

REQUIREMENTS FOR CONSTRUCTION WORKS IN THE AIRSIDE (CHANGI AIRPORT)

1 Construction Works in the Airside

- 1.1 Construction works in the airside refer to works on or near aircraft movement areas and on the roadway system that result in physical changes to infrastructure in the airside, e.g. new buildings, roads, pavements, fixtures, systems, etc.
- 1.2 Construction works within the operating aerodrome may impact the use of airside facilities for aircraft operations and ground handling operations. The requirements stipulated in this document apply to construction works, including preparatory activities, in the airside.
- 1.3 The following areas and systems are defined as airside facilities:
 - a. Aircraft Manoeuvring Areas – runways, runway strips, taxiways, taxiway strips and taxilanes;
 - b. Operational systems (e.g. airfield lighting, iFerret, navigation aids, etc.) and their respective critical and sensitive areas, if applicable;
 - c. Apron – aircraft stands (including equipment staging area), equipment parking area, Aircraft Docking Guidance System, Passenger Loading Bridge, fuel pits and emergency stop switch, flood lights, INS signs, CCTV cameras, etc.;
 - d. Critical installations – AFLCC, ILS LLZ Building, Middle Marker, GP Building, South Pump House, Fire Station, Ramp Tower, etc.;
 - e. Roadways – Perimeter Road, primary and secondary roadways in the aprons, etc.; and
 - f. Baggage Handling Area (BHA) – Baggage Handling System (BHS), parking or staging area, and driveway within BHA.

Note: For the purpose of Airside Work Permit application, all the above except (f) are considered part of the airfield.
- 1.4 The Project Officer who is managing construction works in the airside shall ensure that the Work Party carrying out the works are properly briefed and informed of the requirements stipulated in the latest edition of the Airport Operational and Safety Requirements (AOS), Airside Works Procedure Manual (AWPM).
- 1.5 No construction activities shall take place in the airside unless approval has been granted by CAG Airside Operations.
- 1.6 Refer to Annexes A – D for more details.

1 Airside Work Permit (Airfield)

- 1.1 The Project Officer is required to engage Airside Ops on the scope of works to be carried out in the airside **at least 1 month** prior to the targeted commencement of works.
- 1.2 The purpose is to consult Airside Ops to assess the impact on operations and to confirm the need for closure of affected airside facilities, if any. Please contact the following personnel:

Name/ Designation	Email Address
Lim Seng Kee/ Manager, Airside Ops	lim.sengkee@changiairport.com
Paige See/ Senior Associate, Airside Ops	paige.see@changiairport.com
Tajuddin Abdullah/ Senior Associate, Airside Ops	tajuddin.abdullah@changiairport.com

- 1.3 The Project Officer is required to provide information about the proposed works, including but not limited to the following:
 - a. Purpose/nature of works;
 - b. Proposed work schedule indicating the dates and working hours;
 - c. Schematic superimposed on maps/architectural drawings/layout plans of current infrastructure indicating clearly the areas of works and the boundary of each work site (including areas for staging machinery and equipment, assembly area, site office etc.);
 - d. Phasing plan for various stages of works (including pre-construction activities, e.g. ground surveys);
 - e. Approved risk assessment(s), documenting relevant risks and corresponding mitigating measures for safety hazards and potential disruptions to aircraft operations, and ground handling operations;
 - f. Associated changes to procedures, e.g. push-back, road diversion, etc.; and
 - g. Contact details of key personnel from the project management team, inclusive of consultant/main contractor.

1.4 The Project Officer is required to consult the relevant stakeholders on the considerations related to the method of works, impact on security, operations of critical systems and safety prior to seeking approval from CAG Airside Operations to commence works. Furthermore, written approval/ permits are required for certain work activities. Refer to the list of stakeholders in the table below.

Area of Concern	Approving Agency for Pre-requisite Requirements
Works affecting airport security infrastructure	Aviation Security (CAG) and Airport Police Department
Works on the inner perimeter fencing and/or PIDS	Engineering & Development Cluster (CAG) and Aviation Security (CAG)
Hot works	Airport Emergency Services (CAG)
Works requiring isolation of fire alarm system	Airport Emergency Services (CAG)
Works within another project's work boundary	Relevant Project Officer
Works affecting tenanted and/or operational spaces	Rentable Properties (CAG), Airside Operations (CAG), Engineering & Development Cluster (CAG) and/or Airport Emergency Service (CAG)
Works affecting/on the external façade of terminal buildings	Facilities Management (CAG)
Works on/affecting active roadways	Airside Management (CAG) and Airside Operations (CAG)
Closure of aircraft stands/ roadways	Airside Operations (CAG)
Closure of Aircraft Manoeuvring Area	Airside Operations (CAG) and Changi Tower (CAAS)
Aerodrome reporting requirements (e.g. AIP and NOTAM)	Airside Operations (CAG)
Trial hole works	Refer to stakeholders in AOS
Excavation/piling works	Refer to stakeholders in AOS
Obstacle clearance for works involving tall machinery/equipment	Air Navigation Services Policy & Planning Division (CAAS)
Works near radio navigation and landing aids	Aeronautical Telecommunications & Engineering Division (CAAS)
Works on airfield lighting system, drainage, M&E systems	Engineering & Development Cluster (CAG)
Works on CCTV, iFeret, ADGS	Engineering & Development Cluster (CAG) and Airside Operations (CAG)
Works affecting fire hydrant system	Airport Emergency Services (CAG)
Works affecting fuel system	Changi Airport Fuel Hydrant Installation (CAFHI)
Works on Baggage Handling System or works in the Baggage Handling Area	Engineering & Development Cluster (CAG) and Airside Operations (CAG)

- 1.5 The Project Officer is encouraged to use the “How-to-complete-AWP” Guide (see Supplementary Document for Appendix 1 to Annex A) to guide him/her in verifying that all the necessary requirements in the “Checklist for Project Officer (Airfield)” (see [Appendix 1](#)) have been fulfilled before submitting the application to Airside Ops for approval.
- 1.6 The Project Officer shall prepare the “Airside Work Permit (Airfield)” form (see [Appendix 2](#)) and submit together with the supporting documents via email to the personnel as listed in paragraph 1.2. Airside Ops will respond **within 3 working days** on the outcome of the application (provided it is a complete submission).
- 1.7 Construction activities shall not commence until approval has been granted by Airside Ops. Upon approval, the Project Officer must ensure that works are conducted within the approved duration and authorised daily working hours at the approved work site(s).
- 1.8 The Project Officer shall ensure that the approved work sites are well maintained and hazards are kept under control. As such, the conduct of housekeeping activities such as grass cutting, FOD and waste disposal, cleaning of temporary site office and/or access roads, etc., does not require approval by Airside Ops.
- 1.9 **A fresh application** for Airside Work Permit (Airfield) is required whenever there are any changes to the supporting document(s)/permit(s) and/or conditions based on which an earlier Airside Work Permit has been granted.
- 1.10 For extension of permit, a fresh application will be needed. However, if there are no changes to the earlier supporting document(s), references to these supporting document(s) can be stated in the application without having to attach a copy.
- 1.11 In the event of early completion of works before the approved end date, the Project Officer is encouraged to update Airside Ops accordingly.

2 General Instructions

- 2.1 Any incidents in the airside must be reported to Airside Ops - Airside Management Centre (AMC) at 6541-2275 immediately. The Project Officer or appointed representative shall respond immediately to the site to take immediate control of the area and to prevent exacerbating safety hazard or further disruption to operations.
- 2.2 During the course of works, Airside Ops may issue instructions to stop work arising from non-compliance, e.g. unauthorised works, failure to abide by aerodrome safety requirements, etc. Upon receiving stop work instruction, the Project Officer shall take immediate actions to clear all equipment and personnel from the work area. The Project Officer shall provide an update to Airside Ops as soon as the work area is cleared.

**Checklist for Project Officer
(Airfield)**

Project Title: _____

Scope of Works: _____

This checklist is designed to assist the appointed Project Officer in complying with all the necessary requirements **before** the application for Airside Work Permit. Supporting documents (marked with an "**") are to be appended with the application. Alternatively, references to approved document can also be made to support the application for subsequent applications. For this, the reference and approval date are to be stated in the remarks column.

<u>S/N</u>	<u>Description</u>	<u>Status (√ if completed, else N.A.)</u>	<u>Remarks</u>
	<u>Airport Operational & Safety (AOS) Requirements</u>		
1	The Work Party has obtained the latest copy of the AOS requirements; has read and is able to comply with the requirements.	<input type="checkbox"/>	
	<u>Airport Security Clearance</u>		
2	The Work Party has applied for seasonal airport pass for all personnel who are intended to be deployed for work in the Airport. (Refer to AOS, Section A)	<input type="checkbox"/>	
	<u>Works on Security Gates, Fences or Related Facilities</u>		
3	For works on the inner perimeter fencing of the airport, the application* has been approved by E&D/CAG and AVSEC/CAG. (Refer to AOS, Section A)	<input type="checkbox"/>	
4	The erection of new security fence, door, gate or barrier has been completed and accepted by CAG and APD before works affecting the existing security fence, door, gate or barrier is allowed to commence. (Refer to AOS, Section A)	<input type="checkbox"/>	
5	AVSEC/CAG and APD have been consulted on works near or affecting airport security infrastructure. (Refer to AOS, Section A)	<input type="checkbox"/>	
	<u>Airport Fire Safety Requirements</u>		
6	The Work Party is able to comply with the airport fire safety requirements as stipulated in the CAG Fire Safety Manual and also the regulations and safety practices of the SCDF. (Refer to AOS, Section B)	<input type="checkbox"/>	
	<u>Hot Works</u>		

7 The Hot Work Permit* has been approved by AES/CAG.
(Refer to AOS, Section B)

Works requiring Isolation of Fire Alarm System

8 Isolation of Fire Alarm System* has been approved by
AES/CAG. (Refer to AOS, Section B)

Airport Safety Training

9 The Work Party's personnel (at all levels) have attended
the Airside Safety Induction Briefing. (Refer to AOS,
Section C)

10 The Work Party's personnel (supervisory level) have
attended the Airport Operational and Safety (AOS)
briefing and test. (Refer to AOS, Section C)

Work Programme

11 The work proposal (e.g. Method Statement, design,
demarcation layout, type of barricade used etc.) and
detailed daily programme for the works have been
approved by the Project Officer. (Refer to AOS, Section
C)

12 For works within another project's work boundary, the
Project Officer has sought concurrence to co-exist and
ensure that coordination between the two project teams
has been established.

**Please state the name of Project Officer whom you
have liaised with.**

13 Alternative arrangements (if necessary) have been made
to address tenanted (e.g. parking lots, EPA) and/or
operational spaces (e.g. offsite ESA, Evacuation
Assembly Area, access route to critical installations)
affected by the works.

Note: critical installations include, but are not limited to,
AFLCC, GP building, LLZ building, MM hut, Fire Stations,
VIP complex etc.

14 Facilities Management/CAG has been consulted and
concurred with the works affecting the external façade of
the terminal building.

15 For works in/near RSAF's operational areas to the west of
Runway 02L/20R, the RSAF has approved the work
programme to be carried out. (Refer to AOS, Section C)

Works affecting Active Roadway or Pedestrian Foot Path

16 Prior to the commencement of works, the Work Party has submitted a detailed proposal on the plans to carry out the works, including all the necessary safety and traffic marshalling measures to the Project Officer for evaluation and approval. (Refer to AOS, Section C)

17 Airside Management/CAG has been consulted on any potential impact to safety and has concurred with the works on/affecting active roadway or pedestrian foot path.

18 Airside Ops/CAG has been consulted on any potential impact to operations and has concurred with the works on/affecting active roadway or pedestrian foot path.

19 The request for closure of roadway* has been approved by Airside Ops/CAG.

Closure of Airside Facilities

20 The request for closure of aircraft stand(s)* has been approved by Airside Ops/CAG.

Please state the reference number of NOTAM (if any).

21 For works that require closure of any part of the aircraft manoeuvring areas, the request for closure ("Closure Programme" form* in the Airside Works Procedure Manual) has been approved by Airside Ops/CAG and Changi Tower/ CAAS.

Please state the reference number of NOTAM/AIP Supplement.

Aerodrome Reporting

22 The Project Officer has read and understood the requirements listed in Changi Aerodrome Manual (CAM) Section 4.1 Aerodrome Reporting. Project Officer has notified Airside Ops (Capacity team) on the status (current/impending/non-issuance) of AIP Supplement/AIP Amendment/AIC for the purpose of the works.

Trial Hole Works

23 The application for permit to carry out trial hole works* has been approved. (Refer to AOS, Section C)

Excavation/Piling Works

- 24 The application for permit to carry out excavation/piling works* has been approved. (Refer to AOS, Section C)

Use of Mobile Machinery, Tall Construction Machinery/Plant, Temporary Structures, Stockpile

- 25 The application for the deployment of mobile machineries, tall construction machineries/plant, temporary structures, stockpile* has been approved by CAAS Air Navigation Services (ANS) Policy & Planning Division. (Refer to AOS, Section D)

- 26 If there is a requirement to demobilise machinery for operational reasons to another area within the airside (designated as staging area), that staging area* has been approved by CAAS Air Navigation Services (ANS) Policy & Planning Division.

Works near Communications, Navigation and Landing and Surveillance Aids

- 27 CAAS ATE Division has been consulted and has concurred with the works to be carried out in the vicinity of ATE facilities (e.g. HF Stations & Antennae, Multilateration System Sensors (MLAT), Instrument Landing System) and its corresponding critical and/or sensitive areas. (Refer to AOS, Section F)

Airside Driving Regulations

- 28 All drivers are bound by the rules as specified in the Airside Driving Theory Handbook and CAT 1 Airfield Driving Handbook (if applicable). All vehicles and drivers are to comply with the stipulated regulations before they are allowed to operate in the airside vicinity. (Refer to AOS, Section H)

Hazard Identification and Risk Assessment

- 29 The approved Risk Assessment* has been submitted. (Refer to AOS, Section J)

Note: RA that are non-CAG SMS format to be acknowledged by Project Officer

Works affecting Other Airport Systems

30 Relevant stakeholders have been consulted and have concurred with the works. (E.g. Airfield lighting, CCTV, iFerret, drainage, fire hydrant, ADGS, fuel system & M&E systems etc.)



Please state the type of system and name of officer whom you have liaised with.

Declaration

This is to certify that all the above checklist requirements, where applicable, are fulfilled. All approved documents are duly appended in this submission.

Submitted by (Project Officer):

Name: _____
Designation: _____
Organisation: _____

Signature: _____
Date: _____

**Airside Work Permit
(Airfield)**

Project Title: _____

Main Contractor: _____ Organisation/Division In-charge: _____

Layout of Work Area (to attach drawings if the space below is insufficient)

Please provide layout(s) showing location of work area, staging area (if any) and demarcation, with relevant dimensions. Any distance to operational areas (e.g. runway, ILS critical and sensitive areas, taxiway, taxilane, aircraft stand, roadway etc.) should be clearly indicated. For works within closed aircraft movement areas, the layout is to depict the placement of closure markers and associated markings, with relevant dimensions to adjacent operational areas.

Scope of Works: _____

Period of Works: _____ to _____
Date (DD/MM/YY) & Time (HH:MM) Date (DD/MM/YY) & Time (HH:MM)

Daily Working Hours: _____ to _____
(HH:MM) (HH:MM)

Remarks: _____

I/We hereby apply for a permit to commence airside works as stipulated in the above location and undertake to comply with the requirements as in the appended checklist.

In the event that works are completed before the authorised end date, I/We will update Airside Ops (Airside Works team) at the earliest opportunity.

Requested by (Consultant/Contractor):

Supported by (Project Officer):

Name: _____
Designation: _____
Organisation: _____
Contact No. (H/P): _____
Signature/Date: _____

Name: _____
Designation: _____
Division: _____
Contact No. (H/P): _____
Signature/Date: _____

Approved by (Airside Ops/CAG):

(For Official Use only)

Permit Number: AWP / /

Name: _____
Designation: _____

Signature: _____
Date: _____

Remarks: _____

Supplementary Document for Appendix 1 to Annex A

"How-to-complete-AWP" Guide

This guide was designed as a reference material to assist Project Officer in completing the AWP (Airfield) Checklist (i.e. Appendix 1 to Annex A). This guide does not replace any of the manuals that document the requirements (e.g. AOS).

<u>S/N</u>	<u>Description</u>	<u>Status (√ if completed, else N.A.)</u>	<u>Actions to be taken by Project Officer</u>
<u>Airport Operational & Safety (AOS) Requirements</u>			
1	The Work Party has obtained the latest copy of the AOS requirements; has read and is able to comply with the requirements.	<input type="checkbox"/>	This is a mandatory requirement. It must be a 'tick'; 'NA' is not acceptable.
<u>Airport Security Clearance</u>			
2	The Work Party has applied for seasonal airport pass for all personnel who are intended to be deployed for work in the Airport. (Refer to AOS, Section A)	<input type="checkbox"/>	'Tick' if: all work parties hold seasonal airport pass <hr/> 'NA' if: all work parties hold visitor pass and escorted by a seasonal pass holder
<u>Works on Security Gates, Fences or Related Facilities</u>			
3	For works on the inner perimeter fencing of the airport, the application* has been approved by E&D/CAG and AVSEC/CAG. (Refer to AOS, Section A)	<input type="checkbox"/>	'Tick' if: E&D and Avsec have approved works on inner perimeter fencing itself <hr/> 'NA' if: otherwise
4	The erection of new security fence, door, gate or barrier has been completed and accepted by CAG and APD before works affecting the existing security fence, door, gate or barrier is allowed to commence. (Refer to AOS, Section A)	<input type="checkbox"/>	'Tick' if: CAG and APD has accepted the completed erection of new security fence, door, gate or barrier, before works involve affecting existing security fence, door, gate or barrier commenced <hr/> 'NA' if: otherwise

5	AVSEC/CAG and APD have been consulted on works near or affecting airport security infrastructure. (Refer to AOS, Section A)	<input type="checkbox"/>	'Tick' if: Avsec and APD have been consulted for 1. works on or affecting ANY airport security infrastructure OR 2. works to be carried out within 3m of airport fences OR 3. works to be carried out between inner and outer fence <hr/> 'NA' if: otherwise
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Airport Fire Safety Requirements

6	The Work Party is able to comply with the airport fire safety requirements as stipulated in the CAG Fire Safety Manual and also the regulations and safety practices of the SCDF. (Refer to AOS, Section B)	<input type="checkbox"/>	This is a mandatory requirement. It must be a 'tick'; 'NA' is not acceptable.
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Hot Works

7	The Hot Work Permit* has been approved by AES/CAG. (Refer to AOS, Section B)	<input type="checkbox"/>	'Tick' if: AES has approved hot works <hr/> 'NA' if: otherwise
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Works requiring Isolation of Fire Alarm System

8	Isolation of Fire Alarm System* has been approved by AES/CAG. (Refer to AOS, Section B)	<input type="checkbox"/>	'Tick' if: AES has approved isolation of fire alarm system <hr/> 'NA' if: otherwise
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Airport Safety Training

9	The Work Party's personnel (at all levels) have attended the Airside Safety Induction Briefing. (Refer to AOS, Section C)	<input type="checkbox"/>	'Tick' if: contractors holding seasonal pass, requires to work in the airside and have attended ASIB <hr/> 'NA' if: contractors are on Visitor pass
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10	The Work Party's personnel (supervisory level) have attended the Airport Operational and Safety (AOS) briefing and test. (Refer to AOS, Section C)	<input type="checkbox"/>	This is a mandatory requirement. It must be a 'tick'; 'NA' is not acceptable.
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Work Programme

- | | | | |
|---|---|--------------------------|---|
| 11 | The work proposal (e.g. Method Statement, design, demarcation layout, type of barricade used etc.) and detailed daily programme for the works have been approved by the Project Officer. (Refer to AOS, Section C) | <input type="checkbox"/> | This is a mandatory requirement. It must be a 'tick'; 'NA' is not acceptable. |
| 12 | For works within another project's work boundary, the Project Officer has sought concurrence to co-exist and ensure that coordination between the two project teams has been established. | <input type="checkbox"/> | 'Tick' if:
1. co-existing has been agreed AND
2. coordination has been established for the proposed works to be carried out within another project team's work boundary (i.e. at the same location)
<hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> 'NA' if: there is no on-going work at the same location |
| Please state the name of Project Officer whom you have liaised with. | | | |
| 13 | Alternative arrangements (if necessary) have been made to address tenanted (e.g. parking lots, EPA) and/or operational spaces (e.g. offsite ESA, Evacuation Assembly Area, access route to critical installations*) affected by the works.

Note: critical installations include, but are not limited to, AFLCC, GP building, LLZ building, MM hut, Fire Stations, VIP complex etc. | <input type="checkbox"/> | 'Tick' if: relevant stakeholders have been consulted for
1. works affecting any tenanted and/or operational spaces
2. alternative arrangements (as advised) have been made
<hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> 'NA' if: otherwise |
| 14 | Facilities Management/CAG has been consulted and concurred with the works affecting the external façade of the terminal building. | <input type="checkbox"/> | 'Tick' if: FM has concurred the works to be carried out on the external façade of the terminal building, including bus bays, parking lots, roadways (except underpass)
<hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> 'NA' if: work area does not encroach into the abovementioned |
| 15 | For works in/near RSAF's operational areas to the west of Runway 02L/20R, the RSAF has approved the work programme to be carried out. (Refer to AOS, Section C) | <input type="checkbox"/> | 'Tick' if: RSAF has approved of works carried out within or near RSAF's operational areas to the west of Runway 02L/20R
<hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> 'NA' if: otherwise |

Works Affecting Active Roadway or Pedestrian Foot Path

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|----|---|--------------------------|--|
| 16 | Prior to the commencement of works, the Work Party has submitted a detailed proposal on the plans to carry out the works, including all the necessary safety and traffic marshalling measures to the Project Officer for evaluation and approval. (Refer to AOS, Section C) | <input type="checkbox"/> | 'Tick' if: Project Officer has evaluated and approved on safety and traffic marshalling measures for works affecting active roadway and/or pedestrian foot path
<hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <p>'NA' if: works does not affect active roadway and/or pedestrian foot path</p> |
| 17 | Airside Management/CAG has been consulted on any potential impact to safety and has concurred with the works on/affecting active roadway or pedestrian foot path. | <input type="checkbox"/> | 'Tick' if: Airside Management has concurred the works on/affecting active roadway and/or pedestrian foot path
<hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <p>'NA' if: works does not affect active roadway and/or pedestrian foot path</p> |
| 18 | Airside Ops/CAG has been consulted on any potential impact to operations and has concurred with the works on/affecting active roadway or pedestrian foot path. | <input type="checkbox"/> | 'Tick' if: Airside Ops has concurred the works on/affecting active roadway and/or pedestrian foot path
<hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <p>'NA' if: works does not affect active roadway and/or pedestrian foot path</p> |
| 19 | The request for closure of roadway* has been approved by Airside Ops/CAG. | <input type="checkbox"/> | 'Tick' if: Airside Ops has approved closure of roadway
<hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <p>'NA' if: works does not affect active roadway and/or pedestrian foot path</p> |

Closure of Airside Facilities

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|----|--|--------------------------|--|
| 20 | The request for closure of aircraft stand(s)* has been approved by Airside Ops/CAG.

Please state the reference number of NOTAM (if any). | <input type="checkbox"/> | 'Tick' if: Airside Ops has approved
1. any request for closure of aircraft stand(s) for works to be carried out OR
2. layover at aircraft stand(s) has been assigned
Note: NOTAM reference number is required only if there is a closure of aircraft stand(s).
<hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <p>'NA' if: closure of aircraft stand is not required</p> |
|----|--|--------------------------|--|

- 21 For works that require closure of any part of the aircraft manoeuvring areas, the request for closure ("Closure Programme" form* in the Airside Works Procedure Manual) has been approved by Airside Ops/CAG and Changi Tower/ CAAS. 'Tick' if: works requiring closure of taxiway(s), taxilane(s) and/or runway has been approved

'NA' if: closure of taxiway, taxilane and/or runway is not required
- Please state the reference number of NOTAM/AIP Supplement.**
- Aerodrome Reporting
- 22 The Project Officer has read and understood the requirements listed in Changi Aerodrome Manual (CAM) Section 4.1 Aerodrome Reporting. Project Officer has notified Airside Ops (Capacity team) on the status (current/impending/non-issuance) of AIP Supplement/AIP Amendment/AIC for the purpose of the works. This is a **mandatory** requirement. It must be a 'tick'; 'NA' is not acceptable.
- Trial Hole Works
- 23 The application for permit to carry out trial hole works* has been approved. (Refer to AOS, Section C) 'Tick' if: works requiring trial hole works has been approved

'NA' if: otherwise
- Excavation/Piling Works
- 24 The application for permit to carry out excavation/piling works* has been approved. (Refer to AOS, Section C) 'Tick' if: works requiring excavation works has been approved

'NA' if: otherwise
- Use of Mobile Machinery, Tall Construction Machinery/Plant, Temporary Structures, Stockpile
- 25 The application for the deployment of mobile machineries, tall construction machineries/plant, temporary structures, stockpile* has been approved by CAAS Air Navigation Services (ANS) Policy & Planning Division. (Refer to AOS, Section D) 'Tick' if: CAAS ANSPP has approved for works requiring the deployment of mobile machineries, tall construction machineries/plant, temporary structures, stockpile

'NA' if: otherwise
- 26 If there is a requirement to demobilise machinery for operational reasons to another area within the airside (designated as staging area), that staging area* has been approved by CAAS Air Navigation Services (ANS) Policy & Planning Division 'Tick' if: CAAS ANSPP has approved the staging area

'NA' if: otherwise

Works near Communications, Navigation, Landing and Surveillance Aids

- 27 CAAS ATE Division has been consulted and has concurred with the works to be carried out in the vicinity of ATE facilities (e.g. HF Stations & Antennae, Multilateration System Sensors (MLAT), Instrument Landing System) and its corresponding critical and/or sensitive areas. (Refer to AOS, Section F)
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- 'Tick' if: CAAS ATE has been consulted for
1. works to be carried out within the GP/LLZ critical and sensitive areas OR
2. works to be carried out within 15m radius of all ANS equipment

'NA' if: works are carried out outside the above stated areas

Airside Driving Regulations

- 28 All drivers are bound by the rules as specified in the Airside Driving Theory Handbook and CAT 1 Airfield Driving Handbook (if applicable). All vehicles and drivers are to comply with the stipulated regulations before they are allowed to operate in the airside vicinity. (Refer to AOS, Section H)
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- 'Tick' if: driving is required during the period of works stated

'NA' if: otherwise

Hazard Identification and Risk Assessment

- 29 The approved Risk Assessment* has been submitted. (Refer to AOS, Section J)
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- This is a **mandatory** requirement. It must be a 'tick'; 'NA' is not acceptable.
- Note: RA that are non-CAG SMS format to be acknowledged by Project Officer**

Works affecting Other Airport Systems

- 30 Relevant stakeholders have been consulted and have concurred with the works. (E.g. Airfield lighting, CCTV, iFerret, drainage, fire hydrant, ADGS, fuel system & M&E systems etc.)
-
- 'Tick' if: system owner and user of the affected system have concurred the works

'NA' if: no other airport system is affected

Please state the type of system and name of officer whom you have liaised with.

1 Airside Work Permit (Baggage)

- 1.1 The Project Officer is required to engage Airside Ops on the scope of works to be carried out in the Baggage Handling Area (BHA) **at least 1 month** prior to the targeted commencement of works.
- 1.2 The purpose is to consult Airside Ops to assess the impact on operations and to confirm the need for closure of affected baggage facilities e.g. arrival belts, transfer input lines and/or race track, if any.
- 1.3 The Project Officer is required to provide information about the proposed works, including but not limited to the following:
 - a. Purpose/nature of work;
 - b. Proposed work schedule indicating the dates and working hours;
 - c. Schematic superimposed on maps/architectural drawings/layout plans of current infrastructure indicating clearly the areas of works and the boundary of each work site (including areas for staging machinery and equipment, assembly area, site office etc.);
 - d. Phasing plan for various stages of works;
 - e. Approved risk assessment(s) with the relevant signatures by CAG Project Officer highlighting relevant risks and corresponding mitigating measures for safety hazards and potential disruptions to baggage handling operations;
 - f. Impact on vehicular traffic flow, pedestrian walkway, CCTV coverage, FIDS etc.; and
 - g. Contact details of key personnel from the project management team, inclusive of consultant/main contractor.

- 1.4 **For closure of baggage handling facilities**, submit the closure request form (see [Appendix 1](#)) at least 10 working days before the targeted date of closure to the following personnel:

Name/ Designation	Email Address
Joseph Lim/ Senior Associate, Airside Ops	joseph.lim@changiairport.com
Mokhtar Hussian/ Senior Support Officer, Airside Ops	mokhtar.hussian@changiairport.com

- 1.5 If any baggage conveyor or facilities are affected by the proposed works, alternate loading line if available, shall be proposed by the Project Officer to support the request for closure.
- 1.6 Arising from limited storage spaces for baggage handling equipment low headroom and high volume of vehicular traffic within the BHA, a risk assessment for the proposed works must address the corresponding impact on safety and efficiency of baggage handling operations.
- 1.7 For temporary storage / staging of materials and equipment in the BHA (including transfer baggage handling facilities), approval of space must be granted by Airside Ops. The approved staging area must be properly cordoned. In addition, contact details of the Project Officer and contractor's key personnel shall be clearly printed and displayed on the cordon. The request for closure of baggage handling facilities/roadway must be submitted for approval.
- 1.8 Note that closure of any driveway in the BHA should be avoided. If temporary closure of any driveway is necessary, please seek approval from Airside Ops for closure and respective road diversion plan.
- 1.9 The Project Officer shall use the "Checklist for Project Officer (Baggage)" (see [Appendix 2](#)) to guide him/ her in verifying that all the necessary requirements have been fulfilled before submitting the application to Airside Ops for approval.
- 1.10 The Project Officer shall prepare the "Airside Work Permit (Baggage)" form (see [Appendix 3](#)) and submit together with the supporting documents to Airside Ops **at least 10 working days** prior to the targeted date of commencement of works. This request should be sent via email to the following personnel.

Name/ Designation	Email Address
Rolando Delfin/ Senior Manager, Airside Ops	rolando.delfin@changiairport.com
Joseph Lim/ Senior Associate, Airside Ops	joseph.lim@changiairport.com

- 1.11 Work activities shall not commence until approval has been granted by Airside Ops. Upon approval, the Project Officer must ensure that works are conducted within the approved duration and authorised daily working hours at the approved work site(s).
- 1.12 **A fresh application** for Airside Work Permit (Baggage) is required whenever there are any changes to the supporting document(s)/permit(s) and/or conditions based on which an earlier Airside Work Permit has been granted.
- 1.13 For extension of permit, a fresh application will be needed. However, if there are no changes to the earlier supporting document(s), references to these supporting document(s) can be stated in the application without having to attach a copy.
- 1.14 In the event of early completion of works before the approved end date, the Project Officer is encouraged to update Airside Ops accordingly.

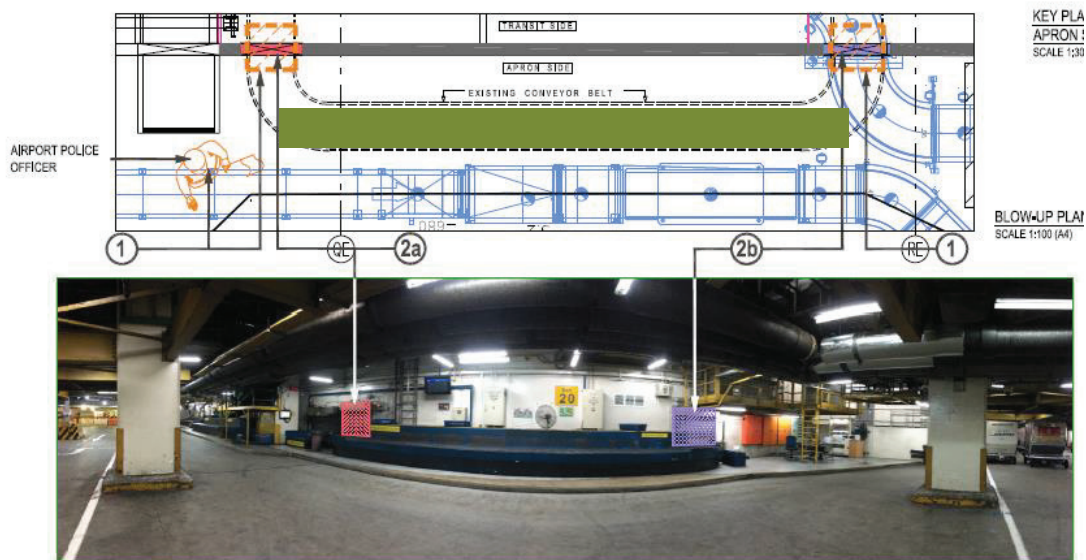
2 General Instructions

- 2.1 Any incidents in the airside must be reported to Airside Ops - Airside Management Centre (AMC) at 6541-2275 immediately. The Project Officer or appointed representative shall respond immediately to the site to take immediate control of the area and to prevent exacerbating safety hazard or further disruption to operations.
- 2.2 During the course of works, Airside Ops may issue instructions to stop work arising from non-compliance, e.g. unauthorised works, failure to abide by aerodrome safety requirements, etc. Upon receiving stop work instruction, the Project Officer shall take immediate actions to clear all equipment and personnel from the work area. The Project Officer shall provide an update to Airside Ops as soon as the work area is cleared.

Closure Request
(Baggage Handling Facilities)

Project Title: _____

<Example only>



Site	Location of Work	Facility to be closed	Date (from/to)	Time (from/to)	Reasons for Closure	Remarks ¹
	T1 BHA	Belt 20	1/12/2015 to 10/12/2015	0000h to 0600h	Removal of baggage claim belt for upgrading works	Full closure

Requested by (Consultant/Contractor):

Name: _____
 Designation: _____
 Company/Section: _____
 Contact No. (H/P): _____
 Signature/Date: _____

Supported by (Project Officer):

Name: _____
 Designation: _____
 Division/Section: _____
 Contact No. (H/P): _____
 Signature/Date: _____

Approved by (Airside Ops/CAG):

(For Official Use only)

Name: _____
 Designation: _____
 Remarks: _____

Signature: _____
 Date: _____

¹

Please indicate alternate facilities available for use and whether the request is for daily or full closure.

CONDITIONS FOR APPROVAL OF CLOSURES

- 1 All requests for scheduled closures of **baggage handling facilities** must be submitted to CAG(S) Airside Operations at least **10 working days** before the intended day of work. Any urgent request must be submitted at least **24 hours** in advance and will be evaluated on a case by case basis.
- 2 All approved closures are subjected to changes and/or cancellation real time.
- 3 All works shall be completed within the approved duration of the facility closure. Request for extension to the closure period must be submitted at least **2 hours** before the expiry of the approved closure timing.
- 4 The Work Party is to call the Airside Management Centre (AMC Baggage Coordinator) at 6541 2255; 30 minutes prior to commencement of work and immediately after completion of work.

<p><u>For AMC Use Only</u></p> <p>The Closure approval has been updated as follows:</p> <p style="margin-left: 40px;">1 In GMS*</p> <p style="margin-left: 40px;">2 In Log Book*</p> <p>*Please tick where applicable</p>
<p>Shift: _____ Name: _____ Sign: _____ Date: _____</p>
<p>Remarks:</p>

**Checklist for Project Officer
(Baggage)**

Project Title: _____

This checklist is designed to assist the appointed Project Officer in complying with all the necessary requirements **before** the application for Airside Work Permit. Supporting documents (marked with an "**") are to be appended with the application. Alternatively, references to approved document can also be made to support the application for subsequent applications. For this, the reference and approval date are to be stated in the remarks column.

<u>S/N</u>	<u>Description</u>	<u>Status (√ if completed, else N.A.)</u>	<u>Remarks</u>
<u>Airport Operational & Safety (AOS) Requirements</u>			
1	The Work Party has obtained the latest copy of the AOS requirements; has read and is able to comply with the requirements.	<input type="checkbox"/>	
<u>Airport Security Clearance</u>			
2	The Work Party has applied for the seasonal airport pass for all personnel who are intended to be deployed for work in the Airport. (Refer to AOS, Section A)	<input type="checkbox"/>	
<u>CAG Renovation Work Permit</u>			
3	The Renovation Work Permit* for the scope and period of works has been approved.	<input type="checkbox"/>	
<u>Airport Fire Safety Requirements</u>			
4	The Work Party is able to comply with the airport fire safety requirements as stipulated in the CAG Fire Safety Manual and also the regulations and safety practices of the SCDF. (Refer to AOS, Section B)	<input type="checkbox"/>	
<u>Hot Works</u>			
5	The Hot Work Permit* has been approved by AES/CAG. (Refer to AOS, Section B)	<input type="checkbox"/>	
<u>Works requiring Isolation of Fire Alarm System</u>			
6	Isolation of Fire Alarm System* has been approved by AES/CAG. (Refer to AOS, Section B)	<input type="checkbox"/>	

Airport Safety Training

- 7 The Work Party's personnel (at all levels) have attended the Airside Safety Induction Briefing. (Refer to AOS, Section C)
- 8 The Work Party's personnel (supervisory level) have attended the Airport Operational and Safety (AOS) briefing and test. (Refer to AOS, Section C)

Work Programme

- 9 The detailed proposal (e.g. Method of Statement, demarcation layout etc.) on the plans to carry out the works has been approved by the Project Officer. (Refer to AOS, Section C)
- 10 Airside Ops/CAG and E&D/CAG have been consulted and have concurred with the works affecting Baggage Handling System, Hold Baggage Screening System, Inter-terminal Transfer Baggage System, equipment staging areas, etc.
- 11 Alternative arrangements (if necessary) have been made to address tenanted and/or operational spaces affected by the works.
- 12 For works within another project's work boundary, the Project Officer has sought concurrence to co-exist and ensure that coordination between the two project teams has been established.

Please state the name of Project Officer whom you liaise with.

Works Affecting Active Roadway or Pedestrian Foot Path

- 13 Prior to the commencement of works, the Work Party has submitted a detailed proposal on the plans to carry out the works, including all the necessary safety and traffic marshalling measures to the Project Officer for evaluation and approval. (Refer to AOS, Section C)
- 14 E&D/CAG has been consulted and has concurred with the works.
- 15 Airside Management/CAG has been consulted on any potential impact to safety and has concurred with the works on/affecting active roadway or pedestrian foot path.
- 16 Airside Ops/CAG has been consulted on any potential impact to operations and has concurred with the works on/affecting active roadway or pedestrian foot path.
- 17 The request for closure of roadway* (within Baggage Handling Area) has been approved by Airside Ops/CAG.

Closure of Baggage Handling Facilities

- 18 Request for closure* of relevant baggage facilities e.g. arrival baggage belt, departure race track, transfer input line, odd-size input/output lines, staging area, roadway etc. has been approved by Airside Ops/CAG.

Trial Hole Works

- 19 The application for permit to carry out trial hole works* has been approved. (Refer to AOS, Section C)

Excavation/Piling Works

- 20 The application for permit to carry out excavation/piling works* has been approved. (Refer to AOS, Section C)

Airside Driving Regulations

- 21 All drivers are bound by the rules as specified in the Airside Driving Theory Handbook. All vehicles and drivers are to comply with the stipulated regulations before they are allowed to operate in the airside vicinity. (Refer to AOS, Section H)

Hazard Identification and Risk Assessment

- 22 The approved Risk Assessment* with the relevant signature has been submitted. (Refer to AOS, Section J)

Note: RA is to be acknowledged by Project Officer

Works affecting Other Airport Systems

- 23 For works affecting other systems such as FIDS (including BMIDS), CCTV, BIDS, M&E installations, etc. in the BHA, relevant stakeholders have been consulted and have concurred with the works.

Declaration

This is to certify that all the above checklist requirements are fulfilled. All approved documents are duly appended in this submission.

Submitted by (Project Officer):

Name: _____
Designation: _____
Organisation: _____

Signature: _____
Date: _____

**Airside Work Permit
(Baggage)**

Project Title: _____

Project Consultant (if any): _____

Description of Project: _____

Main Contractor: _____ Organisation/Division In-charge: _____

Layout of Work Area (to attach drawings if the space below is insufficient)

Please provide the site layout view and clearly mark out the work area. Please include dimensions of the work area and distances to nearby facilities/ roadway.

Scope of Works: _____

Period of Works: _____ to _____
Date (DD/MM/YY) Date (DD/MM/YY)

Daily Working Hours: _____ to _____
(HH:MM) (HH:MM)

Remarks: _____

I/We hereby apply for a permit to commence works in the baggage handling area as stipulated in the above location and undertake to comply with the requirements as specified in the appended checklist.

In the event that works are completed before the authorised end date, I/We will update Airside Ops (AMC Baggage Coordinator) at the earliest opportunity.

Requested by (Consultant/Contractor):

Supported by (Project Officer):

Name: _____

Name: _____

Designation: _____

Designation: _____

Organisation: _____

Division: _____

Contact No. (H/P): _____

Contact No. (H/P): _____

Signature/Date: _____

Signature/Date: _____

Approved by (Airside Ops/CAG):

**(For Official Use
only)**

Permit Number: AWP / /

Name: _____

Signature: _____

Designation: _____

Date: _____

Remarks: _____