

Airport Approvals Guideline

Version 6

2018

BRISBANE AIRPORT CORPORATION PTY LTD 11 THE CIRCUIT, SKYGATE BRISBANE AIRPORT QLD 4008 PO BOX 61, HAMILTON CENTRAL QLD 4007 AUSTRALIA T +61 (0)7 3406 3000 F +61 (0)7 3406 3111 E INFO@BNE.COM.AU W BNE.COM.AU ABN 54 076 870 650



FOREWORD

This Guideline has been prepared by Brisbane Airport Corporation (BAC) Pty Ltd ABN 54 076 870 650. While care has been taken to ensure that the information in this document is accurate and up-to-date; please note that:

- this document is not to be taken as legal advice, or any form of representation, warranty or offer of any kind by BAC about any specific development at Brisbane Airport;
- some of the information is illustrative or conceptual only, has been derived from sources other than BAC, is based on assumptions, and may change without notice;
- where this document includes information as to a future matter; it is an estimate or opinion which has been based on information known to BAC at the time of preparation of this document, and assumptions which may later prove to be incorrect;
- BAC makes no claim or warranty as to the accuracy of any information, or the likelihood of any future matter; and
- The information in this document should not be relied on to make any decision, and to the extent permitted by law, you exclude BAC from liability (including in negligence), for any use of, or reliance on, this document by any party. You should make your own independent enquiries and reach your own commercial or financial conclusions.

VERSION	DATE	AMENDMENT SUMMARY		
1	March 2017	Supercedes Airport Approvals		
		Manual		
2	March 2017	Nominated Sub-contractor list		
		ammended		
3	April 2017	Annexure A added		
4	June 2017	16.2.2 removed		
5	March 2018	Links updated		
6	August 2018	Aurecon Group contact updated		

DOCUMENT CONTROL

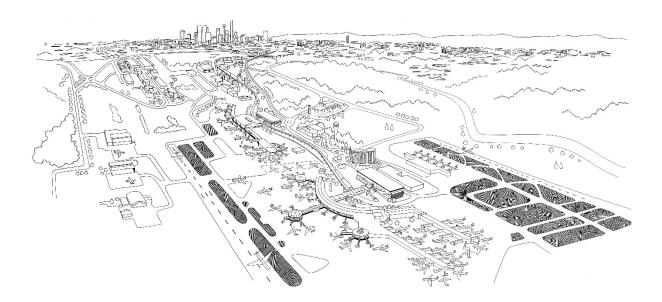


Contents

FOREW	'ORD	2
1.	Introduction	5
2.	Who is BAC	5
2.1.	Airport Map	6
3.	Approval Process Chart	8
4.	Reference documentation	9
5.	Types of Approvals10	0
6.	Initial Design Meeting10	0
7.	Major Development Plan10	0
8.	Airport Lessee Company Consent1	1
9.	Airport Lessee Consent Fee12	2
10.	Airport Building Controller13	3
11.	Contractor Approval Process	3
12.	Asbestos13	3
13.	Dangerous Goods	3
14.	Specific Requirements at the International and Domestic Terminals14	4
15.	International Terminal nominated sub-contractor List15	5
15.1.	Slab core holes/penetrations/excessive loads16	6
		~
15.2.	Fire Safety	6
15.2. 15.2.1	Fire Safety Assessment Report (FSAR)	
-	-	6
15.2.1	Fire Safety Assessment Report (FSAR)16	6 6
15.2.1 15.2.2	Fire Safety Assessment Report (FSAR)	6 6 7
15.2.1 15.2.2 16.	Fire Safety Assessment Report (FSAR) 16 Airport Critical Infrastructure – Fire System 16 Domestic Terminal Nominated Sub Contractor List 17	6 6 7 8
15.2.1 15.2.2 16. 16.1.	Fire Safety Assessment Report (FSAR) 16 Airport Critical Infrastructure – Fire System 16 Domestic Terminal Nominated Sub Contractor List 17 Slab core holes/penetrations/excessive loads 18	6 6 7 8
15.2.1 15.2.2 16. 16.1. 16.2.	Fire Safety Assessment Report (FSAR) 16 Airport Critical Infrastructure – Fire System 16 Domestic Terminal Nominated Sub Contractor List 17 Slab core holes/penetrations/excessive loads 18 Fire Safety 18	6 6 7 8 8
15.2.1 15.2.2 16. 16.1. 16.2. 16.2.1	Fire Safety Assessment Report (FSAR) 16 Airport Critical Infrastructure – Fire System 16 Domestic Terminal Nominated Sub Contractor List 17 Slab core holes/penetrations/excessive loads 18 Fire Safety 18 Fire Safety Assessment Report (FSAR) 18	6 6 7 8 8 8
15.2.1 15.2.2 16. 16.1. 16.2. 16.2.1 16.3.	Fire Safety Assessment Report (FSAR) 16 Airport Critical Infrastructure – Fire System 16 Domestic Terminal Nominated Sub Contractor List 17 Slab core holes/penetrations/excessive loads 18 Fire Safety 18 Fire Safety Assessment Report (FSAR) 18 All other buildings 18	6 7 8 8 8 8
15.2.1 15.2.2 16. 16.1. 16.2. 16.2.1 16.3. 17.	Fire Safety Assessment Report (FSAR) 16 Airport Critical Infrastructure – Fire System 16 Domestic Terminal Nominated Sub Contractor List 17 Slab core holes/penetrations/excessive loads 18 Fire Safety 18 Fire Safety Assessment Report (FSAR) 18 All other buildings 18 Wayfinding Signage 18	6 7 8 8 8 8 8
15.2.1 15.2.2 16. 16.1. 16.2. 16.2.1 16.3. 17. 18.	Fire Safety Assessment Report (FSAR) 16 Airport Critical Infrastructure – Fire System 16 Domestic Terminal Nominated Sub Contractor List 17 Slab core holes/penetrations/excessive loads 18 Fire Safety 18 Fire Safety Assessment Report (FSAR) 18 All other buildings 18 Wayfinding Signage 18 Tenancy Fitouts 18	6 7 8 8 8 8 8 8 9
15.2.1 15.2.2 16. 16.1. 16.2. 16.2.1 16.3. 17. 18. 19.	Fire Safety Assessment Report (FSAR) 16 Airport Critical Infrastructure – Fire System 16 Domestic Terminal Nominated Sub Contractor List 17 Slab core holes/penetrations/excessive loads 18 Fire Safety 18 Fire Safety Assessment Report (FSAR) 18 All other buildings 18 Wayfinding Signage 18 Tenancy Fitouts 18 Final Approvals – Construction Complete 19	6 7 8 8 8 8 8 8 9 0
 15.2.1 15.2.2 16. 16.1. 16.2. 16.2.1 16.3. 17. 18. 19. 20. 	Fire Safety Assessment Report (FSAR) 16 Airport Critical Infrastructure – Fire System 16 Domestic Terminal Nominated Sub Contractor List 17 Slab core holes/penetrations/excessive loads 18 Fire Safety 18 Fire Safety Assessment Report (FSAR) 18 All other buildings 18 Wayfinding Signage 18 Final Approvals – Construction Complete 19 Environmental Issues & Management 20	6 7 8 8 8 8 8 8 9 0
15.2.1 15.2.2 16. 16.1. 16.2. 16.2.1 16.3. 17. 18. 19. 20. 21.	Fire Safety Assessment Report (FSAR) 16 Airport Critical Infrastructure – Fire System 16 Domestic Terminal Nominated Sub Contractor List 17 Slab core holes/penetrations/excessive loads 18 Fire Safety 18 Fire Safety Assessment Report (FSAR) 18 All other buildings 18 Wayfinding Signage 18 Tenancy Fitouts 18 Final Approvals – Construction Complete 19 Environmental Issues & Management 20 Development Control Document 20	6 7 8 8 8 8 8 8 9 0 1
 15.2.1 15.2.2 16. 16.1. 16.2. 16.2.1 16.3. 17. 18. 19. 20. 21. 22. 	Fire Safety Assessment Report (FSAR) 16 Airport Critical Infrastructure – Fire System 16 Domestic Terminal Nominated Sub Contractor List. 17 Slab core holes/penetrations/excessive loads 18 Fire Safety 18 Fire Safety Assessment Report (FSAR) 18 All other buildings 18 Wayfinding Signage. 18 Final Approvals – Construction Complete 19 Environmental Issues & Management 20 Development Control Document 20 Airport Technical Guidelines 21	6 7 8 8 8 8 8 8 9 0 1 1
 15.2.1 15.2.2 16. 16.1. 16.2. 16.2.1 16.3. 17. 18. 19. 20. 21. 22. 23. 	Fire Safety Assessment Report (FSAR) 16 Airport Critical Infrastructure – Fire System 16 Domestic Terminal Nominated Sub Contractor List 17 Slab core holes/penetrations/excessive loads 18 Fire Safety 18 Fire Safety Assessment Report (FSAR) 18 Fire Safety Assessment Report (FSAR) 18 All other buildings 18 Vayfinding Signage 18 Tenancy Fitouts 18 Final Approvals – Construction Complete 19 Environmental Issues & Management 20 Development Control Document 20 Airport Technical Guidelines 27 Exhaust Plumes or Vents on Airport 27	6 6 7 8 8 8 8 8 8 8 8 8 8 8 8 9 0 0 1 1 2
15.2.1 15.2.2 16. 16.1. 16.2. 16.2.1 16.3. 17. 18. 19. 20. 21. 22. 23. 24.	Fire Safety Assessment Report (FSAR) 16 Airport Critical Infrastructure – Fire System 16 Domestic Terminal Nominated Sub Contractor List. 17 Slab core holes/penetrations/excessive loads 18 Fire Safety 18 Fire Safety Assessment Report (FSAR) 18 All other buildings 18 Wayfinding Signage. 18 Final Approvals – Construction Complete 19 Environmental Issues & Management 20 Development Control Document 20 Airport Technical Guidelines 22 Exhaust Plumes or Vents on Airport 22 Utilities & Services 22	6 6 7 8 8 8 8 8 8 8 8 8 8 8 9 0 0 1 1 1 2 2



28.	Crane Operation Application	22
29.	Obstacle Limitation Surfaces (OLS)	23
30.	Application for Ground Water Monitoring Wells	23
31.	Installation of Aerials on Airport	24
32.	Traffic Management Plan	24
33.	Electrical Fire Impairment (FIN)	24
34.	Access for People with Disabilities	24
35.	Landscape Planning	25
36.	Building Identification Signage	25
37.	Temporary & Demountable Buildings	26
38.	Airport Security	26





1. Introduction

The purpose of this guideline is to explain the Airport Development Approvals Process applicable to all new buildings, alterations to existing buildings, tenancy fitouts, civil projects and demolition of buildings on Brisbane Airport. It also explains the roles and responsibilities of all parties involved in the process from concept design to completion and occupation.

This guideline will describe in simple terms the procedures that tenants, contractors and developers must follow in order to develop and construct a project at Brisbane airport and the requirements to submit a Airport Lessee Consent application.

If any additional information is required, please contact the Airport Approvals Manager on (07) 3406 3056 or email approvals@bne.com.au

2. Who is BAC

Brisbane Airport Corporation Pty. Ltd (BAC) is an unlisted Australian public company with a strong values based philosophy which seeks to achieve world's best practice in corporate and environmental management standards with a strong focus on industry, Government and community partnerships.

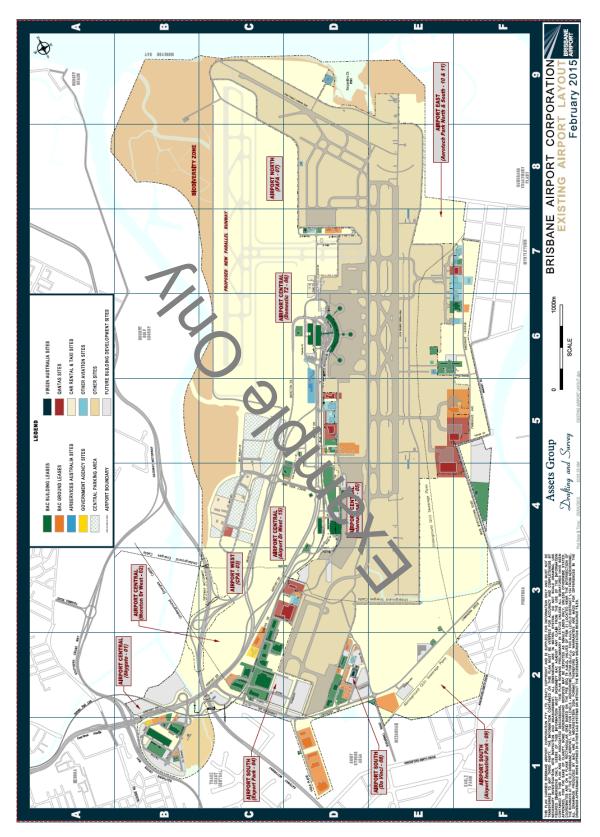
BAC is progressively realising its vision to transform Brisbane Airport from a City Airport to an Airport City. This transformation is being achieved through the development of a number of distinct planning precincts catering to a mix of uses including office, hotel, tourism, retail and recreational, passenger facilities, transportation and other infrastructure improvements.

BAC currently own and manage over one hundred infrastructure elements (sewerage, water, electricity, telecommunications, recycled water) and building assets including the Domestic (Common User) and International Terminals, leased BAC Buildings, runways, taxiways, aprons, ,airfield lighting, car parks ,all airport roads and landscaping.



2.1. Airport Map

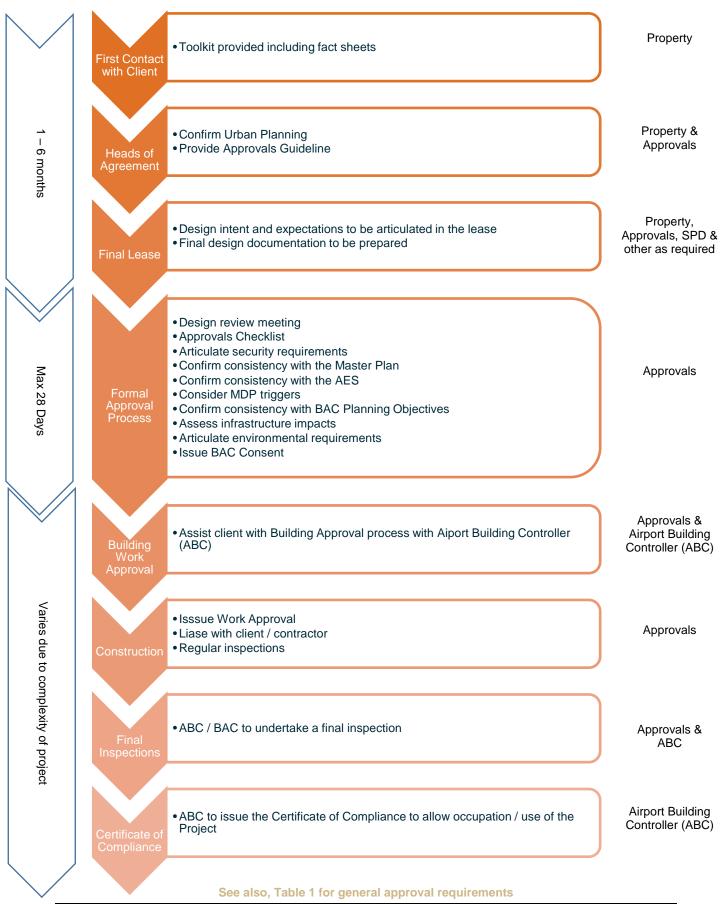
To obtain the latest version of this map email DraftingServiceDesk@bne.com.au



Abbreviation	Definition
ABC	Airport Building Controller
AD	Airport Datum
ADS	Airport Development Strategy
AEO	Airport Environment Officer
AES	Airport Environment Strategy
AES	Airport Environment Strategy
AHD	Australian Height Datum
Airside	The operational aircraft movement area of the airport; airside access is restricted
Anoldo	and controlled.
ALC	Airport Lessee Company
ALCC	Airport Lessee Company Airport Lessee Company Consent
ANEF	Australian Noise Exposure Forecast. This is a noise contour plan produced to
	indicate the noise levels extending from the runway system.
Apron	The part of the airport intended to accommodate aircraft for loading and unloading
Αριοπ	passengers, mail or cargo, and for fuelling, parking or maintenance.
ARFF	Aviation Rescue and Fire Fighting
ASA	Aviation Rescue and File Fighting Airservices Australia
BA	Building Approval – A permit issued by the Airport Building Controller, granting
CofC	approval for a proposed building activity.
COIC	Certificate of Compliance issued by the ABC at the successful completion of the
	project, to allow use or occupation.
CASA	Civil Aviation Safety AuthorityAviation Rescue and Fire Fighting
CEMP	Construction Environmental Management Plan
DCD	Development Control Document
DIRD	Department of Infrastructure and Regional Development.
DTB	Domestic Terminal Building
FEB	Fire Engineering Brief
FSAR	Fire Safety Assessment Report
GA	General Aviation (Area & Terminal)
ITB	International Terminal Building
Landside	Areas of Airport land that has free public access
MDP	A development that triggers the Major Development Plan
NOTAM	Notice to Airmen – A notice containing the information concerning the
	establishment, condition or change in any aeronautical facility, service, feature, or
	hazard. The timely knowledge of which is essential to person's concerned with
	flight operations. NOTAM are published under section 8 of the Air Services Act
	1995.
OLS	Obstacle Limitation Surfaces
PFAS	Perfluorinated compound
SEZ	A Special Event Zone is an area that can be established inside the boundaries of
	a security controlled airport for the purpose of managing security requirements
	that may apply to a particular function, activity or event.
SRA	Security Restricted Area
Sterile Area	The area of the terminal once you have passed security screening
WA	Work Approval



3. Approval Process Chart



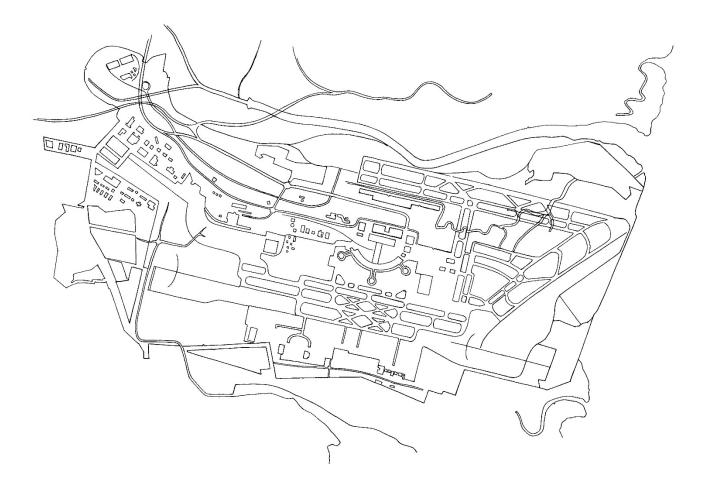


All works at Brisbane Airport require assessment and approval from Brisbane Airport Corporation and the Airport Building Controller

4. Reference documentation

All building and development activities on Brisbane Airport must align with both Commonwealth Legislation and BAC Planning objectives:

- The Airports Act 1996
- The Airports (Building Control) Regulations 1996
- The Airports (Environment Protection) Regulations 1997
- Protection of Airspace Regulations 1996
- 2014 Airport Master Plan
- Australian Noise Exposure Forecast (refer to the Airport Master Plan)
- Airport Environment Strategy (refer to the Airport Master Plan)
- Brisbane Airport landscape setting strategy
- BAC Development Control Document
- Airport Technical Guidelines (contact your Project Manager to request access)
- Drainage Master Plan (contact the Airport Approvals Manager for further information)
- Obstacle Limitation Surface Plan (contact the <u>Airport Approvals team</u> for further information)
- Airport Development Documentation (contact your Project Manager to gain access)





5. Types of Approvals

The following represents the various approvals that may apply to an application depending on the type and complexity.

Approval from the Airport Building Controller (ABC):

- The construction of new buildings or facilities
- The refurbishment, alteration, modification or demolition of existing buildings or facilities
- Tenancy and building fit outs
- All civil projects including bulk earthworks, road and pavement works
- Some types of fencing and structural retaining walls.
- Some free standing signs and signs fixed to buildings
- Service or infrastructure alteration or replacement
- Major environmental projects
- Groundwater monitoring wells
- · Communications antenna's, dishes, poles, aerials etc.
- Land clearing

6. Initial Design Meeting

The applicant/contractor are advised to arrange an initial project meeting to introduce the project to BAC and the ABC to discuss the proposed project. BAC can provide information to assist the applicant and also facilitate meetings with the Airport Building Controller (ABC).

BAC will review the preliminary designs for the project and will provide comment. The initial assessment meeting will identify issues that may require further detail or clarification and this can be facilitated through the Airport Approvals Manager.

The contact details for the Airport Approvals Manager are.

Phone:(07) 3406 3056Email:approvals@bne.com.au

7. Major Development Plan

Part 5, Division 4, The Airports Act 1996 specifies that certain projects on Federal Airport land require an additional level of approval. This is in the form of a Major Development Plan (MDP). BAC will determine if a project triggers the requirements of an MDP but this is generally limited to a significant project on Airport or one that has exceptional environmental impact.



8. Airport Lessee Company Consent

Airport Lessee Company Consent (ALCC) is formal BAC approval for all projects on Airport. The ALCC is issued under the requirements of the Airports (Building Control) Regulations 1996 and confirms that the proposed development is consistent with:

- The Brisbane Airport 2014 Master Plan which also includes the Airport Environment Strategy.
- A Major Development plan if applicable.
- BAC Planning Objectives which include:
- Airports Act 1996
- Landscape Master Plan
- Drainage Master Plan
- Airport Precinct Plans
- BAC Airport Technical Guidelines
- Brisbane Airport Landside Noise Model
- Obstacle Limitation Surface Plan
- Queensland Water Recycling Guidelines

Applicants must provide detailed information including complete Architectural, Engineering and Project Report documentation to convey the extent of the proposed project in detail.

BAC and ABC must be provided with the same documentation to ensure that both organisations are assessing identical applications.

BAC Airport Lessee Company Consent application form can be downloaded from <u>bne.com.au/corporate/projects-and-planning</u>

To lodge an application for an Airport Lessee Company Consent you will need to submit the following:

- A complete Lessee Company Consent Application Form
- One detailed set of hardcopy plans copied to the relevant scale, **plus** one electronic set in pdf & CAD format
- One set of detailed specifications and associated reports as applicable
- Design Certificates and CV's in Airport proforma's (not Form 16/15)
- Copy of the ABC application form

Additional information may be requested that verifies compliance with Brisbane Airports Master Plan and Environmental Strategy.



9. Airport Lessee Consent Fee

An Airport Lessee Consent is subject to a fee as per the following table.

All fees are based on the construction/project contract value of the works. The project value excludes the cost of consultants.

The Airport Lessee Consent Approval fee is shown in the following table.

Project Value \$ Inclusive of GST	Application Fee Inclusive of GST
Up to \$50,000	\$470
\$50,001 - \$100,000	\$660
\$100,001 - \$500,000	\$990
\$500,001 - \$1,000,000	\$1200
\$1,000,000 +	0.14% of the construction value**

All fees are calculated inclusive of GST.

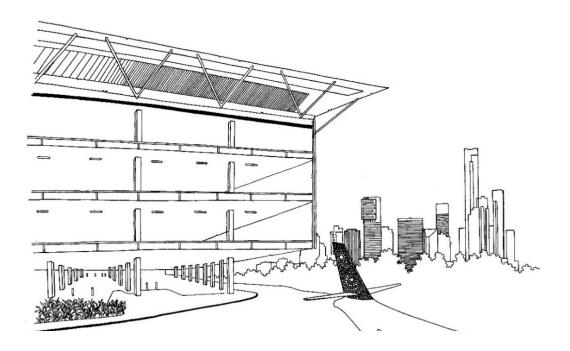
**For projects with a construction value over \$1,000,000, the processing fee is 0.14% of the construction value excluding consultant's fees plus GST.

Upon receiving an application BAC will issue an acknowledgement letter and a tax invoice. An Airport Lessee Consent Approval will not be issued until the fee has been paid.

Preferred Payment Method:

EFT - Request invoice from BAC Approvals

Cheques should be made payable to Brisbane Airport Corporation Pty Limited





10. Airport Building Controller

The Airport Building Controller (ABC) is a Federally Legislated position. It is the ABC's responsibility to issue a Buildings/Works Approval at Brisbane Airport on behalf of the Department of Infrastructure & Regional Development (DIRD).

It is the responsibility of the applicant to contact the ABC office to obtain the relevant building application forms. The contact details for the ABC office are;

Airport Building Controller Airport Environmental Office Unit 3A, Building 107, Leonardo Drive, Brisbane Airport Qld 4007 PO Box 137, Hamilton Central Qld 4007

> Phone: (07) 3216 3040 Email: <u>Marcus.Friman@philipchun.com</u>

11. Contractor Approval Process

BAC use a contractor management system called Beakon.

For further information, refer to the Safety and Security page at www.bne.com.au/corporate/work-at-bne

12. Asbestos

BAC have an asbestos register for all buildings on Airport, which is currently available on the <u>bne.com.au/corporate/work-at-bne/safety-and-security</u>.

13. Dangerous Goods

Dangerous goods are substances, mixtures or articles that because of their physical, chemical (physicochemical) or acute toxicity properties present an immediate hazard to people, property or the environment. Types of substances classified as dangerous goods include explosives, flammable liquids and gases, corrosives, chemically reactive or acutely (highly) toxic substances.

Proposed BAC tenants that occupy BAC buildings including warehouses, workshops or other storage facilities are required to provide details of any storage known to be classified as a 'Dangerous Good' under the *Work Health and Safety Regulation 2011*. A Dangerous Goods Management Plan will be determined by classification, quantity and volume of the proposed storage.

Note: A BAC building subject to a Fire Engineered Performance Solution may have specific limitations on what can be stored within the facility.



14. Specific Requirements at the International and Domestic Terminals

Essential and Non-Essential Load Requirements

The electrical supply for the Brisbane International and Domestic Terminals have been designed to provide separate functions for life and safety to operate as a functioning passenger and aircraft processing facility.

The electrical distribution provided to both Terminals is a secure supply with 33kV feeders from the Energex network and have generator back-up in the event of mains failure.

Back-up generators will operate to supply essential power only in the event of a mains power failure.

	· · · · · · · · · · · · · · · · · · ·
Essential	Non-Essential
 Fire Systems EWIS Emergency Lighting Hearing Augmentation Lifts and Escalators Auto Doors Flight Information Displays Aerobridges Nose-in-Guidance Systems Apron Lighting and Bay Markers Baggage Handling Systems Communications Rooms 50% Check-in facilities for each row 50% General Light and Power Public Address CCTV Alarm Monitoring Screening Equipment Security Access Control Retail Tenancy – (1 x point of sale GPO, 1 x refrigerator or freezer and 25%-50% of lighting, excluding display lighting) Commercial Tenancy – 	 Hand Dryers Signage Vending Machines ATM's Water Fountains Coffee Machines Tenancies – All of the tenancy except those areas listed in the Essential section Auto doors where not required for security or safety 50% Check-in facilities for each row 50% General light and power Anything else not required for life safety or terminal processing. If in doubt seek clarification

- Commercial Tenancy –
 50% Light and Power
- Lounge Tenancy as per Retail Tenancy



15. International Terminal nominated sub-contractor List

All work on terminal building services/systems must only be carried out by the nominated contractor/consultant.

TRADE /SERVICE	Sub-contractor details				
BUILDING MANAGEMENT	Dane McCarthy				
	Honeywell Limited				
	Ph: +61 7 380 6937				
	M: +61 418 700 410				
	E: dane.mccarthy@honeywell.com				
FIRE SAFETY & ENGINEERING	James Boyes				
	WSP Group				
	Ph: +61 7 3368 6638				
	E: james.boyes@wspgroup.com.au				
ALL BUILDING SERVICES					
	CV Services Group (FM Contractor)				
	Ph: +61 7 3622 4333				
	M: +61 488 121 647				
	E: <u>luke.vogel@cvservices.com.au</u>				
PA SYSTEM	Russell Munro				
	CNG				
	Ph: +61 3 9336 1288				
	M: +61 418 607 875				
	E: <u>russell.munro@cng.com.au</u>				
STRUCTURAL / SLAB CORE HOLES /	Aaron Toscan				
PENETRATIONS / EXCESSIVE LOADS	Associate Buildings, Aurecon				
	32 Turbot Street (Locked Bag 331)				
	Brisbane QLD 4001				
	Ph: +61 7 3173 8339				
	M: +61 466 510 811				
	Fax: +61 7 3173 8000				
	E: <u>aaron.toscan@aurecongroup.com</u>				
FIRE EVACUATION DIAGRAMS & PLANNING	Garry Dawson				
	Fire EMT Pty Ltd				
	M: 0421438654				
	EI: <u>garry.dawson@fireemt.com.au</u>				
	W: <u>www.fireemt.com.au</u>				
Airport Critical Infrastructure – Fire Systems	Chris Hemmings				
	Built Environment Operations Leader, SEQ, Aurecon				
	Level 14, 32 Turbot Street (Locked Bag 331)				
	Brisbane QLD 4000				
	Ph; +61 7 3173 8457				
	M: +61 421 050 096				
	F: +61 7 3173 8001				
	E: <u>Chris.Hemmings@aurecongroup.com</u>				
	Dinusha Edirisinghe				
	Senior Electrical Engineer, Aurecon				
	Level 14, 32 Turbot Street (Locked Bag 331)				
	Brisbane QLD 4000				
	Ph; +61 7 3173 8394				
	E: <u>Dinusha.Edirisinghe@aurecongroup.com</u>				



15.1. Slab core holes/penetrations/excessive loads

All Applications requiring drilling/coring/chasing of all slab levels above ground must be accompanied by a certification from <u>Aurecon</u>.

This certificate is also required if any unusual or excessive loads are to be placed on the slab or the building structure.

15.2. Fire Safety

15.2.1 Fire Safety Assessment Report (FSAR)

<u>WSP Group</u> must be engaged to assess the impact of the project in relation to the current FSAR.In particular where issues of variation from the Deemed-to-Satisfy (DtS) design solutions of the Building Code of Australia. This Assessment considers the performance solution (where applicable) to show compliance with the performance requirements of BCA and impact on current fire design. The evaluation methodology is based on direct compliance with applicable FSAR – FER and must be undertaken prior to the works commencing. At the conclusion of the works, the FSAR – FER must be updated to reflect these works and any impact on other areas of the facility.

15.2.2 Airport Critical Infrastructure – Fire System

<u>Aurecon</u> must be engaged to undertake a technical review for all projects that have the potential to interface with the fire systems against technical guidelines, industry codes of practice and current mechanical matrix. Where it is deemed that a project will interface with fire systems, the project must seek an approval from <u>Aurecon</u> before undertaking any works. Project obligations will be clearly communicated to the project team for all of the relevant stages being: pre project – during construction – nearing completion – testing & commissioning.

Refer to Annexure A for Aurecon's schedule of rates



16. Domestic Terminal Nominated Sub Contractor List

Any work on the following services/systems must only be carried out by the nominated contractor.

TRADE /SERVICE	Sub-contractor details					
BUILDING MANAGEMENT SYSTEMS	Dane McCarthy					
	Honey	well Limited				
	Ph:	+61 7 380 6937				
	M:	+61 418 700 410				
	E:	dane.mccarthy@honeywell.com				
FIRE SAFETY AND AIRPORT CRITICAL	Jim W	lood				
INFRASTRUCTURE	GHD					
	Ph:	+61 7 3316 3570				
	E:	jim.wood@ghd.com				
ALL BUILDING SERVICES	Luke	Vogel				
	CV Se	CV Services Group (FM Contractor)				
	Ph:	+61 7 3622 4333				
	M:	+61 488 121 647				
	E:	luke.vogel@cvservices.com.au				
PA SYSTEM		Russell Munro				
	CNG					
	Ph:					
	M:	+61 418 607 875				
	E:	russell.munro@cng.com.au				
STRUCTURAL / SLAB CORE HOLES /		Toscan				
PENETRATIONS / EXCESSIVE LOADS		iate Buildings, Aurecon				
		bot Street (Locked Bag 331)				
		ne QLD 4001				
	Ph:	+61 7 3173 8339				
	M:					
	Fax:					
	E: <u>aaron.toscan@aurecongroup.com</u>					



16.1. Slab core holes/penetrations/excessive loads

All Applications requiring drilling/coring/chasing of all slab levels above ground must be accompanied by a certification from <u>Aurecon</u>.

This certificate is also required if any unusual or excessive loads are to be placed on the slab or the building structure.

16.2. Fire Safety

16.2.1 Fire Safety Assessment Report (FSAR)

<u>GHD</u> must be engaged to assess the impact of the project in relation to the current FSAR. This Assessment considers the performance solution (where applicable) to show compliance with the performance requirements of BCA and impact on current fire design. The evaluation methodology is based on direct compliance with applicable FSAR – FER and must be undertaken prior to the works commencing. At the conclusion of the works, the FSAR – FER must be updated to reflect these works and any impact on other areas of the facility.

16.3. All other buildings

For all other buildings on Airport refer to the relevant Buildings Tenancy Fitout Guide.

17. Wayfinding Signage

All Wayfinding Signage requires BAC approvals and all submissions to submitted to the Approvals Group.

Brisbane Airport Corporation has developed Wayfinding signage guidelines to ensure the consistency of application across all signage on Airport. All wayfinding must meet these guidelines to receive approval. To access a copy of the Wayfinding Guidelines, please contact your Project Manager.

18. Tenancy Fitouts

All tenancy fitouts in the Terminals will require an ALCC from BAC and a building approval from the ABC. Documentation required for an ALCC may include but is not limited to:

- Architectural Plans
- Hydraulic Plans
- Mechanical Plans
- Electrical Plans
- Structural Plans
- Fire Services Report & Plans



19. Final Approvals – Construction Complete

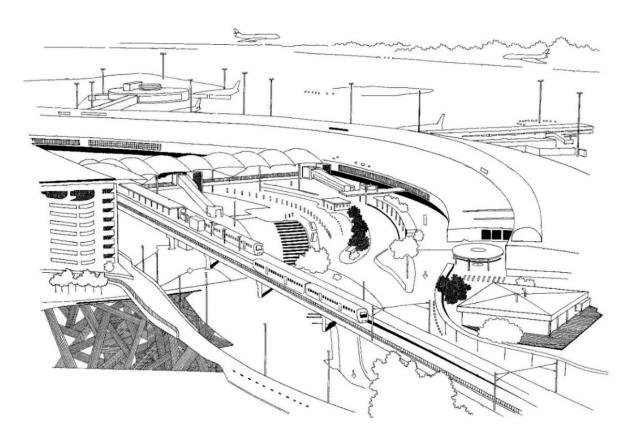
Upon completion of construction works and prior to occupancy, the final approval process will include the following:

- BAC & ABC final inspection.
- Issuance of BAC Final Inspection letter to the ABC.
- Issuance of Certificate of Compliance for occupancy (CofC) by the ABC to the respective applicant.

It must be noted however, that finalisation of approval documentation will be subject to all BAC Consent conditions being met regarding the completed building activity.

It is also a condition that <u>all</u> 'As Constructed' drawings in CAD (dgn or dwg) formats are to be submitted to BAC Approvals as soon as possible upon completion of works. BAC do not distribute consultant's CAD plan's to a 3rd party without authorisation under any circumstances.

Refer to Specification for Drafting 'as built' Documentation - June 2014 for full requirements. To access a copy of the Drafting 'as built' Documentation – June 2014, please contact your Project Manager.





20. Environmental Issues & Management

Environmental considerations are a requirement at the Airport given our proximity to many environmentally sensitive receptors.

All designs must be in accordance with

- the <u>Airports (Environment Protection) Regulations 1997</u>
- the BAC Environmental Policy

The design should consider but is not limited to the following:

- Sustainability initiatives as per the Development Control Plan
- Water sensitive Urban Design measures as per the BAC Airside and Landside Stormwater Quality Management Strategies on potable water storage measures for onsite landscaping
- Construction Environmental Management Plan for construction activities in accordance with the BAC CEMP Guidelines

A 'Construction Environmental Management Plan (CEMP) is a practical plan of management measures which are designed to minimise any environmental impact for the construction phase of a development. Further it provides a framework within which the measures will be implemented throughout the project. This CEMP is to be developed in accordance with BAC CEMP Guidelines and will include but is not limited to:

- Erosion and sediment control
- Acid sulfate soils
- Flora and fauna
- Air quality
- Waste management
- PFC Trigger Assessment
- Storm Water Management (MUSIC Model)

The CEMP will be reviewed and approved by BAC prior to work commencing on site. Allow 10 business for the CEMP to be reviewed.

21. Development Control Document

The <u>Brisbane Airport Development Control Document</u> (DCD) provides design standards which set minimum development guidelines to be adopted in the design of buildings and sites within the Airport Precincts. The DCD guides developments to consistently achieve the development vision as included in the 2014 Master Plan and Airport Environment Strategy.

The DCD provides general planning and building assessment guidance to maintain a consistent approach to development on airport. Notwithstanding the information contained in this DCD, a developer should have prior discussions with BAC regarding a proposal on airport land.



22. Airport Technical Guidelines

BAC has developed Airport Technical Guidelines to assist designers, contractors and other specialists involved in preparing design and contract documentation for works on Brisbane Airport. To access a copy, please contact your Project Manager.

Some variations of the requirements of this document may be considered by BA, however all deviations must be approved in writing by BAC.

23. Exhaust Plumes or Vents on Airport

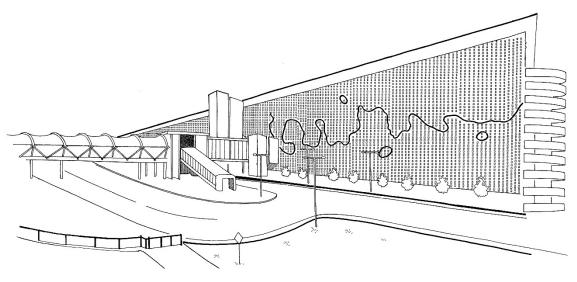
The following activities are controlled activities in relation to a prescribed airspace as described in Section 182 of the Airports Act 1996

- an activity that results in air turbulence, where:
- The level of turbulence exceeds the level ascertained in accordance with the regulations; and
- The turbulence is capable of affecting the normal flight of aircraft operating in the prescribed airspace

The Airports (Protection of Airspace) Regulations 1996 states in clause 6A; "For subparagraph 182 (f)(i) of the act, the level of air turbulence caused by an emission from a stack or vent is upward vertical velocity of **4.3 metres per second and the point of emission**"

If a project includes a vent or stack which has an emission greater than 4.3 metres / second at the point of emission, a Plume Rise Assessment is required. Refer to <u>CASA Guideline</u> for further information.

Once the plume assessment has been prepared this can be submitted to <u>Chris Young BAC Airside Standards</u> <u>Manager</u> with accompanying application <u>CASA Form 1247</u>.





24. Utilities & Services

Brisbane Airport owns, maintains and reticulates the following infrastructure services on Airport including

- Potable Water
- <u>Sewerage</u>
- Electricity
- <u>Communications</u>
- Recycled water

In order to provide these services for a new development it is essential that detailed information on probable loads and volumes are received for assessment. In respect to Fire Hydrant and Fire Sprinkler design requirements, BAC can provide the latest pressure and flow test results for the particular precinct or street at the time of application.

25. Trade Waste Application

BAC currently controls all trade waste volumes on Airport.

Tenants are required to submit a completed Queensland <u>Urban Utilities</u> <u>Trade Waste Application</u> form to BAC as part of their application.

All completed applications are to be sent to BAC Approvals Department and <u>not</u> to Queensland Urban Utilities.

26. Additional Fire System Installation Requirements

BAC require all buildings constructed on Airport to have a fire safety system installed in accordance with the National Construction Code (NCC). All buildings regardless of their size must meet the minimum standard and which must include manual call points (MCP's) and Fire Indicator Panel monitored by the ARFF via a Romteck Transmittal Unit. Please refer to Romteck Fire Signalling Equipment for Airservices Australia requirements for Fire Alarm Monitoring to all airport buildings.

BAC is responsible for the Airports Communications Network System. As such, BAC has implemented a standard specification for provision of optical fibre, pit and conduit systems which underlines the network requirements for buildings constructed at Brisbane Airport. It is important that the network requirements for the project are addressed at an early stage in order that our BAC Assets Group and IT Team can assess the requirements.

27. Landside & Airside

Brisbane Airport has two distinct areas, Landside and Airside. Special security requirements exist for anyone entering the Airside area. If your project requires Airside access, BAC will discuss your requirements at the assessment phase. The following link will describe the conditions for <u>https://bne.com.au/corporate/work-at-bne/safety-and-security</u>.

28. Crane Operation Application

Approval is required for any cranes and permanent structures which may penetrate the airports airspace surfaces under the Airport Act 1996 and Airports (Protection of Airspace) Regulations 1996.

For more information refer to the <u>Crane Application form</u> which can be found at <u>https://bne.com.au/corporate/projects/airspace-protection</u>



29. Obstacle Limitation Surfaces (OLS)

An OLS for an Airport is a surface that is determined in accordance with the International Civil Aviation Organisation (ICAO) International Standards and Recommended Practices for Aerodromes

The OLS surfaces define protection requirements for the initial and final stages of a flight, take off, preparation to land, and the landing itself. During these manoeuvres visibility must be good enough for the pilot to see and maintain visual reference to the Airport, and take responsibility for obstacle avoidance and separation from other aircraft

The objective of the OLS is to define a volume of airspace in proximity to the airport which should be kept free of obstacles that may endanger aircraft visual operations, or during the visual stages of an instrument fight. Even so the intention is not to restrict or prohibit all obstacles, but to ensure that either existing or potential obstacles are examined for their impact on aircraft operations and that their presence is properly taken into account.

Since they are relevant to visual operations, it may sometimes be sufficient to ensure that the obstacle is conspicuous to pilots, and this may require that it be marked and/or provided with night lighting. Of course each new obstacle may in some way inhibit the freedom of aircraft operations and inevitably contribute to air traffic congestion and delays.

If an obstacle in the approach and take off areas, pilots may need to make adjustments to their aircraft's optimum take-off and landing manoeuvre to ensure the necessary obstacle clearance. This may require using less than the full runway length available and may result in significant operational penalties such as fewer passengers, or less freight and fuel.

The OLS for Brisbane Airport comprises a number of reference surfaces in airspace which determine when an object may become an obstacle to aircraft manoeuvring in the vicinity of the airport, or during landing or take off.

The reflectivity of building materials selected must also be considered. Zincalume or other products with similar reflective properties are not to be used for any external cladding.

It is also a requirement that we are notified if a crane is to be erected on the Airport. See <u>part 25</u> for further details on crane applications including application form.

30. Application for Ground Water Monitoring Wells

Installation of ground water monitoring wells must be approved by both the BAC and ABC. Installation must be in accordance with the BAC Guideline to Installing Ground Water Monitoring Wells

 All data collected from every well installed is to be forwarded to <u>Environment@bne.com.au</u>, This information will not be released by BAC under any circumstances to any other party unless authorised.



31. Installation of Aerials on Airport

BAC approvals will require the following information for assessment if an aerial, antenna or satellite dish is required to be installed:

- Detailed location and height of equipment
- Type of communication equipment
- Certification that the installation meets the requirement of AS1170.2 (this must be certified by a professional engineer and that the installation conforms to Terrain Category 2, Region C)
- The installation is licensed and conforms to the Australian Communications & Media Authority (ACMA)

Please refer to General Guidelines to Mounting of Aerials at Brisbane Airport. To access a copy, please contact your Project Manager.

32. Traffic Management Plan

A traffic management plan is required for any changes to the traffic conditions or any work that is being undertaken on or adjacent to roadways.

The Traffic Management Plan provided by a licenced organisation must illustrate in detail the proposed traffic control scheme to be employed, which must be in strict accordance with the current Manual of Uniform Traffic Control Devices.

33. Electrical Fire Impairment (FIN)

Any works affecting the essential services, i.e. sprinklers, hydrants, smoke detectors to all BAC buildings, including terminals will require the completion of a Fire Impairment Notice (FIN).

The Contractor is to provide 3 business days' notice prior to works commencing which involve impairments and zone isolations of essential fire services.

To obtain a 'Fire Impairment Notice' please contact the BAC works co-ordinator;

- For terminals (07) 3406 5711;
- For landside buildings (07) 3406 5753

34. Access for People with Disabilities

BAC are dedicated to providing 'Best Practice' in accessibility for people with a disability throughout its facilities. ALL design documentation must take into account the requirements as set out in the *Disability (Access to Premises – Buildings) Standards 2010* and *Disability Standards for Accessible Public Transport (DSAPT) 2010* where applicable. All designs must comply with the latest version of AS1428 and the National Construction Code (NCC).



35. Landscape Planning

Brisbane Airport Corporation has a series of documents to guide the day to day decision making, project development and evaluation of landscaping at Brisbane Airport (BNE). These documents are designed to realise BAC's vision for the development of its landscape asset, whist supporting the operational needs of BNE. For further information about the series of documents that relate to landscaping, please contact BAC's Infrastructure Planner on (07) 3406 3000.

When seeking BAC's approval for proposed landscaping, it is expected that a Landscape Architect will use these documents to prepare a site-specific Landscape Plan. The site-specific Landscape Plan will contain the following (at a minimum):

- The location of existing and proposed buildings, structures and infrastructure on the site;
- The location of existing or proposed storage areas and machinery on the site;
- The location of existing landscaping in and around the site;
- The location of entries and exits to and from the site and the proposed paving and surface treatments;
- Botanical and common names, height and pot size at planting of the proposed landscaping;
- Indication of existing and proposed contours, changes in elevation and drainage flow associated with mounding, contouring, levelling or shaping the surface;
- Any walls, screens or fences;
- The location, type and performance of irrigation system;
- The location of any art, signage or features;
- Details of lighting to be incorporated into the landscaping (if any);
- Details about the proposed installation and maintenance program, to ensure continuing health and growth of landscaped elements.

The site-specific Landscape Plan should propose landscaping that, at a minimum, is a combination of <u>mature</u> trees, shrubs and groundcovers.

36. Building Identification Signage

All proposed signage installation on Airport will require BAC approval. Please refer to BAC Site Signage Plan. To access a copy, please contact your Project Manager.

Any signage outside the BAC design requirements will be assessed to determine its suitability for use on Airport.



37. Temporary & Demountable Buildings

All applications for the installation of temporary or long term demountable buildings must be lodged with BAC. An application must include:

- A scaled plan of the compound area showing all buildings, awnings, drainage flows, shake down areas, wash down areas, vehicle / pedestrian entry / exit points etc Note: for a site compound to receive an exemption the total area of all connected site sheds and awnings must be less than 500m² as exceeding 500m² requires a fire hydrant system to be installed in accordance with AS 2419.1, which would trigger a building approval.
- Details of the site shed tie down including a design certificate signed by an RPEQ on the ABC template (Form 15 and 16 are not be provided from consultants as they are not relevant on Federal land.)
- If the works include soil movement or excavation a PFC Trigger Assessment will need to be requested from Environment.
- Details of the step / stair to provide access into the site shed.
- Traffic Management plan, if required, to provide safe access from the site compound to the construction site.

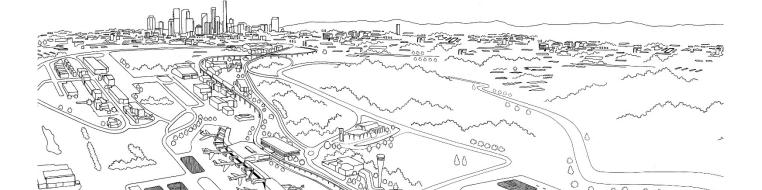
Please note: A separate application must be lodged with the Airport Building Controller (ABC) in order to determine if an Exemption or Building Approval will be required.

38. Airport Security

Security Fencing – Airside Works

Any work affecting the Airside Security Fencing will require approval by BAC Airport Security Services. All plans, specifications and full Scope of Work must be submitted prior to any work commencing. All security fencing must be inspected and approved by BAC Security Operations Manager prior to use of site.

For more information regarding the required standards and security fence scenarios, please visit our website: www.bne.com.au/corporate/work-at-bne or contact the BAC Security Operations Manager on (07) 3406 3016.





Annexure A



WORKS TO BE CARRIED OUT, BASED ON PROJECT CATEGORISATION/PROJECT VALUE		Project Value						
		< \$50,000	\$50,001- \$250,000	\$250,001 - \$2,000,000	\$2,000,001 - \$20,000,000	\$20,000,000 - \$99,000,000	\$100,000,000 >	
a.	Undertake technical review for all projects that have the potential to interface with the fire systems, against technical guidelines, industry codes and standards, the existing FSER, Cause and Effect Matrix, and current system operation. Provide approval or seek further information to be able to approve or reject the application. Any rejection of a project will require clear advice on why the application was rejected and steps or requirements to meet approval	Lump Sum	\$700	\$1,400	\$2,800	\$4,200	\$5,200	\$5,800
b.	As part of any approval granted under 5.3 (a) provide clear guidance of all documentation required during and at completion of the project including, hold points for inspection, test procedures/requirements, supporting documentation, ie. as builts and commissioning data required to be provided such that at completion of the project the consultant has all required documentation to be able to certify the project is complete in accordance with BAC's requirements	Lump Sum	\$200	\$400	\$700	\$1,400	\$2,800	\$3,700
С.	Review and approve any proposed changes to the FIP program, including Fire, smoke, EWIS zones and graphical interface.	Lump Sum	\$400	\$700	\$1,400	\$2,800	\$4,200	\$5,800
d.	Carry out witness testing of all changes to the fire systems, to confirm correct operation of all system interfaces.	Lump Sum	\$400	\$700	\$1,400	\$2,800	\$4,200	\$5,800
e.	Provide written certification at the end of projects that all works have been completed in accordance with the provided documentation, that all testing has been carried out and passed in accordance with the testing requirements detailed under 5.3 (a) and 5.3 (b), that all as built documentation has been provided and is correct, and that all block plans, Cause and Effect Matrices, etc. have been updated.	Lump Sum	\$200	\$400	\$1,400	\$2,800	\$4,200	\$5,800
f.	Provide approved and certified as built documentation to BAC Drafting and review and confirm changes undertaken. Review and confirm all commissioning data required has been delivered and is correct and meets the requirements of the current AS1851.	Lump Sum	\$200	\$400	\$1,400	\$2,100	\$2,800	\$4,600



Blank Page

BRISBANE AIRPORT CORPORATION PTY LTD 11 THE CIRCUIT, SKYGATE BRISBANE AIRPORT GLD 4008 PO BOX 61, HAMILTON CENTRAL GLD 4007 AUSTRALIA T +61 (0)7 3406 3000 F +61 (0)7 3406 3111 E INFO@BNE.COM.AU W BNE.COM.AU ABN 54 076 870 650