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AIRPORTS COMPANY SOUTH AFRICA KING SHAKA INTERNATIONAL AIRPORT

CONTRACT No: KSIA7806/2025/RFP

MANUAL OF PROCEDURES FOR WORKING AIRSIDE

FOR

**PROCUREMENT OF A CIDB GRADE 9 CE CONTRACTOR THE
COMPLETION OF BRAVO TAXIWAY EXTENSION AT KING SHAKA
INTERNATIONAL AIRPORT FOR A PERIOD OF 12 MONTHS AT KING
SHAKA INTERNATIONAL AIRPORT**

ISSUED BY:

Airports Company South Africa
King Shaka International Airport

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MAY 2025

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KING SHAKA INTERNATIONAL AIRPORT**

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WITNESS 1 FOR ACSA: NAME:

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WITNESS 1 FOR CONTRACTOR: NAME:

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1 GENERAL

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

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

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

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

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

2 DEFINITIONS

ACSA	Airports Company South Africa
ATC	Air Traffic Control
ATNS	Air Traffic and Navigation Services who undertake the ATC services at KING SHAKA INTERNATIONAL AIRPORT
AIRPORT/AERODROME	An area of land including buildings intended to be used partly or wholly for the arrival, departure and movement of aircraft, air passengers and airfreight
AIRPORT AUTHORITY (AA)	The Regional General Manager (RGM) or any official from ACSA acting on his behalf
AIRSIDE	The movement area on the airport, adjacent terrain and building or portions thereof, access to which is controlled, but excluding leased areas
APPROVED ISSUING AUTHORITY	An organisation approved by the AA to issue airport security and airside vehicle permits

APRON	<p>The part of the Airport Movement Area used for:</p> <ul style="list-style-type: none"> ▪ The purpose of enabling passengers to board, or disembark from aircraft; ▪ Loading cargo onto, or unloading cargo from aircraft and ▪ Refuelling, parking aircraft or carrying out maintenance on aircraft
AUTHORITY TO DRIVE AIRSIDE	<p>Authority issued by the AA to a driver for the purpose of driving in certain areas on the Airside</p> <ul style="list-style-type: none"> ▪ <i>Authority to Drive Airside Category 1</i> – An Authority issued by the Airport Operator to a driver for the purpose of driving only on the Airside Road in the vicinity of the Terminal or Apron Areas; ▪ <i>Authority to Drive Airside Category 2</i> – An Authority issued by the Airport Operator to a driver for the purpose of driving on the Airside Roads and Aprons (this may include crossing specific taxiways where a taxiway crossing is marked, and when the driver has received specific training to cover this occurrence) and ▪ <i>Authority to Drive Airside Category 3</i> – An Authority issued by the Airport Operator, following a satisfactory attendance and written test, to a driver for the purpose of driving on all movement areas at the airport.
AUTHORITY FOR USE AIRSIDE	Is an authority to be affixed to a Vehicle or motorised item of Construction Equipment approved to access the Airside.
ER	Engineer's Representative for the Consulting Engineer. (Referred to as the Engineer in GCC 2015 and Volume 3).
ESCORT	Means the supervision of a vehicle or item of construction equipment on the airside whereby the supervising person takes responsibility for and provides guidance and may take immediate action to prevent an unsafe act by the vehicle or item of construction equipment being escorted.
ESCORT OFFICER	Means a person authorised by the AA to perform the act of escorting another vehicle on the airside of the airport.
F&R	Fire and Rescue.
KSIA	Means King Shaka International Airport
ILS	Instrument Landing System. Instrumentation installed along the runway strip to assist pilots during poor weather conditions.
LANDSIDE	The area of the airport to which the public has unrestricted access.

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

3 CONTRACTOR'S CAMPSITE

An area has been made available for the Contractor's Campsite as indicated on the key plan (Volume 4).

The site is equipped with water and electricity. The contractor will pay for the service sewer connection, if available and the contractor should allow to provide for chemical toilet facilities. A telecommunication point is also available. The utilisation of this service is at the expense of the contractor.

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

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

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

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

4 PROGRAMMING OF THE WORKS

The Airport Authority must approve the programme of works. The programme of the works must be compiled to ensure minimum disruption to airside operations. The Contractor must take the following restrictions into account when compiling their programme of works:

(a) Work next to runways, RETs and taxiways

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

(b) Restricted Working Times

The construction programme must be based on the restricted working times as shown in the Tender Drawing Pack (Volume 4).

The Contractor must also note that the working timelines will be concluded upon the approval of the Programme of works.

All works will take place during KSIA's allowable working hours. Night works will be allowed where there are crossings with live runways and taxiways. Night work arrangements are to be made in a timely manner with airport operations.

(c) Written Notice

Work will require the temporary closure of runways, aprons and taxiways. The closure of the runway, aprons, and taxiways, and the periods of such closure, shall be by arrangement with the AA. At least fourteen days' written notice shall be given by the Contractor to the Employer's agent/Engineer to enable closure arrangements to be negotiated with the ATNS. Refer to Section 9.3.

(d) End of Shift

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

5 STOCKPILE AND SPOIL SITE

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

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

6 RESTRICTED ACCESS TO THE SITE OF THE WORKS

(a) Restricted Areas

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

The temporary hazard details include hazard requirements for the TWY, APRON and RWY strips are detailed in the document and drawings. After every re-opening of the TWY, APRON and RWY, the surface of the work area shall comply with these requirements.

Although the entire site will be handed to the Contractor at the start of the contract, the AA has the right to decide at short notice where on the site the Contractor may work. Runway 06/24, Taxiway Hotel, Golf and November must remain operational and work required on there are limited to night work and subject to approval by the AA. See below picture of the site layout:

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Under ILS conditions (instructed by the ATC), for all work areas in restricted conditions, no work shall be allowed next to the RWY or in restricted access areas.

(b) Access Point and Routes

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

The contractor will provide staff at strategic points to observe the progress of vehicles along the access routes and to redirect vehicles where necessary.

Construction material must be delivered via the Site Camp Gate (Refer to site layout drawings for the loc) to the site camp under escort.

(c) Communication

Both the Engineer's Representative and the Contractor's Safety Managers will be in possession of radios which can communicate directly with Fire & Rescue. These radios will be used, inter alia, to communicate emergencies, as well as to arrange for opening and closing inspections.

The Contractors' staff will be in contact with one another by means of a radio system of their own. ATNS will be required to authorize the use of any radio frequencies on the airside.

(d) Escorts

Fire & Rescue are the primary providers of escort services. Where Fire & Rescue are unable to provide the required level of escort services, Surface Maintenance or Airside Operations may be required to provide additional assistance.

Contractor's escort will only be allowed to escort contract related delivery/service vehicles outside the manoeuvring area. Proforma visitors forms will be issued to the Contractor and should be completed for each vehicle escorted onto airside – see the permit related costs below. Abuse by any staff will lead to the cancellation of Contractor's escort. All staff entering onto airside will be in possession of a valid Airside Permit.

Pedestrians to be collected by Contractor's escort and transported to site camp. A log sheet of all pedestrians and vehicles escorted onto the construction areas/site camp will be completed on a daily basis and submitted to the ACSA permit office for record purposes. One escort will be allowed to escort a maximum of ten staff members/pedestrians.

7 BARRICADES

The Contractor shall erect, maintain, move and finally remove temporary barriers, fences, signs and markings, all as prescribed by the airport authorities or as shown on the drawings. Barricades, markers and signs have to be placed under escort or while being in radio contact with the ATC, prior to entering a work area for construction purposes.

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

8 ON SITE STORAGE OF PLANT AND EQUIPMENT

Temporary stockpiling and storage of equipment on the site shall be done as far away as possible from operational areas within the approved demarcated areas for construction work. The Contractor shall submit a proposal for approval by the Engineer's Representative.

9 TEMPORARY TRAFFIC-CONTROL FACILITIES

9.1 TRAFFIC SIGNS

The Contractor shall supply, erect and maintain all necessary temporary road signs in accordance with the South African Road Traffic Signs Manual, Volume 2, Chapter 13 (latest edition). No signage or installations of any nature should cause any risk to aircraft at any location on the airside. All signage and installations shall be securely fixed to prevent displacement or detachment due to wind or jet blast.

All temporary road signs, devices, sequences, layouts and spacing shall also comply with the requirements set out in the Road Traffic Act, 1989 (Act 29 of 1989) and its Regulations, the requirements of the relevant authority and the South African Road Traffic Signs Manual, Volume 2, Chapter 13.

The Contractor shall indemnify the Employer against all proceedings, claims, actions, damages and costs which may arise from or be related to the absence or improper functioning or placement of road-traffic signs, barricades, traffic-control facilities, channelisation devices and warning devices.

9.2 TAXIWAY CLOSING DURING CONSTRUCTION PERIOD

Approval from the AA is required before closing a taxiway for construction purposes. Barricades and steady red lights shall be provided to indicate that a taxiway is closed, as indicated in the specification and drawings.

The Contractor shall locate barriers at areas approved by the AA. These barriers shall be weighed down by means of sandbags at both ends. The barrier consists of a triangular framework covered with plate sheeting, which is also covered with high-intensity grade retro-reflective material. Refer to the Drawing Pack in Volume 4 for details.

9.3 RUNWAY AND TAXIWAY CLOSURE

The Contractor shall liaise through the AM to gain access to the runways, apron and taxiways, who in turn shall liaise with the AA for access. The procedure is as follows

Any runway, apron and taxiway closure requires at least fourteen (14) days lead time, except for emergency repairs. As far as is practicable, working areas should be cordoned off from the active parts of the movement area by the placing of physical barriers. This is to both warn pilots and prevent work vehicles from inadvertently straying into the movement area. All barriers must be adequately lit at night. The t. The apron and taxiway lights leading to working areas must be permanently switched off. Guidance on the markings for denoting restricted use areas is contained in ICAO Annexe 14, Chapter 7.

A request form for closures of runways and taxiways is attached as Appendix B. This must be completed and emailed by the Engineers Representative to the ACSA representative designated by the AM. The Manager: Airside will either by e-mail or fax confirm the time and conditions for closures.

9.4 RUNWAY, APRON AND TAXIWAY RE-OPENING

After completing the work, the Contractor will clean the area daily before handover. A combination of hand brooming and mechanical brooming will be used, and a truck will be available to the Contractor for the removal of any swept-up debris. Existing runway markings will be reinstated before the end of each shift, unless otherwise agreed with the AA. An inspection by the contractor must be conducted prior to F&R's inspection. Once the inspection is successfully completed, a notification must be sent to F&R to conduct the final inspection before the site is handed over to airside operations. A checklist must also be completed and signed by the contractor's representative and the F&R.

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Upon successful completion of the above, F&R will advise ATC that the runway/taxiway is now available for use. The Engineer's Representative will provide Fire & Rescue progress reports every 30 minutes, starting 2 hours before RWY opening. If there is any reason why the runway cannot be opened on time at the specified time, the Engineer's Representative will inform the ACSA Project Manager as soon as he becomes aware of this situation. The ACSA Project Manager will then initiate the emergency procedures and mobilise the necessary ACSA personnel.

Fire & Rescue will inspect the no-work areas from 1 hour before RWY opening and maintain a vehicle to monitor and ensure no further activity in these areas. Construction activities must be completed 30 minutes before RWY opening. Plant and personnel will be clear of the runway 25 minutes before RWY opening (escort if required). On completion of a shift, the Contractor will ensure that the work area is clean and free of all FOD material. Painting should be completed 20 minutes before RWY opening. The Engineer's Representative Officer and Fire & Rescue will conduct a final inspection of the work area 20 minutes before the designated opening time. The sweeper truck will not leave the runway until Fire & Rescue has declared the runway open. Once the construction area has been inspected and found satisfactory by Fire & Rescue, Fire & Rescue and the Engineer's Representative will sign off the relevant runway handover forms. ATNS will be notified by Fire & Rescue, and the area will be opened for use by the specified time.

9.5 TRAFFIC SAFETY OFFICER

The Contractor's Safety Officer shall be made available to discuss safety and traffic accommodation matters whenever required by the Employer's agent/Engineer. The Safety Officer is responsible for the following:

- (a) Record on neat and dimensioned sketches and submit to the Employer's agent/Engineer the position and sign reference number, where applicable, of each sign, barricade, delineator, cone, amber flicker light, guardrail and permanent or temporary painted surface marking feature. The position of each shall be adequately referenced to identifiable permanent features located along the site of the works. These records shall also show the date and time at which the recorded traffic accommodation features are certified correct by the traffic safety officer, before being submitted to the Employer's agent/Engineer.

The records shall be amended whenever changes are made in the field, and the revised detailed sketches shall be submitted to the Employer's agent/Engineer. This shall include the recording of the positions of lookouts, flagmen, and stop/go control men, as well as their associated traffic accommodation equipment, wherever they are used.

- (b) Personally inspect the position and condition of each traffic accommodation feature on the whole site at regular intervals, to record all irregularities discovered and the remedial action taken, and to sign off as correct and submit to the Employer's agent/Engineer such record sheets the next day. The Safety Officer shall maintain a duplicate book for this specific purpose and record photographs on a daily basis.

The Safety Officer shall also submit to the Employer's agent/Engineer, before the start of works, a record of all matters pertinent to site safety and traffic accommodation throughout the site of works. He shall also record the daily labour returns of lookouts, flagmen, stop/go and traffic signal control men employed.

The Safety Officer shall be equipped with a radio and cellular telephone and shall have a vehicle and labourers at their disposal at all times. They shall be directly answerable to the Construction Manager. The traffic safety vehicle shall be a truck with a minimum capacity of 5 tons and shall be equipped with a high-visibility rear panel in accordance with the requirements of Chapter 13 of Volume 2 of the South African Road Traffic Signs Manual. The Safety Controller shall maintain a direct line of communication at all times with the AA police and ATNS responsible for the area within the contract limits.

- (c) Ensure that all obstructions related to the Contractor's activities are removed before sunrise, where applicable and instructed by the Employer's agent/Engineer, and that the runway and taxiways are safe for traffic.
- (d) The Safety Officer shall, also be responsible for removal of broken-down vehicles/equipment, resources, etc off the runway and taxiways and implementing actions requested by the AA with regard to the work to be carried out, be responsible for the erection and maintenance of all traffic signs, etc necessary for the accommodation of traffic.
- (e) The Employer's Agent/Engineer is entitled to call a false alarm at any given time, and the cost will have to be borne by the Contractor.

10 SPECIAL PROCEDURES FOR CONSTRUCTION AND NIGHT WORK

The Employer reserves the right to order that either all or part of the work be undertaken at night, and that those areas of the runways, RETs and taxiways used for taxiing be closed or opened to air traffic to suit the ATC.

Any work undertaken within 50 m of the RWY edge and 50 m of the TWY centreline shall be undertaken when the RWY and TWY are closed. The Engineer's Representative (ER) shall be approached at least 14 days before a NOTAM is required to close specific TWYs or RWYs. Any late submission of the request may result in delays, and the contractor will bear the associated costs.

Before the commencement of any substantial work on the movement area, a liaison group comprising representatives from the Airport Operations Department, Safety Department, Air Traffic Control, Airport Maintenance Department, and contractors' agents shall be established. The group will meet as often as necessary to review progress and consider any changes in working practices required to meet operational requirements.

The Contractor's attention is drawn to the fact that his subcontractors shall also comply with the specified safety regulations for entering airside, and that he shall remain responsible for their compliance with these regulations. The contractor shall consult with the Weather Bureau the day prior to any work at night on the runways, RETs, or taxiways to ensure that no delays due to inclement weather occur for reopening the runway the next morning.

A method statement for every closure (refer to Appendix D) shall be submitted to the AA through the engineer before any work commences. Careful briefing of all personnel working is one of the most important aspects to ensure high safety standards.

The Contractor shall provide artificial light after sunset to ensure the proper execution of the work in terms of the contract and shall be subject to the AA's approval and the power system shall comply with the Machinery and Occupational Safety Act No 6 of 1983 as amended, and the Standard Regulations for Wiring of Premises of the South African Institute of Electrical Principal agents.

At the end of the night work, the construction area shall be made safe to a distance of 50 m from the RWY edge and 50 m from the TWY centreline. This area shall be cleared of all personnel, plant and obstructions and shall have no loose material on the surface before re-opening. The work shall be programmed to allow sufficient time for cleaning and inspection of the area prior to its reopening.

Late opening of elements due to the negligence of the Contractor will be subject to penalties as indicated in Volume 3 of the contract.

10.1 BEFORE WORK COMMENCES, AGREEMENTS MUST BE ESTABLISHED ON

- The authorised routes - these should preferably be marked with the contractor's signs. At critical points, controls should be established. Where there is a real risk of conflict between aircraft and vehicles, control points should be manned. At less critical points, controls may be affected by lights or warning signs.
- The communication facilities to be used - where direct control of vehicles is required, each vehicle should either have R/T or be escorted by a suitably equipped vehicle. In some circumstances, it may be sufficient to have direct communications with control points by R/T or by direct telephone lines to air traffic control.
- The permitted heights of vehicles and equipment, and the limitations to be placed on operating heights of crane jibs, and any limitation to be placed on the use of electrical equipment, which might cause interference with navigational facilities or aircraft communications.
- Where contractors work on or traverse movement areas, these areas shall be thoroughly inspected before they are opened again for aircraft use, with particular attention being paid to the presence of debris and the general cleanliness of the surface. Where aircraft are constantly using areas open to

contractors, inspection will be carried out by ACSA at frequent intervals to ensure that the contractor carries out any necessary cleaning.

- Adequate markings are required for crane jibs when increased visibility is considered desirable. If work is of a prolonged duration, a constant watch should be maintained to ensure that the marking and lighting of obstacles and unserviceable areas do not degrade below acceptable limits. This also applies to marking and lighting arrangements to indicate a displaced threshold.
- The possible interference of cranes and other equipment on Instrument Landing Systems (ILS) and radar needs to be considered in conjunction with those responsible for electronic landing aids. Necessary steps will be taken to minimise any limitations. Construction equipment may have an adverse effect on obstacle clearance allowances, and the appropriate authorities shall be consulted when working arrangements are being planned. The Obstacle Limitation Surfaces, according to ICAO Annexe 14, will apply.
- The ACSA Projects Department will confer with the Manager: Airside and the Manager: Safety regarding the feasibility of carrying out the project with minimal disruption to normal operations.
- The Manager: Airside and the Manager: Safety will check through the logistics of the proposed project plan/schedule of works and make any advisory comments.
- Notification of the work to be carried out and details of the possible disruption to normal operations will be sent to the Airlines, Handling Agents and other airside Operators through Emails and NOTAMS by the Manager: Airside prior to commencement of work.
- Construction sites are to be roped, demarcated or hoarded off from the operational area.
- Occupational Health and Safety Legislation is to be adhered to by all.
- All workers on the site will be in possession of a valid ACSA Security Permit and, where applicable, a cell phone permit and camera permit.
- All delivery and construction vehicles must be issued with a valid ACSA Vehicle Permit, and all drivers to be in possession of an Airside Vehicle Operator Permit (AVOP)
- Appropriate personal protective equipment is to be issued and worn by all workers on site.
- Clearing of debris from the site is to be carried out in line with safe working practices to avoid any Foreign Object Damage (FOD).

- Final site inspections must be carried out by ACSA to ensure that any parking stand signage and markings are compliant with recommendations of the Airports Council International (ACI)/International Air Transport Association (IATA), as contained in their handbook's first edition of 2000 or later.
- On completion of work, all Airlines, Handling Agents and other airside users will be informed by the Manager: Airside where operational restrictions have been lifted.

10.2 BRIEFING BEFORE PROJECT COMMENCES

It is essential that time be set aside prior to commencing with the project, so that everyone is briefed on the work activities, including individual workmen. Special care must be taken on longer projects that all shifts are included, and new employees or replacements are briefed before they commence work on the site. Reference must be made to the responsibility placed on the individual by the Occupational Health and Safety Act. Under certain circumstances, it may be possible to issue written work instructions beforehand, but an oral brief should be held as well to give the opportunity to staff to ask questions. The following list details some of the points that should be included in the brief:

- Task(s) being carried out;
- Works Area and how it is to be marked by day and night
- Whether anyone is permitted to move outside the site boundaries, and if so, when and under what conditions
- The permitted working hours and any other restrictions
- The identification methods for warning the working party
- What to do when an aircraft approaches
- How to warn the working party if a person sees impending danger
- Who to ask in case of experiencing a particular difficulty
- Communications procedures and contacts
- The action to be taken in the event of an accident
- Controlled crossings and other approved routes
- Vehicle lights and markings are applicable
- Use of high-visibility clothing
- Warning not to leave equipment outside the designated working area
- The importance not to generate any Foreign Object Damage (FOD)
- Under no circumstances is food or rubbish to be left on site as this may attract birds and
- The dangers of engine suction and exhaust blast.

10.3 MARKING OF SITE BY DAY

The Contractor undertaking the work is responsible for ensuring that all marking equipment for use, such as cones, barriers, fences, etc, is approved and available in sufficient quantity.

Airfield Operations will provide the details of the approved pattern of fencing or marking. The limits of each site must be marked either with reflective cones or with Lind-pet (low-level) barriers firmly fixed to the ground at a spacing of no more than 3 metres or closer if specified by Airfield Operations.

Where specified, such as for extended projects, a Contractor's fence must be erected as specified in the drawings, Operational Safety Instructions (OSI) and Operational Works Memos. All holes, unconsolidated ground such as trenches, are to be marked by cones even though they may be inside an approved working area. Before work commences a member of the ACSA Safety Department will inspect the site to check that it is marked out correctly and to a sufficient high standard. For all stand closures, a series of cones and glims must be positioned across the back of the stand.

10.4 MARKING OF A SITE BY NIGHT OR LOW VISIBILITY

ACSA Safety will specify to the Contractor undertaking the work the type of night lighting and marking equipment to be used. All working areas must be lit during hours of darkness, commencing 30 minutes after sunset until 30 minutes before sunrise or in conditions of low visibility.

Work sites are to be lit by obstruction lights at a maximum spacing of 3 metres. The obstruction lights are to be of a pattern approved by ACSA Airfield Operations. Whenever possible, temporary stop bars are to be installed, or permanent stop bars lit to ensure that a particular block in which work is taking place is properly isolated. This does not obviate the need for a lookout if specified and if work is taking place.

Work sites that are required to be marked will be inspected by the ACSA Safety Department each night to ensure they are lit to the correct standard.

10.5 WORKS UNDER ON/OFF CONDITIONS

ON/OFF Work can be described as work that takes place on or within the obstruction limits of a taxiway, and when an aircraft approaches, both men and equipment endanger their safety as well as that of the aircraft and its occupants.

In this case, the men and equipment must clear the area to a safe distance away to allow the aircraft to pass. Once the aircraft is clear, the men and equipment can re-enter the area and continue their work. The conditions for work under ON/OFF work are as follows:

This type of work is only permitted if the visibility is above the specified minima as laid down by ACSA Airfield Operations.

- The work must be of such a nature that it can be abandoned, and when left, it will not be a hazard to passing aircraft.

- If equipment/plant is used, it must be mobile so that it can be withdrawn quickly
- All those in the working party must wear high-visibility clothing
- R/T Communications with ATNS are to be maintained at all times, and a lookout is nominated
- All members of the working party must be properly briefed, understand the safety measures and be suitably trained/qualified in the use of R/T communications and procedures; and

If work is carried out at night, red stop bars which surround the pavement block are to be switched on whenever possible to give the party additional protection. The above also applies to urgent electrical repairs.

11 EXISTING SERVICES

Before construction commences on any portion of the site, the Contractor shall arrange with the airport authorities for the area to be examined and thoroughly traversed by the authorities or approved specialist contractors with service detectors to locate existing services. The Contractor and the engineer or his representative will attend such inspections.

The contact details of the person to be contacted for locating electrical services on the airside are provided in the contact list (Clause 23).

12 ELECTRICAL EQUIPMENT LIMITATIONS

12.1 INTERFERENCE WITH NAVIGATIONAL FACILITIES

Where cranes are used, the potential for interference with navigational facilities exists. Fire & Rescue will be notified whenever a crane is to be used, for example, to remove a broken-down plant.

12.2 INTERFERENCE WITH AIRCRAFT COMMUNICATIONS

The Contractor will seek approval from ATNS via Fire & Rescue for the radio frequencies to be used on the project. Should any vehicles or radios be found to cause interference with aircraft communications, the relevant vehicle shall be removed from the site or the radio switched off until the fault can be traced and repaired.

13 HOT WORK PERMIT

The following activities have been identified as hot work:

- Heating paver screeds using gas burners
- Heating bituminous products in spray tankers using gas burners
- Any other work involving open flames

A hot work permit with a validity period of two weeks will be applied for and will list the above activities. Fire & Rescue will be asked to extend the validity of this permit every two weeks.

A copy of the permit will be carried by everyone on the site who is likely to engage in hot work, as well as the Safety Officer. A copy will also be kept in the Site Safety File.

14 RADIO COMMUNICATION AT THE AIRPORT

The Contractor shall establish an acceptable radio communication system on the airport. Such a system must be approved by the ATC to ensure that no interference with normal aeronautical communication occurs. A special radio frequency will be provided by ACSA for the contract.

15 RESPONSIBILITY OF THE AIRPORT AUTHORITY AND AIR TRAFFIC CONTROL

15.1 AIRPORT OPERATIONS AND AIR TRAFFIC CONTROL

The Air Traffic Controller (ATC) and the Airport Authority (AA) are ultimately responsible for the safe and efficient operation of the airport.

The AA will, in his/her official capacity, have the authority to give the Contractor verbal or written orders on matters concerning the operation, security or safety of the airport and the Contractor shall inform the Employer's agent/Engineer of the orders and carry out the instructions as if issued by the Employer's agent/Engineer.

The ATC is responsible for the safe movement of all aircraft, both in the air and on the ground. The ATC shall always have absolute authority regarding the movement of any construction personnel, vehicles or equipment, where such movement takes place within the obstruction-free areas of existing facilities, or where it affects the safe movement of the air traffic, and his/her instructions shall be implicitly obeyed. The ATC's decision regarding the acceptability and programming of the Contractor's activities within the areas mentioned above shall be taken into account.

All liaison with the AA or ATC shall be arranged through the Employer's agent/Engineer. The Employer's agent/Engineer will establish detailed lines of communication.

15.2 NOTAM

The Manager: Airside will arrange for the approval and issue of a NOTAM. He will report back to the party who requested the NOTAM, who in turn shall liaise with Fire and Rescue for an escort and ensure that the Contractor has completed the safety induction course.

15.3 PERMITS

The AA will issue the necessary application forms to those who apply to the airport management for an Airside Vehicle Permit and/or an Airport Security Permit and will decide, on receipt of the completed forms, whether or not to issue the permits. Where necessary, the application may include cell phones and cameras.

The AA may at any time withdraw or suspend the Airside Vehicle Permit or any Airport Security Permit.

All permanent staff will apply for ACSA permits. The Contractor will provide, within one week of the award of the contract, a list of staff (including identity numbers) who will receive airside induction training. A meeting will then be scheduled to inform the Contractor of the permit requirements and the issuing of permits. Staff with serious criminal records will be rejected. Special induction training sessions will be scheduled for the contract to ensure the timely issue of permits to permanent staff members.

16 AIRPORT SECURITY

The Contractor shall ensure that the security of the airport is maintained wherever it may be affected by his operations. He shall be responsible for the observance of all security regulations and related requirements, both by his employees, subcontractors and their employees, as well as by his suppliers.

Entry into the security area, whether for personnel, vehicles or self-propelled construction equipment, shall be subject to the issue of access permits. All personnel or vehicle permits shall be displayed at all times while such person or vehicle is within the security area. Permits may be issued to grant access to a designated area only, and it shall be the Contractor's responsibility to exercise the necessary control on site in order to prevent trespassing by personnel or vehicles in this regard.

No photographs shall be taken on the airport without authorisation by AA, and the possession of unauthorised cameras and cell phones on the site is expressly forbidden. The possession of any firearms, explosives or other weapons on the site is also expressly forbidden. Smoking or fires are prohibited in certain areas on the airport, and forbidden on the airside, and fires required for any purpose may only be lit after written approval has been obtained from the airport authorities, who will also supervise such fires. Smoking is only allowed in properly demarcated areas and marked with SMOKING ZONE signs.

Sketches, drawings, diagrams, information, etc regarding the works may not be made, recorded or reproduced other than that specifically required by and for the purpose of the contract, and no sketches, drawings, diagrams, information, etc may be published in magazines, journals or elsewhere unless authorised in writing by the Employer.

This document contains information related to the defence of the Republic of South Africa and should be treated as secret. Amongst others, the provisions of section 118 of the Defence Act, Act 44 of 1957, as amended, as well as the provisions of the Official Secrets Act, Act No. 16 of 1956, as amended, are applicable.

The failure of the Contractor to comply with these or other security regulations and requirements, shall be sufficient reason to cancel the Contractor's access permits and/or terminate all construction activities until such shortcomings or breaches of security have been rectified, and the Contractor shall have no right to claim for any resulting delays, standing time or losses whatsoever. Any costs incurred by ACSA in rectifying and controlling the breach will be for the Contractor's account.

In order to reduce the risk of theft and FOD creation on the airside, all recovered material, including lights, electrical cabling, will be securely stored in containers in the site camp. No additional payment will be made for the provision of these containers, and the Contractor shall include this in their establishment cost. ACSA will carry out periodic audits to confirm compliance in this regard.

17 MOVEMENT WITHIN THE AIRPORT (AIRSIDE)

17.1 GENERAL

The Contractor shall control all movement of his personnel, vehicles and equipment according to the stipulations laid down by the ATC or specified in the documents or indicated on the drawings. In order to achieve proper control over all movements on site, certain areas, routes or corridors shall be clearly demarcated by the erection of temporary barriers, cones, construction fences or security fences, as indicated on the drawings or instructed by the AA. Such fences, barriers or cones shall be erected or placed prior to the commencement of any construction activities in any particular area and shall be moved to new positions as the requirements change during construction of the works.

Movements and operations within the above-mentioned demarcated areas shall not normally be subjected to any restrictions from the ATC. Any access, haul or construction routes shall, however, be fixed after consultation with the AM.

The Contractor must allow in his construction program for any time required to arrange for permission for employees to enter the airside area to execute the contract. Access to the working areas shall be only through the ACSA-established gates.

The Contractor will bear the cost of permits for the Contractor's personnel and vehicles. **It is the contractor's responsibility to arrange for a timely application for permits, including attending the required induction or other training courses.** The cost of these courses or any subsequent delay will be for the contractor and is not refundable.

17.2 AIRSIDE ACCESS

The Contractor's employees will not be allowed to enter the airside area without permission. A Security Permit to enter the airside area will ONLY be issued to persons who have undergone the compulsory prescribed Safety Induction course. All the Contractor's labourers and subcontractors shall attend a compulsory safety course. The Contractor shall provide escort services as indicated in Volume 3. Every person who has completed the safety induction course shall be in possession of a referee whistle or a similar approved device. This whistle shall only be used to warn a remote person infringing the safety of the airside operations.

Stakeholders who wish to conduct their own training may do so provided the necessary accreditation is obtained from the Aerospace Industry Education Training Board (AIETB).

Various accredited training bodies can provide training, of which Aviation Academy for Southern Africa (AAFSa) is one.

All workers entering the airside area must wear lime coloured safety reflective waistcoat-type jackets. Waistcoat jackets are more visible at night and in low visibility/fog than the vest type. The Contractor's employees may be exposed to excessive aircraft noise, and the required measurements shall be taken to comply with the Health and Safety regulations. The Contractor shall warn their employees regarding aircraft jet blast.

Access for construction works to the airside area must be limited to the minimum. Special permits for temporary workers to enter the airside area are required. Permits will not be issued to persons of suspect background. Non-South Africans must hold valid work permits to qualify for Security Permits. Full particulars on the application will be required. Any worker who is granted a permit to enter the airside area must wear such permit while on site and must also be in possession of his/her identification document (ID). The Contractor's workforce will be checked from time to time to ensure compliance with the above. Any personnel found without a permit and an ID will be arrested and charged. The Contractor will be held liable for the behaviour of his personnel.

The ACSA permit/security policy must be adhered to at all times. The policy document can be obtained from the Permit Office (see Contact List). Abuse of the system will lead to termination of the issue of any further permits, and permits are not transferable.

The Contractor must confirm with ACSA and control the process of obtaining the necessary permits for their workforce that may have to work on the airside. He must further manage the process during construction, and his tender must allow for and include possible loss of time for workers to move through security checkpoints, etc.

All costs of obtaining permits will be for the Contractor's account. When a permit is no longer required for the workforce, the Contractor shall return the permit to the Permit Office.

The contractor must provide its own security during the construction period. The security will comprise of security equipment, checkpoints, metal detectors, X-ray machines, etc. ACSA security must vet and clear all security guards permitted to sleep on the premises. Security guards who have not been vetted and cleared will not be permitted to sleep on site. Should the Contractor opt to use an alternative security company, the security company must also be cleared with ACSA security. Only ACSA-approved security companies shall be allowed.

17.3 AIRSIDE MOVEMENT

The Contractor shall submit a plan to the Manager: Airside for routes to be used for travelling between the various construction areas, the spoil site and the campsite. The Contractor will not be permitted to travel on any other routes.

17.4 AIRSIDE VEHICLE CONTROL SYSTEM

17.4.1 RESPONSIBILITIES OF THE CONTRACTOR

Contractors wishing to operate vehicles on the airside without the AA's escort shall make the necessary applications in the manner set out below for each vehicle and driver. As a condition of approval of an application for an Airside Vehicle Permit, the company shall ensure that all vehicles and drivers are covered by the Contract Works, Public Liability and SASRIA Special Risks Insurances.

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

The Contractor shall immediately report to the AA 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 in movement areas.

17.4.2 FITMENT OF MODE-S VEHICLE SQUITTERS:

All vehicles operating on or within the manoeuvring area (runways and taxiways) shall be fitted with cooperative Mode-S vehicle transponders. The vehicle squitters identifies the specific vehicle and its associated call sign through the allocated Mode-S squitter code to the tower controller.

Non-equipped vehicles requiring ad-hoc entry into the manoeuvring areas, will only be allowed access if they are accompanied by another vehicle having a fully operational squitter or are being escorted by fire and rescue.

Mode-S Squitters are available at ATNS Technical Support for rental/lease for the duration of the project.

17.4.3 AIRSIDE VEHICLE PERMIT

Applicants are to demonstrate an operational need for the vehicle to enter the airside, and include the following details of the vehicle:

- Name and address of the owner
- Make and model
- Type of work to be undertaken
- Proposed areas of operation
- Certificate of provincial vehicle registration (or reasons why the vehicle is not registered)
- Any special features

Vehicles are to display the current Authority for Use Airside Permit on the right-hand side of the windscreen or in a holder. All vehicles (including delivery vehicles, etc) shall display appropriate identity signage as follows:

- Lettering shall be 25 mm wide and 200 mm high, black or dark blue. Signage shall be applied to both sides and on the roof of the vehicle. The company's prefix shall be clearly visible, as well as the vehicle's registration or fleet number. All vehicle registrations shall be recorded in the ACSA logbook.
- A medium-sized amber strobe light shall also be fitted on the roof or other high part of the vehicle or construction plant.
- Vehicles shall be registered, or if not registered, shall meet the mechanical and roadworthiness requirements of the relevant provincial authority. In the case of specialist vehicles and equipment, the recognised industry standards shall be met.
- An appropriate radio-equipped vehicle (e.g. from Safety/Fire and Rescue or a Contractors approved Escort) shall at all times escort vehicles wishing to operate on the manoeuvring areas of airports.

17.4.4 AUTHORITY TO DRIVE AIRSIDE

The authority to drive airside is coupled to the Airside Vehicle Operators Permit (AVOP).

The Contractor certifies by applying for an AVOP that the proposed driver:

- has an operational need to drive on the airside
- holds a current provincial driver's license and, where appropriate, is endorsed with an official license to cover the specific type/s of vehicle/equipment to be operated and is able to operate the vehicle/s concerned in a competent and safe manner
- is proficient with the terminology used to describe the airside and is familiar with the airport layout relevant to his/her driving duties
- is conversant with the contents of this Procedure Manual.

Except as otherwise specifically authorised, no person shall drive a vehicle on airside unless the vehicle has a current Airside Vehicle Permit and their Security Permit, which is valid for that area of the airport under construction. It is an explicit condition that the Contractor maintains a control system at the defined security gates for access to vehicles and people from outside using these gates during the work periods. This control shall include giving directions and providing contractors with escorts to and from the specific work area.

17.4.5 AIRSIDE VEHICLE OPERATORS PERMIT - AVOP

An AVOP permit is only required for the contractor's supervisor who has the responsibility to lead the workforce onto the airside workplace. As a first step, drivers of any vehicles or items of construction equipment must hold an authority to drive airside (Airside Vehicle Operators Permit) - AVOP, endorsed by the ACSA Airport Authority. Such a Driver's Authority is not transferable between individuals or between airports and must be carried on the person for the duration of the works on the Airside. The above permit is issued to the driver or

operator of equipment, subject to completion of the theoretical and practical examination and satisfying the competency assessments. Drivers and Operators are also subject to medical examination and shall be in possession of a valid driver's license and public driver's permit where necessary.

All vehicles and items of construction equipment shall display the permit authorising entrance to the airside clearly in the windscreen of the vehicle or item of construction equipment.

As a driver on the Airside of the airport, it is the driver's responsibility to ensure that he/she remains up to date with the latest amendments to the Airport Airfield Regulations.

17.4.6 RULES FOR DRIVING AIRSIDE

A driver wishing to operate vehicle(s) on airside areas of the Airport shall:

- wear a valid Airport Security Permit at all times when in a restricted area
- only operate a vehicle displaying a current Airside Vehicle Permit
- produce the Airport Security Permit and Airside Vehicle Permit on demand by the AA
- comply with any instruction given by the Manager: Airside at all times
- only operate a vehicle within the area of operation as approved by the Manager: Airside
- an escort must be arranged by the Manager: Airside should the driver operate beyond the approved areas.

All drivers shall:

- give way to manoeuvring aircraft or an aircraft on tow (operation of the red anti-collision beacons may indicate that aircraft engines have started or that push-back or towing of the aircraft is about to commence or is underway)
- obey speed limits. Unless otherwise indicated, speed limits are:
 - on an Airside Road: 30 km/h
 - on perimeter service roads: 30 km/h
 - on an Aircraft Parking Stand: 5 – 8 km/h
 - Elsewhere on the apron or movement area: 15 km/h
- obey all other road signs and markings installed around the airport (markings are not always accompanied by associated road signs)
- follow the service roads (apron service roads are delineated by white staggered lines) provided for vehicular movement (as indicated by the AA after award of tender)
- make sure that loose material, equipment and spoil material carried on a vehicle is covered adequately to prevent spillage, and where spillage does occur, to clean it immediately

- when operating a vehicle at night, or in periods of poor visibility while moving on the movement area, ensure headlights are dipped and taillights are displayed as for normal night driving
- park vehicles and equipment in areas specified by the AA (note that Areas marked for steps and are vacant may be utilised by vehicles associated with the servicing of aircraft in the period ½-hour before to ½-hour after arrival or departure of aircraft)
- when operating vehicles in excess of 4,3 m in height, obtain the necessary clearance, either by radio or by telephone from Apron Control to use the alternative routes as indicated by ATC
- when operating vehicles in excess of 4,3 m in height when crossing a taxiway, runway, apron, etc outside the delineated service roads or any service vehicle behind the white safety lines at the back of aircraft stands, do so only when:
 - (i) there is no aircraft on the facility
 - (ii) no aircraft is about to move from the aircraft stands
- Take extreme care when overtaking any other vehicle on airside service roads.

Drivers shall not:

- Operate construction vehicles/plant equipment without having had an adequate rest period since the previous shift
- Drive on taxiways or runways unless in radio communication with Air Traffic Control or under escort by an Airport Authority vehicle
- Operate a vehicle while under the influence of drugs or alcohol
- Operate a vehicle while taking medication that can cause drowsiness
- Operate a vehicle closer than 50 metres to an aircraft
- Drive a vehicle between passengers moving to and from an aircraft.

The Airport Authority reserves the right to:

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

17.5 ACCIDENTS AND INCIDENTS

17.5.1 SCOPE

This procedure details the reporting steps to be taken by all ACSA personnel as specified below, on all ACSA-owned or managed airports, including sites occupied by stakeholders and contractors. These steps shall be followed in the event of an accident or incident within the parameters as per the definition.

17.5.2 OBJECTIVE

To effectively inform all ACSA relevant management and personnel of all incidents or accidents, which have the potential or could result in injury, illness, disease, death, aircraft disaster, damage to property, equipment, vehicles, major aircraft obstruction, normal operational obstruction and business interruption.

17.5.3 DEFINITIONS

As per ACSA Safety Definitions B020 001M & D070 003 M.

17.5.4 PROCEDURE GENERAL

All reportable occurrences shall be captured on the Reporting of Occurrences Form within the following time frames:

- (a) Logging - Within twenty-four (24) hours of the occurrence taking place. The reporting category on the General tab needs to be selected within the logging process.
- (b) Verifying and Closing without investigation - within seventy-two (72) hours of the occurrence been logged.
- (c) Verifying, investigating and closing – Within a reasonable timeframe but not exceeding thirty (30) days.
- (d) All the occurrences that fall within the SACAA regulation part 12 will only be closed upon the completion of the investigation by SACAA, and the final report is published.
- (e) Distinction shall be made between the following types of accidents:
 - Incidents of a minor nature, which do not have an effect on the operational efficiency of the vehicles, aircraft, building or airport property, are involved and reported within 24 hours of occurrence.
 - Accidents, which cause damage to property affecting the operational efficiency of vehicles or infrastructure or causing injury, illness or disease to persons travelling or visiting the airport and are reported immediately to the AA and the SAPS. Where possible, neither the driver, the passenger, nor the vehicles should leave the accident site before the arrival of the police.

The Project Manager receiving the information shall, upon receipt, use his/her discretion by immediately taking the necessary steps to restore the situation and if necessary, report the situation to the Regional General Manager.

17.5.5 RESPONSIBILITIES

The overall responsibility for adherence to these procedures lies with the relevant ACSA Regional General Manager. However, in the absence of the relevant ACSA Regional General Manager and on a shift basis, this procedure shall rest with the most senior person on duty at the Help Desk and the Fire Department. Due to the necessity of compliance with this procedure, it is not possible to nominate one responsible person.

17.6 ADDITIONAL REQUIREMENTS REGARDING CONSTRUCTION ACTIVITIES

17.6.1 EXISTING SURFACES

The surfaces of existing facilities at and adjacent to places where the contractor is working shall be absolutely clean whenever they are used by aircraft. This will require the presence of a cleaning team to remove all debris, stones or other material from the surfaces. The Contractor shall be responsible for any damage to aircraft or other equipment as a result of failure to comply with this requirement. The contractor must provide designated Foreign Object Debris Bins within the confines of the working area.

17.6.2 BARRICADES AND MARKINGS

The Contractor shall erect, maintain, move and finally remove temporary barriers, signs, fences and markings required by the employer, all as prescribed by the airport authorities or as shown on the drawings.

Barricades, markers and signs shall be placed under the direct supervision of the F&R or ER's Safety Controller whilst being in radio contact with ATC, prior to entering a work area for construction purposes. No movement of the contractor will be permitted outside demarcated areas for construction, and these must be treated as NO-GO AREAS. (Also see Par 20.1.6).

17.6.3 ILLUMINATED RUNWAY CLOSURE MARKER

The existing permanent Runway closure marker at the end of both runways should be illuminated before the start of any works. No construction work will be allowed until the closure marker has been commissioned and approved by AA.

Construction on the Runway will not be allowed unless the closure marker is operational.

17.6.4 UNFORESEEN DELAYS DUE TO ACTION BY AIRPORT AUTHORITIES

The Contractor shall note that, at any time during the contract period, the arrival or departure of any aircraft may be delayed or brought forward, and the Contractor may be required to adapt the programme of his work accordingly.

18 ENVIRONMENTAL CONSIDERATIONS

The Environmental considerations that the contractor must adhere to are specified in Clause C3.3 (Volume 3).

19 THE SAFETY PLAN

The following fundamental safety procedures must be taken into account with which to ensure that work in the Movement Area is properly conducted and are to be followed by those responsible for organising and briefing working parties.

- (a) The following very important information must be made available to all staff required to conduct works on the Movement Area:
 - i. Know whom to contact and by what means should a problem arise.
 - ii. Know what action you will have to take in the event of an accident.
 - iii. Manoeuvring Area Entry Points, Entry and Exit points to the Manoeuvring Area must be via an inter-stand clear way.
 - iv. Always inform Airfield Operations and the ACSA Safety Department when work in an area has been completed.
- (b) Operational Areas
 - i. Always ensure that Airfield Operational Clearance has been obtained before commencing with the work required to be conducted. ACSA Airfield Operations and ATC must approve operational Clearance for ALL work taking place on the Movement Area, including all designated Grass Areas within the Airport Boundary. Routine or planned work is normally discussed with Airfield Maintenance Planning prior to the start date. This process can be managed daily and/or weekly by means of the Works Meetings held.
 - ii. When work involves a complicated layout or difficult phasing, Airfield Operational Planning will issue a separate "Works Memo" accompanied by the necessary drawings and detailed requirements to be included as part of the Works Programme.
- (c) Where work is extensive and affects large numbers of aircraft and major traffic diversions, an Operational Safety Instruction (OSI) will normally be issued as well as referred to the Works Programme.
- (d) Where necessary, work will also be notified by NOTAM's or AIP Supplements.
 - i. Urgent work and certain specified work, including routine inspections, replacement of light fittings, repair of pit covers on the runways, and maintenance of navigation aids and communications equipment at existing sites are subject to prior approval from Airfield Operations and Planning, and must be cleared by ATC.

Notwithstanding the permission granted to commence works, no vehicles or equipment shall be permitted within the Cleared and Graded Area when a runway is in use for landing or take-off. Any vehicle engaged in routine maintenance in terms of ON/OFF conditions shall withdraw to the limits of the Cleared and Graded Area whilst an aircraft is either landing or taking off.

- ii. Examples of safety checklists incorporating the various items to be considered in the safety plan are attached in Appendix B, and include:
- RWY/RET/TWY Closure and Opening Checklist
 - Daily works Checklist
 - Additional Daily Works Checklist.

(e) The Safety Plan will be executed in four phases during the night work construction periods.

19.1 PHASE 1: KICK-OFF MEETING TO BE CHAIRED BY THE ER 1 HOUR BEFORE THE TAXIWAY/RET/RUNWAY IS CLOSED

The primary function of the kick-off meeting is to determine if all measures are in place to allow a normal shift's work to be completed in time and as indicated in the Contractor's Method Statement. The following representatives of parties involved with the project will attend the meeting:

- The Engineer's Representative (ER) and ER's Safety Controller
- Site Agent (for each contractor on the project including subcontractors)
- Site Safety Officer/Escort services
- Representative of the AA safety or delegate
- F&R Shift Controller

The following agenda will be discussed and minutes taken by the ER or his representative or the ER's Safety Controller:

- Confirm emergency procedures (by means of detailed explanation by contractor)
- Current weather condition and wind direction (feedback by ER's Safety Controller)
- Expected weather conditions, wind direction and Air Traffic Movements for the night (feedback by ER's Safety Controller)
- Plant and personnel (List to be compiled by contractor's safety official)
- Check hard copy of NOTAM requirements and confirm with ATC (ER's Safety Controller)
- Check available work time and confirm required quantities
- Check latest status and departure time of aircraft (F&R)
- Confirm construction plan, work areas and routes to be followed by Air Traffic and Construction Vehicles, compare with NOTAM (ER's Safety Controller to submit route diagram)
- Confirm availability of Traffic Signs, Barricades and Delineators and the responsibilities for moving the signs in place (ER's Safety Controller to submit traffic diagram)
- Confirm Method Statement by the Contractor
- Confirm operational requirements:
 - Plan transverse and longitudinal joints
 - Temporary paint markings
 - Moving temporary taxiway lights
 - Closure of taxiways
 - Spoil and stockpile sites as per the drawings
 - Contractor
 - Contractor
 - Electrical Contractor
 - ER's Safety Controller
 - Contractor

- Affected electrical services
- Open excavations along the facilities
- Confirm the availability of a qualified Motor Mechanic on site
- Confirm there are sufficient critical spares available for critical plant
- Electrical Contractor
- All Contractors

19.2 PHASE 2: TAXIWAY/RET/RUNWAY CLOSURE CHECKLIST TO BE COMPLETED BEFORE ACCESS TO FACILITIES

The ER's Safety Controller will report on the following matters:

- Taxiway/RET/Runway Closure Markers, Barricades and Delineators placed in position
- Plant and vehicles provided with Amber Flashlights and Reflective Tape as required
- Personnel have Lime Reflective Jackets and necessary valid permits (e.g. AVOP, etc)
- Security measures at the gate are in place
- Radio Communications of both F&R Escorts and ER's Safety Controller in place

19.3 PHASE 3: OPERATIONAL MATTERS DURING CONSTRUCTION

The ER's safety controller will inform the Contractor to adhere to the following timetable during the shift to ensure that the Taxiway/RET/Runway can be opened to Air Traffic in due time:

- ER's Safety Controller must confirm with the contractor 2 hours before taxiway/RET/runway opening time the official completion time (Refer to items 20.1.1, 20.1.7).
- Construction activities will be completed 30 minutes before taxiway/RET/runway opening time. ATC will be informed on completion of the construction activities.
- No longitudinal steps will be allowed.
- Temporary paint markings for live taxiways, RETs and runways will be completed 20 minutes before opening. ATC will be informed on completion of the paint markings.
- Plant will vacate the runway 25 minutes before opening to designated storage areas.
- The ER's safety Controller must be finished with inspection of work completed 20 minutes before opening after which the vehicle barricades shall be removed.
- The taxiway/RET/runway opening checklist will be completed and handed over to officials of Fire and Rescue completed 10 minutes before opening.
- The runway closure markers are to be removed on instruction of the officials of Fire and Rescue 10 minutes before taxiway/RET/runway opening time.

The Contractor will be required to include the above timetable in his proposed Construction Method Statement to be approved by the Employers agent/Engineer and the AA. This will include a methodology for cleaning the work area and the haul routes. A cleaning team and equipment will be on standby for one hour after opening, should additional cleaning be required on the instructions of Fire and Rescue.

The Construction and phasing plan indicates the order of construction to prevent conflict between aircraft movements and construction vehicle routes. Haul routes will follow the perimeter road, apron and taxiways. Delineators will indicate the haul route between the work area and the gate or spoil and stockpile areas. Vehicles will not be allowed to move onto the grass verges or close to the NAVAIDS.

Barricades will be placed at the entrance to taxiways affected by night work such that aircraft approaching a closed taxiway will have an alternative route to follow. Each work area will be totally isolated by means of barricades and Markers, except for a single access for construction vehicles. Work areas will be demarcated at least 50 m away from any "live" Taxiway centreline and 80 m away from the Runway centreline.

Vehicles will be fitted with reflective tape, 2 strips, attached horizontally, each 150 mm wide and with 150 mm gap along the two longer sides of the equipment. Rotating amber lights will be fitted to the equipment. Construction teams will be identified by colour codes.

All lights on vehicles, plant or other obstacles, the work area and used for demarcation will be inspected regularly by the ER's Safety Controller. Any malfunctioning light needs to be replaced within 30 minutes.

As part of the ER's personnel, the Safety Controller will have the following duties on site:

- Confirm with ATC on a continuous basis the scheduled route for aircraft and vehicles
- Inspect and confirm Markers, Barricades and Delineators at the start and during routine inspections on shift;
- Check safety procedures and markings by the Contractor.
- Keep in contact with the Escorts and give instructions if required by the ER
- Keep track of ATC instructions to aircraft and their movements, and notify if errors have been picked up
- Keep track of vehicle movements and give assistance where required; must be informed of visitors and subcontractors coming to the work area, and be informed of who the escorts are
- Liaise with Airport Security on permits and security at the gate, and do regular spot checks for visibility of permits on contractor employees.

19.4 PHASE 4: RUNWAY, APRON OR TAXIWAY OPENING CHECKLIST TO BE COMPLETED 10 MINUTES BEFORE OPENING OR AS REQUIRED BY FIRE AND RESCUE IN CASE OF AN EMERGENCY OPENING OF THE RUNWAY, APRON OR TAXIWAY

The work shall be programmed such that enough time is allowed for cleaning and inspection of the runway/RET/taxiway prior to opening of the element. Late opening of elements due to negligence of the contractor will be subject to penalties. (See 20.1.3)

The work areas and haul routes will be inspected by the ER's Safety Controller 20 minutes before opening, after which the following Taxiway/APRON/Runway Opening Checklist will be completed:

- Excavation backfilled where required in RWY and TWY or TWY Strip
- Ramps are complete and in place as required
- Haul routes clean
- Work area clean
- Plant and delineators moved to the designated areas
- Personnel are ready to move Barricades and Markers to designated areas on instruction by Fire and Rescue.

The checklist will be signed by the contractor's Safety Official, ER's Safety Controller and officials of Fire and Rescue, 20 minutes before opening. The checklist must be completed by the ER's Safety Controller.

20 THE CONTINGENCY PLAN

The following actions will be taken if required:

20.1 LATE COMPLETION ON A SHIFT

20.1.1 ASPHALT WORK, EARTH WORKS, LAYER WORKS, AND ELECTRICAL WORKS

- ATC will be contacted by the ER's Safety Controller via F&R 2 hours before official completion and again 1 hour before completion, and the status communicated.
- Should estimated completion be later than the designated completion time, the Employer's agent/Engineer will advise on immediate termination of work and making safe the work area.
- The Taxiway/RET/Runway Opening checklist will be done.
- Handover to the Fire and Rescue team will follow.

20.1.2 PAINT MARKINGS

The paint contractor will be contacted 3 hours in advance of his services being required, and his attendance will be confirmed every hour. Yellow and white paint and hand equipment shall be available on site for possible emergency use.

20.1.3 CONFIRMED LATE COMPLETION

This shall be identified 2 hours before opening and again 1 hour before opening, and confirmed by the ER's Safety Controller and communicated through F&R to ATC and the Help Desk. The expected completion time shall be made known 30 minutes before opening time or earlier and adhered to.

The ER's Safety Controller will go through the opening checklist before signing the handover form.

20.1.4 Sudden Rain

Where a sudden downpour occurs, work will be stopped and the balance of the work period re-planned in order to open the runway to air traffic at the appointed time. Should rain delay critical asphalt work, which could delay the opening of the runway or taxiway, paving will be stopped and a temporary ramp installed.

20.1.5 Emergency Flight / Fog/Low Visibility

Should the Contractor be required to vacate the runway due to the AA's need to use the ILS on the Runway or Taxiways, this will be treated as an emergency measure. Works will be stopped immediately. A temporary full-width ramp shall be installed in the case of asphalt works and earthworks excavations, backfilled in the case of earthworks as per strip hazard requirements. The Contractor shall evacuate the runway within 45 minutes of being notified of the emergency.

20.1.6 Aircraft or Vehicles Violate No-go Areas

The ER's Safety Controller will notify ATC via F&R per radio and if possible, physically stop the violation. (Refer to Par 15.1).

20.1.7 Non-Attendance of Radio or Communications Support

The ER's Safety Controller will notify the controller at the Fire Station and the contractor will be notified to stop all work and vacate the work area if there is no attendance in 30 minutes. A temporary ramp will be installed, and the Runway/RET/Taxiway opening procedures will be followed.

This rule will also apply to telephone and cell phone communication failures between the ER's Safety Controller and F&R.

20.1.8 Inoperative Plant on the Taxiway/Runway

The Safety Controller will notify ATC by radio. ATC will be contacted 2 hours before official (as per NOTAM) completion time and works will be stopped. ATC will be contacted again 1 hour before completion and the status communicated.

The Contractor shall ensure that any plant inoperative on the RWY or within the ILS restriction distance (Zone III) can be removed immediately. The Contractor's method statement shall clearly indicate how the inoperative plant in these areas will be removed.

21 Reporting of Accidents/Incidents

Contractors shall report to the AA any accident involving a vehicle or plant under their control where the accident has involved injury or damage to another vehicle, aircraft or airport property; or where there is injury to driver(s) or passenger(s) in the vehicle. The prescribed accident report shall be used for this purpose. Refer to paragraph 15.

22 PENALTY FOR NON-COMPLIANCE WITH THE AIRSIDE RULES AND SAFETY SYSTEM

The Contractor's attention is drawn to the penalty system introduced by the AA to enhance airside safety. The contractor shall be conversant with the content of the KSIA Airside Safety Penalty System document, which is available from the Department Head: Aviation Safety, or go to the website, www.acsa.co.za.

Under no circumstances will the contractor be permitted to use any baggage trolley or other airport equipment. Should the contractor or his subcontractors be seen to make use of any trolleys or other airport equipment, an immediate KSIA spot fine per occurrence will apply, and such monies will automatically be deducted from any payment certificates due to the contractor.

Similarly, the contractors and subcontractors are limited to their actual site establishment areas and places of work and under no circumstances will materials, equipment, tools, cooking or any other disturbances be allowed in public areas and delivery of materials via the operational environment in which their work will be performed. A KSIA spot fine per occurrence will be deducted from any payment certificate due to the contractor should the above not be adhered to.

The Contractor's employees are to be clearly identifiable and must be discouraged from visiting the public areas of the airport.

Failure or refusal on the part of the contractor to take the necessary steps to ensure the safety and convenience of the public accommodation of traffic, resources such as plant and personnel in accordance with these specifications or as required by AA or ordered by the Employers agent/Engineer, shall be sufficient cause for the Employers agent/Engineer to impose penalties.

Fixed and non-fixed penalties shall be deducted for each and every occurrence of non-compliance with any of the requirements of the standard specifications. In addition, time-related penalties over and above the fixed penalties shall be deducted for non-compliance as specified.

23 CONTACT LIST

Attached is a list of telephone numbers for individuals who can be contacted. A full contact list shall be provided upon award of the successful contractor.

Function/purpose	Name	Contact number
Project Manager (A Representative)	Kamogelo Molawa	TBC upon award.
Manager: Aviation Quality and Safety	Lentswe Kekana	TBC upon award.
Manager: Airside Operations	Nakedi Kamanga	TBC upon award.
Safety Induction courses	Menzies Training Academy Lynette Adendorf	T: +27 21 408 8309 M: +27 66 301 6152
Radio Communication course	Menzies Training Academy Lynette Adendorf	T: +27 21 408 8309 M: +27 66 301 6152
Access Permits	Permit Office	+27 32 436 6505
Employers agent/Engineer	Yajna Nankhoo	+27 31 536 8310

Amendments

Date	Item Changed	Source

24 DECLARATION

I/we herewith declare on (date) that I/we:

(name) (signature)

(name) (signature)

(name) (signature)

(name) (signature)

(name) (signature)

(name) (signature)

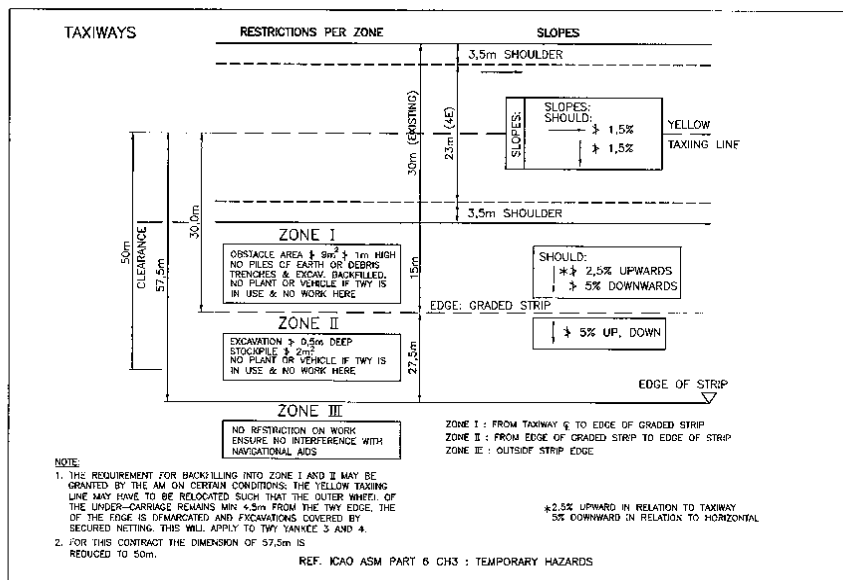
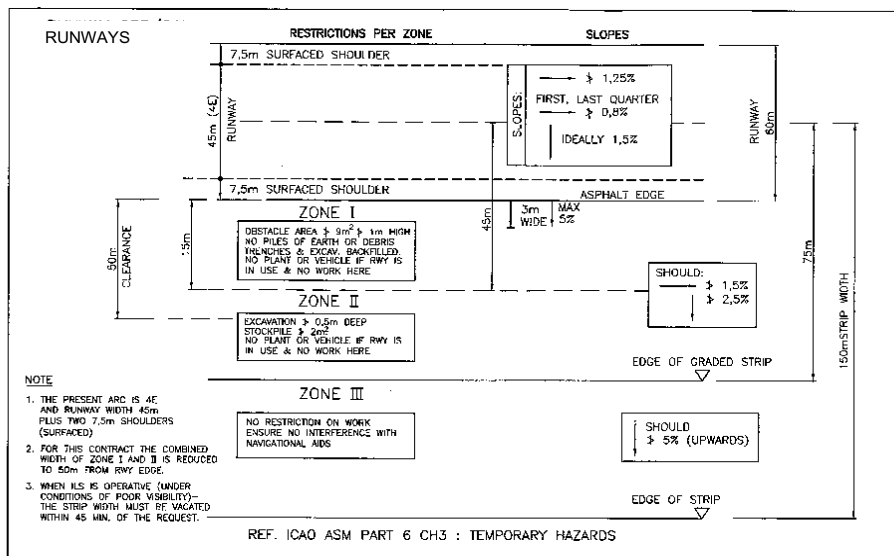
is/are fully conversant with the content of this document and will be responsible on behalf of

..... (name of contractor)

to implement and maintain these procedures during the period of working airside for completion of Contract No. KSIA7806/2025/RFP.

APPENDIX A: TEMPORARY HAZARD GUIDELINES.

(To be read in conjunction with Part 4 – Tender Drawings and the latest ICAO Manual)



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APPENDIX B: APPLICATION FORM FOR CLOSURE OF AIRSIDE FACILITIES

(To be completed by Contractor during construction)

APPLICATION FORM FOR CLOSURE OF AIRSIDE FACILITIES

Applicant's information:

Name of Contractor/Company:

Name of person in charge:..... Signature:

Contact No: Tel: Cell:.....

Fax: e-mail:

CLOSURE OF AIRSIDE FACILITIES				
Section of RWY/RET/TWY for closure	Date (D) and time (T) of closure	Expected date (D) and time (T) re-opening	Actual re-opening of facility after inspection for service	
			Date (D) and (T) time	Name (N) and signature (S) of person authorised by ACSA to inspect facility
	D:	D:	D:	N:
	T:	T:	T:	S:
	D:	D:	D:	N:
	T:	T:	T:	S:
	D:	D:	D:	N:
	T:	T:	T:	S:
Remarks (delays, problems, etc):				
ACSA Conditions:				

For ACSA purposes only:

Department informed/NOTAM copied to		
Department	Contact person	Date
ATNS		
Fire and Rescue		
Safety & Security		
Other:		

NOTAM processed by: Name..... Signature: Date.....

NOTAM approved by: Name..... Signature: Date.....

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NOTES:

- i. To Compiler of NOTAM: A copy of this request must be returned to the applicant/contractor on approval of the request.
- ii. To Applicant/Contractor: This form must be returned to the Manager: Airside after inspection for the reopening of the facility, with the necessary signatures.

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Runway Closure Form

By Contractor					By Closing Shift			By Opening Shift		
Date	Contractor	Section RWY/TWY Closure	NOTAM Ref No.	Date & Time on	Expected Date & Time off	Shift Name	Escort Name	Actual Date & time on	Actual Date & time off	RWY/TWY Open and Serviceable by:(Shift/Sign)
	1.									
	2.									
	3.									
	4.									
	5.									
	6.									
	7.									
	8.									
	9.									
	10.									

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APPENDIX C: ROUTING PLAN

(to be submitted by the contractor)

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APPENDIX D: METHOD STATEMENT

(to be submitted by the contractor)