

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

Tender Reference Number: CTIA7953/2025/RFP

PROJECT NAME AND NUMBER: REQUEST FOR PROPOSAL (RFP) FOR THE PROVISION OF PROFESSIONAL SERVICES TO ENHANCE DRAINAGE EFFICIENCY, MITIGATE FLOOD RISKS, AND ENSURE COMPLIANCE WITH ENVIRONMENTAL AND REGULATORY STANDARDS THROUGH STRUCTURAL IMPROVEMENTS AND OPTIMIZED STORMWATER PONDS FOR A PERIOD OF FIFTEEN (24) MONTHS

NEC 3: PROFESSIONAL SERVICES CONTRACT (PSC)

Between AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

Applicable at AIRPORTS COMPANY SOUTH AFRICA

(Registration Number: 1993/004149/30)

and _____

(Registration Number: _____)

for **PROJECT NAME AND NUMBER: REQUEST FOR PROPOSAL (RFP) FOR THE PROVISION OF PROFESSIONAL SERVICES TO ENHANCE DRAINAGE EFFICIENCY, MITIGATE FLOOD RISKS, AND ENSURE COMPLIANCE WITH ENVIRONMENTAL AND REGULATORY STANDARDS THROUGH STRUCTURAL IMPROVEMENTS AND OPTIMIZED STORMWATER PONDS FOR A PERIOD OF FIFTEEN (24) MONTHS**

Contents:	No of pages
Part C1 Agreements & Contract Data	[24 Pages]
Part C2 Pricing Data	[5 Pages]
Part C3 Scope of Works	[15 Pages]
Part C4 Site Information	[36 Pages]

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 **the provision of professional services to enhance drainage efficiency, mitigate flood risks, and ensure compliance with environmental and regulatory standards through structural improvements and optimized stormwater ponds for Airports Company South Africa for a period of fifteen (24) 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 **Consultant** under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the Contract Data.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VAT IS:

(in words).....
Rands;

(in figures) **R**.....

THE OFFERED PRICES ARE AS STATED IN THE PRICING SCHEDULE

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

Signature(s)

Name(s)

Capacity

For the
Bidder:

Name & signature of witness	<i>(Insert name and address of organisation)</i>	Date
-----------------------------------	--	------

ACCEPTANCE

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the Employer shall pay the **Consultant** 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: Z

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

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

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

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

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the tenderer (now **Consultant**) within five (5) working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

Signature(s)		
Name(s)		
Capacity		

**for the
Employer**

Name & signature of witness
 (Insert name and address of organisation)
 Date

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.

For the Employer

For the Bidder

Signature (s)		
Name (s)		
Capacity		

Name and Address

**Airports Company South Africa
SOC Limited**

Cape Town International Airport

Postal Address (ACSA): Private Bag
X9002, Cape Town, 7525

Physical Address (Cape Town Airport):
Airport Road, Matroosfontein, Cape
Town, 7490

**Name &
Signature of
witness**

*(Insert name and address of
organisation)*

(Insert name and address of organisation)

Date

Part C1: Agreements and Contract Data

Part C1.2a Contract Data

Part one – Data provided by the *Employer*

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

Each item of data given below is cross-referenced to the NEC3 Professional Services 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	A: Priced contract with activity schedule
	Dispute resolution Option	W1: Dispute resolution procedure

Secondary Options
(incorporating amendments)

X7: Delay damages
X10: Employer's Agent
X11: Termination by the Employer
X13: Performance bond
X18: Limitation of liability
Z: Additional conditions of contract

of the NEC3 Professional Services Contract, April 2013.

10.1	The <i>Employer</i> is (Name)	Airports Company South Africa SOC Limited, Cape Town International Airport
	Address	Airports Company South Africa, Cape town International Airport Administration office Southern Office Block South Africa 7525
	Telephone	021 937 1200
11.2(9)	The services are	The provision of professional services to enhance drainage efficiency, mitigate flood risks, and ensure compliance with environmental and regulatory standards through structural improvements and optimized stormwater ponds for a period of fifteen (24)

11.2(10)	The following matters will be included in the Risk Register	- Access to Site (approval and permits, police clearance required) - Delays in obtaining permits or approvals from City of Cape Town / DWS - Adverse weather conditions (heavy rainfall/flooding) affecting construction - Groundwater ingress during excavation - Unidentified underground utilities or services clashes - Inaccurate and completeness as-built records of existing stormwater network - Failure of temporary works (e.g., diversions, bypass pumping) - Environmental non-compliance (pollution, siltation, dust, noise) - Health and safety risks to workers in confined spaces (manholes, culverts) - Traffic disruption during construction - Traffic disruption and community complaints during construction - Non-availability or late delivery of critical materials (e.g., precast culverts, pipes, concrete) - Poor quality workmanship leading to leakage or structural failures - Inadequate compaction or backfilling around rehabilitated pipelines - Cost escalation of materials and fuel - Interface risks with other contractors or ongoing airport/municipal operations - Potential flooding during construction (incomplete system vulnerable) - Contractor's plant breakdowns or insufficient capacity - Skilled labour shortages or industrial action - Archaeological or heritage findings delaying works - Unexpected geotechnical conditions (collapsible soils, high PI clays) - Non-compliance with ICAO Annex 14 / airport operational safety during airside works
11.2(11)	The Scope is in	the document called Part C3: Scope of Work
12.2	The law of the contract is	the law of the Republic of South Africa
13.1	The language of this contract is	English
13.3	The period of reply is	Seven (7) days
13.6	The period of retention is	1 year following Completion or earlier termination of a contract
2	The Parties' main responsibilities	

20.1	The <i>Employer</i> provides access to the following persons, places and things													
	<table> <tr> <th></th><th>Access to</th><th>Access date</th></tr> <tr> <td>1</td><td>Any Information</td><td>Upon contract award</td></tr> <tr> <td>2</td><td></td><td></td></tr> <tr> <td>3</td><td></td><td></td></tr> </table>		Access to	Access date	1	Any Information	Upon contract award	2			3			
	Access to	Access date												
1	Any Information	Upon contract award												
2														
3														
3	Time													
30.1	The <i>starting date</i> is	Upon signing of contract by ACSA/ Employer												
30.2	The <i>completion date</i> is	15 months after signing of the contract by ACSA												
31.1	The <i>Consultant</i> submits a first (preliminary) programme with the tender by	The Consultant is to submit a first programme for acceptance within 2 weeks of the Contract Date.												
32.2	The <i>Consultant</i> submits revised programmes at intervals no longer than	Four (4) weeks												
4	Quality													
40.2	The quality policy statement and quality plan are provided within 2 weeks of the Contract Date.													
41.2	The <i>defects date</i> is	52 weeks after Completion of the whole of the <i>services</i>												
43.2	The <i>defects correction period</i> is	Two (2) weeks												
5	Payment													
50.1	The <i>assessment interval</i> is	Every four (4) weeks, on the 25 th day of each successive month												
51.1	The period within which payment is made is	Four to six (4-6) weeks after the receipt of the tax invoice												
51.2	The <i>currency of this contract</i> is the	South African Rand												
51.4	The <i>interest rate</i> is	The prime lending rate of the Nedbank Bank as determined from time to time												
6	Compensation events													
	No data required for this section of the <i>conditions of contract</i> .													
7	Rights to material													
	No data required for this section of the conditions of contract													
8	Indemnity, insurance, and liability													
81.1	The <i>Consultant</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 <i>Consultant</i> 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 *Consultant* 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	Refer to Secondary Clause X11
10	Data for Main Option Clauses	Refer to Z clause 1
A	Priced contract with activity schedule	Activity schedule is included Part C2 section of this contract
11	Data for Dispute Resolution Option W1	
W1.1	The <i>Adjudicator</i> is	The person appointed jointly by the parties from the list of adjudicators contained below
W1.2	The <i>Adjudicator nominating body</i> is	The current Chairman of Johannesburg Advocate's Bar Council
W1.4	The <i>tribunal</i> is	Arbitration
W1.4	If the <i>tribunal</i> is arbitration, the arbitration procedure is	The <i>arbitration procedure</i> is set out in The Rules for the Conduct of Arbitrations 2013 Edition, 7th Edition, published by The Association of Arbitrators, (Southern Africa)
W1.4	The place where arbitration is to be held is	Johannesburg, South Africa.
W1.4	The person or organisation who will choose an arbitrator	The <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	
X7	Delay Damages	
X7.1	Delay damages of the whole of the <i>services</i> are	Amount per week is 1% up to a maximum of 10% total value of the Professional fees
X10	The <i>Employer's Agent</i>	

X10.1	The <i>Employer's Agent</i> is	Name: TBC Address: Cape Town International Airport Private Bag X9002 Cape Town 7525 The authority of the <i>Employer's Agent</i> is to act on behalf of the <i>Employer</i> with the authority set out in the Contract Data
X11	Termination by <i>Employer</i>	
X11.1	The <i>Employer</i> may	Terminate the <i>Consultant's</i> obligation to Provide the services for a reason not stated in this contract by notifying the <i>Consultant</i> .
X13	Performance Bond (The form of the performance bond is attached as Annexure A of this Contract.)	
X13.1	The <i>performance bond percentage</i> is	10% of the total of the Prices.
X18	Limitation of the <i>Consultant</i> liability for his design to reasonable skill & care	
X18.1	The <i>Consultant'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>Consultant'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 incurred losses and/or repairs to the damages caused
X18.3	The <i>Consultant's</i> total liability to the <i>Employer</i> for defects due to his design which are not listed on the Defects Certificate is limited to	Total of the incurred losses and/or repairs to the damages caused

X18.4	The <i>Consultant'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 <i>Consultant's</i> total direct liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than the excluded matters, total of the incurred losses 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 <i>Consultant</i> as stated in this contract for - Loss of or damage to the <i>Employer's</i> property, - Delay damages, - Defects liability, - Insurance liability to the extent of the <i>Consultant's</i> risks - loss of or damage to property (other than the <i>works</i>, Plant and Materials), - death of or injury to a person; - damage to third party property; and - infringement of an intellectual property right
X18.5	The <i>end of liability</i> date is	The date on which the liability in question prescribes in accordance with the Prescription Act No. 68 of 1969 (as amended or in terms of any replacement legislation) for any other matter
Z	ADDITIONAL CONDITIONS OF CONTRACT	
Z1	Estimation of fees It is specifically recorded that the fees charged by the consultant for services rendered in connection with and/or under this Contract shall be in terms of: Board Notice 138 of 2015 of ECSA (Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act of 2000. Act No of 46 of 2000).	
Z2	Tax invoices The <i>Consultant's</i> invoice. Delete the first sentence of core clause 50.2 and replace with: Invoices submitted by the Consultant to the Employer include • the details stated in the Scope to show how the amount due has been assessed, and • the details required by the Employer for a valid tax invoice. Delete the first sentence of core clause 51.1 and replace with: Each payment is made by the Employer within four (4) weeks of receiving the Consultant's invoice showing the details which this contract requires or, if a different period is stated in the Contract Data, within the period stated.	

Z3 Communications and Notices

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

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

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

Z4 Appointment of the Adjudicator

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

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

Panel of Adjudicators

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

Z4.1 Appointment of the Arbitrator

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

Panel of Arbitrators

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

Z5 Interpretation of the law

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

Z6 Providing the Works: Delete core clause 20.1 and replace with the following:

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

Z7 Extending the defects date: add the following as a new core clause 46:

- Z7.1** If the *Employer* cannot use the *works* due to a Defect, which arises after Completion and before the *defects date*, the *defects date* is delayed by a period equal to that during which the *Employer*, due to a Defect, is unable to use the *works*.
- Z7.2** If part of the *works* is replaced due to a Defect arising after Completion and before the *defects date*, the *defects date* for the part of the *works* which is replaced is delayed by a period equal to that between Completion and the date by when the part has been replaced.
- Z7.3** The *Project Manager* notifies the *Consultant* of the change to a *defect date* when the delay occurs. The period between Completion and an extended *defects date* does not exceed twice the period between Completion and the *defects date* stated in the Contract Data.

Z8 Termination

Z8.1	Add the following to core clause 91.1, at the second main bullet, fifth sub-bullet point, after the words “assets or”: “business rescue proceedings are initiated, or steps are taken to initiate business rescue proceedings”.
Z9	Cession, delegation and assignment
Z9.1	The <i>Consultant</i> shall not cede, delegate or assign any of its rights or obligations to any person without the written consent of the <i>Employer</i> , which consent shall not be unreasonably withheld.
Z9.2	The <i>Employer</i> may, on written notice to the <i>Consultant</i> , cede and delegate its rights and obligations under this contract to any person or entity.
Z10	Ethics
Z10.1	The <i>Consultant</i> undertakes:
Z10.1.1	not to give or cause any offer, payment, consideration, or benefit of any kind, which constitutes or could be construed as an illegal or corrupt practice, either directly or indirectly, as an inducement or reward for the award or in execution of this contract;
Z10.1.2	to comply with all laws, regulations or policies relating to the prevention and combating of bribery, corruption and money laundering to which it or the <i>Employer</i> is subject, including but not limited to the Prevention and Combating of Corrupt Activities Act, 12 of 2004.
Z10.2	The <i>Consultant's</i> breach of this clause constitutes grounds for terminating the <i>Consultant's</i> obligation to Provide the Works or taking any other action as appropriate against the <i>Consultant</i> (including civil or criminal action). However, lawful inducements and rewards shall not constitute grounds for termination.
Z10.3	If the <i>Consultant</i> is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices, including but not limited to the making of offers (directly or indirectly), payments, gifts, gratuity, commission or benefits of any kind, which are in any way whatsoever in connection with the contract with the <i>Employer</i> , the <i>Employer</i> shall be entitled to terminate the contract in accordance with the procedures stated in core clause 92.2. The amount due on termination is A1.
Z11.	Confidentiality
Z11.1.	All information obtained in terms of this contract or arising from the implementation of this contract shall be treated as confidential by the <i>Consultant</i> and shall not be used or divulged or published to any person not being a party to this contract, without the prior written consent of the <i>Project Manager</i> or the <i>Employer</i> , which consent shall not be unreasonably withheld.
Z11.2	If the <i>Consultant</i> is uncertain about whether any such information is confidential, it is to be regarded as such until otherwise notified by the <i>Project Manager</i> .
Z11.3	This undertaking shall not apply to –
Z11.3.1	Information disclosed to the employees of the <i>Consultant</i> for the purposes of the implementation of this agreement. The <i>Consultant</i> undertakes to procure that its employees are aware of the confidential nature of the information so disclosed and that they comply with the provisions of this clause;
Z11.3.2	Information which the <i>Consultant</i> is required by law to disclose, provided that the <i>Consultant</i> notifies the <i>Employer</i> prior to disclosure so as to enable the <i>Employer</i> to take the appropriate action to protect such information. The <i>Consultant</i> may disclose such information only to the extent required by law and shall use reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed; and

Z11.3.3	Information which at the time of disclosure or thereafter, without default on the part of the <i>Consultant</i> , enters the public domain or to information which was already in the possession of the <i>Consultant</i> at the time of disclosure (evidenced by written records in existence at that time).
Z11.4	The taking of images (whether photographs, video footage or otherwise) of the <i>works</i> or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the <i>Project Manager</i> . All rights in and to all such images vests exclusively in the <i>Employer</i> .
Z11.5	The <i>Consultant</i> ensures that all his Sub-Consultants abide by the undertakings in this clause.
Z12.	<i>Employer's Step-in rights</i>
Z12.1	If the <i>Consultant</i> defaults by failing to comply with his obligations and fails to remedy such default within 2 weeks of the notification of the default by the <i>Project Manager</i> , the <i>Employer</i> , without prejudice to his other rights, powers and remedies under the contract, may remedy the default either himself or procure a third party (including any sub-Consultant or supplier of the <i>Consultant</i>) to do so on his behalf. The reasonable costs of such remedial works shall be borne by the <i>Consultant</i> .
Z12.2	The <i>Consultant</i> co-operates with the <i>Employer</i> and facilitates and permits the use of all required information, materials and other matter (including but not limited to documents and all other drawings, CAD materials, data, software, models, plans, designs, programs, diagrams, evaluations, materials, specifications, schedules, reports, calculations, manuals or other documents or recorded information (electronic or otherwise) which have been or are at any time prepared by or on behalf of the <i>Consultant</i> under the contract or otherwise for and/or in connection with the <i>works</i>) and generally does all things required by the <i>Project Manager</i> to achieve this end.
Z13	Intellectual Property
Z13.1	Intellectual Property ("IP") rights means all rights in and to any patent, design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works.
Z13.2	IP rights remain vested in the originator and shall not be used for any reason whatsoever other than carrying out the <i>works</i> .
Z13.3	The <i>Consultant</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.
Z13.4	The <i>Consultant</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:
Z13.4.1	the <i>Consultant's</i> design, manufacture, construction or execution of the Works;
Z13.4.2	the use of the <i>Consultant's</i> Equipment, or
Z13.4.3	the proper use of the Works.
Z13.5	The <i>Employer</i> shall, at the request and cost of the <i>Consultant</i> , assist in contesting the claim and the <i>Consultant</i> may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it.
Z14	Dispute resolution: The following amendments are made to Option W1:
Z14.1	Under clause W1.3, in the fourth row of the first column of the adjudication table, the following words are added after the words "any other matter": "excluding disputes relating to termination of the contract".

Z14.2	The following clauses are added at the end of clause W1.3:
Z14.2.1	"The Adjudicator shall decide the dispute solely on the written submissions of the parties. No oral submissions shall be heard during adjudication."
Z14.2.2	"Disputes relating to or arising from termination of the Contract shall not be determined by an adjudicator. Any such dispute shall be referred directly to arbitration."
Z15	The Consultant shall be expected to annually present a compliant BEE Certificate. Failure to adhere to these requirements shall be considered a material breach of the conditions of this Contract, the sanction for which may be a cancellation of this Contract

Part C1: Agreements and Contract Data

Part C1.2b Contract Data

Part two – Data provided by the *Consultant*

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

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

Clause	Statement	Data
10.1	The <i>Consultant</i> is (Name):	
	Address:	
	Tel No.:	
	Fax No.:	
	Email:	

22.1 The *Consultant's key person* are:

1. Name:

Job: Civil Engineer

Responsibilities:

Qualifications:

Experience:

2. Name:

Job: Dam Specialist

Responsibilities:

Qualifications:

Experience:

3. Name:

Job: Electrical Engineer

Responsibilities:

Qualifications:

Experience:

4. Name:

Job: Geotechnical Engineer

Responsibilities:

Qualifications:

Experience:

5. Name:

Job: Health and Safety Agent

Qualifications:

Responsibilities:

Experience:

6. Name:

Job: Land Surveyor

Responsibilities:

Qualifications:

Experience:

7. Name:

Job: Quantity Surveyor

Responsibilities:

Qualifications:

Experience:

8. Name:

Job: Ecologist

Responsibilities:

Qualifications:

Experience:

9. Name:

Job: Hydrologist

Responsibilities:

Qualifications:

Experience:

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

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

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

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

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

	access to	access date
1	All As-built Information & existing services	Upon award of the project(s)
2	Relevant Engineering, Operational and Maintenance Personnel of ACSA	Upon award of the project(s)

A Priced contract with activity schedule

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

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

PART C1: AGREEMENTS AND CONTRACT DATA

C1.3: OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

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

OBJECTIVES

The Agreement is entered into between Airport Company South Africa ("the Client" or "Employer") and the Consultant (the "Mandatar") in order to comply with the requirements of:

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

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

The parties to this Agreement are:

Name of Organisation: AIRPORTS COMPANY SOUTH AFRICA CAPE TOWN INTERNATIONAL AIRPORT
Physical Address: Cape town International Airport Administration office Southern Office Block South Africa 7525

Hereinafter referred to as “Client”

Name of organisation:
Physical Address:

Hereinafter referred to as “the Mandatary/ Principal Contractor”

MANDATORY’S MAIN SCOPE OF WORK

GENERAL INFORMATION FORMING PART OF THIS AGREEMENT

1. The Occupational Health & Safety Act comprises of SECTION 1-50 and all unrepealed REGULATIONS promulgated in terms of the former Machinery and Occupational Safety Act No.6 of 1983 as amended as well as other REGULATIONS which may be promulgated in terms of the Act and other relevant Acts pertaining to the job in hand.
2. “Mandatary” is defined as including as agent, a principal Consultant work, but WITHOUT DEROGATING FROM HIS/HER STATUS IN HIS/HER RIGHT AS AN EMPLOYER or user of the plant
3. Section 37 of the Occupational Health & Safety Act potentially punishes Employers (PRINCIPAL CONSULTANTS) for unlawful acts or omissions of Mandataries (CONSULTANTS) save where a Written Agreement between the parties has been concluded containing arrangements and procedures to ensure compliance with the said Act BY THE MANDATARY.
4. All documents attached or refer to in the above Agreement form an integral part of the Agreement.
5. To perform in terms of this agreement Mandataries must be familiar and conversant with the relevant

6. provisions of the Occupational Health & Safety Act 85 of 1993 (OHS Act) and applicable Regulations. Mandatories who utilise the services of their own Mandatories (consultants) must conclude a similar Written Agreement with them.
7. Be advised that this Agreement places the onus on the Mandatary to contact the CLIENT in the event of inability to perform as per this Agreement.
8. This Agreement shall be binding for all work the Mandatary undertakes for the client.
9. All documentation according to the Safety checklist including a copy of the written Construction Manager appointment in terms of construction regulation 8, must be submitted 7 days before work commences.

THE UNDERTAKING

The Mandatary undertakes to comply with:

INSURANCE

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

COMPLIANCE WITH THE OCCUPATIONAL HEALTH & SAFETY ACT 85 OF 1993

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

1. All work performed by the Mandatary on the Client's premises must be performed under the close supervision of the Mandatary's employees who are to be trained to understand the hazards associated with any work that the Mandatary performs on the Client's premises.
2. The Mandatary shall be assigned the responsibility in terms of Section 16(1) of the OHS Act 85 of 1993, if the Mandatary assigns any duty in terms of Section 16(2), a copy of such written assignment shall immediately be forwarded to the Client.
3. The Mandatary shall ensure that he/she familiarise himself/herself with the requirements of the OHS Act 85 of 1993 and that s/he and his/her employees and any of his subcontractors comply with the requirements.
4. The Mandatary shall ensure that a baseline risk assessment is performed by a competent person before commencement of any work in the Client's premises. A baseline risk assessment document will include identification of hazards and risk, analysis and evaluation of the risks and hazards identified, a documented plan and safe work procedures to mitigate, reduce or control the risks identified, and a monitoring and review plan of the risks and hazards.
5. The Mandatary shall appoint competent persons who shall be trained on any Occupational Health & Safety aspect pertaining to them or to the work that is to be performed.
6. The Mandatary shall ensure that discipline regarding Occupational Health & Safety shall be strictly enforced.
7. Any personal protective equipment required shall be issued by the Mandatary to his/her employees and shall be worn at all times.
8. Written safe working practices/procedures and precautionary measures shall be made available and enforced and all employees shall be made conversant with the contents of these practises.
9. No unsafe equipment/machinery and/or articles shall be used by the Mandatary or Consultant on

- the Client's premises.
10. All incidents/accidents referred to in OHS Act shall be reported by the Mandatary to the Provincial Director: Department of Labour as well as to the Client.
 11. No user shall be made by the Mandatary and/or their employees and or their subcontractors of any of the Client's machinery/article/substance/plant/personal protective equipment without prior written approval.
 12. The Mandatary shall ensure that work for which the issuing of permit is required shall not be performed prior to the obtaining of a duly completed approved permit.
 13. The Mandatary shall ensure that no alcohol or any other intoxicating substance shall be allowed on the Client's premises. Anyone suspected to be under the influence of alcohol or any other intoxicating substance shall not be allowed on the premises. Anyone found on the premises suspected to be under the influence of alcohol or any other intoxicating substance shall be escorted off the said premises immediately.
 14. Full participation by the Mandatary shall be given to the employees of the Client if and when they inquire into Occupational Health & Safety.

FURTHER UNDERTAKING

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

ACCEPTANCE BY MANDATARY

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

Ia duly authorised 16.2 Appointee acting for and on behalf of

.....(company name) undertake to ensure that the requirements and the provision of the OHS Act 85 of 1993 and its regulations are complied with.

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

Expiry date

SIGNATURE ON BEHALF OF MANDATARY

(Warrant his authority to sign)

DATE

SIGNATURE ON BEHALF OF THE CLIENT

AIRPORT COMPANY SOUTH AFRICA

DATE

PART C1: AGREEMENTS AND CONTRACT DATA

C1.4: ACSA INSURANCE CLAUSES

INSURANCE CLAUSES FOR CAPEX PROJECTS

The insurance clauses in this document should be extracted and attached to tender documents and to contracts.

SECTION A: DEFINITIONS

Landside refers to:

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

Airside refers to:

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

SECTION B: INSURANCE CLAUSES

1. Insurance requirements for contracts with a value below R50million on the LANDSIDE

1.1 Contract Works

- With regards to contract works claims, the contractor/consultant is responsible for a deductible (excess) of R250 000.
- Contractors / consultants may re-insure the deductible

1.2 Public Liability

- In the event of a claim against the Consultant/ consultant for 3rd party property damage the Consultant/ consultant will be responsible for a deductible (excess) of R275 000
- In the event of a claim against the Consultant/ consultant for removal of lateral support, the Consultant/ consultant will be responsible for a deductible (excess) of R500 000
- Contractors / consultants may re-insure the deductibles

1.3 Professional Indemnity

- All consultants are responsible for Professional Indemnity cover of R5million
- In the event of a claim above R5million, the ACSA PI cover will kick in for the amount in excess of R5m.
- Proof of cover in the form of a certificate of insurance should be provided to ACSA before a contract is signed between ACSA and the Consultant.

2. Insurance requirements for contracts below R50million on the AIRSIDE

2.1 Contract Works

With regards to contract works claims, the Consultant is responsible for a deductible (excess) of R250 000. Contractors / consultants may re-insure the deductible.

2.2 Public Liability

- In the event of a claim brought against the Consultant/ consultant for 3rd party property damage the Consultant/ consultant will be responsible for a deductible (excess) of R525 000.
- In the event of a claim brought against the Consultant/ consultant for removal of lateral support, the Consultant/ consultant will be responsible for a deductible (excess) of R750 000.
- In the event of a claim brought against the Consultant/ consultant for damage to aircraft, the Consultant/ consultant will be responsible for a deductible (excess) of R750 000.
- Contractors / consultants may re-insure the deductibles.

2.3 Professional Indemnity

- All consultants are responsible for Professional indemnity insurance cover for not less than two times the contract value.
- Aviation / Airside liability insurance cover not less than R300 000 (three hundred thousand rands) for each and every claim.
- Proof of cover in the form of a certificate of insurance should be provided to ACSA before a contract is signed between ACSA and the Consultant and/or consultant.

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

Nokulunga Masiza
Tel: +27 (0)11 723 1400
M: +27 (0)79 512 0532
Nokulunga.Masiza@airports.co.za

Buhle Mnguni
D: +27 (0)11 723 1400
M: +27 (0)74 535 9075
Buhle.Mnguni@airports.co.za

Part C2: PRICING DATA

C2.1 Pricing Instructions

The appointment of the company, comprising the successful professional team, will be in accordance with the NEC3 Professional Services Contract, April 2013, as amended by ACSA's specific requirements at an operational airport. The pricing guidelines will be in accordance with the following built environment professional councils, latest version at the time of signing the Offer and Acceptance.

1	Civil Engineer	Guideline for services and processes for estimating fees for persons registered in terms of the Engineering Profession Act, published by the Engineering Council of South Africa (2015).
2	Dam Engineer	Guideline for services and processes for estimating fees for persons registered in terms of the Engineering Profession Act, published by the Engineering Council of South Africa (2015).
3	Electrical Engineer	Guideline for services and processes for estimating fees for persons registered in terms of the Engineering Profession Act, published by the Engineering Council of South Africa (2015).
4	Geotechnical Engineer	Guideline for services and processes for estimating fees for persons registered in terms of the Engineering Profession Act, published by the Engineering Council of South Africa (2015).
5	Land Surveyor	Guideline for professional by the South African Geomatics Council (SAGC) in terms of the Geomatics Profession Act (2013).
6	Quantity Surveyor	Guideline for professional fees published by the South African Council for the Quantity Surveying Profession (SACQSP), in terms of the Quantity Surveying Profession (SACQSP), in terms of the Quantity Surveying Profession Act (2000).
7	Ecologist	Guideline for professional fees in terms of the South African Council for Natural Scientific Professions (SACNASP), under the Natural Scientific Professions Act (2003).
8	Hydrologist	Guideline for professional fees in terms of the South African Council for Natural Science Professions (SACNASP), under the Natural Science Professions Act (2003).
9	Health and Safety Agent	Guideline for professional fees published by the South African Council for the Project and Construction Management Professions (SACPCMP), in terms of the Project and Construction Management Professions Act (2000).

The fee proposal shall be based the offered price, based on the recommended Tariff of Fees less the percentage discount being offered by the tenderer. No admin fee shall be payable on sub-consultant remuneration.

NB: Tenderers must only price in accordance with the pricing schedule below. This will enable ACSA to compare priced offers. Failure to submit a priced offer using the prescribed schedule will make the bid liable for disqualification.

Permits for Access to the Airport restricted areas

Please note that before working at all of the airports, all personnel (all members of the professional team) will be required to be in possession of an ACSA permit.

PLEASE NOTE: At Cape Town International Airport (CTIA), all personnel are required to obtain airport permits through CTIA's dedicated application process, which includes applicable fees as determined by the airport authority. Each permit is issued to an individual and is non-transferable; only one person may hold a permit at a time. Accordingly, careful planning must be undertaken when scheduling work, assigning personnel, and managing staff to ensure continuous compliance and uninterrupted access to operational areas.

The Consultant shall not be compensated for costs relating to ACSA required permits, nor for labour / time spent in obtaining it. An allowance must be made in the schedule of rates for costs in this regard.

Proof of having attended the airside induction training course is required for all personal permit applications. Fees are levied for these courses. Fees are further levied for all permit renewals and refresher courses - where applicable.

The Consultant must ensure that he/she is, at all times, familiar with ACSA's safety and security requirements relating to permits in order for no work to be delayed as a result thereof. This will include the permit application process.

Note that (within reason) the Consultants will have no claim against ACSA in the event that a permit request is refused. The latest New Permit prices are as follows (will only apply to the personal permits): available on request from the Permit Office at each airport.

C2.2: Pricing Data

Activity Schedule: description of activities of each project stage under Part C3.

Item No.	Description	Unit	Estimated Quantity	Rate (ZAR)	Amount (ZAR)
1.1	Insurances & contract admin	Sum	1		
1.2	Project office & software	Sum	1		
1.3	Professional time-based services	Prov. Sum			
2.1	Project scoping & inception	Hours			
2.2	Condition assessments	Hours			
3.1	Hydraulic modelling	Hours			
3.2	Conceptual layouts	Hours			
3.3	Option & cost analysis	Sum	1		
3.4	Viability report & presentation	Sum	1		
4.1	Civil detailed design	Hours			
4.2	Geotechnical investigations	Sum	1		
4.3	Electrical & SCADA design	Hours			
4.4	Environmental integration	Hours			
4.5	Health & Safety reviews	Hours			
4.6	Cost estimates	Sum	1		
5.1	NEC3 ECC documentation	Sum	1		

5.2	BoQ & tender docs	Sum	1		
6.1	Site supervision	Months		1200	
6.2	Site meetings & reporting	Hours			
6.3	Quality control	Hours			
6.4	H&S oversight	Hours			
6.5	Environmental monitoring	Hours			
7.1	Performance tests	Sum	1		
7.2	Snagging & defects monitoring	Hours			
7.3	As-built drawings & O&M	Sum	1		
7.4	Completion report	Sum	1		
8.1	Principal Engineer fees	Hour		1700	
8.2	Discipline Engineer fees	Hour		1450	
8.3	Draughtsperson fees	Hour		950	
8.4	Disbursements	Prov. Sum			
9.1	Lab testing & peer review	Prov. Sum			
9.2	Specialist studies	Prov. Sum			

DISBURSMENT SCHEDULE

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

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

Project teams should make allowance for all communication and material commensurate with a project of this nature and value. This will include, but not limited to, printing of concept / prelim drawings, detailed design drawings and user drawings for approval and 3D drawings. / Representations... etc.

Note that the final utilised Disbursements will be subject to prior approval by ACSA.

PROVISION FOR ANY ADDITIONAL SERVICES (OUTSIDE THE NORMAL SCOPE OF SERVICES OF THIS CONTRACT) HOURLY RATES			
NB: SUBJECT TO PRIOR APPROVAL BY ACSA			
(ALL INCLUSIVE RATE)			
	Description	Rate Excl VAT	Rate Incl VAT
1.	Professional Civil Engineer		
	Principals		
	Salaried Professionals		
2.	Professional Dam Engineer		
	Principals		
	Salaried Professionals		
3.	Professional Electrical Engineer		
	Principals		
	Salaried Professionals		
4.	Professional Geotechnical Engineer		
	Principals		
	Salaried Professionals		
5.	Health and Safety Agent		
	Principals		
	Salaried Professionals		
6.	Hydrologist		
	Principals		
	Salaried Professionals		
7.	Land Surveyor		
	Principals		
	Salaried Professionals		
8.	Quantity Surveyor		
	Principals		
	Salaried Professionals		
9.	Professional Ecologist		
	Principals		
	Salaried Professionals		

Part C3: SCOPE OF WORK

C3.1 Employer's Scope of Services

Executive Overview

The Cape Town International Airport (CTIA) site (precinct) is situated on the divide of three major catchments - the Lotus River, Eerste/ Kuils River and the Salt River Catchments. The airport property is relatively flat with no well-defined stormwater drainage and overland escape routes. Currently the entire CTIA precinct is designed to discharge towards the Lotus River and the Salt River Catchments (Kalksteenvontein bulk stormwater system).

The watersheds of three primary external catchments that fall within the CTIA site:

The bulk of the presently developed area of the CTIA drains into the CTIA's detention ponds (situated next to Manchester Street) prior to discharge into the Lotus River canal. Furthermore, a small catchment drains into a the CTIA pond (situated on the corner of Robert Sobukwe / Borchers Quarry Road) prior to discharging into the Kalksteenvontein bulk stormwater system. These ponds are designed to comply with the City of Cape Town's Stormwater Management regulations/policies for stormwater runoff quality and quantity control.

Due to downstream capacity constraints, the allowable continuous discharge is currently limited to 0.45m³/s and 0.7m³/s respectively by the Municipality.

Stormwater Drainage Systems:

(a) Existing Drainage System - Catchments A and B are formally connected to the external stormwater system.

Catchment A encompasses the bulk of the presently developed area of CTIA, including the existing runway RWY 01-19. The catchment drains in a south-westerly direction to discharge into the Lotus River Canal system via the ACSA Detention Pond, which is situated remote from the airport in the Boquinor Industrial Area. Although the CoCT has recently agreed to increase the allowable discharge from 0.1 m³/s to 0.45 m³/s, the existing infrastructure is only capable of a theoretical discharge rate of 0.14 m³/s.

Catchment B at this stage is limited to the runoff from Precinct 2A which is 52 ha in extent and attenuated runoff from CoCT property which is 271 ha. With the assumed discharge rate of 0.7 m³/s, the capacity of the detention pond is required to be increased.

(b) Short Term Drainage System

The short-term development scenarios influence the individual catchments as follows:

Catchment A is expanded to include realigned runway RWY 18-36, apron expansion up to phase 2B and the terminal building expansion. The reticulation system was found to be adequate but the ACSA pond's are required to be increased. It was proposed to raise the pond spillway by 300mm and increase the discharge capacity to 0.45 m³/s. Limited additional development is planned for Precinct 2 and the situation as described above for the existing situation will continue. Should Precinct 3 be developed in this period, the situation will be exacerbated. The Symphony Way housing development is expected to proceed during this period. Due to constraints in the Delft stormwater system, ACSA agreed in principle that a detention pond may be constructed on the ACSA property bordering Symphony Way, for the purpose of temporarily detaining runoff from the housing

development. Runoff is to be pumped into the Delft system off peak and the detention time is limited to 48 hours for the 1 in 5 year rainfall event.

(c) Long Term Drainage System

The long-term development scenario considers the site to be developed to its capacity and with the second runway having been constructed.

The main items of influence are as follows:

Catchment A: The limiting factor in this catchment is the capacity of the ACSA detention pond (situated next to Manchester Street) and the restricted discharge rate of 0.45 m³/s. Due to the increased paved area on the airside, the catchment boundary is reduced, and the southern half of the 1st realigned runway is required to discharge into catchment D.

Catchment D: the discharge route to the Driftsands Dam is required to be in place. The airport's southern catchment (bordering the N2 Freeway) and the Symphony Way development would be pumped or drained by gravity, if possible, to discharge into the Driftsands outfall.

Catchment B, C and E are combined and the attenuated discharge from upstream detention ponds will pass through the Precinct 2 detention pond.

Considering the need to obtain municipal approval for the projects in the planning stage (short-term) as well as the medium/long-term approach to the CTIA precinct development. City of Cape Town (CoCT) and CTIA have formally agreed on the Memorandum of agreement (MOA) at the meeting of May 2019 to a phased approach to the upgrade of stormwater infrastructure, required for compliance with the CoCT's requirements/policies and the Stormwater Bylaw.

The ACSA Detention Pond, although not registered with the Dam Safety Office (DSO) of the Department of Water and Sanitation (DWS) as a dam with a safety risk, is managed by the Airports Company South Africa SOC Limited (ACSA), the owner of the dam, as if it is a Category II dam. The project aims to rehabilitate and upgrade the existing ACSA detention pond; this pond is to comply with the City of Cape Town's Stormwater Management regulations/policies for stormwater runoff quality and quantity control. The dam safety evaluation was carried out in 2019 by Storey ENG (Pty) Ltd (Storey ENG) in compliance with Section 118 (3) (b) of the National Water Act (Act No 36 of 1998) (NWA) and Regulation 35 of the Dam Safety Regulations as published under Government Notice R.139 in the Government Gazette, No 35062 dated 2012-02-24. Currently the pond is in a poor state and have started to leak on embankments and it is not safe. ACSA pond is not complying with City standards and National Water Act (Act No 36 of 1998) (NWA) and Regulation 35 of the Dam Safety Regulations. The recently completed Dam Safety Report found that the dam embankments are structurally unsound, and that the freeboard is inadequate. In order to ensure that the detention pond is structurally sound and that it complies with Dam safety requirements and CoCT's Water and Sanitation requirements/policies and the stormwater bylaw for Catchment, Stormwater and River Management Branch. The detention pond wall is required to be restructured. The pond assessment report is attached including the Memorandum of Understanding (MOU).

The provision of an effective stormwater management system is required to keep pace with the CTIA expansion of the airport and development associated infrastructure. The CTIA development Framework and Land Use Scenarios were reviewed, and the development was considered in three broad phases as follows:

Short Term Phase: This includes the following main developments:

- New Realigned Runway RWY 18-36 Project and associated apron development
- New Domestic Arrivals Terminal Project

- Terminal 2 Development Project
- Extension to Domestic Departures Lounges
- Symphony Way high density residential (housing) development

(The New Domestic Arrivals and Terminal 2 developments are constructed on existing building or paved sites and do not increase stormwater runoff).

Medium Term Phase: With new runway and terminal building in place, increased take-up of land for airside and landside development may be anticipated.

- Precinct 3 development
- Precinct 1 expansion of parking areas
- Southern airside boundary developments (adjacent to N2 Highway)

Long Term Phase: This is the ultimate development state and may include the following:

- Construction of the 2nd runway
- Airside development at both northern and southern ends
- Precinct 2 expansion
- Full apron development

The upgrade will ensure that runoff drains as quickly as possible from the operational areas, without overflowing drainage systems. Ensure that rainfall will not accumulate on the surface of the operational areas. Provide flood control measures to prevent loss of life and significant damage to property. Provide a drainage system that will cause no threat to the safety of people and equipment and no damage to infrastructure and the environment and provide a drainage system that will cater for the present situation and predictable future conditions. The professional service providers will ensure that Cape Town International Airport's stormwater infrastructure is executed and delivered to high standards, providing reliable, efficient, and regulatory-compliant services that align with ACSA's commitment to operational excellence and industry best practices.

Airports Company South Africa (ACSA) seeks to appoint qualified consultants to provide professional services for Stormwater Ponds Rehabilitation and Upgrade. The appointed Civil Engineering Consultant shall be required to provide a comprehensive suite of specialised professional services necessary for the successful execution of this project. These services include, but not limited to, Civil Engineering, Dam Specialist, Electrical Engineer, Hydrological Engineering, Geotechnical Engineering, Land Surveying, Quantity Surveying, Ecological Management, and Construction Health and Safety Agent (CHSA) services. Should the consultant not possess in-house capability for any of the aforementioned disciplines, they shall be responsible for proactively sourcing, appointing, and managing suitably supporting qualified specialists as part of their integrated professional team. The appointed Consultant shall ensure full coordination across all disciplines, maintaining accountability for quality, compliance, and timely delivery of all associated outputs in accordance with the project requirements and statutory obligations.

Interpretation and terminology

The following abbreviations are used in this Scope:

Abbreviation Meaning given to the abbreviation

Abbreviations	Descriptions
ACSA	Airport Company South Africa
BOQ	Bill of Quantities
CHSA	Construction Health and Safety Agent
CHSA	Construction Health and Safety Agent
CHSP	Construction Health and Safety Plan
CIDB	Construction Industry Development Board
CIPS	Chartered Institute of Procurement and Supply
CoCT	City of Cape Town
CSIR	Council for Scientific and Industrial Research
CTIA	Cape Town International Airport
CTIA	Cape Town International Airport
DCP	Dynamic Cone Penetrometer
DEA	Department of Environmental Affairs
DWS	Water and Sanitation
ECSA	Engineering Council of South Africa
EIA	Environmental Impact Assessment
EIR	Environmental Impact Report
EMPs	Environmental Management Plans
GCL	Geosynthetic Clay Liners
HDPE	High Density Polyethylene
HEC-HMS	Hydrologic Engineering Center-Hydrologic Modeling System
HIRA	hazard identification and risk assessments
ICAO	International Civil Aviation Organization
ISO	International Organization for Standards
MOU	Memorandum of Understanding
NEC	New Engineering Contract
NEMA	National Environmental Management Act
NWA	National Water Act
OHS	Occupational Health and safety
PCSWMM	Personal Computer Storm Water Management Model
RFP	Request for Proposal
RTUs	Remote Terminal Units

RWY	Runway
SACAA	South African Civil Aviation Authority
SACNASP	South African Council for Natural Scientific Professionals
SACPCMP	South African Council for Project and Construction Management Professions
SACQSP	South African Council for Quantity Surveying Professions
SAGC	South African Geomatics Council
SANS	South Africa National Standards
SCADA	Supervision control and Data Acquisition
SCM	Supply Chain Management
SIPDM	Standard for Infrastructure Procurement and Delivery Management
SMS	Safety Management System
SuDS	Sustainable Urban Drainage Systems

Scope of Works

Stormwater Ponds Rehabilitation and Upgrade

Project Overview

Airports Company South Africa (ACSA) seeks to appoint a consultant to provide professional services for the assessments, design and upgrade of stormwater detention pond and associated hydraulic systems at CTIA. The aim is to ensure regulatory compliance, enable resilient infrastructure to support airport expansion, and integrate predictive stormwater management technologies aligned with regional climatic patterns of the Western Cape.

This project is a direct response to structural deficiencies in the existing detention ponds, the need to increase hydraulic capacity, and the long-term development vision for CTIA precincts as captured in the ACSA Development Framework and the City of Cape Town Stormwater Master Plan.

Objectives:

Strategic Objectives

- Ensure compliance with the City of Cape Town Stormwater By-law (2015) and Master Plan recommendations.
- Align with the National Water Act (Act No. 36 of 1998) and Dam Safety Regulations (GN R139, 2012).
- Support ACSA's commitment to safe, sustainable, and efficient infrastructure expansion.
- Incorporate climate-adaptive stormwater management technologies, enabling early warning, monitoring, and predictive response to adverse weather events in the Western Cape.

- e) Improve detention and retention infrastructure to mitigate flood risk and support downstream capacity constraints.

Primary Objectives

To upgrade existing stormwater detention infrastructure to:

- a) Comply with the City of Cape Town's Stormwater Management Policy (2015) and Stormwater Bylaw (2005).
- b) Align with SANS 10286:1998 - Drainage of Runways and Taxiways.
- c) Meet hydraulic requirements as per Municipal discharge allowances.
- d) Mitigate flood risks for the 1:5, 1:20, and 1:50 year return periods.
- e) Accommodate future precinct developments (short-, medium-, and long-term).

The Scope of Services

Stage 1: Inception Report (*Project Initiation*)

- a) Convene a project start-up meeting of the project (or as recorded by ACSA/consultant agreement)
- b) Attend project initiation meetings and stakeholder engagement meetings
- c) Inspect the site and advise on the necessary surveys, analyses, tests and site or other investigations where such information will be required for stage 2 including the availability and location of infrastructure and services.
- d) Determine the availability of data, drawings and plans relating to the project.
- e) Advise on criteria that could influence the project life cycle cost significantly.
- f) Provide necessary information within the agreed scope of the project to other consultants/support specialists involved.
- g) Deliverables will include report on project, site and functional requirements. Schedule of required
- h) surveys, tests, analyses, site and other investigations.
- i) Finalise the scope of services and scope of work required.
- j) Conclude the terms of the agreement with ACSA.

Deliverables will typically include:

- a) agreed scope of services and scope of work
- b) signed agreement
- c) report on project, site and functional requirements
- d) schedule of required surveys, tests, analyses, site and other investigations
- e) schedule of consents and approvals and related timeframes.

Stage 2: Preliminary Design (*Concept Stage*)

- a) Prepare and finalise the project concept in accordance with the brief, including project scope, project scale plus preliminary programme and viability of the project.
- b) Conduct design meetings as required.
- c) Establish that the design is compliant with ACSA regulatory authorities' requirements and incorporate these into the design.
- d) Refine and assess the concept design to ensure conformance with all regulatory requirements and consents.
- e) Establish access, utilities, services and connections required for the design.
- f) Coordinate design interface with the necessary relevant individuals from ACSA CTIA and external stakeholders or other consultants involved.
- g) Advise client on asset outages and duration of outages where applicable.

- h) Prepare traffic accommodation drawings for approval by the Airfield Manager.
- i) Prepare preliminary process designs, preliminary designs, and related documentation for approval by relevant authorities and client and suitable for costing. The preferred option shall incorporate best engineering practices while maintaining cost effectiveness.
- j) Liaise, co-operate and provide necessary information to the client, principal consultant and other consultants involved.

The following financial administration services form part of the normal services except as described in clause 3.2.1.3 (a) and (b):

- k) Provide cost estimates and life cycle costs, as required.

Deliverables will typically include:

- a) concept design
- b) schedule of required surveys, tests and other investigations and related reports
- c) process design, if applicable
- d) cost estimates, subject to clause 3.2.1.3 (a) and (b).

Stage 3: Detailed Design

- a) Review documentation programme with ACSA, and other consultants involved.
- b) Attend design and consultants' meetings fortnightly (or as recorded in ACSA/consultant agreement).
- c) Incorporate client's and authorities' detailed requirements into the design.
- d) Incorporate other consultants' designs and requirements into the design.
- e) Following from the Prelim Design Report, after consultation with ACSA, prepare Detailed development drawings including draft technical details and specifications of the agreed concept.
- f) The detailed design shall include all the requirements as contained in section 1 above on the scope of works and shall take into consideration all relevant standards.
- g) Carry out design and value (cost) engineering reviews and evaluate design and outline specification for quality and cost control.
- h) Employer to Review Design Report for conformity with general design intent and Employer's requirements
- i) Obtain approval for the proposed plans and programs from relevant Stakeholders.
- j) Provide finalised operational impact mitigation documentation and drawings and contingency plans to deal with asset outage for approval and communication.
- k) Get the proposed plans approved by the City of Cape Town.
- l) Prepare detailed estimates of construction cost.
- m) Submit the necessary design documentation to local and other authorities for approval.

Deliverables will typically include:

- a) design development drawings
- b) outline technical specifications
- c) local and other authority submission drawings and reports
- d) detailed estimates of construction costs, subject to clause 3.2.1.3 (a) and (b).

Stage 4: Documentation and Procurement

- Design meetings.
- Prepare specifications and preambles of the work.
- Preparation of the tender documentation for contractor procurement
- Check the cost estimate and adjust designs and documents to remain within approved budget if required.
- Final detailing of working drawings
- Tender evaluation
- Deliverables include: specifications, services co-ordination, working drawings, budget construction costs, tender documentations, tender evaluation report, and price contract documentation.

Stage 5: Contract Administration and Inspection

- a) Site handover to Contractor, as applicable
- b) Issue construction documentation in accordance with the documentation schedule including, in the case of structural engineering, reinforcing bending schedules and detailing, and specifications of structural steel sections and connections.
- c) Carry out contract administration procedures in terms of the contract.
- d) Conduct regular site meetings, technical meetings, progress meetings and other agreed meetings (or as recorded in ACSA/consultant agreement).
- e) Quality Control, works inspection and approval of work completed according quality and specifications inclusive of a post as built survey.
- f) Monitor implementation of quality assurance procedures by other consultants and contractors
- g) Prepare proactive estimates of proposed variations for client decision making.
- h) Assist in the resolution of contractual claims by the contractor.
- i) Clarify details and descriptions during construction as required.
- j) Witness and review all tests and mock-ups carried out on site.
- k) Check and approve contractor drawings for compliance with contract documents.
- l) Update and issue drawings register.
- m) Issue contract instructions as and when required.
- n) Financial Control and agreement of interim payment certificates
- o) Adjudicate and resolve financial claims from the Contractor
- p) Review and comment on operation and maintenance manuals, guarantee certificates and warranties.
- q) Inspect the works and issue practical completion certificates and defects lists as appropriate.
- r) Arrange for the delivery of all test certificates, including any Certificates of Compliance,
- s) statutory and other approvals, record drawings and operating manuals.

Deliverables will typically include:

- a) schedules of predicted cash flow, subject to clause 3.2.1.3 (a) and (b)
- b) construction documentation
- c) drawing register
- d) cost estimates for proposed variations, subject to clause 3.2.1.3 (a) and (b)
- e) contract instructions
- f) financial control reports, subject to clause 3.2.1.3 (a) and (b)
- g) valuations for payment certificates, subject to clause 3.2.1.3 (a) and (b)
- h) progressive and draft final accounts, subject to clause 3.2.1.3 (a) and (b)
- i) practical completion certificates and defects lists
- j) all statutory certification and certificates of compliance as required by the local and other statutory authorities and as relevant.

Stage 6: Close Out

- a) Fulfil and complete the project close out including necessary documentation to facilitate effective completion, handover and operation of the project.
- b) Inspect and verify the rectification of the defects.
- c) Receive, comment and approve relevant payment valuation and completion certificates.
- d) Facilitate and/or procure final operations and maintenance manuals, guarantees and warranties
- e) Prepare and procure as built drawings and documentation
- f) Conclude the final accounts.

Additional Services

- a) Level 3 construction monitoring shall be required
- b) valuations for payment certificates, subject to clause 3.2.1.3 (a) and (b)
- c) works and final completion lists
- d) operation and maintenance manuals, guarantees and warranties as relevant.
- e) Record and/or As-built drawings and documentation

final accounts, subject to clause 3.2.1.3 (a) and (b)

Engineering Scope of Services

Catchment and System Review

- a) Reassess Catchments A, B, and D using updated topographic, hydrological, and rainfall data.
- b) Conduct hydrologic modelling using HEC-HMS or PCSWMM for flood routing, attenuation, and to determine peak discharges and volumes under 1:5, 1:20, and 1:50-year storm events.
- c) Model ultimate development scenarios in line with the CTIA expansion phases and land use planning.
- d) Model existing pond drawdown rates, overflow routes, and available retention time.

Civil and Structural Engineering Services

- a) Inspection of the project site,
- b) Raise existing ACSA pond embankments to increase storage capacity and comply with dam safety freeboard requirements. The previous assessments of existing infrastructural elements recommended a raise of pond embankment and spillway crest levels by 300mm in Catchment A to increase volumetric retention and reduce overtopping risk, and to maintain minimum freeboard of 600mm above the 1:50 year maximum water level. The emergency spillways sized for 1:100 year flow. This will be reassessed and be based on the new recommendations with the view of informing the project on options of how to integrate existing works with proposed new works.
- c) Consultation with authorities and other entities having rights or powers of sanction as well as consultation with public and stakeholder group.
- d) Advice to the client as to regulatory and statutory requirements, including environmental management and the need for surveys, analyses, tests and site or other investigations, as well as approvals, where these are required for completion of the services, and arranging for these to be carried out at the client's expense.
- e) Searching for, obtaining, investigating and collating available data, drawings and plans
- f) relating to the works.
- g) Where applicable, investigating financial and economic implications relating to the
- h) proposals or feasibility studies.
- i) Assist ACSA to develop timeframes for next stages of the project where required.
- j) Expand and reshape the spillway systems to manage higher discharge rates safely (minimum design capacity: 1.0 m³/s) as outlined on the MoU between ACSA AND CoCT.
- k) Replace and upsize existing outlet and conveyance pipes, incorporating:
 - One permanent outlet at a design capacity of (max 0.45 m³/s), apply Rational Method for Q = CiA.
 - One telemetry-controlled discharge pipe (0.55 m³/s) activated based on downstream availability.
- l) Upgrade outlet structures with flow control orifices/weirs.
- m) Incorporate vortex flow control devices to restrict outflow rates to allowable municipal discharge thresholds.
- n) Integrate energy dissipation structures at all outlets and overflows.
- o) Install geosynthetic clay liners (GCL) or HDPE liners to address seepage through pond walls.
- p) Place rip-rap armouring (Class 250mm) on upstream slopes to prevent erosion.
- q) Improve and reline existing water channels and culverts to enhance flow efficiency and reduce erosion risks.
- r) Provide riprap protection, mole barriers, and vegetative stabilization on embankments and pond perimeters.
- s) Construct access roads and perimeter fencing for maintenance and safety.

Hydraulic and Hydrological Design

- a) Align discharge design rates with CoCT allocations at 0.45 m³/s and 0.7 m³/s and incorporate 1:5, 1:20, and 1:50 year storm events, rainfall data from SAWS/CoCT rainfall IDF curves.
- b) Apply SANS 10299-2 and SANS 1921 standards for stormwater systems and construction works.
- c) Develop stage-storage-discharge relationships for redesigned ponds.
- d) Design for climate resilience, accommodating increased rainfall variability and intensity patterns in the Western Cape.

Integration with Smart Technologies

Incorporate automated sensors for:

- a) Real-time water level and flow rate monitoring.
- b) Rainfall forecasting and event logging.
- c) Telemetry-controlled outlet operations.
- d) Design infrastructure compatible with SCADA systems and climate early warning systems as we are moving to modernized and integrated infrastructure systems.
- e) Provide mobile and centralized dashboards for ACSA operational control rooms.

Environmental and Sustainability Considerations

Apply Sustainable Urban Drainage Systems (SuDS) principles including:

- a) Biofiltration and wetland vegetation zones.
- b) Sediment traps and forebays.
- c) Water quality monitoring structures.
- d) Perform environmental impact assessments (EIA) if triggered under NEMA regulations.
- e) Ensure no net harm to adjacent ecological areas, particularly near Symphony Way and Driftsands.

Environmental and regulatory Compliance

- a) Conduct an updated Environmental Impact Assessment (EIA) or EIR amendment as per NEMA (Act 107 of 1998)

Design to comply with:

- a) National Water Act, No. 36 of 1998.
- b) Dam Safety Regulations (GNR.139 of 2012).
- c) Include stormwater quality improvement measures: vegetated swales, trash racks, hydrocarbon traps

Dam Safety Compliance

- a) Appoint and coordinate with an Approved Professional Person (APP) registered with DWS.
- b) Undertake a formal dam safety assessment, structural verification, and compliance upgrade plan.
- c) Align upgrades with the 2019 Dam Safety Report recommendations by Storey ENG.

Documentation, Procurement & Supervision

- a) Prepare detailed construction drawings, technical specifications, and Bills of Quantities (BoQ) for the contractor.
- b) Assist ACSA Project Manager in compiling the tender documentation in line with ACSA SCM and National Treasury procurement protocols.

Contracting & Procurement Framework

All consultancy services shall be procured through an open RFP process, with evaluation criteria aligned to the NEC3 principles of transparency, fairness, and value for money similar nature.

- a) Technical capability & experience of the consultant team in relation to works of similar nature.
- b) Compliance with CIDB, statutory, and professional registration requirements.

- c) OHS compliance and environmental sustainability practices consistent with applicable legislation and project-specific needs.
- d) Cost-effectiveness, quality assurance system, and project management capabilities, demonstrating the ability to deliver within time, cost, and quality parameters.
- e) Service providers will operate under NEC3 PSC, ensuring flexibility and risk allocation.

Engineering Consultants to Supervise construction under Level 3, including:

- a) Supervision of contractor's works by ensuring compliance with designs, specifications and employer's requirements.
- b) Quality assurance in terms of overseeing acceptance of tests, inspections, materials approvals.
- c) Programme and progress monitoring: Assisting ACSA by checking against NEC3 accepted programmes
- d) Contract administration support: Assisting ACSA's Project Manager with reviewing early warnings, compensation events, valuations, and payment certificates
- e) Technical guidance: Advising on site problems, approving drawings, handling variations.
- f) Compliance audits shall be conducted

Commissioning and Handover

- a) Provide as-built documentation, operation & maintenance manuals, and training workshop.
- b) Conduct system commissioning and performance verification testing.
- c) Ensure full integration into ACSA's maintenance and monitoring systems in line with other business units.

Applicable Standards and Guidelines

- a) City of Cape Town Stormwater Management By-law and Guidelines which binds any organ of state, which states that any provision in any other by-law dealing with stormwater, is subject to the provisions of this CoCT by-law.
- b) SANS 10299-2: Stormwater Drainage Design.
- c) SANS 1921: Construction and General Works.
- d) National Water Act (1998) and Dam Safety Regulations.
- e) ACSA Engineering Standards and Environmental Framework.
- f) Green Infrastructure Guidelines (CoCT, 2022).
- g) Best Practice Guidelines for Stormwater (DEA/CSIR, 2021).
- h) ACSA - CTIA Stormwater Master Plan (References).
- i) City of Cape Town Management of Urban Stormwater Impacts Policy , and Floodplain and River Corridor Management Policy.

Service Delivery Standards & Compliance

Services must align with the latest ACSA policies and international best practices, including:

- a) ICAO Annex 14 (Aerodrome Design & Operations).
- b) SACAA Civil Aviation Regulations.
- c) National Treasury SIPDM Procurement Framework.
- d) ISO 9001 (Quality Management), ISO 45001 (OHS), and ISO 14001 (Environmental Management).
- e) SANS 10162 (Structural Steel Design) & SANS 10286 (Stormwater Drainage Design).

Futureproofing and Development Integration

Design must consider future precinct development including:

- a) Runway 18-36 realignment
- b) Symphony Way housing integration
- c) Precinct 2A and Precinct 3 expansions
- d) Provide flexible and modular infrastructure to adapt to future catchment modifications and increasing impervious surface areas.

These professionals form an integrated multidisciplinary team, each playing a critical role in delivering a stormwater infrastructure solution that is structurally sound, environmentally sustainable, financially accountable, and compliant with national and municipal regulations-ensuring the long-term resilience and operational safety of CTIA.

The appointed panel of consulting engineers and specialist professionals will be responsible for the stormwater pond rehabilitation and upgrade project, ensuring that it is delivered safely, within budget, environmental compliance, and structural sound-supporting Cape Town International Airport's operational resilience, regulatory obligations, and future expansion needs. The consultants will be responsible for managing the project from Stage 1 to Stage 9 in accordance with the National treasury SIPDM, including infrastructure planning, feasibility, detailed design, construction documentation, implementation, and project close-out. They will also oversee the formal RFP process together with ACSA team for the appointing a main contractor, evaluate bids, and ensure that the appointed Consultant adheres to the approved designs, quality standards, OHS legislation, and ACSA's operational requirements throughout the construction phase.

This document outlines the detailed roles and responsibilities for each discipline, ensuring regulatory compliance, operational excellence, and cost efficiency in line with ACSA's latest strategic goals, safety protocols, and sustainability policies.

Roles and Responsibilities - ACSA Stormwater Pond Upgrade Project

a) Dam Specialist (Class 2)

Role: Research, Design, assesses (inspection of materials, structural analysis, foundations, monitoring system, hydrology, spillways, mechanical equipment, outlets), and certifies the structural integrity of the detention pond embankments, spillways, outlet works, and associated reinforced concrete structures.

Responsibilities:

- a) Conduct structural condition assessments of existing pond walls and embankments.
- b) Design and specify reinforced concrete components (e.g. spillways, type outlet structures, wall height, type pf wall, nature of the foundation material, size and location of catchment area, sustainable type of spillway and magnitude of design flood, hazard potential of the dam, age of structure, and any expected problems such as alkali aggregate reaction or soil with dispersive characteristics).
- c) Ensure compliance with SANS 10100 (Concrete Design) and Dam Safety Regulations.
- d) Certify the structural safety and adequacy of rehabilitated or new pond structures.
- e) Provide construction monitoring and quality control inspections.

b) Geotechnical Engineering Specialist

Role: Evaluates subsurface conditions to ensure safe and stable construction and long-term performance of the detention pond infrastructure.

Responsibilities:

- a) Conduct borehole drilling, DCP tests, and laboratory testing.
- b) Analyze slope stability, seepage, and bearing capacity.
- c) Recommend suitable earthworks compaction specifications.
- d) Design embankment materials, cutoff trenches, and geosynthetic solutions.
- e) Monitor settlement and advise on mitigation for ground movement risks.

c) Hydrological Engineer

Role: Responsible for stormwater modelling, hydraulic design, and ensuring the ponds meet attenuation and discharge requirements.

Responsibilities:

- a) Perform catchment delineation and runoff calculations.
- b) Use tools like HEC-HMS/PCSWMM to model detention and release flows.
- c) Size spillways and outlet structures for 1:5 to 1:50-year return period storms.
- d) Ensure stormwater system complies with SANS 10286 and CoCT stormwater bylaws.
- e) Integrate sustainable stormwater management practices.

d) Land Surveyor

Role: Provides accurate spatial and elevation data to support design, construction, and verification activities.

Responsibilities:

- a) Conduct topographic and boundary surveys of ponds and adjacent areas.
- b) Generate contour plans, cross-sections, and as-built drawings.
- c) Provide accurate benchmarks for earthworks and hydraulic level setting.
- d) Assist with volume calculations for excavation, fill, and water detention.
- e) Ensure spatial accuracy for setting out of new infrastructure.

e) Ecologist

Role: Assesses and mitigates the environmental impacts of the pond upgrade, particularly on biodiversity and wetland habitats.

Responsibilities:

- a) Conduct biodiversity and habitat assessments near watercourses.
- b) Evaluate potential impact on wetlands, fauna, and flora.
- c) Prepare Environmental Management Plans (EMPs) and assist with EIA compliance.
- d) Provide input on stormwater quality controls.
- e) Advise on wetland restoration and alien invasive species management.

f) Quantity Surveyor

Role: Manages all aspects related to cost estimation, budgeting, procurement, and financial control.

Responsibilities:

- a) Prepare preliminary and detailed cost estimates for civil works.
- b) Develop and maintain the Bill of Quantities (BoQ).
- c) Conduct tender evaluation and adjudication support.
- d) Monitor project cash flows, variations, and payment certifications.
- e) Ensure compliance with National Treasury SIPDM cost management principles.

g) Electrical Engineer

Role: Control systems, instrumentation, and automation

Responsibilities:

- a) Design of SCADA systems involving sensors, PLCs (Programmable Logic Controllers), RTUs, telemetry, communication networks, and user interface.

- b) To ensure proper integration of sensors, control panels, and remote monitoring systems with the SCADA platform.
- c) Instrumentation and Sensor Integration.
- d) Power Supply and Distribution.
- e) Testing and Commissioning.
- f) Documentation and Compliance.

h) Construction Health and Safety Agent (CHSA)

Role: Ensures all construction activities comply with occupational health and safety laws and standards.

Responsibilities:

- a) Develop and implement the Construction Health and Safety Plan (CHSP).
- b) Conduct hazard identification and risk assessments (HIRA).
- c) Perform site safety audits, toolbox talks, and compliance inspections.
- d) Enforce compliance with OHS Act No. 85 of 1993 and Construction Regulations 2014.
- Ensure all contractors follow ACSA's Safety Management System (SMS).

The project scope of services included in this contract are aligned to the trades which are contained in the standard system of measuring civil work in South Africa. The services are broken down to the following categories:

STORMWATER POND UPGRADE PROJECT - SERVICE CATEGORIES

No.	Category	Description
1	Civil Engineering Design	Design of stormwater ponds, inlet/outlet structures, hydraulic systems, and erosion protection.
2	Environmental Services	Environmental impact assessment, water use licenses, EMP compliance, and monitoring.
3	Topographical and Geotechnical Surveys	Site surveys, ground investigations, soil classification, and geotechnical reporting.
4	Health & Safety Management	Development and implementation of the Construction Health and Safety Plan (CHSP) per OHS Act.
5	Construction Services	Earthworks, civil works, gabion and lining installation, pipework, and outlet structure upgrades.
6	Traffic & Access Control	Safe movement planning for vehicles and equipment within the airport's secure and live environment.
7	Quality Assurance & Testing	Material testing, compaction control, concrete testing, and quality documentation.
8	Project & Contract Management	NEC3 contract administration, programme management, cost control, and reporting.
9	Stakeholder Engagement & Compliance	Coordination with ACSA operations, ATNS, airport safety, and municipal/environmental authorities.
10	Commissioning & Handover Services	Performance verification, snag resolution, as-built documentation, and operational training.

The project will be managed as per National Treasury Standard for Infrastructure Procurement and Delivery Management (SIPDM).

The Successful bidder shall be responsible for appointing appropriately qualified specialists for any stage of the project, from Stage 1 to Stage 9, as and when required. The appointment of such specialists will be determined by the specific requirements and timing of the project phases, ensuring that all necessary expertise is engaged to meet the project's technical and operational demands.

Stormwater Pond Upgrade Project - Delivery Stages and Deliverables

Stage	No.	Name	End-of-stage Deliverable
	0	Project Initiation	An initiation report outlining the need for stormwater rehabilitation, initial cost estimate, risk register, and high-level programme.
	1	Infrastructure Planning	The end-of-stage deliverable for Infrastructure Planning is a prioritized stormwater rehabilitation plan aligned with the airport's five-year infrastructure investment framework.
	2	Strategic Resourcing	A delivery and procurement strategy defining internal vs. outsourced work packages and identifying NEC3 PSC use per scope.
Preparation & Briefing	3	Prefeasibility	A report determining viability based on hydrological, structural, and environmental conditions, justifying further investment.
		Preparation and Briefing	A strategic brief defining project scope, drainage issues, key performance indicators, and operational constraints near airside facilities.
Concept & Viability	4	Feasibility	A detailed feasibility report evaluating technical, environmental, and financial viability, including risks and compliance constraints.
		Concept and Viability	A concept report detailing the preferred technical solution, initial hydraulic modelling, form, cost estimate, and layout of stormwater ponds.
Design Development	5	Design Development	A developed design report with refined hydraulic design, erosion protection, outlet works, and updated cost and programme estimates.
Design Documentation	6	Production Information	Construction-ready documents, including drawings, specifications, method statements, and BoQs, compliant with airport safety and access protocols.
Construction	7	Works	Completed rehabilitation works including reshaped stormwater ponds, inlet/outlet upgrades, erosion controls, and landscaping ready for operation.
Handover	8	Handover	Works taken over by ACSA, with commissioning reports, maintenance manuals, and as-built drawings signed off by all stakeholders.
Closeout	9	Package Completion	Final account agreement, defects rectification, completion certificate, and closeout report with lessons learned and sustainability assessments.

The professional service providers are required to provide all aspects of the service with all reasonable care, diligence and skill in accordance with generally accepted professional techniques and standards, and to ensure that all legal requirements are met, and that all legal processes are adhered to.

The Consultant will be tasked with executing various activities which fall within the defined scope of the project. The operating philosophy for the stormwater pond rehabilitation and upgrade project is centered on delivering a robust, sustainable, and safe stormwater management system that supports flood attenuation, improves water quality, aligns with environmental best practices, and integrates seamlessly with airport operations. By prioritizing reliability, ease of maintenance, and compliance with aviation and environmental standards, the upgraded ponds will enhance resilience against extreme weather event, protect airport infrastructure, and contribute to long-term operational efficiency and NEC task-based contracts will be used for both Maintenance Contract and Capex.

ACSA, as the Employer under the NEC 3 PSC, reserves strong and clear rights to manage consultant performance, enforce obligations, address non-compliance, and ensure alignment with project goals. These rights ensure that consultant act diligently and transparently, ultimately protecting the integrity, timeline, and budget of the stormwater pond project.

The Bill of Quantities (BoQ) provides a structured framework that allows the ACSA to leverage the consultant's services based on measurable deliverables, transparency, cost control, and contractual accountability. It also transforms the consultant's services into clearly priced, trackable work items, thereby ensuring that ACSA can leverage the service effectively under the principles of the NEC3 contract.

Work Streams

The work streams included in this project is:

Work Stream	Key Activities
1. Project Initiation and Planning	Define project scope and objectives, Stakeholder engagement, Risk assessment, and Site investigations etc.
2. Detailed Design and Engineering	Hydraulic & hydrological modelling, Civil/structural design, Environmental permitting, and Final Bill of Quantity (BoQ) and drawings etc.
3. Procurement and contracting	Support ACSA for the preparation of RFP/tender documents, evaluate bids, appointment of the main contractor, and the signing of NEC3 contracts etc.
4. Site Establishment & Preliminary Works	Establish site access and facilities, SHEQ setup, Service relocation (if required), and Temporary works etc.
5. Construction & Rehabilitation Works	Excavation and reshaping of ponds, Inlet/outlet structures, Concrete and gabion works, and Landscaping etc.
6. Environmental & Water Quality Management	Install silt traps and separators, apply erosion controls, monitor water quality, and integrate natural systems etc.
7. Testing, Commissioning & Handover	Snag resolution, System performance tests, and Operational handover to ACSA etc.
8. Project Closeout	Submit as-built documentation, Final audits and payments, and Lessons learned report etc.

Specification and description of the services

The professional engineering services are for the management of the Pavement Management System for ACSA.

The Consultant is deemed to already own a Pavement Management System that meets the technical specifications, as outlined in this document, and as per the evaluation done at tender stage.

The project will be implemented in line with ACSA's Project Management Manual, which outlines processes to be adhered to in the implementation and delivery of projects at ACSA. It guides both ACSA internal processes and the professional team.

Please note that all team members will require an ACSA permit to access the Airside precinct at all the airports. Requirements and pricing for the permits are under section C2: Pricing Instructions.

The standards, manuals and guideline documents to be used in the project are as follows (as applicable & not limited to):

- ICAO: Annex 14 Aerodromes Volume I & II
- SACAA Aerodrome Regulations Part 139
- SA-CATS Aerodrome Standards Part 139
- ACSA Aerodrome Safety Standards Internal
- SANS 2001 Series CC1, DP2, DP3, DP5, etc.
- SANS 1200 Series for Civil Engineering Specifications
- COTO Standard Specifications
- SANRAL Materials Testing Manual TNH1, TMH9
- TRH26 access management
- National Water act, Act 36 of 1998
- NEMA (National Environmental Management Act, Act 107 of 1998) and associated EIA Regulations
- DEA Environmental Best Practice Guidelines
- SANS 508: Stormwater Management System
- City of Cape Town Stormwater Management Bylaws & Design Guidelines
- CSIR Guideline for Human Settlement Planning and Design (Red Book)
- OHS Act, Act 85 of 1993
- Construction Regulations 2014 (as amended)
- ISO 45001
- SANS 10142-1 Electrical installations
- ISO 9001 Quality management system requirements
- ISO 17025 Testing and calibration laboratory competence
- NEC3 Professional Services Contract
- SIPDM 2015 Infrastructure procurement and delivery management
- PFMA Act 1 of 1999
- Draft TMH 11: Standard Survey Methods
- The Employer's M1 Manual: Code of Procedure Manual for Geotechnical and Materials Investigation, Design and Documentation
- The SAICE Code of Practice: The Safety of Persons Working in Small Diameter Shafts or Test Pits for Civil Engineering Purposes
- Current industry best practice
- The Employer's relevant pro-forma documentation for services, sub-services, evaluations, etc.
- ICAO-Doc-9137_Airport Services Manual-Part 9-Airport Maintenance Practices
- ICAO-Doc-9184_Airport Planning Manual Part 3-Guidelines for Consultant Construction Services

Constraints on the Implementation of the project

The Stormwater Pond Rehabilitation and Upgrade project will be implemented in a live, operational environment. Work and services done on or near an active airport is subject to several special requirements and conditions to ensure the safe operation of the airport at all times. Various limitations and requirements are to be taken cognisance of during the preparation of the tender and construction programme.

Working on the *Employer's* property

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

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

Please also refer to Part C4: **SPECIAL REQUIREMENTS AT AN OPERATIONAL AIRPORT.**

People restrictions, hours of work, conduct and records

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

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

Occupational Health and Safety

ACSA is committed to adhering to the highest level of health and safety.

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

The Consultant shall comply with the Health and Safety requirements contained in Part C4.

Drawing Requirements

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

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

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

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

All drawings for the Stormwater Pond Rehabilitation and Upgrade Project shall be prepared in metric units in accordance with SANS standards, unless otherwise specified for compatibility with existing infrastructure. Each drawing shall include a graphic scale, key plan, north arrow, and benchmark references tied to site survey data. Dates shall be shown in the form dd/mm/yyyy, with revisions designated sequentially (i.e. R0, R1, R2 etc.) starting from the first issue, and all revisions clearly described in the revision column. Drawings shall comprehensively cover pond layouts, spillways, outlet structures, gabion box installations for energy dissipation, hydraulic flow profiles, and all environmental and safety provisions to ensure compliance with NEMA, OHS, and regulatory approvals.

Constraints on how the Consultants provides the Services

Management meetings

To ensure effective delivery of the Stormwater Pond Rehabilitation and Upgrade Project, the Employer and Consultant team will convene structured meetings to proactively and jointly manage the contract, minimise adverse risks, and make decisions in respect of project matters. The attendees shall include representatives with delegated authority to make decisions. The frequency and nature of these meetings shall be agreed, and shall include:

- Risk Register and Compensation Event meetings, to identify, track, and mitigate environmental, hydraulic, geotechnical related risks etc. Meetings to be held at a frequency not exceeding two weeks or based on the agreed intervals.
- Overall project progress and technical feedback meetings, to monitor compliance with NEC3 obligations, SACAA/ICAO requirements, SANS standards, and environmental permits (e.g., NEMA water use authorisations). Meetings to be held at a frequency not exceeding one month.
- Special coordination sessions, involving the Civil Engineer, Dam Engineer, Hydrologist, Ecologist, Health and Safety Agent, and others key professionals or stakeholders, to address technical integration such as:
 - Spillway and outlet structure designs,
 - Use of gabion boxes for energy dissipation and erosion control,
 - Stormwater discharge approved rates and hydraulic modelling (HEC-HMS/PCSWMM),
 - Environmental compliance and ecological preservation,
 - Safety protocols and other considerations.

These meetings shall form a key governance mechanism to ensure that design, construction, and operational requirements of the stormwater ponds are fully aligned with project objectives, regulatory approvals, and stakeholder expectations.

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

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

Consultant's key persons

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

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

Work Plan

Objectives

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

ISO Quality management System

All projects shall be managed in accordance with strict ISO 9001 quality system ensuring quality in design, administration, reports and site administration. Consultants must be accredited with ISO9001 compliance, and each project shall be administrated with respect to quality and technical compliance, in accordance with these strict international Quality Procedures.

Programme and Client feedback

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

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

Understanding the Works

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

Compliance with Laws

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

Compliance with Codes & Standards

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

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

Cooperating with and obtaining acceptance of Others

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

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

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

Things provided by the Employer

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

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

Part C4: Site Information

C4.1: Site Information

DESCRIPTION OF THE SITE AND ITS SURROUNDINGS

General description

General description

The works covered under this project are located at Cape Town International Airport (CTIA) within the landside precinct, owned and managed by Airports Company South Africa. All services shall be executed in a live operational environment, requiring careful planning and consultation with the relevant stakeholders, to ensure that the airport operations continue uninterrupted. As CTIA is declared a National Key Point (NKP) in terms of the National Key Points Act of 1980, it is imperative that the service Provider's personnel working on the project have a clear understanding of the NKP Act requirements, associated regulations, and the security nature of the airport environment.

The following section provides a brief description of Cape Town International Airport and key infrastructure to be addressed under this contract, with specific reference to the stormwater ponds situated on the landside precinct.

Existing structures, services and hidden Services

There are several services buried in and around the sites where the Works will take place, and precaution should be taken while carrying out the works. These services provide critical essential services to the Airside operations and should not be disturbed.

Known services include:

- The Fuel hydrant system
- Potable water main
- Fibre optic cables
- Communication cables
- Electrical cables
- Storm water pipes
- Sewerage pipes
- The Terminal Building
- The Fire Station
- The Admin Offices

A copy of the available drawings of existing services will be provided to the successful Tenderer. The Consultant shall verify all service locations on site and implement appropriate protection measures before commencement of works by adopting safe working methods (including trial holes and service detection) to prevent any disruption. All works must comply with ACSA safety protocols, NEMA environmental requirements, and the operation constraints of a live airport environment.

DESCRIPTION OF THE SITE AND ITS SURROUNDINGS

General description

The works to be done under this project is located at all the 9 airports owned and managed by Airports Company South Africa. The work to be done is both on the landside and airside precinct of the various airports. All services shall be executed in a live operational environment, and the services shall be done either outside of operational hours or with consultation with the various stakeholders, to ensure operations continue undisturbed.

The airside precinct is declared a National Key Point (NKP) in terms of the National Key Points Act of 1980. It is important that the Service Providers working on airside have a sound understand of the NKP Act and the associated regulations.

In the pages to follow are brief descriptions of the various airports and the main infrastructure to be covered under this contract.

Existing structures, services and hidden Services

There are several services buried in and around the sites where the Works will take place, and precaution should be taken while carrying out the works. These services provide critical essential services to the Airside operations and should not be disturbed.

Known services include:

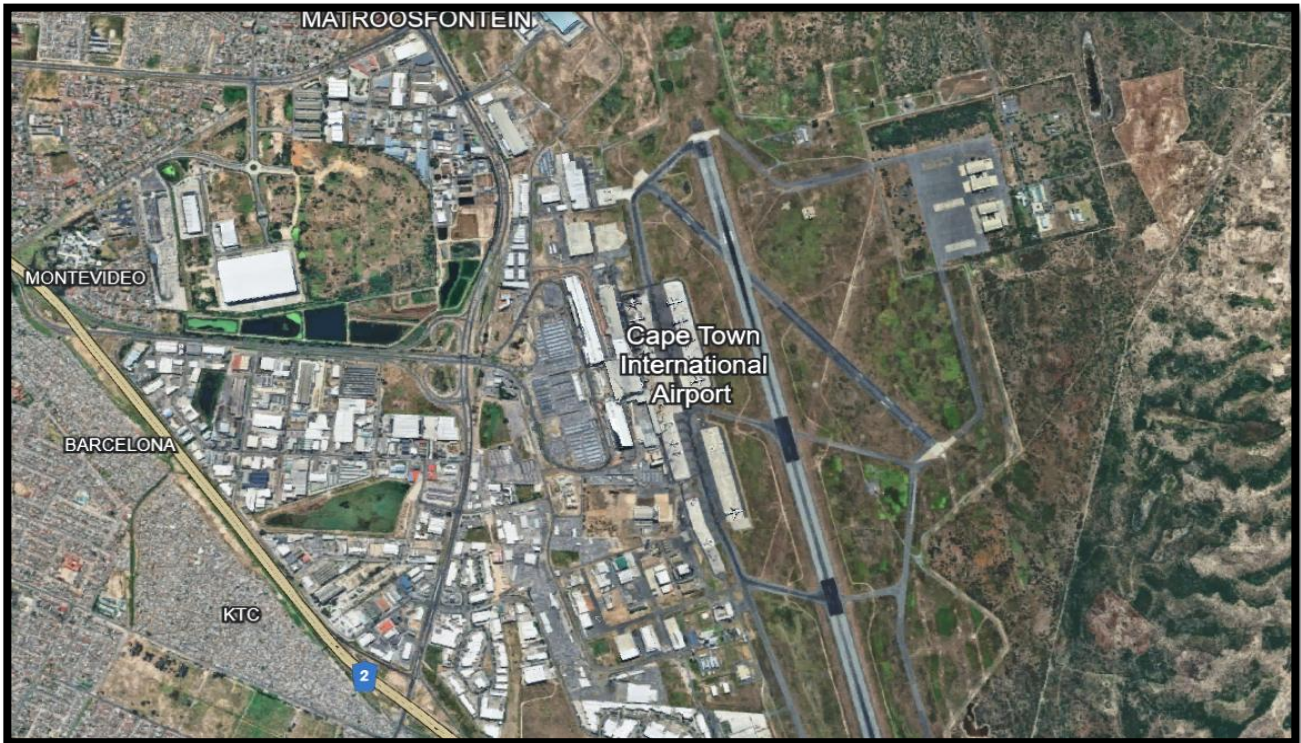
- Potable water pipelines
- Fire hydrant and firefighting ring main
- Sewage pipelines and associated manholes
- Stormwater pipelines and culverts
- Electrical supply cables (medium and low voltage)
- Communication and fibre optic cables
- Perimeter security and access control systems
- and other services.

A copy of the drawings of existing services will be issued to the successful Tenderer, where available.

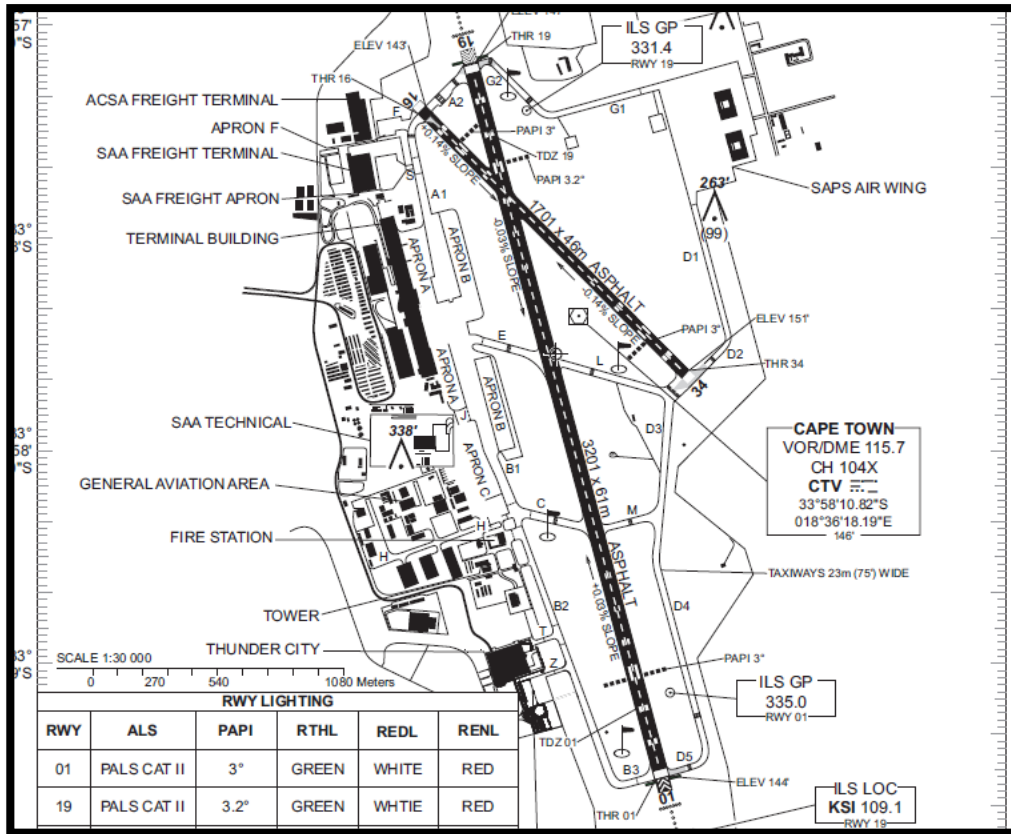
C4.1a Site Information: Cape Town International Airport (CTIA)

DESCRIPTION OF THE SITE AND ITS SURROUNDINGS

Locality of the airport



Existing infrastructure to be covered under this contract



C4.2: ACSA Special Requirements at an Operational Airport

SPECIAL REQUIREMENTS AT AN OPERATIONAL AIRPORT

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

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

1. Airports Manager

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

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

The Airport Management may at any time withdraw or suspend an Airside vehicle Permit or any Airside Security Permit. All negotiations between the Consultant and the airport management shall be through the Engineer.

2. Airport Security and Safety

All personnel of the Engineer or Consultant will have to undergo a Security and Safety Awareness Programme before the start of the contract. The Engineer/Consultant shall ensure that airport security is at all times complied with by his own personnel, all subcontractors and their personnel as well as all suppliers.

Access to the security area for personnel, vehicles and construction plant can only be obtained with permission from the Employer. Permits may be required for personnel and vehicles frequently moving through the security check points and shall at all times be visibly displayed while a person or vehicle is within the security area. Identity Documents must be available and presented on request. Permits are only valid for a specific area inside the security area and the responsibility rests with the Consultant to control the movement of personnel, plant and vehicles to ensure their compliance with this requirement. A Prime Cost Sum has been provided for the cost of any permits required.

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

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

3. Responsibilities of Consulting Engineers

As a condition of approval of an application for an Airside Vehicle Permit, the Consulting Engineer shall ensure that all vehicles and drivers are covered by the Contract Works, Public Liability and SASRIA Special Risks Insurance. When a vehicle is no longer required for airside use, the Engineer must upon removing it from airside use, remove and return the Airside Vehicle Permit to the airport manager. The Engineer shall immediately report to the airport manager all notifiable accidents and shall ensure that arrangements are in place for the rapid removal and/or repair of its vehicles should they become immobilised on movement areas.

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

4. Accident/Penalties

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

Distinction will be made between the following types of accidents:

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

Accidents in the first category must be reported to the Airport Manager within 24 hours. Accidents in the second category must be reported to the Airport Manager immediately and the South African Police Services (SAPS) shall be called to the accident site to investigate and report on the causes of the accident.

Where possible neither the driver, the passenger or vehicles should leave the accident site before the arrival of the SAPS.

The parties involved must ensure that adequate arrangements are made for the rapid removal or repair of the immobilised vehicles on **operational** areas. All accidents/incidents, irrespective of the seriousness thereof, affecting aircraft or loading bridges, must be reported immediately to the AM.

The Airport Manager reserves the right to:

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

5. Identification and Warning Lights

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

6. Additional Security Measures

No cameras or the taking of photos will be allowed within the security area without written approval from the Airport Manager. No fire-arms, explosives or any other weapons may be brought into the security area.

- Smoking and the making of fires are prohibited in certain areas of the airport. Open fires may only be made in designated areas after written permission has been obtained from the Airport Manager, who will also supervise such fires. No smoking is allowed in the apron areas.
- No accommodation of personnel will be allowed in the security area of the airport.
- No drawings, sketches, diagrams, information, etc. pertaining to the works, airport, accidents, etc. may be made, reproduced or registered, except when it is necessary for the execution of the contract. No information regarding accidents, airport activities, reports, etc. shall be given to anybody and no press release shall be made or interview may be given to anybody without the written permission from the Airport Manager.

Any interference with airport personnel, equipment or aircraft will be considered as an infringement of this clause. The Consultant will be held responsible for any damage, direct or indirect, to any airport equipment, aircraft, etc. caused by his own personnel or those of his subcontractors or suppliers whether on duty or not. The Consultant shall make good all costs necessary to remedy the situation including re-calibration of equipment where necessary. The Consultant shall note that especially navigation equipment is extremely sensitive and may be disturbed by sitting or leaning on it.

- No aircraft may be touched or moved by any member of the construction team. In case of an aircraft accident, no assistance what so ever may be given by the Consultant unless specifically requested and all staff must stay away from any part of an accident scene for a distance of at least 300m.

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

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

7. Compliance with Instructions

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

8. Delays Caused by Airport Management

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

9. General Requirements for Execution of the Work

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

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

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

10. Times for the Execution of the Works

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

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

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

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

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

12. Dust and Pollution Control

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

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

13. Storing of Vehicles, Plant and Materials

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

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

14. Fires

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

In the case of fire, including veld fires, the Consultant must instruct his employees to assist the airport management in extinguishing the fire if requested to do so. The Consultant shall indemnify the Employer against claims that may arise from fires due to negligence by the Consultant or his operations. If it is required by the Employer to extinguish any fires caused by the Contractor, the cost thereof will be for the Contractor. In case of a fire caused by air traffic activities, the area involved shall immediately be evacuated by the Consultant to an area beyond a radius of 300 m from the fire.

15. Environmental

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

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



C4.3: ACSA Environmental Policy

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED ENVIRONMENTAL MANAGEMENT SYSTEM POLICY

Airports Company South Africa SOC Limited, as a world-class airport operator acknowledges that airport activities and operations may have diverse impacts on the environment and therefore accepts our stewardship role of responsible care for the environment. Consequently, we are committed to implementing and maintaining an Environmental Management System.

Airports Company South Africa SOC Limited (the group) is committed to:

- Maintain an Environmental Management System based on the ISO 14001: 2004 specifications, and shall conduct regular audits of the Environmental Management System to ensure its adequacy and effectiveness.
- Monitor and measure significant environmental aspects and impacts of airport activities and operations.
- Ensure employees, operators, tenants, concessionaires, contractors and supply chain that fall within the scope of the Environmental Management System are aware of the environmental aspects and impacts associated with their activities and operations and of the requirements of the Environmental Management System.
- Report its environmental performance indicators in the integrated annual report.
- Continual improvement of our environmental performance.
- Prevent environmental pollution resulting from airport activities and operations
- Ensure storm water runoff leaving the airport remains unpolluted, and groundwater remains free from pollution resulting from airport operations.
- Actively seek opportunities to reduce overall aircraft noise footprint of airports.
- Monitor aircraft noise at Cape Town, King Shaka and O R Tambo International Airports.
- Actively seek out opportunities to reduce its carbon footprint, as well as that of the aviation industry.
- Monitor air quality at Cape Town, King Shaka and O R Tambo International Airports.
- Actively seek opportunities to reduce water consumption.
- Ensuring all waste generated is minimised, or otherwise reduced, re-used or recycled.
- Conserve biodiversity where feasible on its property.
- Collaborating with and engage surrounding communities to seek opportunities to minimise the environmental impact of airport operations on the environment.
- Comply with relevant environmental legislation, associated regulations and other applicable requirements.

The scope of the Environmental Management System extends to all Airports Company South Africa SOC Limited buildings, infrastructure and geographical areas within the group operates its aeronautical business. Where the group does not directly control the impacts at Corporate Office or Business Units, we shall work in partnership with operators, contractors, tenants, concessionaires and supply chain to improve performance. The group's managers and staff acknowledge that the implementation of this Environmental Policy is their responsibility and are committed to it. This policy shall be reviewed by management every three (3) years and made available to any interested parties on request.

Signed:

Date: 04th May 2015

Issue No: 8

B. A. Maseko

Chief Executive Officer: Airports Company South Africa SOC Limited

C4.4: Environmental Management System

1. Scope

This procedure is intended for all ACSA Service and Maintenance Contractors whose activities, products and services may produce a negative impact on the environment at ACSA Operated Airports.

1. Objective

To incorporate all service and maintenance contractors into ACSA's Environmental Management System (EMS), to align activities, products and services with the EMS and ACSA's Environmental Policy.

2. Definitions and Abbreviations

ACSA

Airports Company South Africa SOC Ltd

ACSA AEMR

ACSA Airport Environmental Management Representative

ARFFS

Aerodrome Rescue and Fire Fighting Services

HCS

Handling & Storage of Hazardous Chemical Substances

SHE

Safety, Health and Environment

Service & Maintenance Contractor

An ACSA appointed service or maintenance provider assigned to carry out repairs, upgrades, installations and ongoing maintenance of airport infrastructure. Service contractors (e.g. cleansing, landscaping, pest removal, hygiene, sanitation) or maintenance contractors (e.g. electricians, plumbers, mechanics) may have long-term contracts or provide services on an ad-hoc basis.

3. Procedure General

3.1. All ACSA departments shall contact the airport's ACSA AEMR prior to appointing a service or maintenance Consultant on the airport.

3.1.1. All new or renewed service and maintenance contractors shall be screened for significant environmental aspects by the airport's ACSA AEMR. Refer [ACSA EMS Department Determining Significant Environmental Aspects Procedure - T010 001M](#). Any new significant environmental aspects shall be documented in the aspects register, and control measures implemented accordingly.

3.2. The ACSA AEMR shall decide whether or not the Consultant requires formal environmental induction training based on Point 4.1.1 above. If training is required, it shall be conducted by the relevant contractor's responsible person/supervisor prior to commencing work on the airport.

3.3. The ACSA Department responsible for appointing service or maintenance contractors shall append the [ACSA Service and Maintenance Contractors Environmental Terms and Conditions to Commence Work - EMS 048](#) permit to tender documents, contract documents, service level agreements or bill/schedule of quantities specifications. This will allow contractors to accommodate any unforeseen costs, to minimise environmental risk or ensure compliance. Prior to

commencement of works, contractors shall sign this permit, a copy of which shall be kept by both the responsible ACSA Department and the contractor.

- 3.4. The contractor's representative shall ensure the conditions set out in the [ACSA Service and Maintenance Contractors Environmental Terms and Conditions to Commence Work - EMS 048](#), along with [ACSA's Environmental Management System Policy](#) are communicated to, comprehended and implemented by all Consultant staff.
- 3.5. All ACSA Departments making use of contractors shall keep an up-to-date register of contractors on site. This register shall include the name of the contracting company, the site supervisor/manager and his/her contact number, the nature of works and work area, the date of commencement and expected completion of the work, and whether the [ACSA Service and Maintenance Contractors Environmental Terms and Conditions to Commence Work - EMS 048](#) permit has been duly signed. In addition, Consultant tender documents, contract documents, service level agreements or bill/schedule of quantities specifications shall be available for audit/inspection by the ACSA AEMR.
- 3.6. Consultant activities shall be audited at the discretion of the ACSA AEMR depending on the nature of risks and environmental aspect significance.

4. Roles and Responsibilities

Issues	Responsible Person	Alternate
Has overall responsibility for adherence to this Operational Procedure	ACSA General Manager or Airport Manager	Relevant designated person shall assume responsibility
Has responsibility for adherence and implementation of this Operational Procedure	ACSA Safety Manager/ ACSA ARFFS Manager/ ACSA HOD: SHE/ ACSA AEMR	Relevant designated person shall assume responsibility

5. Verification

This procedure shall be verified in accordance with ACSA Verification Policy, Procedure and Working Instruction - Z001 002M.

6. Non-Conformance

Any deviation from this procedure shall be identified and registered with corrective and preventative measures for continual improvement in accordance with the ACSA Non Conformance Policy, Procedure and Working Instruction - Z001 001M.

7. References

ACSA Non-Conformance Policy, Procedure and Working Instruction - Z001 001M
 ACSA Verification Policy, Procedure and Working Instruction - Z001 002M
 ACSA Change Control Policy, Procedure and Working Instruction - Z001 003M
 ACSA Document Control Procedure - Z001 006M
 ACSA Record Keeping Requirements Procedure - Z001 008M
 ACSA Airfield Standard Operating Procedure Manual

8. Change Control

This procedure shall only be changed with the authorisation of the ACSA Group Executive: Airport Operations and in accordance with ACSA Change Control Policy, Procedure and Working Instruction - Z001 003M.

C4.5: ACSA Service & Maintenance Contractors Environmental Terms and Conditions to Commence Work - EMS 048

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

ISSUE	REQUIREMENT
Environmental Policy	ACSA's Environmental Policy shall be communicated, comprehended and implemented by all ACSA appointed Consultant staff (see attached Environmental Policy).
Stormwater, Soil and Groundwater Pollution	▪ No solid or liquid material may be permitted to contaminate or potentially contaminate stormwater, soil or groundwater resources. ▪ Any pollution that risks contamination of these resources must be cleaned-up immediately. Spills must be reported to ACSA immediately. Contractors shall supply their own suitable clean-up materials where required. ▪ Washing, maintenance and refuelling of equipment shall only be allowed in designated service areas on ACSA property. It is the contractor's responsibility to determine the location of these areas. ▪ No leaking equipment or vehicles shall be permitted on the airport.
Air Pollution	▪ Dust: Dust resulting from work activities that could cause a nuisance to employees or the public shall be kept to a minimum. ▪ Odours and emissions: All practical measures shall be taken to reduce unpleasant odours and emissions generated from work related activities. ▪ Fires: No open fires shall be permitted on site.
Noise Pollution	▪ All reasonable measures shall be taken to minimise noise generated on site as a result of work operations. ▪ The Consultant shall comply with the applicable regulations with regard to noise.
Waste Management	▪ Waste shall be separated as general or hazardous waste. ▪ General and hazardous waste shall be disposed of appropriately at a permitted landfill site should recycling or re-use of waste not be feasible. ▪ Under no circumstances shall solid or liquid waste be dumped, buried or burnt. ▪ Contractors shall maintain a tidy, litter free environment at all times in their work area. ▪ Contractors must keep on file: 1. The name of the contracting waste company 2. Waste disposal site used 3. Monthly reports on quantities – separated into general, hazardous and recycled 4. Maintained file of all Waste Manifest Documents and Certificates of Safe Disposal 5. Copy of waste permit for disposal site

	This information must be available during audits and inspections.
Handling & Storage of Hazardous Chemical Substances (HCS)	▪ All HCS shall be clearly labelled, stored and handled in accordance to Materials Safety Data Sheets. ▪ Materials Safety Data Sheets shall be stored with all HCS. ▪ All spillages of HCS must be cleaned-up immediately and disposed of as hazardous waste. (HCS spillages must be reported to ACSA immediately). ▪ All contractors shall be adequately informed with regards to the handling and storage of hazardous substances. ▪ Contractors shall comply with all relevant national, regional and local legislation with regard to the transport, storage, use and disposal of hazardous substances.
Water and Energy Consumption	ACSA promotes the conservation of water and energy resources. The Consultant shall identify and manage those work activities that may result in water and energy wastage.
Training & Awareness	The conditions outlined in this permit shall be communicated to all contractors and their employees prior to commencing works at the airport.

Penalties

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

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

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

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

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

at: _____ (airport name).

C4.6: Baseline HIRA: ACSA Generic Hazards Assessment

Baseline Risk Assessment	
Project Name:	REQUEST FOR PROPOSAL (RFP) FOR THE PROVISION OF PROFESSIONAL SERVICES TO ENHANCE DRAINAGE EFFICIENCY, MITIGATE FLOOD RISKS, AND ENSURE COMPLIANCE WITH ENVIRONMENTAL AND REGULATORY STANDARDS THROUGH STRUCTURAL IMPROVEMENTS AND OPTIMIZED STORMWATER PONDS FOR A PERIOD OF FIFTEEN (15) MONTHS
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 effected and no vehicular movements are allowed on the Airfield. Low visibility procedures will be in place	4A
Driving on runways and taxiways without permission	Incursion (include definition)	Collision with aircraft/property damage or 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 jetblast is installed at high risk areas. Risks associated with jetblast are covered during Airside Induction Training. Caution to be taken around aircraft when the anti-collision lights are activated in the Apron bays. 75 meter clearance behind aircraft to be observed to prevent jetblast. Contractors to be aware of aircraft movements	4C
Perimeter fence breach	Security risk	National Key Point Violation	Access and egress points are strictly enforced. Contractors are only to use the entry points as provided by the ACSA Project Leader. No materials are to be stored within 3meter of the perimeter fence.	3B
Crane operations	Height of crane	Flight path obstruction/collision with aircraft	30 meter height restriction procedure – refer to Airfield Operation Department for further information	2A
Weather	Adverse weather conditions	Damage to aircraft/vehicles/equipment	Weather warnings are issued by the Airside Safety Department as and when required. All equipment on the Airside is to be secured	4A
Construction works	Foreign Object Debris (FOD)	Ingestion into aircraft engine	Airside induction is required for all staff working on the Airside, FOD bins are to be used for any FOD found lying on the ground. All waste to be secured to prevent it from becoming airborne (refer to Environmental Terms and Conditions)	4B



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



Delivery of materials	Falling materials or stones or sand	Vehicle/pedestrian accidents	Materials are to be delivered within specified time frames, flagman to be 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
Road crossing Central Boulevard	Not using the tunnel for crossing	Vehicle and pedestrian accidents	Contractor staff are to cross the Boulevard via the North or South tunnels	4B
Waste management	Environmental impact	Illegal dumping	Temporary laydown areas to be identified and no illegal dumping is permitted.	3C
Trolleys	Damaging trolleys through misuse	Injuries and property damage	Contractors to provide their own trolleys. ACSA's trolleys are for passenger use only	5D
Golf carts	Misuse of golf carts	Injuries and property damage	Contractor staff to be aware of golf cart movements on the Landside. Golf cart use for airport users only and not for contractor use for transporting materials. Golf cart operate in predetermined routes – contractors to be aware thereof	3D
Fire equipment	Use and abuse of fire equipment	Injuries and property damage	Fire equipment is only to be used during emergencies. Contractors to provide their own fire equipment. No materials to be stored in ACSA fire cabinets. Emergency exits are to be kept clear at all times	2B



AIRPORTS COMPANY
SOUTH AFRICA

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 on the Central Boulevard and Elevated Road are 40km/h, exiting the road networks is 50km/h, Tower Road is 50km/h and Freight Road is 50km/h. Speed humps are installed along Tower Road and Freight Road to reduce speeding	3C
Deliveries	Elevated Road	Disrupt traffic flow and passenger movements	No trucks allowed, deliveries to be done via North or South Delivery Yards, delivery notes are required and delivery times are to be specified.	2C
Overhead works	Falling items	Injuries, vehicles, property damage	Fall protection plan required as per the Construction Regulations 2014.	5C
General housekeeping	Damage to escalators	Injuries, property damages	Escalators are not be used to transport heavy items in the Parkade	4C

Part C5: Annexures

ANNEXURE A

Pro forma Performance Bond – Demand Guarantee (for use with Option X13)

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

The Airports Company South Africa SOC Limited

Guarantor's reference No.

Date:

Dear Sirs,

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

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

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

1.7	“Guaranteed Sum”	means [insert]
1.8	“Works”	means [insert]

2. The Guarantor's liability shall be limited to the Guaranteed Amount.
3. The Guarantor's period of liability shall be from and including the date of issue of this Guarantee and up to and including the Expiry Date or the date of payment in full of the Guaranteed Amount, whichever occurs first. The Project Manager and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.
4. The Guarantor hereby acknowledges that:
 - a. any reference in this Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship; and
 - b. its obligation under this Guarantee is restricted to the payment of money.
5. The Guarantor hereby undertakes to pay the Employer any sum or sums not exceeding the Guarantee Amount in total, upon receipt of a written demand delivered to the Guarantor's Address, stating that the Consultant is in breach of its obligations under the Contract (without being required to prove the nature of the breach and the amount claimed. The written demand shall be signed by the authorised representative of the Employer and be accompanied by the original Guarantee.
6. Payment by the Guarantor, in terms of this Guarantee, shall be made within seven (7) calendar days upon receipt of the Employer's written demand to the Guarantor.
7. The obligations under this Guarantee constitute direct primary, irrevocable and unconditional obligations, do not require any previous notice to or claim against the Consultant, and shall not in any way be released or discharged or otherwise absolved of liability hereunder by reason of any arrangement or change in relationship made between the Consultant and the Employer and/or between the Guarantor and Consultant; nor any alteration in the obligations undertaken by the Consultant or in the terms of the Contract; nor any indulgence, failure, delay by the Employer as to any matter; nor any dissolution or liquidation or such other analogous event of the Consultant (whether or not the Guarantor has notice thereof).
8. The Employer shall have the absolute right to arrange his affairs with the Consultant in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
9. All payments made by Guarantor shall be due and payable in the amount specified in any payment demand made in respect hereof by the Employer and shall be made free and clear of and without any deduction for or on account of any tax or future taxes, levies, imposts, duties, charges, fees, set off, counterclaims, deductions or withholdings of any nature whatsoever and by whomever imposed. All charges of the Guarantor related to the issuance or performance of this Guarantee (including, but not limited to, the negotiation, payment, extension or transfer hereof) shall be borne by the Consultant and under no circumstances shall be charged to the Employer by the Guarantor.
10. This Guarantee shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the High Court of the Republic of South Africa.
11. This Guarantee, with the required demand notice, shall be regarded as a liquid document for the purposes of obtaining a court order.
12. The Guarantor chooses as its *domicilium citandi et executandi* for all purposes in connection with this Guarantee at the Guarantor's Address.
13. If at any time any one or more of the provisions of this Guarantee is or becomes illegal, invalid or otherwise unenforceable in any respect neither the legality, validity or enforceability of the remaining provisions of this

Guarantee, nor the legality, validity or enforceability of such provision, under the law shall in any way be affected or impaired as a result.

SIGNED at _____ on _____ Day of _____ 202__

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

Full Name: _____

Capacity: _____

Witness: _____

[Insert Guarantor's stamp]

ANNEXURE B: Compliance with Codes & Standards

The Designs comply with the latest edition codes and SANS and International standards stated below and/or in the Scope and Good Engineering and Construction Practices'. To the extent not stated, the Designs comply with internationally recognised codes and standards which are accepted by the Employer.

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

The minimum ACSA requirements are:

- a. the requirements of the Occupational Health and Safety Act No. 85 of 1993 and Construction Regulations 2014;
- b. Legislation By-Laws and Regulations applicable to the area within which the project falls;
- c. the code of practice for the Application of the National Buildings Regulations, (SANS 10400);
- d. the ATEX directives; (The Regulations apply to al/ equipment intended for use in explosive atmospheres, whether electrical or mechanical, and also to protective systems)
- e. the National Environmental Management Act No. 107 of 1998;
- f. the recommendations of OIML;
- g. the requirements of SANS 347;
- h. the requirements and recommendations of the NFPA standards and codes for fire protection and fire safety, e.g. NFPA 10, 11, 13, 15, 16, 20, 22, 24, 30, etc.;
- i. ICAO Annex 14 Standards and Recommended Practices (SARPs) for aerodromes.
- j. IATA Airport Development Reference Manual

The recommendations contained within or made by international and national standards are viewed as the benchmark for *Good Engineering and Construction Practices*¹ and are complied with unless it can be demonstrated that it is not practicable.

Good Engineering and Construction Practices are the relevant practices, standards, recommendations, methods, procedures and acts used internationally by skilled contractors engaged in the design, engineering, construction, testing and commissioning of work similar in nature and extent to the Works that, at a particular time, with the exercise of reasonable judgment, care, attention in light of the facts known or that reasonably should have been known to the party making a decision at the time a decision is or should be made, would be expected to accomplish the desired result in a manner consistent with Laws, reliability, safety, environmental protection, economy and expedition. With respect to the plant and the Works, Good Engineering and Construction Practices include taking reasonable steps to ensure that:

- (i) Adequate materials, resources and supplies are available to undertake the Works under normal conditions;
- (ii) Sufficient engineering, design, construction and safety personnel are available and are adequately experienced and trained to design, construct and test the Works properly, efficiently

and within applicable Laws, manufacturer's guidelines and specifications and API and EI standards and recommendations;

- (iii) Appropriate monitoring and testing is done during the design, manufacturing, erection and commissioning to ensure that the Works are constructed to the required standards, tolerances and specifications and that equipment is functioning as designed and to provide assurance that it will function properly under normal conditions;
- (iv) Appropriate protective devices and design features are provided to ensure that safe, reliable, long-term operation of the plant can be achieved, if operated and maintained in accordance with the Operation and Maintenance Manual;

ANNEXURE C: POPIA

CONFIDENTIALITY AND DATA PROTECTION

Save as provided in this clause (*Confidentiality and Data Protection*), each Party shall, and shall procure that its Affiliate and their respective officers, directors, employees, agents, auditors and advisors shall, treat as confidential all information relating to the other Party or its Affiliates thereof or relating to their respective businesses that is of a confidential nature and which is obtained by that Party in terms of, or arising from the implementation of this Agreement, which may become known to it by virtue of being a Party, and shall not reveal, disclose or authorise the disclosure of any such information to any third party or use such information for its own purpose or for any purposes other than those related to the implementation of this Agreement.

The obligations of confidentiality in this clause shall not apply in respect of the disclosure or use of such information in the following circumstances:

in respect of any information which is previously known by such Party (other than as a result of any breach or default by any Party or other person of any agreement by which such Confidential Information was obtained by such Party);

in respect of any information which is in the public domain (other than as a result of any breach or default by either Party);

any disclosure to either Party's professional advisors, executive staff, board of directors or similar governing body who (i) such Party believes have a need to know such information, and (ii) are notified of the confidential nature of such information and are bound by a general duty of confidentiality in respect thereof materially similar to that set out herein;

any disclosure required by law or by any court of competent jurisdiction or by any regulatory authority or by the rules or regulations of any stock exchange;

any disclosure made by a Party made in accordance with that Party's pursuit of any legal remedy;

any disclosure by a Party to its shareholders or members pursuant to any reporting obligations that Party may have to its shareholders or members, provided that each such shareholder or member is notified of the confidential nature of such information and is bound by a general duty of confidentiality in respect thereof materially similar to that set out herein;

In the event that a Party is required to disclose confidential information as contemplated in this clause, such Party will:

advise any Party/ies in respect of whom such information relates (the "**Relevant Party/ies**") in writing prior to disclosure, if possible;

take such steps to limit the disclosure to the minimum extent required to satisfy such requirement and to the extent that it lawfully and reasonably can;

afford the Relevant Party/ies a reasonable opportunity, if possible, to intervene in the proceedings;

comply with the Relevant Party/ies' reasonable requests as to the manner and terms of such disclosure; and

notify the Relevant Party/ies of the recipient of, and the form and extent of, any such disclosure or announcement immediately after it was made.

Either Party may, by notice in writing, be entitled to demand the prompt return of the whole or any part of any confidential information supplied by it to the other Party, and each Party hereby undertakes to comply promptly with any such demand.

In line with the provisions of Protection of Personal Information Act, No 4 of 2013 (POPIA), particularly section 20 and 21, the service provider (referred to as Operator in POPIA) shall observe the following principles when processing personal information on behalf of the Company (referred to as Responsible Party in POPIA):

the Service Provider shall only act on the Company's documented instructions, unless required by law to act without such instructions;

the Service Provider shall ensure that its representatives processing the information are subject to a duty of confidence;

the Service Provider shall take appropriate measures to ensure the security of processing. The Service Provider shall ensure and hereby warrants that they have minimum IT and or physical security safeguard to protect personal information;

the Service Provider shall notify the Company immediately where there are reasonable grounds to believe that the personal information of a data subject has been accessed or acquired by any unauthorised person;

the Service Provider shall only engage a sub-operator with the Company's prior authorisation and under a written contract;

the Service Provider shall take appropriate measures to help the Company respond to requests from data subjects to exercise their rights;

taking into account the nature of processing and the information available, the Service Provider shall assist the Company in meeting its POPIA obligations in relation to the security of processing, the notification of personal information breaches and data protection impact assessments;

the Service Provider shall delete or return all personal information to the Company (at the Company's choice) at the end of the contract, and the service provider shall also delete existing personal information unless the law requires its storage; and

the Service Provider shall submit to audits and inspections. The Service Provider shall also give the Company whatever information it needs to ensure that the Parties meet their Section 20(1) obligations.