluded matters.	

	connection with this contract, other than excluded matters, is limited to:	The <i>Contractor's</i> total liability for the additional excluded matters is not limited. The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for Defects due to his design which arise before the Defects Certificate is issued, Defects due to manufacture and fabrication outside the Site, loss of or damage to property (other than the works, Plant and Materials), death of or injury to a person; damage to third party property; and infringement of an intellectual property right.
X18.5	The <i>end of liability date</i> is	The date on which the liability in question prescribes in accordance with the Prescription Act No. 68 of 1969 (as amended or in terms of any replacement legislation) for any other matter.
Z	The <i>Additional conditions of contract</i> are	Z1 to Z24 below.

AMENDMENTS TO THE CORE CLAUSES

- Z1 Interpretation and the law**
- Z1.1 Add to core clause 12.3:** Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *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.
- Z1.2 Add the following as a new core clause 12.5:**
- Z1.2.1** In this contract:
- Z1.2.1.1** references to any Party to the Contract include its successors or permitted assigns;
- Z1.2.1.2** references to the Contractor include the obligations of its personnel;
- Z1.2.1.3** the references to the provisions of any law include such provisions as amended, re-enacted or consolidated from time to time in so far as such amendment, re-enactment or consolidation applies or is capable of applying to any works under this Contract;
- Z1.2.1.4** references to this Contract and any deed, Contract or instrument are deemed to include references to this Contract or such other deed, agreement or instrument as amended, novated, supplemented, varied or replaced from time to time;
- Z1.2.1.5** references to a "person" include a natural person, company or any other artificial person or other corporate entity, a charity, trust, partnership, joint venture, syndicate, or any other association of persons;
- Z1.2.1.6** references to "month" means a calendar month;

- Z1.2.1.7** headings are for convenience only and are not taken into consideration in the interpretation of the Contract;
- Z1.2.1.8** where any number of days is prescribed, those days are reckoned exclusively of the first and inclusively of the last day unless the last day falls on a day that is not a working day, in which event the last day is the next succeeding working day;
- Z1.2.1.9** any provision in Contract that is or may become illegal, invalid or unenforceable in any jurisdiction is ineffective to the extent of such prohibition or unenforceability in such jurisdiction and is treated as severed from the balance of Contract in such jurisdiction, without invalidating the remaining provisions of Contract in such jurisdiction or affecting it in any other jurisdiction;
- Z1.2.1.10** references to any amount means that amount exclusive of VAT, unless the amount expressly includes VAT;
- Z1.2.1.11** the rule of construction that if general words or terms are used in association with specific words or terms that are a species of a particular genus or class, the meaning of the general words or terms shall be restricted to that same class shall not apply, and whenever the word "including" is used followed by specific examples, such examples shall not be interpreted so as to limit the meaning of any word or term to the same genus or class as the examples given;
- Z1.2.1.12** the rule of construction that the Contract is interpreted against or to the disadvantage of the party responsible for the drafting or preparation of Contract does not apply;
- Z1.2.1.13** words and abbreviations that have well known technical or trade meanings are used in the Contract in accordance with such recognized meanings;
- Z1.2.1.14** references to a "*subsidiary*" or a "*holding company*" is references to a direct or indirect subsidiary or holding company as defined in the law of the jurisdiction of the place of incorporation of the company that has a subsidiary or holding company and "*affiliate*" is any company that is under common control with such subsidiary or holding company;
- Z1.2.1.15** time is of the essence in the performance of the parties' respective obligations.
- Z2** **The Project Manager and Supervisor: add the following at the end of core clause 14.2:**
- Z2.1** The Project Manager and the Supervisor may take an action which they have delegated.
- Z3** **Early Warning: add the following at the end of core clause 16.2:**
- Z3.1** The Contractor ensures that a subcontractor attends risk reduction meeting if its attendance would assist in deciding the actions to be taken.
- Z4** **Providing the Works: Delete core clause 20.1 and replace with the following:**
- Z4.1** The *Contractor* provides the works in accordance with the Works Information and warrants that the results of the Works, when complete, shall be fit for their intended purpose as stated in the Works Information, and if no such purposes is stated, the ordinary purpose of the Works.
- Z5** **Subcontracting:**
- Z5.1** **The following clause is added as a new core clause 26.4:** "Within 5 days of request by the *Project Manager*, the Contractor provides proof to the *Project Manager* that the Contractor's payment obligations towards its Subcontractors have been discharged. Failure by the Contractor to provide such proof to the satisfaction of the *Project Manager* entitles the *Employer* to instruct the *Project Manager* to certify payment directly to any such Subcontractor and the *Contractor* shall have no recourse to recover such amounts from the *Employer*. Such direct payment do not create privity of contract between the Employer and such Subcontractor. The *Employer* may recover such direct payment from the *Contractor*."

- Z6 Other responsibilities: add the following at the end of core clause 27:**
- Z6.1** The *Contractor* has satisfied himself, prior to the Contract Date, as to the completeness, sufficiency and accuracy of all information and drawings provided to him as at the Contract Date.
- Z6.2** The *Contractor* is responsible for the correct setting out of the *Works* in accordance with the original points, lines and levels stated in the *Works* Information or notified by the *Project Manager*, *Supervisor* or the *Employer*. Any errors in the positioning of the *Works* are rectified by the *Contractor* at the *Contractor's* own costs.
- Z7 Acceleration: add the following new provisions at the end of core clause 36:**
- Z7.1** The Project Manager's reply is either:
- Z7.1.1** A notification that the quotation is accepted, in which case, the *Project Manager* changes the Prices, Completion Date and Key Dates and accepts the revised programme; or
- Z7.1.2** A notification that the quotation is not accepted and that the Prices, Completion Date and Key Dates are not changed.
- Z8 Extending the defects date: add the following as a new core clause 46:**
- Z8.1** 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*.
- Z8.2** 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 which the part has been replaced.
- Z8.3** The *Project Manager* notifies the *Contractor* 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.
- Z9 Quality Management System: add the following as a new core clause 47:**
- Z9.1** The *Contractor* implements and maintains a quality management system with the requirements stated in the *Works* Information.
- Z9.2** Within the period stated in the Contract Data, the *Contractor* provides the *Project Manager* with a quality plan for acceptance. A reason for not accepting the quality plan is that it does not allow for the *Contractor* to Provide the *Works*.
- Z9.3** If any changes are made to the quality plan, the *Contractor* provides the *Project Manager* with the changes quality plan for acceptance.
- Z9.4** The *Project Manager* may instruct the *Contractor* to correct a failure to comply with the quality plan. This instruction is not a compensation event.
- Z10 Assessing the amount due:**
- Z10.1** Delete the second bullet point of core clause 50.1 and replace with the following: "within thirteen weeks of termination of this Contract"
- Z11 Final assessment: add the following as a new core clause 53:**
- Z11.1** The *Project Manager* makes a final assessment and certifies final payment in accordance with the Contract. The final payment is made within four weeks of the assessment.

- Z11.2** An assessment of the final amount due is conclusive evidence of the final amount due under or in connection with the Contract, unless a Party raises a dispute in relation to the assessment of the final amount due.
- Z11.3** The assessment of the final amount due is changed to include any agreement the Parties reached and/or a decision of the Adjudicator which has not been referred to the tribunal within four weeks of that decision. The changed assessment becomes conclusive evidence of the final amount due under or in connection with the Contract.
- Z12** **Notifying compensation events:**
- Z12.1** **Delete the last sentence in core clause 61.3 and replace with the following:** “If the *Contractor* does not notify a compensation event within four weeks of becoming aware of the event, he is not entitled to a change in the Prices, the Completion date or a Key Date and the *Employer* is absolved from all liability in relation to such event.”
- Z13** **Assessing compensation events:**
- Z13.1** **The following is added at the end of core clause 63.4:** “the *Contractor* shall only be entitled to changes to the Prices, the Completion Date and/or the Key Date if the compensation event affects the critical path.”
- Z14** **Termination**
- Z14.1** **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”.

AMENDMENTS TO THE SECONDARY OPTION CLAUSES

- Z15** **Changes in Law: Add the following clause to secondary option X2 as X2.2:**
- Z15.1** A change in law is defined as:
- Z15.1.1** the adoption, enactment, promulgation, coming into effect, repeal, amendment, reinterpretation, change in application or other modification after the Contract Date of any law, excluding (i) the enactment of any bill inside the country, but only if such bill is enacted without any material changes being made to the contents of such bill from the form published in the Gazette (as defined in the Interpretation Act, 1957) as at the Contract Date, and (ii) any such modification in law relating to any taxes, charges, imposts, duties, levies or deductions that are assessed in relation to a person's income
- Z15.1.2** any permit being terminated, withdrawn, amended, modified or replaced, other than (i) in accordance with the terms upon which it was originally granted, (ii) as a result of the failure by the *Contractor* to comply with any condition set out therein, or (iii) as a result of any act or omission of the *Contractor*, any Subcontractor or any affiliate to the *Contractor*.
- Z16.** **Delay damages: add the following to secondary Option X7 (if applicable in this contract)**
- Z16.1** If the amount due for the *Contractor's* payment of delay damages reaches the limits stated in this Contract Data for Option X7, the *Employer* may, at its sole discretion, terminate the *Contractor's* obligation to Provide the Works.
- Z16.2** If the *Employer* terminates in terms of this clause, the procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table
- Z17** **Performance Bond**
- Z17.1** **Amend the first sentence of clause X13.1 to read as follows:** The *Contractor* gives the *Employer* an unconditional, on-demand performance bond, provided by a bank or insurer which the *Project Manager* and the *Employer* have accepted, for the amount stated in the Contract Data and in the form set out in Annexure B of this Contract Data.

Z17.2 **Add the following new clause as Option X13.2:** The *Contractor* ensures that the performance bond is valid and enforceable until the end of the *contract period*. If the terms of the performance bond specify its expiry date and the end of the *contract period* does not coincide with such expiry date, four weeks prior to the said expiry date, the *Contractor* extends the validity of the performance bond until the end of the *contract period*. If the *Contractor* fails to so extend the validity of the performance bond, the *Employer* may claim the full amount of the performance bond and retain the proceeds as cash security

Z18 **Limitation of liability: Insert the following new clause as Option X18.6:**

Z18.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00.

Z18.2 Notwithstanding any other clause in this contract, any proceeds received from the security bonds and guarantees provided by the *Contractor* in terms of this Contract and any insurances or any proceeds which would have been received from any insurances but for the conduct of the *Contractor* shall be excluded from the calculation of the limitations of liability listed in the contract.

ADDITIONAL Z CLAUSES

Z19 **Cession, delegation and assignment**

Z19.1 The *Contractor* 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. This clause shall be binding on the liquidator/business rescue practitioner /trustee (whether provisional or not) of the *Contractor*.

Z19.2 The *Employer* may, on written notice to the *Contractor*, cede and delegate its rights and obligations under this contract to any person or entity.

Z20 **Joint and several liability**

Z20.1 If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons, these persons are deemed to be jointly and severally liable to the *Employer* for the performance of the Contract.

Z20.2 The *Contractor* shall, within 1 week of the Contract Date, notify the *Project Manager* and the *Employer* of the key person who has the authority to bind the *Contractor* on their behalf.

Z20.3 The *Contractor* does not materially alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without prior written consent of the *Employer*.

Z21 **Ethics**

Z21.1 The *Contractor* undertakes:

Z21.1.1 not to give any offer, payment, consideration, or benefit of any kind, which constitutes or could be construed as an illegal or corrupt practice, either directly or indirectly, as an inducement or reward for the award or in execution of this contract;

Z21.1.2 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.

Z21.2 The *Contractor's* breach of this clause constitutes grounds for terminating the *Contractor's* obligation to Provide the Works or taking any other action as appropriate against the *Contractor* (including civil or criminal action). However, lawful inducements and rewards shall not constitute grounds for termination.

Z21.3 If the *Contractor* 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.

Z22 Confidentiality

- Z22.1** All information obtained in terms of this contract or arising from the implementation of this contract shall be treated as confidential by the *Contractor* 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.
- Z22.2** If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until otherwise notified by the *Project Manager*.
- Z22.3** This undertaking shall not apply to –
- Z22.3.1** Information disclosed to the employees of the *Contractor* for the purposes of the implementation of this agreement. The *Contractor* 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;
- Z22.3.2** Information which the *Contractor* is required by law to disclose, provided that the *Contractor* notifies the *Employer* prior to disclosure so as to enable the *Employer* to take the appropriate action to protect such information. The *Contractor* 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;
- Z22.3.3** Information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time);
- Z22.4** 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*.
- Z22.5** The *Contractor* ensures that all his Subcontractors abide by the undertakings in this clause.

Z23 Liens and Encumbrances

- Z23.1** The *Contractor* keeps the Equipment used to Provide the Services free of all liens and other encumbrances at all times. The *Contractor*, vis-a-vis the *Employer*, waives all and any liens which he may from time to time have, or become entitled to over such Equipment and any part thereof and procures that his Subcontractors similarly, vis-a-vis the *Employer*, waive all liens they may have or become entitled to over such Equipment from time to time

Z24 Intellectual Property

- Z24.1** 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.
- Z24.2** IP rights remain vested in the originator and shall not be used for any reason whatsoever other than carrying out the *works*.
- Z24.3** The *Contractor* gives the *Employer* an irrevocable, transferrable, non-exclusive, royalty free licence to use and copy all IP related to the *works* for the purposes of constructing, repairing, demolishing, operating and maintaining the works.
- Z24.4** The written approval of the *Contractor* is to be obtained before the *Contractor's* IP made available to any third party which approval will not be unreasonably withheld or delayed. Prior to making any *Contractor's* IP available to any third party the *Employer* shall obtain a written confidentiality undertaking from any such third party on terms no less onerous than the terms the *Employer* would use to protect its IP.
- Z24.5** The *Contractor* shall indemnify and hold the *Employer* harmless against and from any claim alleging an infringement of IP rights ("**the claim**"), which arises out of or in relation to:
- Z24.5.1** the *Contractor's* design, manufacture, construction or execution of the Works;
- Z24.5.2** the use of the *Contractor's* Equipment, or

Z24.5.3 the proper use of the Works.

Z24.6 The *Employer* shall, at the request and cost of the *Contractor*, assist in contesting the claim and the *Contractor* may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it.

Annexure A: Pro forma Security Bonds and Guarantee

For use with the NEC3 Engineering & Construction Contract (April 2013)

The *conditions of contract* stated in the Contract Data Part 1 include the following Secondary Options:

Option X13: Performance Bond

Each of these secondary Options requires a bond or guarantee “in the form set out in the Works Information”. Pro forma documents for these bonds and guarantees are provided here for convenience but are to be treated as part of the Works Information.

Option X16: Retention (not used with Option F)

The *Contractor* may provide a Retention Money Guarantee in the form stated here. When the *Employer* receives and accepts a Retention Money Guarantee exactly in the form stated he will instruct the *Project Manager* not to assess any amount be retained in terms of secondary Option X16.

The organisation providing the bond / guarantee does so by copying the pro forma document onto his letterhead without any change to the text or format and completing the required details. The completed document is then given to the *Employer* within the time stated in the contract. Any changes to the pro-forma document must be approved in writing by the Employer.

PRO FORMA PERFORMANCE BOND – DEMAND GUARANTEE (FOR USE WITH OPTION X13)

[To be reproduced exactly as shown below on the letterhead of the Bank providing the Bond / Guarantee]

For use with the NEC3 Engineering and Construction Contract (April 2013)

The Airports Company South Africa SOC Limited

Guarantor's reference No.

Western Precinct, Aviation Park, O.R. Tambo International
Airport, 1 Jones Road, Kempton Park, Gauteng, South
Africa, 1632.

Date:

Dear Sirs,

Performance Bond – Demand Guarantee for [insert name of Contractor] required in terms of contract [insert Contractor's contract reference number or title]

1. In this Guarantee the following words and expressions shall have the following meanings:-

1.1	"Guarantor"	means [insert]
1.2	"Guarantor's Address"	means [insert]
1.3	"Contract" means	means the construction contract entered into between the Employer and the Contractor (Contract Reference No. _____ and such amendments or additions to the Contract as may be agreed in writing between the parties.
1.4	"Contractor"	means [insert]
1.5	"Employer"	means the Airports Company South Africa SOC Limited, a company registered in accordance with the laws of the South Africa
1.6	"Expiry Date"	means the earlier of - the date that the Bank receives a notice from the Employer stating that all amounts due from the Contractor as certified in terms of the contract have been received by the Employer and that the Contractor has fulfilled all his obligations under the Contract, or - the date that the Bank issues a replacement Bond for such lesser or higher amount as may be required by the Employer.
1.7	"Guaranteed Sum"	means [insert]
1.8	"Works"	means [insert]

2. The Guarantor's liability shall be limited to the Guaranteed Amount.

3. The Guarantor's period of liability shall be from and including the date of issue of this Guarantee and up to and including the Expiry Date or the date of payment in full of the Guaranteed Amount, whichever occurs first. The Project Manager and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.

4. The Guarantor hereby acknowledges that:

-
- a. any reference in this Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship; and
 - b. its obligation under this Guarantee is restricted to the payment of money.
 5. The Guarantor hereby undertakes to pay the Employer any sum or sums not exceeding the Guarantee Amount in total, upon receipt of a written demand delivered to the Guarantor's Address, stating that the Contractor is in breach of its obligations under the Contract (without being required to prove the nature of the breach and the amount claimed. The written demand shall be signed by the Employer and be accompanied by the original Guarantee.
 6. Payment by the Guarantor, in terms of this Guarantee, shall be made within seven (7) calendar days upon receipt of the Employer's written demand to the Guarantor.
 7. The obligations under this Guarantee constitute direct primary, irrevocable and unconditional obligations, do not require any previous notice to or claim against the Contractor, and shall not in any way be released or discharged or otherwise absolved of liability hereunder by reason of any arrangement or change in relationship made between the Contractor and the Employer and/or between the Guarantor and Contractor; nor any alteration in the obligations undertaken by the Contractor or in the terms of the Contract; nor any indulgence, failure, delay by the Employer as to any matter; nor any dissolution or liquidation or such other analogous event of the Contractor (whether or not the Guarantor has notice thereof).
 8. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
 9. All payments made by Guarantor shall be due and payable in the amount specified in any payment demand made in respect hereof by the Employer and shall be made free and clear of and without any deduction for or on account of any tax or future taxes, levies, imposts, duties, charges, fees, set off, counterclaims, deductions or withholdings of any nature whatsoever and by whomever imposed. All charges of the Guarantor related to the issuance or performance of this Guarantee (including, but not limited to, the negotiation, payment, extension or transfer hereof) shall be borne by the Contractor and under no circumstances shall be charged to the Employer by the Guarantor.
 10. This Guarantee shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the High Court of the Republic of South Africa.
 11. This Guarantee, with the required demand notice, shall be regarded as a liquid document for the purposes of obtaining a court order.
 12. The Guarantor chooses as its *domicilium citandi et executandi* for all purposes in connection with this Guarantee at the Guarantor's Address.
-

-
13. If at any time any one or more of the provisions of this Guarantee is or becomes illegal, invalid or otherwise unenforceable in any respect neither the legality, validity or enforceability of the remaining provisions of this Guarantee, nor the legality, validity or enforceability of such provision, under the law shall in any way be affected or impaired as a result.

SIGNED at _____ on _____ Day of _____ 2026

For and on behalf of the **GUARANTOR**, duly authorised and warranting such authority

Full Name: _____

Capacity: _____

Witness: _____

[Insert Guarantor's stamp]

PRO FORMA RETENTION MONEY GUARANTEE (MAY BE USED WHEN OPTION X16 APPLIES)

[To be reproduced exactly as shown below on the letterhead of the Bank providing the Guarantee]

For use with the NEC3 Engineering and Construction Contract (April 2013)

The Airports Company South Africa SOC Limited
Western Precinct, Aviation Park, O.R. Tambo International
Airport, 1 Jones Road, Kempton Park, Gauteng, South
Africa, 1632.

Date:

Dear Sirs

Reference No. [•] **[Drafting Note: Guarantor's reference number to be inserted]**

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

Project [●]

1. In this Guarantee the following words and phrases shall have the meaning stated:-
 - 1.1 **"Contract"** means the construction contract entered into between the Employer and the Contractor (Contract Reference No. _____ and such amendments or additions to the Contract as may be agreed in writing between the parties.
 - 1.2 **"Contractor"** means **[insert]**
 - 1.3 **"Employer"** means Airports Company South Africa SOC Limited, a company registered in accordance with the laws of the South Africa
 - 1.4 **"Expiry Date"** means **[insert]**
 - 1.5 **"Guarantee"** means this on-demand, unconditional, irrevocable advance payment guarantee, which is independent and/or separate from the underlying Contract.
 - 1.6 **"Guaranteed Amount"** means the sum of **[insert]**, being the total value of the advance payment made in terms of the Contract.
 - 1.7 **"Guarantor"** means **[insert]**
 - 1.8 **"Guarantor's Address"** mean **[insert]**
 2. The Contractor is required to obtain a retention money guarantee under the Contract.
 3. The Guarantor hereby undertakes to pay the Employer any sum or sums not exceeding the Guarantee Amount in total (the **"Demand Amount"**), upon receipt of a written demand delivered to the Guarantor's Address, stating that the Contractor has failed to carry out his obligation(s) to remedy certain defects for which he is responsible under the Contract and, the nature of such defects (without being required to prove the nature of the breach and the amount claimed). The written demand shall be signed by the Employer and be accompanied by the original Guarantee.
 4. The Guarantee Amount shall be reduced by 50% at the earlier or Completion of the whole of the Works and the date on which the Employer takes over the whole of the Works(as defined in the Contract). After receiving the Certificate of Completion from the Contractor the Guarantor shall promptly notify the Employer of the revised Guarantee Amount.
 5. This Guarantee automatically comes into full force and effect on the signature date by the Guarantor and shall automatically expire 14 days after the assessment made at the Completion of the whole of
-

the Works or the assessment after the Employer takes over the whole of the Works if this is before Completion of the whole of the Works.

6. The obligations under this Guarantee constitute direct primary, irrevocable and unconditional obligations, do not require any previous notice to or claim against the Contractor, and shall not in any way be released or discharged or otherwise absolved of liability hereunder by reason of any arrangement or change in relationship made between the Contractor and the Employer and/or between the Guarantor and Contractor; nor any alteration in the obligations undertaken by the Contractor or in the terms of the Contract; nor any indulgence, failure, delay by the Employer as to any matter; nor any dissolution or liquidation or such other analogous event of the Contractor (whether or not the Guarantor has notice thereof).
7. The Employer shall be entitled to arrange its affairs with the Contractor in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the Contractor or any variation under or to the Contract.
8. All payments made by Guarantor shall be due and payable in the amount specified in any payment demand made in respect hereof by the Employer and shall be made free and clear of and without any deduction for or on account of any tax or future taxes, levies, imposts, duties, charges, fees, set off, counterclaims, deductions or withholdings of any nature whatsoever and by whomever imposed. All charges of the Guarantor related to the issuance or performance of this Guarantee (including, but not limited to, the negotiation, payment, extension or transfer hereof) shall be borne by the Contractor and under no circumstances shall be charged to the Employer by the Guarantor.
9. This Guarantee shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the High Court of the Republic of South Africa.
10. This Guarantee, with the required demand notice, shall be regarded as a liquid document for the purposes of obtaining a court order.
11. The Guarantor chooses as its *domicilium citandi et executandi* for all purposes in connection with this Guarantee at the Guarantor's Address.
12. If at any time any one or more of the provisions of this Guarantee is or becomes illegal, invalid or otherwise unenforceable in any respect neither the legality, validity or enforceability of the remaining provisions of this Guarantee, nor the legality, validity or enforceability of such provision, under the law shall in any way be affected or impaired as a result.

SIGNED at _____ on _____ Day of _____ 202__

For and on behalf of the **GUARANTOR**, duly authorised and warranting such authority

Full Name: _____

Capacity: _____

Witness: _____

[Insert Guarantor's stamp]

Annexure B: ACSA Panel of Adjudicators

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

Annexure C: ACSA Insurance Clauses

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~~ 30 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~~ 30 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 R13,5000,000 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 **R13,500,000,000 (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 – **R 3000 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 employer's Insurance brokers / Insurers or their appointed loss adjusters shall have the right to make all and any inquiry 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 inquiry'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 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.

8.6.2 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 **R5000 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.za

Buhle.Mnguni@airports.co.za

*
.....
.....
.....
.....

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

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

Date of loss : _____

Reported to site agent by : _____ Date : _____

Reported to Insurance Broker by : _____ Date : _____

Locality of Incident _____

How did the loss occur (cause) ? _____

Details and nature of loss or damage to Contract Works _____

Details of other property damaged _____

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 C1.2 Contract Data

The conditions of contract are the NEC3 Engineering and Construction Contract, April 2013 (ECC)

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

Part two - Data provided by the Contractor

Notes to a tendering contractor:

1. Please read both the NEC3 Engineering and Construction Contract (April 2013) and the relevant parts of its Guidance Notes (ECC3-GN)⁴ in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on pages 152 to 154 of the ECC3 Guidance Notes.
2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data
3. Where a form field like this [] appears, data is required to be inserted relevant to the option selected. Click on the form field **once** and type in the data. Otherwise complete by hand and in ink.

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

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is The <i>subcontracted fee percentage</i> is	% %
11.2(18)	The <i>working areas</i> are the Site and	
24.1	The <i>Contractor's</i> key persons are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job Responsibilities:	

⁴ Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009 or see www.ecs.co.za

	Qualifications: Experience:	CV's (and further key persons data including CVs) are appended to Tender Schedule entitled .		
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is			
11.2(14)	The following matters will be included in the Risk Register			
11.2(19)	The Works Information for the <i>Contractor's</i> design is in:			
31.1	The programme identified in the Contract Data is			
A	Priced contract with activity schedule			
11.2(20)	The <i>activity schedule</i> is in	(in figures) (in words), excluding VAT		
11.2(30)	The tendered total of the Prices is			
	Data for Schedules of Cost Components	Note "SCC" means Schedule of Cost Components starting on page 60 of ECC3, and "SSCC" means Shorter Schedule of Cost Components starting on page 63 of ECC3.		
A	Priced contract with activity schedule	Data for the Shorter Schedule of Cost Components		
41 in SSCC	The percentage for people overheads is:	%		
21 in SSCC	The published list of Equipment is the last edition of the list published by The percentage for adjustment for Equipment in the published list is	Minus %		
22 in SSCC	The rates of other Equipment are:	Equipment	Size or capacity	Rate
61 in SSCC	The hourly rates for Defined Cost of design outside the Working Areas are Note: Hourly rates are estimated 'cost to company of the employee' and not selling rates. Please insert another schedule if foreign resources may also be used	Category of employee		Hourly rate

62 in SSCC	The percentage for design overheads is	%
63 in SSCC	The categories of design employees whose travelling expenses to and from the Working Areas are included in Defined Cost are:	

AIRPORTS COMPANY SOUTH AFRICA
TENDER NO. RA8018/2025/RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT ., KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 6 MONTHS

C1.3 Occupational Health and Safety Agreement

AGREEMENT

AGREEMENT MADE AND ENTERED INTO BETWEEN THE ACSA (HEREINAFTER CALLED THE “EMPLOYER”) AND

(Contractor)	
--------------	--

IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, ACT No. 85 OF 1993 AS AMENDED.

This is to certify that I,	
representing (Tenderer name)	

, as an employer in its own right, do hereby undertake to ensure, as far as is reasonably practicable, that all work will be performed, and all equipment, machinery or plant used in such a manner as to comply with the provisions of the Occupational Health and Safety Act (OHSA) and the Regulations promulgated thereunder.

I furthermore confirm that I am/we are registered with the Compensation Commissioner and that all registration and assessment monies due to the Compensation Commissioner have been fully paid or that I/We are insured with an approved licensed compensation insurer.

COID ACT Registration Number:			
OR Compensation Insurer:		Policy No.:	

I undertake to appoint, where required, suitable competent persons, in writing, in terms of the requirements of OHSA and the Regulations and to charge him/them with the duty of ensuring that the provisions of OHSA and Regulations as well as the Employer’s Special Conditions of Contract, Way Leave, Lock-Out and Work Permit Procedures are adhered to as far as reasonably practicable.

I further undertake to ensure that any subcontractors employed by me will enter into an occupational health and safety agreement separately, and that such subcontractors comply with the conditions set.

I hereby declare that I have read and understand the appended Occupational Health and Safety Conditions and undertake to comply therewith at all times. I hereby also undertake to comply with the Occupational Health and Safety Specification and Plan.

For the Contractor:		For the Employer:	
Signature		Signature	
Name		Name	
Date		Date	
Witness:		Witness:	
Signature		Signature	
Name		Name	
Date		Date	

C1.4 Adjudicator's Agreement

This agreement is made on the day of between:

..... [name of company/organisation]

of

..... [address] and

..... [name of company/organisation]

of

..... [address]

(the Parties) and

..... [name]

of

..... [address]

(the Adjudicator).

Disputes or differences may arise/have arisen* between the Parties under a Contract dated and known as

and these disputes or differences shall be/have been* referred to adjudication in accordance with the c Adjudication Procedure [hereinafter called "the Procedure"], and the Adjudicator may be or has been requested to act.

*Delete as necessary.

IT IS NOW AGREED as follows:

- 1 The rights and obligations of the Adjudicator and the Parties shall be as set out in the Procedure.
- 2 The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance with the Procedure.
- 3 The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses in accordance with the Procedure as set out in the Contract Data.
- 4 The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and shall endeavour to ensure that anyone acting on their behalf or through them will do likewise, save with the consent of the other Parties which consent shall not be unreasonably refused.
- 5 The Adjudicator shall inform the Parties if he intends to destroy the documents which have been sent to him in relation to the adjudication and he shall retain documents for a further period at the request of either Party.

SIGNED BY: _____

Name:

who warrants that he/she is duly authorised to sign for and on behalf of the first Party in the presence of

SIGNED BY _____

Name:

who warrants that he/she is duly authorised to sign for on behalf of the second Party in the presence of

SIGNED BY _____

Name:

the Adjudicator in the presence of

Witness: _____	Witness: _____	Witness: _____
Name: _____	Name: _____	Name: _____
Address: _____ _____	Address: _____ _____	Address: _____ _____
_____	_____	_____
_____	_____	_____
Date: _____	Date: _____	Date: _____

Contract Data

- 1 The Adjudicator shall be paid at the hourly rate of R..... in respect of all time spent upon, or in connection with, the adjudication including time spent travelling.
- 2 The Adjudicator shall be reimbursed in respect of all disbursements properly made including, but not restricted to:
 - (a) Printing, reproduction and purchase of documents, drawings, maps, records and photographs
 - (b) Telegrams, telex, faxes and telephone calls
 - (c) Postage and similar delivery charges
 - (d) Travelling, hotel expenses and other similar disbursements
 - (e) Room charges
 - (f) Charges for legal or technical advice obtained in accordance with the Procedure.
- 3 The Adjudicator shall be paid an appointment fee of R..... This fee shall become payable in equal amounts by each Party within 14 days of the appointment of the Adjudicator, subject to an invoice being provided. This fee will be deducted from the final statement of any sums which shall become payable under item 1 and/or item 2 of the Contract Data. If the final statement is less than the appointment fee the balance shall be refunded to the Parties.
- 4 The Adjudicator is/is not* currently registered for VAT.

**Delete as necessary*

- 5 Where the Adjudicator is registered for VAT it shall be charged additionally in accordance with the rates current at the date of invoice.
- 6 All payments, other than the appointment fee (item 3) shall become due 7 days after receipt of invoice, thereafter interest shall be payable at 5% per annum above the Reserve Bank base rate for every day the amount remains outstanding.

1. DEFINITIONS

- 1.1 “acceptable tender”** means any tender which, in all respects, complies with the specifications and conditions of tender as set out in the tender document.
- 1.2 “affidavit”** is a type of verified statement or showing, or in other words, it contains a verification, meaning it is under oath or penalty of perjury, and this serves as evidence to its veracity and is required for court proceedings.
- 1.3 “all applicable taxes”** includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;
- 1.4 “B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- 1.5 “B-BBEE status level of contributor”** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- 1.6 “bid”** means a written offer on the official bid documents or invitation of price quotations and “tender” is the act of bidding /tendering; ***(Therefore in the context of the 2022 regulations “bidder” and “Tenderer” have the same meaning***
- 1.7 “Code of Good Practice”** means the generic codes or the sector codes as the case may be;
- 1.8 “consortium or joint venture”** means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract;
- 1.9 “contract”** means the agreement that results from the acceptance of a bid by an organ of state;
- 1.10 “EME”** is an Exempted Micro Enterprise with an annual total revenue of R10 million or less.
- 1.11 “Firm price”** means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- 1.12 “functionality”** means the ability of a Tenderer to provide goods or services in accordance with specification as set out in the tender documents;
- 1.13 “Large Enterprise”** is any enterprise with an annual total revenue above R13,50 million;
- 1.14 “non-firm prices”** means all prices other than “firm” prices;
- 1.15 “person”** includes a juristic person;
- 1.16 “price”** includes all applicable taxes less all unconditional discounts;
- 1.17 “proof of B-BBEE status level contributor”** means-
- (a) The B-BBEE status level certificate issued by an authorized body or person;
 - (b) A sworn affidavit as prescribed in terms of the B-BBEE Codes of Good Practice; or
 - (c) Any other requirement prescribed in terms of the Broad- Based Black Economic Empowerment Act.
- 1.18 QSE** is a Qualifying Small Enterprise with an annual total revenue between R10 million and R13,50 million;
- 1.19 “rand value”** means the total estimated value of a contract in Rand, calculated at the time of the tender invitation;
- 1.20 “sub-contract”** means the primary contractor’s assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;
- 1.21 “the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000);
- 1.22 “the Regulations”** means the Preferential Procurement Regulations, 2022;

1.23 “total revenue” bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the *Government Gazette on 11 October 2013*;

1.24 “trust” means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and

1.25 “trustee” means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

2. GENERAL CONDITIONS

2.1 The following preference point systems are applicable to all bids:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

2.2 Preference point system for this bid:

- Either the 80/20 or 90/10 preference point system will be applicable to this tender

2.3 Preference points for this bid shall be awarded for:

- Price; and

2.4 B-BBEE Status as per ACSA's Preference Goals. The maximum points for this bid will be allocated based the applicable system determined by the value of the lowest valid tender.

2.5 Failure on the part of a bidder to fill in, sign this form and submit in the circumstances prescribed in the Codes of Good Practice either a B-BBEE Verification Certificate issued by a Verification Agency accredited by the South African Accreditation System (SANAS) or an affidavit confirming annual total revenue and level of black ownership together with the bid or an affidavit issued by Companies Intellectual Property Commission, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

2.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2.7 In the event that the bidder is appointed to carry out the Works associated with this bid, the bidder shall maintain B-BBEE status level of contribution claimed hereunder for the full duration of construction. Furthermore the bidder is to advise the purchaser of any changes in B-BBEE status level of contribution within seven days of becoming aware of such change, and provide detailed reasons and motivations for such changes.

3. ADJUDICATION USING A POINT SYSTEM

3.1 Subject to Regulation 11 of the Regulations, the bidder obtaining the highest number of total points will be awarded the contract.

3.2 A Tenderer must submit proof of its B-BBEE status level of contributor in order to claim points for B-BBEE.

3.3 A Tenderer failing to submit proof of B-BBEE status level of contributor or is a non-compliant contributor to B-BBEE will not be disqualified but will only score points awarded for price.

3.4 Points scored must be rounded off to the nearest 2 decimal places.

3.5 In the event that two or more bids have scored equal total points, the successful bid must be the one scoring the highest number of preference points for B-BBEE.

3.6 When functionality is part of the evaluation process and two or more bids have scored equal total points including equal preference points for B-BBEE, the successful bid must be the one scoring the highest points for functionality.

3.7 Should two or more bids be equal in all respects; the award shall be decided by the drawing of lots.

4. POINTS AWARDED FOR PRICE

4.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEM

A maximum of 80 or 90 points is allocated for price on the following basis:

Part C2: Pricing Data

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A	
C2.2	The <i>activity schedule</i>	

AIRPORTS COMPANY SOUTH AFRICA
TENDER NO. RA8018/2025/RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT ., KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 6 MONTHS

C2.1 Pricing assumptions: Option A

1. The conditions of contract

1.1. How work is priced and assessed for payment

Clause 11 in NEC3 Engineering and Construction Contract, April 2013 (ECC3) Option A states:

Identified and defined terms	11 11.2	(20) The Activity Schedule is the <i>activity schedule</i> unless later changed in accordance with this contract.
		(22) Defined Cost is the cost of the components in the Shorter Schedule of Cost Components whether work is subcontracted or not excluding the cost of preparing quotations for compensation events.
		(27) The Price for Work Done to Date is the total of the Prices for each group of completed activities and each completed activity which is not in a group. A completed activity is one which is without Defects which would either delay or be covered by immediately following work.
		(30) The Prices are the lump sum prices for each of the activities on the Activity Schedule unless later changed in accordance with this contract.

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

1.2. Function of the Activity Schedule

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

1.3. Link to the programme

Clause 31.4 states that "The *Contractor* provides information which shows how each activity on the Activity Schedule relates to the operations on each programme which he submits for acceptance". Hence when compiling the *activity schedule*, the tendering contractor needs to show each activity on the programme he submits with his tender.

1.4. Preparing the *activity schedule*

The tendering contractor prepares the *activity schedule* and should study the ECC3 Guidance Notes pages 19 and 20 before doing so. The *Employer* may have instructed the tendering contractor to include particular activities which he has specified and requires the *Contractor* to identify them in his *activity schedule*.

1. Generally, it is the Contractor who prepares the Activity Schedule as part of his tender by breaking down the work described within the Works Information into suitable activities which can be well defined, priced as a lump sum and shown on the programme. The Employer, in his Conditions of Tender or in a Tender Schedule, may have listed some items that he requires the Contractor to include in his activity schedule and be priced accordingly.

AIRPORTS COMPANY SOUTH AFRICA
TENDER NO. RA8018/2025/RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT ., KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 6 MONTHS

2. The Prices are defined in clause 11.2(20) as the lump sum for each activity in the activity schedule and the Price for Work Done to Date (PWDD) (the amount due to the contractor) is defined in clause 11.2(24) as the total of the Prices for each activity that has been completed. Hence activities in the activity schedule should be structured so as to provide an acceptable monthly cash flow as they are only assessed for payment on the assessment date if they have been completed.
3. As the Contractor has an obligation to correct Defects (core clause 43.1) and there is no compensation event for this unless the Defect was due to an Employer's risk, the lump sum Prices must also include for the correction of Defects.
4. If the Contractor has decided not to identify a particular activity, the cost to the *Contractor* of doing the work must be included in, or spread across, the other Prices in order to fulfil the obligation to complete the works for the tendered total of the Prices.
5. There is no adjustment to the lump sum activity schedule price if the amount, or quantity, of work within that activity later turns out to be different to that which the contractor estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event. See Clause 60.1.
6. Hence the Prices tendered by the Contractor in the *activity schedule* are inclusive of everything necessary and incidental to Providing the Works in accordance with the Works Information, as it was at the time of tender, as well as correct any Defects not caused by an Employer's risk.
7. However, the Contractor does not have to allow in his Prices for matters that may arise as a result of a compensation event. It should be noted that the list of compensation events includes those arising as a result of an Employer's risk event listed in core clause 80.1.

AIRPORTS COMPANY SOUTH AFRICA
TENDER NO. RA8018/2025/RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT ., KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 6 MONTHS

C2.2 The Activity Schedule – For Kimberley Airport

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

Item No.	Programme Reference	Activity description	Price
1.		Design and Approvals	
1.1.		FIPDM Stage 2 – Concept and Viability report submitted and approved by ACSA	
1.2		FIPDM Stage 3 – Design Development report submitted and approved by ACSA	
1.3		FIDPM Stage 4 – Design Documentation	
1.4		FIDPM Stage 5 – Works	
1.5		FIDPM Stage 6 – Handover	
1.6		FIDPM Stage 7 – Close-Out	
1.7		Disbursements	
		Subtotal 1	
2.		Kimberley Airport	
2.1.		Preliminaries and General	
2.2.		Power Conversion System: Hybrid Inverters	
2.3.		Li-ion Battery Storage	
2.4		Solar Plant 11% Capacity Augmentation	
2.5.		Cabling	
2.6.		Consumables	
2.7.		Installation	
		TOTAL (1+2)	
		Add 20% Contingencies	
		CONTRACT SUM BEFORE VAT	
		VAT at 15%	
		CONTRACT VALUE INCLUSIVE OF VAT	
Total of prices to be carried over to C1.1 Form of Offer and Acceptance			

AIRPORTS COMPANY SOUTH AFRICA
TENDER NO. RA8018/2025/RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT ., KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 6 MONTHS

C2.2 The Activity Schedule – For George Airport

Item No.	Programme Reference	Activity description	Price
1.		Design and Approvals	
1.1.		FIPDM Stage 2 – Concept and Viability report submitted and approved by ACSA	
1.2		FIPDM Stage 3 – Design Development report submitted and approved by ACSA	
1.3		FIDPM Stage 4 – Design Documentation	
1.4		FIDPM Stage 5 – Works	
1.5		FIDPM Stage 6 – Handover	
1.6		FIDPM Stage 7 – Close-Out	
1.7		Disbursements	
		Subtotal 1	
2.		George Airport	
2.1.		Preliminaries and General	
2.2.		Power Conversion System: Hybrid Inverters	
2.3.		Li-ion Battery Storage	
2.4		Solar Plant 11% Capacity Augmentation	
2.5.		Cabling	
2.6.		Consumables	
2.7.		Installation	
		TOTAL (1+2)	
		Add 20% Contingencies	
		CONTRACT SUM BEFORE VAT	
		VAT at 15%	
		CONTRACT VALUE INCLUSIVE OF VAT	
Total of prices to be carried over to C1.1 Form of Offer and Acceptance			

AIRPORTS COMPANY SOUTH AFRICA
TENDER NO. RA8018/2025/RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT ., KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 6 MONTHS

C3: Scope of the Works

C3.1 DESCRIPTION OF THE WORKS	158
C3.2 ENGINEERING	162
C3.3 PROCUREMENT	164
C3.4 CONSTRUCTION	165
C3.5 MANAGEMENT	169
C3.6 PROJECT TECHNICAL SPECIFICATIONS	173
C3.7 GENERIC SPECIFICATIONS.....	201

**AIRPORTS COMPANY SOUTH AFRICA
TENDER NO. RA8018/2025/RFP**

**APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST
LITHIUM-ION BATTERIES AT ., KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS
COMPANY SOUTH AFRICA FOR A PERIOD OF 6 MONTHS**

PART C3 SCOPE OF WORKS

This section of the Contract Document is to be read in conjunction with:

- 1** ICAO
- 2** Drawings issued for Construction
- 3** Other instructions/documentation issued by the Employer

C3.1: Description of the Works

C3.1.1 Employer's Objectives

The Employer's objective in entering into an agreement with a service provider is to secure the services of an electrical engineering contractor to serve the Employer's needs and requirements involving the design, supply, install commission, and test Lithium-ion Batteries at ., Kimberley Airport and George Airport

This is to ensure that the Airports Company South Africa as a member and participant in the Airport Carbon Accreditation program of Airports Council International implement best practices in carbon management and achieve emissions reductions with the goal of becoming carbon neutral Level 3+ at all three ACSA Regional Airports under Cluster 2, which are currently not certified.

C3.1.2 OVERVIEW OF THE WORKS

The scope of works for the implementation of a battery energy storage system (BESS) involves following aspects:

- Integrating the BESS with the existing solar PV plant with the objective to minimize dependency on the national grid, reduce operational expenditure, lower emissions, and enable smart grid adoption. This includes designing and engineering the system, procuring, and supplying components as per the technical requirements, conducting site preparation and installation, commissioning and confirming that the integrated system performs per the design through testing, and implementing advanced control systems for smart grid functionalities.
- Assessment of the solar plant performance in line with the OEM performance guarantee and to augment the capacity of the solar plant by at least 11% or more based on the outcomes of the assessment.
- Training operational staff, developing a maintenance plan, and providing a maintenance and services 60-month plan for consideration by ACSA as an option, and implementing a monitoring system to ensure measure and optimise day to day performance of the system.
- The supply a 2-year performance warranty for the Battery Energy Storage solution to safeguard ACSA's investment and shall specify the conditions of warranty. ACSA also seeks performance

AIRPORTS COMPANY SOUTH AFRICA
TENDER NO. RA8018/2025/RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT ., KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 6 MONTHS

guarantees that ensure that the seem will maintain its specified performance in line with Original Equipment Manufacture's specification throughout its lifecycle

- Creation of a list of assets as per the ACSA data dictionary.

C3.1.3 EXTENT OF THE WORKS

The description of the work contained in the Extent of Work is merely an outline of the work to be executed in terms of the contract and shall not limit the work to be carried out by the Contractor. The planned works and construction measures are shown on the construction drawings.

The Works included in this contract will mainly consist of the works described in the sub-sections below:

(a) General

General work operations include:

- i) Compilation and submission for approval of a detailed site safety plan and work method statements, all in compliance with the Manual for Working Airside – Volume 5.
- ii) Attendance by all site staff of a safety training course and obtaining ACSA permits. This includes the necessary vehicle and equipment driving permits for any driver having to drive airside, as indicated in the Manual for Working Airside – Volume 5.
- iii) Compile and submit a quality management plan for approval by the Employer's Agent.
- iv) Compliance with local and national Occupational Health and Safety regulations (OHS Act No. 85 of 1993) and ACSA Health and Safety regulations.
- v) Full compliance with the ACSA Environmental Specifications.
- vi) Locating, relocating (where required) and protection of all services in the work areas.
- vii) Cleaning of the construction area after each work shift to the satisfaction of Airport Management staff.

(a) Establishment

Establishment includes, but not limited to:

- Completion of safety training.
- The supply of plant, labour, tools, equipment and materials necessary to complete the work.
- Topographical survey and setting out of the Works.
- Completion of relevant OHS and labour requirements applications and files.
- Compliance with the ACSA Environmental Specifications
- Compile and submit a quality management plan for approval by the Employer's Agent.
- Cleaning of the construction area after each work shift to the satisfaction of AM staff.
- Programming the construction of the new facilities and co-ordinating the activities of the Electrical Subcontractor.
- All works are subject to base ground check.

**AIRPORTS COMPANY SOUTH AFRICA
TENDER NO. RA8018/2025/RFP**

**APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST
LITHIUM-ION BATTERIES AT ., KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS
COMPANY SOUTH AFRICA FOR A PERIOD OF 6 MONTHS**

(b) Changes to Scope of Work

It is a condition of this contract that the employer reserves the right to limit the total expenditure on the Works due to possible budget constraints. Should the tender sum exceed the budgeted amount, the scope of the works may be reduced at any time before or during the contract period to ensure that the final contract amount does not exceed the budgeted amount.

C3.1.4 LOCATION OF THE WORKS

Kimberley Airport is located in the Northern Cape, and serves Kimberley, the capital city of the province and its surrounding areas. The airport is approximately 6.5 kilometres away from city centre and services domestic passengers to destinations such as Cape Town and Johannesburg.

The George Airport is located along National Route (N2) and west of the R404 near George in the Western Cape Province. The proposed site is situated at the George Airport.

C3.1.5. TEMPORARY WORKS

No temporary works are foreseen

C3.2: ENGINEERING

C3.2.1 DESIGN SERVICES AND ACTIVITY MATRIX

The responsibilities for design and related documentation are as follows:

DESCRIPTION	RESPONSIBILITY
Detailed design for construction	Contractor
Temporary works (Section C3.1.5): Items a) to b) Items c) to e) and any other temporary works required by the contractor	Contractor
Record drawings: Provision of data and marked up drawings Preparation of drawings	Contractor

C3.2.2 EMPLOYER'S DESIGN

None.

C3.2.3 CONTRACTOR'S DESIGN BRIEF

The contractor shall design the design for the Battery Energy Storage solutions for ., Kimberley Airport and George Airport.

C3.2.4 DRAWINGS

The Contractor shall provide all the drawings required for the Works for approval before commencing work.

C3.2.5 DESIGN PROCEDURES

As the Project Technical Specifications

C3.2.6 CONSTRUCTION IN CONFINED AREAS

Working space for some of the work to be carried out under this contract is restricted. The construction method used in these confined areas largely depends on the Contractor's plant. However, the Contractor must note that measurement and payment will be according to the specified cross-sections and dimensions irrespective of the method used, and that the rates and prices tendered will be deemed to include full compensation for difficulties encountered while working in confined areas.

AIRPORTS COMPANY SOUTH AFRICA
TENDER NO. RA8018/2025/RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

C3.3: PROCUREMENT

C3.3.1 PREFERENTIAL PROCUREMENT PROCEDURES

The Works shall be executed in accordance with the requirements specified in Section T1.2, Tender Data (Clause F3.11) and submitted by the Contractor in his Returnable Schedules.

C3.3.2 SUBCONTRACTING

(a) Scope of Mandatory Subcontract Works

N/A

(b) Preferred Subcontractors

The subcontractors must meet the requirements as laid out in Clause F3.11 of this document.

(c) Subcontracting Procedures

The electrical works shall be subcontracted to CIDB registered contractors in accordance with the subcontracting procedures set out in the General Conditions of Contract.

(d) Attendance on Subcontractors

The Contractor shall provide any necessary facilities in order to manage the subcontractor to ensure that the works are carried out in accordance with:

- The programme of works, and
- The contract requirements, and
- In the Project requirements concerning access to and from the airport facilities at the beginning and end of working shifts. He shall also ensure that the subcontractor complies with the requirements of the Safety Plan, Environmental Management Plan and Operational procedure requirements.

**AIRPORTS COMPANY SOUTH AFRICA
TENDER NO. RA8018/2025/RFP**

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

C3.4: CONSTRUCTION

C3.4.1 WORKS SPECIFICATIONS

(e) Applicable Project Technical Specifications

The Technical Specifications forming part of this contract shall be the “Project Technical Specification for the Installation of Battery Energy Storage Systems (BESS) at ., Kimberley Airport and George Airport” which have been written to cover all phases of work usually encountered on Battery Energy Storage Solutions contracts.

(f) Applicable National and International Standards

The Works must comply with certain National and International Standards. These include:

- ICAO
- Electricity Regulation Act 4 of 2006 as amended by the Electricity Regulation Amendment Act 28 of 2007 (ERA)
- South African Grid Code (all parts)
- South African Distribution Code (All parts)
- South African Battery Energy Storage Facility (BESF) Grid Code
- Grid Connection Code for Renewable Power Plants Connected to the Distribution System in South Africa
- South African National Standards SANS 10142-1
- South African National Standards SANS 10142-1-2
- Other applicable SANS Standards
- Municipal policy and legislation (Municipal by-laws)
- National Environmental Management: Waste Act 59 of 2008

Where required, compliance with these and other National and International Standards have been specified in the Standard and Project Specifications.

(g) Project Specifications

In certain clauses, the Standard Specifications allow a choice to be specified in the Particular (Project) Specifications between alternative materials or methods of construction and for additional requirements to be specified to suit a Contract. Details of such alternatives or additional requirements applicable to this Contract are contained in the Project Technical Specification for the Installation of Battery Energy Storage Systems (BESS) at ., Kimberley Airport and George Airport. It also contains some additional specifications required for this Contract.

(h) Certification by Recognized Bodies

Where required, South African National Standards (SANS) must undertake the certification of items for inclusion in the Works.

C3.4.2 PLANT AND MATERIALS

**AIRPORTS COMPANY SOUTH AFRICA
TENDER NO. RA8018/2025/RFP**

**APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST
LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY
SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

(a) Plant and Materials supplied by the Employer

Nil

(b) Materials, Samples and Shop Drawings

Where required, requirements for proof of compliance with materials specifications, submission of samples of materials and finishes and requirements for shop drawings, are stated in the standard or project specifications. This will also apply to the subcontracts.

All materials used in the works shall, where such mark has been awarded for a specific type of material, bear the official mark of the SANS (SABS). Written proof shall be obtained from the Employer's Agent for any materials not bearing the official mark of the SANS.

C3.4.3 CONSTRUCTION EQUIPMENT

(a) Requirements for Equipment

The equipment required for this operation shall always be available on the landside of George Airport.

(b) Equipment Provided by the Employer

Nil

C3.4.4 EXISTING SERVICES

"The owners of services affected under this Contract are all under the control of the Airports Company South Africa whose representative must be contacted regarding the location of all services in the construction area. Inspections shall be undertaken by means of the authority's service detectors and such inspections shall be attended by the Contractor and the Engineer's Representative. No payment shall be made to the Contractor for attending these inspections.

Protection and/or relocation of certain services will be required. The Engineer will issue instructions after location and exposure of these services. No large compaction equipment will be allowed to work within 10 m of any ground mounted frangible light fixtures or any other navigational equipment without approval by the Engineer. No additional payment will be made for work close to the equipment as specified above."

"The Contractor shall also be liable for any loss or consequential loss suffered by the owner of a service which is damaged by the contractor's operations, e.g. loss lighting due to a power failure."

"The contractor shall ensure that the position of the cables are known to himself and his personnel and shall take all reasonable care to avoid damage to the cables, lights or transformers. Protective covers and markers shall be used as required to protect the lights from being damaged or covered by products (e.g. bituminous) whilst the work is carried out. No additional payment will be made to protect the lights.

Should existing services be damaged, the contractor shall give adequate notice to all concerned and leave enough time after completing a particular work shift to allow for the reinstatement of the cables.

**AIRPORTS COMPANY SOUTH AFRICA
TENDER NO. RA8018/2025/RFP**

**APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST
LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY
SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

C3.4.5 SITE ESTABLISHMENT

i. Services and Facilities Provided by the Employer

The location of and access to a proposed construction camp will be provided to the contractor. Approval for the establishment of a construction camp must be obtained from ACSA. The Contractor is responsible for all arrangements for obtaining all necessary approvals, establishment and subsequent removal and reinstatement of his construction camp. Note that services for water and sewer will not be free of charge, and the utilization of these services will be at the expense of the contractor.

Other contractors may in part also use the proposed area. The contractor must at all time limit his personnel, plant, equipment and materials at the Contractor's site or the working areas as approved by the Employer's Agent. No personnel shall be accommodated on airport property. Only guards approved by the Employer and on duty may be on site at all times. The contractor shall only use the designated gate(s) for access purposes to the airside.

The area designated by the Employer's Agent can be used for stockpiling material for use in the works and for temporary parking of plant and equipment. This location is to be confirmed by the Employer.

All regulations and local authority ordinances, as regards smoke emissions and noise abatements shall apply and compliance will be enforced as well as height restrictions and any required obstacle markers.

Also refer to the requirements of Clause 3 of the **Procedure Manual for Working Airside (Volume 5)**.

ii. Facilities Provided by the Contractor

The contractor shall make his own arrangements for the supply of electrical power, water, telecommunication services, ablution facilities, sewer services, first aid facilities and other services, the payment thereof and all reinstatements required upon completion. No direct payment will be made to the Contractor for the provision of electrical and other services. The cost thereof shall be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required.

The contractor will be required to erect a security fence around the construction camp and temporary parking area for plant and equipment. The cost thereof is regarded to be included in the relevant rates for establishment on site.

The storage of fuels in tanks may be kept in the contractor's camp subject to the regulations of the Airport authorities that require a berm or wall around the installation sufficient to retain the capacity fuel of the tanks.

The Contractor shall make his own arrangements for telephone and facsimile facilities. Cellular phones will be acceptable, but the Contractor must obtain airside permits from ACSA at his own cost.

iii. Storage Facilities

The Contractor shall make a storage room available for use by the Employer's Agent's staff.

iv. Other Facilities and Services

The Contractor shall be responsible for the removal of all waste generated from the airport property and the proper disposal thereof elsewhere at his own cost.

AIRPORTS COMPANY SOUTH AFRICA
TENDER NO. RA8018/2025/RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

If required by the Employer's Agent, the Contractor shall supply portable chemical toilet facilities next to the construction site for his staff as well as for the Employer's Agent's supervisory staff. These facilities must be erected and removed on a daily basis and regularly serviced to the satisfaction of the Airport Authorities and the Employer's Agent.

v. Vehicles and Equipment

The requirements (e.g. permits, etc.) for vehicles and drivers operating on the airside at George Airport are specified in the Procedure Manual for Working Airside (Volume 5). The responsibility will however remain with the Contractor to ensure that all necessary requirements are met to bring any vehicles and equipment on site.

vi. Advertising Rights

Only one sign board for the Contractor and his subcontractors may be erected at the entrance to the construction camp.

vii. Notice Boards

A construction notice board complying with the SAICE specifications must be provided and erected at a position to be agreed with the Employer's Agent. The cost of the supply and erection of this notice board must be included in the establishment cost of the Contractor.

C3.4.6 SITE USAGE

Restrictions on the site usage are stated in the Procedure Manual for Working Airside (Volume 5).

C3.4.7 ALTERATIONS, ADDITIONS, EXTENSIONS AND MODIFICATIONS TO EXISTING WORKS

The Contractor must satisfy himself that the dimensional accuracy, alignment, levels and setting out of existing components are compatible with the proposed Works. Where this is not the case the Employer's Agent's Representative must be notified in writing at the earliest possible time.

C3.4.8 WATER FOR CONSTRUCTION PURPOSES

The Contractor must make all arrangements for the transport, storage and distribution of water required for construction purposes and for his own use and at his own cost (allowed for in the relevant tendered rates). Alternatively, water can be purchased from ACSA at a prescribed rate..

C3.5: MANAGEMENT

C3.5.1 MANAGEMENT OF THE WORKS

(a) Planning and Programming

The Contractor's programme must be based on the interim milestone dates for completion and the Working Times defined in the **Procedure Manual for Working Airside (Volume 5)**. Penalties will be imposed if these Interim Milestone dates are not achieved. Refer to Section C1.2 (contract Data), Sub-clause 5.13.1.

(b) Methods and Procedures

The methods and procedures that must be complied with are contained in Volumes 2, 3, 4 and 5 of the contract documentation. These include but are not limited to:

- Occupational Health and Safety Specifications (C3.7.1).
- Environmental Work Instructions (C3.7.2).
- Manual of Procedures for Working Airside (Volume 5).

(c) Quality Plans and Control

The requirements for Quality Plans and Control are stated

(d) Construction Method Statement

Within 14 days of the Commencement Date the Contractor shall submit a Construction Method Statement to the Employer's Agent for approval by the Employer. Once approved, this Statement will form part of Appendix C of the Procedure Manual for Working Airside (Volume 5). No work on the airside will be allowed until the Employer has approved this Construction Method Statement.

The Method Statement shall include:

- i. All measures to be implemented to comply with the requirements of the Procedure Manual for Working Airside (Volume 5).
- ii. All measures to be implemented to comply with the requirements of the OHS Act.
- iii. A contingency plan to deal with interruptions of shifts by inclement weather, plant breakdowns or emergency closures of the work areas.
- iv. Special measures, such as availability of back-up plant, to be implemented in normal shifts to comply with the Project Specifications.
- v. Measures and equipment that will be used on site to limit the ingress of water into the excavations and to remove rain water from the excavations.
- vi. Measures to protect services (above and below surface) during construction.
- vii. Procedures to ensure that the whole work area is safe before removing staff or handing over of the site at the end of the each work shift.
- viii. A watchman to remain on site of excavations/construction with telephone contact to the contract manager in case of emergency.
- ix. The cost of complying with the ACSA approved method statement is deemed to be covered by the tendered rates for the Contractor's General Obligations.

(e) Environment

The Environmental requirements are specified in Generic Specifications (Section C3.7.2)

(f) Accommodation of Traffic on Roads and Accesses used by the Contractor

ACSA staff and other stake holders will also use the access road to the construction site and camp. It is therefore a requirement that the contractor coordinate with all stakeholders on a daily basis (to be minuted at the daily meeting) on the usage of the roads by the Contractor's vehicles and construction equipment.

(g) Testing, Completion, Commissioning and Correction of Defects

Procedures for testing, completion, commissioning and correction of defects will be provided to the Contractor by the Employer's Agent on site.

(h) Recording of Weather

The contractor shall provide an electronic mobile weather station. He shall erect them according to the requirements of the weather bureau. The contractor shall record and keep a record of the daily rainfall and maximum/minimum temperatures and supply the data to the Employer's Agent on a daily basis.

The contractor shall also record wind speed measurements on site as agreed with the Employer's Agent's Representative. Data can also be obtained from the local weather bureau but has to be recorded on site on a daily basis.

The cost of complying with these requirements is deemed to be covered by the tendered rates for the Contractor's General Obligations.

(i) Format of Communications

All instructions or requests need to be confirmed in writing through:

- Site instructions.
- Requests for inspections.

(j) Key Personnel

The Contractor, Employer's Agent and Employer must compile a schedule of their Key Personnel with their contact numbers and keep it updated as per requirements for the contact list in Volume 5 – Procedure Manual for Working Airside. The list must be made available to the Employer's Agent, Employer and Contractor.

(k) Management Meetings

The following formal meetings will be held at the office of the Employer's Agent's Representative between the representatives of the Employer, Employer's Agent and the Contractor:

- Monthly site meeting (Date and time to be agreed by attendees).
- Monthly technical meeting (Date and time to be agreed by attendees).
- The representatives must have the necessary delegated authority in respect of aspects such as planning, change management and health and safety.

(l) Daily records

The Contractor must keep daily records of resources (people and equipment employed) and site diaries in respect of work performed on the site. A copy of the previous day's daily record must be provided to the Employer's Agent on a daily basis.

(m) Bonds and Guarantees

Original copies of the bonds and guarantees must be lodged at the office of ACSA, George Airport and one copy of each must be kept on site with the Employer's Agent's representative. On release, the bond and guarantees can be collected from ACSA.

(n) Payment Certificates

The Employer's Agent's certificate will be issued only after receipt by him of a draft certificate prepared by the Contractor at his own expense in the form prescribed by the Employer's Agent. The cost of duplicating and delivering copies of the certificate to the Contractor, the Employer's Agent and the employer shall be borne by the Contractor. The Employer's Agent and the employer shall require three (3) sets of A4-sized paper copies in total.

(o) Permits

All requirements in connection with the application for and usage of permits are stated in the Airside Manual (Volume 5)

(p) Insurance Provided by the Employer

For information on the Employer Insurance, refer to Clause 35.1 Section C1.2.

C3.5.2 HEALTH AND SAFETY

(a) Health and Safety Requirements and Procedures

Health and Safety requirements and procedures are presented in Annexure B, Section C3.7.1.

(b) Barricades and lighting

Requirements for the provision and usage of barricades and lighting are stated in Volume 5

C3.6: Generic Specifications

The Specifications herein are Specifications prepared by the employer applicable to this contract. Three Specifications are included:

C3.6.1: OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS C3-25

C3.6.2: ENVIRONMENTAL WORK INSTRUCTIONS C3-68

2. C3.6.1: OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS

This part of the Specifications contains comprehensive occupational health and safety specifications.

LIST OF ABBREVIATIONS

ACSA	Airports Company South Africa
GAR	General Administration Regulations
GSR	General Safety Regulations
OHSA	Occupational Health and Safety Act 85 of 1993
OHSS	Occupational Health and Safety Specification
SABS	South African Bureau of Standards

PART A: GENERIC SPECIFICATIONS

1. INTRODUCTION

1.1 Purpose of the Occupational Health and Safety Specification

The purpose of the OHSS is to assist Contractors to achieve compliance with the Occupational Health and Safety law, in order to reduce incidents and injuries. The OHSS will be implemented during the construction of this project or any construction activity that the Employer has control over.

The OHSS is a performance specification to ensure that the Employer and any bodies that enter into formal agreements with the Employer viz. Agents, Consultants and Contractors achieve an acceptable level of OHS performance. No advice, approval of any document required by the OHSS such as hazard identification and risk assessment action plan or any other form of communication from the Employer shall be construed as an acceptance by the Employer of any obligation that absolves the Contractor from achieving the required level of performance and compliance with legal requirements. Further, there is no acceptance of liability by the Employer which may result from the Contractor failing to comply with the OHSS, i.e. the Contractor remains responsible for achieving the required performance levels.

1.2 Implementation of the Occupational Health and Safety Specification

This OHSS forms an integral part of the Contract, and Contractors are required to make it an integral part of their Contracts with Sub-Contractors and Suppliers. It will be disseminated by the Employer to persons responsible for and inspection of the design of the infrastructure works, who will ensure that it is included in the Tender Document(s) issued to prospective Contractors. The prospective Contractors shall incorporate the requirements of the OHSS in their submission of tenders to the Employer as well as provide health and safety plans for evaluation.

This specification must be read in conjunction with the OHS Act No 85 of 1993 (as amended), the Regulations as published in Government Gazette No 7721 of 18 July 2003 as well as the General Safety Regulations published in Government notice No. R 1031 of 30 May 1986, as amended. The OHS Act Agreement in this document (Returnable Schedules) must be fully completed by the Contractor.

2. STANDARD OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

2.1 Scope

This OHSS covers the requirements for eliminating and mitigating incidents and injuries in all Employer controlled projects.

The scope also addresses legal compliance, hazard identification and risk control, promoting a health and safety culture amongst those working on ACSA projects and those affected by the activities taking place in and around them.

2.2 Interpretations

2.2.1 Application

The OHSS contains clauses that are applicable to building / construction and that impose pro-active controls associated with activities that impact on human health and safety as they relate to plant and machinery.

Compliance to the requirements of the OHSA, Construction Regulations and General Safety Regulations is in addition to the requirements of the OHSS and is part of the Contractor's responsibility. The Employer will through the Agents, as appointed, monitor that the Contractor complies with the requirements of the OHSA and will not prescribe to the Contractor how such compliance is achieved.

Definitions

The definitions used will be those set out in the Regulation Gazette No 7721 of 18 July 2003 with the following addition:

ACSA: Airports Company South Africa

Hazard Identification and Risk Assessment and Risk Control:

Means a documented plan, which identifies hazards, assesses the risks and details the control measures and safe working procedures which are to be used to mitigate and control the occurrence of hazards and risks during construction or operation phases.

Health and Safety Management Plan:

Means a documented plan which addresses the OHSS requirements hazards identified and include safe working procedures to mitigate, reduce or control the hazards identified.

Induction Training:

Means once off introductory training on general health and safety issues as well as project specific matters given to all employees before commencement of work or other visitors to the site.

Risk:

Means the probability or likelihood that a hazard can result in injury or damage.

Site:

Means the area in the possession of the Contractor for the construction of the works. Where there is no demarcated boundary it will include all adjacent areas, which are reasonably required for the activities for the Contractor, and approved for such use by the Engineer.

The Act:

Means, unless the context indicates otherwise, the Occupational Health and Safety Act, 1993 (Act NO. 85 of 1993) and Regulations promulgated there under.

Contractor:

The Contractor terminology used in these specifications shall be deemed to cover Principle Contractor, Contractors and Sub-Contractors.

3. REQUIREMENTS AT TENDER STAGE

The Contractor shall make available the following with his completed tender:

A Health and Safety Plan as described in Regulation 7 of the Construction Regulations. The Safety Plan must be based on the Construction Regulations 2014 and this specification and will be subject to approval by the Employer. This will include a Hazard Identification and Risk Assessment appropriate to the project, expansion of Annexure D, and a declaration to the effect that he has the competence, completion of Occupational Health and Safety Questionnaire, and necessary resources to carry out the work safely in compliance with the Construction Regulations 2014.

Failure to submit the foregoing with his tender, will lead to the conclusion that the Contractor is not able to carry out the work under the contract safely in accordance with the Construction Regulations and may result in the tender being disqualified.

4. NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION WORK

Due to the estimated project cost the Clients Health and Safety Agent will apply for a construction works permit. No construction or related work such as site establishment or delivery of any equipment or material may commence before the construction works permit has been received and the Engineer approved the start of the works.

A copy of the construction works permit must be conspicuously displayed at the main entrance to the site as well as be kept on the health and safety files, and be available for inspection by inspectors, Employer, Engineer, employees and other duly authorised persons on site.

5. GUIDELINES FOR THE DEVELOPMENT OF A HEALTH & SAFETY PLAN

5.1 Background

In terms of the Construction Regulations [Regulation 5 (1) (b)] of the Occupational Health and Safety Act, No 85 of 1993, the Client is required to compile an Occupational Health and Safety specification for each of its projects and the Contractor, appointed by the Client in terms of Regulation 5 (1) (k), is required to prepare an Occupational Health and Safety Plan. This plan has to be prepared in terms of Regulation 7 (1)(a) as well as the Client's Occupational Health & Safety Specification. In terms of Regulation 5 (1)(l), the Client and the Contractor are required to agree on the Occupational Health and Safety Plan before any work may commence.

5.2 Framework for an Occupational Health and Safety Plan

5.2.1 Introduction

The Contractor has to demonstrate to the Client that he has a suitable and sufficiently documented Occupational Health and Safety Plan as well as the necessary competencies, experience and resources to perform the construction work safely. The Contractor is required to submit, the following documentation for perusal and verification by the Client:

- Management Structure including an organogram – Tender Stage
- Quality Plan – Tender Stage
- Human Resources Plan – Tender Stage
- Registered Workplace Skills Plan
- “Letter of good standing” from the Compensation Commissioner or licensed compensation insurer – Tender Stage
- Proof of induction and other training of employees
- Example copies of minutes of previous Occupational Health and Safety Committee meetings and copies of Incident Investigation Reports

5.2.2 Contents of an Occupational Health and Safety Plan

The Occupational Health and Safety Plan shall include the following:

5.2.2.1 Occupational Health and Safety Management Programme

- Management of Occupational Health and Safety risks
- Occupational Health and Safety structures and appointments
- Programme of Occupational Health and Safety inspections
- Occupational Health and Safety Representatives
- Occupational Health and Safety committee

5.2.2.2 Statement Regarding the Communication and Management of the Work

- Management structure and responsibilities
- Occupational Health and Safety objectives for the project and arrangements for monitoring and review of Occupational Health and Safety performance
- Arrangements for regular liaison between parties on site
- Consultation with the workforce
- The exchange of design information between the Client, Engineer, supervisors and subcontractors on site
- Handling design changes during the project
- Selection and control of subcontractors
- The exchange of Occupational Health and Safety information between all subcontractors
- Security
- Site induction and on site training
- Facilities and first-aid
- The reporting and investigation of accidents and incidents
- The production and approval of risk assessments and method statements
- Site Occupational Health and Safety rules
- Fire and emergency procedures
- Reporting to the Client i.e. results of Occupational Health and Safety inspections.
- Incident investigations and committee meetings
- Reporting of incidents to the Department of Labour and Compensation Commissioner where appropriate

6. APPOINTMENT OF SAFETY PERSONNEL

6.1 Construction Supervisor

In terms of Section 16 of the Act, the Chief Executive Officer of the Contractor may delegate, in writing, part or all of his powers to a suitable person on the site.

The Contractor shall appoint a full-time Construction Manager, in writing, in terms of Section 8(1) of the Construction Regulations with the duty of supervising the performance of the construction work as well as ensuring occupational health and safety compliance.

He may also have to appoint one or more competent employees to assist the construction manager where justified by the scope and complexity of the works as well as an Alternate Construction Manager when applicable.

6.2 Construction safety officer

In terms of Section 8(5) of the Construction Regulations the Contractor shall appoint in writing a full-time Construction Safety Officer which is duly accredited by SACPCMP. The Safety Officer shall have the necessary competence and resources to perform his duties diligently.

Provision will be made in the Bill of Quantities to cover the cost of a dedicated construction safety officer appointed after award of the contract.

6.3 Health and safety representatives

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

The number of health and safety representatives for a workplace shall be at least one for every 50 employees which will include the employees of subcontractors

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

6.4 Health and safety committee

In terms of Sections 17, 18 and 19 of the Act (OHSA 1993) the Contractor (as employer), shall establish one or more health and safety committee(s) where there are two or more health and safety representatives at a workplace. The persons selected by the employees and appointed by the Contractor to serve on the committee shall be designated in writing.

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

6.5 Competent persons

In accordance with the Construction Regulations the Contractor shall appoint, in writing, competent persons responsible for supervising construction work for the following work situations that may be expected on the site of the works, as applicable to the project.

- Risk assessment (Regulation 9);
- Fall protection (Regulation 10);
- Excavation work (Regulation 13);
- Demolition work (Regulation 14);
- Suspended platform operations (Regulation 17);
- Material Hoists (Regulation 19);
- Bulk mixing plant operations (Regulation 208);
- Explosive actuated fastening device (Regulation 21)
- Construction vehicle and mobile plant (Regulation 23);
- Use of temporary storage of flammable liquids on construction site (Regulation 25);
- Water environments (Regulation 26);
- Housekeeping on construction sites (Regulation 27)
- Stacking and storage on construction sites (Regulation 28);
- Fire precautions on construction sites (Regulation 29); and
- Construction employees' facilities (Regulation 308).

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

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

7. PROJECT / SITE SPECIFIC REQUIREMENTS

A list of activities and considerations that have been identified for the project and the construction site and for which Risk Assessments, Standard Working Procedures (SWP), management and control measures and Method Statements (where necessary) have to be developed by the Principal Contractor is given in Annexure D. This list is not to be considered as inclusive and other items must be added as required.

In addition, the following health risks should be taken into account. It may become necessary to include others according to the requirements of the project.

Health risks

- Health risks arising from neighbouring as well as own activities and from the environment e.g. threats by dogs, bees, snakes, inclement weather etc.
- Exposure to noise
- Exposure to vibration
- Protection against dehydration and heat exhaustion
- Protection from wet & cold conditions
- Exposure to hazardous substances and chemicals used on site.

Emergency Procedures

The Principal Contractor shall submit a detailed Emergency Procedure for approval by the Client prior to commencement on site. The procedure shall detail the response plan including the following key elements:

- List of key competent personnel
- Details of emergency services
- Actions or steps to be taken in the event of the specific types of emergencies
- Information on hazardous material/situations.

Emergency procedure(s) shall include, but shall not be limited to, fire, spills, accidents to employees, use of hazardous substances, bomb threats, major incidents/accidents, etc. The Principal Contractor shall advise the Client, Agent, Engineer and all relevant authorities forthwith, of any emergencies, together with a record of action taken. This shall be confirmed in writing as soon as possible after the incident. A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, Construction Manager, Safety Officer etc) must be maintained and available to site personnel. These procedures shall form part of the Health and Safety Plan.

First Aid Boxes and First Aid Equipment

The Principal Contractor and all Contractors shall appoint in writing First Aider(s). If not already accredited, the appointed First Aider(s) are to be sent for accredited first aid training. Valid certificates are to be kept on site. The Principal Contractor shall provide an on-site First Aid Station with first aid facilities, including first aid boxes containing, at least, the requirements of the Annexure to Section 3 of the General Safety Regulations. All Contractors with 5 or more employees shall supply their own first aid box. Contractors with 10 or more employees shall have a trained and certified First Aider on site at all times.

Personal Protective Equipment (PPE) and Clothing

The Principal Contractor shall ensure that all employees are issued with and shall wear hard hats, protective footwear and overalls as well as any other necessary PPE as set out in Section 2.3 of the General Safety Regulations. Contractors are encouraged to provide reflective vests for all their employees. The Principal Contractor and all Contractors shall make provision and keep adequate quantities of SABS approved PPE on site at all times. This shall include necessary safety gear for visitors. The Principal Contractor shall clearly outline procedures to be taken when PPE or Clothing is:

- Lost or stolen
- Worn out or damaged
- Issued to temporary employees.

The above procedure applies to Contractors and their Sub-contractors, as they are all Employers in their own right.

Occupational Health and Safety Signage

The Contractor shall provide adequate on-site OHS signage. This should include but is not limited to: 'no unauthorised entry', 'report to site office', 'site office', 'beware of overhead work', 'hard hat area'. Signage shall be posted up at all entrances to site as well as on site in strategic locations e.g. access routes, stairways, entrances to structures and buildings, and other potential risk areas/operations. These signs shall be in accordance with the requirements of the General Safety Regulations as amended.

8. HEALTH AND SAFETY FILE

The Contractor shall in terms of Construction Regulation 7(1)(b) maintain a Health and Safety File on site at all times. The Health and Safety File is a file or other permanent record containing information on aspects of the construction project - which will be necessary to ensure the health and safety of any person who may be affected by the construction work.

The Contractor shall appoint a suitably qualified person to prepare the Health and Safety File and to keep it up to date for the duration of the contract. The Health and Safety file shall include at least the following information:

- All Documents as required by the Act and Regulations
- All reports of inspections and audits
- All non-conformity reports
- All working drawings, calculations and design where applicable
- Detailed list of sub-contractors with contact details
- List of all hazardous materials used and stored on site with Material Safety Data Sheets
- All Hazard Identification and Risk Assessments carried out for the project.
- All Health and Safety Plans for the project.
- All safe working procedures and method statements
- Minutes of all relevant meetings
- Incident records, including investigations and results
- Record of all appointments under the Regulations

Annexure B is a list of the records to be kept on site.

The Health & Safety File shall be handed over to the Client on completion of the contract. It must contain all the documentation as set out above, or as instructed, as well as any handed to the Principle Contractor by any subcontractors together with a record of all drawings, designs, materials used and other similar information concerning the completed project.

9. RISK ASSESSMENT

Before commencement of any construction work during the construction period, the Contractor shall have a risk assessment performed and recorded in writing by a competent person. (Refer Regulation 9 of the Construction Regulations 2014).

Risk is a measure of the likelihood that the harm from a particular hazard will be realised, taking into account the possible severity of the harm. Harm to people includes death, injury (permanent or temporary), physical or mental health or any combination thereof. Risk management in health and safety includes the identification of hazards, assessing risks, taking action to eliminate or reduce the risk, monitoring the effectiveness and performing regular reviews of the entire process. The Contractor shall compile method statements to address or handle the following:

- Hazards particulars to the contract
- Identify what could go wrong and how
- Identify the likelihood of this happening
- Identify the persons or asset at risk
- Identify the extent of possible harm
- Eliminating or reducing this risk
- A monitoring plan
- A review plan

Contractors must ensure that all subcontractors conduct risk assessments for their scope of work as well. All risk assessments shall be updated and re-evaluated with any extra works or with any change to the scope of the works.

The risk assessment shall identify and evaluate the risks and hazards that may be expected during the execution of the work under the contract, and it shall include a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards identified.

The risk assessment shall be available on site for inspection by inspectors, Employer, Engineer, Health and Safety Agent, subcontractors, employees, trade unions and health and safety committee members, and must be monitored and reviewed periodically by the Contractor.

10. ARRANGEMENTS FOR MONITORING AND REVIEW

The Client and/or Agent will conduct a Monthly, or at greater frequency, Audit to audit compliance with Construction Regulation 5 (1) (o) to ensure that the Contractor has implemented and is maintaining the agreed and approved OH&S Plan. Annexure C will be used as format when conducting the audit.

The Client reserves the right to conduct other ad hoc audits and inspections as deemed necessary.

A representative of the Contractor must accompany the Client on all audits and inspections and may conduct his own audit/inspection at the same time. Each party will, however, take responsibility for the results of his own audit/inspection results.

11. MEASUREMENT AND PAYMENT

In tendering rates for these items the Contractor shall ensure that the sum of the amounts of the four items shall be based upon as well as be expressed as a percentage (i.e. 1%) of the Work Value of the Tender (Total: Schedule A).

"Item"	Unit
C11.01 Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations	Lump Sum

The full amount will be paid in one instalment only once:-

- (a) The construction works permit has been issued by the Department of Labour .
- (b) The Contractor has made the required initial Appointments of Employees and Sub-Contractors.
- (c) The Client has approved the Contractor's Health and Safety Plan.
- (d) The Contractor has set up his Health and Safety File."

"Item"	Unit
C11.02 Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations	Month

The tendered rate shall represent full compensation for that part of the contractors general obligations in terms of the Occupational Health and Safety Act and the Construction Regulations which are mainly a function of time. The sum will be paid per month only after payment for Item C11.01 has been made. This item shall also cover all updates of the files, plans and reports associated with the Occupational Health and Safety Act and the Construction Regulations."

"Item"	Unit
C11.03 Provision of full time Construction Safety Officer	Month

The tendered sum shall include for the cost of a SACPCMP accredited construction safety officer on a full time basis, his overheads, transport and all others items necessary for the proper carrying out of his duties. ."

"Item"	Unit
C11.04 Submission of the Health and Safety File	Lump Sum

This amount will be paid only once the Contractor has met all his obligations in respect of the Occupational Health and Safety Act and the Construction Regulations and has submitted his Health and Safety File complete as envisaged on this specification to the Client's satisfaction. This must be done prior to the issue of a Certificate of Completion."

3.

HEALTH AND SAFETY SPECIFICATIONS

CLIENT

AIRPORTS COMPANY SOUTH AFRICA

PROJECT

TENDER NO. RA8018/2025/RFP

CONTRACTOR APPOINTMENT FOR TENDER FOR A CONTRACTOR TO APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT, KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 6 MONTHS

PROJECT HEALTH AND SAFETY SPECIFICATION

TABLE OF CONTENTS

1. Specific Project Information

- 1.1 Introduction and Definitions
- 1.2 Background to the Health and Safety Specification
- 1.3 Purpose of the Health and Safety Specification
- 1.4 Implementation of the Health and Safety Specification
- 1.5 Project Directory
- 1.6 Project Details
- 1.7 Existing Environment
- 1.8 Available Drawings
- 1.9 Project Health and Safety Requirements
- 1.10 Interface and Restrictions by Client
- 1.11 Safety File Return to Client

2. Further Requirements

- 2.1 Duties of Principal Contractor / Contractor in terms of Construction Regulations 2014
- 2.2 Management and Supervision of Construction Work
- 2.3 Notification of Intention to Commence Construction Work
- 2.4 Construction Work Permit
- 2.5 Assignment of Contractor's Responsible Persons to Manage Health and Safety on Site
- 2.6 Competency for Contractor's Responsible Persons
- 2.7 Compensation of Occupational Injuries Act 130 of 1993 (COIDA)
- 2.8 Occupational Health and Safety Policy
- 2.9 Health and Safety Organogram
- 2.10 Risk Assessments
- 2.11 Health and Safety Representative(s)
- 2.12 Health and Safety Committee
- 2.13 Medical Certificate of Fitness
- 2.14 Health and Safety Training
 - 2.14.1 Induction
 - 2.14.2 Awareness
- 2.15 Competency
- 2.16 General Record Keeping
- 2.17 General Inspection, Monitoring and Reporting
- 2.18 Emergency Procedures
- 2.19 First Aid Box and First Aid Equipment
- 2.20 Accident / Incident Reporting and Investigation
- 2.21 Hazards and Potential Situations
- 2.22 Occupational Health and Safety Signage
- 2.23 Management of Contractors by Principal Contractor
- 2.24 Stacking of Materials
- 2.25 Housekeeping and General Safeguarding on Construction Sites
- 2.26 Construction Vehicles and Mobile Plant
- 2.27 Electrical Installations and Machinery on Construction Sites
- 2.28 Use and Temporary Storage of Flammable Liquids on Construction Sites
- 2.29 Water Environments
- 2.30 Fire Precautions on Construction Sites
- 2.31 Construction Employees' Facilities
- 2.32 Fall Protection
- 2.33 Temporary Works

- 2.34 Excavation
- 2.35 Demolition Work
- 2.36 Tunnelling
- 2.37 Scaffolding
- 2.38 Bulk Mixing Plant
- 2.39 Rope Access Work
- 2.40 Hazardous Chemical Substances (HCS)
- 2.41 Noise Induced Hearing Loss
- 2.42 Explosives and Blasting
- 2.43 Personal Protective Equipment (PPE)
- 2.44 Asbestos
- 2.45 Pressure Vessels (Including Gas Bottles)
- 2.46 Fire Extinguishers and Fire Fighting Equipment
- 2.47 Lifting Machinery and Tackle
- 2.48 Ladders and Ladder Work
- 2.49 General Machinery
- 2.50 Portable Electrical Tools
- 2.51 High Voltage Electrical Equipment
- 2.52 Public Health and Safety
- 2.53 Night Work
- 2.54 Environmental Conditions and Flora and Fauna
- 2.55 Occupational Health
- 2.56 Suspended Scaffolds
- 2.57 Material Hoists
- 2.58 Explosive Actuating Fastening Devices

Annexure A

- Task Completion Form

Annexure B

- Contractor's Responsible Persons

Baseline Risk Assessments

Health and Safety Specification Acknowledgement Receipt

1.0 SPECIFIC PROJECT INFORMATION

1. 1 INTRODUCTION AND DEFINITIONS

PLEASE NOTE THAT THE REQUIREMENTS OF THE NEW CONSTRUCTION REGULATIONS 2014 HAVE BEEN IN EFFECT SINCE 7TH AUGUST 2014. THE NEW REGULATIONS PLACE ADDITIONAL LEGAL DUTIES UPON PRINCIPAL CONTRACTORS AND CONTRACTORS. ALTHOUGH THIS HEALTH AND SAFETY SPECIFICATION INCLUDES MUCH OF THE CONTENT OF THESE NEW REQUIREMENTS, THE CONTRACTOR WILL BE DEEMED TO BE FAMILIAR WITH THE REQUIREMENTS OF THESE REGULATIONS, AND TO HAVE FACTORED IN ALL THE DUTIES PLACED UPON CONTRACTORS AND PRINCIPAL CONTRACTORS IN THE TENDER. A COPY OF THE REGULATIONS CAN BE VIEWED ON THE DEPARTMENT OF LABOUR'S WEBSITE.

This Health and Safety Specification contains clauses that are generally applicable to construction activities, as well as imposing pro-active controls associated with activities that impact on Health and Safety as it relates to plant and machinery. Compliance to the requirements of the Occupational Health and Safety Act 1993 is in addition to the requirements of this Health and Safety Specification and is part of the Contractor's responsibility. The Client will monitor that the Contractors comply with the requirements of such legislation.

ALL REFERENCES TO CLIENT IN THIS HEALTH AND SAFETY SPECIFICATION ALSO REFER TO CLIENT AGENT, WHERE SO APPOINTED.

Definitions (as per the Construction Regulations 2014) applicable to this Health and Safety Specification:

"agent" means a competent person who acts as a representative for a client;

"angle of repose" means the steepest angle of a surface at which a mass of loose or fragmented material will remain stationary in a pile on the surface, rather than sliding or crumbling away;

"bulk mixing plant" means machinery, appliances or other similar devices that are assembled in such a manner so as to be able to mix materials in bulk for the purposes of using the mixed product for construction work;

"client" means any person for whom construction work is being performed;

"competent person" means a person who 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 is familiar with the Act and with the applicable regulations made under the Act;

"construction manager" means a competent person responsible for the management of the physical construction processes and the coordination, administration and management of resources on a construction site;

"construction site" means a work place where construction work is being performed;

"construction supervisor" means a competent person responsible for supervising construction activities on a construction site;

"construction vehicle" means a vehicle used as a means of conveyance for transporting persons or material, or persons and material, on and off the construction site for the purposes of performing 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;

"construction work permit" means a document issued in terms of regulation 3;

"contractor" means an employer who performs construction work;

"demolition work" means a method to dismantle, wreck, break, pull down or knock down of a structure or part thereof by way of manual labour, machinery, or the use of explosives;

"design" in relation to any structure, includes drawings, calculations, design details and specifications;

"designer" means a competent person who-

- prepares a design;
- checks and approves a design;
- arranges for a person at work under his or her control to prepare a design, including an employee of that person where he or she is the employer; or
- designs temporary work, including its components;
- an architect or engineer contributing to, or having overall responsibility for a design;
- a building services engineer designing details for fixed plant;
- a surveyor specifying articles or drawing up specifications;
- a contractor carrying out design work as part of a design and building project; or
- an interior designer, shop-fitter or landscape architect;

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

"explosive actuated fastening device" means a tool that is activated by an explosive charge and that is used for driving bolts, nails and similar objects for the purpose of providing fixing;

"fall arrest equipment" means equipment used to arrest a person in a fall, including personal equipment, a body harness, lanyards, deceleration devices, lifelines or similar equipment;

"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 guard-rails, screens, barricades, anchorages or similar equipment;

"fall protection plan" means a documented plan, which includes and provides for -

- all risks relating to working from a fall risk position, considering the nature of work undertaken;
- the procedures and methods to be applied in order to eliminate the risk of falling; and
- a rescue plan and procedures;

"fall risk" means any potential exposure to falling either from, off or into;

"health and safety file " means a file, or other record containing the information in writing required by these Regulations;

"health and safety plan" means a site, activity or project specific documented plan in accordance with the client's health and safety specification;

"health and safety specification" means a site, activity or project specific document prepared by the client pertaining to all health and safety requirements related to construction work;

"material hoist" means a hoist used to lower or raise material and equipment, excluding passengers;

"medical certificate of fitness" means a certificate contemplated in regulation 7(8);

"mobile plant" means any machinery, appliance or other similar device that is able to move independently, and is used for the purpose of performing construction work on a construction site;

"National Building Regulations" means the National Building Regulations made under the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), and promulgated by Government Notice No. R. 2378 of 30 July 1990, as amended by Government Notices No's R. 432 of 8 March 1991, R. 919 of 30 July 1999 and R. 547 of 30 May 2008;

"person day" means one normal working shift of carrying out construction work by a person on a construction site;

"principal contractor" means an employer appointed by the client to perform construction work;

"Professional Engineer or Professional Certificated Engineer" means a person holding registration as either a Professional Engineer or Professional Certificated Engineer in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000);

"Professional Technologist" means a person holding registration as a Professional Engineering Technologist in terms of the Engineering Profession Act, 2000;

"provincial director" means the provincial director as defined in regulation 1 of the General Administrative Regulations, 2003;

"scaffold" means a temporary elevated platform and supporting structure used for providing access to and supporting workmen or materials or both;

"shoring" means a system used to support the sides of an excavation and which is intended to prevent the cave-in or the collapse of the sides of an excavation;

"structure" means-

- any building, steel or reinforced concrete structure (not being a building), railway line or siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, bulk mixing plant, pylon, surface and underground tanks, earth retaining structure or any structure designed to preserve or alter any natural feature, and any other similar structure;
- any falsework, scaffold or other structure designed or used to provide support or means of access during construction work; or
- any fixed plant in respect of construction work which includes installation, commissioning, decommissioning or dismantling and where any construction work involves a risk of a person falling;

"suspended platform" means a working platform suspended from supports by means of one or more separate ropes from each support;

"temporary works" means any falsework, formwork, support work, scaffold, shoring or other temporary structure designed to provide support or means of access during construction work;

"the Act" means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993);

"tunnelling" means the construction of any tunnel beneath the natural surface of the earth for a purpose other than the searching for or winning of a mineral.

1 Reference should be made to the following documentation in conjunction with this Safety Specification (including existing surveys, drawings and reports):

Tender documents Engineers Drawings – if available Baseline Risk Assessment

IMPORTANT NOTE:

This Health and Safety Specification has been prepared to comply with the requirements of the Construction Regulations 2014.

1.2 BACKGROUND TO THE HEALTH AND SAFETY SPECIFICATION
--

Historically, the Construction Industry has had a poor health and safety record. Due to the complex and potentially dangerous operations being undertaken, there is a high risk of incidents, accidents and injuries.

In many instances poor adherence to the Act and Regulations has resulted in severe consequences for Health and Safety performance. The Client is determined that the highest Health and Safety standards will prevail throughout the Contract and that there will be full commitment from all parties involved.

To achieve this goal the Client has prepared this Health and Safety Specification. The Health and Safety Specification sets out guidelines and minimum levels of awareness and guidance for Health and Safety requirements for the project. Contractual responsibility for adhering to these requirements rests with the Contractors. All employees are encouraged to be pro-active in compliance.

The Client is committed to ensuring the highest Health and Safety standards for all work undertaken within the Contract.

Contractors as employers are fully responsible and accountable for compliance with all Health and Safety requirements.

IMPORTANT NOTE:

Compliance with the Occupational Health and Safety Act and Regulations shall not be limited to this Health and Safety Specification and definitions contained in this document.

Contractors shall be conversant with the requirements and effects of Health and Safety legislation upon their activities, the Construction Regulations, 2014, and the Occupational Health and Safety Act, 1993, and to have made adequate provision in their tender submission to comply with all legislative requirements.

The Contractor's personnel will be responsible for the auditing of the implementation of the Health and Safety Specification and maintaining the document control and record systems associated with the Health and Safety Specification. The Client will conduct Health and Safety audits of the works too.

1.3 PURPOSE OF THE HEALTH AND SAFETY SPECIFICATION

The purpose of this site-specific Health and Safety Specification is to comply with legal requirements and to provide health and safety information about specific project risks known by the Client, Designer and Client Agent to be applicable to this project. This document also provides minimum health and safety requirements, standards and expectations that the principal contractor and contractors must adhere to.

The Contractor must take into account all information in this specification and ensure that their tenders include adequate resources and competence to deal with the matters detailed herein so that all relevant contents are dealt with in a way which is in compliance with legislation and the ethical concerns for the safeguarding of employees, contractors and other persons as well as assets affected by the construction activities.

The Health and Safety Specification will be implemented during construction of the works and any construction activity that the Client has control over.

This will also assist in ensuring that all the costs related to the compliance with Occupational Health Act 85 of 1993 and the Construction Regulations 2014, as well as this Health and Safety Specification, are taken into consideration at Tender stage.

No advice, approval of any document required by the Health and Safety Specification such as hazard identification and risk assessment action plans or any other form shall be construed as an acceptance by the Client of any obligation that absolves the Contractor from achieving the required level of performance and compliance with legal requirements.

Further, there is no acceptance of liability by the Client which may result from the Contractor failing to comply with the Health and Safety legislation as well as Specification unless the Client has issued an instruction to any requirement, i.e. the Contractor remains responsible for achieving the required performance levels.

1.4 IMPLEMENTATION OF THE HEALTH AND SAFETY SPECIFICATION

This Health and Safety Specification forms an integral part of the Contract, and Contractors shall make it an integral part of their Contracts with Sub Contractors and Suppliers. Contractors employed by the Client are to ensure that the provisions of the Health and Safety Specification are applied both on the site and in respect of all off site activities relating to the project, in transport activities and project dedicated off site fabrication works and Bulk Mixing Plants.

The Contractor shall enforce the provisions of the Health and Safety Specification amongst all sub-contractors and suppliers for the project.

The Contractor shall sign the acknowledgment on the last page of this safety specification that he/she has familiarized him/herself with the content of the Health and Safety Specification and shall comply with all obligations in respect thereof.

The successful Contractor will be required to compile a Health and Safety Plan based on the requirements of the Occupational Health Act 85 of 1993 and these Specifications, which will need to be approved by Client prior to commencement with construction work.

1.4.1 Client Duties

In terms of the Construction Regulations 2014 the Client (or their Agent, where appointed) has legal duties. Where an Agent (refer to “definitions” section of this document) is appointed in terms of this project, these Health and Safety duties assigned will also apply.

All references to “Client” will apply to their appointed “Client Agent”, where so appointed, in this Health and Safety Specification.

The Client must:

- Prepare a baseline risk assessment for the construction work
- Prepare a suitable, sufficiently documented and coherent site-specific Health and Safety specification for the intended construction work, based on the baseline risk assessment
- Include the health and safety specification in the tender documents
- Ensure that potential principal contractors submitting tenders have made adequate provision for the cost of health and safety measures
- Ensure that the principal contractor to be appointed has the necessary competencies and resources to carry out the construction work safely
- Take reasonable steps to ensure co-operation between all contractors appointed by the client to enable each of those contractors to comply with the regulations as well as specifications
- Ensure, before work commences, that every principal 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 (Act no 130 of 1993)
- Appoint each principal contractor in writing for the project, or part thereof
- Discuss and negotiate with the principal contractor the contents of the principal contractor’s safety plan and thereafter finally approve that plan for implementation
- Ensure that a copy of the principal contractor’s health and safety plan is implemented and maintained
- Ensure that periodic health and safety audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days
- Ensure that a copy of the health and safety audit report is provided to the principal contractor within 7 days after the audit
- Stop any contractor from executing a construction activity which poses a threat to the health and safety of persons which is not in accordance with the principal contractor’s health and safety plan for site
- Where changes are brought about to the design or construction work, make sufficient health and safety information and appropriate resources available to the principal contractor to execute the work safely
- Ensure that the health and safety file is kept and maintained by the principal contractor.

- Where the client requires additional work to be performed as a result of a design change or error in construction due to the actions of the client, the client must ensure that sufficient safety information and appropriate additional resources are available to execute the required work safely.
- Where more than one principal contractor is appointed, the client must take reasonable steps to ensure co-operation between all principal contractors and contractors to ensure compliance with the Regulations
- Where the Client has appointed a Client Agent for the project, their details for this project are contained in the Project Directory section of this health and safety specification.

1.4.2 Designer Duties

It must be noted that the Designer also has Health and Safety duties assigned in terms of the Construction Regulations. Where the contractor fulfils a design function in terms of this project (refer to “definitions” section of this document), these duties will also apply. Please refer to Regulation 6 of the Construction Regulations 2014.

Please note that the designer of temporary works must ensure that:

- all temporary works are adequately designed so that it will be capable of supporting all anticipated vertical and lateral loads that may be applied;
- the designs of temporary works are done with close reference to the structural design drawings issued by the contractor, and in the event of any uncertainty consult the contractor;
- all drawings and calculations pertaining to the design of temporary works are kept at the office of the temporary works designer and are made available on request by an inspector; and
- the loads caused by the temporary works and any imposed loads are clearly indicated in the design.

1.5 PROJECT DIRECTORY		<u>TBC</u>
Project Client	ACSA Project Manager	Tel: 011 723 1579
Contact Person	TBC	Fax: Cell: e-mail:.....
Project Manager	Construction Project Manager	Tel:
Contact Person	TBC	Fax: Cell: e-mail:.....
Construction Health and Safety Agent	TBC	Tel:
Contact Person	TBC	Fax: ... Cell: e-mail:
Consulting Engineer	TBC	Tel:
Contact Person	TBC	Fax: - Cell: e-mail:

OTHER PARTIES DIRECTORY		
Department of Labour for submission of Annexure 2: Notification of Construction Work Provisional Office: Name:	Tel: Email: Mobile:	
Telecommunications Company: ACSA HOD Maintenance & Engineering Contact Name: TBC	Cell: TBC	
Water, Electricity & Gas Company: ACSA HOD Maintenance & Engineering Contact Name: TBC	Cell: TBC	
1.6 PROJECT DETAILS		
Description of Works • Supply, Install, Commission and Test Lithium-ion Battery Energy Storage Solution at . • Supply, Install, Commission and Test Lithium-ion Battery Energy Storage Solution at Kimberley Airport • Supply, Install, Commission and Test Lithium-ion Battery Energy Storage Solution at George Airport		
Anticipated Construction Duration 6 Months		
Provisional Start Date March 2025		
Completion Date October 2025		
1.7 EXISTING ENVIRONMENT		
Hazards particular to this project by virtue of location: Sites are in Upington Intranational Airport, Kimberley Airport and George Airport. Protection of Aviation and site security are of the utmost importance. All necessary preventative measures must be in place to ensure the safety of Aviation, members of the public and airport personnel, including: • Demarcation: Works area that will be decommissioned during the construction phase must be demarcated. All demarcation must be FOD approved and minimize dust on site. • Safety signage that clearly stipulates access routes, PPE that must be used (hardhats, safety shoes, ear and eye protection and high visibility vests) must be displayed. • Clearly display emergency numbers and procedures • Extra care must be taken in marking all entrance and exist routes • No material may be used that is classified as foreign object debris (ex: danger tape) • Warning signs to be displayed for all ACSA approved vehicles – this will include speed reduction and allocated parking areas.		
Overhead, Above Ground and Underground Services crossing the site:		

Overhead: None that will have an impact on works

Underground: Stormwater drainage systems and electrical cables, water pipeline

Ground level: None that will have an impact on works lights?

Service Drawings available: Please refer to available drawings

Wayleaves required: None that will have an impact on works

Permits required: All workers to have induction training. Permits must always be visible

Isolations required: Please refer to tender documents for all requirements by professional team.

Existing structures and surrounding land use (with a significant impact on Health & Safety):

Site is located within George Airport. There is existing car parking area, main terminal building and fuel plant. Works area will be located on Airside and along the road entrance. Extreme care must be taken to follow ACSA requirements.

Existing known services which occur within, or in close proximity of the road reserve:

- Power cables
- Telkom optic fibre

Existing Traffic Systems

All vehicles to adhere to ACSA Airside and security requirements.

Restrictions to access: All access will be restricted and indicated by ACSA. Permits will be compulsory to access to works area. Only approved drivers will be allowed access.

Speed restrictions: Airport speed limits to be followed.

Existing ground conditions: Good

Climate:

Management of Environment: The contractor will be responsible for construction according to an environmental management plan

1.8 AVAILABLE DRAWINGS

Refer to tender documentation.

1.9 PROJECT HEALTH AND SAFETY REQUIREMENTS

Significant health and safety hazards identified by Designer and Client Agent:

Access and Security Permits: No person will be allowed to gain access to airside without the proper induction, training and security clearance. Access permits must always be visible. Any person failing to comply will be removed from site.

Safety Signs: All signs must clearly indicate access routes and evacuation procedures. Required personal protective equipment for contractors as well as any other person to be clearly visible.

Demarcation: All Demarcation must be FOD approved. Demarcation must ensure the minimizing of noise and dust on site. All safety signs must be displayed as per OHS Act, Regulation and Specification requirements.

Traffic plan and accommodation: Principal contractor to provide a method statement of traffic control with regards to entry and exit of construction vehicles and delivery vehicles. All workers to adhere to ACSA Airside traffic rules and regulations at all times.

Working Hours: Extended Contractor Construction hours for work impacting on operations and passenger comfort will be set in accordance with flight schedules and off-peak periods. Cartage of waste material from demolition works and deliveries of bulk material will only be allowed during off- peak hours as stipulated. The delivery and erection of unusual loads will be subject to protocols developed to comply with ACSA requirements. Penalties will apply for working outside working hours as deemed appropriate by ACSA.

Other construction hazards expected are as follows:

Cutting Kerbs
Cutting Off Disc
Electric Tools and Electrical Installations
Excavations
Fire
Hand tools
Hazardous Substances
Kerb Laying
Members of Public
Noise and Dust
Painting
Plant/Vehicle and Equipment Operation
Road Marking- existing pavement
Road Working – in or next to (Traffic Management)
Underground Services

ACTIVITIES REQUIRING APPROVED METHOD STATEMENTS (FOR HEALTH AND SAFETY)

Please note that a method statement will be required for all high-risk activities on site. This will include but is not limited to:

- Rubble removal and environmental control
- Delivery of materials to designated areas.
- Emergency Evacuation plans and procedures that will follow the Airport procedure
- Working on the airside
- FOD Demarcation areas

ACTIVITIES REQUIRING PERMITS (FOR HEALTH AND SAFETY PURPOSES)

Permit to Dig: Daily registers to be completed as required

Permit to Enter Excavations: Daily registers to be completed as required

Confined Space Permit: Not applicable for this project

Permit to Work under Power Lines: Not applicable for this project

CONTRACTOR SAFETY OFFICER PROVISION

Records of safety audits undertaken by the Contractor's permanent Safety Officer must be kept on site in the safety file and non-conformances reported by the Safety Officer to the Contractor's management team. All non-conformances identified by the Safety Officer must be investigated and corrective action taken by the Contractor to prevent re-occurrence.

MEDICAL CERTIFICATE OF FITNESS

The contractor must ensure that their employees on site have a valid medical certificate of fitness, specific to the construction work being performed, issued by an occupational health practitioner in the form of an Annexure 3 template of the Construction Regulations.

MANAGEMENT AND SUPERVISION OF CONSTRUCTION WORK

A 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.

TRAFFIC MANAGEMENT AND TRAFFIC SAFETY OFFICER PROVISION

Records of safety audits undertaken by the Contractor's permanent Traffic Safety Officer must be kept on site in the safety file and non-conformances reported by the Traffic Safety Officer to the Contractor's management team. All non-conformances identified by the Traffic Safety Officer must be investigated and corrective action taken by the Contractor to prevent re-occurrence.

ENVIRONMENTAL CONDITIONS

Contractor must consider adverse weather conditions on site activities and implement control measures to mitigate risk. This includes risk of exposure to excessive heat, cold, rain and wind. The open nature of the site works will not preclude any of the above.

ARRANGEMENTS FOR ACCESS, PARKING, DELIVERIES, ETC

Access to site by Construction Vehicles: Only approved drivers with permits will gain access to site camp

Access to site by Construction Workers and Visitors: All visitors to make arrangement prior to visiting site to gain access. All visitors to follow ACSA Airside security procedures. Only contractors with permits will be allowed access to site.

ARRANGEMENTS FOR SITE CAMP, ABLUTIONS AND YARD

Site camp location and set up

- | | | |
|---------------------------------------|---|--------------------------------------|
| • Restrictions / requirements: | } | |
| | } | |
| • Storage areas: | } | Contractor to advise in consultation |
| | } | with Engineer / Professional Team |
| • Security: | } | |

Ablutions and Welfare Arrangements

Contractor to supply ablutions and facilities in line with the Construction Regulations 2014, refer to section 2.31 of this health and safety specification regarding the below. Please note that toilets should be provided with built in facilities for hand washing:

- | | | |
|------------------------------|---|--|
| • Toilets: | } | |
| | } | |
| • Washing facilities: | } | |
| | } | |
| • Drinking Water: | } | Contractor to provide as per Regulations and after consultation with engineers |
| | } | |
| • Shelter: | } | |
| | } | |
| • Showers: | } | |

PROTECTION OF SITE AGAINST UNAUTHORISED ACCESS BY PUBLIC

Excavation Fencing: Note that excavations accessible to public, or adjacent to public roads / thoroughfares, must have (1) barrier / fence of at least 1m in height, and (2) warning illuminates at night or when visibility is poor, or have other suitable precautionary measures if of both these are not practicable.

General Fencing of Site: Note that construction sites in built up areas adjacent to public way must be fenced off and have controlled access points. All fencing/hoarding must be painted as per ACSA requirements and be FOD approved.

Warning Notices: Warning signs must be properly displayed as per requirements. Signs to be FOD approved and properly secured.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

The Client requires the Contractor to ensure that employees (and others under his/her control) wear the following minimum PPE:

Overalls: Yes, all workers must be clearly identifiable

Safety Harnesses: Not applicable to this project.

Hard Hats: Not applicable to this project

Reflective Vests: Yes, all workers must be clearly visible

Safety Footwear: Yes, must always be worn

Goggles / gloves / ear defenders / respiratory protection: Yes, must always be worn as activity requires

Specialist Equipment (e.g.: for confined Spaces): Yes, must always be worn for relevant activities.

HAZARDOUS SUBSTANCES

The following materials and substances have, or may have, to be used in the works and are identified as potentially posing special health and / or safety hazards during the project. Appropriate measures will need to be specified for their control:

Cement, Petrol, Thinners, Diesel, Paint

1.10 INTERFACE AND RESTRICTIONS BY CLIENT

The following Client safety rules and/or requirements are to be observed:

All workers are to receive AIT and AVOP induction prior to commencement of work on site.

No workers will be allowed on site without his/her induction permit.

Other safety rules and requirements to be advised at induction.

Please also refer to tender document.

Restrictions on times, access or other restrictions by Client

Because construction work must be conducted with minimal disruption to airport operations, restrictions may be imposed that will determine the times that work can be conducted and the length of the work shift. Extended Contractor Construction hours for work impacting on operations and passenger comfort will be set in accordance with flight schedules and off-peak periods. Cartage of waste material from demolition works and deliveries of bulk material will only be allowed during off- peak hours as stipulated. The delivery

and erection of unusual loads will be subject to protocols developed to comply with ACSA requirements. Penalties will apply for working outside working hours as deemed appropriate by ACSA.
--

1.11 SAFETY FILE RETURN TO CLIENT
--

The Safety File for the Project is to be handed over by the Principal Contractor to the Client upon Project Completion in either a hard copy format or on CD.

2.0 FURTHER REQUIREMENTS

2.1 Duties of Principal Contractor / Contractor in terms of Construction Regulations 2014

A Principal Contractor must:

- 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, which 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;
- open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, which must be made available on request to an inspector, the client, the client's agent or a contractor; and
- on appointing any other contractor, in order to ensure compliance with the provisions of the Act –
 - 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 must be performed;
 - ensure that potential contractors submitting tenders have made enough provision for health and safety measures during the construction process;
 - ensure that no contractor is appointed to perform construction work unless the principal contractor is reasonably satisfied that the contractor that he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely;
 - 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;
 - appoint each contractor in writing for the part of the project on the construction site;
 - take reasonable steps to ensure that each contractor's health and safety plan is implemented and maintained on the construction site;
 - ensure that the periodic site audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days;
 - 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 for the site or which poses a threat to the health and safety of persons;
- 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;
- discuss and negotiate with the contractor the contents of their health and safety plan and finally approve that plan for implementation;

- ensure that a copy of both the principal contractor and contractor's health and safety plan is available on request to an employee, an inspector, a contractor, the client or the client's agent;
- hand over a consolidated health and safety file to the client upon completion of the construction work, to include a record of all drawings, designs, materials used and other similar information concerning the completed structure;
- 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;
- 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.

A contractor must prior to performing any construction work-

- 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 and provided by the principal contractor, which 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;
- open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, and which must be made available on request to an inspector, the client, the client's agent or the principal contractor;
- before appointing another contractor to perform construction work be reasonably satisfied that the contractor that he or she intends to appoint has the necessary competencies and resources to perform the construction work safely;
- co-operate with the principal contractor as far as is necessary to enable each of them to comply with the provisions of the Act and Specifications;
- as far as is reasonably practicable, promptly provide the principal 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 a contractor appoints another contractor to perform construction work, the duties that apply to the principal contractor will apply to the contractor as if he or she were the principal contractor.

A 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 these Regulations.

No contractor may allow or permit any employee or person to enter any site, unless that employee or person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.

A contractor must ensure that all visitors to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site and must ensure that such visitors have the necessary personal protective equipment.

A contractor must always keep on his or her construction site 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 (a template of which can be found in the Construction Regulations, 2014).

2.2 Management and Supervision of Construction Work

A 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.

A 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.

Where the construction manager has not appointed assistant construction managers, or, in the opinion of an inspector, a enough such assistant construction managers have not been appointed, that inspector must direct the construction manager in writing to appoint the number of assistant construction managers indicated by the inspector, and those assistant construction managers must be regarded as having been appointed.

No construction manager appointed in terms of the Regulations may manage any construction work on or in any construction site other than the site in respect of which he or 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 SACPCMP accredited 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 or she is reasonably satisfied that the construction health and safety officer that he or she intends to appoint is registered with a statutory body approved by the Chief Inspector and has necessary competencies and resources to assist the 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, and every such employee has, to the extent clearly defined by the contractor in the letter of appointment, the same duties as the construction supervisor: Provided that the designation of such employee does not relieve the construction supervisor of any personal accountability for failing in his or her supervisory duties.

Where the contractor has not appointed such an employee, or, in the opinion of an inspector, a enough such employees have not been appointed, that inspector must instruct the employer to appoint the number of employees indicated by the inspector.

No construction supervisor appointed may supervise any construction work on or in any construction site other than the site in respect of which he or 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.

2.3 Notification of Intention to Commence Construction Work

2.4 Construction Work Permit

It must be noted that from August 2018 all projects that meet the following criteria will require a construction work permit to be applied for at least 30 days prior to the work being carried out:

- Exceeds 365 days
- Will involve more than 3600-person days of construction work
- Works contract is of a value equal to or exceeding forty million rand, or Construction Industry Grading Board (CIDB) grading level 7

It is the client's responsibility to apply for this permit from the Provincial Director and construction work may not commence until the permit has been issued by the Provincial Director.

A copy of this permit will be required to be kept in the principal contractor's safety file, and the site-specific number issued by the Provincial Director must be displayed at the main site entrance.

2.5 Assignment of Contractor's Responsible Persons to Manage Health and Safety on Site

The Contractor shall submit management and supervisory appointments as well as any relevant appointments in writing (as stipulated by the Construction Regulations 2014 and the Occupational Safety and Health Act 1993), prior to commencement of work (refer to **Annexure B** at the end of this Health and Safety Specification).

2.6 Competency for Contractor's Responsible Persons

The Contractor's responsible persons shall be competent in health and safety and be familiar with the Occupational Health and Safety Act 1993, and applicable regulations. Valid proof of pertinent and accredited, where applicable, health and safety courses attended by such persons will be required to be presented to the Client.

2.7 Compensation of Occupational Injuries and Diseases Act 130 of 1993 (COIDA)

The successful Contractor shall submit to the Client a valid letter of good standing with the Compensation Commissioner or Insurer prior to appointment.

2.8 Occupational Health and Safety Policy

The Contractor shall submit their Health and Safety Policy, prior to construction commencement, signed by the Chief Executive Officer. The Policy must outline objectives and how they will be achieved and implemented within the company operations.

2.9 Health and Safety Organogram

The Contractor shall submit an organogram, prior to construction commencement, outlining the Health and Safety Site Team that will be assigned to the project, if successful with the tender. In cases where appointments have not been made, the organogram shall reflect the position. The organogram shall be updated, when there is a change in the site team.

2.10 Risk Assessments

Baseline Risk Assessment

The Client shall cause a baseline risk assessment to be conducted by a competent person before the design process and tender process commence, and the assessed risks shall form part of the health and safety specifications.

The Contractor must, before commencement of any construction work, and during 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 i.e.:

- The identification of the risks and hazards to which persons may be exposed to;
- An analysis and evaluation of the risks and hazards identified; based on a documented method;
- A documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- A monitoring plan; and
- A review plans

The Contractor must ensure that, as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in a risk assessment.

The Contractor must ensure that all employees under his 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**.

The 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 determined in the risk assessment monitoring and review plan of the relevant site**.

The Contractor must consult with the health and safety committee or with a representative trade union or representative group of employees if no health and safety committee exist, on the monitoring and review of the risk assessments for the site.

The Contractor must ensure that copies of risk assessment for this site are available on site for inspection purposes by interested parties (inspector, the client, client's agent, any contractor, any employee, a representative trade union, a health and safety representative or safety committee member).

A Contractor must review the relevant risk assessments where changes are affected to the design and/or construction that result in a change to the risk profile, or when an incident has occurred.

Preventative measures must first address the elimination of the hazard or risk. Should PPE be required to reduce risk, the equipment or clothing to be used must be SABS approved?

In general, the Contractor must ensure that the Risk Assessment involves identifying the hazards present in a work activity on site. This is followed by an evaluation of the extent of the risk involved considering those precautions already being taken.

The following general principle should be followed when conducting a risk assessment:

- All relevant risks and/or hazards should be systematically addressed;
- The risk assessment should address what happens in the workplace during the work activity;
- All employees and those who may be affected must be considered, including maintenance staff, security guards, visitors and subcontractors;
- The risk assessment should highlight those groups and individuals who may be required to work alone or who have disabilities;
- The risk assessment process should take into account the existing safety measures and controls.
- The level of detail on a risk assessment should be appropriate to the level of risk.

2.11 Health and Safety Representative(s)

The Contractor shall ensure that Health and Safety Representative(s) is/are elected and trained to carry out his / her functions. The appointment must be in writing. The Health and Safety Representative shall carry out regular inspections, keep records and report to the supervisor to take appropriate action. He / she shall attend Health and Safety Committee Meetings. The Health and Safety Representative shall be part of the team that will investigate incidents, accidents and non-conformances.

2.12 Health and Safety Committee

Where two or more health and safety representatives have been appointed on site, the Contractor shall ensure that monthly health and safety meetings are held with such representatives and minutes are kept on record. Meetings must be organized and chaired by the Contractor's Health and Safety Committee Chairperson. Minutes of these meetings must be available for the employees of the contractor to refer to.

2.13 Medical Certificate of Fitness

The contractor must ensure that their employees on site have a valid medical certificate of fitness, specific to the construction work being performed, issued by an occupational health practitioner in the form of an Annexure 3 template (refer to the Construction Regulations 2014 on the Department of Labour website for a sample of this form).

2.14 Health and Safety Training

The Contractor shall quarterly conduct a training needs analysis to ascertain what health and safety training is required. A plan of action should be devised and forwarded to the Client for records. Once the identified people have attended the training, the Contractor must provide the Client with copies of certificates obtained.

2.14.1 Induction

No Contractor may allow or permit any employee or person to enter site unless they have undergone health and safety induction training pertaining to the hazards prevalent on site at the time of entry. This includes visitors to site. The Contractor must ensure that visitors to site have the necessary protective equipment (PPE). A copy of attendance registers of all employees who attend inductions shall be kept.

2.14.2 Awareness

The Contractor shall conduct periodic toolbox talks on site, preferably weekly or before any hazardous work takes place. The talks shall cover the relevant activity, risk assessments, methodology to be followed and an attendance register must be signed by all attendees. This record of who attended and the content of the topic as well as presenter will be kept on the site health a safety file as evidence of training.

2.15 Competency

After the Contractor has identified the training to be conducted as part of the competency requirements, and based on the Risk Assessments, he shall send the relevant persons on appropriate courses and keep certificates of training for reference. Familiarity with the Health and Safety Act and Regulations is an integral part of the definition of competence.

2.16 General Record Keeping

The Contractor shall keep and maintain Health and Safety records to demonstrate compliance with the Health and Safety Specification and the Occupational Health and Safety Act. The contractor shall ensure that all records of incidents, spot fines, training etc. are kept on site. All documents shall be available for inspection by the Client, or the Department of Labour's Inspectors.

2.17 General Inspection, Monitoring and Reporting

The Contractor shall carry out inspections as required by this Health and Safety Specification, as well as by health and safety legislation.

2.18 *Emergency Procedures*

The Contractor shall submit a detailed Emergency Procedure for approval by the Client prior to commencement on site. The procedure shall detail the response plan including the following:

- List of key personnel;
- Details of emergency services;
- Actions or steps to be taken in the event of the emergency; and
- Information on hazardous materials / situations, including each material's hazardous potential impact or risk on the environment or human and measures to be taken in the event of an accident.

Emergency procedure(s) shall include, but shall not be limited to, fire, spills, accidents to employees, use of hazardous substances, dangers as a result of riot / service deliver protests / intimidation, etc. The Contractor shall advise the Client in writing of any on-site emergencies, together with a record of action taken, within 24 hours of the emergency occurring. A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc) must be maintained and available to site personnel.

2.19 *First Aid Box and First Aid Equipment*

The Contractor shall provide first aid box/es and appoint, in writing, First Aider(s) for this project in line with the results of the Contractor's risk assessment for the project, this health and safety specification as well as the provisions of the General Safety Regulations. The appointed First Aider(s) are to be sent for accredited first aid training before starting on site. Valid certificates are to be kept on site.

First Aid box/es must be adequately stocked at all time, accessible and be controlled by a qualified First Aider. If required by the Client, the Contractor shall have a stretcher on site to be used in case of a serious incident.

2.20 *Accident / Incident Reporting and Investigation*

The Contractor shall, in addition to the prescribed requirements of the Occupational Health and Safety Act and General Safety Regulations, investigate, record and report all Section 24 reportable incidents to the Client within 24 hours of the incident occurring. Incident investigations shall be conducted by the Contractor's appointed Accident Investigator – this Investigator must be a competent person or persons who have sufficient knowledge and training to carry out an investigation.

In the event of a fatality or a permanent disabling injury the Contractor must submit proof of reporting of incident to Department of Labour as well as proof of preventative measures to the Client. The Client reserves the right to conduct investigations into any incidents that they deem fit and the Contractor is required to provide full co-operation in this regard.

2.21 *Hazards and Potential Situations*

The Contractor shall immediately notify other Contractors of any hazardous or potentially hazardous situations, which may arise during performance of the activities.

2.22 *Occupational Health and Safety Signage*

The Contractor shall ascertain and provide adequate on-site health and safety signage. This signage shall include, but shall not be limited to, Hard Hat / Helmet Area; Safety Shoes to be worn on site; Dust Masks to be worn in areas where there might be exposure to excessive dust; Ear Plugs / Muffs to be worn where there might be noise exposure over 85 db; Gloves; Safety Goggles; Safety Harness, Workers in Excavation, traffic management, etc. The Contractor shall be responsible to maintain the quality and replacement of signage.

2.23 *Management of Contractors by Principal Contractor*

The Principal Contractor shall ensure that all contractors under his control are complying with the respective Health and Safety Specifications and Plans, as well as Health and Safety Legislation.

2.24 *Stacking of Materials*

In addition to the provisions for the stacking of articles in the General Safety Regulations, 2003, the contractor must ensure that –

- a competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;
- adequate storage areas are provided;
- there are demarcated storage areas; and
- storage areas are kept neat and under control.

2.25 *Housekeeping and General Safeguarding on Construction Sites*

A contractor must, in addition to compliance with the Environmental Regulations for Workplaces, 1987, promulgated by Government Notice No. R. 2281 of 16 October 1987, ensure that suitable housekeeping is continuously implemented on each construction site, including-

- the proper storage of materials and equipment;
- the removal of scrap, waste and debris at appropriate intervals;
- 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;
- ensuring that materials which are no longer required for use, do not accumulate on and are removed from the site at appropriate intervals;
- ensuring that waste and debris are not disposed of from a high place with a chute, unless the chute complies with the requirements set out in the regulations;
- 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
- 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.

2.26 *Construction Vehicles and Mobile Plant*

A contractor must ensure that all construction vehicles and mobile plant-

- are of an acceptable design and construction;
- are maintained in a good working order;
- are used in accordance with their design and the intention for which they were designed, having due regard to safety and health;
- are operated by a person who-
 - has received appropriate training, is certified competent and in possession of proof of competency and is authorised in writing to operate those construction vehicles and mobile plant;
 - has a medical certificate of fitness to operate those construction vehicles and mobile plant, issued by an occupational health practitioner in the form of Annexure 3.
- have safe and suitable means of access and egress;
- are properly organized and controlled in any work situation by providing adequate signalling or other control arrangements to guard against the dangers relating to the movement of vehicles and plant, in order to ensure their continued safe operation;
- are prevented from falling into excavations, water or any other area lower than the working surface by installing adequate edge protection, which may include guard-rails and crash barriers;
- are fitted with structures designed to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn;
- are equipped with an acoustic warning device which can be activated by the operator;
- are equipped with an automatic acoustic reversing alarm; and
- are inspected by the authorised operator or driver on a daily basis using a relevant checklist prior to use and that the findings of such inspection are recorded in a register kept in the construction vehicle

or mobile plant.

A contractor must ensure that-

- no person rides or is required or permitted to ride on a construction vehicle or mobile plant otherwise than in a safe place provided thereon for that purpose;
- every construction site is organized in such a way that, as far as is reasonably practicable, pedestrians and vehicles can move safely and without risks to health;
- the traffic routes are suitable for the persons, construction vehicles or mobile plant using them, are sufficient in number, in suitable positions and of sufficient size;
- every traffic route is, where necessary, indicated by suitable signs;
- all construction vehicles and mobile plant left unattended at night, adjacent to a public road in normal use or adjacent to construction areas where work is in progress, have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, in order to identify the location of the vehicles or plant;
- all construction vehicles or mobile plant when not in use, have buckets, booms or similar appendages, fully lowered or blocked, controls in a neutral position, motors stopped, wheels chocked, brakes set, and ignition secured;
- whenever visibility conditions warrant additional lighting, all mobile plant are equipped with at least two headlights and two taillights when in operation;
- tools, material and equipment are secured and separated by means of a physical barrier in order to prevent movement when transported in the same compartment with employees;
- vehicles used to transport employees have seats firmly secured and adequate for the number of employees to be carried; and
- all construction vehicles or mobile plant travelling, working or operating on public roads comply with the requirements of the National Road Traffic Act, 1996.

2.27 Electrical Installations and Machinery on Construction Sites

A contractor must, in addition to compliance with the Electrical Installation Regulations and the Electrical Machinery Regulations, 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 daily using a relevant checklist prior to use and the inspection findings are recorded in a register kept on the construction site.

2.28 Use and Temporary Storage of Flammable Liquids on Construction Sites

A contractor must, in addition to compliance with the provisions for the use and storage of flammable liquids in the General Safety Regulations, 2003, ensure that –

- where flammable liquids are being used, applied or stored at the workplace concerned, it is done in a manner that does not cause a fire or explosion hazard, and that the workplace is effectively ventilated;
- no person smokes in any place in which flammable liquid is used or stored, and the contractor must affix a suitable and conspicuous notice at all entrances to any such areas prohibiting such smoking;
- an adequate amount of efficient fire-fighting equipment is installed in suitable locations around the flammable liquids store with the recognized symbolic signs;
- only the quantity of flammable liquid needed for work on one day is taken out of the store for use;

- all containers holding flammable liquids are kept tightly closed when not in actual use and, after their contents have been used up, are removed from the construction site and safely disposed of;
- where flammable liquids are decanted, the metal containers are bonded and earthed; and
- no flammable material, including cotton waste, paper, cleaning rags or similar material is stored together with flammable liquids.

2.29 Water environments

A contractor must ensure that where construction work is done over or in close proximity to water, provision is made for –

- preventing persons from falling into water; and
- the rescuing of persons in danger of drowning.

A contractor must ensure that where a person is exposed to the risk of drowning by falling into the water, the person is provided with and wears a lifejacket.

2.30 Fire precautions on Construction Sites

A contractor must, in addition to compliance with the Environmental Regulations for Workplaces, 1987, ensure that –

- all appropriate measures are taken to avoid the risk of fire;
- sufficient and suitable storage is provided for flammable liquids, solids and gases;
- smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
- in confined spaces and other places in which flammable gases, vapours or dust can cause danger-
 - only suitably protected electrical installations and equipment, including portable lights, are used;
 - there are no flames or similar means of ignition;
 - there are conspicuous notices prohibiting smoking;
 - oily rags, waste and other substances liable to ignite are without delay removed to a safe place; and
 - adequate ventilation is provided;
- combustible materials do not accumulate on the construction site;
- welding, flame cutting and other hot work are done only after appropriate precautions have been taken to reduce the risk of fire;
- suitable and enough 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;
- the fire equipment contemplated above is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof;
- a enough workers are trained in the use of fire-extinguishing equipment;
- where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire;
- the means of escape is always kept clear ;
- there is an effective evacuation plan providing for all -
 - persons to be evacuated speedily without panic;
 - persons to be accounted for; and
 - plant and processes to be shut down; and
- a siren is installed and sounded in the event of a fire.

2.31 Construction Employees' Facilities

A contractor must, in terms of the Construction Regulations 2014, provide:

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

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.

2.32 *Fall protection*

Not applicable to this project.

2.33 *Temporary works*

A contractor must appoint a temporary works designer in writing to design, inspect and approve the erected temporary works on site before use.

A contractor must ensure that all temporary works operations are carried out under the supervision of a competent person who has been appointed in writing for that purpose.

A contractor must ensure that-

- all temporary works structures are adequately erected, supported, braced and maintained by a competent person so that they can support all anticipated vertical and lateral loads that may be applied to them, and that no loads are imposed onto the structure that the structure is not designed to withstand;
- all temporary works structures are done with close reference to the structural design drawings, and where any uncertainty exists the structural designer should be consulted;
- detailed activity specific drawings pertaining to the design of temporary works structures are kept on the site and are available on request to an inspector, other contractors, the client, the client's agent or any employee;
- all persons required to erect, move or dismantle temporary works structures are provided with adequate training and instruction to perform those operations safely;
- all equipment used in temporary works structure are carefully examined and checked for suitability by a competent person, before being used;
- all temporary works structures are inspected by a competent person immediately before, during and after the placement of concrete, after inclement weather or any other imposed load and at least on a daily basis until the temporary works structure has been removed and the results have been recorded in a register and made available on site;
- no person may cast concrete, until authorization in writing has been given by the competent person contemplated above;
- if, after erection, any temporary works structure is found to be damaged or weakened to such a degree that its integrity is affected, it is safely removed or reinforced immediately;
- adequate precautionary measures are taken in order to-
 - secure any deck panels against displacement; and
 - prevent any person from slipping on temporary works due to the application of release agents;
- as far as is reasonably practicable, the health of any person is not affected through the use of solvents or oils or any other similar substances;
- upon casting concrete, the temporary works structure is left in place until the concrete has acquired sufficient strength to safely support its own weight and any imposed load, and is not removed until authorization in writing has been given by the competent person;
- the foundation conditions are suitable to withstand the loads caused by the temporary works structure and any imposed load in accordance with the temporary works design;
- provision is made for safe access by means of secured ladders or staircases for all work to be carried out above the foundation bearing level;

- a temporary works drawing or any other relevant document includes construction sequences and methods statements;
- the temporary works designer has been issued with the latest revision of any relevant structural design drawing;
- a temporary works design and drawing is used only for its intended purpose and for a specific portion of a construction site; and
- the temporary works drawings are approved by the temporary works designer before the erection of any temporary works.

No contractor may use a temporary works design and drawing for any work other than its intended purpose.

2.34 Excavation

A contractor must-

- ensure that all excavation work is carried out under the supervision of a competent person who has been appointed in writing for that purpose; and
- evaluate, as far as is reasonably practicable, the stability of the ground before excavation work begins.

A contractor who performs excavation work-

- must take reasonable and sufficient steps in order to prevent, as far as is reasonably practicable, any person from being buried or trapped by a fall or dislodgement of material in an excavation;
- may not require or permit any person to work in an excavation which has not been adequately shored or braced: Provided that shoring and bracing may not be necessary where-
 - the sides of the excavation are sloped to at least the maximum angle of repose measured relative to the horizontal plane; or
 - such an excavation is in stable material: Provided that-
 - permission has been given in writing by the appointed competent person contemplated above upon evaluation by him or her of the site conditions; and
 - where any uncertainty pertaining to the stability of the soil still exists, the decision from a professional engineer or a professional technologist competent in excavations is decisive and such a decision must be noted in writing and signed by both the competent person and the professional engineer or technologist, as the case may be;
- must take steps to ensure that the shoring or bracing contemplated above is designed and constructed in a manner that renders it strong enough to support the sides of the excavation in question;
- must ensure that no load, material, plant or equipment is placed or moved near the edge of any excavation where it may cause its collapse and consequently endangers the safety of any person, unless precautions such as the provision of sufficient and suitable shoring or bracing are taken to prevent the sides from collapsing;
- must ensure that where the stability of an adjoining building, structure or road is likely to be affected by the making of an excavation, steps are taken to ensure the stability of such building, structure or road and the safety of persons;
- must cause convenient and safe means of access to be provided to every excavation in which persons are required to work, and such access may not be further than six meters from the point where any worker within the excavation is working;
- must ascertain, as far as is reasonably practicable, the location and nature of electricity, water, gas or other similar services which may in any way be affected by the work to be performed, and must before the commencement of excavation work that may affect any such service, take the steps that are necessary to render the circumstances safe for all persons involved;
 - must ensure that every excavation, including all bracing and shoring, is inspected-
 - daily, prior to the commencement of each shift;
 - after every blasting operation;
 - after an unexpected fall of ground;
 - after damage to supports; and
 - after rain,

by the competent person, in order to ensure the safety of the excavation and of persons, and those results must be recorded in a register kept on site and made available on request to an inspector, the client, the client's agent, any other contractor or any employee;

- must cause every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered, to be –
 - adequately protected by a barrier or fence of at least one metre in height and as close to the excavation as is practicable; and
 - provided with warning illuminates or any other clearly visible boundary indicators at night or when visibility is poor, or have resort to any other suitable and sufficient precautionary measure where this is not practicable;
- must ensure that all precautionary measures stipulated for confined spaces as determined in the General Safety Regulations, 2003, are complied with by any person entering any excavation;
- must, where the excavation work involves the use of explosives, appoint a competent person in the use of explosives for excavation, and must ensure that a method statement is developed by that person in accordance with the applicable explosive's legislation; and
- must cause warning signs to be positioned next to an excavation within which or where persons are working or carrying out inspections or tests.

2.35 *Demolition Work*

Not applicable to this project.

2.36 *Tunnelling*

Not applicable to this project.

2.37 *Scaffolding*

Not applicable to this project.

2.38 *Bulk mixing plant*

A contractor must ensure that the operation of a bulk mixing plant is supervised by a competent person who has been appointed in writing and is –

- aware of all the dangers involved in the operation thereof; and
- conversant with the precautionary measures to be taken in the interest of health and safety.

No person supervising or operating a bulk mixing plant may authorize any other person to operate the plant, unless that person is competent to operate a bulk mixing plant.

A contractor must ensure that the placement and erection of a bulk mixing plant complies with the requirements set out by the manufacturer and that such plant is erected as designed.

A contractor must ensure that all devices to start and stop a bulk mixing plant are provided and that those devices are placed in an easily accessible position and constructed in a manner to prevent accidental starting.

A contractor must ensure that the machinery and plant selected is suitable for the mixing task and that all dangerous moving parts of a mixer are placed beyond the reach of persons by means of doors, covers or other similar means.

No person may remove or modify any guard or safety equipment relating to a bulk mixing plant, unless authorized to do so by the appointed person.

A contractor must ensure that all precautionary measures stipulated for confined spaces as determined in the General Safety Regulations, 2003, are complied with when entering any silo.

A contractor must ensure that a record is kept of all repairs or maintenance to a bulk mixing plant and that the record is available on site to an inspector, the client, the client's agent or any employee.

2.39 *Rope Access Work*

Not applicable to this project.

2.40 Hazardous Chemical Substances (HCS)

In addition to the requirements in the HCS Regulations, the principal contractor must provide proof in the Health and Safety Plan that:

- Material Safety Data Sheets (MSDS's) of the relevant materials / hazardous chemical substances are available prior to use by the contractor. All MSDS's shall always be available for inspection by the agent.
- Risk assessments are done at least once every 6 months.
- Exposure monitoring is done according to OESSM and by an Approved Inspection Authority (AIA) and that the medical surveillance programme is based on the outcomes of the exposure monitoring.
- How the relevant HCS's are being/going to be controlled by referring to:
 - Limiting the amount of HCS
 - Limiting the number of employees
 - Limiting the period of exposure
 - Substituting the HCS
 - Using engineering controls
 - Using appropriate written work procedures
- The correct PPE is being used.
- HCS are stored and transported according to SABS 072 and 0228.
- Training with regards to these regulations was given.

The Health and Safety plan should make reference to the disposal of hazardous waste on classified sites and the location thereof (where applicable).

The First Aider must be made aware of the MSDS and trained in how to treat HCS incidents appropriately.

2.41 Noise Induced Hearing Loss

Where noise is identified as a hazard the requirements of the NIHL regulations must be complied with and the following must be included / referred to in the Health and Safety Plan:

- Proof of training with regards to these regulations.
- Risk assessment done within 1 month of commencement of work.
- That monitoring carried out by an AIA and done according to SABS 083.
- Medical surveillance programme established and maintained for the necessary employees.
- Control of noise by referring to:
 - Engineering methods considered
 - Admin control (number of employees exposed) considered
 - Personal protective equipment considered/decided on
 - Describe how records are going to be kept for 40 years.

2.42 Explosives and Blasting

Not applicable to this project.

2.43 Personal Protective Equipment (PPE)

The Contractor shall carry out PPE or clothing needs analysis in accordance with his risk assessment, to determine the necessary PPE or clothing to be used during construction. The Contractor shall make provision and keep adequate quantities of SABS approved PPE or clothing on site at all times.

The Contractor must ensure that personnel are trained in the correct use of PPE to be used.

The Contractor must ensure that lost, stolen, worn out or damaged PPE is replaced as required and receipt signed for by employees on site.

2.44 Asbestos

Not applicable to this project.

2.45 Pressure Vessels (Including Gas Bottles)

Not applicable to this project.

2.46 Fire Extinguishers and Fire Fighting Equipment

The Contractor shall provide adequate, regularly serviced fire extinguishers located at strategic points on site. The Contractor shall keep spare serviced portable fire extinguishers. The Contractor shall have adequate persons trained or competent to use the Fire Fighting Equipment.

Safety signage shall be posted up in all areas where fire extinguishers are located.

Proof that an adequate number of employees have been trained in firefighting must be kept on site.

2.47 Lifting Machinery and Tackle

Not applicable to this project.

2.48 Ladders and Ladder work

The Contractor shall ensure that all ladders are numbered and inspected regularly as well as keeping record of inspections. It should be noted that Aluminium ladders are preferred to wooden ladders.

2.49 General Machinery

The Contractor shall comply with the Driven Machinery Regulations, which include inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE or clothing and training those that use machinery and enforce compliance.

2.50 Portable Electrical Tools

The Contractor shall ensure that use and storage of all explosive actuating fastening devices and portable electrical tools are in compliance with relevant legislation.

The Contractor shall consider that:

- A competent person undertakes routine inspections;
- Only authorised persons use the tools;
- There are safe working procedures applied;
- Awareness training is carried out and compliance is enforced at all times; and
- PPE and clothing is provided and maintained.

2.51 High Voltage Electrical Equipment

The Contractor shall ensure that, where the work is under, on or near high-voltage electrical equipment the Electrical Installation Regulations, together with safety instructions (Regulations of the Owner of the Equipment) are complied with. Such equipment includes:

- Eskom and the Local Authority equipment
- The Contractor's own power supply; and
- Electrical equipment being installed but not yet taken over from a Contractor by The Client.

2.52 Public Health and Safety

The Contractor shall ensure that each person working on or visiting a site, and the surrounding community, shall be made aware of the dangers likely to arise from on-site activities and the precautions to be observed to avoid or minimize those dangers. Appropriate health and safety signage shall be posted at all times.

2.53 Night Work

Not applicable for this project

2.54 Environmental Conditions and Flora and Fauna

The Contractor must be mindful of adverse weather conditions upon the health and safety of the workforce. This includes inclement weather, strong wind, heat stress, extreme cold, etc. The Contractor's risk assessment process must take into account the risks associated with such weather conditions. The same is true when working in an environment where there is a risk to employees' health and safety from presence of poisonous flora, or wildlife (including bees, snakes, etc). The Contractor's risk assessment process must take these risks into account.

2.55 Occupational Health

Exposure of workers to occupational health hazards and risks are very common in any work environment, especially in construction. Occupational health hazards and risks exposure is a major problem and all Contractors are to ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards and risks.

The occupational hazards and risks may enter the body in three ways:

- Inhalation through breathing e.g. cement and dust;
- Ingestion through swallowing maybe through food intake; and/or
- Absorption through the skin (pores) e.g. painting or use of thinners.

The contractor is required to ensure that all his personnel are medically fit prior to being allowed onto the work site.

All Contractors should ensure that Occupational Hygiene surveys are conducted as per the Occupational Health and Safety Act to ensure employees is not exposed to hazards. Risk Assessments should identify areas where surveys are to be conducted.

2.56 Suspended Platforms

Not applicable to this project.

2.57 Material Hoists

Not applicable to this project.

2.58 Explosive Actuated Fastening Device

Not applicable to this project

OTHER HEALTH AND SAFETY SPECIFICATION REQUIREMENTS

The contractor must be aware of the following additional requirements:

What	When	Output
Awareness training (Toolbox Talks)	Toolbox talk must be communicated in every begging of the week.	Attendance Register
Health and Safety Committee Meetings	Monthly	Minutes signed by the employer (Contractor) covering: a) Health and Safety Representative Checklist
Health and Safety Reports	Monthly	Report covering: a) Incidents/Accidents and Investigations b) Non-conformance c) Health and Safety Training d) HIRA Updates e) Internal and External Audits
General Inspections	As per Health and Safety Specification and OHSA	Report on Health and Safety Specification and OHSA compliance: a) Excavation b) Equipment c) Vehicles
General Inspections	Monthly	Covering: a) Firefighting Equipment b) Portable Electrical Equipment c) Ladders
Record keeping	Ongoing	Covering: a) General complaints b) Fines c) General incidents d) MSDS' e) Surveillance Medicals f) Inspection Register g) Dept of Labour Notices

Key: OHSA – Occupational Health and Safety Act, 85 of 1993

ANNEXURE A

The Contractor shall submit the info below in an Annexure 2 prior to construction commencement.

Item No.	Health and Safety Specification Requirement	OHSA Requirement	Submission date
1	Assignment of Responsible Person to Manage Building Work via Health and Safety Organogram	Construction Regulations 2014	Before commencement on site
2	Competency for Health and Safety Positions	Client / Client Agent requirement	Before commencement on site
3	Compensation of Occupational Injuries and Diseases Act (COIDA) 130 of 1993	COIDA Requirement	Before commencement on site
4	Occupational Health and Safety Policy	Client / Client Agent requirement	Before commencement on site
5	Risk Assessment, Safety Plan and Fall Protection Plan and Method Statements	Client / Client Agent requirement	Before construction work commences

ANNEXURE B - The contractor shall make the following appointments, as required:

Chief Executive Officer (OSHACT 16(1))
Contract Director/Manager (OSHACT 16(2))
Construction Manager (CR 8(1))
Assistant Construction Manager (CR8(2))
Construction Supervisor (CR 8(7))
Assistant Construction Supervisor (CR 8(8))
Construction Safety Officer (CR 8(5))
Safety Representative (where > 20 employees on site)
Temporary work Designer (CR 12(1))
Temporary work Supervisor (CR12(2))
Construction risk assessor (CR 9(1))

Excavation Supervisor (CR13(1)(a))
Bulk Mixing Plant Supervisor (CR20(1))
Bulk Mixing Plant Operator (CR20(2))
Construction Vehicle and Mobile Plant Operator (CR23(1)(d)(i))
Controller of Temporary Electrical Installations (CR24(c))
Stacking Supervisor (CR28(a))
Fire Extinguishing Equipment Inspector (CR29(h))
Incident Investigator (OSHACT 9(2))
Competent Person – Confined Spaces (GAR 5(1))

Acknowledgement:

I, _____ representing
 _____ (Contractor), have satisfied
 myself with the content of this Health and Safety Specification and shall ensure that our employees and
 contractors on site comply with the requirements of this document, our safety documentation and health
 and safety legislation.

 Signature of Contractor Date

Comments:

ENVIRONMENTAL WORK INSTRUCTIONS

THE ACSA ENVIRONMENTAL SPECIFICATION

It is a requirement of the Airports Company South Africa (ACSA)- that all construction works within ACSA airports be undertaken in accordance with the ACSA Environmental Specification

TABLE OF CONTENTS

INDEX

SECTION 1: ACSA - ENVIRONMENTAL SPECIFICATIONS OVERVIEW

- 1. Purpose of the Environmental Specifications**
- 2. Implementation of the Environmental Specifications**
- 3. Structure of the Environmental Specifications**

SECTION 2: ACSA ENVIRONMENTAL PARTICULAR SPECIFICATIONS

- EP1 Introduction**
- EP2 Organisational Requirements**
- EP3 Method Statements**
- EP4 General Site Procedures**
- EP5 Site Clearance**
- EP6 Site Rehabilitation**
- EP7 Management and Monitoring**
- EP8 Measurement and Payment**

LIST OF ABBREVIATIONS

ACSA	Airports Company South Africa
AEC	Airport Environmental Committee
EO	Environmental Officer
ES	Environmental Specification
EMS	Environmental Management System for ACSA
ESA	Environmentally Sensitive Areas
SABS	South African Bureau of Standards
SAHRA	South African Heritage Resource Agency
SSSI	Sites of Special Scientific Interest

PART 1: ACSA ENVIRONMENTAL SPECIFICATIONS OVERVIEW

1. PURPOSE OF THE ENVIRONMENTAL SPECIFICATIONS

The purpose of the Environmental Specifications (ES) is to translate the recommendations of the Environmental Management System (EMS) into a contractual environmental specification for application during construction activities.

The Environmental Specifications will be applicable to all construction activities that occur on ACSA owned and/or managed airports. Construction activities include construction of buildings, infrastructure as well as developer / tenant property and rehabilitation work at the airport.

2. IMPLEMENTATION OF THE ENVIRONMENTAL SPECIFICATIONS

The Environmental Specifications is intended for dissemination by ACSA to the “Employer”, who is the party for whom the construction works are to be executed (hereafter referred to as the Employer). The Employer may therefore be ACSA (the relevant Departmental Manager responsible for construction activities), a tenant or a developer with a land lease or another party such as a contractor responsible for developing or rehabilitation of the site or sites at the airport.

The Employer shall ensure that the Environmental Specification is included in the Tender Document(s) issued to the prospective Contractor and is also responsible for appointing/designating, in writing, a Responsible Person for the construction works.

The Responsible Person would manage the requirements outlined in the Environmental Specifications on behalf of the Employer. The Contractors shall incorporate the requirements of the ES in their tender submissions to the Employer and are responsible for implementing the ES on a daily basis.

The Environmental Officer (EO) will be responsible for updating the ES as required, auditing the implementation of the ES for each construction project and for maintaining the document control and record systems associated with it.

The Environmental Specifications report has been structured to be incorporated into a standard engineering tender document as the Environmental Particular Specification.

A ‘Particular Specification’ is the terminology used for a specification that covers activities that are not adequately covered in the standardised SABS 1200 series specifications for engineering contracts, or where the specification is sufficiently detailed to make it inappropriate for inclusion as a variation or addition to a standardised specification.

The Environmental Specification is a generic document applicable to construction projects at all ACSA airports. The majority of the specifications within the ES will apply to all construction work, although it is anticipated that variations to this specification may need to be

PART 2: ENVIRONMENTAL Particular SPECIFICATIONS

Index to Environmental Particular (EP) Specifications

Clause	Description
EP1	INTRODUCTION
EP2	ORGANISATIONAL REQUIREMENTS
EP2.1	Organisational overview and structure
EP2.2	Roles and responsibilities
EP3	METHOD STATEMENTS
EP4	GENERAL SITE PROCEDURES
EP4.1	Demarcation of Environmentally Sensitive Areas (ESAs)
EP4.2	Location of camp and depot
EP4.3	Demarcation of the site
EP4.4	Ablution Facilities
EP4.5	Domestic waste water
EP4.6	Refuse
EP4.7	Protection of the fauna and flora
EP4.8	Defacement of natural features
EP4.9	Protection of archaeological and paleontological sites
EP4.10	Effluent and storm-water management
EP4.11	Dust control
EP4.12	Noise control
EP4.13	Materials use, handling, storage and transport
EP4.14	Emergency procedures
EP4.15	Social issues
EP5	SITE CLEARANCE
EP5.1	Removal of top soil
EP5.2	Stabilisation of steep slopes
EP5.3	Removal of alien vegetation
EP6	SITE REHABILITATION
EP6.1	Scope
EP6.2	Landscaping and preparation for re-vegetation
EP7	MANAGEMENT AND MONITORING:
EP7.1	Monitoring and reporting
EP7.2	Environmental awareness training
EP7.3	Non-conformance and corrective actions
EP7.4	Documentation
EP7.5	Incentives and penalties
EP7.6	External audit
EP8	MEASUREMENT AND PAYMENT

EP1 INTRODUCTION

The ES has been prepared and is to be implemented as part of the Environmental Management Systems for ACSA.

The ES provides specifications that the Contractor shall adhere to, in order to minimise adverse environmental impacts and optimise opportunities associated with construction activities.

The ES is provided to the Contractor at the tender stage so that the costs of implementing the ES are included into the contract cost and so that the Contractor is aware of his environmental responsibilities before commencing work.

The aim of this ES is to ensure that environmental management of site activities is integrated into the other management systems implemented by the Contractor (e.g. quality management, health and safety). For this reason, the ES includes a requirement for the Contractor(s) to develop their own system (i.e. roles, responsibilities and timing) for ensuring that the requirements of the ES are met, and that the Contractor checks, by means of an internal audit, that this system is operating effectively.

EP2 ORGANISATIONAL REQUIREMENTS

EP2.1 Organisational Structure

This section outlines the required management structure for the administration of the ES, with particular emphasis on the roles and responsibilities of key individuals.

The organisational structure for the implementation of the ES is presented in Figure 1 and should be viewed in conjunction with the roles and responsibilities below.

EP2.2 Roles and responsibilities

EP2.2.1 Airports Company South Africa

Airports Company South Africa is ultimately responsible for ensuring effective environmental management at the airport in terms of the scope of the Environmental Management Systems.

EP2.2.2 Environmental Officer (EO)

The Environmental Officer has been appointed by ACSA and is responsible for monitoring the implementation of the requirements of the Environmental Specification by the relevant parties as specified.

The Environmental Officer shall:

- Review and approve in writing valid method statements;
- Inspect the Contractor's site to check compliance with method statements and the requirements of the ES (at least weekly and more frequently if thought to be warranted by the EO) and maintain inspection reports on file;
- Meet with the Responsible Person for the developer or tenant, whereby the Responsible Person reports on the implementation of the ES (at least monthly) and keep a record of minutes of the above meetings;
- Provide material / manuals and assistance to the Responsible Person for the initial environmental training sessions; and
- Report in writing any problems related to conformance with the ES which cannot be resolved in co-operation with the relevant Responsible Person to ACSA Managers or the relevant developer / tenant.

EP2.2.3 Employer

The Employer shall:

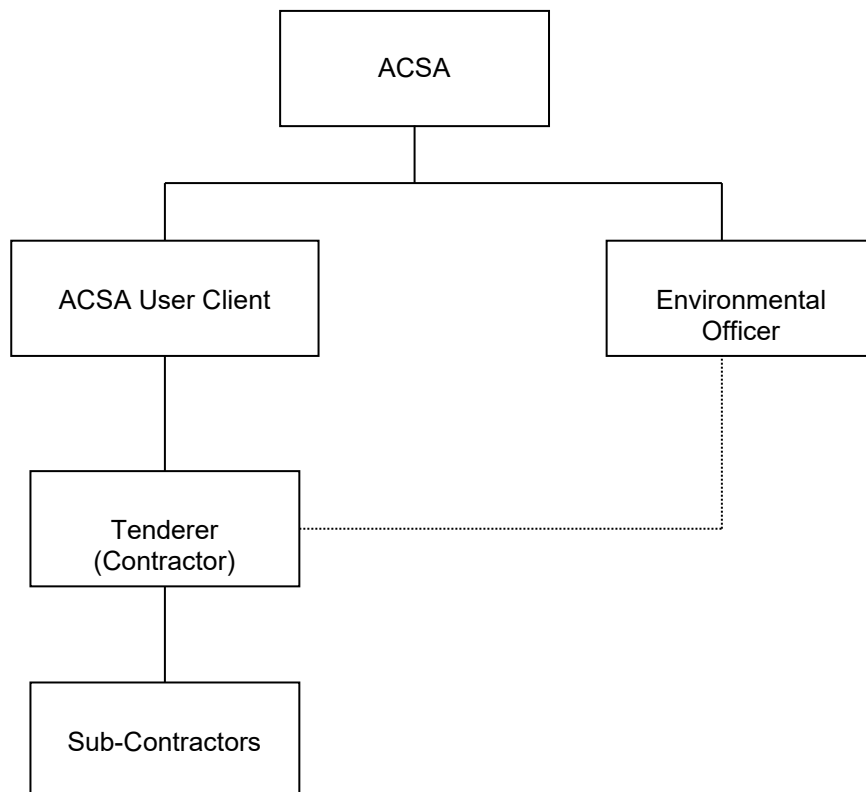
- Include the ES, with any revisions, in any tender document related to construction activities on site;
- Designate in writing a Responsible Person for the proper implementation of the ES; and
- Send a copy of the letter of appointment of the Responsible Person to the EO.

EP2.2.4 Responsible Person

The Responsible Person for each building site or infrastructure installation shall:

- Develop a system to ensure that the ES is effectively implemented;
- Audit this system so that he/she can demonstrate to the EO that the ES is being effectively implemented;
- Ensure that Contractors staff, sub-contractors, suppliers etc. receive appropriate environmental awareness training prior to commencement of work on the project and maintain records of training. It is anticipated, though not a requirement, that the Responsible Person will deliver training sessions;
- Ensure that responsible persons for sub-contractors are designated to carry out the requirements of the Environmental Specifications
- Submit method statements to the Environmental Officer for approval as specified in the Environmental Specifications and maintain approved method statements on file; and
- Have sufficient authority to issue site instructions to the Contractors staff on their site. It is probable, though not a requirement, that the Responsible Person will be the Engineers Representative.

Figure 1: Organisational structure showing lines of responsibility and communication during the construction phase at the airport.



EP3 METHOD STATEMENTS

The Contractor shall submit a written method statement to the Responsible Person for approval, covering those activities which are identified (in this document and/or by the Environmental Officer), as being potentially harmful to the environment.

Method statements indicate how compliance with the Environmental Particular Specification will be achieved.

The method statement shall state clearly:

- timing of activities;
- materials to be used;
- equipment and staffing requirements;
- the proposed construction procedure designed to implement the relevant environmental specifications;
- the system to be implemented to ensure compliance with the above; and
- other information deemed necessary by the Environmental Officer and Responsible Person.

The method statement shall be submitted at least five working days prior to expected commencement of work on an activity, to allow the Responsible Person time to study and approve the method statement. The contractor shall ensure ACSA that the activity is conducted according to the method statement which will be approved in writing by the ACSA successful Tenderer (and also signed by the ACSA Environmental Officer), which shall be done within five working days of receipt.

Due to changing circumstances, it may be necessary to modify method statements. In such cases, the proposed modifications must be indicated and agreed upon in writing between the Environmental Officer and Responsible Person. The EO and Responsible Person must retain records of any amendments and ensure that the most current version of any method statement is being used.

EP4 GENERAL SITE PROCEDURES

EP4.1 Demarcation of Environmentally Sensitive Areas

Before construction commences there needs to be confirmation by ACSA's Environmental Officer that the vegetation in the area to be impacted by construction activities is not identified as an Environmentally Sensitive Area (ESA). However, should Environmental Sensitive Areas be identified during the construction period the following actions would have to be taken to minimize adverse impacts:

- Environmentally Sensitive Areas, shall not be entered or used for any purpose unless a written motivation has been submitted to the EO by the Responsible Person, and written approval has been obtained from the EO;
- The Contractor shall exercise special care when working close to the ESA's in order to avoid damage or physical disturbance of these areas. The EO may instruct the Responsible Person to restrict the number of construction personnel and equipment operating near Environmentally Sensitive Areas (ESA's);
- Damage caused to ESAs by the Contractor shall be cause for the Contractor to make good any damaged areas to the written satisfaction of the EO;
- The Contractor shall note the proximity to the site of any designated ESAs. The Contractor shall fence any ESAs located within 20-m of the site boundary. The fencing shall extend along the boundary of the ESA for sufficient distance to ensure that the location of the ESA is obvious from the Contractor's site and from the approach to the Contractor's Site; and
- The Contractor shall make provision for the demarcation of ESAs with fencing to the following specifications:

Posts shall be wooden droppers or steel standards where the ground is too hard for wooden droppers to be driven in;

- The posts shall be long enough and spaced closely enough to support a strand of 12-gauge wire at 750- mm above the ground level; and
- The top 300-mm of the posts shall be painted white for easy visibility.

EP4.2 Location of camp and depot

The Contractor's Camp and Materials Storage Area shall be located at a position approved by the Responsible Person. No site staff other than security personnel shall be housed on site.

The Contractor shall provide water and/or washing facilities at the Contractor's Camp for personnel.

The Contractor's Camp and Materials Storage Area shall be kept neat and tidy and free of litter.

EP4.3 Demarcation of the site

It is important that activities are conducted within a limited area to facilitate control and to minimise the impact on the existing natural environment, existing tenants and other construction activities in the vicinity and public thoroughfares.

The Contractor shall demarcate the boundaries of the site in order to restrict his construction activities to the site. The method of demarcation and the location of the demarcated area shall be determined by the Contractor and approved by the Responsible Person before any work being undertaken. The Contractor shall ensure that all plant, labour and materials remain within the boundaries of the site. Failure to do so may result in the Contractor being required to fence the boundaries of the site at his/her own expense to the satisfaction of the Responsible Person.

If additional areas (e.g. for lay down, rest areas) are required, these must be approved in writing by the Responsible Person. The Contractor is advised that it may take approximately one week to obtain such permission from the Responsible Person.

Suitable temporary fencing may need to be erected during construction to minimise the risk of injury to the public, and animals.

EP4.4 Ablution Facilities

The Contractor shall provide the necessary ablution facilities for all his personnel.

Toilets with chemical disinfectants shall be provided, with a minimum of one toilet per 15-persons. Toilets shall be easily accessible and shall be transportable. The toilets shall be secured to prevent them from blowing over and shall be provided with an external closing mechanism to prevent toilet paper from being blown out. Toilet paper dispensers shall be provided in all toilets. Toilets shall be cleaned and serviced regularly by a reputable toilet servicing company. Toilets shall be emptied before long weekends and builders' holidays.

The Contractor shall ensure that chemicals and/or waste from toilet cleaning operations are not spilled on the ground at any time. Should there be repeated spillage of chemicals and/or waste (i.e. more than three incidents), the EO shall require the Contractor to place the toilets on a solid base with a sump at his own expense. Accumulations of chemicals and waste will have to be removed from the site and disposed at an approved waste disposal site or sewage plant.

Ablutions anywhere other than in the toilets shall not be permitted. Repeated use of open areas, rivers or other areas for ablution purposes (i.e. more than three incidents) may result in the guilty party being given a spot fine. The Contractor shall also be responsible for cleaning up any waste deposited by his personnel.

EP4.5 Domestic waste water

Waste-water from any other ablution or kitchen facilities on site shall be discharged into a suitable conservancy tank. The Contractor shall be responsible for ensuring that the system continues to operate effectively throughout the project and that the conservancy tank is emptied as required during the project. The Contractor shall employ a suitable qualified sub-contractor or the local authority to empty the conservancy tank.

EP4.6 Refuse

Refuse refers to all solid waste, including construction debris (e.g. wrapping materials, timber, cans etc.) waste and surplus food, food packaging etc.

The Contractor shall institute an on-site waste management system that is acceptable to the Responsible Person in order to prevent the spread of refuse within and beyond the site. The Contractor is reminded that wind velocities on the construction site can be extremely high.

All waste shall be collected and contained immediately. The Contractor shall institute a weekly clean-up of the site if so, instructed by the Responsible Person. This daily/weekly clean up shall be for the Contractor's account.

The Contractor shall not dispose of any waste and/or construction debris by burning or burying. The use of waste bins and skips is recommended. The bins shall be provided with lids and an external closing mechanism to prevent their contents from blowing out. The Contractor shall ensure that all waste is deposited by his employees in the waste bins for removal by the Contractor. Bins shall not be used for any purposes other than waste collection and shall be emptied on a regular basis. All waste shall be disposed of offsite at approved landfill sites.

Waste generated at the construction camps shall be separated into recyclable and non-recyclable waste, and shall be separated as follows:

- Hazardous waste (including used oil, diesel, petrol tins, paint, bitumen, etc.);
- Recyclable waste (paper, tins, glass);
- General waste; and
- Reusable construction material

Recyclable waste shall be deposited in separate skips/bins and removed off site for recycling. The Contractor may wish to enter into an agreement with the surrounding communities and/or his staff with regard to the collection and sale of recyclable and reusable materials.

Hazardous waste, including waste oil and other chemicals (e.g. paints, solvents) shall be stored in (an) enclosed area(s), and shall be clearly marked. If deemed necessary by the Responsible Person, the Contractor shall obtain the advice of a specialist waste expert concerning the storage of hazardous waste. Such waste shall be disposed of off-site by a specialist waste contractor, at a permitted hazardous waste disposal site.

The EO shall be consulted about, and agree to, the method of storage and disposal of hazardous waste.

The Contractor is advised that spot fines for littering have been included in this document. Offenders found littering will be liable for a spot fine.

EP4.7 Protection of fauna and flora

All fauna within and around the site shall be protected. Birds and animals shall not be caught or killed by any means, including poisoning, trapping, shooting or setting of snares. Offenders may be prosecuted in terms of the Animals Protection Act 71 of 1962.

EP4.8 Defacement of natural features

Defacement of any features outside of the construction site shall not occur without the prior written permission of the Responsible Person. Any features defaced by the Contractor shall be restored to the satisfaction of the Responsible Person.

EP4.9 Protection of archaeological and palaeontological Sites

If any possible palaeontological /archaeological material is found during excavations, the Contractor shall stop work immediately and inform the Responsible Person. The Responsible person will inform the South African Heritage Resource Agency (SAHRA) and arrange for a palaeontologist/archaeologist to inspect, and if necessary, excavate, the material, subject to acquiring the requisite permits from the National Monuments Council. Costs incurred will be for the Employer's account.

EP4.10 Effluent and storm-water management

EP4.10.1 General

The Contractor must ensure that pollution of the ground or surface water does not occur as a result of site activities. Pollution could result from the accidental release of contaminated run-off from construction camps, discharge of contaminated construction water, chemicals, oils, fuels, sewage, run-off from stockpiles, solid waste, litter, etc.

EP4.10.2 Run off from construction camps

The Contractor shall ensure that polluted run-off (excluding silt “pollution”), such as run-off from construction camps where equipment is cleaned and/or serviced, fuel stores, workshops, etc. is not discharged overland. The Contractor may direct it into the local sewerage main, with the written permission of the Responsible Person. Alternatively, the Contractor shall erect an earth/brick berm 0,5 m high around such areas and shall collect all run-off from these areas and store it in a conservancy tank for removal from the site. The Contractor shall ensure that silt-laden water is not discharged directly into any surface watercourses (i.e. vleis, etc.), and shall take suitable measures to prevent this.

Natural run-off shall be diverted away from any camps towards the storm-water drains where these are available. Special care must be taken in areas susceptible to erosion, e.g. steep slopes. The Contractor shall ensure that excessive quantities of sand, silt and silt-laden water do not enter the storm-water drain system, or any surface watercourse. The Contractor shall take appropriate measures, e.g. the erection of silt traps, or drainage retention areas, to prevent silt and sand entering drainage or watercourses. Any partial or complete blockage of the storm-water drainage system shall be cleared by the Contractor at his / her own expense.

EP4.10.3 Discharge of construction water

Construction water refers to all water dirtied as a result of construction activities.

The Contractor may discharge silt laden water overland and allow this water to filter into the ground. However, s/he shall ensure that he does not cause erosion as a result of any overland discharge.

The Contractor may discharge limited quantities (less than 50L) of cement-laden water overland, i.e. washings from trowels, wheelbarrows and the like.

Water from washing large concrete-mixing equipment (mixers and the like) shall not be discharged overland. Such water shall be collected in a conservancy tank, removed from the site and disposed of in the correct manner. The Contractor may consider reusing such water for washing other concrete equipment to minimise the amount required to be removed off site.

Trucks delivering concrete shall not wash the trucks or the chutes on the site. All washing operations shall take place off site at a location where wastewater can be disposed of in the correct manner.

EP4.10.4 Servicing/fuelling of construction equipment

Servicing and fuelling should preferably occur off site.

However, if these activities occur on site, the Contractor shall ensure that all servicing of vehicles and equipment takes place in designated areas agreed upon by the Responsible Person. All waste shall be collected and disposed of off-site at an appropriately licensed landfill site. All equipment that leaks onto the ground shall be repaired immediately or removed.

Similarly, no vehicles or machines shall be refuelled on site except at designated refuelling locations, unless otherwise agreed with the Responsible Person. The Contractor shall not change oil or lubricants anywhere on site except at designated locations, except if there is a breakdown or an emergency repair. In such instances, the Contractor shall ensure that he has Drizit pads (or equivalent) and/or drip trays available to collect any oil, fluid, etc.

EP4.10.5 Fuels and chemicals

The Contractor shall take all reasonable precautions to prevent the pollution of the ground and/or water resources by fuels and chemicals as a result of his activities.

The Contractor shall keep the necessary materials and equipment on site to deal with ground spills of any of the materials used or stored on site.

The Contractor shall ensure that no oil, petrol, diesel, etc. is discharged onto the ground. Pumps and other machinery requiring oil, diesel, which is intended to remain in one position for longer than two days shall be placed on drip trays. The drip trays shall be emptied regularly and the contaminated water disposed of off-site at a facility capable of handling such wastewater. Drip trays shall be cleaned before any possible rain events that may result in the drip trays overflowing, and before long weekends and holidays.

The Contractor shall remove all oil-, petrol-, and diesel-soaked sand immediately and shall dispose of it as hazardous waste.

Should the Responsible Person/ECO and/or the relevant authorities deem it necessary to institute a programme for the removal of contaminated ground resulting from the non-compliance of the controls detailed above, these costs will be for the Contractor's account. Remedial action shall be approved by the ECO and relevant authorities, if appropriate.

EP4.11 Dust control

The Contractor shall be responsible for the continued control of dust arising from his/her operations, through measures including, but not limited to, spraying of water on bare areas, rotovating straw bales into the soil surface and the scheduling of dust-generating activities to times when wind velocity is low. Overhead sprayers shall not be used in windy conditions, due to water loss through evaporation. The use of water carts is preferred.

The Contractor shall inform the Responsible Person 48 hours in advance of anticipated "unavoidable" dust-generating activities. The Responsible Person and/or ECO may inform adjacent land users, tenants and communities about the possibility of dust pollution, and the approximate duration of the problem.

EP4.12 Noise control

The Contractor shall take all reasonable precautions to minimise noise generated on site as a result of his operations, especially when working in areas or on activities that may impact on neighbouring land users.

The Contractor shall comply with the applicable regulations with regard to noise.

The Contractor shall inform the Responsible Person 48-hours in advance of anticipated "unavoidable" noise-generating activities. The Responsible Person and/or Environmental Officer may inform adjacent land users, tenants and communities about the possibility of noise pollution and the approximate duration of the problem.

EP4.13 Materials use, handling, storage and transport

Procedure for material handling must be discussed with and approved by the Responsible Person prior to commencement of this activity.

EP4.13.1 Use of cement/concrete

The Contractor is advised that cement and concrete are regarded as highly hazardous to the natural environment on account of the very high pH of the material, and the chemicals contained therein. Therefore, the Contractor shall ensure that:

- concrete is mixed on mortar boards, and not directly on the ground;
- visible remains of concrete, either solid, or from washings, are physically removed immediately and disposed of as waste. Washing visible signs into the ground is not acceptable; and
- all aggregate is also removed.

EP4.13.2 Fuel storage and use

Tanks containing fuels shall have lids and shall remain firmly shut. Only clean, empty tanks may be stored on the bare ground. Fuel stores shall be placed on a bunded sealed base - the bunds shall have a volume of 110% of the volume of the largest tank in the storage area. Any waste-water or spilled fuel collected within the bund shall be disposed of as hazardous waste.

The Contractor shall take all the necessary precautions to prevent fires or spills. No smoking shall be allowed in the vicinity of the fuel stores. Failure to adhere to this specification shall be cause for a spot fine being imposed on the offender.

The Contractor shall ensure that there is adequate fire-fighting equipment at the fuel stores.

EP4.13.3 Hazardous materials

The Contractor shall comply with all relevant national, regional and local legislation with regard to the transport, use and disposal of hazardous materials. If necessary, the Contractor shall obtain the advice of the manufacturer with regard to the safe handling of hazardous materials. Any claims against the Contractor shall be for his/her account.

The Contractor shall provide the Responsible Person with a list of hazardous substances on site, together with storage procedures for these materials.

The Contractor shall ensure that there is an emergency procedure to deal with accidents and incidents (e.g. spills) arising from hazardous substances. The Contractor shall report major incidents (spills in excess of 50 litres) to the Responsible Person immediately.

The Contractor shall maintain a register of spills or incidents involving hazardous materials, as well as measures taken.

The Contractor shall ensure that information on all hazardous substances is available to all personnel on site. The Contractor shall furthermore be responsible for the training of all personnel on site who will be handling the material about its proper use, handling and disposal.

EP4.13.4 Transport of materials outside the site

The Contractor shall comply with all the applicable local, regional and national by-laws with regard to road safety and the transport of materials, especially hazardous and/or toxic materials. Any claims against the Contractor shall be for his account.

The Responsible Person shall provide the Environmental Officer with a schedule of the proposed transportation of significant quantities of hazardous material onto the site, before commencing work on site. The Environmental Officer may request further details or notifications of specific material movements if considered necessary.

EP4.14 Emergency procedures

EP4.14.1 General

The Contractor shall ensure that emergency procedures are set up prior to commencing work. Emergency procedures shall include, but are not limited to, fire, spills, contamination of the ground, accidents to employees, use of hazardous substances, etc. Emergency procedures, including responsible personnel, contact details of emergency services, etc. shall be made available to all the relevant personnel and shall be clearly demarcated at the relevant locations around the site.

The Responsible Person shall advise the EO of any emergencies on site, together with a record of action taken.

EP4.14.2 Fire

The Contractor shall take all the necessary precautions to ensure that fires are not started as a result of his/her activities on site and shall also comply with the requirements of the Occupational Health and Safety Act 85 of 1993.

No open fires shall be permitted on or off site. Closed fires or stoves shall only be permitted at designated safe sites in the construction camps. Fires shall also not be permitted near any potential sources of combustion, such as fuel stores, stockpiles of plant material etc.

The Contractor is advised that sparks generated during welding, cutting of metal or gas cutting can cause fires. Every possible precaution shall therefore be taken when working with this equipment near potential

sources of combustion. Such precautions include having an approved fire extinguisher immediately available at the site of any such activities.

The Contractor shall be liable for any expenses incurred by any organisations called to assist with fighting fires, and for any costs relating to the rehabilitation of burnt areas.

EP4.15 Social issues

EP4.15.1 Third party or public complaints

The Environmental Officer shall be responsible for responding to queries and/or complaints and may request assistance from the Responsible Person in this regard.

The Environmental Officer shall notify the Responsible Person of any complaints lodged by a third party and request appropriate information and measures to address such complaints. The Environmental Officer shall be responsible for maintaining a complaint register in which all complaints are recorded, as well as action taken. This register shall be available to the Responsible Person and the Contractor on request.

EP4.15.2 Information sharing

The Responsible Person and/or the Contractor may need to make staff available for formal consultation with affected parties for the purpose of explaining the construction process and answering queries if necessary.

EP5 SITE CLEARANCE

EP5.1 Removal of topsoil

Following removal of vegetation from the site, all topsoil shall be removed (up to a maximum of 30-cm depth) and stock-piled for re-use in subsequent rehabilitation and landscaping activities. The stockpiles shall not be higher than 2-m in order to minimise composting. The stockpiles of topsoil shall be located in an area agreed with the Responsible Person.

EP5.2 Stabilisation of steep slopes

The disturbance of steep slopes, for example by the removal of vegetation, may result in slope instability and erosion by rain and surface run off. The Contractor shall ensure that slopes that are disturbed during construction are stabilised to prevent erosion occurring. Where re-vegetation of slopes is undertaken, this shall be in accordance with the specification provided in EP6.

Slopes that are susceptible to accidental damage during construction shall be protected to reduce the risk of disturbance.

Any erosion that does occur must be reinstated at the Contractor's cost.

EP5.3 Removal of alien vegetation

The Contractor shall clear all alien vegetation from areas within the demarcated site that are to be landscaped or which fall within open space or buffer zones (e.g. pipeline routes, road fringes).

EP6 SITE REHABILITATION

EP6.1 Scope

The Contractor shall be responsible for rehabilitating any areas cleared or disturbed for construction purposes that are to be incorporated into open space or buffer zones. The Contractor shall re-vegetate such areas in accordance with the specification provided below.

The Contractor shall stabilise, by straw rot ovation or other means, any areas that are cleared or disturbed for construction purposes which are not going to be incorporated into open space or buffer zones (i.e. areas that will be subsequently developed by another party).

All construction equipment and excess aggregate, gravel, stone, concrete, bricks, temporary fencing and the like shall be removed from the site upon completion of the work. No discarded materials of whatsoever nature shall be buried on the site or on any other land not owned by ACSA.

EP6.2 Landscaping and preparation for re-vegetation

Areas that require reshaping shall be cut, filled and compacted to follow the contours of the surrounding landscape. Topsoil removed from the area initially shall be replaced. Care must be taken not to mix the topsoil with the subsoil during shaping operations. Should a crust form on the soil before re-vegetation is commenced, the Contractor shall, at his own cost, loosen the crust by scarifying to a depth of 150-mm.

EP7 MANAGEMENT AND MONITORING

This section focuses on the systems and procedures required to ensure that the environmental specifications are effectively implemented. The emphasis is on monitoring, training and penalties/incentives aimed at ensuring compliance with this document. Suitable documentation and external checks are crucial to ensure compliance and methods to achieve this are also presented in this section.

EP7.1 General Inspection, Monitoring and Reporting

The Responsible Person shall:

- Inspect the site on a daily basis to ensure that the environmental specifications are adhered to.
- Provide the Environmental Officer with a monthly written report, detailing both compliance with the Environmental Specifications as well as general environmental performance.
- Maintain a record of major incidents (spills, impacts, complaints, legal transgressions etc) as well as corrective and preventive actions taken, for submission to the Environmental Officer at scheduled monthly report back meetings.
- Conduct regular internal audits to ensure that the system for implementation of the ES is operating effectively. The audit shall check that a procedure is in place to ensure that:
 - the Method Statements and Environmental Specifications being used are the up-to-date versions;
 - variations to the Environmental Specifications/Method Statements and non-compliances and corrective action is documented;
 - appropriate environmental training of personnel is undertaken; and
 - emergency procedures are in place and effectively communicated to personnel.
- Provide the required information to the Environmental Officer during external audits conducted, as part of the Environmental Management Systems auditing procedure. The information required will include the reports of internal audits conducted by the Responsible Person.

EP7.2 Environmental awareness training

EP7.2.1 Environmental awareness training prior to commencing work

An initial environmental awareness training workshop shall be held prior to any work commencing at the airport. The Responsible Person shall organise (deliver) the workshop and will record the names of those attending. It is recommended that the Contractor allow one hour for this workshop. The workshop shall be attended by all site staff, including sub-contractor's staff.

The Contractor is responsible for ensuring that personnel commencing work on site after the start of the contract (who therefore miss the initial workshop) are also made aware of the environmental procedures before commencing work.

The emphasis should be on any (potential) environmental impacts relating to the construction activities to be undertaken on site and the related environmental precautions, which need to be taken to avoid or mitigate these impacts. The contractual obligation to comply with the specifications in the Environmental Specifications must also be emphasised (some training material will be specific to certain sites or tenders).

A general environmental awareness programme aimed at all employees of the Contractor, sub-contractors and suppliers is available from the Environmental Officer.

EP7.2.2 Additional environmental awareness sessions

If there are persistent breaches of the specifications contained in the Environmental Specification and/or if new environmental issues arise during construction, the Environmental Officer may require additional environmental training sessions. Attendance at these sessions will be determined by the EO, in consultation with the Responsible Person. The Contractor shall make provision for one hour a month for attendance (of construction staff) at these meetings.

EP7.3 Documentation

The Responsible Person shall ensure that all records of spills, pollution incidents, spot fines, training details etc. are copied to the Environmental Officer for his/her records. All documents shall be open for inspection by the Airport Environmental Committee (AEC).

The Environmental Officer shall ensure that a register of public complaints and action taken thereon, plus the relevant documentation from the Contractors, is maintained.

EP7.4 Incentives and penalties

EP7.4.1 Incentives

The Environmental Officer may identify a Contractor that is best implementing this Environmental Specifications and may make a (monthly) award to, or acknowledge, that Contractor.

EP7.4.2 Penalties

Spot fines shall be imposed by the Environmental Officer on Contractors who are found to be infringing these specifications. The Contractor shall be advised in writing of the nature of the infringement and the amount of the spot fine, and furthermore the Contractor shall determine how to recover the fine from the relevant employee and/or sub-contractor. The Contractor shall also take the necessary steps (e.g. training) to prevent a recurrence of the infringement and shall advise the Environmental Officer accordingly.

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

Spot fines shall be between R13,500 and R2000, depending upon the severity of the infringement. The decision on how much to impose will be made by the Environmental Officer and will be final. In addition to the spot fine, the Contractor shall be required to make good any damage caused as a result of the infringement at his/her own expense.

A preliminary list of infringements for which spot fines will be imposed is as follows:

- moving outside the demarcated site boundaries;
- littering of waste on site and surrounds and burying waste on site and surrounds;
- smoking in the vicinity of fuel storage and filling areas and in any other areas where flammable materials are stored/used;
- making fires outside designated areas;
- defacement of natural features;
- spillage onto the ground of oil, diesel, etc;
- picking/damaging plant material;
- damaging/killing wild animals; and
- additional fines as determined by the Environmental Officer.

The Responsible Person may also order the Contractor to suspend part or all the works if the Contractor repeatedly causes damage to the environment by not adhering to the ES (i.e. more than 3 cases of

infringements). The suspension will be enforced until the offending actions, procedure or equipment is corrected. No extension of time will be granted for such delays and all costs will be borne by the Contractor.

EP7.5 External audit

Regular scheduled audits of the EMS will be conducted. However, this is not a dedicated audit of the implementation of this document (which is one of many components of the EMS). Nevertheless, it is anticipated that implementation of the terms and specifications contained in this document will be periodically audited as part of the EMS audit.

All documentation held by the Environmental Officer shall always be available for the EMS audit. Contractors shall also be required to provide any information required by the EMS auditors.

EP8 Measurement and Payment

Item	Unit
D10.01	Implementation of Construction Environmental Management Plan month

The unit of measurement for Item D10.01 shall be the month, or part thereof for the duration of the approved contract period. Part of a month shall be calculated to two decimal places. The contract rate shall include full compensation for implementing the Construction Environmental Management Plan, including the provision of a full time Designated Environmental Officer (DEO) to carrying the specified duties in terms of the Specifications. The contract rate shall also include the provision of a monthly environmental compliance report to the Engineer.



AIRPORTS COMPANY SOUTH AFRICA

KIMBERLEY AIRPORT AND GEORGE AIRPORT

CONTRACT NO: RA8018/2025/RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT, KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 6 MONTHS 6 MONTHS

C4: SITE INFORMATION

C4.1 SCOPE AND DISCLAIMERS

C4.2 SITE DESCRIPTION

C4.3 RESTRICTED ACCESS TO THE SITE OF THE WORKS

C4 SITE INFORMATION

C.4.1. SCOPE AND DISCLAIMERS

The information contained in Part C4 is intended as an indication of the conditions likely to be encountered. All drawings, opinions, interpretations and suggested working methods given in this volume must be regarded as a guide. The results are given in good faith but no warranty is given that the information is representative of the entire airport or route, and no responsibility will be accepted for any consequence arising from actual conditions being different from those indicated in this volume.

C4.2. SITE DESCRIPTION

C4.2.1 GENERAL

The site is situated at . and located within the airport's airside boundary; refer to the locality plan below (Fig.1):



The site is situated at Kimberly Airport and located within the airport's airside boundary; refer to the locality plan below (Fig.2):



The site is situated at George Airport and located within the airport's airside boundary; refer to the locality plan below (Fig.3):



C4.3 RESTRICTED ACCESS TO THE SITE OF THE WORKS

The designated access point for plant and personnel will be provided to the contractor. The Contractor will be required to provide 24-hour security at these Gates. The security stall at this Gate will be in radio contact with Fire & Rescue at all times to enable the provision of escort services.

Construction material must be delivered via the temporary access gate to the site camp under escort service. The Contractor shall erect, maintain, move and finally remove temporary barriers, fences, signs and markings, all as prescribed by the airport authorities. The Contractor shall ensure that all barricades, markers and signs are placed under escort, prior to entering a work area for construction purposes.

Movement outside the areas demarcated for construction shall not be permitted, unless special arrangements have been made and approved by the AM.

ANNEXURE A

PROJECT FUNCTIONAL SPECIFICATION FOR THE INSTALLATION OF SOLAR PV AND BATTERY ENERGY STORAGE SYSTEMS (BESS) AT, KIMBERLEY AIRPORT AND GEORGE AIRPORT

ANNEX B: VOLUME 5:
MANUAL OF PROCEDURES FOR WORKING AIRSIDE



AIRPORTS COMPANY SOUTH AFRICA
REGIONAL AIRPORTS

Bid Reference Number: RA8018/2025/RFP
MANUAL OF PROCEDURES FOR WORKING AIRSIDE
FOR
TENDER FOR THE APPOINTMENT OF A SERVICE PROVIDER TO
DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-
ION BATTERIES AT ., KIMBERLEY AIRPORT AND GEORGE
AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A
PERIOD OF 36 MONTHS

ISSUED BY:

REGIONAL AIRPORTS
AIRPORTS COMPANY SOUTH AFRICA
WESTERN PRECINCT, AVIATION PARK,
O.R. TAMBO INTERNATIONAL AIRPORT,
1 JONES ROAD, KEMPTON PARK,
GAUTENG, SOUTH AFRICA, 1632

JUNE 2024

VOLUME 5

NAME OF CONTRACTOR:

AIRPORTS COMPANY SOUTH AFRICA
KIMBERLEY AIRPORT AND GEORGE AIRPORT

Bid Reference Number: RA8018/2025/RFP

**TENDER FOR THE APPOINTMENT OF A SERVICE
PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION
AND TEST LITHIUM-ION BATTERIES AT, KIMBERLEY
AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS
COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

WITNESS 1 FOR ACSA:		NAME:	
WITNESS 2 FOR ACSA:		NAME:	
WITNESS 1 FOR CONTRACTOR:		NAME:	
WITNESS 2 FOR CONTRACTOR:		NAME:	

TABLE OF CONTENTS

	PAGE
1 GENERAL	94
2 DEFINITIONS	94
3 CONTRACTOR'S CAMPSITE.....	96
4 PROGRAMMING OF THE WORKS	97
5 STOCKPILE AND SPOIL SITE	98
6 RESTRICTED ACCESS TO THE SITE OF THE WORKS	99
7 BARRICADES	100
8 ON SITE STORAGE OF PLANT AND EQUIPMENT	100
9 TEMPORARY TRAFFIC-CONTROL FACILITIES.....	100
9.1 Traffic Signs	100
9.2 Taxiway closing during Construction Period.....	100
9.3 Runway and taxiway Closure	101
9.4 Scheduled Maintenance	101
9.5 Unscheduled Maintenance	101
9.6 Non-scheduled runway closure for safety reasons.....	101
9.7 Runway and taxiway re-opening.....	102
9.8 TRAFFIC SAFETY OFFICER.....	102
10 SPECIAL PROCEDURES FOR CONSTRUCTION AND NIGHT WORK.....	103
10.1 Before work commences, agreements must be established on	104
10.2 Briefing Before Project Commences.....	105
10.3 Marking of a site by day	106
10.4 Marking of a site by night or low visibility	107
10.5 Works under on/off conditions	107
11 EXISTING SERVICES	107
12 ELECTRICAL EQUIPMENT LIMITATIONS	109
12.1 Interference with navigational facilities	109
12.2 Interference with aircraft communications	109
13 HOT WORK PERMIT.....	109
14 RADIO COMMUNICATION ON THE AIRPORT.....	109
15 RESPONSIBILITY OF AIRPORT MANAGER AND AIR TRAFFIC CONTROL	110

15.1	Airport Operations and Air Traffic Control	110
15.2	NOTAM	110
15.3	Permits	110
16	AIRPORT SECURITY	111
17	MOVEMENT WITHIN THE AIRPORT (AIRSIDE).....	111
17.1	General	111
17.2	Airside access	112
17.3	Airside movement	113
17.4	Airside vehicle control system.....	113
17.4.1	Responsibilities of the Contractor.....	113
17.4.2	Airside vehicle permit.....	114
17.4.3	Authority to drive airside.....	114
17.4.4	Airside Vehicle Operators Permit – AVOP.....	115
17.4.5	Rules for driving airside	115
17.5	Accident and incidents	117
17.5.1	Scope	117
17.5.2	Objective	117
17.5.3	Definitions	117
17.5.4	Procedure general	117
17.5.5	Responsibilities	118
17.5.6	Verification	118
17.5.7	Non-conformance	118
17.5.8	Reference	118
17.5.9	Subordinate Documents	119
17.5.10	Change Control	119
17.6	Additional requirements regarding construction activities	119
17.6.1	Existing surfaces	119
17.6.2	Barricades and markings	119
17.6.3	Illuminated Runway closure marker	119
17.6.4	Unforeseen delays due to action by airport authorities	120
18	ENVIRONMENTAL CONSIDERATIONS	120
19	THE SAFETY PLAN	120
19.1	Phase 1: Kick-off meeting to be chaired by the ER 1 hour before the Taxiway/Runway is closed.....	121
19.2	PHASE 2: Taxiway/Runway closure checklist to be completed before access to facilities	122
19.3	PHASE 3: Operational matters during construction	123
19.4	PHASE 4: Runway or Taxiway Opening Checklist to be completed 10 minutes before opening or as required by Fire and Rescue in case of an emergency opening of the Runway or Taxiway.....	124
20	THE CONTINGENCY PLAN.....	125
20.1	Late completion on a shift.....	125
20.1.1	Asphalt work, Earth works, Layer works and Electrical work	125
20.1.2	Paint markings	125
20.1.3	Confirmed late completion	125
20.1.4	Sudden rain	125
20.1.5	Emergency flight /fog/low visibility	126
20.1.6	Aircraft or vehicles violate no-go areas	126
20.1.7	Non-attendance of radio or communications support	126

21	REPORTING OF ACCIDENTS/INCIDENTS.....	126
22	PENALTY FOR NON-COMPLIANCE TO THE AIRSIDE RULES AND SAFETY SYSTEM	126
23	CONTACT LIST	128
24	DECLARATION	129
	APPENDIX A: WORK AREAS AND STRIP HAZARD REQUIREMENTS FOR TAXIWAYS AND RUNWAYS	130
	APPENDIX B: APPLICATION FORM FOR CLOSURE OF AIRSIDE FACILITIES ...	132
	APPENDIX C: ROUTING PLAN	136
	APPENDIX D: METHOD STATEMENT	137
	APPENDIX E: MUNICIPAL AND ELECTRICAL TARRIFS	138

1. GENERAL

This document (Volume 5) is a Procedure Manual for the Contractor's establishment and working airside to guarantee and safeguard the continuous operation of the airport at all times. This document is complimentary to the Tender Document (Volume 3) and should be used for easy reference working airside. Information provided in this document will affect the Contractor's programme.

The Contractor shall not commence with any establishment or construction work on the airside unless the Contractor:

- Is fully conversant with the contents of this document and it has been signed and implemented by the parties.
- His staff moving on the airside outside demarcated work areas is escorted by a person duly authorised by ACSA to assist and guide the Contractor.
- Comply with the regulations of the Occupational Health and Safety Act and Regulations 85 of 1993 Full Version.

The Contractor shall be subject to various procedures as listed below to guarantee and safeguard the operation of the airport at all times.

This document forms part of the contract documentation as listed in the Tender Data. This Volume must be read in conjunction with Volumes 3 and 4.

2. DEFINITIONS

ACSA	Airports Company South Africa
ATC	Air Traffic Control
ATNS	Air Traffic and Navigation Services who undertake the ATC services at George Airport
AIRPORT/AERODROME	An area of land including buildings intended to be used partly or wholly for the arrival, departure and movement of aircraft, air passengers and airfreight
AIRPORT MANAGER (AM)	The Airport Manager or any official of the airport authority acting on his behalf
AIRSIDE	The movement area on the airport, adjacent terrain and building or portions thereof, access to which is controlled, but excluding leased areas
APPROVED ISSUING AUTHORITY	An organisation approved by the airport manager to issue airport security and airside vehicle permits
APRON	The part of the Airport Movement Area used for: ▪ The purpose of enabling passengers to board, or disembark from aircraft;

	▪ Loading cargo onto, or unloading cargo from aircraft and ▪ Refuelling, parking aircraft or carrying out maintenance on aircraft
AUTHORITY TO DRIVE AIRSIDE	Authority issued by the Airport Operator to a driver for the purpose of driving in certain areas on the Airside ▪ <i>Authority to Drive Airside Category 1</i> – An Authority issued by the Airport Operator to a driver for the purpose of driving only on the Airside Road in the vicinity of the Terminal or Apron Areas; ▪ <i>Authority to Drive Airside Category 2</i> – An Authority issued by the Airport Operator to a driver for the purpose of driving on the Airside Roads and Aprons (this may include crossing specific taxiways where a taxiway crossing is marked, and when the driver has received specific training to cover this occurrence) and ▪ <i>Authority to Drive Airside Category 3</i> – An Authority issued by the Airport Operator, following a satisfactory attendance and written test, to a driver for the purpose of driving on all movement areas at the airport.
AUTHORITY FOR USE AIRSIDE	Is an authority to be affixed to a Vehicle or motorised item of Construction Equipment approved to access the Airside.
ER	Engineer's Representative for the Consulting Engineer.
ESCORT	Means the supervision of a vehicle or item of construction equipment on the airside whereby the supervising person takes responsibility for and provides guidance and may take immediate action to prevent an unsafe act by the vehicle or item of construction equipment being escorted.
ESCORT OFFICER	Means a person authorised by the Airport Operator to perform the act of escorting another vehicle on the airside of the airport.
F&R	Fire and Rescue.
GA	George Airport
ILS	Instrument Landing System. Instrumentation installed along the runway strip to assist pilots during poor weather conditions.
LANDSIDE	The area of the airport to which the public has unrestricted access.
MOVEMENT AREA	That part of an aerodrome to be used for the take-off, landing and taxing of aircraft consisting of the manoeuvring area and the apron(s).
MANOEUVRING AREA	That part of an aerodrome to be used for take-off, landing and taxiing of aircraft – excluding aprons.
MARKINGS	Symbols, lines, words and figures displayed on the surface of a movement area, or special visual features added to vehicles.

NOTAM	A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.
PERIMETER ROAD	A road within the airside to facilitate movement of vehicles to various areas while remaining clear of the manoeuvring areas.
RET	Rapid Exit Taxiway. A Taxiway designed to facilitate the rapid exit of aircraft from the runway.
RESTRICTED AREA	Any part of an airport, designated by notices posted by the airport manager. Access to this designated area is allowed only for persons in possession of an authorised identification card valid for the specific restricted area.
RUNWAY (RWY)	A defined surfaced rectangular area at an airport prepared for the landing and take-off of aircraft.
RUNWAY TURNPAD	A defined area on a land aerodrome adjacent to a runway for the purpose of completing a 180-degree turn on the runway
BLASTPAD	A specially prepared surface placed adjacent to the ends of the runways to eliminate the erosive effect on pavement surfaces by high jet engine efflux forces produced by the airplanes at the beginning of their takeoff rolls
RUNWAY END SAFETY AREA (RESA)	An area symmetrical about the extended runway centre line and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway
RUNWAY STRIP	The area adjacent to the runway extending to 150 m on either side from the centre line of the runway
TAXIWAY (TWY)	A defined path for the taxiing of aircraft, including aircraft stand taxi lane, apron taxiway and rapid exit taxiway.
CLEARWAY (CWY):	A defined rectangular area on the ground, selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specific height
VEHICLE	Any self-propelled ground surface vehicle or mobile equipment (including specialised aircraft servicing vehicles and ramp equipment).

3. CONTRACTOR'S CAMPSITE

An area has been made available for the Contractor's Campsite as indicated on the drawings (Volume 4). It will remain the contractors responsibility to maintain safety clearances from the taxilane and the apron slab when planning the layout of the camp. The contractor has to ensure that his camp is properly

fenced off, screened and secured. Municipal services is available in the vicinity of the main gate and it will be the contractors responsibility to arrange for the necessary installation, metering and COC's together with any administrative costs for providing the said connections. Tariffs will be as per municipal rates, attached as Appendix E to this document.

The Contractor is responsible for all arrangements for obtaining all necessary approvals, establishment and subsequent removal and reinstatement of his construction camp.

The contractor should allow provide for chemical toilet facilities.

The height of any fixed structure (silo's, cranes, etc) for the duration of the contract shall be forwarded to the Engineer prior to erection thereof. The Engineer will verify that these structures do comply with airspace safety regulations and will notify the Contractor accordingly.

The Contractor shall not be allowed to store/deliver materials or occupy any other area, other than the site establishment area demarcated as such.

Under no circumstances will construction traffic, deliveries, etc be allowed through and via the normal airport traffic routes or perimeter roads. Construction traffic that has to travel on the airside must be strictly controlled and channelled via approved routes inside the airport boundary.

The Contractor shall provide 24-hour security at the site camp at his own cost and shall provide sufficient lighting in compliance with the OHS regulations. The Contractor must also allow for full compensation for providing one security guard to control the access at one of the access gates to the site as indicated on the drawings.

4. PROGRAMMING OF THE WORKS

The Manager: Airside must approve the programme of the works which will take place on airside. The programme of the works must be compiled to ensure minimum disruption to airside operations. The Contractor must take the following restrictions into account when compiling his programme of works:

(a) Work next to runways and taxiways

Special arrangements need to be made for any construction work on the runway and taxiways. Work is not permitted in this area without approval from the Manager: Airside.

(b) Restricted Working Times

The construction programme must be based on the restricted working times as shown in Table 1.

Table 1: RESTRICTED WORKING TIMES

Work Areas	Working Times Available
All non-restricted working areas	- Monday – Thursday : 06H00 – 19H00 - Friday : 06H00 – 20H00 - Saturday : 08H00 – 15H00 - Sunday# : 08H00 – 19H30 - Runway 11/29 unrestricted area - Runway 11/29 RESA's - Apron works (1 bay closed at a time) - Perimeter road unrestricted areas
All restricted working areas	- Monday – Thursday : 06H00 – 19H00 - Friday : 06H00 – 20H00 - Saturday : 08H00 – 15H00 - Sunday# : 08H00 – 19H30 - Runway 11/29 Restricted areas (between approx. Alpha Taxiway and Charlie Taxiway – See work programme drawing)
Note : # Sunday work will only be permitted if permission is obtained from the Engineer	

(c) Written Notice

Work that will require the temporary closure of runways and taxiways. The closure of the runway and taxiways and the periods of such closure shall be by arrangement with air and surface traffic control. At least fourteen day's written notice shall be given by the Contractor to the Engineer to enable closure arrangements to be negotiated with the ATNS. Refer to Section 9.3.

(d) End of Shift

On the areas where restrictions apply, all works shall be completed at least 30 minutes before the end of the working time. The termination of the shift must allow for sufficient time to do cleaning work and the compulsory inspection before the opening at the due time, to ensure the safe movement of aircraft after opening. The holding lines, relevant runway markings, stop bar lights and runway edge lights where air traffic movement takes place shall be operational after each shift.

5. STOCKPILE AND SPOIL SITE

Inside the boundaries of the GA, the Contractor shall only stockpile or spoil approved construction material at designated approved areas, which will be provided by the AM. Alternatively the Contractor shall make arrangements for his own spoil sites outside the GA boundaries. The stockpiles will not exceed in height the surrounding vegetation/trees and will not be within 3,0 m of any boundary fence.

Waste matter such as plastics, paper, etc that originates from the Contractor shall be taken to spoil outside the GA boundaries.

6. RESTRICTED ACCESS TO THE SITE OF THE WORKS

(a) Restricted Areas

The Contractor will have restricted access to the works at any given time because simultaneous closure of the runway and taxiways during normal operational hours will not be permitted.

The temporary hazard drawings summarise hazard requirements for the TWY and RWY strips. After every re-opening of the TWY and RWY, the surface of the work area shall comply with these requirements (See Appendix C).

Although the entire site will be handed to the Contractor at the start of the contract, the airport manager and the air traffic controller have the right to decide at short notice where on the site the Contractor may work. Runway 02/20 remains operational and access on the runway is limited to night work and subject to approval by the AM.

Under ILS conditions (instructed by the ATC), for all work areas in restricted conditions, no work shall be allowed next to the RWY or in restricted access areas.

(b) Access Point and Routes

The designated access point for plant and personnel will be indicated to the Contractor. The Contractor will provide 24 hour security at this Gate. The security stall at this Gate will be in radio contract with Fire & Rescue at all times to enable the provision of escort services.

Fire & Rescue will provide staff at strategic points to observe the progress of vehicles along the access routes and to redirect vehicles where necessary.

Construction material must be delivered via the northern access gate to the site camp under escort.

(c) Communication

Both the Engineer's and the Contractor's Safety Managers will be in possession of radios which can communicate directly with Fire & Rescue. These radios will be used, inter alia, to communicate emergencies, as well as to arrange for opening and closing inspections.

The Contractors' staff will be in contact with one another by means of a radio system of their own. ATNS will be required to authorize the use of any radio frequencies on the airside.

(d) Escorts

Fire & Rescue are the primary providers of escort services. Where Fire & Rescue are unable to provide the required level of escort services, Surface Maintenance may be required to provide additional assistance.

Contractor's escort will collect all contract related delivery/service vehicles at the access gate and proceed to the site camps only. Pro-forma visitor forms will be issued to the Contractor and should be completed for each vehicle escorted onto airside. There will be no cost for the procedure, but abuse by any staff will lead to the cancellation of Contractor's escort. All staff entering onto airside will be in possession of a valid identity document.

Pedestrians to be collected by Contractor's escort and transported to site camp. A log sheet of all pedestrians and vehicles escorted onto the construction areas/site camp will be completed on a daily basis and submitted to the ACSA permit office for record purposes. One escort will be allowed to escort a maximum of ten staff members/pedestrians.

7. BARRICADES

The Contractor shall erect, maintain, move and finally remove temporary barriers, fences, signs and markings, all as prescribed by the airport authorities or as shown on the drawings. Barricades, markers and signs have to be placed under escort or while being in radio contact with the ATC, prior to entering a work area for construction purposes.

Movement outside the areas demarcated for construction shall not be permitted, unless special arrangements have been made and approved by the AM.

8. ON SITE STORAGE OF PLANT AND EQUIPMENT

Temporary stockpiling and storage of equipment on the site shall be done as far away as possible from operational areas within the approved demarcated areas for construction work. The Contractor shall submit a proposal for approval by the Engineer's Representative.

9. TEMPORARY TRAFFIC-CONTROL FACILITIES

9.1 Traffic Signs

The Contractor shall supply, erect and maintain all necessary temporary road signs in accordance with South African Road Traffic Signs Manual, Volume 2, Chapter 13 (latest edition).

All temporary road signs, devices, sequences, layouts and spacing shall also comply with the requirements set out in the Road Traffic Act, 1989 (Act 29 of 1989) and its Regulations, the requirements of the relevant authority and the South African Road Traffic Signs Manual, Volume 2, Chapter 13.

The Contractor shall indemnify the Employer against all proceedings, claims, actions, damages and costs which may arise from or be related to the absence or improper functioning or placement of road-traffic signs, barricades, traffic-control facilities, channelisation devices and warning devices.

9.2 Taxiway closing during Construction Period

Approval from the Manager: Airside is required before closing a taxiway for construction purposes. Barricades and steady red lights shall be provided to indicate that a taxiway is closed as indicated in the specification and drawings.

The Contractor shall locate barriers at areas approved by the Manager: Airside. These barriers shall be weighted down by means of sandbags at both ends. The barrier consists of a triangular framework covered with plate sheeting (covered with high intensity grade retro-reflective material) (also see Work Program Drawing in Volume 4).

9.3 Runway and taxiway Closure

The Contractor shall liaise through the AM to gain access to the runways and taxiways, who in turn shall liaise with the Manager: Airside for access. The procedure is as follows:

Any runway and taxiway closure requires at least fourteen (14) days lead- time, except for emergency repairs. As far as is practicable, working areas should be cordoned off from the active parts of the movement area by the placing of physical barriers. This is to both warn pilots and preclude work vehicles inadvertently straying onto the movement area. All barriers must be adequately lit at night. The taxiway lights leading to working areas must be permanently switched off. Guidance on the markings for denoting restricted use areas is contained in ICAO Annex 14 Chapter 7.

A request form for closures of runways and taxiways is attached as Appendix B. This must be completed and e-mailed by the Engineers Representative to the ACSA representative designated by the AM. The Manager: Airside will either by e-mail or fax confirmed time and conditions for closures.

9.4 Scheduled Maintenance

The ACSA Manager: Maintenance and Engineering will contact the Manager: Airside and Manager: Safety to agree on a planned maintenance schedule. The ACSA Manager: Airside will come to an agreement with ATC regarding the planned maintenance schedule. Once the maintenance schedule has been agreed upon the ACSA Manager will ensure that the necessary NOTAM have been communicated to all the Airlines. Scheduled maintenance at ACSA operated airports will be carried out after normal operational hours wherever possible. At GA scheduled maintenance is carried out between the hours of 20h00 and 05h30 local time.

9.5 Unscheduled Maintenance

The ACSA Manager: Maintenance and Engineering will contact the ACSA Manager: Airside and Manager: Safety to agree upon a suitable time for work to be carried out. In the event of the maintenance being of a non-essential nature, 7-days notification must be given by the appropriate maintenance department in order for the ACSA Manager: Engineering or Projects to make the necessary arrangements.

In the event of the work being of an essential nature, the ACSA Manager: Maintenance and Engineering will contact the ACSA Manager: Airside and Manager: Safety to discuss the scope and extent of the work required. Once the closure has been agreed the ACSA Manager: Airside will contact the appropriate ACSA General Manager or Airport Manager to inform them of the closure. The ACSA Manager: Airside will then communicate closure notice via a NOTAM and signals or telephone calls to the affected airlines, aircraft operators or owners and ground handling agents.

9.6 Non-scheduled runway closure for safety reasons

If a runway needs to be closed due to bird scare activities, animal removal, collection of FOD, following the identification of damage to the runway, the Officer in charge of the ACSA Safety Department and/or Fire and Rescue Services Department and/or Airside Inspection Unit will contact the ATC to advise them of the necessity for a temporary runway closure. After advising the ATC, they must then advise the ACSA Manager: Airside and Manager: Safety.

9.7 Runway and taxiway re-opening

After completion of work the Contractor will clean up the area on a daily basis before the handover. A combination of hand brooming and mechanical brooming will be used and a flat truck will be available to remove any swept up debris.

Existing runway markings will be reinstated before the end of each shift, unless otherwise agreed with the Engineer.

Upon receipt of notification of completion of the above, the ACSA Fire and Rescue Services Department Head will conduct a runway/taxiway inspection and advise ATC that the runway/taxiway is now available for use. The Engineer's Representative will give Fire & Rescue progress reports from 2 hours before RWY opening, every 30 minutes. If there is any reason why the runway cannot be opened on time at the specified time the Engineer's Representative will inform ACSA Project Manager as soon as he becomes aware of this situation. The ACSA Project Manager will then initiate the emergency procedures and mobilise the necessary ACSA personnel.

Fire & Rescue will inspect the no-work areas from 1 hour before RWY opening and maintain a vehicle to monitor and ensure no further activity in these areas. Construction activities must be completed 30 minutes before RWY opening. Plant and personnel will be clear of the runway 25 minutes before RWY opening (escort if required). On completion of a shift the Contractor will ensure that the work area is clean and free of all FOD material. Painting should be completed 20 minutes before RWY opening. The Engineer's Representative Officer and Fire & Rescue will conduct final inspection of the work area 20 minutes before the designated opening time. The sweeper truck will not leave the runway until Fire & Rescue has declared the runway open. Once the construction area has been inspected and found satisfactory by Fire & Rescue, Fire & Rescue and Engineer's Representative will sign off the relevant runway handover forms. ATNS will be notified by Fire & Rescue and the area will be opened for use by the specified time.

9.8 TRAFFIC SAFETY OFFICER

The Contractor's Safety Officer shall be made available to discuss safety and traffic accommodation matters whenever required by the engineer." The Safety Officer is responsible for the following:

- (a)** Record on neat and dimensioned sketches and submit to the engineer the position and sign reference number, where applicable, of each sign, barricade, delineator, cone, amber flicker light, guardrail and permanent or temporary painted surface marking feature. The position of each shall be adequately referenced to identifiable permanent features located along the site of the works.

These records shall also show the date and time at which the recorded traffic accommodation features are certified correct by the traffic safety officer, before being submitted to the engineer.

The records shall be amended whenever changes are made in the field and the revised detailed sketches shall be submitted to the engineer. This shall include the recording of the position of lookouts, flagmen and stop/go control men and their associated traffic accommodation equipment wherever they are used.

- (b)** Personally inspect the position and condition of each traffic accommodation feature on the whole site at regular intervals, to record all irregularities discovered and the remedial action taken, and to

sign off as correct and submit to the engineer such record sheets the next day. The Safety Officer shall keep a duplicate book for this specific purpose and a record of photographs on a daily basis.

The Safety Officer shall also submit to the engineer before the start of works, a record of all matters pertinent to site safety and traffic accommodation throughout the site of works. He shall also record the daily labour returns of lookouts, flagmen, stop/go and traffic signal control men employed.

The Safety Officer shall be equipped with a radio and cellular telephone and shall have a vehicle and labourers at his disposal at all times and he shall be directly answerable to the site agent. The traffic safety vehicle shall be a truck with a minimum capacity of 5 tons and shall be equipped with a high visibility rear panel in accordance with the requirements of Chapter 13 of Volume 2 of the South African Road Traffic Signs Manual. The Safety Controller shall have a direct line of communication at all times with the AM police and ATNS responsible for the area within the limits of the contract.

- (c) Ensure that all obstructions related to the Contractors activities be removed before sunrise where applicable and instructed by the engineer and that the runway and taxiways are safe for traffic.
- (d) The Safety Officer shall, also be responsible for removal of broken down vehicles/equipment, resources, etc off the runway and taxiways and implementing actions requested by the AM with regard to the work to be carried out, be responsible for the erection and maintenance of all traffic signs, etc necessary for the accommodation of traffic.
- (e) The Engineer is entitled to call a false alarm at any given time and the cost will have to be born by the Contractor.

10 SPECIAL PROCEDURES FOR CONSTRUCTION AND NIGHT WORK

The Employer reserves the right to order that either all or part of the work be undertaken at night, and that those areas of the runways and taxiways used for taxiing be closed or opened to air traffic to suit the ATC.

Any work undertaken within 50 m from the RWY edge and 50 m from the TWY centreline shall be undertaken when the RWY and TWY is closed. The Engineer's Representative (ER) shall be approached at least 14 days before a NOTAM is required to close specific TWY's or RWY's. Any late submission of the request may result in delays and the cost shall be borne by the Contractor.

Before the commencement of any substantial work on the movement area, a liaison group comprising of representatives from the Airport Operations Department, Safety Department, Air Traffic Control, Airport Maintenance Department and Contractors' agents shall be established. The group will meet as often as considered necessary to review progress and consider the need for any change in working practices to meet operational requirements.

The Contractor's attention is drawn to the fact that his Subcontractors shall also comply with the specified safety regulations for entering airside and that he shall remain responsible for their compliance with the safety regulations. The Weather Bureau shall be consulted by the Contractor during the day prior to any work at night on the runways or taxiways in order to ensure that no delays due to inclement weather occur for re-opening the runway the next morning.

A method statement for every closure (refer to Appendix D) shall be submitted to the AM through the engineer before any work will commence. Careful briefing of all personnel working is one of the most important aspects to ensure high safety standards.

The Contractor shall provide artificial light after sunset to ensure the proper execution of the work in terms of the contract and shall be subject to the AM's approval and the power system shall comply with the Machinery and Occupational Safety Act No 6 of 1983 as amended, and the Standard Regulations for Wiring of Premises of the South African Institute of Electrical Principal agents.

At the end of the night work, the construction area shall be made safe to a distance of 50 m from the RWY edge and 50 m from TWY centreline. This area shall be cleared of all personnel, plant and obstructions and shall have no loose material on the surface before re-opening. The work shall be programmed such that enough time is allowed for cleaning and inspection of the area prior to its re-opening.

Late opening of elements due to the negligence of the Contractor will be subject to penalties as indicated in Volume 3 of the contract.

10.1 Before work commences, agreements must be established on

- The authorised routes - these should preferably be marked with Contractor's signs. At critical points controls should be established. Where there is real risk of conflict between aircraft and vehicles, control points should be manned. At less critical points, controls may be affected by lights or warning signs.
- The communication facilities to be used - where direct control of vehicles is required, each vehicle should either have R/T or be escorted by a suitably equipped vehicle. In some circumstances it may be sufficient to have direct communications with control points by R/T or by direct telephone lines to air traffic control.
- The permitted heights of vehicles and equipment and the limitations to be placed on operating heights of crane jibs and any limitation to be placed on the use of electrical equipment, which might cause interference with navigational facilities or aircraft communications.
- Where contractors work on or traverse movement areas, these areas shall be thoroughly inspected before they are opened again for aircraft use, with particular attention being paid to the presence of debris and general cleanliness of the surface. Where aircraft are constantly using areas open to contractors, inspection will be carried out by ACSA at frequent intervals to ensure that the Contractor carried out any necessary cleaning.
- Adequate markings are required for crane jibs when increased visibility is considered desirable. If work is of a prolonged duration a constant watch should be maintained to ensure that the marking

and lighting of obstacles and unserviceable areas do not degrade below acceptable limits. This also applies to marking and lighting arrangements to indicate a displaced threshold.

- The possible interference of cranes and other equipment on Instrument Landing Systems (ILS) and radar need to be considered in conjunction with those responsible for electronic landing aids. Necessary steps to reduce any limitation to the minimum will be taken. Construction equipment may have adverse affect on obstacle clearance allowances and the appropriate authorities shall be consulted when working arrangements are being planned. The Obstacle Limitation Surfaces according to ICAO Annex 14 will apply.
- The ACSA Projects Department will confer with the Manager: Airside and Manager: Safety as to the feasibility of the project being carried out with minimal disruption to the normal operations.
- The Manager: Airside and Manager: Safety will check through the logistics of the proposed project plan/schedule of works and make any advisory comments.
- Notification of the work to be carried out and details of the possible disruption to normal operations will be sent to the Airlines, Handling Agents and other airside Operators through faxes, NOTAMS, SITA and AFTN by the Manager: Airside prior to commencement of work.
- Construction sites are to be roped, demarcated or hoarded off from the operational area.
- Occupational Health and Safety Legislation is to be adhered to by all.
- All workers on the site will all be in possession of a valid ACSA Security Permit and where applicable, a cell phone permit and camera permit.
- All delivery and construction vehicles must be issued with a valid ACSA Vehicle Permit and all drivers to be in possession of an Airside Vehicle Operator Permit (AVOP)
- Appropriate personal protective equipment to be issued and worn by all workers on site.
- Clearing of debris from the site to be carried out in line with safe working practices to avoid any Foreign Object Damage (FOD).
- Final site inspections must be carried out by ACSA to ensure that any parking stand signage and markings are compliant with recommendations of the Airports Council International (ACI)/International Air Traffic Association (IATA), as contained in their handbook's first edition of 2000 or later.
- On completion of work all Airlines, Handling Agents and other airside users will be informed by the Manager: Airside where operational restrictions have been lifted.

10.2 Briefing Before Project Commences

It is essential that time be set aside prior to commencing with the project, that everyone is briefed on the work activities including individual workmen. Special care must be taken on longer projects that all shifts are included and new employees or replacements are briefed before they commence work on the site. Reference must be made to the responsibility placed on the individual by the Occupational Health and

Safety Act. Under certain circumstances it may be possible to issue written work instructions beforehand, but an oral brief should be held as well to give the opportunity to staff to ask questions. The following list details some of the points that should be included in the brief:

- Task(s) being carried out;
- Works Area and how it is to be marked by day and night
- Whether anyone is permitted to move outside the site boundaries and if so, when and under what conditions
- The permitted working hours and any other restrictions
- The identification methods of warning the working party
- What to do when aircraft approach
- How to warn the working party if a person sees impending danger
- Who to ask in case of experiencing a particular difficulty
- Communications procedures and contacts
- The action to be taken in the event of an accident
- Controlled crossings and other approved routes
- Vehicle lights and markings applicable
- Use of high visibility clothing
- Warning not to leave equipment outside the designated working area
- The importance not to generate any Foreign Object Damage (FOD)
- Under no circumstances is food or rubbish to be left on site as this may attract birds and
- The dangers of engine suction and exhaust blast.

10.3 Marking of a site by day

The Contractor undertaking the work is responsible to ensure that all marking equipment for use such as cones, barriers, fences, etc are approved and available in sufficient quantity.

Airfield Operations will provide the details of the approved pattern of fencing or marking. The limits of each site must be marked either with reflective cones or with Lind-pet (low level) barriers firmly fixed to the ground at a spacing of no more than 3 metres or closer if specified by Airfield Operations.

Where specified, such as for extended projects, a Contractor's fence must be erected as specified in the drawings, Operational Safety Instructions (OSI) and Operational Works Memo's. All holes, unconsolidated ground such as trenches are to be marked by cones even though they may be inside an approved working area. Before work commences a member of the ACSA Safety Department will inspect the site to check that it is marked out correctly and to a sufficient high standard. For all stand closures, a series of cones and glims must be positioned across the back of the stand.

10.4 Marking of a site by night or low visibility

ACSA Safety will specify to the Contractor undertaking the work the type of night lighting and marking equipment to be used. All working areas must be lit during hours of darkness, commencing 30 minutes after sunset until 30 minutes before sunrise or in conditions of low visibility.

Work sites are to be lit by obstruction lights at a maximum spacing of 3 metres. The obstruction lights are to be of a pattern approved by ACSA Airfield Operations. Whenever possible, temporary stop bars are to be installed or permanent stop bars lit to ensure a particular block in which work is taking place is properly isolated. This does not obviate the need for a lookout if specified and if work is taking place.

Work sites that are required to be marked will be inspected by the ACSA Safety Department each night too ensures they are lit to the correct standard.

10.5 Works under on/off conditions

ON/OFF Work can be described as work that takes place on or within the obstruction limits of a taxiway and when an aircraft approaches both men and equipment endangering their safety as well as that of the aircraft and its occupants.

In this case, the men and equipment must clear the area to a safe distance away to allow the aircraft to pass. Once the aircraft is clear, the men and equipment can re-enter the area and continue their work. The conditions for work under ON/OFF work are as follows:

This type of work is only permitted if the visibility is above specified minima as laid down by ACSA Airfield Operations.

- The work must be of such a nature that it can be abandoned and when left it will not be a hazard to passing aircraft
- If equipment/plant is used, it must be mobile so that it can be withdrawn quickly
- All those in the working party must wear high visibility clothing
- R/T Communications with ATNS are to be maintained at all times and a lookout nominated
- All members of the working party must be properly briefed, understand the safety measures and be suitably trained/qualified in the use of R/T communications and procedures; and

If work is carried out at night, red stop bars which surround the pavement block are to be switched on whenever possible to give the party additional protection. The above also apply to urgent electrical repairs.

4. EXISTING SERVICES

Before construction commences on any portion of the site, the Contractor shall arrange with the airport authorities for the area to be examined and thoroughly traversed by the authorities or approved specialist

contractors with service detectors to locate existing services. The Contractor and the engineer or his representative will attend such inspections.

The contact details of the person to be contacted for locating of electrical services on the airside are provided in the contact list (Clause 23).

5. ELECTRICAL EQUIPMENT LIMITATIONS

12.1 Interference with navigational facilities

Where cranes are used, the potential for interference with navigational facilities exists. Fire & Rescue will be notified whenever a crane is to be used, for example, to remove broken down plant.

12.2 Interference with aircraft communications

The Contractor will seek approval from ATNS via Fire & Rescue for the radio frequencies to be used on the project. Should any vehicles or radios be found to cause interference with aircraft communications, the relevant vehicle shall be removed from the site or the radio switched off until the fault can be traced and repaired.

6. HOT WORK PERMIT

The following activities have been identified as hot work:

- Heating paver screeds using gas burners
- Heating bituminous products in spray tankers using gas burners
- Any other work involving open flames

A hot work permit with a validity period of two weeks will be applied for and will list the above activities. Fire & Rescue will be asked to extend the validity of this permit every two weeks.

A copy of the permit will be carried by everyone on the site who is likely to engage in hot work, as well as the Safety Officer. A copy will also be kept in the Site Safety File.

7. RADIO COMMUNICATION ON THE AIRPORT

The Contractor shall establish an acceptable radio communication system on the airport. Such a system must be approved by the ATC to ensure that no interference with normal aeronautical communication occurs. A special radio frequency will be provided by ACSA for the contract.

Radio communication between the AM and the Contractor will be effected by means of two-way radio units. These units are to be supplied by the Contractor. The number of units permitted shall be determined by the AM, depending on the need for direct contact with the Contractor. The Contractor's personnel shall complete a radio operator's basic course before they use the two-way radio units. The duration of the radio course is 5 working days. The contact person for confirmation regarding cost and course dates is listed in the contact list. The Contractor shall be responsible for any maintenance costs, damage or loss of these units.

Alternatively the AM can on request supply all escorts with communication equipment and their instructions shall be adhered to. No access shall be given on the airside without the escort, and all personnel and equipment shall remain behind the escort when elements are entered. All delay to the works due to the incidental non-availability of such escort will be for the Contractor's account.

All permanent staff will apply for ACSA permits. The Contractor will provide within one week of award of contract a list of staff (including identity numbers) who will receive airside induction training. A meeting will then be scheduled to inform the Contractor of the permit requirements and issuing of permits. Staff

with serious criminal records will be rejected. Special induction training sessions will be scheduled for the contract to ensure timeous issue of permits to permanent staff members.

8. RESPONSIBILITY OF AIRPORT MANAGER AND AIR TRAFFIC CONTROL

15.1 Airport Operations and Air Traffic Control

The AM and the Air Traffic Controller (ATC) are ultimately responsible for the safe and efficient operation of the airport.

The AM will in his/her official capacity have authority to give the Contractor verbal or written orders on matters concerning the operation, security or safety of the airport and the Contractor shall inform the engineer of the orders and carry out the instructions as if issued by the engineer.

The ATC is responsible for the safe movement of all aircraft, both in the air and on the ground. The ATC shall at all times have absolute authority regarding the movement of any construction personnel, vehicles or equipment, where such movement take place within the obstruction free areas of existing facilities, or where it affects the safe movement of the air traffic, and his/her instructions shall be implicitly obeyed. The ATC's decision regarding the acceptability and programming of the Contractor's activities within the above mentioned areas shall be taken into account.

All liaison with the AM or ATC shall be arranged through the engineer. The engineer will establish detailed lines of communication.

15.2 NOTAM

The Manager: Airside will arrange for approval and issue of a NOTAM. He will report back to the party who requested for the NOTAM, who in turn shall liaise with Fire and Rescue for an escort and ensure that the Contractor has completed the safety induction course.

15.3 Permits

The AM 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 the permits. Where necessary the application may include cellphone and cameras.

The AM may at any time withdraw or suspend the Airside Vehicle Permit or any Airport Security Permit.

All permanent staff will apply for ACSA permits. The Contractor will provide within one week of award of contract a list of staff (including identity numbers) who will receive airside induction training. A meeting will then be scheduled to inform the Contractor of the permit requirements and issuing of permits. Staff with serious criminal records will be rejected. Special induction training sessions will be scheduled for the contract to ensure timeous issue of permits to permanent staff members.

9. AIRPORT SECURITY

The Contractor shall ensure that the security of the airport is maintained wherever it may be affected by his operations. He shall be responsible for the observance of all security regulations and related requirements, both by his employees, subcontractors and their employees, as well as by his suppliers.

Entry into the security area, whether for personnel, vehicles or self-propelled construction equipment shall be subject to the issue of access permits. All personnel or vehicle permits shall be displayed at all times while such person or vehicle is within the security area. Permits may be issued to grant access to a designated area only and it shall be the Contractor's responsibility to exercise the necessary control on site in order to prevent trespassing by personnel or vehicles in this regard.

No photographs shall be taken on the airport without authorisation by AM and the possession of unauthorised cameras and cell phones on the site is expressly forbidden. The possession of any firearms, explosives or other weapons on the site is also expressly forbidden. Smoking or fires are prohibited in certain areas on the airport, and forbidden on the airside, and fires required for any purpose may only be lit after written approval has been obtained from the airport authorities who will also supervise such fires. Smoking is only allowed at properly demarcated areas and marked with SMOKING ZONE signs.

Sketches, drawings, diagrams, information, etc regarding the works may not be made, recorded or reproduced other than that specifically required by and for the purpose of the contract, and no sketches, drawings, diagrams, information, etc may be published in magazines, journals or elsewhere unless authorised in writing by the Employer.

This document contains information related to the defence of the Republic of South Africa and should be treated as secret. Amongst others, the provisions of section 118 of the Defence Act, Act 44 of 1957, as amended, as well as the provisions of the Official Secrets Act, Act No 16 of 1956, as amended, are applicable.

The failure of the Contractor to comply with these or other security regulations and requirements, shall be sufficient reason to cancel the Contractor's access permits and/or terminate all construction activities until such shortcomings or breaches of security have been rectified, and the Contractor shall have no right to claim for any resulting delays, standing time or losses whatsoever. Any costs incurred by ACSA in rectifying and controlling the breach will be for the Contractor's account.

In order to reduce the risk of theft and FOD creation on the airside all recovered material including lights, electrical cabling will be securely stored in containers in the site camp. No additional payment will be made for the provision of these containers and the Contractor shall include this in his establishment cost. ACSA will carry out periodic audits to confirm compliance in this regard.

10. MOVEMENT WITHIN THE AIRPORT (AIRSIDE)

17.1 General

The Contractor shall control all movement of his personnel, vehicles and equipment according to the stipulations laid down by the ATC, or specified in the documents or indicated on the drawings. In order

to achieve proper control over all movements on site, certain areas, routes or corridors shall be clearly demarcated by the erection of temporary barriers, cones, construction fences or security fences, as indicated on the drawings or instructed by the AM. Such fences, barriers or cones shall be erected or placed prior to the commencement of any construction activities in any particular area, and shall be moved to new positions as the requirements change during construction of the works.

Movements and operations within the above mentioned demarcated areas shall not normally be subjected to any restrictions from the ATC. Any access, haul or construction routes shall however, be fixed after consultation with the AM.

The Contractor must allow in his construction program for any time required to arrange for permission for employees to enter the airside area to execute the contract. Access to the working areas shall be only through ACSA established gates.

The cost of permits for the Contractor's personnel and vehicles will be borne by the Contractor. It is the Contractor's responsibility to arrange for timely application for permits, including attending the required induction or other training courses. The cost of these courses or any subsequent delay will be for the Contractor and is not refundable.

17.2 Airside access

The Contractor's employees will not be allowed to enter the airside area without permission. A Security Permit to enter the airside area will ONLY be issued to persons who have undergone the compulsory prescribed Safety Induction course. All the Contractor's labourers and subcontractors shall attend a compulsory safety course. Contact details for more information concerning this course are given in the Contact List. The Contractor shall provide escort services as indicated in Volume 3. Every person who has completed the safety induction course shall be in the possession of a referee whistle or similar approved. This whistle shall only be used to warn a remote person infringing the safety of the airside operations.

Stakeholders who wish to conduct their own training may do so provided the necessary accreditation is obtained from the Aerospace Industry Education Training Board (AIETB).

There are various accredited training bodies that can provide training, of which Aviation Academy for Southern Africa (AAFSA) is one. Contact details are provided in the Contact List.

All workers entering the airside area must wear lime coloured safety reflective waistcoat type jackets. Waistcoat jackets are more visible during night and low visibility/fog than the vest type. The Contractor's employees may be exposed to excessive aircraft noise and the required measurements shall be taken to comply within the Health and Safety regulations. The Contractor shall warn their employees regarding aircraft jet blast.

Access for construction works to the airside area must be limited to the minimum. Special permits for temporary workers to enter the airside area are required. Permits will not be issued to persons of suspect background. Non South Africans must hold valid work permits to qualify for Security Permits. Full particulars on application will be required. Any worker, who is granted a permit to enter the airside area,

must wear such permit while on site and must also be in possession of his/her identification document (ID). The Contractor's workforce will be checked from time to time to ensure compliance with the above. Any personnel found without a permit and an ID will be arrested and charged. The Contractor will be held liable for the behaviour of his personnel.

The ACSA permit/security policy must be adhered to at all times. The policy document can be obtained from the Permit Office (see Contact List). Abuse of the system will lead to termination of the issue of any further permits and permits are not transferable.

The Contractor must confirm with ACSA and control the process of obtaining the necessary permits for his workforce that may have to work on the airside. He must further manage the process during construction and his tender must allow and include for possible loss of time for workers to move through security check points, etc.

All cost of obtaining permits will be for the Contractor's account. When a permit is no longer required for the workforce the Contractor shall return the permit to the Permit Office.

ACSA will provide its own security during the construction period. The security will comprise of security equipment, checkpoints, metal detectors, X-ray machines, etc.

The Contractor may provide security guards in the campsite. A maximum of one security person will be allowed to sleep on the premises. The Contractor may also apply to the AM in writing, requesting to accommodate an additional security person. ACSA security must vet and clear all security guards permitted to sleep over on the premises and security guards who have not been vetted and cleared will not be permitted to sleep on site. Should the Contractor opt to use an alternative security company, the security company must also be cleared with ACSA security.

17.3 Airside movement

The Contractor shall submit a plan to the Manager: Airside for routes to be used for travelling between the various construction areas, spoil site and campsite. The Contractor will not be permitted to travel on any other routes.

17.4 Airside vehicle control system

17.4.1 Responsibilities of the Contractor

Contractors wishing to operate vehicles on the airside without the AM's escort shall make the necessary applications in the manner set out below for each vehicle and driver. As a condition of approval of an application for an Airside Vehicle Permit, the company shall ensure that all vehicles and drivers are covered by the Contract Works, Public Liability and SASRIA Special Risks Insurances.

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

The Contractor shall immediately report to the AM 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.

17.4.2 Airside vehicle permit

Applicants are to demonstrate an operational need for the vehicle to enter the airside, and include the following details of the vehicle:

- Name and address of the owner
- Make and model
- Type of work to be undertaken
- Proposed areas of operation
- Certificate of provincial vehicle registration (or reasons why the vehicle is not registered)
- Any special features

Vehicles are to display the current Authority for Use Airside Permit on the right hand side of the windscreen or in a holder. All vehicles (including delivery vehicles, etc.) shall display appropriate identity signage as follows:

Lettering shall be 25 mm wide and 200 mm high, black or dark blue. Signage shall be applied to both sides and on the roof of the vehicle. The company's prefix shall be clearly visible, as well as the vehicle's registration or fleet number. All vehicles registration shall be recorded in the ACSA logbook.

A medium sized amber strobe light shall also be fitted on the roof or other high part of the vehicle or construction plant.

Vehicles shall be registered, or if not registered, shall meet the mechanical and road-worthiness requirements of the relevant provincial authority. In the case of specialist vehicles and equipment, the recognised industry standards shall be met.

An appropriate radio equipped vehicle (eg. from Safety/Fire and Rescue or Contractors approved Escort) shall at all times escort vehicles wishing to operate on the manoeuvring areas of airports.

17.4.3 Authority to drive airside

The authority to drive airside is coupled to the Airside Vehicle Operators Permit (AVOP).

The Contractor certifies by applying for an AVOP that the proposed driver:

- has an operational need to drive on the airside
- holds a current provincial driver's license and, where appropriate, is endorsed with an official license to cover the specific type/s of vehicle/equipment to be operated and is able to operate the vehicle/s concerned in a competent and safe manner

- is proficient with the terminology used to describe the airside and is familiar with the airport layout relevant to his/her driving duties
- is conversant with the contents of this Procedure Manual.

Except as otherwise specifically authorised, no person shall drive a vehicle on airside unless the vehicle has a current Airside Vehicle Permit and his Security Permit, which is valid for that area of the airport under construction. It is an explicit condition that the Contractor maintains a control system, at the defined security gates, for the access to vehicles and people from outside using these gates during the work periods. This control shall include giving directions and provide contractors escorts to and from the specific work area.

17.4.4 Airside Vehicle Operators Permit - AVOP

An AVOP permit is only required for the Contractor's supervisor who has the responsibility to lead the workforce onto the airside work place. As a first step, drivers of any vehicles or items of construction equipment must hold an authority to drive airside (Airside Vehicle Operators Permit) - AVOP, endorsed by the ACSA Airport Authority. Such Driver's Authority is not transferable between individuals or between airports and must be carried on the person for the duration of the works on the Airside. The above permit is issued to the driver or operator of equipment subject to completion of theoretical and practical examination and satisfying the competency assessments. Drivers and Operators are also subject to medical examination, and shall be in possession of a valid driver's license and Public drivers permit where necessary.

All vehicles and items of construction equipment shall display the permit authorising entrance to the airside clearly in the windscreen of the vehicle or item of construction equipment.

As a driver on the Airside of the airport, it is the driver's responsibility to ensure that he/she remains up to date with the latest amendment to the Airport Airfield Regulations.

17.4.5 Rules for driving airside

A driver wishing to operate vehicle(s) on airside areas of the Airport shall:

- wear a valid Airport Security Permit at all times when in a restricted area
- only operate a vehicle displaying a current Airside Vehicle Permit
- produce the Airport Security Permit and Airside Vehicle Permit on demand by the AM
- comply with any instruction given by the Manager: Airside at all times
- only operate a vehicle within the area of operation as approved by the Manager: Airside
- an escort must be arranged by the Manager: Airside should the driver operate beyond the approved areas.

All drivers shall:

- give way to manoeuvring aircraft or an aircraft on tow (operation of the red anti-collision beacons may indicate that aircraft engines have started or that push-back or towing of the aircraft is about to commence or is underway)
- obey speed limits. Unless otherwise indicated, speed limits are:
 - on an Airside Road: 30 km/h
 - on perimeter service roads: 30 km/h
 - on an Aircraft Parking Stand: 5 – 8 km/h
 - Elsewhere on apron or movement area: 15 km/h
- obey all other road signs and markings installed around the airport (markings are not always accompanied by associated road signs)
- follow the service roads (apron service roads are delineated by white staggered lines) provided for vehicular movement (as indicated by the AM after award of tender)
- make sure that loose material, equipment and spoil material carried on a vehicle is covered adequately to prevent spillage and where spillage does occur, to clean it immediately
- when operating a vehicle at night, or in periods of poor visibility while moving on the movement area, ensure headlights are dipped and tail lights are displayed as for normal night driving
- park vehicles and equipment in areas specified by the AM (note that Areas marked for steps and are vacant may be utilised by vehicles associated with the servicing of aircraft in the period ½-hour before to ½-hour after arrival or departure of aircraft)
- when operating vehicles in excess of 4,3 m in height, obtain the necessary clearance, either by radio or by telephone from Apron Control to use the alternative routes as indicated by ATC
- when operating vehicles in excess of 4,3 m in height when crossing a taxiway, runway, apron, etc. outside the delineated service roads or any service vehicle behind the white safety lines at the back of aircraft stands, do so only when:
 - (i) there is no aircraft on the facility
 - (ii) no aircraft is about to move from the aircraft stands
- take extreme care when overtaking any other vehicle on airside service roads.

Drivers shall not:

- operate construction vehicles/plant equipment without having had an adequate rest period since the previous shift
- drive on taxiways or runways unless in radio communication with Air Traffic Control or under escort by an Airport Authority vehicle
- operate a vehicle while under the influence of drugs or alcohol

- operate a vehicle while taking medication that can cause drowsiness
- operate a vehicle closer than 50 metres to an aircraft
- drive a vehicle between passengers moving to and from an aircraft.

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.

17.5 Accident and incidents

17.5.1 Scope

This procedure details the reporting steps to be taken by all ACSA personnel as specified below, on all ACSA owned or managed airports including sites occupied by stakeholders and contractors. These steps shall be followed in the event of an accident or incident within the parameters as per the definition.

17.5.2 Objective

To effectively inform all ACSA relevant management and personnel of all incidents or accidents, which have the potential or could result into injury, illness, disease, death, aircraft disaster, damage to property, equipment, vehicles, major aircraft obstruction, normal operational obstruction and business interruption.

17.5.3 Definitions

As per ACSA Safety Definitions Document Z002 004.

17.5.4 Procedure general

- Should an accident/incident be reported, or come to the attention of any individual, the accident/incident shall immediately be reported to the Help Desk and the Fire Department.
- Upon receipt of the above, the one party shall contact the other (Help Desk to Fire Department or vice versa) irrespective of whether they are aware of the accident/incident or not.
- On receipt of the above information, by either the Help Desk or the Fire Department they shall immediately inform the Managers: Airside, Security, Safety and Duty Manager (if during a weekend).

- (d) Under no circumstances may any information be relayed to any person outside of ACSA or member of the media without prior arrangement and approval of the Regional General Manager.
- (e) Distinction shall be made between the following types of accidents:
 - Incidents of a minor nature, which do not have an effect on the operational efficiency of the vehicles, aircraft, building or airport property, involved and reported within 24 hours of occurrence.
 - Accidents, which cause damage to property affecting the operational efficiency of vehicles or infrastructure or causing injury, illness or disease to persons travelling or visiting the airport and reported immediately to the AM and the SAPS. Where possible neither the driver, the passenger nor the vehicles should leave the accident site before the arrival of the police.

The Manager receiving the information shall upon receipt, use his/her discretion by immediately taking the necessary steps to restore the situation and it necessary report the situation to the Regional General Manager.

17.5.5 Responsibilities

The overall responsibility for adherence to this procedures lies with the relevant ACSA Regional General Manager. However, in the absence of the relevant ACSA Regional General Manage and on a shift basis this procedure shall rest with the most senior person on duty at the Help Desk and the Fire Department. Due to the necessity of compliance with this procedure it is not possible to nominate one responsible person.

17.5.6 Verification

This procedure will be verified in accordance with Safety Verification Procedure Z002 002.

17.5.7 Non-conformance

Any deviation from this procedure will be identified and registered with immediate corrective measures taken on the spot to limit negative effects in accordance with ACSA Safety Non-Conformance Procedure Z002 001.

17.5.8 Reference

ACSA Safety Non-Conformance:	Procedure Z002 001
ACSA Safety Verification:	Procedure Z002 002
ACSA Safety Change Control:	Procedure Z002 003

17.5.9 Subordinate Documents

Working Instructions attached to this procedure.

Working Instructions attached to ACSA.

Safety Non-Conformance: Procedure Z002 001

Safety Verification: Procedure Z002 002

Safety Change Control: Procedure Z002 003

17.5.10 Change Control

This procedure may only be changed with the authorisation of ACSA's General Manager: Airport Services and in accordance with ACSA Safety Change Control Procedure Z002 003.

17.6 Additional requirements regarding construction activities

17.6.1 Existing surfaces

The surfaces of existing facilities at and adjacent to places where the Contractor is working shall be absolutely clean whenever they are used by aircraft. This will require the presence of a cleaning team to remove all debris, stones or other material from the surfaces. The Contractor shall be responsible for any damage to aircraft or other equipment as a result of failure to comply with this requirement. The Contractor must provide designated Foreign Object Debris Bins within the confines of the working area.

17.6.2 Barricades and markings

The Contractor shall erect, maintain, move and finally remove temporary barriers, signs, fences and markings required by the employer, all as prescribed by the airport authorities or as shown on the drawings.

Barricades, markers and signs shall be placed under the direct supervision of the F&R or ER's Safety Controller whilst being in radio contact with ATC, prior to entering a work area for construction purposes. No movement of the Contractor will be permitted outside demarcated areas for construction, and these must be treated as NO-GO-AREAS. (Also see Par 20.1.6).

17.5.3 Illuminated Runway closure marker

The existing Runway closure marker at TH11 shall be moved to a position outside the new TH11 RESA construction area for the duration of the Runway extension and RESA construction. No

construction work will be allowed until the closure marker has been commissioned and approved by AM.

After completion of the extension works and RESA, the closure marker will be relocated to a new position just west of the new blast pad in the RESA.

Construction on the Runway will not be allowed unless the closure marker is in position and operational.

17.6.4 Unforeseen delays due to action by airport authorities

The Contractor shall note that, at any time during the contract period, the arrival or departure of any aircraft may be delayed or brought forward, and the Contractor may be required to adapt the programme of his work accordingly.

11. ENVIRONMENTAL CONSIDERATIONS

The Environmental considerations that the Contractor must adhere to are specified in Clause C3.3 (Volume 3).

12. THE SAFETY PLAN

The following fundamental safety procedures must be taken into account with which to ensure that work in the Movement Area is properly conducted and are to be followed by those responsible for organising and briefing working parties.

- (a)** The following very important information must be made available to all staff required to conduct works on the Movement Area:
 - i.** Know whom to contact and by what means should a problem arise.
 - ii.** Know what action you will have to take in the event of an accident.
 - iii.** Manoeuvring Area Entry Points, Entry and Exit points to the Manoeuvring Area must be via an inter-stand clear way.
 - iv.** Always inform Airfield Operations and the ACSA Safety Department when work in an area has been completed.

- (b)** Operational Areas
 - i.** Always ensure that Airfield Operational Clearance has been obtained before commencing with the work required to be conducted. ACSA Airfield Operations and ATC must approve operational Clearance for ALL work taking place on the Movement Area, including all designated Grass Areas within the Airport Boundary. Routine or planned work is normally

discussed with Airfield Maintenance Planning prior to the start date. This process can be managed daily and/or weekly by means of the Works Meetings held.

- ii. When work involves a complicated layout or difficult phasing, Airfield Operational Planning will issue a separate “Works Memo” accompanied by the necessary drawings and detailed requirements to be included as part of the Works Programme:
- (c) Where work is extensive and affects large numbers of aircraft and major traffic diversions, an Operational Safety Instruction (OSI) will normally be issued as well as referred to the Works Programme.
- (d) Where necessary, work will also be notified by NOTAM's or AIP Supplements.
 - i. Urgent work and certain specified work, including routine inspections, replacement of light fittings, repair of pit covers on the runways, and maintenance of navigation aids and communications equipment at existing sites are subject to prior approval from Airfield Operations and Planning, and must be cleared by ATC.

Notwithstanding the permission granted to commence works, no vehicles or equipment shall be permitted within the Cleared and Graded Area when a runway is in use for landing or take-off. Any vehicle engaged in routine maintenance in terms of ON/OFF conditions shall withdraw to the limits of the Cleared and Graded Area whilst an aircraft is either landing or taking off.
 - ii. Examples of safety checklists incorporating the various items to be considered in the safety plan are attached in Appendix B, and include:
 - RWY/TWY Closure And Opening Checklist
 - Daily works Checklist
 - Additional Daily Works Checklist.
- (e) The Safety Plan will be executed in four phases during the night work construction periods.

19.1 Phase 1: Kick-off meeting to be chaired by the ER 1 hour before the Taxiway/Runway is closed

The primary function of the kick-off meeting is to determine if all measures are in place to allow a normal shift's work to be completed in time and as indicated in the Contractor's Method Statement. The following representatives of parties involved with the project will attend the meeting:

- The Engineer's Representative (ER) and ER's Safety Controller
- Site Agent (for each contractor on the project including subcontractors)
- Site Safety Officer/Escort services
- Representative of the AM safety or delegate

- F&R Shift Controller

The following agenda will be discussed and minutes taken by the ER or his representative or the ER's Safety Controller:

- Confirm emergency procedures (by means of detailed explanation by the Contractor)
- Current weather condition and wind direction (feedback by ER's Safety Controller)
- Expected weather conditions, wind direction and Air Traffic Movements for the night (feedback by RE's Safety Controller)
- Plant and personnel (List to be compiled by Contractor's safety official)
- Check hard copy of NOTAM requirements and confirm with ATC (ER's Safety Controller)
- Check available work time and confirm required quantities
- Check latest status and departure time of aircraft (F&R)
- Confirm construction plan, work areas and routes to be followed by Air Traffic and Construction Vehicles, compare with NOTAM (ER's Safety Controller to submit route diagram)
- Confirm availability of Traffic Signs, Barricades and Delineators and the responsibilities for moving the signs in place (ER's Safety Controller to submit traffic diagram)
- Confirm Method Statement by the Contractor
- Confirm operational requirements:

- Plan transverse and longitudinal joints	- Contractor
- Temporary paint markings	- Contractor
- Moving temporary taxiway lights	- Electrical Contractor
- Closure of taxiways	- ER's Safety Controller
- Spoil and stockpile sites as per the drawings	- Contractor
- Affected electrical services	- Electrical Contractor
- Open excavations along the facilities	- All Contractors
- Confirm the availability of a qualified Motor Mechanic on site
- Confirm there are sufficient critical spares available for critical plant

19.2 PHASE 2: Taxiway/Runway closure checklist to be completed before access to facilities

The ER's Safety Controller will report on the following matters:

- Taxiway/Runway Closure Markers, Barricades and Delineators placed in position
- Plant and vehicles provided with Amber Flash Lights and Reflective Tape as required
- Personnel have Lime Reflective Jackets and necessary valid permits (eg. AVOP, etc)
- Security measures at the gate are in place

- Radio Communications of both F&R Escorts and ER's Safety Controller in place

19.3 PHASE 3: Operational matters during construction

The ER's safety controller will inform the Contractor to adhere to the following timetable during the shift to ensure that the Taxiway/Runway can be opened to Air Traffic in due time:

- ER's Safety Controller must confirm with the Contractor 2 hours before taxiway/runway opening time the official completion time (Refer to items 20.1.1, 20.1.7).
- Construction activities will be completed 30 minutes before taxiway/runway opening time. ATC will be informed on completion of the construction activities.
- No longitudinal steps will be allowed.
- Temporary paint markings for live taxiways and runways will be completed 20 minutes before opening. ATC will be informed on completion of the paint markings.
- Plant will vacate the runway 25 minutes before opening, to designated storage areas.
- The ER's safety Controller must be finished with inspection of work completed 20 minutes before opening after which the vehicle barricades shall be removed.
- The taxiway/runway opening checklist will be completed and handed over to officials of Fire and Rescue completed 10 minutes before opening.
- The runway closure markers are to be removed on instruction of the officials of Fire and Rescue 10 minutes before taxiway/runway opening time.

The Contractor will be required to include the above timetable in his proposed Construction Method Statement to be approved by the Engineer and the AM. This will include a methodology for cleaning the work area and the haul routes. A cleaning team and equipment will be on standby till one hour after opening should additional cleaning be required on instruction of Fire and Rescue.

The Construction and phasing plan indicate the order of construction to prevent conflict between aircraft movements and construction vehicle routes. Haul routes will follow perimeter road, apron and taxiways. Delineators will indicate the haul route between the work area and the gate or spoil and stockpile areas. Vehicles will not be allowed to move neither onto the grass verges nor close to the Nav aids.

Barricades will be placed at the entrance to taxiways affected by night work such that aircraft approaching a closed taxiway will have an alternative route to follow. Each work area will be totally isolated by means of barricades and Markers, except for a single access for construction vehicles. Work areas will be demarcated at least 50 m away from any "live" Taxiway centreline and 80 m away from the Runway centreline.

Vehicles will be fitted with reflective tape, 2 strips, attached horizontally, each 150 mm wide and with 150 mm gap along the two longer sides of the equipment. Rotating amber lights will be fitted to the equipment. Construction teams will be identified by colour codes.

All lights on vehicles, plant or other obstacles, the work area and used for demarcation will be inspected regularly by the ER's Safety Controller. Any malfunctioning light need to be replaced within 30 minutes.

As part of the ER's personnel, the Safety Controller will have the following duties on site:

- Confirm with ATC on a continuous basis the scheduled route for aircraft and vehicles
- Inspect and confirm Markers, Barricades and Delineators at the start and during routine inspections on shift;
- Check safety procedures and markings by the Contractor;
- Keep in contact with Escorts and give instructions if required by ER
- Keep track of ATC instructions to aircraft and their movements and notify if errors have been picked up
- Keep track of vehicle movements and give assistance where required; must be informed of visitors and subcontractors coming to the work area, and be informed of who the escorts are
- Liaise with Airport Security on permits and security at the gate, and do regular spot-checks for visibility of permits on the Contractor's employees.

19.4 PHASE 4: Runway or Taxiway Opening Checklist to be completed 10 minutes before opening or as required by Fire and Rescue in case of aN emergency opening of the Runway or Taxiway

The work shall be programmed such that enough time is allowed for cleaning and inspection of the runway/taxiway prior to opening of the element. Late opening of elements due to negligence of the Contractor will be subject to penalties. (See 20.1.3)

The work areas and haul routes will be inspected by the ER's Safety Controller 20 minutes before opening after which the following Taxiway/Runway Opening Checklist will be completed:

- Excavation backfilled where required in RWY and TWY or TWY Strip
- Ramps complete and in place as required
- Haul routes clean
- Work area clean
- Plant and delineators moved to the designated areas
- Personnel ready to move Barricades and Markers to designated areas on instruction by Fire and Rescue.

The checklist will be signed by the Contractor's Safety Official, ER's Safety Controller and officials of Fire and Rescue, 20 minutes before opening. The checklist must be completed by the ER's Safety Controller.

13. THE CONTINGENCY PLAN

The following actions will be taken if required:

20.1 Late completion on a shift

20.1.1 Asphalt work, Earth works, Layer works and Electrical work

- ATC will be contacted by the ER's Safety Controller via F&R 2 hours before official completion and again 1 hour before completion and the status communicated.
- Should estimated completion be later than the designated completion time, the Engineer will advise on immediate termination of work and making safe of the work area.
- The Taxiway/Runway Opening checklist will be done.
- Handover to Fire and Rescue team will follow.

20.1.2 Paint markings

The paint contractor will be contacted 3 hours in advance of his services being required and his attendance confirmed every hour. Yellow and white paint and hand equipment shall be available on site for possible emergency use.

20.1.3 Confirmed late completion

This shall be identified 2 hours before opening and again 1 hour before opening and confirmed by the ER's Safety Controller and communicated through F&R to ATC and the Help Desk. The expected completion time shall be made known 30 minutes before opening time or earlier and adhered to.

The ER's Safety Controller will go through the opening checklist before signing the handover form.

20.1.4 Sudden rain

Where a sudden downpour occurs, work will be stopped and the balance of the work period re-planned in order to open the runway to air traffic at the appointed time. Should rain delay critical asphalt work which could delay opening of the runway or taxiway, paving will be stopped and a temporary ramp installed.

20.1.5 Emergency flight /fog/low visibility

Should the Contractor be required to vacate the runway due to the AM's need to use the ILS, this will be treated as an emergency measure. Works will be stopped immediately. A temporary full width ramp shall be installed in the case of asphalt works and earthworks excavations backfilled in the case of earthworks as per strip hazard requirements. The Contractor shall evacuate the runway within 45 minutes of being notified of the emergency.

20.1.6 Aircraft or vehicles violate no-go areas

The ER's Safety Controller will notify ATC via F&R per radio and if possible, physically stop the violation. (Refer to Par 15.1).

20.1.7 Non-attendance of radio or communications support

The ER's Safety Controller will notify the controller at the Fire Station and the Contractor will be notified to stop all work and vacate the work area if there is no attendance in 30 minutes. A temporary ramp will be installed and the Runway/Taxiway opening procedures will be followed.

This rule will also apply for telephone and cell phone communication failure between the ER's Safety Controller and F&R.

20.1.8 Inoperative plant on the taxiway/runway

Safety Controller will notify ATC per radio. ATC will be contacted 2 hours before official (as per NOTAM) completion time and works will be stopped. ATC will be contacted again 1 hour before completion and the status communicated.

The Contractor shall ensure that any plant inoperative on the RWY or within the ILS restriction distance (Zone III) can be removed immediately. The Contractor's method statement shall clearly indicate how inoperative plant in these areas, will be removed.

14. REPORTING OF ACCIDENTS/INCIDENTS

Contractors shall report to the AM 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. Refer to paragraph 15.

15. PENALTY FOR NON-COMPLIANCE TO THE AIRSIDE RULES AND SAFETY SYSTEM

The Contractor's attention is drawn to the penalty system introduced by the AM to enhance airside safety. The contractor shall be conversant with the content of the GA Airside Safety Penalty System

document, which is available from the Department Head: Aviation Safety or go the website, www.acsa.co.za.

Under no circumstances will the Contractor be allowed to make use of any baggage trolley or other airport equipment. Should the Contractor or his Subcontractors be seen to make use of any trolleys or other airport equipment, an immediate spot fine of **R3 000,00** per occurrence will apply and such monies will automatically be deducted off any payment certificates due to the Contractor.

Similarly the contractors and subcontractors are limited to their actual site establishment areas and places of work and under no circumstances will materials, equipment, tools, cooking or any other disturbances be allowed in public areas and delivery of materials via operational environment in which their work will be performed. A spot fine in the form of a R1 000,00 penalty per occurrence will be deducted off any payment certificate due to the Contractor should the above not be adhered to.

The Contractor's employees are to be clearly identifiable and must be discouraged to visit the public areas of the airport.

Failure or refusal on the part of the Contractor to take the necessary steps to ensure the safety and convenience of the public accommodation of traffic, resources such as plant and personnel in accordance with these specifications or as required by AM or ordered by the engineer, shall be sufficient cause for the engineer to impose penalties.

Fixed and non-fixed penalties shall be deducted for each and every occurrence of non-compliance with any of the requirements of the standard specifications. In addition time-related penalties over and above the fixed penalties shall be deducted for non-compliance as specified.

16. CONTACT LIST

Attached is a list of the telephone numbers of persons who can be contacted concerning site related issues.

	Function/purpose	Name	Contact number
1	Emergency number	Help desk Fire Department	044 876 9310
2	Manager: Projects	Mr Arvind Jeewan	082 784 3211
3	Project Engineer	Mr Arvind Jeewan	082 784 3211
4	Senior Safety Compliance Officer	Sors Grobbelaar	082 589 1763
5	Manager Airfield Services	Deon Groenewald	082 455 0714
6	Safety Induction courses	Erna Theron	082 897 5681
7	Radio Communication course	Deon Groenewald	082 455 0714
8	Spoil sites	Marclen Stallenberg	082 305 4595
9	Campsite	Marclen Stallenberg	082 305 4595
10	Locating existing services: • Electrical services • Wet services (Bulk)	Marclen Stallenberg Riaan Lombard	082 305 4595 082 455 0716
11	Existing ATNS services	Hennie Hubbard	082 569 9815
12	Surface Maintenance	Yanga Jingisa Ikho Ntunja	071 353 3371 044 876 9310
13	Access Permits	Kobus Krige	082 455 0713
14	Engineer, Delta BEC	Mr Piet Agema	082 809 4838

Amendments

Date	Item Changed	Source

17. DECLARATION

I/we herewith declare on (date)that I/we:

(name) (signature)

(name) (signature)

(name) (signature)

(name) (signature)

(name) (signature)

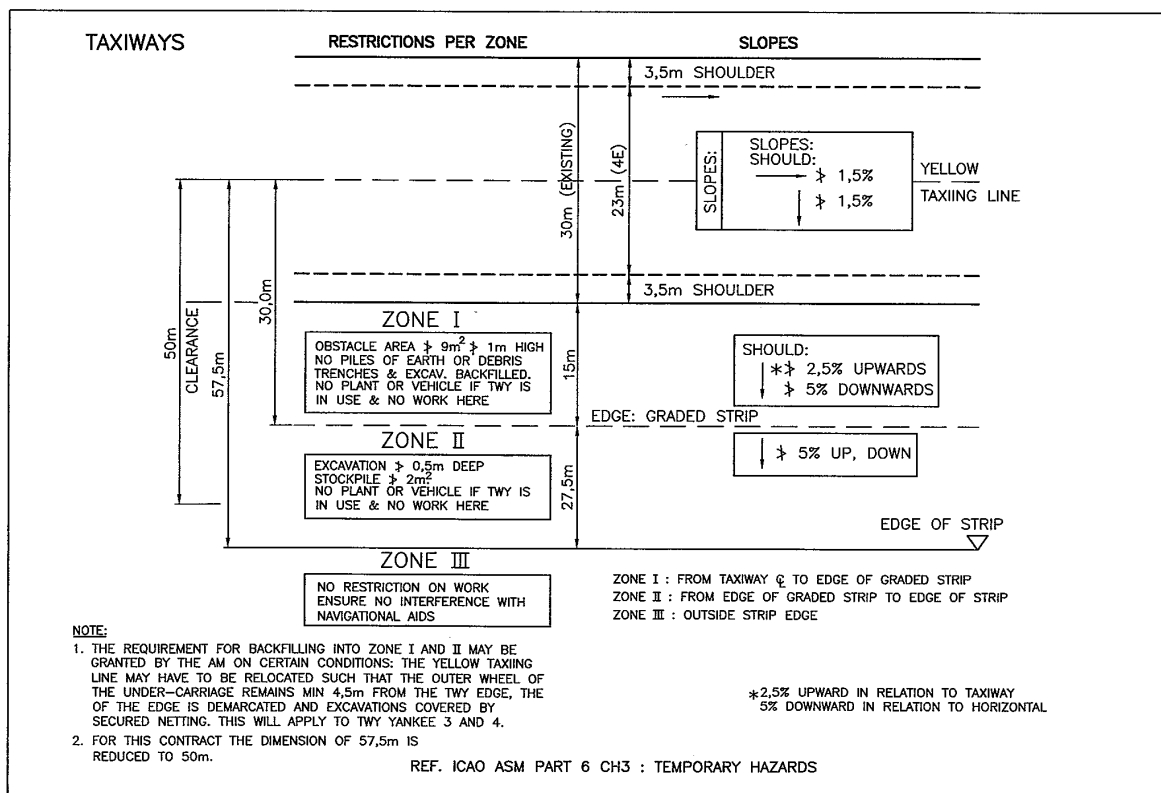
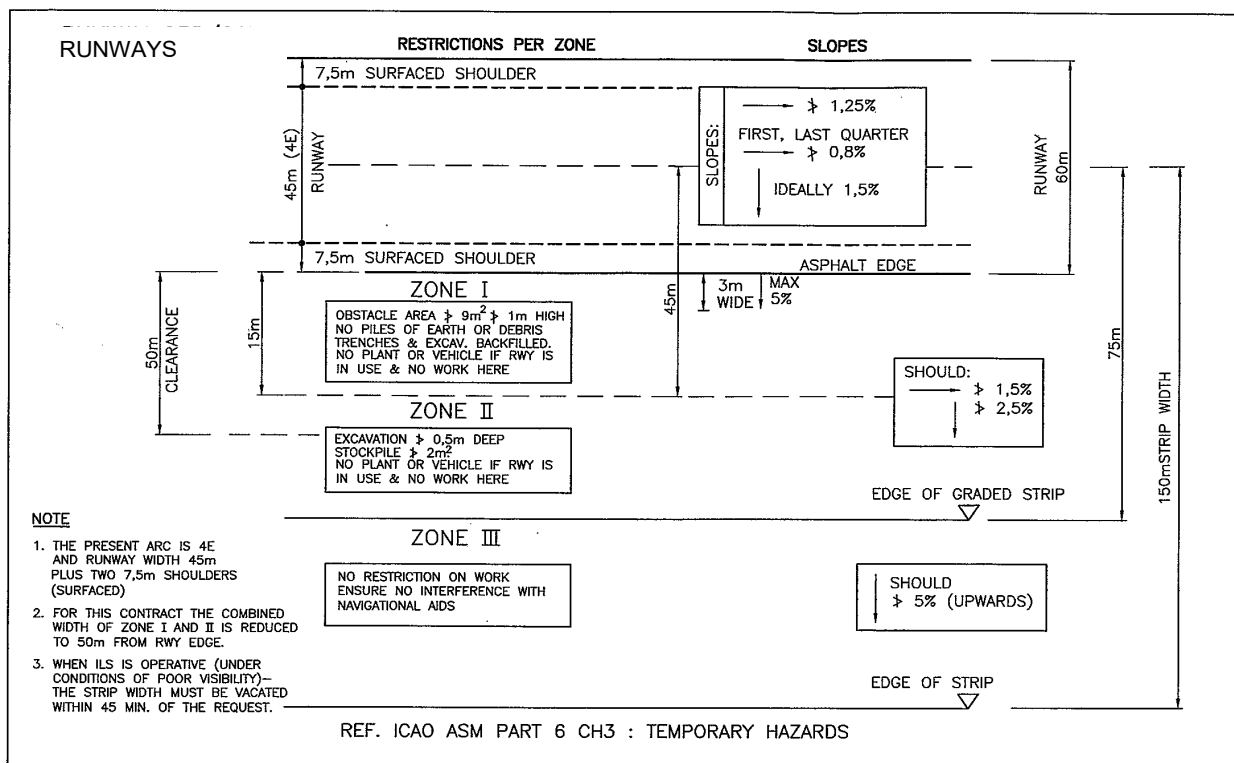
(name) (signature)

is/are fully conversant with the content of this document and will be responsible on behalf of

..... (name of Contractor)

to implement and maintain these procedures during the period working airside for completion of
Contract No. GRJ19/2017.

APPENDIX A: WORK AREAS AND STRIP HAZARD REQUIREMENTS FOR TAXIWAYS AND RUNWAYS



APPENDIX B: APPLICATION FORM FOR CLOSURE OF AIRSIDE FACILITIES
(To be completed by Contractor during construction)

APPLICATION FORM FOR CLOSURE OF AIRSIDE FACILITIES

Applicant's information:

Name of Contractor/Company:

Name of person in charge: Signature:

Contact No : Tel : Cell :

Fax : e-mail :

CLOSURE OF AIRSIDE FACILITIES				
Section of RWY/TWY for closure	Date (D) and time (T) of closure	Expected date (D) and time (T) re- opening	Actual re-opening of facility after inspection for service	
			Date (D) and (T) time	Name (N) and signature (S) of person authorised by ACSA to inspect facility
	D:	D:	D:	N:
	T:	T:	T:	S:
	D:	D:	D:	N:
	T:	T:	T:	S:
	D:	D:	D:	N:
	T:	T:	T:	S:
Remarks (delays, problems, etc):				
ACSA Conditions:				

For ACSA purposes only:

Department informed/NOTAM copied to		
Department	Contact person	Date
ATNS		
Fire and Rescue		
Safety & Security		
Other:		

NOTAM processed by: Name Signature: Date

NOTAM approved by: Name Signature: Date

NOTES:

1. To Compiler of NOTAM: A copy of this request must be returned to the Applicant/Contractor on approval of request.
2. To Applicant/Contractor: This form must be returned to the Manager: Airside after inspection for re-opening of the facility with the necessary signatures.

Runway Closure Form

By Contractor					By Closing Shift			By Opening Shift		
Date	Contractor	Section RWY/TWY Closure	NOTAM Ref No.	Date & Time on	Expected Date & Time off	Shift Name	Escort Name	Actual Date & time on	Actual Date & time off	RWY/TWY Open and Serviceable by:(Shift/Sign)
	1.									
	2.									
	3.									
	4.									
	5.									
	6.									
	7.									
	8.									
	9.									
	10.									

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

**APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST
LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY
SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

APPENDIX C: ROUTING PLAN

(to be submitted by successful contractor)

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

**APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST
LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY
SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

APPENDIX D: METHOD STATEMENT

(to be submitted by successful contractor)

**AIRPORTS COMPANY SOUTH AFRICA
CONTRACT NO. RA8018-2026 RFP
APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST
LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY
SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

APPENDIX E: MUNICIPAL AND ELECTRICAL TARRIFS

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

**APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST
LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY
SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

SOL PLAATJIE MUN – TARIFFS

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

**APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST
LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY
SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

GEORGE MUN – TARIFFS

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

**APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST
LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY
SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

ANNEX C: HEALTH AND SAFETY

AIRPORTS COMPANY SOUTH AFRICA**CONTRACT NO. RA8018-2026 RFP****APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

 AIRPORTS COMPANY SOUTH AFRICA	DOC. NAME	SITE SPECIFIC HEALTH AND SAFETY SPECIFICATION (SSHSS)		
	CLIENT	ACSA	DOC NO	679
	PROJECT NAME	LITHIUMION BATTERY ENERGY STORAGE	COMMENCE DATE	TBC
	ADRESS	., KIMBERLEY AIRPORT AND GEORGE AIRPORT, GEORGE AIRPORT		

REVISION STATUS		
REVISION DATE	DESCRIPTION OF REVISION	DETAIL:
2026/08/11	REVISED AND CUSTOMIZED FOR THE PROJECT TAKING PLACE AT:	PROJECT NO.

AUTHOR OF THIS DOCUMENT (SSHSS)	
CLIENT	
NAME OF CLIENT	AIRPORTS COMPANY SOUTH AFRICA
RESPONSIBLE DEPARTMENT	Legal Department
APPROVAL DATE	Tuesday, 11 August 2026
PAGES INCLUDED IN THIS DOCUMENT	248
SIGNATURE OF APPROVAL	

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

**APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST
LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY
SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

RECEIPT BY CONTRACTOR	
CONTRACTOR	
NAME OF CONTRACTOR	
DOCUMENT REFERENCE	Legal / Compliance
ACCEPTANCE DATE	Tuesday, 11 August 2026
PAGES INCLUDED IN THIS DOCUMENT	248
SIGNATURE OF APPROVAL	

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

INDEX

Cover Page & Document Control Sheet

Table of Content

Introduction

Table of Content

- 1. PROJECT INFORMATION**
- 2. CLIENTS REQUIREMENT FOR H&S MANAGEMENT ON THE PROJECT**

H&S Responsibilities
H&S goals
Hazard identification and risk assessments (RAMS)
Design information
Communication and consultation
Co-operation between contractors
H&S Monitoring
H&S Inspections
H&S Review
Training Attestation
Purchasing
Site rules
Permits
Site security, access and transport arrangement
Deliveries
Construction employees' facilities
Waste
Personal Protective Equipment
Working hours
Notice boards
Emergency and first aid
Medical certificates
Medical surveillance
Reporting fatality, permanent injury and occupational diseases
Method statements (RAMS)
H&S file

3. ENVIRONMENTAL RESTRICTIONS AND EXISTING ON-SITE RISKS ARRANGEMENTS

- 3.1 Fall protection
- 3.2 Fall prevention
- 3.3 Roof work
- 3.4 Falling objects
- 3.5 Structures
- 3.6 Temporary works
- 3.7 Excavations and Ground Conditions
- 3.8 Demolition works
- 3.9 Tunnelling
- 3.10 Scaffolding
- 3.11 Suspended platforms
- 3.12 Rope access work

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

- 3.13 Material hoists
- 3.14 Bulk mixing plant
- 3.15 Explosive actuated fastening device
- 3.16 Cranes
- 3.17 Construction vehicles and plant
- 3.18 Electrical installations and machinery
- 3.19 Flammable and hazardous materials
- 3.20 Water environments
- 3.21 Housekeeping and general safeguarding
- 3.22 Stacking and storage
- 3.23 Fire precautions
- 3.24 Construction employees' facilities
- 3.25 Contaminated land
- 3.26 Client activities (risks)
- 3.27 Manual handling of materials
- 3.28 Noise and vibration
- 3.29 Working near fragile materials
- 3.30 Traffic planning
- 3.31 Control of dust and mud
- 3.32 Monitoring of noise, silica and dust levels
- 3.33 Confined spaces
- 3.34 Hand tools
- 3.35 Registers & Checklists
- 3.36 Legal Appointments
- 3.37 Health and Safety Budgets

4. H&S File requirements

- 4.1. H&S Practitioner preparing the file
- 4.2. Contact detail to H&S Practitioner
- 4.3. Copy of CWP / NC
- 4.4. Complete Contact details for parties
- 4.5. Physical Address for construction site and site office
- 4.6. Nature of the work describe
- 4.7. Commencement and completion date
- 4.8. List of Contractors appointed by PC
- 4.9. Procedures to ensure PC maintain H&S file
- 4.10. Updated record of "as-built" drawings and plans
- 4.11. Criteria for design loadings for structural elements
- 4.12. Detail of potential hazard included in structure eg. tension beams or slabs
- 4.13. General details of construction methods and materials
- 4.14. Equipment and maintenance of facilities within the Structure
- 4.15. Maintenance procedures and requirements provided for the Structure
- 4.16. List and proof of appointments of each contractor
- 4.17. Procedures to approve, monitor and review all Contractors H&S files for the project
- 4.18. Manuals for operating, maintenance procedures & schedule for plant and equipment
- 4.19. Details of location and nature of utilities and services (emergency and fire-fighting)
- 4.20. Responsible for "as-build" drawings
- 4.21. Procedures for marking-up drawings to as-build

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

- 4.22. Procedures to pass on residual risk information to those who need such
- 4.23. General Record Keeping
- 4.24. Unanticipated Hazards (Inclusive of adverse weather such as strong winds)
- 4.25. Occupational Health and Safety Signage
- 4.26. Occupational Safety
- 4.27. General Machinery
- 4.28. CIDB Health and Safety Plan Audit
- 4.29. HIV/Aids Programme (when applicable)
- 4.30. Non-Compliance to set requirements
- 4.31. Handling conflict of interest
- 4.32. Penalties
- 4.33. Project Close - Out Requirements

5. PROJECT REVIEW

- 5.1 Provision for project review and applying lessons learned (continuing evaluations of contractor competence)

ANNEXURE 1 – PROFESSIONAL TEAM AND INFORMATION ON THIS PROJECT

ANNEXURE 2 - NOTIFICATION OF CONSTRUCTION WORK

ANNEXURE 3 - ORGANOGRAM

ANNEXURE 4 - LEGAL APPOINTMENTS

ANNEXURE 5 - REGISTERS & CHECKLISTS

ANNEXURE 6 - RETURNABLE DOCUMENTS

BASELINE RISK ASSESSMENT

OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

Introduction

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

A responsible Occupational Health and Safety management is **essential** to protect the client, consultants, contractors, employees, visitors and the public to provide a work environment that encourages a health and safety culture.

Purpose

The purpose and objectives of this Specification is to ensure that all Contractors (herein referred to as the "**Contractor**") (including Principal Contractor, Contractors, Subcontractors, Service Providers, Suppliers, **Consultants** or similar) shall enter into a **contractual agreement** / relationship with AIRPORTS COMPANY SOUTH AFRICA (herein referred to as the "**Client**"). Such Contractor shall achieve and maintain an acceptable level of Occupational Health and Safety performance whilst conducting work for or on behalf of the Client.

These health and safety specifications ("**specifications**") have been prepared in terms of the Occupational Health & Safety Act, Act 85 of 1993 (hereinafter referred to as the "**OHS Act**") and the regulations promulgated there under and as amended, in particular the Construction Regulations 2014 and guidelines published there under and **must be complied with**.

It is a **requirement** that Contractor's shall **provide a safe and healthy working environment** and to direct his activities in such a manner that his employees and any other persons, who may be affected by his activities, are not exposed to hazards to their health and safety, maintain OHS Act legislative compliance and minimize the risks of incidents, injuries, contracting diseases and damage to the employees' health, environment, assets or property of the Client.

Scope

This **document is part of** the tender requirement, all contracts, principal agreements, applicable service level **agreements** and legal **appointments** entered into with AIRPORTS COMPANY SOUTH AFRICA and a Contractor or service provider. **The client impose security clearance requirements and internal safety documentation approval that must be adhered which may cause a delay to the appointed principal contract with the starting of construction works due to these compliance requirements. Caution should be included for such procedure.**

The Contractor is required to use and apply it when **developing** Health and Safety documentation for implementation on sites. This document will carry equal weight to the contracts, principal agreements, service level agreements and legal appointments as far as enforcement, compliance and breach is concerned.

These **specifications form an audit guideline** and management tool for the use of the Contractor to **ensure compliance with the OHS Act and Regulations, Directions, Directives, Notices and Guidelines** promulgated there under and updated from time to time. **Covid-19 compliance requirements is included in the OHS Direction as published.**

Any **contradiction** between these specifications and the OHS Act, the OHS Act take preference except where explicitly stated. When these specifications do not cover specific health and safety requirement, the **OHS Act must be used as the standard requirement**.

Adherence

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

The specifications are **mandatory before the commencement** and for the duration of any contract works to be conducted on any AIRPORTS COMPANY SOUTH AFRICA premises (owned or leased). These specifications shall be implemented and be subject to audits, without prior announcement from time to time.

It is the responsibility of the contractor to familiarise himself with the **contents of this specification** and any subsequent updates hereto. The latest version should always be kept in the contractors file on site.

Failure to adhere to this specification may result in disciplinary action, penalties and a breach being raised in the event of continuous non-conformances.

Reputational impact

Any action or inaction taken relevant to this Specification which may have potential to incur reputation **or cost** risk for AIRPORTS COMPANY SOUTH AFRICA , i.e. likely to result in material criticism and / or censure of AIRPORTS COMPANY SOUTH AFRICA by key stakeholders or opinion formers (including clients, market counterparties, regulators, government officials, law enforcement agencies, media or NGOs) should be escalated to the appropriate committee.

Penalties

Penalties may be implemented for continuous non-compliance to sample provisions set out later in this specification.

Interpretation

The SSHSS contains clauses that are generally applicable to building / construction / civil work and to impose pro-active controls associated with activities that impact on human Health and Safety as it relates to plant and machinery.

Compliance to the requirements of the OHS ACT is in addition to the requirements of the SSHSS and is part of the Contractor's responsibility. The CLIENT will monitor that the Contractors comply with the requirements of the OHS ACT and will not prescribe to the Contractor how such compliance is achieved.

Definitions

For the purpose of this SSHSS some of the definitions / acronyms given hereunder have been extracted (but not limited) from the Construction Regulation shall apply:

"Construction Work" (as defined in the Construction Regulations, 2014) means any work in connection with –

- a) The construction, erection, alteration, renovation, repair, demolition or dismantling of or an addition to a building or any similar structure; or
- b) 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.

"Hazard Identification, Risk Assessment and Risk Control" means a documented plan, which identifies hazards, assesses the risks and detailing controls.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

“*Site*” means the area in the possession of the Principal Contractor after site hand-over for the construction of the works. Where there is no demarcated boundary it will include all adjacent areas, which are reasonably required for the activities for the Principal Contractor, and approved for such use by the Client’s representatives / Engineer.

“*The Act*” means, unless the context indicates otherwise, the Occupational Health and Safety Act, 1993 (ACT NO. 85 of 1993) and Regulations promulgated there under.

“*Client*” means AIRPORTS COMPANY SOUTH AFRICA.

“*Hazard*” means a source of or exposure to danger (source which may cause injury or damage to persons or property)

“*Risk*” means the probability or likelihood that a hazard can result in injury or damage

“*Principal Contractor’s Responsible Person*” means any person appointed in writing by the Principal Contractor to supervise construction or building work. The appointment shall be as required by the OHS ACT which shall stipulate Health and Safety responsibilities, area of responsibility and the proposed duration of the project.

“*Employer’s Personnel*” means any Employee of the Principal Contractor, Contractor or Sub Contractors.

“*SSHSS*” means Site Specific Health and Safety Specifications / Occupational Health and Safety Specification.

Health and Safety Plan

The Contractor shall be required to develop and provide for review and approval by the client’s representative, a comprehensive **revised** site and project specific Health and Safety **Plan**, prior to work commencement. The Health and Safety Plan provided in the tender might need a **revision** for implementation.

Such plan shall be specific to the scope of work of the contractor including his sub-contractor scope of work, addressing the requirements set out in this specification.

Such plan must follow this specifications layout and shall detail the Contractor’s planned methods of management on site for the duration project. The detail required shall provide the client with a clear indication of how the Contractor (as well as his sub-contractors) intends to address, implement and manage the requirements of this specification in terms of his own scope of works.

The contractor’s health and safety plan must include a **Table of Content (INDEX)**. This will be seen as a tender responsiveness requirement.

The CIDB has gazette a best practice Standard for Health and Safety Plans and auditing requirements (Grade 2 to 9), Vol 641 9 November 2018 No 42021. The potential principal contractor should adopt such **standard for the layout of the Principal Contractor’s Health and Safety Plan**.

Such health and safety plan audit standard were gazetted by the CIDB to ensure that every contractor’s health and safety plan is evaluated fairly.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

PROJECT INFORMATION

This health, safety and environmental specifications have been prepared for the preparation of construction work. Thereafter the enforcement of these specifications will be applicable during the construction phases. The appointed contractor's health and safety plan cannot override the client's specifications.

A general description of the type of work activities involved in the project.

This description of the works is not necessarily complete and shall not limit the work to be carried out by the principal contractor and contractor under this contract.

The Scope of Work consists of:

EMPLOYER'S OBJECTIVES

Airports Company South Africa (here on referred to as ACSA) as a member and participant in the Airport Carbon Accreditation program of Airports Council International is required to implement best practices in carbon management and achieve emissions reductions with the goal of becoming carbon neutral Level 3+. All three ACSA Regional Airports under Cluster 2, i.e., ., Kimberley and George Airports are currently not certified, and this project will aid the emission reduction for the airport and assist to facilitate the certification.

The Project will minimize the dependency of the airports on the electrical grid, reduce the use of backup diesel generators during load shedding and/or forced outages and achieve reduction in the operational expenditure of each airport.

OVERVIEW AND EXTENT OF THE WORKS

The project scope involves the following activities which falls on the Airside of the ., Kimberley Airport and George Airport precinct. The scope of works for the implementation of a battery energy storage system (BESS) involves

- Integrating it with the existing solar PV plant with the objective to minimize dependency on the national grid, reduce operational expenditure, lower emissions, and enable smart grid adoption. This includes designing and engineering the system, procuring, and supplying components as per the technical requirements, conducting site preparation and installation, commissioning and confirming that the integrated system performs per the design through testing, and implementing advanced control systems for smart grid functionalities.
- Assessment of the solar plant performance in line with the OEM performance guarantee and to augment the capacity of the solar plant by at least 10% or more based on the outcomes of the assessment
- Training operational staff, developing a maintenance plan, and providing a maintenance and services 60-month plan for consideration by ACSA as an option, and implementing a monitoring system to ensure measure and optimise day to day performance of the system. The contractor shall supply a 2-year performance warranty for the Battery Energy Storage solution to safeguard ACSA's investment and shall specify the conditions of warranty.
- ACSA also seeks performance guarantees that ensure that the seem will maintain its specified performance in line with Original Equipment Manufacture's specification throughout its lifecycle parking.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

The Contractor must allow for all items, whether specified or not, required to complete the installation in a neat and workmanlike manner, according to the true intent of the document and the drawings.

GENERAL INTENT

The general intent of this Contract is that the Contractor shall procure all items necessary for construction and to complete the Works in accordance with the terms of the Contract, in a workman-like and expeditious manner, and shall have full authority over all the Works. **Other principal contractors may be working in close proximity and the project require coordination between principal contractors.**

The Engineer shall have the right to verify that all work is carried out in accordance with this Contract and to approve or reject materials supplied and work undertaken by the Contractor or approved subcontractors.

LOCATION OF THE WORKS

The works is located within the ., Kimberley Airport and George Airport.

The site is located inside the ., Kimberley Airport and George Airport as indicated on the layout drawing referred to under an Annexure of the tender document. Access to the site is available from a number of roads as depicted on the locality plan.

SUBSOIL INVESTIGATIONS AND TEST RESULTS

No soil investigations have been conducted. Tenderers shall therefore acquaint themselves with these conditions of each site.

EXISTING SERVICES, KNOWN SERVICES

Information about piped and other services below the surface of the site.

Record drawings of existing services, those which are shown on construction drawings, are available. The successful Tenderer will have to consult with the relevant authorities to point out existing services prior to commencement construction activities.

The Contractor shall take whatever precautions are required to protect these services from damage during the period of the contract. The Contractor must take every effort to locate and repair such services which may be damaged as a result of construction.

TREATMENT OF EXISTING SERVICES

The treatment of existing services, i.e. their termination, diversion of continued use, either temporarily or permanently, is shown on the relevant drawings. Any services encountered on site which are not on the drawings, must be pointed out to the Employer's representatives. The Employer's representatives will issue further instructions with regard to the treatment of these services.

Construction activities shall include the following:

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

- Detection, marking and adjustment of existing services;
- Site clearance;
- Excavation;
- Training, supervision and provision of equipment for local labourers;
- Installation of bollards, booms, fencing and communication - and electrical network; and
- Reinstatement of surfaces if required.

General activities may also include, but are not limited to:

- a. Public safety and security;
- b. Protection of environment;
- c. Site Organization, Establishment and Barricading / Hoarding;
- d. Site handover meeting and progress meetings;
- e. Deliveries and other Construction Vehicles;
- f. Manual Handling of Material and Equipment;
- g. Earthworks (Excavation);
- h. Backfilling;
- i. Compacting and Filling;
- j. Construction of Access Roads;
- k. Road Signs and - markings;
- l. Demolition works;
- m. Installation of Services;
- n. Electrical Reticulation;
- o. Steel reinforcing;
- p. Concrete Works;
- q. Bricklaying & Plastering;
- r. Plumbing;
- s. Roof Erection;
- t. Scaffolding & Working on ladders;
- u. Working in elevated positions;
- v. Welding and gas cutting;
- w. Fire prevention;
- x. Hoisting and lifting Operations;
- y. Landscaping; and
- z. Subcontractors and Visitors on site.

Throughout the construction process it is required that the contractors are compliant to the require regulations.

Health and Safety is everyone's responsibility, report Unsafe Acts and Unsafe Conditions to your superior immediately.

Project program or schedule details, including start and finish dates, showing principal activities and intermediate stages.

- i. Project Program / schedule details

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

A project program with schedule detail need to be prepared by the appointed contractor once the tender has been assigned. Such program must be updated and recorded in the meetings and site-specific health and safety file of the contractor.

ii. Start and finish dates

Once an appointment has been made the official starting date will be confirmed with the contractor and site handover arrange once all documentation work, including the approval of the health and safety plan and the site-specific health and safety file, has been approved.

iii. Principal Activities

Within the Scope of Works section, a general list of activities was described. These activities form part of the Hazard identification process

iv. Intermediate stages

This SSHSS was prepared for incorporation during Stage 4 to form part of the Tender documentation to ensure that the potential contractor makes provision for these requirements during Stage 5 and 6. Stage 5 is the construction phase and stage 6 the close-out stage. Within the construction period different progress stages may also be defined by the professional team.

CLIENT'S REQUIREMENTS FOR HEALTH AND SAFETY MANAGEMENT ON PROJECT.

2.1 Health and Safety Responsibilities

THE PRINCIPAL CONTRACTOR'S HEALTH AND SAFETY RESPONSIBILITIES ARE DELEGATED FOLLOWING AN ORGANIZATIONAL STRUCTURE WHEREBY THE INVOLVEMENT OF MANAGEMENT, CONTRACTOR AND EMPLOYEES ARE COORDINATED THROUGH BOTH THEIR SKILLS, TRAINING AND EXPERIENCES TO BE ACCEPTABLE **COMPETENT PERSONS** TO PERFORM THEIR DELEGATED DUTIES.

A DIAGRAMMED **ORGANOGRAM** (SEE ANNEXURE BELOW AS SAMPLE) **MUST BE INCLUDED IN THE CONTRACTOR'S HEALTH AND SAFETY PLAN** AND KEPT UP TO DATE IN THE HEALTH AND SAFETY FILE ON SITE. WHEN A **CHANGE OF MANAGEMENT** OCCURS, THE CLIENT MUST BE NOTIFYING AND SUPPLIED WITH THE REQUIRED CV, WHICH SHALL INCLUDE THE QUALIFICATION AND HEALTH AND SAFETY TRAINING FOR SUCH PERSON, FOR APPROVAL. CHANGE OF MANAGEMENT QUALIFICATIONS WILL MEET THE **SAME CRITERIA** AS RECORDED IN THE TENDER DOCUMENTS. LEGAL APPOINTMENTS MUST BE UPDATED WHEN A CHANGE OF MANAGEMENT OCCURS.

Each appointment letter shall indicate:

- a. Legal reference to the appointment (Please note: one legal reference one appointment. E.g. CR 8. (1) cannot be appointed as CoVid-19 Compliance Officer on the same document with only indicating additional duties);
- b. The name of the person appointing and his / her designation;
- c. The name of the company who this person represents;
- d. The name of the appointee and the appointment;
- e. The detail of the site/address
- f. Period of validity of such appointment (not longer than 3 year);

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

- g. Signature of the Company's representative making the appointment & date of signature;
- h. Duties or reference to requirements in regulations (to include Checklists & Registers);
- i. Acceptance of appointment;
- j. Signature of acceptor and date; and
- k. Designation.
- l. Training certificate (where applicable)

ALL CONTRACTORS PROFESSIONAL TEAM MEMBERS HAVE TO ENSURE THAT AN ARRANGEMENT IS IN PLACE TO ENSURE ALL THEIR EMPLOYEES HAVE VALID MEDICAL CERTIFICATES OF FITNESS.

H&S goals

The project team and contractor's management must commit to the implementation of Health, Safety & Environmental standards from management down.

During the following goals need to be adhered:

- Site supervisor must be on Site at all times;
- Employees and client employees required to comply by wearing minimum required PPE – Personal Protective Equipment as risk assessments may indicate;
- Construction Supervisors to ensure all employees were supplied PPE as Job Category register to ensure employees work safe;
- Work safely;
- Report all Near-Hits to the Client;
- Comply with SHE Management System;
- Comply with site-specific Work Rules;
- Prevent and/or correct unsafe behaviours;
- Prevent and/or correct unsafe work conditions;
- Implement Specifications;
- Security required at site entrance;
- Will be managed through Monthly site audits and Weekly inspections, PTO's, SWP, DSTI's.
- Site Manager and Safety Managers to supervise this on a daily base.

To achieve such goals the contractor must **monitor and review** these goals, targets, key performances indicators, etc.

Hazard identification and risk assessments

Baseline Risk Assessment

The Contractor shall submit their "construction" **risk assessment** (can also be referred to as a project "**method statement**" with reference to a project schedule / plan) for the project, which shall form part / addendum when submitting the Health and Safety plan and place in the health and safety file. The above incorporate "RAMS" (Risk Assessment and Methodology Statement) methodology.

The Risk Methodology applied should follow the hierarchy of controls mitigation and must form part of the Risk Assessment, and be included in the Health and Safety File. Within such documentation the Principal Contractor **shall address risk rating** strategy (Matrix) used.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

Should the Principal Contractor commence work without approval of the risk assessment, or should the risk assessment not reflect the activities being undertaken, the CLIENT may instruct the work to be immediately halted, and the Principal Contractor **will have no claim** against the CLIENT in such a case for lost time or costs, irrespective of whether it can be demonstrated that the work was being safely undertaken

The risk assessment should include the following:

- (a) The identification of the risks and hazards to the Health and Safety to which persons may be exposed;
- (b) The analysis and evaluation of the hazards identified;
- (c) A documented plan and safe working procedures to mitigate reduce or control the risks identified;
- (d) The monitoring and review plan of the risks and hazards; and
- (e) The relevant personal protective equipment or clothing.

The Principal Contractor shall ensure that all persons entering the site are informed of all hazards on site; record of this is to be kept on the Health and Safety File.

The risk assessment should take into consideration the following key processes for this project, but are not limited (nor exhausted) to:

- Site Establishment inclusive of long-lasting hoarding separating construction area with the operations of the other contractors
- Identification of existing services, exposure and protection thereof
- Access Control of Public, including Students, to site
- Backfilling of trenches
- Bricklaying
- Brush / Bush Cutting
- Chainsaw use
- Compacting and Filling
- Compacter Operations
- Cutting of Concrete, Road Surfaces or Kerbs
- Cutting of Steel
- Demolition
- Electrical Tools and Electrical Installations
- Electrical works and connection/disconnection of electricity to municipal supply or other
- Excavating of trenches / foundations (hand and mechanical)
- Fire
- Flammable Liquids / Gas
- Fragile materials
- Goods - / Material - / Passenger Hoist Operations
- Hand Tools
- Hazardous Bio-waste
- Hazardous Chemicals
- Hygiene requirements
- Hot Works
- Kerb Laying
- Lifting Operations
- Manhole Rings and Pipes Storage
- Manual Handling of General Items
- Members of Public, including Students
- Movement (transport) of Construction Vehicles (Inclusive of light vehicles)
- Noise and dust

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

- Overhead Services
- Painting
- Paving
- Plant / Vehicle and Equipment operations
- Plastering
- Plumbing
- Precast slabs
- Road Construction / - Marking
- Road Working
- Rope Access Work
- Scaffolding (Erection / Inspection and Dismantling)
- Site Strip
- Skipping of concrete with hoist / crane
- Temporary Works (Shoring / Scaffolding or False Works)
- Tower Cranes
- Traffic Management
- Underground Services
- Working at Heights
- Working during inclement weather
- Working near sewage water
- Working near water environments
- Work near underground services

All health hazards that can be present during any of the above activities should include individual, dusts, gases, fumes, vapours, noise, extreme temperatures, illumination, vibration and ergonomic hazards.

Preventative measures must first address the elimination of the hazard or risk. Should PPE be required to reduce risk then appropriate equipment or clothing must be used and be SABS approved.

Issue Based Risk Assessment

As circumstances and needs arise, separate risk assessment studies will need to be conducted. These will be associated with a system for the management of change. An additional risk assessment will need to be conducted and submitted to the CLIENT for verification when for example:

- (a) A new machine is introduced onto site;
- (b) A system for work is changed or operations altered;
- (c) After an accident or a 'near miss' has occurred
- (d) New knowledge comes to light and information is received which may influence the level of risk to employees on site.

Continuous Risk Assessment

This is the most important form of risk assessment which should take place continually, as an integral part of day-to-day management.

This should be conducted by Construction Manager on site and it is essential that formal **training** be provided to enable this process to be efficient.

AIRPORTS COMPANY SOUTH AFRICA**CONTRACT NO. RA8018-2026 RFP****APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

The Principal Contractor shall be responsible for making sure that all employees under his / her control are conversant with the content of the Risk Assessment and what appropriate measures have been put in place to either eliminate or reduce the identified risks. The Principal Contractor shall outline to employees what role they are expected to play in the Risk Assessment and control measure process. Records are to be kept of this communication. Such information can also be communicated through Safe Work Procedure (SWP), Safe Operation Procedure (SOP), Toolbox talks, Job Base Analysis (JBA) or Task Bases Assessment (TBA).

Continuous Risk Assessment is also commonly known as a Daily Safe Task Instruction (DSTI's).

Design Information

In terms of Construction Regulation (2014), regulation 6.1)(c&d), the designer must -

- Make available in a report all relevant health and safety information about the design, the geotechnical-science aspects and loading that the structure is designed to withstand; and
- Inform the client in writing of any known or anticipated dangers or hazards relating to the construction work, and make available all relevant information required for the safe execution of the work upon being designed or when the design is subsequently altered.

An alteration in the design requires the principle contractor to review the *management of change* procedure to anticipate if any hazards may arise due to such alterations.

- a. Relevant existing records available on services would either be obtained through the Project Implementing Agent or from the Municipality's building Inspectorate.
- b. Surveys, site-investigations and Geotechnical reports conducted on behalf of the client can be requested through the Project Implementing Agent should it be available.
- c. "As-built" drawings could be sourced from the appointed Architect.
- d. The municipality has traffic flow statistics should density and traffic flow information be of relevance to a project.
- e. Should any change of design occur the contractor must address how this will be received on site, recorded and distributed. Liaison with the PIA on design changes must be recorded. The latest version of any new design must always be available on the site.
- f. The line of communication is discussed under a later section, but the principle contractor should note this in his plan at this point as well.
- g. An arrangement how on-site changes, potential health and safety implication of variation orders (VO's), Request for Information (RFI's and site Instructions to be explained.
- h. Due to the institution's continuous use of facilities all areas need to be available most of the time. Should areas be demarcated permission must be sought and approved through the PIA.
- i. Should new work "packages" be handed over during the project the incorporation of such work package be into the existing programs to be indicated.
- j. An arrangement for continuous interaction with the client representatives must be indicated where the design is on-going.

Communication and Consultation**2.5.1 Communication: Client**

The Contractor must provide the client with their client communication procedure that shall include:

- a. Reporting prior to work commencement on any client site with:
 - i. an approved health and safety plan;
 - ii. an in-dated letter of good standing;
 - iii. stamped Notification of Construction work (each contractor); and
 - iv. Certificate of Compliance (COC) to commence after the implemented health and safety file has been audited.
- b. Reporting site mobilisation and site establishment for a site inspection;

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

- c. Reporting of review and approvals of appointed sub-contractors to perform work on the client site (in line with a.i-iv above);
- d. Notifying the client if there is any change to the site management;
- e. **Immediately** notify the client of any incidents, accidents or served notices by any regulatory authority while on site and during the project;
- f. Reporting to the client site inspection and audit findings;
- g. Report corrective and preventative actions (non-conformance close-out) within 48 hours;
- h. Advise the client in writing of any emergencies including actions taken.

2.5.2 Communication: Workforce

The Contractor must provide the client with their workforce consultation and communication procedure that shall include, but not limited to:

- a. CoVid-19 hygiene, sanitising, awareness and PPE;
- b. Medical conditions, restrictions or recommendations;
- c. Health and Safety Rules;
- d. Incident and near miss reporting;
- e. Report findings and corrective actions in incident investigations;
- f. Lessons from non-conformances and audits;
- g. Communicating of Risk Assessments for the work to be performed;
- h. Awareness (posters) & Toolbox Talks;
- i. DSTI communication
- j. OHS meetings to initiate, promote, maintain and review measures of ensuring the health and safety of persons on site. Note that this may be included in the progress or site meetings as an agenda item.

Co-operation between contractors

The contractor must coordinate and make arrangements:

- a. Identifying where works by one contractor and their assessment and control of risks may affect the works of another contractor;
- b. Between all contractors such as where the type and frequency of health and safety meetings are described;
- c. For preventative and control measures where more than one contractor may be exposed to the same risk; and
- d. for Health and safety surveillance and/or assistance between various contractors.

H&S Monitoring

A contractor must document:

- a. How the Health and Safety performance on site is going to be monitored?
- b. How the Health and Safety performance of others especially contractors are going to be measured and monitored?
- c. Who, on the site, will stop unsafe acts by contractors and employees?

H&S Inspections

General Inspection, Monitoring and Reporting

A table of intended inspections (with the stipulated frequency) are to be included in the Health and Safety plan and placed on a Site Calendar for ease of reference. Inspection registers and checklists must be kept in the Health and Safety File.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

Internal Audits

The Principal Contractor shall conduct monthly Health and Safety audits of the project Health and Safety Management System, including the sub-contractor records, to ensure compliance with the OHS Act and OHSS. Records of audits must be kept and non-conformance reported, investigated and corrective action must be taken and reported to prevent re-occurrence to the client. Proof hereof recorded as a non-conformance close-out must be submitted to the client's agent within 24 hours after the non-conformance was reported on an internal audit report.

External Audits

The CLIENT, or its relevant Representative, shall conduct monthly Audits on site. All documentation held by the Principal Contractor shall be available for inspection. The Principal Contractor shall provide any additional information required. The Principal Contractor is required to (must) participate in the Audit and adheres to the section of these specifications.

A copy of the Close-out report must be submitted to the client's representative within 48 hours of audit report placed in Principal Contractors Health and Safety File. The Principal Contractor has 3 (three) working days after hard copy of audit was placed in contractors file to rectify any non-conformances.

As information the full process of health and safety documentation approval is stipulated as follow:

- a. Invited contractor's health and safety file be electronically submitted and approved;
- b. Evaluation of health and safety plan of potential contractor during tender evaluation;
- c. Discuss, negotiate and approve health and safety plan after appointment of contractor;
- d. Evaluate the implementation of the health and safety file on site with site establishment;
- e. Conduct monthly audits and where required bi-weekly site visits. Reports on such must be documented and provided by auditor in hard copy to the site within 7 days after the audit was conducted signed by auditor and a site supervisor who were present during the visit;
- f. Audit close-out report on findings documented and distributed to client's representative within 3 days after the documented hard copy of audits / visit was placed in contractors file;
- g. Final project close-out, when zero working hours are reached, submitted to the client to include:
 - i. Withdraw, close, retract and cancel all legal appointments;
 - ii. Consolidated list of contractors (Name, Area of work, Contact number & email)
 - iii. Final month's Health and Safety audit report and Certificate of Compliance
 - iv. Minutes of the Health and Safety Committee meetings (when applicable)
 - v. Summary of Incidents & IOD report (Incidents on Duty)
 - vi. Summary of WCA /COIDA Claims
 - vii. Total project Man-hours and DIFR (Disable Injury Frequency Rate / 200,000 hours)
 - viii. Environmental rehabilitation status
 - ix. Current or outstanding Health and Safety Non-conformances.
 - x. Ensure that all registers and checklist are closed with the last sentence being on the document marked as "CLOSED" with the applicable date and "closed" marked across the full page.

Health and Safety Review

Contractors must ensure that health and safety documentation included in the health and safety file be reviewed **monthly** or when any change of management occur. The responsibility of review lies with the contractor's management and the responsibility must be designated.

The results of such review must be submitted for approval by the client.

Training

Health and Safety Training (*training dependent on the latest changes between SAQA's "Last date of enrolment" and QCTO's skills requirement.*)

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

The Construction Regulation requires that ***“A Client must ... ensure that potential principal contractors submitting tenders have made adequate provision for the cost of health and safety measures”***.

The Principal Contractor shall at project start-up conduct a training needs analysis (**training / skill matrix**) to ascertain what Health and Safety training is required and what already exist. The training needs should specifically be based on the scope of work in relation to supervision with daily risk assessment qualification / experience, first aider, incident investigation, ladder inspection and tool inspection competencies.

The single page in tabular format as intended plan of action should be drafted and included in the Health and Safety file and **submitted with the tender**.

Once the identified people have attended training, the Principal Contractor must ensure copies of the certificates are kept in the Health and Safety File.

Where a Part-time OHS Practitioner is appointed the Construction Managers and / or - supervisors are required to have, as minimum, **legal liability training** with SAQA US certificates. SAQA US for CIVIL is 120344.

Excavation supervisors and construction manager must have a SAQA US 365183 competency certificates.

The following skills training to be considered:

- a. Legal Liability;
- b. Excavation Supervisors;
- c. Fall Protection;
- d. Fire Equipment Inspector;
- e. Fire Marshal;
- f. First Aider;
- g. Formwork & Support;
- h. Hand Tool Inspector;
- i. Health and Safety Representatives;
- j. Legal Liability Training for Management;
- k. Machine Operator;
- l. Scaffolding Erectors;
- m. Scaffolding Inspectors;
- n. Stacking & Storage Supervisor;
- o. Welder, grinding / cutting machine operator;
- p. Working at heights;

Induction

The Principal Contractor shall conduct Site Specific Inductions to all new employees and visitors on site. Proof of inductions in a form of attendance registers must be kept in the Health and Safety File.

Should any new equipment or plant be brought to site employees should be inducted on such ensuring the understanding, **blind spots, risks** and coordination when these units are being used.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

Within the Contractor's Health and Safety Plan a layout of such induction to be performed should be indicated that will include Safety Rules. An attendance register must be kept and signed by all attendees.

Awareness

The Principal Contractor shall conduct, on site, periodic toolbox talks, preferably weekly or before any hazardous work takes place. The talks shall cover the relevant activity and an attendance register must be kept and signed by all attendees.

A record of who attended and the content of the topic will be kept in the site Health and Safety file as evidence of training.

Competency

After the Principal Contractor has identified the training to be conducted, based on the Hazard Identification & Risk Assessment (HIRA); he/she shall send the relevant persons on appropriate courses and keep the accredited certificates of training for reference in the site health and safety file. A maximum grace period of 30 days from the start of the project are provided for this training to be conducted and proof must be submitted to the client's representative.

Purchasing

The contractor has to ensure that the purchasing procedure include the evaluation of competencies and adequate resources of the contractors, suppliers and manufacturers. No Principal Contractor may appoint a specialist contractor who then appoints a subcontractor for such services.

Site rules

The Contractor shall ensure that all persons working under his control observe the health and safety rules of the client at all times and shall not permit any person who is not directly associated with the work from entering the site.

These specifications express various rules and other restrictions on contractors, suppliers and manufacturers such as permit-to-work procedures and arrangements for compliance by others with the rules herein and those of the contractor's health and safety plan.

Permits

The Contractor must implement a permit system for high risk activities, but not only limited to:

- a. Concrete pouring;
- b. Confined spaces;
- c. Electricity and other energy sources;
- d. Excavations;
- e. Explosive, corrosive or toxic gases or atmospheres;
- f. Extreme temperatures;
- g. Hazardous substances or Radioactive material;
- h. Hot work or Steam;
- i. Isolation of the fire alarm or fire suppression;
- j. Lifting operations;
- k. Night work;
- l. Operations requiring lockout
- m. Possibility of drowning in bulk material / tanks;
- n. Restricted access, exit and movement
- o. Welding, grinding or any other operation that could result in sparks;
- p. Working at heights, - isolation;
- q. Working in close proximity to water environment
- r. Working on live/pressurized equipment

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

- s. Working on public holidays, weekends and during a shutdown period;

The permit shall include the arrangements for competence and authority for issuing, acceptance, renewal (validity) and clearance of permits to work.

The Contractor shall ensure that work for which a permit is required by legislation, this specification or own permit to work procedure, is not performed by his employees prior to obtaining such permit. The Contractor shall additionally also ensure that AIRPORTS COMPANY SOUTH AFRICA or the Municipalities permit for specific work procedure (way leave) is prior obtained and complied with on site, for the duration of the project.

Site security, access and transport arrangement

Security

The Principal Contractor shall ensure that each person working on or visiting a site, and the surrounding community, shall be made aware of the dangers likely to arise from on-site activities and the precautions to be observed to avoid or minimise those dangers.

The construction area should be permanently hoarded-off to prevent access of non-construction staff into the construction area. This should further be able to prevent excessive dust. Appropriate Health and Safety signage shall be posted at all times.

The Principal Contractor have a duty in terms of the OHS ACT to do all that is reasonably practicable to prevent members of the public and others being affected by the construction processes to be aware and put preventative measures in place.

The visitors to site shall go through a visitor's Health and Safety induction detailing hazards and risks they may be exposed to and what measures are in place to control these hazards and risks. A proof of such induction must be kept on the safety file for audit purposes.

Each of the Contractor's employees must be issued with a company identification card which must be displayed on his/her person at all times whilst on site (card only when required).

Such identification **cards** shall include as a minimum:

- a. Company Logo;
- b. Employee name and surname;
- c. Employee photo; and
- d. Identity number.

A list of employees with their next of kin must always be available on site (COID requirement as well).

The Contractor acknowledges that its employees, vehicles as well as that of its agents, subcontractors and service providers may be subject to security searches at any time, and the Contractor shall ensure the aforementioned parties co-operate fully with such searches.

Access

The Contractor is required at all times to be aware of all subcontractors on site and ensure that they have means of identification and proof to verify their authorization to be on site. It is important to note that failure to produce such means of authorization for site work will result in the immediate eviction of the subcontractor from the site.

The road surface of all public and private roadways and pavements/pedestrian walkways must remain in a reasonably clean state, free of excessive sand, stone, water or other construction related materials – daily inspections to be conducted by the Contractor with action to be taken without delay.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

The Contractor must upon site establishment identify and **demarcate** designated walkways. Signage should be displayed indicating it as a designated and safe to use walkway. Walkways should be safe to use in terms of distances from hot works, works with electrical tools, overhead work, and trenches and should be of such that persons using the walkway do not disturb any work activities taking place in the area.

Transport of Workers

The Principal Contractor shall refer and comply with the requirements set in the National Road Transport Regulations, 2000. The Principal Contractor shall, and not be limited to:

- Not transporting persons together with goods or tools unless there is an appropriate area or section to store them;
- Not transport persons in a non-enclosed (top) vehicle, e.g. truck, there must be a proper canopy (properly covering the back and top) with suitable sitting area. Workers shall not be permitted to stand or sit at the edge of the transporting vehicle;
- Not transporting workers on the back of open light motor vehicles;
- Provision of a serviced portable fire extinguisher in vehicles at all times;
- Driver must have a valid PDP license transporting people; and
- Adequate seating arrangement specifically in respect of social distances.

Deliveries

The contractor must make arrangement and get approval from the client for deliveries, any restriction such as delivery times, demarcation, reserved storage areas, loading and unloading areas, and working area for prefabrication to be put in place. Banksman / direct supervision from contractor's side must be present receiving, offloading and departure of delivery vehicles.

Construction employees' facilities

THE PRINCIPAL CONTRACTOR SHALL PROVIDE FACILITIES FOR

- a. Safekeeping, e.g. lockers etc.;
- b. Temporary shaded structure to serve as a mess room or eating area;
- c. Sufficient toilets for each gender (1 toilet per 30 workers);
- d. Hand washing facilities;
- e. Soap and toilet paper;
- f. Disposable paper hand drying material;
- g. Where there is a risk of exposure to HCS separate lockers shall be provided for clean and soiled/ contaminated clothing for each employee;
- h. **COVID-19 requirement;**
- i. Waste bins must be strategically placed around the site and emptied regularly but no less than weekly;
- j. Workers must not be exposed to HCS while eating and must be provided with adequate, sheltered eating areas complete with benches and tables separated from the work areas; and
- k. Stores may not double up as change rooms, mess areas or eating areas.

THE WEATHER CONDITIONS MIGHT BE UNSUITABLE FOR WORKERS TO BE EXPOSED TO, E.G. IN RAINY SEASON.

Waste

The responsibility to ensure that all Contractors enforce, in terms of their waste management, environment sustainable methods, the disposal, keep sufficient waste containers for different waste types as described below and record such in a waste management plan.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

Contractor to reduce the amount of waste that is generated and where waste is generated ensures that useable waste is re-used / recycled or recovered in an environmentally sound manner before being safely treated and disposed of.

Any waste of material value the client needs to be informed and when and where possible handed over to the client.

Waste will be classified in the following categories and these requirements incorporated into the contractor's waste management plan:

LIQUID WASTE:

- a. When mobile toilets are used it must be serviced on a weekly basis and waste dispose by the service provider in an acceptable manner;
- b. Service records must be documented;
- c. Cleaning of the inside of the toilets are part of the hygiene requirement and recording must be daily conducted;
- d. The contractor must provide sufficient toilet paper for such toilets as required by the facilities regulation;
- e. Cleaning of paint buckets / brushes and disposal of paint may not be through the storm water system;
- f. Run-off from wash bays must be intercepted
- g. Chemical spills must be contained and cleaned

SOLID WASTE:

- a. Any littering is prohibited;
- b. Bins must be provided and cleaned on regular basis, preferably by end of each week or whenever possible;
- c. Disposal must be to a legal dumpsite;
- d. Sites must be swept of material that could cause injury or damage to persons or vehicles;
- e. Hand mixing of cement is only permitted inside a batch mixing bucket (brimmed area) or on the footprint of a construction area.
- f. Contaminated ground / soil must be treated or be removed and the area rehabilitated immediately.

HAZARDOUS WASTE:

- a. Hazardous materials may only be disposed of at an appropriately permitted landfill or disposal sites for hazardous material;
- b. Dedicated containers clearly marked for Hazardous waste must be used and only be used for designated purpose as designed; and
- c. Hazardous waste registers to be maintained.

GENERAL WASTE REQUIREMENTS

- a. Disposing of waste must be conducted as soon as possible at a legal dumpsite, skip or on permitted municipal landfill site;
- b. Contractor must monitor the presence of litter on the work sites;

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

- c. Waste must not be allowed to stand on site to decay resulting in bad odours;
- d. Poisonous or material capable of fermentation, putrefaction or constituting a nuisance shall be treated or disposed of by methods approved by the local authorities.

Personal Protective Equipment

Personal Protective Equipment (PPE)

A PPE needs analysis is to be conducted in accordance with the HIRA. PPE is to be issued free of charge. The Principal Contractor is to indicate procedure for Lost or Stolen and Worn Out or Damaged PPE.

The following PPE shall be used on site as minimum required for everyone on site:

- Steel-Toe Safety Shoes/Boots;
- Hard-hat;
- Two Piece Overalls;
- Protective gloves where required; and
- Hi-Viz Vest in **cases where visibility is impaired**.
- Employees working at access points need to wear cloth masks and **face shield** when recording employees and visitors entering the site.

Working hours

The regional sectorial requirement in terms of the BCEA should be complied with. Contractor must document their working hours and breaks. Total working hours per week not to be exceed legislative requirement.

An arrangement for working at night, after hours, over weekends and during holidays with supervision must be documented in health and safety plan.

All works will be supervised on site.

Where accelerate work programs are implemented adherence to undisturbed weekly or two weekly rest period (BCEA 15.(1) & 15.(2)) should be adhered to (weekly is 36 consecutive hours and fortnight basis is 60 hours).

Night Work

The Principal Contractor shall not undertake any night work without prior arrangement and a written authorization from the CLIENT. The Principal Contractor shall ensure that adequate lighting is provided for all night work and failure to do so shall result in work being stopped.

All works must be supervised directly by management on site.

NB: risk assessment to be revised should night works be approved.

Notice boards

Different notice board may be required depicting the following information on a site:

The professional team involve in the project (external Organogram); and

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

Displaying health and safety pictographs, access control, PPE requirement and contact details to the site management (Internal Organogram).

A layout for the professional team will be provided by the Consulting engineer / Program Implementing Agent. Only approved erecting locations may be used. The requirement and provision for the implementation of Notice Boards must be included in the activity schedule.

Emergency and first aid

Emergency Procedures

The Principal Contractor shall submit a detailed Emergency Procedure for approval by in the Health and Safety File.

The procedure shall detail the response plan including the following key personnel:

- List of key personnel,
- Details of emergency services,
- Actions or steps to be taken in the event of the emergency; and
- Information on hazardous material / situation, including each material's / hazardous potential impact or risk on the environment or human and measures to be taken in the event of an accident.

Emergency procedure(s) shall include, but not be limited to, fire, spills, accidents to employees and use of hazardous substances.

A contact list of all service providers (Fire department, Ambulance, Police, Medical and Clinic, etc) must be maintained and available to site personnel.

First Aid Box and First Aid Equipment

General Safety Regulations 3.(2) Where more than 5 employees are employed .. provide a first aid box ... at or near the workplace. (4) Where more than 10 employees are employed, ... at least one person is readily available.

The Principal Contractors shall provide an on-site First Aid Box, adequately stocked (19 items as prescribed) at all times, and ensure that the First Aid Box is accessible and fully controlled by a qualified First Aider.

Medical certificates

The contractor has to ensure that an arrangement is in place to ensure all the management and employees have valid medical certificates of fitness specific to the construction work to be performed.

Medical surveillance

OCCUPATIONAL HYGIENE

- a. Proper health and hygiene measures must be put in place to prevent exposure to hygiene hazards.
- b. Prevention should include the prevention of accidental inhalation, ingestion, and absorption of any hazardous substance or high noise level exposure.

MEDICAL SURVEILLANCE

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

The Contractor shall provide in the OHS Plan for the management of employee medical surveillance and ensure that:

- a. All employees on site to undergo routine medical examinations specific to the work to be performed taking into account the hazard and risk exposures;
- b. This should address pre-employment examination, periodic monitoring and exit examinations;
- c. Exit examination will be compulsory for employees working with hazardous chemicals;
- d. A declaration should be noted in the close-out report declaring all employees fit on completion of the project;
- e. All employees performing work on site must be declared medically fit for the work they are to perform (especially for working at heights);
- f. Employees will be notified the results of their medical examinations and any concerns made available that may become evident from medical examinations;
- g. Copies of valid medical certificate of fitness must be available on site as a duty of care towards employees to ensure employees are made aware of any health conditions or health restrictions which may have resulted from or may be aggravated by work activities on site.
- h. The consultation, notification and communication with the employee should, with the employees' written consent, be made available upon request for verification by the client, regulatory authority or their representatives.

CONTACT TRACING

- a. Records kept on site of employees and visitors entering the site for contract tracing purposes.

Reporting fatality, permanent injury and occupational diseases

The Contractor shall provide in the OHS Plan a summarized section providing information pertaining to his incident management procedure which should include at least the framework of the procedure and noting the requirements set out below.

Incident management procedure

In addition to the above the Contractor shall be required to prepare a comprehensive incident management procedure to be implemented on the client's sites. The procedure should address at least, but not limited to:

- a. Incident classifications
- b. Incident and near miss reporting process
- c. Incident reporting timeframes
- d. Investigation teams
- e. Investigation techniques/methods to be used
- f. Investigation timeframes
- g. Investigation reporting
- h. Corrective action implementation

Without derogating from the generality of the above, the Contractor shall ensure incidents are investigated by, where appropriate, a competent multidisciplinary team within 7 days. The Contractor shall ensure all incident and investigation records shall be available in the OHS File.

The Contractor shall notify the client of any incidents, accidents and notices served by any regulatory authority while on site. The client shall further be provided with copies of any written documentation

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

relating to any incident. The Contractor will be responsible to inform the relevant authorities of any Reportable Incidents which may occur in terms of the applicable legislation.

All correspondence with the relevant authorities regarding these incidents must be copied and kept in the OHS File.

Incident management documentation

The Contractor shall note in the OHS Plan the incident management supporting documentation which should provide for and include, at least:

- a. Legislative reporting and recording documents
- b. Contractor's own reporting and recording forms (near miss to be provided for)
- c. First aid kit contents list
- d. First aid kit inspection checklist
- e. First aid dressing register / treatment register

Medical procedure – CoVid-19

The following documentation should be submitted to the Compensation Commissioner

- Employer Report of an Occupational Disease (W.CL.1)
- Notice of an Occupational Disease & Claim for Compensation (W.CL.14)
- Exposure and Medical Questionnaire
- First Medical Report in respect of an Occupational Disease (W.CL.22) (Should list the diagnosis as U 07.1 ICD-10 code for COVID-19)
- Exposure history (W.CL.110) and/or any other employment history
- A medical report from Dr and/or Specialist
- Progress medical reports (W.CL.26)
- Final medical report (W.CL.26) once MMI reached

Method statements

Method statements, Safe Work Procedures (SWP), Safe Operating Procedures (SOP), Daily Safe Task Instructions (DSTI's)

Certain changes have been made in the Construction Regulation of 2014 in these regards and are extracted below to indicate current requirements.

Extractions from the Construction Regulations where reference to "**method(s) or method statements**" appear:

QUOTE

Construction Regulation 2003

"method statement" means a written **document detailing the key activities** to be performed in order to **reduce** as reasonably as practicable the **hazards identified in any risk assessment**;

Construction Regulation 2014

"Method statement" The description of a Method Statement was removed from definition section. ...

Risk Assessment for construction work 9.(1) ... (b) ... documented **method**;

Fall protection Plan 10.(1) ... (2) ... procedures and **methods** used to address all the risks ...

Temporary works 12.(1) ... (3) A contractor must ensure that - ... (n) a temporary works drawing or any other relevant document includes construction sequences and **methods statements**; ...

Excavation 13 (2) A contractor who performs excavation work – ... (k) must, where the excavation work involves the use of explosives, appoint a competent person in the use of explosives for excavation,

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

and must ensure that a **method statement** is developed by that person in accordance with the applicable explosives legislation; and ...

Demolition work 14. ... (2) A Contractor must ensure that before any demolition work is carried out, and in order to ascertain the method of demolition to be used, a detailed structural engineering survey of the structure to be demolished is carried out by a competent person and that a **method statement** on the procedure to be followed in demolishing the structure is developed by that person. ... (11) Where the demolition work involves the use of explosives, a **method statement** must be developed in accordance with the applicable explosive legislation, by an appointed person who is competent in the use of explosives for demolition work ...

Cranes 22. A contractor must, in addition to compliance with the driven Machine Regulations, 1988 ensure that where tower cranes are used – ... (b) a relevant risk assessment and **method statement** are developed and applied; ...

UNQUOTE

It is therefore a legal requirement that method statements be prepared for:

- a. Temporary Works;
- b. Excavation;
- c. Demolition Work; and
- d. Cranes.

Anywhere else, but not exhausted, where method(s) is used the contractor must prepare at least the applicable SWP / SOP or DSTI for such method statement.

Health and Safety File

Based on the scope of work the health and safety file shall include and address, but not limited to, the items set out in the relevant specifications as stipulated by AIRPORTS COMPANY SOUTH AFRICA.

2.27 Hand tools

The purpose of this procedure is to ensure employees understand and practice the general safety requirements when using hand tools.

There is a big variety of hand tools in the market. The objective of this is to cover the basic safety principles of a hand tool. The responsibility lies with the Contractor to ensure employees are aware of the safety requirements on any given specific hand tool

Hazards / Risks

- Hand injury from broken or homemade tools.
- Hand injury from incorrect storage of hack saw / "Stanley" knife.
- Eye injury from using a hammer and chisel.
- Hand/body injury from forcing tools beyond their stress capability.

Control Measures to Minimize Risks

- Fitter/leather Gloves to prevent cuts from sharp edges.
- Safety glasses to prevent eye injuries when using tools that can projectile foreign objects (Chisel, Copper hammer, etc.)
- Routine inspections to ensure tools are in safe working order.
- × Never throw a tool to another person.
- × Never leave your tools lying around.
- × Never use a hammer with a loose head.
- × Never use none insulated tools for live electrical work.
- × Never use tools which have been declared unfit/unsafe.
- × Never use another spanner as leverage on a spanner.
- × Never leave tools lying on ladders.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

- a) Always keep your work area clean and neat.
- b) Always wear safety glasses and gloves if you are going to work with a hammer, metal file, hand saw and any tool that might produce flying objects and sharp edges.
- c) Always report damaged or worn tools by end of shift.
- d) Always grind off mushroom heads on chisels and copper hammers.

Pre-Start Procedure

- 1. Check the condition of the tool before use.
- 2. Make sure the tool is the correct tool for the job. (Example: correct size and fitment)

Job Steps

- 1. Inspect tool for wear and damages.
- 2. Put your gloves, safety glasses and long sleeve overalls on if necessary.
- 3. Store the toolbox or tool bag out of walkways.
- 4. Select a tool that is appropriate for the job.
- 5. Do the job safely
- 6. Place tool in a carry container until the tool is going to be used again.

2.28 Registers & Checklists

A tabular layout should be included in the contractor's Health and Safety Plan. It is important that the legal required frequencies are adhered to and must therefore be stipulated. (Sample included in Annexure below)

2.29 Legal Appointments

A tabular layout should be included in the contractor's Health and Safety Plan to correspond with the contractor's organogram depicting a list of legal appointments. (Sample included in Annexure below.) Section 2.1 above depict the layout of such appointments.

2.30 Health and Safety Budgets

Construction Regulation 5.(1)(g) requires that the client must ensure that a potential contractor has made adequate provision for the cost of health and safety measures. This includes the following, but not only limited to: Medicals, PPE, Fire-fighting, First Aid, Health and safety personnel, Facilities, Fall Protection, Vehicle and equipment upgrade for use on site, Lifting machinery and equipment, Insurance, First Aid, Training, Signage, Electrical & Plant and Scaffolding.

A contractor should prepare and submit, in tabular form as an annexure, their health and safety budget.

Should a contractor exclude various items as noted above or indicate a no costs, in his own discretion, to an item it will be understood that such costs are included in the contractor's tender costs.

RE-USEABLE ITEMS (EQUIPMENT) COSTED AND CLAIMED IN SUCH BUDGET AND APPROVED BY THE CLIENT, E.G. ROAD CONES, TESTING EQUIPMENT, FIRE EXTINGUISHERS, ETC., BECOME THE OWNERSHIP OF THE CLIENT AFTER THE PROJECT HAS BEEN COMPLETED.

ENVIRONMENTAL RESTRICTIONS AND EXISTING ON-SITE RISKS ARRANGEMENTS

3.1 Fall protection

Where a fall protection plan is required a competent fall protection planner with SAQA US 229994 certificate must be made available with such plan.

Where employees then work at heights / elevated positions those employees could be trained with a SAQA US 120362.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

The person(s) erecting scaffolding must proof competencies with a SAQA US 263205 and for a scaffolding inspector SAQA US 263205.

Where fall arrest systems are implemented SAQA US 229995 and SAQA US 229998 be required.

- a. An additional pre-emptive Risk Assessment will be required for any work to be carried out where there is a fall risk and will be classified as "Working at Heights".
- b. 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, as required by the risk assessment contemplated above, shall wear and use a full body harness that will prevent the person falling from the platform 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 length that the person will not be able to move over the edge.
- c. Any platform, slab, deck or surface forming an edge over which a person may fall must be fitted with suitable guard rails at two different heights as prescribed in SABS 10085-1 Code of Practice for the Design, Erection, Use and Inspection of Access Scaffolding.
- d. Where the requirement above is not practicable, the person will be provided with a full body harness that will be worn at all times and shall be attached above the wearer's head at all times. The lanyard must be fitted with a shock-absorbing device or the person must be attached to a fall arrest system (anchorage connector; body wear; and connecting device).
- e. Where the requirements above are not practicable, a suitable catch net must be erected. Employees working at heights must be trained to work without risk to their health and safety or that of others and be declared medically and psychologically fit to perform work at elevated positions. Proof of medical fitness and working at heights training must be maintained in the Contractor's OHS File.
- f. Where work on roofs is carried out, a risk assessment must be performed and take into account the possibility of persons falling through fragile material, i.e. skylights and openings in the roof. The Risk Assessment shall place specific emphasis on the placing and handling of roofing materials such as IBR Sheeting or similar materials, (including contingency safety measures), which when exposed to windy conditions represents a serious safety hazard.
- g. The Contractor shall ensure a comprehensive fall protection plan and rescue procedure is drafted by an appointed competent person who is trained and knowledgeable in the development of such plans.
- h. All employees required to perform work in elevated positions shall be trained and conversant with the requirements of the fall protection plan and the rescue procedure.

Fall Arrest Equipment:

- a. Each employee required to perform work at elevated positions shall be issued with a body harness for his/her exclusive use. No harnesses should be shared
- b. Fall arrest equipment shall be inspected prior to use by a competent person
- c. Fall arrest equipment must be stored in such manner as to not compromise the integrity of the equipment
- d. Employees required to use fall arrest equipment shall be sufficiently trained in the correct use thereof
- e. Records of training and inspections shall be maintained in the OHS File.

3.2 Fall prevention

Elevated positions including roof work

The Principal Contractor shall ensure that a detailed fall protection plan, rescue plan and HIRA has been undertaken and submitted for approval to the CLIENT before commencement of such activity on site.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

Such plan shall include (but not limited or exhausted) to: Introduction, Scope, Goals, Definitions, Worksite Information, Fall Protection Risk Assessment, Designations and Responsibilities, Training Management, Employee Health Management, Equipment Management, Operating Procedures, Rescue Procedures, Document Review and Amendments, Records – Training, Records – Medical Certificate of Fitness, Records – Inspection Registers & Records – Staff Register and Personal Details.

Where working on roofs take place the slope of the roof may cause edge protection to be implemented.

Working at heights –height of +1.5m

The Principal Contractor shall ensure that a detailed fall protection plan, rescue plan and HIRA has been undertaken and submitted for approval to the CLIENT before commencement of such activity on site.

All work at height must be:

- Appropriately supervised;
- Properly planned; and
- Carried out in a manner which is safe.

A detailed risk assessment and a fall protection plan that is site and task specific must be approved before working at height may be done. Please ensure that supervision is conducted as per Construction Regulation section 10, a competent person qualified for fall protection development.

Suitable and sufficient means must be provided to prevent workers falling from height. This must include the following measures supplied by the contractor appointed on the project:

- a. Scaffolding to allow safe access, both externally and internally;
- b. Scaffolding to be signed off weekly and after inclement weather;
- c. Internal Scaffolding to be erected for roof work acting as a working platform;
- d. Suitable working platforms to ensure safe access to all elevated areas;
- e. Suitable fall protection for worker working at height (harness); and
- f. Lifelines.

Ladders must only be allowed when it is not possible to use other more suitable access equipment (Scaffolding or platform / podium steps) for access or work of short durations (less than 10 minutes) and where 3 points of contact can be maintained at all times by the person working on the ladder. Suitable platforms must be used where both hands are required to be free and only in cases where it is not possible to use other more suitable access equipment e.g. scaffolding.

Where a slab is being prepared solid edge protection should also be put in place at a height of 1m above floor level.

Ladders and Ladder work

The Principal Contractor shall ensure that all ladders are numbered and inspected regularly keeping record of inspections. It should be noted that Aluminium ladders are preferred to wooden ladders. Ladders must be selected as suitable for the work to be performed.

3.3 Roof work

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

When working at heights during the roof erection work scaffolding will be erected in the inside of the structure to prevent the employees from falling to the ground.

Again, the employees working at height are required to make use of safety harnesses and fall prevention techniques to be put in place like safety cables / attachment slings.

Where work on roofs is 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 to support the roof structure.

The Risk Assessments shall place specific emphasis on the placing and handling of roofing materials which when exposed to windy conditions represent a serious safety hazard or overload factor.

Where working on roofs take place the slope of the roof may cause edge protection to be implemented.

All life lines and secure/anchor points must be designed and signed off by a competent appointed person or Design Engineer.

Life lines, fall arrest equipment and fall prevention equipment must be inspected prior to use and have a SWL displayed and the SWL certificate must be kept on site.

All fall arrest and fall prevention equipment shall be subject to inspections and tests as required by the Regulations and SANS standards and records of such inspections and tests kept in the site health and safety file.

3.4 Falling objects

Erect a catch platform or net above an entrance or passageway or above a place where persons work or pass under, or fence 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 where there is a danger or possibility of persons being struck by **falling objects**.

3.5 Structures

Existing structures

Contractor will always have in place an emergency plan. The prevention of fire damage, fragility and stability of existing structures is of utmost importance to complete this project in time.

Existing structures with recognized hazard will be reported to the client and Contractor will assist the client to improve the quality of compliance to structural integrity of such structure.

New Structures

During construction Contractor will adhere to the design specifications of the appointed engineering consultant. Pre-cast inspections of steel lay down are implemented in the registers and engineers have to approve pre-cast registers on site. Contractor will adhere to the removal of supports in accordance to the requirements to prevent any uncontrolled collapse of such structure.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

When environmental conditions create bad conditions employees will not be allowed to use such uncompleted structure as a hiding place during inclined weather.

3.6 Temporary works

Contractor will adhere to the erection and removal of temporary structures for the casting of slab supports in accordance to the requirements to prevent any uncontrolled collapse of such structure. The engineering design or competent person will stipulate safe removing of such support and document such in the register.

3.7 Excavations and Ground Conditions

Excavation

Survey must be done to determine soil conditions, compaction and location of underground services. Where the uncertainty pertaining to the stability of the soil exists, the decision (documented) from a professional engineer or a professional technologist competent in excavation shall be decisive and such a decision shall be in writing and signed by both the excavation supervisor and the professional engineer or technologist as the case may be.

Excavation supervisors and / or construction manager must have a SAQA US 365183 competency certificates (or obtain one within the first month after appointment).

The following conditions should also be complied with for excavation:

- a. Excavation should be sloped to prevent collapse;
- b. Excavation should be shored / braced to prevent caving / falling in;
- c. Soil dumped at least 1m away from edge of excavation
- d. On sloping ground soil should be dumped on lower side of excavation;
- e. Use of stop blocks and signs for dumpers and place a banksman;
- f. If more than 2-meter-deep shoring must be used and safe access be provided and must be seen as a confined space entry;
- g. Protect vehicles from falling into excavation;
- h. Provide barriers and signage and lights at night;
- i. Beware of undermining adjacent structures integrity;
- j. Appoint only a competent person as excavation supervisor;
- k. Ensure that no load or plant is placed near excavated areas; and

Work strictly according to the plans provided by the client when searching for current and existing services. Stop work when the current or existing services have not been found within a radius of 1 meter and consult the client's representative before commencing. Preliminary safety talks will be noted and the potential hazards explained to all employees prior to works. Digging will commence with hand tools at all times when looking for existing services.

Caution should be taken and emergency measure put in place when digging in areas where flooding may occur

The Excavation Supervisor to inspect:

- I. Daily, prior to each shift;
- II. After an unexpected fall of ground;

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

- III. After any damaged to supports, bracing or shoring;
- IV. After Rain

3.8 Demolition works

The Contractor must ensure that before any demolition work is carried out, and in order to ascertain the method of demolition to be used, a detailed structural engineering survey of the structure to be demolished is carried out by a competent person and that a method statement on the procedure to be followed in demolishing the structure is developed by that person.

The Contractor is required to appoint a competent person to supervise and control all demolition work on site. During demolition, the competent person must inspect the structural integrity of the structure at intervals determined in the method statement, in order to avoid any premature collapses.

Contractors who perform demolition work must ensure that:

- a. no floor, roof or other part of the structure is overloaded with debris or material in a manner with regard to a structure being demolished;
- b. Sufficient steps to ensure that all reasonably practicable precautions are taken to avoid the danger of the structure collapsing would render it unsafe;
- c. When any part of the framing of a framed or partly framed building is removed or when reinforced concrete is cut would render it safe; and
- d. Precautions are taken in the form of adequate shoring or other means that may be necessary to prevent the accidental collapse of any part of the structure or adjoining structure.

Further:

- a. Ensure that no person works under overhanging material or a structure which has not been adequately supported, shored or braced;
- b. Ensure that any support, shoring or bracing contemplated above, is designed and constructed so that it is strong enough to support the overhanging material.
- c. Where the stability of an adjoining building, structure or road is likely to be affected by the demolition work on a structure, take steps to ensure the stability of such structure or road and the safety of persons;
- d. Ascertain as far as is reasonably practicable the location and nature of electricity, water, gas or other similar services which may in any way be affected by the work to be performed, and must before the commencement of demolition work, take the steps necessary to render circumstances safe for all persons involved.
- e. Cause every stairwell used and every floor where work is being performed in a building being demolished, to be adequately illuminated by either natural or artificial means.
- f. Cause convenient and safe means of access to be provided to every part of the demolition site in which persons are required to work.
- g. Erect a catch platform or net above an entrance or passageway or above a place where persons work or pass under, or fence 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 where there is a danger or possibility of persons being struck by falling objects.
- h. Ensure that no material is dropped to any point, which falls outside the exterior walls of the structure, unless the area is effectively protected.
- i. Ensure that every chute used to dispose of rubble is designed and managed in accordance with the relevant section for waste management of this specification.

3.9 Tunneling

Where tunnelling work encounter the Contractor will appoint a competent tunnelling supervisor and have the required documentation / registers in place. No work will be conducted in tunnels with a height dimension smaller than 800mm.

3.10 Scaffolding

Scaffolding

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

The Principal Contractor shall ensure that a detailed fall protection plan and HIRA has been undertaken and submitted for approval to the CLIENT before commencement of such activity on site. The Principal Contractor shall appoint and train scaffolding inspectors and erectors to ensure all scaffolding is erected according to SANS 10085.

Form and Support Work for Structures

Should the design require this type of work, the Principal Contractor shall ensure that formwork and support work structures are examined and checked for suitability by a competent Person, Structural Engineer, before use, during and after placement of concrete. Records of such examinations are to be kept on the Health and Safety file.

3.11 Suspended platforms

If suspended platforms are used a competent person will be appointed to design such requirement that will provide a designer's health and safety report and certificate for the design. A competent person will be appointed to erect such platform following an operational compliance plan developed by a competent person.

Copies of the design and competent certificates for the suspended platform will be delivered to the regional Chief-Inspector for recognition.

3.12 Rope access work

Where rope access is used the contractor must ensure compliance to section 18 of the Construction Regulation and ensure that a competent person is appointed in writing as a rope access supervisor with the duty of supervising all rope access work on the site, including ensuring health and safety compliance in respect of rope access work.

In addition to the required of section 10 of the Construction Regulation, fall protection, the contractor shall provide a site, work and environment specific fall protection plan for rope access work developed by a competent person prior to the commencement of the work.

The fall protection plan contemplated above shall include:

- a. Risk assessment;
- b. Procedure to evaluate employee's medical fitness;
- c. Training for the work to be conducted;
- d. Procedure addressing the inspections, testing and maintenance of equipment; and
- e. Rescue plan.

3.13 Material hoists

The Principal Contractor shall ensure that lifting machinery and tackle is inspected before use and/or on a monthly basis. The Principal Contractor shall have lifting machinery and tackle inspector who will inspect the equipment daily or before use, taking into account that:

- All lifting machinery and tackle have a safe working load clearly indicated;
- Records of inspections and load testing certificates are kept on site.
- There is proper supervision in terms of guiding the loads which includes a trained banks man to direct and check lifting tackle if it is safe for use.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

3.14 Bulk mixing plant

Where bulk mixing plants is used the contractor shall ensure compliance to Construction Regulation 20 for the construction, maintenance and operation of a bulk mixing plant on site.

Only competent and trained supervisors and operators shall be appointed in writing as bulk mixing plant operators. No person may be authorised to operate a bulk mixing plant that is not declared competent.

Safety devices provided to prevent the accidental starting of the bulk mixing plant are to be maintained and operational at all times. All machinery and dangerous moving parts of the mixer shall be adequately guarded or fenced and no such guard or fence shall be removed or modified.

Compliance to General Safety Regulation section 5 for confined spaces entry shall be adhered to when as a precautionary measure when entering any silo.

3.15 Explosive actuated fastening device

Where explosive actuated fastening devices are used the Contractor shall ensure that all the requirements and provisions of Construction Regulation 21 are implemented and maintained for explosive actuated fastening devices.

Controllers, inspectors and operators of explosive actuated fastening devices are to be competent persons appointed in writing and specifically trained and proof of training held on record.

Operators shall be issued with suitable protective equipment and the use thereof enforced. A cartridge issue and return register shall be maintained by the appointed person and cartridges shall be kept in a lockable facility and under the control of the appointed person at all times.

Warning signage to be prominently displayed in areas where explosive actuated fastening devices are used on site and such area shall be demarcated to prevent access of unauthorised persons.

3.16 Cranes

Projects classified as a CIDB Category C project may require the use of mobile cranes or truck mounted cranes.

Referencing Construction Regulation 22, Construction Regulation 27, Driven Machinery Regulation 18 and SANS 12480- 1, cranes and lifting equipment must be designed and constructed in accordance with generally accepted technical standards and operated, used, inspected and maintained in accordance with the requirements of the Driven Machinery Regulation.

The requirements of Construction Regulation 22 and Driven Machinery Regulation 18 are to be stringently applied and maintained in respect of all tower cranes, mobile cranes, lifting tackle and lifting operations. SANS 12480 shall further be applicable for the installation and use of tower cranes.

If required, the Contractor shall notify the Civil Aviation Authority of the erection of a tower crane or use of a mobile crane that exceeds the allowable limits.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

3.17 Construction vehicles and plant

Construction Plant

“Construction Plant” encompasses all types of plant including but not limiting to, cranes, cherry pickers, piling frames, boring machines, and excavators, draglines, dewatering equipment and road vehicles with or without lifting equipment.

It is envisaged that such plant will be used on this project and where the need arise the Principal Contractor shall ensure that all such plant complies with the requirements of the OHS Act. The Principal Contractor shall inspect and keep records of inspections of the tools and equipment used on site. Only authorised persons are to use machinery under proper supervision. All operational manuals requirements should be complied with and checklists duly completed. Appropriate PPE and clothing and as specified by the HIRA, shall be provided and maintained in good condition at all times.

Where construction plant (hired included) operates with a joystick a “joystick protection bar” should be installed to protect the operational mechanisms from objects falling on or persons falling on the operational mechanism in case of a slip. Should a contractor not comply with this requirement the principal contractor will be fined in terms of section 4.32 as a severe non-conformance.

Hired Plant and Machinery

The Principal Contractor shall ensure that any hired plant and machinery brought to site is safe for use. The necessary requirements as stipulated by the OHS ACT as well as those that are stipulated by this OHS Specification, shall apply (see *Construction Plant* above).

The Principal Contractor shall ensure that operators hired with machinery (seen as a contractor) have proof of competency to operate the machinery, proof of medical certificate of fitness and undergo a Health and Safety induction, appropriate tool box talks and be issued with the necessary PPE.

3.18 Electrical installations and machinery

High Voltage Electrical Equipment and any electrical works

The Principal Contractor shall ensure that, where the work is under, on or near high-voltage electrical equipment that a SWP is drafted and approved by a competent person and the client’s representative and that such approval document to be kept in the Health and Safety File.

Such SWP shall include relevant risk management procedures (e.g. **Lock-out Procedure**). The Principal Contractor shall communicate with and receive approval from the relevant representatives prior to commencement of any **live** or tie-in electrical works.

Portable Electrical Tools / Explosive Power Tools

The Principal Contractor shall ensure that use and storage of all explosive powered tools and portable electrical tools are in compliance with relevant legislation. The Principal Contractor shall consider that:

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

- A competent person undertakes routine inspections;
- Only authorised persons use the tools;
- There are safe working procedures applied;
- Awareness training is carried out and compliance is enforced at all times; and
- PPE and clothing are provided and maintained.

Telescopic Link sticks or Hot sticks

- Telescopic Link sticks or Hot sticks are used by linesman to open and close solid links (open/close circuits) on overhead lines. Linesman use telescopic link sticks to carry out maintenance operations on links, fuses, live line surge arrestors and rocker isolators. These are used to provide restoration of power to sectionalised sections of overhead networks without having to climb poles.
- The cylindrical shaft provides mechanical strength to the unit. Fibreglass units are foam filled at the end section for the first meter. The remaining sections are fibreglass with the telescopic buttons.
- It is important to observe the minimum working distances between the operator and the live conductor. Although the telescopic link stick is tested to standards all instruments are manufactured from the highest grade electrical rated fibreglass to meet or exceed all applicable industry performance criteria including ASTM F711, ASTM F1826, and OSHA 1926.951(d). Eskom approved link sticks are manufactured to **SAP 021 2806 number D-DT-12600 standards**.
- Valid Test certificates should accompany this equipment and be available in Safety files.

3.19 Flammable and hazardous materials

Hazardous Chemical Substances (HCS)

In addition to the requirements in the HCS Regulations, the Principal Contractor must provide proof in the Health and Safety Plan that:

- Safety Data Sheets (SDS's) of the relevant materials/hazardous chemical substances are available prior to use by the Principal Contractor. Mention should be made how the Principal Contractor is going to act according to special/unique requirements made in the relevant SDS's. All SDS's shall be available for inspection by the agent at all times.
- Risk assessments are to be done when new HCS are introduced on site.
- How the relevant HCS's are being/going to be controlled by referring to:
 - a) Limiting the amount of HCS
 - b) Limiting the number of employees
 - c) Limiting the period of exposure
 - d) Substituting the HCS
 - e) Using engineering controls
 - f) Using appropriate written work procedures
- The correct PPE is being used.
- HCS are stored and transported according to SABS 072 and 0228.
- Training with regards to these regulations is conducted.

The Health and Safety plan should make reference to the disposal of hazardous waste on classified sites and the location thereof (where applicable).

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

The First Aider must be made aware of the SDS and how to treat HCS incidents appropriately.

Asbestos (Not to be used on new construction site)

The Principal Contractor/Contractor shall comply with the Provisions of Asbestos Regulations should they have to work with asbestos related materials.

No new asbestos contained material should be use on this project.

3.20 Water environments

Unless water is accumulated within excavations the Contractor need to ensure that any water entrapment where public could gain access be barricaded and access restricted to such environment.

However, should such areas exist on the site the Contractor will have a trained first aider on site to assist with medical conditions as, when and where possible.

3.21 Housekeeping and general safeguarding

Contractor will provide proper storage of materials for housekeeping. In the waste management plan the disposal procedures for waste is described. No materials be place where it would interference with other operations.

Where chutes are required when waste is removed from higher levels (3 levels 9m) Contractor will install the required mechanisms.

When internal waste storage area is provided it will be fenced off and will have access control via a lock. No waste bins or other collection articles will be place at entrances or passageways, but rather on an outside wall or under an overhead screen.

The construction manager and all other employees must ensure and maintain at all time during work that;

- a. A housekeeping supervisor will be appointed
- b. Housekeeping will be managed on a **daily basis**

The appointed person will make use of daily/weekly and Monthly checklists.

- ◆ Housekeeping is continuously implemented and maintained;
- ◆ Materials and equipment are properly stored;
- ◆ Scrap, waste and debris is removed;
- ◆ Materials placed for use are placed safely and not allowed to accumulate or cause obstruction to the free-flow of pedestrians and or other employees;
- ◆ An unimpeded work space is maintained for every employee;
- ◆ Every workplace is kept clean, orderly and free of tools, materials and the like that are not required for the work being done;
- ◆ As far as is practicable, every floor, walkway, stair, passage and gangway is kept in good state of repair, skid-free and free of obstruction, waste and materials

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

3.22 Stacking and storage

Stacking of Materials

The Principal Contractor shall ensure that there is an appointed stacking and storage supervisor for all materials, scaffolding and all equipment that are stacked and stored in accordance with legislation.

All materials shall be neatly stacked in a designated lay down area within the confines of the Principal Contractor's allocated construction area.

3.23 Fire precautions

The importance of fire protection and precautionary measures is recognised and arrangements shall be implemented to ensure that adequate procedures are adopted to **prevent risk** of injury or damage from fire.

Non-Smoking signs will be placed in close proximity of the stores and where any flammable materials are stored.

Good maintained fire-equipment will be placed at appropriate intervals.

Sufficient number of employees will be trained with fire equipment.

Contractor will be reliant on the existing Escape plan of the institute or otherwise put in place its own Escape and evacuation plan.

Competent **Fire Fighter must be appointed** for this project and will manage all Hot works and any other task that may result in possible fire. Such competent person should carry the correct SAQA qualification. Additionally, to a Fire Fighter a **Fire Equipment Inspector** must also be appointed with at least a similar qualification as the Fire Fighter.

Fire prevention procedures require HOT work Permits to be in place with the required Fire Equipment available on site, Site require trained employees when any Hot work is required.

Once Hot Work Permit is signed and in place work may commence.

Smoking will be limited to smoking area.

No open flames are allowed in or near site.

All electrical equipment will be checked for loose wires.

All flammable substances are removed from hot works area.

Fire Extinguishers and Fire Fighting Equipment

The Principal Contractor shall provide adequate regularly serviced fire extinguishers located at strategic points on site. The Principal Contractor shall keep spare serviced portable fire extinguishers. Safety signage shall be posted up in all areas where fire extinguishers are located.

Employees should be trained on using the correct type extinguisher for the correct application (electrical, wood, chemicals, etc).

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

The Principal Contractor shall have adequate persons trained or competent to use the Fire Fighting Equipment.

3.24 Construction employees' facilities

Where the client does not authorize the use of existing facilities the Contractor will provide at least 1 shower for each 15 employees on site. Contractor will provide at least one sanitary facility for each sex and for every 30 employees. There will be changing facility for each sex. A temporary shelter eating area will be erected and made available to employees.

3.25 Contaminated land

Any contaminated land will be handled through the environmental management plan.

3.26 Client activities (risks)

The client may have ongoing lectures or students occupying residential facilities there for the Contractor will accommodate such activity. Where major work is required adjacent to such lecture rooms Contractor will pre-warn the facility of such activities and mutually agree upon action to be taken.

3.27 Manual handling of materials

Manual material handling will occur and Contractor will find the most **ergonomic** manner to work with such requirement ensuring that no employees stand chance for injuries.

3.28 Noise and vibration

Noise Induced Hearing Loss (NIHL)

Where noise is identified as a hazard, the requirements of the NIHL regulations must be complied with and means of compliance is to be stipulated in the Health and Safety Plan.

The Contractor is to ensure that noise is minimised to acceptable levels and try to conduct noisy activities at times where it would not make any nuisance to the institution. Proper planning and finding means of reducing noise levels with regards to these activities is highly encouraged. (See also section 3.31)

Vibration:

Any excessive vibration can cause Hand-arm vibration syndrome (Raynaud's phenomenon).

Employees working on vibrating equipment must take regular breaks.

When working on vibrating equipment a kidney belt is to be worn where applicable.

3.29 Working near fragile materials

Cautionary manners will be implemented when working in close proximity of fragile materials. A no-smoking - and use of mobile phone policy must be in place.

3.30 Traffic planning

The contractor must ensure that all the necessary traffic/vehicle and pedestrian accommodation safety measures are taken into account to ensure the safety of personnel and members of the public (including site visitors) both on site and adjacent to site.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

Such measures must be in accordance with recognized practices and be pre- approved by the Client and if required by the local municipality and traffic authority.

The contractor must place the necessary emphasis on safe pedestrian walkways and routings throughout the construction stage. The site is located in a densely populated area with pedestrian walkways on two sides of the site.

Roadways are situated directly behind these walkways. Traffic and pedestrian accommodation drawings must be available on site as a source of reference and to assist with daily inspections and enforcement.

During construction the contractor must ensure that dust suppression through watering is utilized. When mud damage to the adjacent roads is due to the construction on site the contractor will remove these obstacles from the adjacent roads.

3.31 Monitoring of noise, silica and dust levels

Contractor need to implement sufficient precaution to ensure that the construction activities reduce their noise to the lowest possible level.

Silica and dust levels are kept to an acceptable level and that it does not pose a threat to the Health and Safety of employees, adjacent residents or the public on the premises.

3.32 Confined spaces

Areas identified as confined spaces as defined in General Safety Regulation GNR 1031 of May 1986 are (but not limited to):

- All tank manholes;
- Dispenser Sumps;
- Trenched less than 1m wide and deeper than 1.5m;
- Ceiling crawl space;
- Canopy crawl space;
- Chambers;
- Sewer Pipes;
- Pipes;
- Pit;
- Container;
- Calve;
- Pump Sump or Construction equipment, machinery, dangerous liquids or dangerous concentration of gas; and
- Any object where a dangerous vapour, dust fumes may be present.

Entering and working in a confined - or enclosed space requires a Confined Space Permit. The Principal Contractor shall provide his supervisor / contractor with the permit authorized through the Client's representatives with the work procedure for authorized persons prior to work commencement.

The responsibility for safe work procedures, both at the time of entry and during the entire operation of entering and working in confined spaces, rests with the Contractor.

3.32.1 The Contractor shall ensure that:

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

- a. All persons working in a confined space or managing entry to a confined space are appropriately trained;
- b. Adequate steps are taken to eliminate or control hazards. Before working in an area that contains dust, the area is to be ventilated and hosed down to settle and dampen the dust; and
- c. All necessary equipment to manage confined spaces, including all necessary monitoring and rescue equipment (such as tripods, breathing equipment and the like) made available.

3.32.2 Records to be maintained by the Contractor:

- a. Confined space entry permits;
- b. Confined space entry registers;
- c. Safety harness registers; and
- d. Atmospheric monitoring results.

3.32.3 Compulsory requirements during work in and entry to a confined space:

- a. Continuous supervision and monitoring;
- b. Adequate ventilation;
- c. Communication (radio) and
- d. Trained emergency rescue teams

3.32.4 Safety equipment where applicable, but not limited to:

- a. Employees issued with gas monitoring equipment, safety harnesses and self-rescuers;
- b. Trained with the safe use of the proper safety equipment;
- c. Upon entering an excavation, the requirements of work in confined spaces, must be observed;
- d. Any confined space may only be entered after the air quality has been tested to ensure that it is safe to breathe and does not contain any flammable or noxious air mixture;
- e. The confined space must be purged and ventilated of any hazardous or flammable gas, vapour, dust or fumes if and when such hazardous or flammable gas, vapour, dust or fumes have been identified;
- f. The safe atmosphere must be maintained and, where necessary;
- g. Employees are to be provided with breathing apparatus and must wear a safety harness with a rope with the free end of the rope being continuously attended to by a person outside the confined space;
- h. An additional person, trained in resuscitation, to be in full-time attendance immediately outside the confined space;
- i. Additional serviceable breathing and rescue apparatus is kept immediately outside the confined space for rescue purposes;
- j. All pipes, ducts etc. that may leak into the confined space to be blanked off sufficiently to prevent any leakage or seepage;
- k. The contractor must ensure that all employees have left the confined space after the completion of work; and
- l. Where flammable gas is present in a confined space no work may be performed in close proximity to the flammable atmosphere.

H&S File requirements

4.1 H&S Practitioner preparing the file

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

Contractor must provide detail of the Practitioner who prepared the health and safety plan in this section that includes skills, experience and if any base is use in preparing such document.

4.2 CONTACT DETAIL TO H&S PRACTITIONER

Contractor must provide contact detail of the Practitioner who prepared the health and safety plan in this section.

4.3 COPY OF CWP / NC

Where a Construction Work Permit (CWP) is required the client will prepare and submit such application. CWP must be conspicuously display at all entrances to the construction site.

Each Contractor must submit a Notification of Construction work, where the conditions specified under regulation 4. (1)(a-d) is triggered, 7 days prior to commencing on site to the department of employment and labour's provincial office. Take 2 copies of the document and ask for a stamp at the reception.

An appendix added to the specifications give a sample layout of the required notification also found in the Construction Regulation. An electronic copy of this document may also be available from the project manager.

4.4 COMPLETE CONTACT DETAILS FOR PARTIES

The contractor shall place a tabular sheet in their health and safety plan that depict the detail of the Client, Professional team and Contractors management involve on the project (Annexure 1).

4.5 PHYSICAL ADDRESS FOR CONSTRUCTION SITE AND SITE OFFICE

This information will be depicted in the tender document and must be noted in Annexure 1 of the contractor.

4.6 NATURE OF THE WORK DESCRIBE

The full scope of work for the project are described in the tender documents and need to be recorded in the contractor's health and safety plan.

4.7 COMMENCEMENT AND COMPLETION DATE

Once a contractor has been appointed this information will discussed and made available.

The appointed contractor is required to provide a work schedule for the project and submit for approval before work may commence on site.

4.8 LIST OF CONTRACTORS APPOINTED BY PC

Principal Contractor must have a list of the entire appointed contractor in the H&S file on site where it also indicates the status of each contractor in respect of man-days / month, LOG, H&S Plan approval, Notification date, Audits Conducted, etc.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

4.9 PROCEDURES TO ENSURE PC MAINTAIN H&S FILE

Client's representatives will perform CR 5.1.o-p requirement audit and documentation verification on all contractors, as specified in the definition above.

4.10 UPDATED RECORD OF "AS-BUILT" DRAWINGS AND PLANS

Any changes in design will be communicated to client and as build drawings for the responsible area communicated.

4.11 CRITERIA FOR DESIGN LOADINGS FOR STRUCTURAL ELEMENTS

The Client normally contract a consulting engineer for the design to handles such responsibility. Should this not be the case the principal contractor should inform the client immediately of any loading requirements to ensure all structures has the capacity to withhold the increased load capacity.

4.12 DETAIL OF POTENTIAL HAZARD INCLUDED IN STRUCTURE EG. PRE- OR POST – TENSION BEAMS OR SLABS

The Client normally contract a Civil Engineer for the design to handles such responsibility. Should this not be the case the principal contractor should inform the client immediately of any encountered potential hazards.

4.13 GENERAL DETAILS OF CONSTRUCTION METHODS AND MATERIALS

Matter expert contractors are contracted for specific scope of works. No contractor may appoint a 3rd party as matter expert to perform their contracted scope of works. Where a conflict to the contracted **contractor's competencies and resources** occur, the detail must be declared to the Client's representatives before approval may be granted.

4.14 EQUIPMENT AND MAINTENANCE OF FACILITIES WITHIN THE STRUCTURE

Contractor depends on the client's available equipment and maintenance of facilities in the structure. When a contractor completed his scope of works any residual risk must be convened to the client's representative in writing and communicated with the relevant facility maintenance management.

4.15 MAINTENANCE PROCEDURES AND REQUIREMENTS PROVIDED FOR THE STRUCTURE

Contractor depends on the client's maintenance procedures of facilities in the structure. Should it be found that additional requirements be implemented the contractor must inform the client in writing through the client's representative (facility managers).

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

4.16 LIST AND PROOF OF APPOINTMENTS OF EACH CONTRACTOR

CONTRACTOR WILL INCLUDE IN THE H&S FILE A LIST OF APPOINTED CONTRACTORS. REFER TO 4.8 & 4.13 ABOVE AS WELL.

4.17 PROCEDURES TO APPROVE, MONITOR AND REVIEW ALL CONTRACTORS H&S FILES ON SITE FOR THE PROJECT

The Principal Contractor shall implement a Contractor Management System to ensure compliance to the OHS Act and OHS Specifications. The Contractor Safety Management System procedures are to be stipulated in the Health and Safety Plan.

Contractor will implement the following process for contractor evaluation:

- a. Provide the Contractor with the Client's Health and Safety Specifications (this specifications);
- b. Provide the Contractor with the Principal Contractors Health and Safety Plan;
- c. Negotiate and approve the contractors Health and Safety plan;
- d. Approve Contractors competencies, resources & budget;
- e. Approve Contractors implementation of Health and Safety file to site by issuing a Certificate to Commence ("CCC");
- f. Monthly compliance documentation verification and site audit ("Periodic Site Audit");
- g. Submit a **hard copy** to the contractor within 7 days (CR 5.(1)(p))
- h. Issue PSA certificate on audit;
- i. Site visit reports and closure of audit findings; and
- j. Close-out report and indicate man-days of project per contractor.

4.18 MANUALS FOR OPERATING AND MAINTENANCE PROCEDURES AND SCHEDULE FOR PLANT AND EQUIPMENT

Contractor will keep Risk Assessment; operational manuals & Checklist accompanied any plant or equipment.

When a contractor completed his scope of works any residual risk must be conveyed to the client's representative in writing and communicated with the relevant facility maintenance management.

4.19 DETAILS OF LOCATION AND NATURE OF UTILITIES AND SERVICES (EMERGENCY AND FIRE-FIGHTING SYSTEMS)

The Client will ensure that the contractor be inducted on site indicating access to all the arrangements, utilities and services on the site.

Should this not be the situation then the Contractor will prepare an induction and provide this to its employees and appointed contractors.

4.20 RESPONSIBLE FOR "AS-BUILD" DRAWINGS

Any changes in design will be communicated to the client and as build drawings for the responsible area communicated and handed over to the client after the project is completed.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

4.21 PROCEDURES FOR MARKING–UP DRAWINGS TO AS-BUILD

The Client contracted a Civil Engineer for the design and handles such responsibility.

4.22 PROCEDURES TO PASS ON RESIDUAL RISK INFORMATION TO THOSE WHO NEED SUCH

In accordance to section 6. (1)(d) of the Construction Regulation the designer are responsible to document in a report to the client the residual risk of the design before the project goes out on tender.

Any changes in design need to be communicated to the client and as build drawings for the responsible area communicated.

4.23 General Record Keeping

The Contractor shall keep and maintain Health and Safety records to demonstrate compliance with the OHSS and the OHS Act in the frequency describe in the contractor's health and safety plan. The contractor shall ensure that all records of incidents, spot fines, training etc. are kept on site.

All documents shall be available for inspection by the CLIENT, his nominated representative or the Department of Employments and Labour's Inspectors.

4.24 Unanticipated Hazards (Inclusive of adverse weather such as strong winds)

Any contractor shall immediately notify the CLIENT of any hazardous or potentially hazardous situations arising during the performance of activities. CoVid-19 is known hazard.

A record must be minute in the monthly progress meetings regarding **rainfall and working days lost**.

4.25 Occupational Health and Safety Signage

The Contractor shall ascertain and provide adequate on-site Warning, Prohibition, Mandatory and General Signage and adhere to those instated by the Client.

The Contractor shall be responsible to maintain the quality and replacement of signage.

4.26 Occupational Safety

4.26.1 Site Access, Speed Restrictions and Protection

The Contractor shall ensure that a separate entrance/exit to the construction site is opened and erected for the sole use of construction activities.

The exact opening shall be discussed and agreed upon with the client representatives. The Contractor shall ensure that all persons in their employ and all those that are visiting the site are aware and comply with the site speed restriction(s).

The speed limit is set to not exceed 20km/h when entering grounds/site.

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

4.26.2 Pressure Equipment or Gas Bottles Including Operations

Should such equipment be used, the Principal Contractor shall comply with Pressure Equipment Regulations, including:

- Providing competency and awareness training to the operators;
- Providing PPE or clothing;
- Providing and maintain appropriate signage in areas where Pressure equipment are used;
- Inspect equipment regularly and keep records of inspections;
- Providing appropriate firefighting equipment (Fire Extinguishers).

4.27 General Machinery

The Principal Contractor shall comply with the Driven Machinery Regulations, which include inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE or clothing and training those that use machinery and enforce compliance.

As a precautionary matter it is a requirement that a **protective bar** be placed over the joystick / control of movement of machinery to prevent any uncontrolled operation of the machinery if a person or material falls on top of the controls.

The Principal Contractor shall report in the minutes of the progress meeting the type of machinery on site.

4.28 CIDB Health and Safety Plan Audit

The CIDB has gazette a best practice Standard for Health and Safety Plans and auditing requirements (Grade 2 to 9), Vol 641 9 November 2018 No 42021 and the principal contractor should adopt such layout as **standard for the layout of the Principal Contractor's Health and Safety Plan to ensure a fair evaluation.**

4.29 HIV/Aids Programme (when applicable)

Client commits itself to providing guidance and leadership in the implementation of HIV and AIDS, TB and Sexually Transmitted Infections (STI) programmes by all stakeholder organisations. It is a requirement that Principal Contractors shall provide HIV/Aids awareness training and roll out an HIV/Aids Programme for all employees.

The HIV/Aids Awareness Programme Requirements:

- HIV Programme Coordinator appointed (part-time)
- Appoint and train Peer Educator/s (Part-time)
- Male condom dispensers, sufficient male condom available and is it placed in high trafficked areas.
- Female condom dispenser, sufficient female condoms available and is it in high trafficked area
- All types of HIV/Aids related posters displayed in a high trafficked area and in a good condition.
- HIV/Aids Awareness workshops/tool box talk
- HIV/Aids Prevention Measures
- HIV/Aids Care and Support
- Free voluntary HIV testing

Duties of the HIV/AIDS Coordinator:

RA 8018-2025

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

- Ensure on-site programme implementation
- Ensure Peer Educators are elected, trained and active and supported
- Ensure Voluntary Counselling and Testing takes place
- Ensure awareness talks and education initiatives take place
- Posters, awareness materials and condoms are freely available on site
- Ensure that evidence of programme implementation is readily available
- Facilitate Site Management commitment

No Principal Contractor shall require an employee, or an applicant for employment, to undertake an HIV test in order to ascertain that employee's HIV status. As provided for in the Employment Equity Act, employers may approach the Labour Court to obtain authorisation for testing.

All Personnel must be encouraged to undertake voluntary testing. Voluntary Testing and Counselling (VCT) must be encouraged by all Principal Contractors.

4.30 Non-Compliance to set requirements

Should it be found that the principal contractor is in non-compliance with the specifications or their approved Health and Safety Plan, the Occupational Health and Safety Practitioner has the responsibility and authorization to stop any activity or all construction until compliance has been reached. The cost of stoppage on site due to non-compliance will be borne by the principal contractor / contractor

In the event of extra audits being done by the OHS Practitioner due to ongoing non-compliance, non-availability of Safety File or an audit score less than 80%, the **cost of that additional audit will be borne by the principal contractor** / contractor and will be equal to the amount as stipulated in the agreement with the client.

The appointed Safety Officer for the principal contractor will be required to draft a **close-out report** after each audit. The close-out report must address all non-conformities identified during the audit and highlight the measures taken to rectify the non-conformity. This report must be forwarded to the OHS practitioner **within 24-72 hours of receiving** date of the audit.

Should the construction work run longer than the anticipated project period the Principal Contractor / Contractor will be liable for the cost of the additional health and safety audits.

4.31 Handling conflict of interest

The following is accepted during the course of the contract:

The potential Principal Contractor may appoint only one construction manager for the project and various construction supervisors on each area of responsibility should work be active on more than one area.

The client's health and safety practitioner can assist the Principal Contractors management to ensure the health and safety requirements, as set out by these specifications and the Health and Safety Plan of the Principal Contractor, are complied with at a cost to the Principal Contractor.

Should the Principal Contractor appoint a contractor these contractors can request the client's health and safety practitioner to prepare their required documentation for health and safety compliances on this project without any conflict of interest.

AIRPORTS COMPANY SOUTH AFRICA**CONTRACT NO. RA8018-2026 RFP****APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**4.32 Penalties

Should, at any time, the works, or part of the works, be stopped due to unsafe acts or non-compliance with the Clients or PCs OHS Plan; neither the PC nor any other Principal Contractor or Contractor shall have a claim for extension of time or any other compensation.

In cases of any **repetitive non-conformances**, the non-conforming party shall be penalised as per the table below:

The following constitute examples of the types of non-conformances that will attract penalties:

<u>Minor:</u>	<u>Medium:</u>	<u>Severe:</u>
Fine: R50/count	Fine: R500/count and a non-conformance	Fine: R5, 000/count, a non-conformance and/or activity stoppage
Non-use of basic PPE supplied (e.g. Overalls, Safety Shoes, Hardhats) per person	Toilets not supplied or regularly serviced; lack of drinking water	Principal Contractors working without OHS Plan approval
Non completion of registers for plant and equipment on site	Principal Contractors not audited	Workers transported in contravention of the OHS Plan or legal requirements
Lack of OHS signage at work areas	Working without training or the appropriate OHS SWP / HIRA	Invalid/expired Letters of Good Standing with licensed Compensation Insurer
Tools and equipment identified in poor condition during inspections	Non-conformances identified during the previous audit and not addressed within the agreed time frame	Allow people to work at heights without proper training and PPE
	No internal monthly Audit Report on file.	Fall Arrest Harness not tied off / worn when a risk of falling exists
	No Medical Certificates of Fitness for relevant workers	Threat to the OHS of persons

AIRPORTS COMPANY SOUTH AFRICA**CONTRACT NO. RA8018-2026 RFP****APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

	Unsafe work at heights	3rd Offence on Unsafe Work at Heights
	Poor Housekeeping	Failure to submit consolidated Health and Safety report and relevant document.

All penalties shall be communicated to the Principal Contractor on a monthly basis.

The Principal Contractor will be expected to confirm receipt of such penalties. The total deductible amount as per penalties issued shall be tabled in the Monthly Progress Meeting for noting purposes. All monthly penalties shall be deducted from the Certified Certificates submitted by the Principal Contractor.

4.33 Project Close - Out Requirements

Upon completion of the project, the Principal Contractor shall submit a well-documented consolidated Health and Safety file (to be in electronic form) confirming the H & S history of the project.

The following **summary** of information is required in the file, but not limited to:

- Final closure of all registers and checklists;
- Monthly Health and Safety audit reports;
- Minutes of the Health and Safety Committee meetings (Min every 3 months);
- Summary of Incidents & IOD report;
- WCA /COIDA Claims;
- Total Man-hours and DIFR (0:200,000);
- Environmental rehabilitation status;
- Copies of Pre and Post Employment Medical Certificates of all employees that worked on the project (Medical surveillance and final declaration) where applicable;
- Health and Safety Non-conformances (current / outstanding); and
- Copies of all Hazardous Waste Disposal Certificates (where applicable)

Handover of the consolidated Health and Safety file can only commence once all personnel has been demobilized and **nil man-hours** are recorded. Electronic submission must be provided to the CLIENT, or its Health and Safety Advisor, who are required to store this information for 3 subsequent years.

The Health and Safety Advisor or - Agent will evaluate the Health and Safety performance of the Principal Contractor i.e. compliance, performance, quality and refer in a cover letter which will be added to the Principal Contractors consolidated file with the contractor's close-out report.

Acknowledgement:

I, _____ representing _____ as Contractor have satisfied myself with the content of the Occupational Health and Safety Specification (OHSS) and

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

**APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST
LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY
SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

shall ensure compliance and that the personnel and other people visiting the site comply with all relevant obligations in respect thereof.

Signature of Principal Contractor

Date

Signature of Principal Agent

Date

Signature of Client

Date

Comments:

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

**APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST
LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY
SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

ANNEXURE 1 – PROFESSIONAL TEAM AND INFORMATION ON THIS PROJECT

ANNEXURE 2 - NOTIFICATION OF CONSTRUCTION WORK

ANNEXURE 3 - ORGANOGRAM

ANNEXURE 4 - LEGAL APPOINTMENTS

ANNEXURE 5 - REGISTERS & CHECKLISTS

ANNEXURE 6 - RETURNABLE DOCUMENTS

BASELINE RISK ASSESSMENT

AIRPORTS COMPANY SOUTH AFRICA**CONTRACT NO. RA8018-2026 RFP****APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

Annexure 1 – Professional team and information on this project

CLIENT:	Name	Person	Email
Name of Client	AIRPORTS COMPANY SOUTH AFRICA		
Address			
Project Name	Design, Supply, Install, Commission and Test Lithium-Ion Batteries at ., Kimberley Airport and George Airport, for Airports Company South Africa		
Principal Agent	TBC		
Pr. CHSA	TBC		
<u>PRINCIPAL CONTRACTOR</u>	<u>Tender</u>		
Name of PC:			
16.1			
16.2			
8.1			
8.7			
<u>CONTRACTORS</u>	To be announced	List of contractors will be in H&S file	
Plumbing			
Electrical			
<u>MAJOR SUPPLIERS</u>	To be announced	List of contractors will be in H&S file	
<u>EXTENT AND LOCATION OF:</u>			
Relevant existing records		To receive from client	
Surveys		To be conducted with appointment	
Site investigation & Geotechnical reports		To be conducted with appointment	
Records of “as-built” drawings		To receive from client	
H&S File			In site office
Maps			

AIRPORTS COMPANY SOUTH AFRICA**CONTRACT NO. RA8018-2026 RFP****APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

Annexure 2 – Notification of Construction Work

ANNEXURE A- NOTIFICATION OF CONSTRUCTION WORK
Regulation 4 of the Construction Regulations, 2014

1 (a)	Name and postal address of principal contractor:	
(b)	Name and telephone number of principal contractor's contact person:	
2	Principal contractor's compensation registration number:	
3 (a)	Name and postal address of client:	Airports Company South Africa, Western Precinct, Aviation Park, O.R. Tambo International Airport, 1 Jones Road, Kempton Park, Gauteng, South Africa, 1632
(b)	Name and telephone number of client's contact person or agent:	
4 (a)	Name and postal address of designer(s) for the project:	
(b)	Name and telephone number of designer's contact person:	
5	Name and telephone number of principal contractor's construction manager on site appointed in terms of regulation 8(1):	
6	Name/s of principal contractor's sub-ordinate managers on site appointed in terms of regulation 8(2):	
7	Exact physical address of the construction site or site office:	
8	Nature of the construction work:	
9	Expected commencement date:	
10	Expected completion date:	
11	Estimated maximum number of persons on the construction site:	Total: Male: Female:
12	Planned number of contractors on the construction site accountable to principle contractor:	
13	Name(s) of contractors already selected:	

Principal contractor_____
Date_____
Client's Agent (where applicable)_____
Date

AIRPORTS COMPANY SOUTH AFRICA

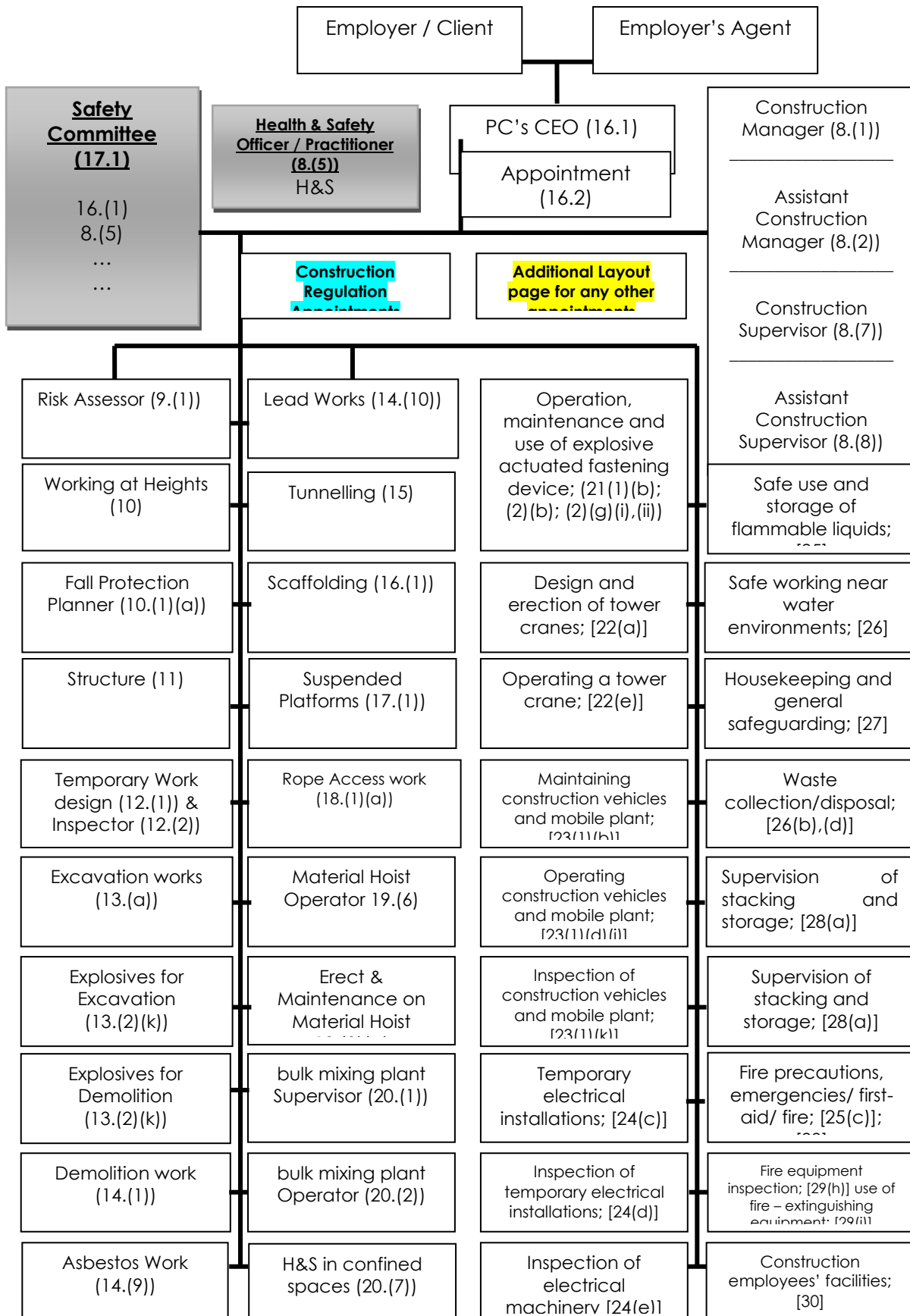
CONTRACT NO. RA8018-2026 RFP

**APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST
LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY
SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

Client

Date

THIS DOCUMENT TO BE FORWARDED TO THE OFFICE OF THE DEPARTMENT OF LABOUR
PRIOR TO COMMENCEMENT OF WORK ON SITE

AIRPORTS COMPANY SOUTH AFRICA**CONTRACT NO. RA8018-2026 RFP****APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS****Annexure 3 – Organogram**

AIRPORTS COMPANY SOUTH AFRICA**CONTRACT NO. RA8018-2026 RFP****APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS****Annexure 4 – Legal appointments**

Each appointment letter shall indicate:

- a. Legal reference to the appointment requirement;
- b. The name of the person appointing and his / her designation;
- c. The name of the company who this person represents;
- d. The name of the appointee and the appointment;
- e. The detail of the site / address
- f. Period of validity of such appointment (not longer than 3 year);
- g. Signature of the Company's representative making the appointment & date of signature;
- h. Duties or reference to requirements in regulations (to include Checklists & Registers);
- i. Acceptance of appointment;
- j. Signature of acceptor and date; and
- k. Designation.

All contractors including the professional team members has to ensure that an arrangement is in place to ensure all their employees have valid medical certificates of fitness.

Sample of tabular list to be included in health and safety plan (not limited or exhausted to only these

Appointment description (Safety File)	Appointment required in terms of	
Assistant to Chief Executive Officer	OHSACT Section 16(2)	
Principal contractor for each phase or project	Construction Regulation 5(1)(k)	
Construction Manager	Construction Regulation 8(1)	
Construction Supervisor	Construction Regulation 8(7)	
Assistant Construction Supervisor	Construction Regulations 8(8)	
CHS Officer registered with SACPCMP	Construction Regulation 8(5)	
Construction vehicle and mobile plant operator	Construction Regulation	
Construction vehicle inspector	Construction Regulations	
CoVid-19 Compliance Officer	Dept Labour and Employ. Guidelines	
CoVid-19 Manager	Disaster Management Act	
Demolition Supervisor	Construction Regulation	
Electrical installation and appliances inspector	Construction Regulation 24	
Emergency evacuation controller	Construction Regulation	
Excavation supervisor	Construction Regulation 13 (1)	
Explosive powered tool supervisor	Construction Regulation 21(2)	
Fall Protection Developer	Construction Regulation 8	
Fire Fighter	Construction Regulation	
Fire Fighting Equipment Inspector	Construction Regulation 27	
First-Aiders	General Safety Regulation 3	
Hand Tool Inspector	General Safety Regulations	
Hazardous chemical substances supervisor	Hazardous Chemicals Substances Regulations	
Housekeeping supervisor	Construction Regulation	
Incident Investigator	General Administrative Regulation 9(2)	
Ladder Inspector	General Safety Regulation 13(a)	
Occupational Health and Safety Committee	OHSACT Section 19	
Occupational Health and Safety Representatives	OHSACT Section 17	
Personal Protective Equipment Inspector	Construction Regulation	

AIRPORTS COMPANY SOUTH AFRICA**CONTRACT NO. RA8018-2026 RFP****APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS**

Portable Electrical Equipment	Construction Regulation	
Risk Assessor	Construction Regulation 9(1)	
Safety Harness inspector	General Safety Regulations	
Scaffolding supervisor	Construction Regulation 14	
Stacking and storage supervisor	Construction Regulation 28	
Structures supervisor	Construction Regulation	
Supervisor demolition work	Construction Regulation	
Suspended platform supervisor	Construction Regulation 15	
Temporary electrical installations inspector	Construction Regulation	
Traffic management supervisor	OHSACT Section	
Vessels under pressure supervisor (Fire)	Vessels under Pressure Regulations	
Welding supervisor	General Safety Regulation	
Working on or next to water supervisor	Construction Regulation	

Sample

FIRST AIDER

OCCUPATIONAL HEALTH AND SAFETY ACT, Act 85 of 1993
General Safety Regulations 3.(4)

... (legal reference)

I, _____ (Employer Responsible Person), for _____ (Company) do hereby appoint _____ (Employee) as First Aider and to ensure that all first aid boxes are maintained in accordance with General Safety Regulation 3 at _____ (Site/Address).

This appointment is valid from ___ / ___ / 20__ to the completion of the stipulated construction work. (Not more than 3 years)

Signature: _____ Date: _____

Your duties are to:

- Ensure that the first aid box or boxes under your control remain properly stocked to meet all foreseeable incidents which may occur in your designated area of responsibility;
- Perform kit inspection by documenting the content on the provided checklist;
- Attend to and report incidents / accidents to the supervisor immediately;

...

Acceptance

I, _____, the undersigned do hereby acknowledge receipt of, understand the duties in this appointment, are competent to perform this appointment with regards to First Aid.

Signature: _____, Date: _____ & Designation _____

AIRPORTS COMPANY SOUTH AFRICA**CONTRACT NO. RA8018-2026 RFP****APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS****ANNEXURE 5 – REGISTERS & CHECKLISTS (SAMPLE)**

SAMPLE OF TABULAR LIST TO BE INCLUDED IN HEALTH AND SAFETY PLAN (NOT LIMITED OR EXHAUSTED TO ONLY THESE REGISTERS & CHECKLISTS)

Statutory Registers (Safety File)	Register Intervals	YES/NO
	Daily Before work commence	
Approval to Cast Concrete	Before Casting	Yes
Concrete and Mixer	Daily	Yes
Confined space entry		
Construction Vehicle inspection register	Daily	Yes
Daily Safe Task Instructions	Daily	Yes
Electrical installations Register	Daily before work commence	Yes
Electrical Tools Register	Monthly	Yes
Excavation Register	Daily, before each shift, etc	Yes
Explosive fastening device	Daily	Yes
Fall Protection Inspections Register	Daily before work commence	Yes
Fire Equipment Inspection Register	Monthly	Yes
First-Aid Box Content Register (vehicle)	Weekly	Yes
First-Aid Treatment Register	After each treatment	Yes
First-Aid Dressing Register	After each treatment	Yes
Formwork and support	Weekly	Yes
Hand Tool Inspection Register	Monthly	Yes
Hazardous Chemical Substances Register	After use of Substance	Yes
Health and Safety Rep Inspection Register	Monthly	Yes
Hygiene Inspection: Toilets	Daily	Yes
Induction training	Project Start	Yes
Ladder Inspection Register & Checklist	Monthly	Yes
Personnel Protective Equipment Issue Register	At start of project and at every issue	Yes
Personnel Protective Inspection Register	Weekly – Part of DSTI	Yes
Powered Tools Register	Daily before work commence	Yes
Safety Harness Inspection Register	At Start of project and then every month	Yes
Scaffold Inspection Register	Daily before work commence	Yes
Stacking and Storage Register	Weekly Per site	Yes
Structures Inspection Register	Weekly	Yes
toolbox talks	Weekly –	Yes

AIRPORTS COMPANY SOUTH AFRICA

CONTRACT NO. RA8018-2026 RFP

APPOINTMENT OF A SERVICE PROVIDER TO DESIGN, SUPPLY, INSTALL, COMMISSION AND TEST LITHIUM-ION BATTERIES AT KIMBERLEY AIRPORT AND GEORGE AIRPORT, FOR AIRPORTS COMPANY SOUTH AFRICA FOR A PERIOD OF 36 MONTHS

ANNEXURE 6 - RETURNABLE DOCUMENTS

Health and Safety documents to be submitted with tender:

2. Health and Safety Plan
3. Health and Safety Budget (Construction Regulation 5.(1)(g))
4. Skills training / existing qualification matrix (Construction Regulation 5.(1)(h))
e.g.
 - a. Competencies for:
 - Legal liability training (Min Construction Manager & Supervisor);
 - Excavation Supervisor;
 - First Aider on site;
 - H&S Representative (CHSO/M qualification registration);
 - Fire Fighter & Equipment Inspector,
 - Risk Assessor;
 - Incident Investigator;
 - Fall Protection Planner / Developer; and
 - Working on Heights
 - b. Resources evaluation:
 - Scaffolding
 - Mobile plant & construction vehicles
 - Artisans registration (Plumbing / Electrical, etc)