



AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

PROJECT NAME AND NUMBER:

BID REFERENCE NUMBER:

DESIGN & BUILD MODULAR GUARDHOUSE INSTALLATIONS AT CLUSTER 3 AIRPORTS (KING SHAKA INTERNATIONAL AIRPORT, CHIEF DAWID STUURMAN INTERNATIONAL AIRPORT, KING PHALO AIRPORT) FOR A PERIOD OF EIGHTEEN (18) MONTHS

NEC 3: ENGINEERING AND CONSTRUCTION CONTRACT (ECC)

Between AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED
Applicable at King Shaka International Airport
(The Employer)

(Registration Number: 1993/004149/30)

and _____
(The Contractor)

(Registration Number: _____)

for **DESIGN & BUILD MODULAR GUARDHOUSE INSTALLATIONS
AT CLUSTER 3 AIRPORTS (KING SHAKA INTERNATIONAL
AIRPORT, CHIEF DAWID STUURMAN INTERNATIONAL
AIRPORT, KING PHALO AIRPORT) FOR A PERIOD OF
EIGHTEEN (18) MONTHS**

Contents:	No of pages
Part C1 Agreements & Contract Data	2-19[18]
Part C2 Pricing Data	20-22[3]
Part C3 Scope of Works	23-59[37]
Part C4 Site Information	60-70[11]

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

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of: **DESIGN & BUILD MODULAR GUARDHOUSE INSTALLATIONS AT CLUSTER 3 AIRPORTS (KING SHAKA INTERNATIONAL AIRPORT, CHIEF DAWID STUURMAN INTERNATIONAL AIRPORT, KING PHALO AIRPORT) FOR A PERIOD OF EIGHTEEN (18) MONTHS**

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

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

Option B	The offered total of the Prices exclusive of VAT is	R
	Value Added Tax @ 15% is	R
	The offered total of the amount due inclusive of VAT is	R
	(in words – inclusive of VAT)	

THE OFFERED PRICES ARE AS STATED IN THE PRICING SCHEDULE

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

Signature(s) _____

Name(s) _____

Capacity _____

**For the
Bidder:**

*(Insert name and address of
organisation)*

Date

Name &
signature of
witness

ACCEPTANCE

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

The terms of the contract, are contained in:

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

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

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

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

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

Signature(s)	_____	_____
Name(s)	_____	_____
Capacity	_____	_____
for the Employer	Airports Company South Africa SOC Limited King Shaka International Airport King Shaka Dr, La Mercy, 4407 <i>(Insert name and address of organisation)</i>	Date
Name & signature of witness	_____	_____

PROJECT & CONTRACT TITLE

Schedule of Deviations

1 Subject

Details

.....

.....

.....

2 Subject

Details

.....

.....

.....

3 Subject

Details

.....

.....

.....

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

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

	<u>For the Employer</u>	<u>For the Bidder</u>
Signature (s)	_____	_____
Name (s)	_____	_____
Capacity	_____	_____
Name and address	Airports Company South Africa SOC Limited King Shaka International Airport King Shaka Dr, La Mercy, 4407	_____
Name & Signature of witness	<i>(Insert name and address of organisation)</i>	<i>(Insert name and address of organisation)</i>
Date	_____	_____

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

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

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

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for Main Option	
	Main Option	B: Priced Contract with Bill of Quantities
	Dispute resolution Option	W1: Dispute resolution procedure
	Secondary Options (incorporating amendments)	X2: Changes in the law X5 & X7: Sectional completion & Delay damages X16: Retention X17: Low-performance damages X18: Limitation of liability Z: Additional conditions of contract of the NEC3 Engineering and Construction Contract, April 2013
10.1	The <i>Employer</i> is (Name)	Airports Company South Africa SOC Limited, Cluster 3 Airports (KSIA, CDSIA, KPA)
	Address	King Shaka International Airport King Shaka Dr, La Mercy, 4407
	Telephone	(032) 436 6000
	Fax	(032) 436 6672
10.1	The <i>Project Manager</i> is	TBC
	Address	King Shaka International Airport King Shaka Dr, La Mercy, 4407
	Telephone	(032) 436 6000
	E-mail address	TBC

PROJECT & CONTRACT TITLE

10.1	The <i>Supervisor</i> is	TBC
	Address	King Shaka International Airport King Shaka Dr, La Mercy, 4407
	Telephone	TBC
	Email	
11.2(13)	The <i>works</i> are	GUARDHOUSE INSTALLATIONS AT CLUSTER 3 AIRPORTS (KING SHAKA INTERNATIONAL AIRPORT, CHIEF DAWID STUURMAN INTERNATIONAL AIRPORT, KING PHALO AIRPORT)
11.2(14)	The following matters will be included in the Risk Register	- Existing Services - Access to Site - Delay in supply of material and/or equipment - Progress of the works against the program - Members of the public and ACSA stakeholders - Occupational and Health & Safety - Airport Operations & Working Hours - All early warning matters notified by the <i>Project Manager</i> or the <i>Contractor</i> - Delay in approvals from relevant authorities
11.2(15)	The <i>boundary of the site</i>	Contained in Part C4 'Site Information' section of this contract
11.2(16)	The <i>Site Information</i> is in	Part C4 'Site Information' section of this contract
11.2(19)	The <i>Works Information</i> is in	Part C3 'Scope of Works' section of this contract
12.2	The <i>law of the contract</i> is the law of	The law of the Republic of South Africa
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period of reply</i> is	Seven (7) days
2	The <i>Contractor's</i> main responsibilities	Data required by this section of the core clauses is provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.
3	Time	
11.2(3)	The <i>completion date</i> is	18 months after the contract <i>start date</i>
30.1	The <i>access date</i> is	To be agreed before contract signing

PROJECT & CONTRACT TITLE

31.1	The <i>Contractor</i> submits a first (preliminary) programme within	2 weeks of the contract date/start date																												
31.2	The <i>starting date</i> is	To be agreed before contract signing																												
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	4 weeks																												
4	Testing and Defects																													
42.2	The <i>defects date</i> is	52 weeks after Sectional Completion has been certified per site.																												
43.2	The <i>defect correction period</i> is	4 weeks																												
5	Payment																													
50.1	The <i>assessment interval</i> is	Every four (4) weeks																												
50.1	The <i>currency of this contract</i> is the	South African Rand																												
51.2	The period within which payment is made is	Four (4) – Six (6) weeks from date of invoice .																												
6	Compensation events																													
60.1(13)	The place where weather is to be recorded (on the Site) is	At the Construction Site Office and the records to be kept on site in a file clearly marked for this purpose																												
60.1(13)	The <i>weather measurements</i> to be recorded for each calendar month are	the cumulative rainfall (mm) the number of days with rainfall more than 10 mm the number of days with minimum air temperature less than 0 degrees Celsius																												
60.1(13)	Assumed values for the ten-year return <i>weather data</i> for each <i>weather measurement</i> for each calendar month are	<table><tr><td>Month</td><td>Days</td><td>Month</td><td>Days</td></tr><tr><td>January</td><td>4*</td><td>July</td><td>1</td></tr><tr><td>February</td><td>3</td><td>August</td><td>2</td></tr><tr><td>March</td><td>3</td><td>September</td><td>2</td></tr><tr><td>April</td><td>2</td><td>October</td><td>2</td></tr><tr><td>May</td><td>2</td><td>November</td><td>3</td></tr><tr><td>June</td><td>1</td><td>December</td><td>1*</td></tr></table> * = The number of working days lost allows for the annual statutory Construction holiday in December and January of each year	Month	Days	Month	Days	January	4*	July	1	February	3	August	2	March	3	September	2	April	2	October	2	May	2	November	3	June	1	December	1*
Month	Days	Month	Days																											
January	4*	July	1																											
February	3	August	2																											
March	3	September	2																											
April	2	October	2																											
May	2	November	3																											
June	1	December	1*																											
7	Title	No data required for this section of the <i>conditions of contract</i>																												
8	Risks and Insurance																													
84.1	The <i>Employer</i> provides these insurances	Refer to the Insurance Clauses which is attached at the end of the Contract Data																												

PROJECT & CONTRACT TITLE

84.2	The <i>Contractor</i> provides the insurance stated in	The Insurance Clauses which is attached at the end of the Contract Data. The insurances are in the joint names of the Parties and provide cover for events which are at the Contractor's risk from the starting date until the Defects Certificate or a termination certificate has been issued.
	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the Contractor arising out of and in the course of their employment in connection with this contract for any one event is:	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993
9	Termination	No data required for this section of the <i>conditions of contract</i>
10	Data for Main Options	
B	Priced contract with Bills of Quantity	Refer to Pricing Instructions under Part C2 'Pricing Data' for information on the Activity Schedule
11	Data for Option W1	
W1.1	The <i>Adjudicator</i> is	The person appointed jointly by the parties from the list of adjudicators contained below
W1.2(3)	The <i>Adjudicator nominating body</i> is	The current Chairman of Johannesburg Advocate's Bar Council
W1.4(2)	The <i>tribunal</i> is	Arbitration
W1.4(5)	If the <i>tribunal</i> is arbitration, the arbitration procedure is	The <i>arbitration procedure</i> is set out in The Rules for the Conduct of Arbitrations 2013 Edition, 7th Edition, published by The Association of Arbitrators, (Southern Africa)
W1.4	The place where arbitration is to be held is	Johannesburg, South Africa.
W1.4	The person or organisation who will choose an arbitrator	The <i>Arbitrator</i> is the person selected by the Parties as and when a dispute arises in terms of the relevant Z Clause, from the Panel of Arbitrators provided under the relevant Z clause if the arbitration procedure does not state who selects an arbitrator. The Arbitrator nominating body is the Chairman of the Johannesburg Advocates Bar Council.
12	Data for Secondary Option Clauses	
X2	Changes in the law	No data is required for this secondary option
X5	Sectional Completion	

PROJECT & CONTRACT TITLE

X5.1	The <i>completion date</i> for each <i>section</i> of the <i>works</i> is:	Defined in Part C3
X5 & X7 Sectional Completion and Delay Damages used together		
X7.1	Delay damages for late completion of the sections of the <i>works</i> are	Amount per day is 0.05% of the value of the section delayed, to the maximum of 10% of the Contract value
X16 Retention		
X16.1	The <i>retention percentage</i> is	10% of the Contract value.
X17 Low-Performance Damages		
No data is required for this secondary option		
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	Total of the losses incurred and/or repairs to the damages caused
X18.3	The Contractor's total liability to the Employer for defects due to his design which are not listed on the Defects Certificate is limited to	Total of the losses incurred and/or repairs to the damages caused

PROJECT & CONTRACT TITLE

X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to	The Contractor's total direct liability to the Employer for all matters arising under or in connection with this contract, other than the excluded matters, is limited to the total of the total of the losses incurred and/or repairs to the damages caused and applies in contract, tort or delict and otherwise to the extent allowed under the law of the contract.
-------	--	---

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

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

Z	The <i>Additional conditions of contract</i> are	Z1 – Z20
	Amendments to the Core Clauses	
Z1	Interpretation of the law	
Z1.1	Add to core clause 12.3: Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the <i>Project Manager</i> , the <i>Supervisor</i> , or the <i>Adjudicator</i> does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.	
Z2	Providing the Works:	
Z2.1	Delete core clause 20.1 and replace with the following: The <i>Contractor</i> provides the works in accordance with the Works Information and warrants that the results of the Works, when complete, shall be fit for their intended purpose	
Z3	Other responsibilities:	
	Add the following at the end of core clause 27:	
Z3.1	The <i>Contractor</i> shall have satisfied himself, prior to the Contract Date, as to the completeness, sufficiency and accuracy of all information and drawings provided to him as at the Contract Date	
Z3.2	The <i>Contractor</i> shall be responsible for the correct setting out of the <i>Works</i> in accordance with the original points, lines and levels stated in the <i>Works</i> Information or notified by the <i>Project Manager</i> , <i>Supervisor</i> , or the <i>Employer</i> . Any errors in the positioning of the <i>Works</i> shall be rectified by the <i>Contractor</i> at the <i>Contractor's</i> own costs.	
Z4	Extending the defects date:	

Add the following as a new core clause 46:	
Z4.1	If the <i>Employer</i> cannot use the <i>works</i> due to a Defect, which arises after Completion and before the <i>defects date</i> , the <i>defects date</i> is delayed by a period equal to that during which the <i>Employer</i> , due to a Defect, is unable to use the <i>works</i>
Z4.2	If part of the <i>works</i> is replaced due to a Defect arising after Completion and before the <i>defects date</i> , the <i>defects date</i> for the part of the <i>works</i> which is replaced is delayed by a period equal to that between Completion and the date by when the part has been replaced
Z4.3	The <i>Project Manager</i> notifies the <i>Contractor</i> of the change to a <i>defect date</i> when the delay occurs. The period between Completion and an extended <i>defects date</i> does not exceed twice the period between Completion and the <i>defects date</i> stated in the Contract Data
Z5	Termination
Z5.1	Add the following to core clause 91.1, at the second main bullet, fifth sub-bullet point, after the words “assets or”: “business rescue proceedings are initiated or steps are taken to initiate business rescue proceedings”.
Amendment to the Secondary Option Clauses	
Z6	Changes in Law: Add the following clause to secondary option X2 as X2.2:
Z6.1	A change in law is defined as:
Z6.1.1	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
Z6.1.2	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 <i>Contractor</i> to comply with any condition set out therein, or (iii) as a result of any act or omission of the <i>Contractor</i> , any Subcontractor or any affiliate to the <i>Contractor</i> .
Z7	Performance Bond
Z	Amend the first sentence of clause X13.1 to read as follows: The <i>Contractor</i> gives the <i>Employer</i> an unconditional, on-demand performance bond, provided by a bank which the <i>Project Manager</i> and the <i>Employer</i> have accepted, for the amount stated in the Contract Data and in the form set out in Annexure C.ii of this Contract Data.
Z	Add the following new clause as Option X13.2: The <i>Contractor ensures</i> that the performance bond is valid and enforceable until the end of the <i>contract period</i> . If the terms of the performance bond specify its expiry date and the end of the <i>contract period</i> does not coincide with such expiry date, four weeks prior to the said expiry date, the <i>Contractor</i> extends the validity of the performance bond until the end of the <i>contract period</i> . If the <i>Contractor</i> fails to so extend the validity of the performance bond, the <i>Employer</i> may claim the full amount of the performance bond and retain the proceeds as cash security
Z8	Limitation of liability:

Insert the following new clause as Option X18.6:

- Z8.1** The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00
- Z8.2** Notwithstanding any other clause in this contract, any proceeds received from any insurances or any proceeds which would have been received from any insurances but for the conduct of the *Contractor* shall be excluded from the calculation of the limitations of liability listed in the contract

Additional Z Clauses**Z9 Cession, delegation and assignment**

- Z** 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*
- Z** The *Employer* may cede and delegate its rights and obligations under this contract to any person or entity

Z10 Joint and several liability

- Z10.1** 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.
- Z10.2** 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.
- Z10.3** 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*.

Z11 Ethics

- Z11.1** The *Contractor* undertakes:
- Z11.1.1** 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;
- Z11.1.2** 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.
- Z11.2** 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.

PROJECT & CONTRACT TITLE

- Z11.3** 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.

Z12 Confidentiality

- Z12.1** 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.
- Z12.2** 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*.
- Z12.3** This undertaking shall not apply to –
- Z12.3.1** 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;
- Z12.3.2** 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;
- Z12.3.3** 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);
- Z12.4** 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*
- Z12.5** The *Contractor* ensures that all his Subcontractors abide by the undertakings in this clause.

Z13 Employer's Step-in rights

- Z13.1** If the *Contractor* defaults by failing to comply with his obligations and fails to remedy such default within 2 weeks of the notification of the default by the *Project Manager*, the *Employer*, without prejudice to his other rights, powers and remedies under the contract, may remedy the default either himself or procure a third party (including any subcontractor or supplier of the *Contractor*) to do so on his behalf. The reasonable costs of such remedial works shall be borne by the *Contractor*
- Z13.2** The *Contractor* co-operates with the *Employer* and facilitates and permits the use of all required information, materials and other matter (including but not limited to documents and all other drawings, CAD materials, data, software, models, plans, designs, programs, diagrams, evaluations, materials, specifications, schedules, reports, calculations, manuals or other documents or recorded information (electronic or otherwise) which have been or are at any time prepared by or on behalf of the *Contractor* under the contract or otherwise for and/or in connection with the *works*) and generally does all things required by the *Project Manager* to achieve this end.

Z14 Liens and Encumbrances

Z14.1	The <i>Contractor</i> keeps the Equipment used to Provide the Services free of all liens and other encumbrances at all times. The <i>Contractor</i> , vis-a-vis the <i>Employer</i> , waives all and any liens which he may from time to time have, or become entitled to over such Equipment and any part thereof and procures that his Subcontractors similarly, vis-a-vis the <i>Employer</i> , waive all liens they may have or become entitled to over such Equipment from time to time
Z15	Intellectual Property
Z15.1	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.
Z15.2	IP rights remain vested in the originator and shall not be used for any reason whatsoever other than carrying out the <i>works</i> .
Z15.3	The <i>Contractor</i> gives the <i>Employer</i> an irrevocable, transferrable, non-exclusive, royalty free licence to use and copy all IP related to the <i>works</i> for the purposes of constructing, repairing, demolishing, operating and maintaining the works
Z15.4	The written approval of the <i>Contractor</i> is to be obtained before the <i>Contractor's</i> IP made available to any third party which approval will not be unreasonably withheld or delayed. Prior to making any <i>Contractor's</i> IP available to any third party the <i>Employer</i> shall obtain a written confidentiality undertaking from any such third party on terms no less onerous than the terms the <i>Employer</i> would use to protect its IP
Z15.5	The <i>Contractor</i> shall indemnify and hold the <i>Employer</i> harmless against and from any claim alleging an infringement of IP rights (" the claim "), which arises out of or in relation to:
Z15.5.1	the <i>Contractor's</i> design, manufacture, construction or execution of the Works
Z15.5.2	the use of the <i>Contractor's</i> Equipment, or
Z15.5.3	the proper use of the Works.
Z15.6	The <i>Employer</i> shall, at the request and cost of the <i>Contractor</i> , assist in contesting the claim and the <i>Contractor</i> may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it.
Z16	Dispute resolution: The following amendments are made to Option W1:
Z16.1	Appointment of the Adjudicator Under clause W1.3, in the fourth row of the first column of the adjudication table, the following words are added after the words "any other matter": "excluding disputes relating to termination of the contract".
Z16.2	The following clauses are added at the end of clause W1.3:
Z16.2.1	"The Adjudicator shall decide the dispute solely on the written submissions of the parties. No oral submissions shall be heard during adjudication."
Z16.2.2	"Disputes relating to or arising from termination of the Contract shall not be determined by an adjudicator. Any such dispute shall be referred directly to arbitration."
Z16.3	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 accepted or rejected by the other party. In the instance of a rejection of the nominated *Arbitrator*, the referring Party refers the appointment deadlock to the Chairman of the Johannesburg Bar Council, who appoints an *Arbitrator* listed in the Panel of *Arbitrators* below

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

Z17 Notification of a compensation event

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

Z18 BBEE Certificate

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

Z19 Communication

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

Z20 Delegation

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

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

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

Clause	Statement	Data
10.1	The Contractor is (Name): Address: Telephone No. Fax No. Email:	
11.2(18)	The <i>working areas</i> are	See C3 'Scope of Works' & C4 'Site Information'
24.1	The <i>Contractor's Key people</i> are:	CV's to be appended to Tender Schedule
	Name: Job: Responsibility: Qualifications: Experience:	
	Name: Job: Responsibility: Qualifications: Experience:	
	Name: Job: Responsibility: Qualifications: Experience:	
11.2(14)	The following matters will be included in the Risk Register	

C1.4: OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

PART C1: AGREEMENTS AND CONTRACT DATA

C1.5: ACSA INSURANCE CLAUSES

Refer to the attached insurance specification as Annexure 5

PART C2: PRICING DATA**C2.1 Pricing assumptions: Option B****SECTION 2 (PRICING DATA)*****The conditions of contract*****How work is priced and assessed for payment**

Clause 11 in NEC3 Engineering and Construction Contract, June 2005 (ECC3) Option B states:

Identified and defined terms	11	
	11.2	(21) The Bill of Quantities is the <i>bill of quantities</i> as changed in accordance with this contract to accommodate implemented compensation events and for accepted quotations for acceleration.
		(28) The Price for Work Done to Date is the total of the quantity of the work which the <i>Contractor</i> has completed for each item in the Bill of Quantities multiplied by the rate and a proportion of each lump sum which is the proportion of the work covered by the item which the <i>Contractor</i> has completed.
		Completed work is work without Defects which would either delay or be covered by immediately following work.
		(31) The Prices are the lump sums and the amounts obtained by multiplying the rates by the quantities for the items in the Bill of Quantities.

This confirms that Option B is a re-measurement contract, and the bill comprises only items measured using quantities and rates or stated as lump sums. Value related items are used. Time related items are items measured using rates where the rate is a unit of time.

Function of the Bill of Quantities

Clause 55.1 in Option B states, "Information in the Bill of Quantities is not Works Information or Site Information". This confirms that instructions to do work or how it is to be done are not included in the Bill, but in the Works Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Works in accordance with the Works Information". Hence the *Contractor* does **not** Provide the Works in accordance with the Bill of Quantities. The Bill of Quantities is only a pricing document.

Measurement and payment

Symbols

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

Abbreviation	Unit
%	Percent
h	Hour
ha	Hectare
kg	Kilogram
kl	kilolitre
km	kilometre
km-pass	kilometre-pass
kPa	kilopascal
kW	kilowatt
l	litre
m	metre
mm	millimetre
m ²	square metre
m ² -pass	square metre pass
m ³	cubic metre
m ³ -km	cubic metre-kilometre
MN	meganewton
MN.m	meganewton-metre
MPa	megapascal
No.	number
Prov sum	provisional sum
PC-sum	prime cost sum
R/only	Rate only
sum	Lump sum
t	ton (1000kg)
W/day	Work day

General assumptions

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

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

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

Provisional sums included in the bill of quantities shall be expended on a proven cost basis. The contractor will be permitted to add the agreed mark up to all agreed proven costs. All proven costs shall be net with discounts deducted.

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

PROJECT & CONTRACT TITLE

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

Refer to attached price schedule.

C2.2 Bills of Quantities

Refer to attached Bills of Quantities – Annexure 3

Design and pricing procedure for project specific cost planning and management upon appointment.

- Upon appointment, the Design & Build team must develop concept designs for iterative approval by ACSA.
- Following approval of the Concept Design, the Design & Build team is to develop Detail Design drawings and specifications for iterative approval by ACSA.
- The Design & Build Teams QS is to prepare and submit price breakdowns where requested to be administered as a reference cost management document for all interim and final account claims for the duration of the execution phase, i.e. Construction.
- Following works completion, the contractor must submit all stage 6 close out deliverables for iterative approval by ACSA.

C3 ECC3 COVER PAGE

C3.1: EMPLOYER'S WORKS INFORMATION

Contents

Part 3: Scope of Work	23
C3.1: Employer's works Information	24
1 Description of the works	27
1.1 Executive overview	27
1.2 Employer's objectives and purpose of the works	27
1.3 Employers Scope Overview	27
1.4 Interpretation and terminology	33
2 Management and start up.	34
2.1 Management meetings	34
2.2 Documentation control	34
2.3 Health and safety risk management	35
2.4 Environmental constraints and management	36
2.5 Quality assurance requirements	36
2.6 Programming constraints	37
2.7 Contractor's management, supervision and key people	38
2.8 Invoicing and payment	40
2.9 Contract change management	40
2.10 Provision of bonds and guarantees	41
2.11 Records of Defined Cost, payments & assessments of compensation events to be kept by the Contractor	41
2.12 Training workshops and technology transfer	41
3 Engineering and the Contractor's design	42
3.1 Employer's design	42
3.2 Parts of the works which the Contractor is to design	42
3.3 Procedure for submission and acceptance of Contractor's design	42
3.4 Other requirements of the Contractor's design	44
3.5 Use of Contractor's design	45
3.6 Design of Equipment	45
3.7 Equipment required to be included in the works	45
3.8 As-built drawings, operating manuals and maintenance schedules	45
4 Procurement	47
4.1 People	47
4.1.1 Minimum requirements of people employed on the Site	47
4.1.2 BBBEE and preferencing scheme	47
4.2 Subcontracting	47
4.2.1 Preferred subcontractors	47
4.2.2 Subcontract documentation, and assessment of subcontract tenders	47

4.2.3	Limitations on subcontracting	47
4.2.4	Attendance on subcontractors	47
4.3	Plant and Materials	48
4.3.1	Quality	48
4.3.2	Plant & Materials provided “free issue” by the <i>Employer</i>	48
4.3.3	<i>Contractor’s</i> procurement of Plant and Materials	48
4.3.4	Spares and consumables	48
4.4	Tests and inspections before delivery	48
4.5	Marking Plant and Materials outside the Working Areas.....	48
4.6	<i>Contractor’s</i> Equipment (including temporary works).....	48
5	Construction	50
5.1	Temporary works, Site services & construction constraints	50
5.1.1	<i>Employer’s</i> Site entry and security control, permits, and Site regulations	50
5.1.2	Restrictions to access on Site, roads, walkways and barricades	50
5.1.3	People restrictions on Site; hours of work, conduct and records.....	50
5.1.4	Health and safety facilities on Site	50
5.1.5	Environmental controls, fauna & flora, dealing with objects of historical interest	51
5.1.6	Title to materials from demolition and excavation.....	51
5.1.7	Cooperating with and obtaining acceptance of Others	51
5.1.8	Publicity and progress photographs	51
5.1.9	<i>Contractor’s</i> Equipment	51
5.1.10	Equipment provided by the <i>Employer</i>	51
5.1.11	Site services and facilities	51
5.1.12	Facilities provided by the <i>Contractor</i>	52
5.1.13	Existing premises, inspection of adjoining properties and checking work of Others	52
5.1.14	Survey control and setting out of the <i>works</i>	52
5.1.15	Excavations and associated water control.....	52
5.1.16	Underground services, other existing services, cable and pipe trenches and covers	53
5.1.17	Control of noise, dust, water and waste.....	53
5.1.18	Sequences of construction or installation	53
5.1.19	Giving notice of work to be covered up.....	53
5.1.20	Hook ups to existing works	53
5.2	Completion, testing, commissioning and correction of Defects	53
5.2.1	Work to be done by the Completion Date	54
5.2.2	Use of the <i>works</i> before Completion has been certified	54
5.2.3	Materials facilities and samples for tests and inspections	54
5.2.4	Commissioning	54
5.2.5	Start-up procedures required to put the <i>works</i> into operation	54
5.2.6	Take over procedures	54
5.2.7	Access given by the <i>Employer</i> for correction of Defects	55
5.2.8	Performance tests after Completion	55
5.2.9	Training and technology transfer	55
5.2.10	Operational maintenance after Completion	55

6	Plant and Materials standards and workmanship	56
6.1	Investigation, survey and Site clearance	56
6.2	Building works.....	56
6.3	Civil engineering and structural works	56
6.4	Electrical & mechanical engineering works	56
6.5	Process control and IT works	56
6.6	Plant & Materials.....	56
6.7	Workmanship.....	57
6.8	Dimensions, heights and levels	57
6.9	Set Out.....	57
6.10	Clean Site	57
6.11	Other [as required]	57
7	List of drawings.....	59
7.1	Drawings issued by the <i>Employer</i>	59

1. Description of the works

1.1. Executive overview

The Contractor shall design, manufacture, deliver, install, connect, test, commission and hand over modular or prefabricated or containerised guard houses at the Cluster 3 Airports namely King Shaka International Airport, Chief Dawid Stuurman International Airport and King Phalo Airport. A total of eighteen (18) guard houses will be required across the airports. The solution must be operational, fit for purpose, compliant with applicable standards and airport requirements, and aesthetically aligned to complement the airport precinct in which it is located.

The works are packaged as a design and build solution where ACSA will contract with an experienced contractor who will carry out the necessary design services as well as execute on the construction / installation activities required to successfully complete the project. It will be expected that the team is led by a professional architect that will be responsible for design and overall contract management.

1.2. Employer's objectives and purpose of the works

Purpose:

The purpose of this bid is to Solicit a contractor to render Design & Building Services to provide the required guard houses.

ACSAs Cluster 3 airports management team has established a need for the provision of new Guard Houses for Cluster 3 airports.

The Guard Houses will be utilised by security personnel and will be provided as follows:

- King Shaka International Airport – 8 Guard Houses
- King Phalo Airport – 5 Guard Houses
- Chief Dawid Stuurman International Airport – 5 Guard Houses

Objective:

- Provide robust, secure, and comfortable guard houses that support access control and perimeter/entrance operations.
- Deliver quick-to-deploy modular / prefabricated / containerised solutions with minimal disruption to airport operations.
- Elevate visual quality at entrances and perimeter points through contemporary design and high-quality finishes.
- Enable sectional completion per site where required.
- Ensure guard houses are 'fit for purpose' and are fully operational at handover.
- Designed to achieve a life span of 20 years or more.

1.3. Employers Scope Overview

The solution provided shall meet all functional requirements of a typical guard house facility considering airport specific requirements and constraints which include relevant regulation and legislation as may be applicable within the aviation industry as well as a national key point. The solution will consider the overall aesthetics and ambiance of the airports and incorporate such aesthetics into the final design for client approval.

The solution shall incorporate high-quality finishes which meet and comply with industry standards. The solution shall further incorporate the necessary warranties and guarantees including suitable corrosion protection noting the coastal environment within which all three (3) airports are situated.

REQUIREMENTS PER AIRPORT

King Shaka International Airport

The following items form the requirements for the KSIA site.

- Guard House 1 - Guard house at staff parking, to accommodate four people. Must be erected at the side of either exit/entrance under the main entrance shelter. To include toilet and water access, this unit will incorporate toilets for use by staff who use the parking facilities. This unit shall incorporate a female ablution facility x 1, disabled toilet facility x 1 and a male toilet facility x 1. Additionally, the male facility shall incorporate a urinal. The ablution facility will be separated / partitioned from the guard house and will have separate external access for public use.
- Guard House 2 - Guard house at shaded parking to accommodate two people, must be erected on the pavement along the perimeter fence or one parking bay to be allocated. Will include toilet x 1 and potable water access if feasible.
- Guard House 3 - Guard house at long stay parking to accommodate two people, must be erected on the pavement along the perimeter fence or one parking bay to be used. To include toilet x 1 and potable water access.
- Guard House 4 - Guard house at drop-off zone next to the boom gate to accommodate two people. Will include toilet x 1 and potable water access if feasible.
- Guard House 5 - Basement exit point, to accommodate two people. Will include toilet x 1 and potable water access if feasible.
- Guard House 6 - Car rental entry/exit point, to accommodate two people. Will include toilet x 1 and potable water access if feasible.
- Guard House 7 - North Staff parking entry/exit point, to accommodate two people. Will include toilet x 1 and water access if feasible.
- Guard House 8 - Coach Zone entry/exit point, to accommodate two people. Will include toilet x 1 and water access if feasible.
- KSIA requires 8 guard houses in total.
- At least 2 x units to include toilets and potable water access
- The remaining 6 units to receive toilet and potable water access if viable.
- Electricity supply to be provided to all 8 units
- Units to be air conditioned.

King Phalo Airport

The following items form the requirements for the KPA site:

- Guard House 1 - 1 x Guard house at Open Parking to accommodate two people, to include toilet x 1 and potable water access if viable.
- Guard House 2 - 1 x Guard house at GAA/Cargo Area to accommodate two people, to include toilet x 1 and potable water access if viable.
- Guard House 3 - 1 x Guard house at Entrance to GAA to accommodate two people, to include toilet x 1 and potable water access if viable.
- Guard House 4 - 1 x Guard house at Airside / Landside boundary at GAA to accommodate two people, to include toilet x 1 and potable water access if viable.
- Guard House 5 - 1 x Guard house at Cargo Airside to accommodate two people, to include toilet x 1 and potable water access if viable.
- KPA will require 5 x guard houses in total.
- Electricity supply to be provided to all units.

- Units to be air conditioned.

Chief Dawid Stuurman International Airport

The following items form the requirements for the CDSIA site:

- Guard House 1 - 1 x Guardhouse at remote parking / long term. Accommodates two people. Includes toilet x 1 and water access.
- Guard House 2 - 1 x Guardhouse at gate 6. Accommodates two people. Includes toilet x 1 and potable water access if viable.
- Guard House 3 - 1 X Guardhouses for substation 08. Accommodates two people. Includes toilet x 1 and potable water access if viable.
- Guard House 4 - 1 X Guardhouses for entrance and exit at the Solar plant. Accommodates two people. Includes toilet x 1 and potable water access if viable.
- Guard House 5 - 1 X Guardhouse at ATNS radar. Accommodates two people. Includes toilet x 1 and potable water access if viable.
- CDSIA will require 5 x guardhouses.
- Electricity supply to be provided to all units.
- Units to be air conditioned.

Functional Requirements

Aesthetic Design Criteria

- Exterior: clean modular profiles, concealed fixings where practical, durable cladding (coated steel/aluminium/composites), colours coordinated to airport identity.
- Glazing: safety/laminated glazing; anti-glare/solar control to suit location; maintain sightlines for security.
- Night-time presence: integrated LED lighting that enhances visibility without glare for drivers.
- Interior: durable and premium finishes; ergonomic counters; thermal and acoustic comfort.

Functional Planning Requirements

- Space for two officers minimum; ergonomic counter, lockable storage, small IT cabinet.
- Access-control interface to booms/turnstiles, CCTV monitor point, panic/duress alarm integration.
- Small hand-wash basin (or modular hygiene provision) and cleaning storage.
- Toilet facility
- Accessibility provisions (thresholds/ramps, door clear widths) per SANS 10400.

Modularity and Expandability

- Designed for add-on modules and designed for relocation if operational needs change.

Technical Requirements

Architectural and Envelope

- Structure: certified steel frame or equivalent modular system suitable for transport and installation.
- Envelope: fire-retardant/non-combustible cladding; weatherproof joints; corrosion protection suitable for coastal conditions.
- Doors/Windows: security-rated doors; tamper-resistant ironmongery; laminated/safety glazing.
- Thermal/Acoustic: insulated walls/roof to achieve comfort and mitigate operational noise.
- Lighting & ventilation to be designed per relevant SANS standards.

Electrical (SANS 10142-1)

- The contractor shall supply, install, and commission all electrical infrastructure required to provide a safe and compliant 230V/ 50Hz supply from the property's nearest Main Distribution Board Connection point to the remote guard houses. This includes:
 - Excavation and bedding for underground cabling.

- Supply and installation of code compliant cabling, circuit breakers, earthing cabling, bonding, lightning protection, surge arrestors, glands, conduits and required connection accessories.
- Installation of sub-distribution boards (DBs) and associated accessories within each guard house.
- Earthing, bonding, and lightning protection.
- Testing, commissioning, and issuance of a Certificate of Compliance (CoC).
- Standard Compliance: All work and materials must comply with SANS 10142-1 (latest edition).
- Use copper cables (4-core depending, sizes to be determined by load required and distance between the point of supply and point of consumption).
- Cables must be buried at a minimum depth of 600mm (or 1000mm under roadways) with yellow "Danger" warning tape placed 300mm above the cable.
- Guard house DBs must be surface-mounted or flush-mounted as per site requirements, with all applicable protection as per SANS 10142-1 for all socket outlets, lighting circuits, or distinguished loads.
- Allow for 20% spare capacity (space) for future expansion.
- An earth electrode (copper-bonded steel rod) must be installed at each remote guard house. Depth and required conductivity determined as per the soil resistivity in the region prescribed in the SANS 10142-1.
- All conductive parts, including metal door frames or roofs, must be bonded to the earth bar as per SANS 10142-1 requirements.
- Cable sizing selection to be determined to cater for Voltage Drop as per SANS 10142-1 for low voltage to deliver maximum power at the point of consumption
- Distribution board partitioned for normal/essential/dedicated circuits; labelling and testing; Certificate of Compliance on completion.
- Internally fitted power trunking for normal and essential power
- Internal lighting to suit design and layout
- External lighting around entries to comply with IP66, cool white LED fixture with low power consumption and corresponding Lux level for outdoor security lighting, with minimum glare.
- Personnel: Work must be performed or supervised by a registered Installation Electrician or Master Installation Electrician.
- A valid Certificate of Compliance (CoC) for each guard house
- "As-built" drawings for all installations and showing exact cable routes.
- Test reports verifying earth resistance and insulation integrity.

Fire Detection & Fire Fighting Equipment

- Fire detection and alarm (detectors, MCPs, sounders) per SANS 10139/10400-T; testing and labelling as required by regulation.
- Portable firefighting equipment, signage and egress provisions as applicable.

ICT/Security Integration

- UTP cabling, data points, patch panels and cabinet; integrate CCTV, access control readers, intercoms and panic/duress alarms where possible.
- Provide control for booms/turnstiles and cameras where specified, coordinate with ACSA networks.

Mechanical (HVAC/Ventilation)

- Split-unit air conditioning sized for occupancy; low noise; condensate management.

Plumbing

- Connections to potable water and sewer waste where available; otherwise provide temporary modular tanks/reticulation until permanent connections are in place; comply with SANS and local by-laws.
- The contractor to note the tie ins to existing water supply points must be done according to SANS standards. Pipe diameters vary from 50mm – 250mm diameter. Provision must be made in the prices for tie in accordingly and must cover tie in up to 250mm in diameter.
- Tie into existing sewer and storm water lines range from 110mm diameter up to 250mm diameter. Provision must be made in the prices for tie in accordingly and must cover tie in up to 250mm in diameter.

Furniture, Fixtures & Equipment (FF&E)

- Security counter, operator chairs, lockable storage, key cabinet, first-aid box, notice board and task lighting.

Off-Site Fabrication, Logistics and Installation

Factory Build & QA

- Fabricate modules under an approved Quality Plan with material traceability, Inspections and factory acceptance records.

Transport & Lifting

- Plan road transport, crantage and escorts; coordinate with ACSA for lifting operations and flight path/height restrictions as applicable.
- Protect modules during transit; verify dimensions and weights for route clearances.

Site Works & Preparatory Works

- Land surveying and Site assessments including Geotechnical Investigations where needed and proofing of existing services.
- Grubbing and clearing of platform area for each guard house.
- Rip & Recompact platform as required.
- Import, lay and compact fill materials as required.
- Soil poisoning as required.
- Density testing as required.
- Forming plinths, foundations, bases, slabs from concrete or masonry or both to support the guard house.
- Include suitable finishes such as paving, aprons etc. to guard house perimeter and surrounds to ensure that the aesthetics are integrated with the overall approved design concept.

Ablution Facilities

- The pricing specification makes provision for the ablution installation to be priced separately as an extra over item for each guard house.
- The contractor must price for a conventional compliant installation that includes:
 - Supply and installation of a suitable toilet pan and cistern installed complete
 - Suitable wash hand basin installed outside the water closet
 - All necessary plumbing of water supply and water drainage
 - Suitable ironmongery and sanitary ware to ensure a fully functional and compliant ablution facility
 - Suitable extraction fan
 - Suitable floor finishes
 - Suitable wall finishes
 - Suitable ceiling finishes
 - Suitable window finishes

Alternate Ablution Facilities (Rate only option)

- The client anticipates that connection to existing water supply and existing sewers may not be practical and not viable in certain locations.
- In such instances the client may opt to choose an off-grid solution that ensures compliance with relevant building codes and provides users with a suitable fit for purpose ablution facility.
- The alternate solution shall be in a form that ensures appropriate and acceptable hygiene controls.
- The pricing specification makes provision for the alternate ablution installation to be priced separately as an extra over rate only item.
- The off-grid solution will be substituted in place of a conventional installation where viable.
- The contractor must price for an alternative compliant installation that includes:
 - Supply and installation of a suitable toilet system installed complete.
 - Suitable wash hand basin installed outside the water closet
 - All necessary plumbing as needed.
 - Suitable ironmongery and sanitary ware to ensure a fully functional and compliant ablution facility
 - Suitable extraction fan
 - Suitable floor finishes
 - Suitable wall finishes
 - Suitable ceiling finishes
 - Suitable window finishes
- The alternate solution shall be designed in a manner that allows for integration into future tie ins for water supply and sewer connections as they become available.

Note: The client reserves the option to omit in its entirety the ablution installation where it deems it unviable. This includes both the conventional as well as the alternate option. Such omission will result in a reduction in the contract value equal to the omitted elements.

Services / Utilities

- The client provides the contractor with a table that reflects the estimated distances to service tie in points
- The table provides tie in distances for the following:
 - Electrical tie in points
 - Water supply points
 - Sewer tie in points
 - Stormwater tie in points

- The pricing specification makes provision for pricing of such provisions on a per meter or linear meter basis. The rate provided shall be deemed to be inclusive of supply of all materials & consumables, equipment, plant, overheads, profit and any other costs required to successfully complete the installation.
- Connections to existing services at the tie in point are measured separately.
- Connection to the guardhouse is measured separately.
- Excavations are measured separately.
- Reinstatement of paved or landscaped surfaces are measured separately.
- With respect to paved surfaces, no distinction is made between concrete cast insitu paving, segmented concrete/clay paver or tar paving. Reinstatement is deemed to include the necessary layer works, importing of infill materials and replacing the paved surface to match existing.

TABLE OF ESTIMATED DISTANCES TO KNOWN TIE IN POINTS											
ITEM			G1	G2	G3	G4	G5	G6	G7	G8	Total
1	KSIA										
1.1	Electrical	m	40,00	32,00	30,00	200,00	62,00	10,00	600,00	26,00	1000,00
1.2	Water Supply	m	70,00	48,00	30,00	60,00	145,00	145,00	20,00	120,00	638,00
1.3	Sewer	m	70,00	125,00	30,00	60,00	200,00	200,00	140,00	120,00	945,00
1.4	Stormwater	m	20,00	50,00	30,00	60,00	25,00	20,00	10,00	30,00	245,00
2	KPA										
2.1	Electrical	m	1,00	54,40	26,40	81,50	6,50				169,80
2.2	Water Supply	m	69,30	54,40	26,40	81,50	120,80				352,40
2.3	Sewer	m	69,30	24,80	19,70	8,90	122,50				245,20
2.4	Stormwater	m	23,50	4,20	20,90	216,30	87,00				351,90
3	CDSIA										
3.1	Electrical	m	27,00	33,00	30,00	465,00	104,00				659,00
3.2	Water Supply	m	150,00	625,00	750,00	945,00	65,00				2535,00
3.3	Sewer	m	150,00	625,00	750,00	945,00	65,00				2535,00
3.4	Stormwater	m	12,00	35,00	61,00	45,00	20,00				173,00
Note 1: Reference G1 – G8 is an abbreviation of Guard House 1 to Guard House 8 Note 2: Distances provided are estimates of known points and actuals may vary.											

It is required that the works be fully completed in 4-6 months from the access date.

Scope of Services for the Principal Contractors Design Team:

Summary of Scope of Work (Design Teams Work)

Architect

Prescribed Principal Contractor's Architectural team to achieve the Contract's design responsibility to include an Architect. The Architect to be competent persons in line with the Guidelines for Persons Registered in terms of the Architectural Profession Act 44 of 2000. As Pr.Arch. The Architect will be required to ensure that all services and deliverables are carried out in accordance with Architectural Professions Act. In addition, the architect shall fulfil the role of contracts manager and discharge all duties and responsibilities accordingly.

Engineers

Prescribed Principal Contractor's Professional Engineering team to achieve the Contract's design responsibility to include a Civil & Structural Engineer, Electrical Engineer, Mechanical Engineer, and Fire Engineer. Key members of each discipline to be competent persons in line with the Guidelines for Persons Registered in terms of the Engineering Professional Act, 2000 (Act no. 46 of 2000) as Pr.Eng or Pr.Tech. The Engineers will be required to ensure that all services and deliverables are carried out in accordance with the Engineering Profession Act.

Quantity Surveyor

Prescribed Principal Contractor's Quantity Surveying team to achieve the Contract's design and cost management responsibility to include a Quantity Surveyor. The Quantity Surveyor to be a competent person in line with the Guidelines for Persons Registered in terms of the Quantity Surveying Professions Act 49 of 2000. as Pr.QS. The Quantity Surveyor will be required to ensure that all services and deliverables are carried out in accordance with Quantity Surveying Professions Act.

Construction Health & Safety Agent

Prescribed Principal Contractor's Health & Safety team to achieve the Contract's design and health & safety management responsibility to include a Construction Health & Safety Agent. The Construction Health & Safety Agent to be a competent person in line with the Guidelines for Persons Registered in terms of the Project and Construction Management Professions Act 48 of 2000. as Pr.CHSA. The Construction Health & Safety Agent will be required to ensure that all services and deliverables are carried out in accordance with Project & Construction Management Professions Act.

These objectives of the project is to be made possible through acquiring the services of experts to design, develop and execute the proposed facilities in line with the scope of works (Scope of works detailed above as high level requirements) The intended deliverables to be achieved at different stages by the project lifecycle are as follows:

- Initiation: Appointment of a competent Principal Contactor contracted with a team of professionals and experts in a Design and Build agreement to carry out the project.
- Concept Design
- Detailed Design
- Planning: Successful creation of a project plan, financial plan, risk plan, quality plan, communication plan.
- Execution: Building of the deliverables, monitoring, and controlling of project aspects.
- Closure: Performance of project closure and review at project completion.

1.4. Interpretation and terminology

The following abbreviations are used in this Works Information:

Abbreviation	Meaning given to the abbreviation
SANS	South African National Standards
ECSA	Engineering Council of South Africa
SACPCMP	South African Council for the Construction and Construction Management Professions
SACQSP	South African Council for the Quantity Surveying Profession
SACAP	South African Council for the Architectural Profession

ACSA	Airports Company South Africa SOC Limited
CLUSTER 3	Represents King Phalo Airport, Chief Dawid Stuurman International Airport and King Shaka International Airport
KPA	King Phalo Airport
CDSIA	Chief Dawid Stuurman International Airport
KSIA	King Shaka International Airport
OHS	Occupational Health & Safety
OEM	Original Equipment Manufacturer

2. Management and start up.

2.1. Management meetings

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

Title and purpose	Approximate time & interval	Location	Attendance by:
Kick-off Meeting	Once off at beginning of contract	Applicable site	Project Manager (and appropriate delegates and contractor)
Risk register and compensation events	As and when needed	TBC	TBC
Design development & planning	As and when needed	TBC	TBC
Overall contract progress and feedback	Monthly on TBC within cluster 3 airports	TBC	TBC
Site Inspections	Monthly per site on TBC within cluster 3 airports	KSIA KPA CDSIA	TBC

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

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

2.2. Documentation control

The Contractor shall keep daily records of people and equipment employed as well as a site diary in respect of work performed on the site.

At the end of each week, the Contractor shall provide the Employer / Employer's Agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all sub-contractors on the works each day.

At the end of each week, the Contractor shall provide the Employer's Agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works.

2.3. Health and safety risk management

The *Contractor* shall comply with the health and safety requirements contained in Annexure 6 attached to this Works Information.

The Contractor shall appoint responsible person(s), and their names shall be forwarded to the Client before any work may commence on site. The responsible person shall legally be responsible and ensure that safety measures are exercised on site by his workforce. No work may be executed in the absence of approved safety measures for that item of work.

The Contractor will be responsible for the safety of his personnel on site at all times. All laws, rules and regulations shall be strictly followed in this regard, and all the necessary precautions and measures shall be taken to ensure the safety of personnel, the public and equipment.

Where work is to be carried out on or in the proximity of live electrical equipment the Contractor shall make all the necessary arrangements with the relevant Supply Authority to isolate and earth such equipment. These arrangements shall be in writing and copies thereof shall be submitted to the Engineer. The Contractor shall also adhere to any requirements or procedures the Local Supply Authority may have in this regard. None of these arrangements shall, however, alleviate the Contractor's responsibilities in terms of this contract or any Laws and Regulations.

By the submission of a bid, any Bidder will if awarded the contract to which this bid document relates, envisaged by Section 37 (2) of the Act. As a mandatory the successful Bidder will be deemed to be the "principal contractor" and an employer in his/her/their own right with duties as prescribed in the Act and accordingly will be deemed to have agreed to be solely responsible for ensuring that in connection with the service to which this bid document relates, all work will be performed and machinery and plant used in accordance with the Act. Should the Contractor, for whatever reason be unable to perform as required by the Act, the Contractor undertakes to inform the Employer accordingly.

Bidders are advised that it is a Condition of this Bid that a '**Construction Phase Safety, Health and Environmental Plan**' that specifically relates to the project must be prepared by the successful Bidder prior to the commencement of the Construction Works all to the approval of the employer.

Bidders are to take cognisance of the information and specifications provided in this tender document.

The Contractor will be deemed to have satisfied himself with his obligations in terms of the Act and to have allowed for all costs arising from compliance with the Act as no claim for extra costs arising from compliance with, and obligations in terms of the Act will be entertained.

The contractor must ensure that a competent health and safety manager/agent in terms of the act is appointed to this project.

The contractor must ensure that a Professionally Registered Construction Health & Safety Agent is appointed to this project. This person shall be professionally registered with the SACPCMP.

The *Contractor* shall comply with the health and safety requirements contained in Annexures attached to this Works Information.

The Contractor ensures that its Sub-contractors comply with the requirements of the Employers house rules and applicable safety requirements

The Contractor shall comply with the employer's safety requirements to the satisfaction of the Employer

A 'Permit to work' can only be obtained by the Contractor once the OHS Department has approved the safety plan and documentation.

The Contractor shall ensure that the site and work areas are kept neat, clean and tidy at all times and minimise potential hazards.

The Contractor shall provide their own safety equipment.

The Contractor shall undertake regular site safety toolbox talks. The toolbox talks shall take place at least once per week.

Subcontractors will be legally appointed and will be subject to the conditions set out in this specification including preparation and submission of a safety file for approval. It is the responsibility of the contractor to ensure that their subcontractors have an approved safety file and are made fully aware of the conditions of the contract as it relates to their scope of work.

2.4. Environmental constraints and management

The Contractor performs the works and all construction activities within the Site and Working Areas having due regard to the environment and to environmental management practices as more particularly described within the Standard Environmental Specification.

The *Contractor* shall comply with the environmental criteria and constraints stated in Annexure - EMS_048_Service_&_Maintenance_Contractors_Environmental_Terms_&_Conditions_to_Commence_Work (1)

2.5. Quality assurance requirements

All material shall be of high quality and suitable for the conditions on site. These conditions shall include weather conditions as well as conditions under which materials are installed, stored and used. Should the materials not be suitable for use under temporary site conditions the Contractor shall at his own cost provide suitable protection until these unfavourable site conditions cease to exist.

All materials proposed by the Contractor shall be tested. The test, as well as the materials, shall be approved by the Engineer prior to such materials being built into the works and all costs involved shall be deemed to be included in the quoted rates.

It will be the responsibility of the Contractor to undertake appropriate quality control and quality assurance measures during manufacture as well as on site.

The level of quality of materials and workmanship. In general, all materials shall comply with the relevant SABS or equivalent standard specifications. In the absence of a suitable specification, the materials may be those available from suppliers provided they are approved by the Engineer. Likewise, all systems of working and workmanship shall comply with the relevant SABS or equivalent codes of practice or otherwise be approved by the Client.

The Contractor will be expected to comply with this section of the specification in detail throughout the contract and the Client will carry out ad hoc audits of the system from time to time.

Tenderers should take note of the special requirements and the cost implications to be included, when making up their tender.

The works shall always comply with:

- The Contractor shall have, maintain and demonstrate its use to the Project Manager (Employer Agent) the documented Quality Management System to be used in the performance of the works.
- The Contractor submits his Quality Management System documents to the Project Manager as part of his programme under ECC Clause 31.2 to include details of:
 - Quality Plan for the contract;
 - Quality Policy; and
 - Index of Procedures to be used;
- The Project Manager indicates those documents required to be submitted for either information, review or acceptance and the Contractor indicates such requirements within his register of documents. The register shall indicate the dates of issue of the documents with the Project Manager responding to documents submitted by the Contractor for review or acceptance within the period for reply prior to such documents being used by the Contractor.

- The Quality Plan means the Contractor's statement, which outlines strategy, methodology, resources allocation, QA and Quality Control co-ordination activities to ensure that the works meet the standards stated in the Works Information.
- The employers agent will ensure quality assurance objectives are met and the contractor must give the necessary co-operation and supply all the necessary management documentation as required.
- The Contractor shall ensure that the quality assurance requirements placed on him under this Contract are transferred into any subcontracts.
- Quality system requirements shall be applied on all subcontracts to the point where the acceptability of supplies can be demonstrated solely by the conduct of inspection and/or examination of goods upon receipt at the designated point of delivery.
- The Contractor's quality plan shall include or reference the quality plans of Sub-contractors.

2.6. Programming constraints

The Contractor's programme must be based on the Working Times defined elsewhere in the specification. The Contractor's attention is drawn to the limited occupation (night-time) periods applicable to this project.

Time is of the essence, and all construction work must be completed on the schedules/stipulated times. Sufficient manpower shall be made available to cope with the construction schedule dates.

Any cost item which the prospective tenderer regards necessary for the proper functioning or completion of an item or element, shall be added to the tender rates as there must be no uncertainty that the tender rates and total tender price is all inclusive.

Prospective tenderers shall make sufficient allowance for site management and administrative staff. The project scope is not final and fixed, and it is anticipated that comprehensive site communication (via site instructions/queries, etc) will transpire during the execution of this contract.

Site co-ordination meetings will be held, and the Contractor's site manager shall attend these meetings and promptly implement the requirements put forward.

Prospective tenderers shall allow in their tender rates for all aspects which could lead to non-continuity of work, disruption or any other event which is regarded normal to fast-track type of construction projects.

- **General**

The Contract programme, progress reports, subsequent updates, revisions and supplementary programmes as detailed in this section are an essential part of the project control system used by the Employer for managing the works and in monitoring the progress of the work under the Contract. The information and data provided by the Contractor pursuant to this procedure must therefore be reliable, accurate and timely in presentation.

- **Programme submission**

The Contractor's first Programme shall be submitted in both hard and soft copy forms within two weeks of kick off and using a computer software package approved by the Project Manager. The preferred software package is Microsoft Projects or similar approved.

- **Contract programme (baseline)**

The Contractor's First Programme once approved shall become the "Contract Programme" or "baseline" against which actual time performance will be compared. The contractor ensures that the baseline program is **no longer than 6 months**. Once the baseline has been established, all subsequent programmes will have baseline (target) bars shown against each activity. This programme will be used as the basis on which all variations, extensions of time and changes to methods of delivery shall be assessed.

Identified deviations from the baseline shall be addressed by the Contractor by either demonstrating that the deviation does not constitute a problem to the overall Contractor's Programme or providing a course of action to remedy the deviation.

- **Revisions to contract schedule**

The Project Manager's written approval of any revised contract programme shall be given prior to the revised contract programme becoming the new contract programme.

Additional detail may be inserted into the Contract Programme at the request of either the Contractor or the Project Manager. In such cases, the overall start and finish dates of the detail activities shall not vary from the original summary activity(s) that were replaced.

All revisions to the contract programme shall be prepared by, and at the cost of the Contractor.

- **Supplementary programmes**

The Project Manager may at any time, and at the cost and expense of the Contractor, direct the Contractor to produce supplementary programmes to highlight a particular aspect of the work under the Contract. The Project Manager shall not unreasonably request supplementary programmes.

- **Cash flow**

The Contractor shall submit to the Project Manager a detailed cash flow chart based on the contract programme showing the anticipated cash flow as represented by expected payment claim submissions, not only payments received.

- **Progress reporting**

To demonstrate the actual progress of the work under the Contract the Contractor shall, once every two (2) weeks, update and submit the contract programme and the progress to the Project Manager.

The contract programme shall be in the form of a two week look ahead schedule, and shall show the following two separate bars for each activity so as to enable comparison of the actual progress to the contract programme:

- The contract programme “baseline” activity bar
- The current schedule activity bar identifying the currently forecast start and finish dates of the activity, and the status (% completion of each activity).

- **Progress monitoring and review**

Monitoring and review of the progress of work under the Contract shall consist of an assessment of all activities currently in progress. The following shall be determined:

- percentage complete.
- forecast completion date.
- deviations from the baseline programme; and
- actions required to remedy any deviations.

- **Monthly status report**

The Contractor shall provide a written status report by the 20th of each month or such other reporting period as may be required by the Project Manager from time-to-time. The report shall summarise progress and problems encountered during that month in respect of all parts of the work under the Contract.

As a minimum the report shall include:

- progress against the current approved contract programme.
- summary of progress achieved during the period.
- list of milestones achieved during the period.
- status of design, procurement, and off-site works.
- status of on-site works.
- deviations from the contract programme “baseline”, and in particular, the forecast completion dates of activities which have or should have commenced.
- status of approvals.
- actual or anticipated problems with corresponding action plans to minimise the impact.
- summary of works planned for the following period, and
- cash flow status versus the original forecast.

The progress report shall form the basis of a monthly progress meeting between the Project Manager and the Contractor.

- **Monthly expediting report**

The Contractor shall submit to the Project Manager by email within four (4) days after month-end a report on progress of any off-site manufacturing activities of the Contractor during the previous month.

The report shall state the current percentage progress of each major piece of equipment as applies at that date.

Each report shall state the actual completion date for those manufacturing activities completed in the last reported period, shall advise the anticipated completion date for each major piece of equipment and shall comment on any delay or variance with respect to scheduled progress.

The Contractor shall also report his calculated overall completion percentage for each Subcontract at each report date.

2.7. Contractor’s management, supervision and key people

As stipulated in the tender data, the key resources required in managing and delivery of the project are the following:

- Architect - SACAP Registered as a Professional Architect (Pr. Arch) and relevant experience (The architect will be responsible for design and contract management responsibilities)
- All other professionals shall be professionally registered and will be authorised by ACSA prior to commencement of any works related to the project. Bidders are to make provision for the following additional resources as a minimum.

No	Resource	Experience	Professional Status
1	Structural Engineer	Proof that the Structural Engineer has Structural Engineering professional services work experience in building projects.	Proof that the Structural Engineer is Professionally registered with the Engineering Council of South

		Minimum of one (1) year. Note: Experience to be post professional registration	Africa (Pr.Eng/Pr.Tech.Eng - ECSA)
2	Civil Engineer	Proof that the Civil Engineer has Civil Engineering professional services work experience in building projects. Minimum of one (1) year. Note: Experience to be post professional registration	Proof that the Civil Engineer is Professionally registered with the Engineering Council of South Africa (Pr.Eng/Pr.Tech.Eng - ECSA)
3	Electrical Engineer	Proof that the Electrical Engineer has Electrical Engineering professional services work experience in building projects. Minimum of one (1) year. Note: Experience to be post professional registration	Proof that the Electrical Engineer is Professionally registered with the Engineering Council of South Africa (Pr.Eng/Pr.Tech.Eng - ECSA)
4	Mechanical Engineer	Proof that the Mechanical Engineer has Mechanical Engineering professional services work experience in building projects. Minimum of one (1) year. Note: Experience to be post professional registration	Proof that the Mechanical Engineer is Professionally registered with the Engineering Council of South Africa (Pr.Eng/Pr.Tech.Eng - ECSA)
5	Fire Engineer	Proof that the Fire Engineer has Fire Engineering professional services work experience in building projects. Minimum of one (1) year. Note: Experience to be post professional registration	Proof that the Fire Engineer is Professionally registered with the Engineering Council of South Africa (Pr.Eng/Pr.Tech.Eng - ECSA)
6	Quantity Surveyor	Proof that the Quantity Surveyor has Quantity Surveying professional services work experience in building projects. Minimum of one (1) year. Note: Experience to be post professional registration	Proof that the Quantity Surveyor is Professionally registered with the South African Council for the Quantity Surveying Profession (Pr. QS - SACQSP)
7	Construction Health & Safety Agent	Proof that the Occupational Health and Safety Agent has Occupational Health and Safety professional services work experience in building projects. Minimum of one (1) year. Note: Experience to be post professional registration	Proof that the Occupational Health and Safety Agent is Professionally registered with the South African Council for Project and Construction management professions (Pr.CHSA - SACPCMP)
8	Site Supervisor / Foreman x 3	The site supervisor / foreman x 3 (1 per site) has site supervisory / management experience in building projects. Minimum three (3) years. AND Must have a minimum of an NQF 6 qualification in the built environment.	Professional registration for the supervisor / foreman is not mandatory.

The list provided represent the minimum resources needed to execute the works, the bidder shall have discretion on the inclusion on any additional resources required to ensure the successful completion of the works.

The Bidder must ensure that the key resources have a comprehensive understanding of the NEC Contract Agreement stipulated in the contract data.

The employer's expectation is that the key resources have the necessary experience in managing, scheduling, planning and delivery of the works.

- The Contractor shall make an adequate, experienced and stable project team available for the duration of the contract. Every effort must be exercised by the Contractor to minimise replacement of individual project team members in order to ensure optimum contract management continuity.
- It is a requirement of this contract that the Contractor employs a fully qualified and experienced Architect who will perform design and Contract Management responsibilities who has been delegated sufficient authority to manage the full contract efficiently for the duration of the contract.
- It is a requirement of this contract that the Contractor employs a full time, fully qualified and experienced Foreman/supervisor who has been delegated sufficient authority to manage the works. A supervisor/foreman will be required on each site once construction commences. The Foreman/supervisor is required to be fluent in English, both in writing and orally.
- An organogram of all the Contractor's people who will be directly involved with the management and execution of this contract down to Supervisory level, showing each key person named to do the job as stated in the Contract Data.

2.8. Invoicing and payment

Within two days of receiving a payment certificate from the *Project Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice showing the amount due for payment equal to that stated in the *Project Manager's* payment certificate.

The *Contractor* shall address the tax invoice to _____ and include on each invoice the following information:

Name and address of the *Contractor* and the *Project Manager*;

The contract number and title;

Contractor's VAT registration number;

The *Employer's* VAT registration number _____;

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

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

(add other as required)

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

2.9. Contract change management

The contractor is to inform the client of any changes in writing and suitable mitigations to such changes are to be provided such that the client is not in any way prejudiced in line with the terms set out in the contract.

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.

All costs for variations to the contract shall be done in accordance with the rates that shall be completed by the Contractor in the pricing section of this document.

Any items or variations for which rates have not been included in the Schedules shall be priced as non-scheduled items and will be subject to approval per prevailing governance rules.

The Contractor shall not accept oral instructions from any party whatsoever.

2.10. Provision of bonds and guarantees

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

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

- Retention will be applied to all interim payment certificates.
- Defects period of 12 months will be applied from date of works completion.
- Sectional completion for each site will apply.
- Guarantees & Warranties on the works – Where regulations and standards prescribe guarantees and warranties are longer than the 12-month defects period, then guarantees and warranties on such works shall be aligned with the applicable regulation or standard.
- Guarantees & Warranties on the works – Where Original Equipment/Material Manufacturer (OEM/MM) guarantees and warranties are longer than the 12-month defects period, then guarantees and warranties on such works shall be aligned with the applicable OEM/MM guarantee or warranties.

2.11. Records of Defined Cost, payments & assessments of compensation events to be kept by the Contractor

The contractor is to keep a detailed record of all payment claims and assessments of compensation events.

2.12. Training workshops and technology transfer

The contractor is to produce a comprehensive user and maintenance manual which shall at a minimum include descriptions of installations, specifications on materials used, instructions on use, instructions on maintenance.

The contractor shall carry out training for the employers personnel as part of the hand over process.

3. Engineering and the *Contractor's* design

3.1. *Employer's* design

- The employer only provides all relevant as-built information that is available. No commitment is made as to the completeness or accuracy of available as-built information.

3.2. Parts of the *works* which the *Contractor* is to design

The design responsibility of the installation, general layout, arrangement and the functionality of the systems rest with the Contractor with regard to interpretation of the employers' requirements. The detailed installation design responsibility, also, rest with the Contractor with regard to the design for installation and manufacturing and the compliance to specifications and requirements, which are stipulated in the contract documents and on the drawings.

The cost of complying with these requirements is deemed to be covered by the tendered rates.

- The contractor must conduct inspections, assessments and surveys of the existing sites defined in part C4.
- The contractor will produce conceptual designs for each of the guard houses included in the scope and make presentations to the client for approval.
- Submit drawings, models/renders, specifications, schedules and samples in required formats.
- Upon obtaining approval for conceptual design proposals, the contractor will produce detailed designs and working drawings to enable the works.
- The contractor will obtain client approval for all detailed designs and working drawings.
- The contractor will prepare and submit applications to local and applicable statutory authorities if needed.
- The contractor will ensure that all construction works is conducted in accordance with the agreed specifications and approvals.
- Ensure alignment with relevant legislation, regulations and guides as it relates to guard house facilities that are modular / prefabricated / containerised
- In addition, the contractor is to design the following parts of the works:
 - Site establishment layout(s), as required
 - Any temporary works required to construct the permanent works
 - Construction execution plan
 - Shop drawings
- The contractor shall be responsible for full compliance with all codes of practice, safety, professional procedures, checking, site approval and requirements of the Construction Regulations in regard to their design

DESIGN SERVICES AND ACTIVITY MATRIX

Activity	Responsibility
• Obtain the necessary approvals from relevant authorities and submit documents to relevant authorities, if required	Contractor
• Provide the necessary concept designs for approval	
• Provide the necessary detailed design for approval	
• Provide the necessary shop drawings as may be needed	
• Design temporary works	
• Provide updated as-built drawings & Specification	
• Provide the required handover information & Close out Report	

3.3. Procedure for submission and acceptance of *Contractor's* design

DESIGN PROCEDURES

High-Level Overview:

- The contractor will be appointed based on NEC 3 ECC – Option B – Priced Contract with Bills of Quantities. The contractor shall not add any activities to the provided schedule.
- All specifications and designs to be approved by Employer in writing prior to execution.

- Quality assurance checks shall be performed by the client or the client representative.
- Only once approved by the client, can the contractor proceed with the works.
- The contractor will adhere to the following procedure for submitting designs or specifications for acceptance:
 - Design review meetings shall be held on an as-and-when- required basis.
 - The contractor shall present the designs to the Project Manager and the stakeholders identified by the project manager.
 - These designs shall be signed/approved by the Project Manager after deliberation with stakeholders.
 - The design shall be presented in the format as requested by the Project Manager and may include drawings, 3D renderings, specification sheets, technical schedules or physical samples.
- Documentation Submission
 - Project documentation can be submitted electronically where possible. Samples and hard-copies (as-an-when required) to be delivered to the Project Managers Site office.

Combined Stage 1 to 4 Deliverables

1	Surveys, Concepts & Viability	I. Surveys and inspection – Inspect, survey, measure and prepare documentation of existing premises as needed. II. Collation of information III. List of consents and approval and related time frames IV. Time frames for upcoming deliverables. V. Agreed scope of services and scope of work VI. Receive, appraise, and report on the client's requirements with regard to the client's brief. VII. Determine budgetary constraints. VIII. Determine indicative project timelines. IX. Whether other statutory authority applications are required or desirable. X. Schedule of required surveys, tests, analyses, site, and other investigations XI. Schedule of consents and approvals and related timeframes. XII. Project Initiation Programme XIII. Prepare an initial design concept and advise on: a. the intended space provisions and planning relationships. b. proposed materials and intended building services; and c. the technical and functional characteristics of the design. XIV. Check for conformity of the concept with the rights to the use of the land/infrastructure. XV. Consult with local and statutory authorities. XVI. Reviewing and evaluating design concepts and advising on viability. XVII. Approval by Client to proceed to Detail Design on selected concepts.
---	-------------------------------	---

2	Design Development & Local Authority Approval	I. Develop all aspects of the design from concept to full development including, but not limited to, construction systems, materials, fittings, and finishes selections. II. Review the programme and budget with the client, principal consultant or other consultants. III. Coordinate other consultants designs into building design. IV. Outline specifications V. Prepare design development drawings including drafting technical details and material specifications. VI. Discuss and agree on the building plan application and approval requirements with the local authority. VII. Reviewing and evaluating design and outline specifications and exercising cost control VIII. Internal and external approvals of designs documentation. IX. Preparing detailed estimates of construction cost X. Updated Indicative Construction Programme XI. Prepare documentation required for local authority building plan application submission. XII. Co-ordinate technical documentation and complete primary co-ordination sufficient to support building plan submission. XIII. Obtain the client's authority and submit documents for approval at the local authority. XIV. Prepare specifications for the works. XV. Complete all remaining technical and construction documentation. XVI. Services co-ordination. XVII. Working drawings - XVIII. Reviewing working drawings for compliance with the approved budget of construction cost and/or financial viability XIX. Company health and safety management system (Sample documentation) XX. Baseline risk assessments / task specific risk assessment XXI. Completed site establishment check lists XXII. Health and safety documentation for authorities - XXIII. Approval by Client to proceed with construction works
---	---	--

3.4. Other requirements of the *Contractor's* design

KSIA currently has a set of as-built information that is codified, the contractor shall in all instances take this coding into account in preparation of all as-built designs, specifications, drawings etc and ensure that all documents align fully with the current coding system.

The Contractors design complies with the following:

- ICAO – International Standards and Practices: Aerodromes – Annex 14 to the Convention on International Civil Aviation (fourth edition – July 2004 and subsequent amendments) and related standards.
- ACSA – Operational Airfield Regulations (July 1998 as amended)
- The Occupational Health and Safety Act of 1993
- The Construction Regulations of 2024/As amended
- The Local Fire Regulations
- South African National Standards
- Model Preamble for Trades 2008
- CAA Regulations as may be applicable
- National Key Point (NKP) Regulations
- Incorporate applicable standards
- Incorporate applicable regulations
- Incorporate applicable legislation
- Incorporate applicable local authority by laws
- The employer may from time-to-time issue specifications & standards for defined work as necessary.

The Contractor shall issue all notices and pay all the required fees in respect of the installation to the authorities, and shall exempt the employer, principal Contractor and Engineer from all losses, claims, costs or expenditure which may arise as a result of the Contractor's negligence to comply with the requirements of these regulations.

It shall be assumed that the Contractor is conversant with the above-mentioned requirements. Should any requirements, by-laws or regulation, which contradicts the requirements of this document, apply or become applicable during erection of the installation, such requirements, by-law or regulation shall overrule this document, and the Contractor shall immediately inform the Client of such a contradiction. Under no circumstances shall the Contractor carry out any variations to the installation in terms of such contradictions without the written permission to do so from the Client.

3.5. Use of Contractor's design

All rights for use transfer to the employer upon payment for such designs.

3.6. Design of Equipment

The contractor is to ensure that they provide for all equipment necessary to execute the works. The design of the equipment is the responsibility of the contractor. Such design shall be subject to the approval of the client.

3.7. Equipment required to be included in the works

The contractor is to provide all the equipment required to execute the works as specified.

3.8. As-built drawings, operating manuals and maintenance schedules

Drawings & Documents

a. Comments on Drawings and Other Documents

- II. The Contractor takes due account of any comments made by the Employer and/or Others on the drawings or other documents. Unless otherwise expressly provided for in this contract, however, none of the Employer and/or Others is bound to comment on the drawings or other documents.
- III. None of the Employer and/or Others is bound to check the Contractors drawings or other documents for any errors, omissions, ambiguities or discrepancies or compliance with the requirements of this contract. The Employer's and/or others acceptance, receipt of, or review of, or comment on the contractor's drawings or other documents or other matter does not relieve the contractor from responsibility for drawing errors or omissions.

b. Drawing Requirements

- I. All drawings bear accepted contract references using a project title block which is accepted by the Employer. Detailed revision blocks and drawing numbers are suffixed accordingly. All drawings, particularly layout drawings, submitted for acceptance are to a scale acceptable to the Employer. All drawings are made to scale and fully detailed and dimensioned. All dimensions marked on the drawings are to be considered correct, although measurements by scale may differ therefrom. The material from which each part is to be made shall be indicated.
- II. The drawings include tolerances for manufacture and installation. The tolerances are suitable and of sufficient accuracy to provide safe and trouble-free construction and operation over the life of the component.
- III. All copies of drawings submitted to the Employer are provided in the form of 4 prints on white paper with black lines. The drawing size is A3 unless the use of another size is unavoidable. All native electronic format documents are also provided.
- IV. All drawings are dimensioned in metric units unless the use of another unit is required and/or recommended, e.g. imperial sizes for flange holes, studs, etc. Where applicable, drawings show a graphic scale key plan and north arrow. Dates on drawings are reflected in the following format: dd/mm/ccyy. Revisions are designated RO, RI, R2, R3, etc., commencing with the first issue. All revisions are clearly described in the revision column bearing the revision number.
- V. All drawings additionally comply with the latest revision of the ACSA Cad Specification and Good Practice Guideline.

c. Document Tracking System

- I. The Contractor establishes a document tracking system to record the dates for the supply and receipt of all drawings, calculations, correspondence, and requests for information to/from the Employer and/or Others.

Operations & Maintenance Manuals

- I. The Contractor provides comprehensive detailed operational and maintenance manuals covering all elements of the works.

4. Procurement

4.1. People

4.1.1. Minimum requirements of people employed on the Site

- Lead Architect – Suitably experienced and registered with SACAP
- Design team – Suitably experienced and registered with the relevant and applicable built environment council
- Supervisor / Foreman – Suitable experience and qualified

4.1.2. BBBEE and preferencing scheme

In line with the requirements set out in the tender specifications.

4.2. Subcontracting

4.2.1. Preferred subcontractors

The Contractor shall provide any necessary facilities in order to manage any of their subcontractors to ensure that the works allocated to them are carried out in accordance with:

- The programme of works
- The contract requirements and
- In particular the requirements concerning access to and from the airport facilities at the beginning and end of working shifts. The Contractor shall also ensure that the Sub-Contractor complies with all the requirements as contained in the Contract Documentation and in particular the Safety Plan, Environmental Management Plan and Operational procedure requirements.
- Where a contractor opts to obtain the security / guarding service for protection of the works. Then such security service provider shall be accredited / supported by the ACSA security division.
- Where integration with existing ACSA services is needed, ACSA may direct that such integration is carried out in coordination with or through relevant service providers / departments responsible for such infrastructure

4.2.2. Subcontract documentation, and assessment of subcontract tenders

All subcontractors used shall be experienced and shall demonstrate to the satisfaction of the client competency to execute the work for which they are being subcontracted.

The client reserves the right to reject subcontractors who in the opinion of the client cannot demonstrate the required experience and competency.

The Contractor shall only employ or bring a Sub-contractor onto the site and/or working areas with prior written approval of the Project Manager.

4.2.3. Limitations on subcontracting

The Contractor shall be responsible for the correct and complete installation of all Plant and Materials supplied by Sub-contractors.

In such instances where the Contractor employs a Sub-contractor who constructs or installs part of the Works, The Contractor shall ensure that any such Sub-contractor complies with all the safety, risk and quality requirements as stipulated in this document and as required by the Employer.

4.2.4. Attendance on subcontractors

In cases of third-party procurement, attendance shall be limited to the agreed mark-up provision.

The safety file of the Sub-contractor shall be submitted and approved by the Employers OHS department. The Employer reserves two (2) weeks for review and approval of safety files.

4.3. Plant and Materials

4.3.1. Quality

Shall be defined based on relevant SANS standards, building regulations, local authority requirements, compliance with legislative requirements and demonstrating alignment with industry best practise all while ensuring the finished product meets the functional and aesthetic requirement it was designed to provide.

4.3.2. Plant & Materials provided “free issue” by the *Employer*

None

4.3.3. *Contractor's* procurement of Plant and Materials

The Contractor is to provide all the plant and materials necessary for the successful delivery of the project.

Where required, requirements for proof of compliance with materials specifications, submission of samples of materials and finishes, requirements for shop drawings and other details shall be provided upon request by the employer. 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 (SANS). Written proof shall be obtained for any materials not bearing the official mark of the SANS.

4.3.4. Spares and consumables

The Contractor is to provide all the spares and consumables necessary for the successful delivery of the project. Sufficient attic stock of spares and consumables shall be provided to cover anticipated maintenance needs for years 2 and 3 following works completion.

The first 12 months or year 1 is within the defects period and is the sole responsibility of the contractor to attend defects which may arise within the defects period.

4.4. Tests and inspections before delivery

The contractor is to conduct and ensure that all materials delivered to site meet the quality criteria as defined in relevant SANS standards, regulations and adhere to the specifications provided in this tender.

Proof of such confirmation shall be provided upon request by the client.

4.5. Marking Plant and Materials outside the Working Areas

Plant and Materials shall be marked with unique referencing system to ensure traceability and proper due diligence.

4.6. *Contractor's* Equipment (including temporary works).

Due to operational constraints, all areas to remain operational for the duration of the works. The contractor is to provide all necessary temporary works and ensure the work is executed after hours. Disruption to Airport operations will not be tolerated. All temporary works to be removed upon completion and prior to commencement of airport operations the next day.

Where applicable, minimum requirements for equipment are specified in the Standard and Project specifications. The Contractor shall indicate in his Construction Method Statement how he will manage an emergency where a plant item breaks down during an operation being undertaken on the airside within the 50 m restriction zone, to ensure timeous opening of the taxiway (i.e. all limited occupation period works, especially runway tie-in areas between stop-bar and runway shoulders).

5. Construction

5.1. Temporary works, Site services & construction constraints

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

The site of the Works is situated both Airside and Landside at the three airports i.e. King Shaka International Airport, Chief Dawid Stuurman International Airport and King Phalo Airport. The site is under the jurisdiction of the Airports Company South Africa (ACSA).

Site access will be per agreement with the employer in strict compliance with prevailing employer house rules.

The Contractor must obtain written permission from the Client before construction of any temporary works may commence. Temporary works will include the following:

- Signage and markings of identified work areas.
- Electrical connections, where such connections are required, the contractor shall at their own cost make such connections directly with the KSIA billing and electrical departments.
- Placing and removal of barricades as needed. It is required that all sites be fully hoarded while under construction.
- All facilities within the Contractor's construction camp. The site is to be negotiated with ACSA and shall
 - be fenced off using 2,0 m high diamond mesh fencing material and clad with shade cloth. The design shall comply with the specifications where, provided in these documents and all statutory requirements such as the Occupational Health and Safety Act and Regulations.
 - The area is to be reinstated upon completion.
- Any other temporary works deemed necessary for the successful completion of the works.

The Contractor shall confine his operations to as small an area as may be practical for the purpose of constructing the works.

On completion of operations the ground surface where it may have been disrupted by the Contractor shall be restored to its original condition by filling in all ruts with material similar to the material within the rut and levelling the ground and where necessary planting grass and shrubs as may be required. Any boundary fences, which have been removed or damaged, shall be repaired and/or reinstated at the Contractor's expense.

The natural vegetation must not be disturbed other than in areas where it is essential for the execution for the work or where directed by the Client.

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

Restrictions, if any will be in strict compliance with prevailing employer house rules.

- Access to site is limited to persons in possession of a valid ACSA issue access permit
- Vehicular use on the premises is limited to vehicles authorized and permitted by ACSA
- Use of roads, walkways for the purposes of construction works (i.e.: closures and cordoning / restricting access) shall be approved by ACSA
- The type and form of barricades to be used in the works shall first be approved by ACSA

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

All work is to be carried out after operational hours.

After operational hours is defined as the time after the last flight for the day and the time before the first flight.

Operational times is typically as follows:

KSIA – 04:00am – 22:00pm

KPA – 04:30am – 20:45pm

CDSIA - 04:30am – 21:00pm

Times may however vary based on flight changes for the day.

Based on the approved construction plan developed following detail design, the contractor may make proposals for certain specific activities to be executed during operational hours. The client will consider and may approve such requests where impact to airport is regarded as minimal.

5.1.4. Health and safety facilities on Site

The contractor must at all times adhere to the requirements and provisions of the specifications provided in respect to health and safety on site all in strict compliance with all legislative requirements as it relates to Occupational Health and Safety. The contractor's attention is drawn to the Occupational Health and Safety Act as amended, which must be complied with in full.

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

Refer to the attached environmental specification.

5.1.6. Title to materials from demolition and excavation

Material disposals shall be reimbursed on a proven cost basis and shall be supported by suitable safe disposal certification.

All recyclable materials remain the property of the client; the contractor shall transfer such recyclable materials to an approved recycling facility. Monetary returns on such materials less the transport costs shall be returned to the client in the form of a credit against the contractor's claims.

5.1.7. Cooperating with and obtaining acceptance of Others

ACSA cluster 3 airports sites are live operational environment and requires constant cooperation, collaboration amongst varied stakeholders in order to facilitate the proper planning and execution of the works. The contractor will be required to align to agreed and prevailing operational requirements.

All tender rates shall be deemed to fully allow for this provision.

5.1.8. Publicity and progress photographs

The contractor will be permitted to erect a notice board displaying the project details. The artwork, wording, size and fixing methodology shall first be approved by the client.

5.1.9. *Contractor's* Equipment

The contractor shall maintain an up-to-date record of all equipment and plant used on site. Records shall be available for inspection at any time.

5.1.10. Equipment provided by the *Employer*

None

5.1.11. Site services and facilities

A suitable site camp location will be provided should it be required. The client will have discretion in determining the location of the site camp (all within the precinct of each respective airport) The contractor will be required to suitably enclose such site camp to the satisfaction of the client.

Site camp areas will exclude water, electricity and sanitation and sanitation access points. Provisions must be made by the contractor to attend to such requirements.

Therefore, the contractor is to ensure that provisions are made for establishing and operating of a site camp should the contractor deem it required.

Approval for the establishment of a construction camp must be obtained from ACSA. The Contractor is responsible for all arrangements for obtaining approval, establishment and subsequent removal and reinstatement of his construction camp.

The Contractor must at all times limit his personnel, plant, equipment and materials to the Contractor's site or the working areas as approved by the Engineer. No personnel shall be accommodated on airport property. Only guards approved by the Employer and on duty may be on site at all times.

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.

5.1.12. Facilities provided by the *Contractor*

The contractor is to provide all the facilities for the execution of the works.

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 shall make arrangements at his own cost for telephone and facsimile facilities, with cellular phones being acceptable.

Airside permits must be obtained by the Contractor from ACSA in accordance with the requirements of the Contract documents prior to commencing any work on Airside.

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.

If required that the Contractor shall supply portable chemical toilet facilities next to the construction site for his staff. These facilities must be cleaned a minimum of three times daily or per work shift. The client reserves the right to request an increase in cleaning frequency where hygiene and health concerns arise. Such facilities must be decanted and cleaned at a suitable frequency acceptable to the client.

5.1.13. Existing premises, inspection of adjoining properties and checking work of Others

The contractor will be working in a live operational environment as such due care is to be taken and necessitates checking with others continually as the work proceeds

The Contractor must satisfy himself that the dimensional accuracy, alignment, levels and setting out of existing components are compatible with the proposed Works.

The Contractor shall take all the necessary precautions to protect existing services, finishes and structures during the execution of the contract. All repairs and damages shall be the responsibility of the Contractor, and the cost thereof shall be borne by the Contractor.

The Contractor shall exercise extreme care when excavations are made to avoid damage to existing or newly installed services. Any damages to other services will be rectified forthwith and the costs for the rectification will be recovered from the Contractor.

5.1.14. Survey control and setting out of the *works*

The Contractor shall be responsible for the setting out of the 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 Client must be notified in writing at the earliest possible time.

The Contractor shall be responsible for the setting out of the works. The setting out of the reticulation system and supply line shall originate from the proposed guard house location.

The Contractor shall ensure that all routes are located before work commences and shall bring to the Clients attention any challenges encountered.

The Contractor shall peg out the routes of all services before any construction work commences.

5.1.15. Excavations and associated water control

The contractor to be aware that airports are live environments with a number of underground services. The contractor must therefore take adequate care when excavating and ensure provisions are made for suitable controls and protection of such excavations which includes dewatering where needed.

5.1.16. Underground services, other existing services, cable and pipe trenches and covers

- The contractor shall take care with respect to all existing services
- The Contractor shall be responsible for all excavations and associated dewatering works (if needed).
- The Contractor shall exercise due care in relation to existing underground services.
- The Contractor shall at his own expense repair any damages arising from the contractor's works.

5.1.17. Control of noise, dust, water and waste

In view of the intense concentration of construction activities likely to be experienced during the construction period, progressive and systematic finishing and tidying will form an essential part of this contract. At no time may spoil rubble, materials, equipment of unfinished operations be allowed to accumulate in such a manner as to unnecessarily impede the activities of others and in the event of this occurring, the employer shall have the right to withhold payment for as long as may be necessary in respect of the relevant works in the area concerned without prejudicing the rights of others to institute claims against the Contractor on the ground of unnecessary obstruction.

Finishing and tidying must not simply be left to the end of the contract. All finishing and tidying shall be carried out to the best advantage of the project as a whole and in the close co-operation of impacted stakeholders.

The contractor shall always maintain a clean working environment.

- The work area shall be cleaned continuously as work is undertaken
- The work area shall be completely cleaned upon vacating site each day
- The work area shall be kept free from dust, water and waste
- Noise shall be kept to a minimum and where unavoidable, adequate notice shall be given
- The Contractor shall be responsible for the removal of all waste generated from the works and the proper disposal thereof at his own cost.
- Where a contractor opts to provide a site camp, the Contractor shall supply portable chemical toilet facilities within the construction site camp for his staff. These facilities must be cleaned and sanitized in a minimum interval of 3 times per day / per shift, additionally cleaning may be required if found soiled. Ablution facilities shall be in a clean and hygienic state at all times.

5.1.18. Sequences of construction or installation

- The concept design work will be executed simultaneously across the three airports (KSIA, KPA, CDSIA).
- The detail design work will follow and will be executed simultaneously across the three airports (KSIA, KPA, CDSIA).
- The execution plan, quality plan and safety plan shall be suited to align the clients' operational requirements and shall be agreed prior to commencement.
- The execution of construction works may be executed across all three sites simultaneously or may be staggered to suit client requirements.
- The contractor shall make adequate provision in his pricing to accommodate construction being staggered across the sites.

5.1.19. Giving notice of work to be covered up

As applicable, based on operational plans and risk assessments for specific work packages.

5.1.20. Hook ups to existing works

As and where needed in respect of tie into existing services.

5.2. Completion, testing, commissioning and correction of Defects

5.2.1. Work to be done by the Completion Date

The *Project Manager* cannot certify Completion until all the work has been done and is also free of Defects which would have, in his opinion, prevented the *Employer* from using the *works* and Others from doing their work.

	Item of work	To be completed by
1	The works as a whole shall be completed within 6 months of the start date.	Sectional completion shall apply. Section 1 – KSIA Guard Houses Section 2 – KPA Guard Houses Section 3 – CDSIA Guard Houses Note: Sectional completion dates for each section and each guard house within the section shall be agreed with the client.

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

- The works completion for each airport shall be certified individually as 'sectional completion' once all required obligations have been met for each guard house.
- The defects period shall commence upon works completion (sectional completion) being certified.

5.2.3. Materials facilities and samples for tests and inspections

The appointed contractor will ensure that suitable tests and inspections are carried out to ensure compliance for all the works.

The appointed contractor shall provide the necessary samples and tests at his own costs where appropriate to ensure conformance with design specifications.

5.2.4. Commissioning

- The contractor will be responsible for commissioning of the works, these include submission of all required compliance certificates, occupancy certificates, engineers' certificates, warranties, guarantees, check lists, as built information including drawings and specifications.
- The contractor shall ensure that all works have been completed according to design intent and is fit for purpose and fit for use as originally intended.
- Test all installations and equipment in accordance with OEM requirements and recommendations.
- Occupancy certificates as issued by the local authority to be in place by the date sectional completion is confirmed. Failure to have the occupancy certificate in place will result in a delay in sectional completion certification until such time that occupancy certificates have been issued by the local authority.
- The appointed contractor shall facilitate, in coordination with the employer's agent the operational readiness and transfer process to ready the facility for end user occupation.

5.2.5. Start-up procedures required to put the *works* into operation

- The contractor will be required to develop a procedure for the operational, readiness and transfer of the works. Such procedures will be developed in contract in consultation with the client, the client representative and the wider stakeholder community to ensure seamless handover.

5.2.6. Take over procedures

- Take over will happen at works completion (sectional completion).

Take over only takes place once sectional completion for that site is certified.

5.2.7. Access given by the *Employer* for correction of Defects

The defects period shall commence after works completion has been certified for that respective airport, the contractor shall be allowed access to the site to remedy any defects that may arise within this period.

Contractors are reminded that to access the site in the defects period; the following is required:

- Relevant valid and active insurances as outlined in the insurance specification provided in this tender.
- Updating of the safety file and obtain a permit to work from ACSAs safety department.
- Ensure that staff required to perform remedial works obtain ACSA access permits including medicals and relevant training.

The contractor shall make sure such provisions are allowed for as no further claim shall be allowed for remedial works within the defects period.

5.2.8. Performance tests after Completion

- Refer to defects period provided in the contract data
- The guard houses are to be designed with a useful life of 20 years or more. The contractor is to provide the necessary documentation to support the design. Documentation includes materials specifications, materials tests, quality inspections and the like to demonstrate the structures useful life.

5.2.9. Training and technology transfer

The contractor shall prepare and provide a comprehensive set of as-built drawings, technical specifications and user manuals for issue to the client.

The contractor shall make provision for training of the client's staff on the proper use of the provided infrastructure and equipment.

5.2.10. Operational maintenance after Completion

The contractor shall prepare and provide a comprehensive set of as-built drawings, technical specifications and user manuals for issue to the client.

The works as a whole included in the contract shall be guaranteed for a period of twelve months (defects period) from the date of acceptance by Client in all respects. The tender price shall include the above.

For the full duration of the defects period, the Contractor shall be responsible for the complete installation with respect to the necessary replacement and adjustments to the works to ensure the proper functioning and condition thereof.

6. Plant and Materials standards and workmanship

6.1. Investigation, survey and Site clearance

The contractors appointed design team shall perform surveys of each site in accordance with the scope of works

- The contractor carries out a site investigation at contract start.
- The contractor shall ensure the existing services & infrastructure in the vicinity of the work area are protected.
- All existing surfaces, services and/or structures affected, whether shown on the plan or otherwise, that are damaged or caused to be repositioned as a result of the activities will have to be reinstated at the cost of the contractor.
- The contractor is responsible for site clearance and preparation of the platforms.

6.2. Building works

The contractor is to ensure that all materials used are SABS / SANS approved.

The contractor is to ensure all workmanship complies with applicable standards, regulation and industry best practise.

- All work shall be executed in accordance with the requirements of SANS standards as applicable.
- This specification, any Supplementary Specifications and Drawings, shall be read in conjunction with and shall form part of the description of items in the bills of quantities.
- Items described on the bills of quantities and not covered in these specifications or supplementary specifications shall be governed by 'MODEL PREAMBLE FOR TRADES 2008' instituted by the Association of South African Quantity Surveyors or relevant SANS standards.
- Reference to any documentation or supplementary specifications shall be to its latest edition.

6.3. Civil engineering and structural works

- The contractor shall comply with relevant SANS standards as it relates to Civil and Structural engineering works

6.4. Electrical & mechanical engineering works

The contractor is to ensure that all materials used are SABS / SANS approved.

The contractor is to ensure all workmanship complies with applicable SANS standards, building regulations and industry best practise.

6.5. Process control and IT works

- The contractor is to ensure that all materials used are SABS / SANS approved.
- The contractor is to ensure all workmanship complies with applicable SANS standards, building regulations and industry best practise.

6.6. Plant & Materials

- All materials specified herein, wastage and supportive installation material shall be provided by the Contractor and understood as included in the relevant rates.
- Materials must be as specified and from prescribed manufacturers only. Such materials may only be substituted upon written approval from the Project Manager.
- For the purposes of submission of tenders, rates for items described in the bills of quantities by trade names, catalogue references, etc shall be for the particular type and manufacture specified.
- Rates and quantities may be adjusted relative to such substitutions.
- Upon delivery of any material onto site, the Contractor must first confirm that such materials conform to specifications herein and thereafter provide proof of conformance to the Project Manager, prior to building in any such material.

- Materials built in must be the best of their respective kinds, new and free from defects and damage.
- All materials shall be SABS approved or proof of equivalence in respect of material quality and performance shall be provided.
- Where required, requirements for proof of compliance with materials specifications, submission of samples of materials and finishes, requirements for shop drawings, are stated in the standard or project specifications. This will also apply to the subcontracts.

6.7. Workmanship

- Workmanship must be the best in each trade and executed by competent, certified and registered Artisans, proof of which must be kept on site for duration of the Contract.
- The Contractor's foreman shall be competent in all relevant trades relating to the works and shall rigorously interrogate workmanship in its finest detail. The Project Manager reserves the right to demand a more reliable replacement for any Artisan or foreman he justifies as not performing according to the standards of these specifications or relevant SABS standards.
- Rates for manufactured items shall include assembling complete and handing over in proper working order.
- The dimensional and positional accuracy of the guard houses and their component parts shall comply with of SANS 10155 as may be applicable unless otherwise stated.

6.8. Dimensions, heights and levels

- The contractor is responsible for ensuring dimensional accuracy of their work, due care shall be taken to ensure that construction layout adhered strictly with the approved dimensions as per the contractor's design.

6.9. Set Out

- The Contractor shall timeously set-out all aspects of the works, identify any conflicts or services and obtain the Project Managers approval prior to commencing the works.

6.10. Clean Site

At the end of each working day the site must be properly cleaned. All material on site must be properly stacked or stored during all times of every day during the works.

6.11. Other [as required]

The plant, materials and workmanship shall at all times comply with relevant regulations, SANS specifications, relevant ISO specifications, local authority by laws as well any national and provisional legislation.

APPLICABLE SANS 2001 STANDARDS FOR CONSTRUCTION WORKS

- The Contractor is referred to the "Model Preambles to Trades - 2008", any "Supplementary Preambles for full descriptions of materials and methods referred to in these Bills of Quantities/Lump Sum documents, insofar as they apply. The Contractor is advised to study the "Standard Preambles to all Trades", any "Supplementary Preambles" before pricing Bills of Quantities/Lump Sum documents.
- No claim whatsoever will be allowed in respect of errors in pricing due to brevity of description of items in the Bills of Quantities/Lump Sum documents which are fully described when read in conjunction with the relevant Preambles and/or Specifications.
- Suppliers of materials and the like, whose quality systems apply with one or more of the SABS/SANS ISO 9000 Series should be used whenever possible in the absence of a particular SABS/SANS Specification Standard Mark.
- Wherever the words "shall be deemed to be included in the description", "shall be stated" or other words having the same effect, appear in the Standard System, it shall be deemed that all descriptions in these Bills of Quantities/Lump Sum documents incorporated such inclusions and statements whether specifically stated or not.
- Whenever reference is made to "Sub-Contractor", "Nominated Sub-Contractor" or the like in the specifications included or referred to in these Bills of Quantities/Lump Sums documents, it shall be deemed to mean "Contractor" as defined.
- The Contractor is hereby informed that where SABS/SANS Specifications are referred to in these Bills of Quantities/Lump Sums documents and Specifications thereto, then ONLY the Specification of Work Clauses will apply. The method of measurement and payment clauses will **NOT** apply to this Contract.

APPLICABLE NATIONAL AND INTERNATIONAL STANDARDS

The Contractor is referred to the following documents whether attached to this document or not:

- Construction Regulation, SHE (Safety, Health and Environmental) and latest amendments of relevant act(s)
- Model Preambles for Trades 2008
- Applicable SANS standards
- Other applicable standards
- Other applicable regulations
- Local Authority by laws as may be applicable

PARTICULAR / GENERIC SPECIFICATIONS

AGRÉMENT CERTIFICATES

- Agrément certificate that confirms fitness-for-purpose of a non-standardised product, material or component or the acceptability of related replacement members will be applicable.

7. List of drawings

7.1. Drawings issued by the *Employer*

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

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

Drawing number	Revision		Title
N/A	N/A	N/A	

PART C4: SITE INFORMATION

1. Description of the Site and its surroundings

1.1 General description

Guard House Layout: King Shaka International Airport



Guard House Layout: Chief David Stuurman International Airport



Guard House Layout: King Phalo Airport



1.2 Key site data

The sites are located at King Shaka International Airport, Chief Dawid Stuurman International Airport and King Phalo Airport. The Guard houses are to be installed both on the Airside and Landside at the respective airports. The Contractor is reminded that this is a National Key Point and as such must adhere to all airport's rules and regulations regarding health safety, environment, security, fire and access control.

1.2.1 Access

- The Contractor shall liaise with ACSA Security Staff in order to obtain access permits for his staff and vehicle working at the airport.
- Personnel and vehicles entering or leaving the site will be subjected to routine searches.
- The Contractor shall obtain the "gate permit" from the Project Manager before material and equipment are brought and removed from the airside.
- The Contractor shall be reimbursed at COST for ACSA issue permits and permit training.
- Cost of medicals will be for the contractor's own account.

1.2.2 Permits

- The Contractor shall familiarize himself with ACSA's safety and security requirements relating to permits to prevent any unnecessary work delay.
- This shall include the permit application process.
- The Contractor shall have no claim against ACSA in the event that a permit request is refused.
- The following table is not all inclusive, but is provided for illustration purposes:

Permit	Required by/for	Department
Personal Permit	All persons employed on the airport	ACSA Security no permit is issued to anyone with a criminal record.
Tools Permit	All persons taking tools to airside	ACSA Security
Laptop Permit	All persons taking laptop computers to airside	ACSA Security
Camera Permit	All persons taking camera equipment to airside	ACSA Security
Hot Works Permit	All welding and/metal cutting work or work generating heat on the site	ACSA Safety
Permit to Work	For all work to commence	ACSA Safety

- Proof of having attended the General Security Awareness Induction Training course is required for all personal permit applications.

- Proof of having attended Airside Induction Training for airside access is required for all persons expected to enter Airside.
- Fees are levied for these courses. Fees are further levied for all permit renewals and refresher courses where applicable.
- No work shall be done without a written permission in the form of a permit to work.

1.2.3 Cell phones and two-way radios

- Cell phone permit issuing authority lies with the ACSA Security department.
- The Contractor will not be allowed to use two-way radios at the Airport unless these radios are of the type, model and frequency range as approved by the ACSA IT department.
- Approved radios may be arranged via said department – payment will be for the account of the Contractor.

1.2.4 Hidden and other services within site

There might be electrical, mechanical, I.T, water, sewer pipes and other services, located in the affected site area.

BASELINE HIRA: ACSA GENERIC HAZARDS ASSESSMENT

Baseline Risk Assessment	
Project Name:	Cluster 3 Guard Houses
Document Number: HIRA 1	Revision Number: 001

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

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

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

Generic Hazard	Specific component of Hazard	Hazard related consequence	Existing defenses to control risk	Safety Risk Index
Site establishment	Delivering of containers and materials; increased vehicle movements and location of services	Operational disruptions, incidents and service disruptions	Site plan location requires prior approval, services to be identified by ACSA representatives and drivers to be competent and vigilant of other road users. Vehicle inspections are to be conducted daily	2D
Site Access	Access is to be controlled, and movement of vehicles and staff are to be monitored to reduce impact on operations	Injuries to Airport users, traffic build up, operational delays, vehicle incidents	Site is to be access controlled. All visitors to site are to report to the site office. Entrance to site camp is to be kept clean, swept after truck deliveries to minimize impact to operations.	2D
Persons on airside	Accidents and injuries	Injury to persons/Fatality	All staff wishing to work on the Airside are to go for Airside induction training. These staff members are to have valid Permits with them at all times. Personal protective equipment required for Airside includes but is not limited to high visibility jackets (as per the procedure, hearing protection, safety shoes & hard hats (if required). An airside safety plan must be submitted before commencement of work.	3A
Vehicles on airside	Accidents and injuries	Damage to aircraft/vehicles/ property/persons	All vehicles operating on the Airside are to be fitted with a strobe light, appropriate signage in the form of a prefix, have the necessary vehicle permit in place, to be fitted with a fire extinguisher and are to be serviceable. Vehicles are to be checked by Airside Safety prior to be granted Airside access	4A

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

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

Construction works	Working at Height	Injury /fatality	Fall protection plan to be devised by the contractors in line with the Construction Regulations 2014. Rescue plans are to be included	3A
Construction works	Storage of hazardous chemicals substances	Contamination/fire/ injury to persons/ environmental impact	ACSA's Environmental terms and conditions are to be adhered to. All relevant legislation and bylaws are to be adhered to. All necessary permits are to be applied for by the contractor such as transport permits, possession permits and flammable certificates. ACSA Environment and Fire and Rescue to be notified where a spill occurs.	4B
Construction works	Waste	Attracts rodents and birds which leads to bird strikes and adds to FOD	Waste management to be implemented in line with ACSA's Environmental Terms and Conditions	4B
Construction works	Spillages (fuels/oils/hydraulics/chemicals/ human waste)	Contamination/Pollution/injury to persons/adverse health effects	ACSA's Environmental terms and conditions and applicable legislative controls are to be adhered to. ACSA Environment and Fire and Rescue to be notified where a spill occurs	4B
Construction works	Dust	Damage to aircraft/injury to persons/adverse health effects/	Dust suppression measures are to be implemented and PPE used where required	4A
Construction works/ Trenching	Damage to underground services. Interruption of critical services	Electrocution, loss of critical services, damage to property, major injuries, aircraft diversions	Consult as-built plans. Scan area before trenching. Trenching to be done under competent supervision.	4A

Delivery of materials	Falling materials or stones or sand	Vehicle/pedestrian accidents	Materials are to be delivered within specified time frames, flagman to be utilized during deliveries, load limitations to be observed, netting is to be used, contractors to clean road after deliveries	4E
Lack of signage – warning signs	Injuries and accidents	Injuries and accidents	Contractors to install sufficient demarcations around construction sites along with the necessary warning signs and beacon lights (refer to Construction Regulations and Traffic Act) No signs are to be removed without prior permission and notification. Temporary way finding signage is required if signage has been disturbed	2D
Waste management	Environmental impact	Illegal dumping	Temporary laydown areas to be identified and no illegal dumping is permitted.	3C
Trolleys	Damaging trolleys through misuse	Injuries and property damage	Contractors to provide their own trolleys. ACSA's trolleys are for passenger use only	5D
Golf carts	Misuse of golf carts	Injuries and property damage	Contractor staff to be aware of golf cart movements on the Landside. Golf cart use for airport users only and not for contractor use for transporting materials. Golf carts operate in predetermined routes – contractors to be aware thereof	3D
Fire equipment	Use and abuse of fire equipment	Injuries and property damage	Fire equipment is only to be used during emergencies. Contractors to provide their own fire equipment. No materials to be stored in ACSA fire cabinets. Emergency exits are to be kept clear at all times	2B
Unattended bags	Security risk	Injuries/fatality to Airport users/stakeholders/ACSA employees. Bomb threat-damage to property, vehicle and or Operational disruptions	Contractors are not permitted to leave bags unattended as they will be removed and will be handed to SAPS	5C

Speed limits	Car accidents	Injuries and vehicle damage	Speed limits are shown on signage in various areas.	3C
Deliveries	Basement	Disrupt traffic flow and passenger movements	Delivery notes are required, and delivery times are to be specified.	2C
Overhead works	Falling items	Injuries, vehicles, property damage	Fall protection plan required as per the Construction Regulations 2014.	5C
General housekeeping	Damage to infrastructure	Injuries, property damages	Site and task specific risk assessments to be carried out by the contractor	4C