PRELIMINARY DRAFT MAJOR DEVELOPMENT PLAN

6 BRINDABELLA CIRCUIT OFFICE DEVELOPMENT

September 2018





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Glossary

ABC Airport Building Controller
AEO Airport Environment Officer

ALC Airport Lessee Company

AMSL Above Mean Sea Level

ANEF Aircraft Noise Exposure Forecast

ASA Airservices Australia

BBP Brindabella Business Park
BRA Building Restricted Area

CASA Civil Aviation Safety Authority

CRJO Canberra Region Joint Organisation

CEMP Construction Environmental Management Plan

EMS Environment Management System

EPBC Environment Protection and Biodiversity Conservation Act 1999

GBCA Green Building Council of Australia

GVA Gross Value Added

ILS Instrument Landing System

JLL Jones Lange Lasalle

LOS Level of Service

MDP Major Development Plan

MOP Majura Office Park
MOS Manual of Standards

MOU Memorandum of Understanding
MPSC Majura Park Shopping Centre
NCA National Capital Authority
NCC National Construction Code

NCP National Capital Plan

MTOW Maximum Take Off Weight

NCP National Capital Plan

NLA Net Lettable Area

NOTAM Notice to Airmen

OLS Obstacle Limitation Surface

PANS-OPS Procedures for Air Navigation Services – Aircraft Operations

PCA Property Council of Australia

PFAS Per- and poly-fluoroalkyl substances

Chapter One: Introduction

1.1 Location

The Canberra Airport Aerotropolis forms part of the Central National Area (as denoted in the NCP) and is located in the Majura Valley, eight kilometres East of Canberra's Central Business District and four kilometres North-West of Queanbeyan. It is located on the East-West Transport Corridor as defined in the NCP, which contains over 75 percent of Canberra's employment. It is also denoted as a Defined Office Employment Location in the NCP. The Airport is part of the Eastern Broadacre area described in the ACT Planning Strategy 2012.

Similar airports around the world, where major activity nodes are developing, are now known as an Aerotropolis. The Commonwealth Government's aspiration is to develop the Western Sydney Airport as an Aerotropolis consistent with Brisbane, Melbourne, Perth and Canberra Airports.



Brindabella Business Park, Canberra Airport

Most of the land North and South of the Airport is currently used for broadacre purposes because it is overflown by aircraft or because of its long association with Department of Defence activities. This land (including the Airport) is denoted as a new Employment Corridor in the ACT Planning Strategy 2012. Amendment 86 to the NCP (May 2016) rezoned lands West and North-West of the Airport as Potential Future Urban. The IKEA development is Stage 1 of proposals by the ACT Government for employment / retail land sales in this rezoned area.

This proposal is situated within Brindabella Business Park on Canberra Airport. Brindabella Business Park is a mixed-use precinct, largely for a wide-range of office accommodation but also for a range of uses such as small-scale retail, aircraft maintenance and other professional services. The Airport site adjoins the Airport Interchange at the junction of Canberra's North-South and East-West road corridors. As such, the Airport is strategically located for the development of a major activity node reinforcing the "30-minute city" catchments of Canberra, Queanbeyan and parts of the subregion. Being so close to Canberra City and Parliament House, as well as having such a large number of residents drive through the Airport Interchange or nearby the Airport every day (particularly from Queanbeyan, Tuggeranong and Gungahlin), the Airport Aerotropolis is a key employment location to minimise drive times and travel distance for sustainable transport initiatives consistent with the NCP.

1.2 The proposal

The proposal is to construct two office buildings (Building A and Building B) at 6 Brindabella Circuit with up to a total of 21,000m² NLA in Brindabella Business Park on Canberra Airport.

The proponent requires the office buildings to be market ready for new tenant opportunities as they emerge, to attract "the kind of businesses that gain value from the connectivity that a 24-hour airport offers".

If the development proceeds at the maximum development of 21,000m² NLA, the building cost will be in the order of \$65 million, subject to final design and specification.

1.3 The project

The construction of this proposal is consistent with the Canberra Airport Master Plans, including the latest 2014 Master Plan approved in January 2015. The development will be up to 21,000m² of office space across two buildings with one roofline. The timing of the project is subject to a tenancy agreement to lease, realising long-term planning for the site, but indicatively is scheduled to commence in 2019. The proposal will be developed by the proponent to provide A-Grade office space within Brindabella Business Park. Brindabella Business Park has been developed into one of Australia's best planned office and retail precincts and the worldwide development trend of airports now acknowledged as Aerotropolises.

In the past, airports were seen as transport hubs for moving goods and people from one region or country to another. Not so today. Airports are now business destinations in their own right and provide a powerful economic engine for their region and local communities.

Increasingly, airport precincts are home to business and industrial parks; information, communications and technology complexes; retail centres and hotels.²

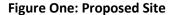
¹ Fletcher, P. [2017] Luncheon Address – NSW Division of Property Council, 3 November 2017.

² Mrdak, M [2015] *The difficulty of planning and investing in productive infrastructure – Western Sydney Airport.* Address to the AFR National Infrastructure Summit, 12 June 2015

The development of Canberra Airport as an Aerotropolis is consistent with the Commonwealth Government's aspirations for all federally-leased airports and the future Western Sydney Airport.

The Commonwealth, ACT, NSW Governments and the Canberra Region Joint Organisation (CRJO) are working together to capture this opportunity for the Canberra Region leveraging off the Canberra Airport Aerotropolis. The Airport is identified by the NSW Future Transport 2056 as one of New South Wales' three Global Gateways.

The proposal will be designed and constructed to meet Commonwealth Government building standards and performance levels, high levels of environmental design and sustainability, as well as any applicable, specific ASA and CASA requirements. The site for the proposal has an area of approximately 8,300m².





1.4 Proponent details

On 29 May 1998, the Commonwealth Government granted a long-term Airport Lease for Canberra Airport to Canberra Airport Pty Limited as part of the Phase II sale of Federal Airports.

As Canberra Airport is located on Commonwealth land, the Commonwealth's statutory officers include the ABC and the AEO. Canberra Airport Pty Limited is the ALC under the provisions of the *Airports Act 1996* (the Act). Under this Act responsibility for decisions regarding the use and development of airport land resides with:

the Minister for Infrastructure and Transport (the Minister) for proposals considered to be 'major airport developments', or

Canberra Airport and the ABC and AEO for all other proposals (see Section 1.6).

The proponent of the proposal is:

Canberra Airport Pty Limited

Level 4, Plaza Offices West

21 Terminal Avenue

CANBERRA AIRPORT ACT 2609

1.5 Objective

The objective of this proposal is to construct an A-Grade office facility, subject to demand, further fulfilling plans for Brindabella Business Park. This objective is consistent with the vision for Canberra Airport as presented in the 2014 Master Plan and previous Master Plans to:

- develop Canberra Airport as a first-class quality facility as the major public transport gateway to the National Capital;
- meet the evolving transport needs of the region's business and resident community; and
- maximise the growth of a wide range of aeronautical and other businesses.

The construction of the proposal will provide ongoing job opportunities, economic activity from the investment, optimise the social and economic benefits of the Airport to the Region, and facilitate additional income streams to ensure that all of the detailed objectives of the Airport are performed in a viable, safe, comfortable, secure and environmentally sustainable way.

As is evident with the development of Canberra Airport over the past 20 years, the diversity of income generated from non-aviation development similar to the proposal has facilitated aviation development with capacity to service future growth, for example the Terminal precinct.

1.6 Major development plan process

A "major development", as defined under the Act, requires the preparation of an MDP which is considered and may be approved by the Minister. The proposal may also be considered under the EPBC Act.

This MDP was prepared because the proposal is expected to exceed the requirements under subsection 89(1) of the Act, notably:

89(1)(e) – constructing a new building where the building is not wholly or principally for use as a passenger Terminal; and the cost of construction exceeds \$20 million or such higher amount as is prescribed.

In addition, the proposal will be subject to:

- Compliance with the development requirements of Canberra Airport Pty Limited;
- Submission of an Application for a Building Permit to the ABC in accordance with the Airports (Building Control) Regulations 1996; and
- Submission of a CEMP to the Australian Government Department of the Environment and Energy for review and support.

1.7 National Construction Code

The proposal will be designed and built to comply with the NCC.

1.8 NCP Employment Location

As set out in the NCP, Canberra Airport is within the Central National Area, is an employment location and the relevant precinct code is the Airport's Master Plan.

This proposal is consistent with the NCP.

1.9 Construction Environmental Management Plan (CEMP)

The Canberra Airport CEMP (originally approved by the then Department of the Environment, Water, Heritage and the Arts on 3 February 2010) is currently being refreshed and updated, in consultation with the Department of Environment and Energy (DoEE), to ensure it is consistent with:

- National Environment Protection (Assessment of Site Contamination) Measure 1991 (ASC NEPM);
- PFAS National Environmental Management Plan (NEMP) 2018, including its guideline values, as amended from time to time;
- National Water Quality Management Strategy (NWQS), including the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000) which is currently under review, and
- National Strategic Plan for Asbestos Awareness and Management September 2015

The final refreshed and DoEE approved CEMP will be uploaded to Canberra Airport's website and included as an Appendix to the Draft Major Development Plan for this proposal when it is submitted to the Minister of Infrastructure and Transport for consideration.

Chapter Two: Proposal Description

2.1 Office development

The proponent will have carriage of the base building design, fittings and equipment, construction and ownership of the completed buildings.

The proposal will be in keeping with the high architectural standard of the existing buildings in Brindabella Business Park. The proposal will marry best practice campus style workplace principles within a master planned landscaped precinct. This, in combination with the A-Grade quality building, will create an internal and external 'village' for a tenant achieving co-location, breaking the historical constraints of disjointed and siloed workplaces typical of older buildings.

Canberra Airport has been a member of the GBCA since its inception. 8 Brindabella Circuit is the first office building in Australia to be awarded a 5 Star Green Star Rating by the GBCA. All buildings on Canberra Airport, including the proposal, are designed and built in response to GBCA principles.

The proposal will further bridge the existing Brindabella Business Park with nearby pedestrian thoroughfares and recreational and retail amenities. The development will be visible from aircraft on the main Runway 17/35. It is important that the proposal embraces architectural language from the surrounding precinct to influence a welcoming modern design on all facades.

The design of the proposal is yet to be finalised however **Figure Two** conceptually represents the proposal.

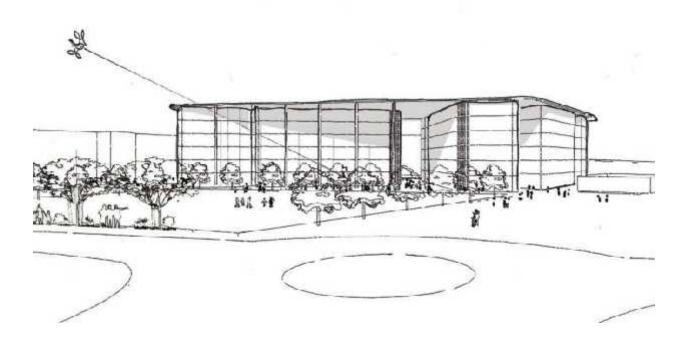


Figure Two: Indicative Office Development - West Elevation

Proposal Site and Specifications

The proposal will be situated in the North-Eastern end of Brindabella Business Park. The proposal will be constructed on the site of the existing on-grade car park located between 4 and 8 Brindabella Circuit, opposite the existing QantasLink Hangar at 9 Brindabella Circuit, with easy pedestrian access to facilities within the Park and beyond to the Terminal Precinct.

The site for the proposal has an area of approximately 8,300m².

The floor plate of each building at 6 Brindabella Circuit is expected to be up to 1,920m² NLA on most upper floors. Subject to commercial negotiation, it is anticipated the proposal will consist of:

)	Two buildings, Building A and Building B with pedestrian access in-between;
J	Up to 21,000m² NLA floor space across both buildings;
J	Up to six storeys up to an average maximum height of 25.20 metres above ground level;
J	One level of basement car parking. The basement is not part of this MDP and is likely to be constructed ahead of the two buildings as a separate project;
J	Vehicle access;
J	Atrium / lobby areas; and
J	A number of lifts, including service lifts.

Final design and specification is yet to be decided, however the proposal will likely provide space for a loading dock, general storage, waste management, meeting facilities, and potentially for a café, a kiosk and other tenant requirements. Externally, the proposal will include a set down/ pick up area out the front of the building on the Brindabella Circuit frontage, as well as access areas for service vehicles, pedestrian thoroughfares and landscaping.

The proposal will be designed to meet all applicable building standards and respond to GBCA principles.

Parking facilities

The proponent has a history of providing car parking space capacity ahead of demand. This is evident in all Airport precincts. The proponent plans, designs and builds all car parking and also provides ongoing customer service in all Airport precinct car parks, including Brindabella Business Park.

One level of basement car parking will be provided as part of this proposal. There is extensive car parking broadly within Brindabella Business Park that the proponent forecasts will satisfy demand with minor changes to existing car parking facilities and management practices.

The proposal will be supported by over 7,000 car parking spaces within Brindabella Business Park (as shown in **Figure Three**).

Figure Three: 6 Brindabella Circuit Car Parking and Access



Building height

The proposal will be up to six storeys over basement car parking up to a height of 25.20 metres above ground level. The building height including roof vents, lift over-runs and plant and equipment will be below the OLS and the BRA.

Building material and finishes

Final design and specification is yet to be decided, however external finishes, all with non-glare finishes, are likely to be as follows:

- Roof Powder coated metal decking, similar to that used for the existing MOP.
- External walls A mix of masonry and glazing. The masonry at ground level or on particular facades will have applied finishes. Concrete features may also be included.
- Windows Double glazed with low 'e' high performance glass to deliver high levels of thermal and noise attenuation performance and mitigate glare.
- Paving Tiled, brick or concrete paving.

Internal finishes:

- Floors Generally modular carpet tiles (subject to building occupant) with hard surfaces in foyers and wet areas.
- Walls Hard surfaces, generally plaster board or similar.
- Ceilings Generally modular mineral fibre tile within a metal grid system.

All building products and specifications will be consistent with NCC requirements.

The design of the building envelope will be similar in character to the other high-quality buildings that have been constructed at the Airport. It is intended the building facade will comprise selected colours portraying quality and sophistication.

2.2 Canberra Airport office precincts

Across Brindabella Business Park, Majura Office Park and Fairbairn, Canberra Airport is now Canberra's third largest office precinct, after Civic and the Parliamentary Triangle, supporting a growing working population of approximately 15,000 people, expected to reach 18,000 people by 2020 and 34,000 people by 2034 (2014 Master Plan).

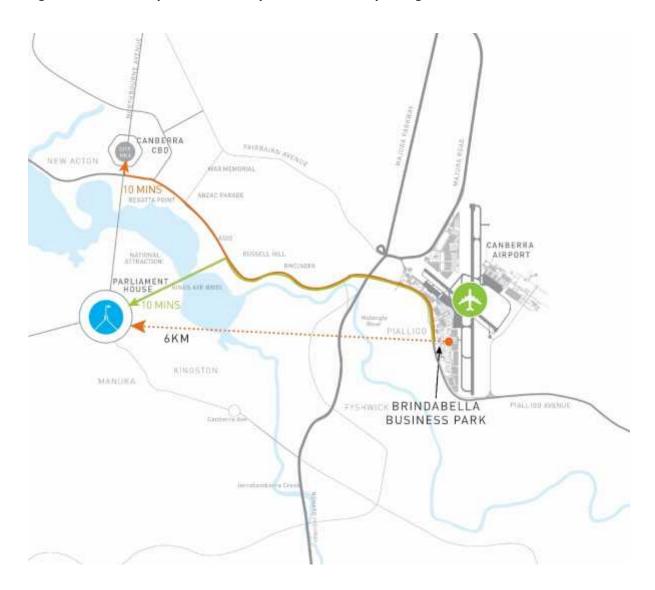


Existing Brindabella Business Park, Canberra Airport

The Airport provides a total master-planned workplace solution encompassing landscaped gardens, childcare centres, a range of parking facilities, integrated public transport, conferencing facilities, BBQ facilities, playing fields, gymnasiums, tennis courts, a swimming pool, cafes, retail offerings, medical practitioners, as well as a Vibe Hotel.

Brindabella Business Park is centrally located to the rest of Canberra, sitting at the intersection of Canberra's East-West and North-South arterial road network, and approximately eight kilometres from the City and six kilometres from the Parliamentary Triangle as shown in **Figure Four**. Around two-thirds of the Canberra and Queanbeyan population live within a 20-minute drive of the Airport.

Figure Four: Proximity to Canberra City and Parliamentary Triangle



Brindabella Business Park is recognised as a leading example of urban design and place making. It is designed to create a sense of community and achieve on site a balance between work, health and lifestyle.

2.3 Needs of airport users

The proposal will not adversely affect airport users. The proposal forms a further stage to the established and highly successful Brindabella Business Park as an A-Grade office campus and this proposal will further reinforce the long-term concept for Brindabella Business Park as a quality campus setting.

Opportunities will be enhanced for existing government agencies, blue-chip business, and retail and café businesses situated in the Park or in the vicinity. Tenants of 6 Brindabella Circuit will be within walking distance of the Airport Terminal precinct, including the Vibe Hotel, providing excellent amenity and opportunity for seamless interstate and international travel.



Brindabella Business Park 'Town Centre', Canberra Airport

The proponent owns and manages all the current buildings in the Brindabella Business Park with a high focus on customer service to airport tenants.

The proponent will consult existing tenants throughout the MDP process and during construction. Many tenants have already been consulted.

The Canberra Airport CEMP is currently being refreshed in consultation with the Department of Environment and Energy.

The contractor is required to comply with the provisions of the CEMP and will be monitored by the proponent. If any complaints are received by the proponent, work practices and work times will be reviewed and adjusted to meet reasonable and practical compliance with the CEMP.

Risk and hazard management

There is a low level of hazard and risk associated with the construction and operation of the building as it will comply with current building standards and relevant health and safety standards.

The potential for incidental hazards such as fire within the building is controlled by adherence to building codes and standards such as the NCC and all relevant Australian Standards, and by the operation, as required, of work, health and safety legislation. The NCC prescribes requirements for fire extinguishers, hose reels, and emergency exits.

The proposal will comply with the Canberra Airport Safety Management System. Furthermore, risk assessments will be conducted as part of all Method of Working Plans published for the purposes of building the proposal.

Australian Standard 2021:2015 is the criterion for the acoustic insulation of buildings. The siting, design and construction of the proposal is consistent with the provisions of Australian Standard 2021:2015 and other relevant standards. Work, health and safety requirements within and adjacent to the proposal will be managed in accordance with relevant statutory requirements.

Provisions for mobility impaired people

The proposal will be compliant with the NCC Standard 1428.1. Provisions for mobility impaired people will include – consistent with the proponent's development criteria and disability policies:

J	Disabled persons toilets;
J	At grade access to the building from the vehicle drop-off point;
J	Mobility-impaired parking;
J	Uniform floor levels throughout the interior; and
J	Lifts access to levels

2.4 Building services and facilities

The Airport site is serviced to the boundary by all utilities. The reticulation of all utility services within the Airport is planned, constructed, owned and managed by the proponent to a high quality and with redundant capacity designed to service growth over time and to achieve the optimum life cycle of each utility reticulation.

Power supply/electricity/gas

The proposal will be supplied with an electricity and gas service adequate to supply all building, lighting and other services.

Water supply

Adequate supplies from ICON Water are readily available through the Airport site's reticulation system which has no constraints to capacity following upgrades in 2006/07.

Wastewater and sewage disposal

The proposal will be connected to the existing wastewater and sewage reticulation systems in the precinct. No constraints to capacity for these services currently exist in this area.

Telecommunications

The proposal will incorporate current telecommunications technologies in all respects, including the ability for fibre optics communication/data transmission. There are cabling conduits for multiple carriers throughout the precinct owned and managed by the proponent. No constraints to capacity for these services currently exist in this area.

Lighting

The proposal will be fitted with non-glare, energy efficient light fixtures internally and externally, where appropriate. External lighting fixtures will be installed to comply with requirements outlined in Chapter 9 of Manual of Standards Part 139 and also Guideline E of the National Airports Safeguarding Framework, *Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports*, to meet air safety requirements.

The proposal is within Zone B where any up lighting is restricted to 50 candela. The same restrictions apply to a number of existing buildings on Brindabella Circuit.

Heating, ventilation and air-conditioning

The proposal will incorporate an energy efficient air-conditioning system managed by building plant computer systems consistent with operational requirements, GBCA principles and efficient low energy use targets.

2.5 Landscaping and site planning

The proponent designs, constructs and manages all landscaping maintenance on and adjacent to the Airport.

Landscaping will be consistent with existing development within Brindabella Business Park in order to create an urban and landscape design that is harmonious in form and texture both within the Airport and on surrounding land to reinforce the site as the public transport gateway to the National Capital.



Brindabella Business Park, Canberra Airport

The surrounds of the proposal will be landscaped to extend the strong unified landscape theme which is being progressively implemented throughout the Airport.

Landscaping will be designed to minimise attraction to birds and other wildlife.

The management of rubbish will be undertaken in a similar manner to that implemented in other buildings on-airport to ensure no bird attraction or foreign object debris risk exists.

2.6 Signage

Signage relevant to the completed building will be generally consistent with signage throughout Brindabella Business Park and the provisions of the Airport's approved 2014 Master Plan, including:

- Tenant signs business name and logo, subject to commercial agreement;
- Ground transport and traffic signage; and
- Safety and hazard signage as required.

Identification signage on the building may be permitted following negotiated commercial signage agreements with airport management.

2.7 Construction

Earthworks to a depth of up to 4 metres may be required to accommodate the building's foundations and basement car park.

Sufficient laydown and layby areas for construction activities will be provided. The proponent has considerable experience in managing construction proposals of a large scale so that access to the proposed site and through Brindabella Business Park will be maintained with minimal disturbance.

2.8 Operation and maintenance

The proposal will be maintained within the proponent's overall asset maintenance function.

2.9 Impact on aviation

The proposal will not affect flight paths at the Airport.

OLS and PANS-OPS

The proposal will not affect or penetrate the OLS or PANS-OPS (as shown in Figure Five).

OLS are 'a series of geometric planes associated with each runway at an aerodrome that defines the desirable limits to which objects may protrude into the airspace around the aerodrome so that aircraft operations at the aerodrome may be conducted safely'.³

The purpose of the OLS is to ensure both the safe operation of aircraft in the vicinity of the Airport and the operational viability of all runways. Building heights on and around the Airport are limited by application of the OLS. The OLS surface for either runway does not extend over the site.

The proposal and its fittings will stand at a maximum height of 593.00 metres AMSL (an average maximum height 25.20 metres above ground level) which is below the lowest point of the OLS.

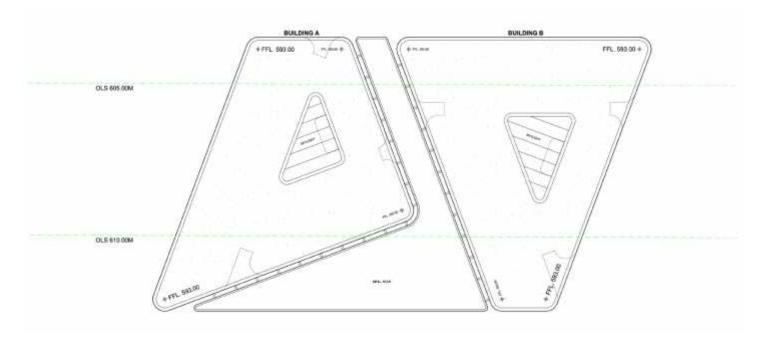
The final design of the building may vary from the above due to design height considerations in the context of navigation aids and will again be checked against the OLS to ensure the OLS is not exceeded at any point. The PANS-OPS sits above the OLS. Because the proposal is below the OLS, it will also be below the PANS-OPS.

Should cranes be required at any time during construction that may penetrate the prescribed airspace, clearances will be sought in compliance with the Airports (Protection of Airspace) Regulations 1996.

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³ CASA. *Manual of Standards Part 139 – Aerodromes.* Version 1.6. June 2011. Page 1-10.

Figure Five: OLS clearance over proposed building - plan section



Navigational aids, radar and Building Restricted Area (BRA)

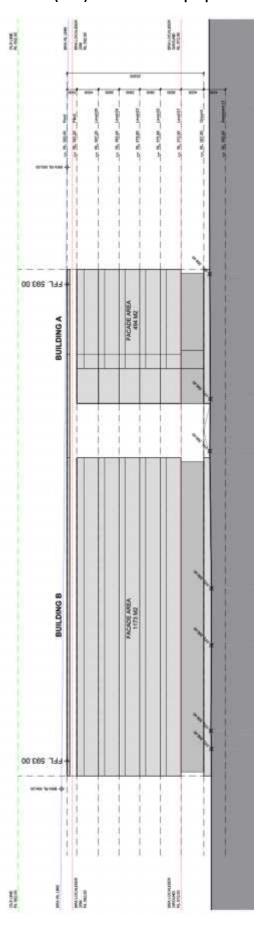
The proposal is to be located to the West of Runway 17/35 and will be designed and built not to infringe any navigation aid and in particular will comply with "Navigation Aids Radio Instrument Landing System Localiser Building Restricted Area", drawing HR 31247 SHT No 004, 30 June 2011. The proposal will be designed and built to ensure there will be no vertical wall facing the runway that exceeds 2,000m² in area (as shown in **Figure Six**).

As part of pre-consultations to this Major Development Plan proposal, the proponent has consulted ASA in regard to the BRA.

Canberra Airport is finalising the necessary infrastructure works to upgrade Runway 35 from Category I to Category II. ASA has advised that to secure the integrity of the ILS for Category II operations, the building height of the proposal should not exceed RL 593.00.

The commissioning of Category II operations in 2018 at Canberra Airport will mean that relevant aircraft will be able to land in low visual conditions with greater regularity compared to the current Category I operations. The decision for a pilot to land will be made at 100 feet above the runway height compared to the current Category I 200 feet above the runway height. This will mean in Category II operations a pilot will make a decision to land with the aid of centerline and touchdown zone lighting and the aircraft will be positioned approximately 400 metres inside the airport fence, North of Pialligo Avenue.

Figure Six: Building Restricted Area (BRA) clearance over proposed building – North to South



Chapter Three: Environment and Heritage

Consistent with the proponent's drive for world-leading environmental outcomes, 6 Brindabella Circuit will be at the forefront of environmentally sustainable design. The proposal is expected to achieve at least a 4.5 NABERS rating and GBCA 5 Star Green Star design requirements.

Environmental measures will include:

J	100kw solar on the roof;
J	solar hot water;
J	programmable lighting;
J	extensive sun-shading;
J	a high use of recycled building materials;
J	sizing of plant to allow maximum efficiency; and
J	floor-by-floor air-handling.

3.1 Approach to assessment

Immediate and regional environment

The site is not located within or near any threatened listed species, including Natural Temperate Grassland, flora and fauna.

Environmental impacts

Environmental impacts relate both to the construction period and the occupation and use of the building once constructed. The potential impacts of the use of the proposal and the mitigation and management of any adverse impacts are addressed in the following sections in relation to:

)	Site conditions;
J	Hydrology and water quality;
J	Noise and vibration;
J	Wind;
J	Air quality;
J	Flora and fauna;
J	Waste management;
J	Visual impact and landscape; and
J	Cultural heritage.

Further information about these matters may be developed by the proponent when submitting a building application for the proposal.

3.2 Site conditions

Soil conditions

The alluvial soils of the Majura and Molonglo Valley floodplains typically range from loams to sandy loams and silty loams to light and medium clays, to a depth of 2 to 3 metres. Below that, they comprise mainly sands, gravely sands and sandy gravels, to a depth of 15 metres. The soil conditions of the site are consistent with this description.

The proposal will be built on land that has been developed previously as an on-grade bitumen car park, therefore the proponent is not expecting to discover contamination. All fill excavated during construction works will be tested and classified prior to relocation on Airport or leaving the Airport site, in compliance with the Canberra Airport refreshed and approved CEMP (refer section 1.9). A geotechnical assessment will be undertaken before detailed design as required for structural purposes.

Site contamination

There is no known contamination on the site.

If a contamination source is encountered, the contamination source and material will be removed on expert advice and the AEO will be advised. Further treatment and testing of the site will depend upon the type of contaminant and expert advice. The proponent's policy is to employ all reasonable and practical measures to remove contamination, minimising further loss to soil or groundwater or otherwise comply with specified environmental limits outlined in the Airports (Environment Protection) Regulations 1997.

Any small quantities of fuels and oils used in the construction or operation of the building will be stored to mitigate leakage into any soil.

3.3 Hydrology and water quality

Surface hydrology

Stormwater from the site drains via a network of open and closed drains and water systems to the Molonglo River. The Molonglo River flows generally westwards to Lake Burley Griffin and ultimately to the Murrumbidgee River North-West of Canberra.

The proponent maintains a comprehensive environmental management program in relation to stormwater quality. This program ensures minor pollutants emanating from the access roads and car parking areas will not significantly affect the quality of stormwater discharge from the Airport into receiving waters such as the Molonglo River. This is outlined in the *Canberra Airport Water Management Plan*. Stormwater from the constructed building will be directed into the existing network of drains. The capability of these drains is not fully utilised.

All sewage and wastewater from the proposal will be conveyed directly to the existing ICON sewerage system servicing the Airport.

It is unlikely there will be significant impact from the proposal on the water quality in the Molonglo River or downstream waters.

Groundwater

The proponent has a network of groundwater monitoring and irrigation wells. It is unlikely there will be any impact on groundwater quantity levels or quality as a result of this proposal.

Any excavations below the groundwater level will be managed in an appropriate way consistent with Canberra Airport's refreshed and approved CEMP (refer section 1.9) in that testing of any groundwater encountered will occur before the water is pumped out and before any chemical treatment to settle turbidity, to determine the most appropriate disposal method.

3.4 Noise and vibration

Construction noise

There is expected to be a certain level of noise and vibration associated with the construction of the proposal. This noise is not expected to be any different from that produced in the construction of any other building and will comply with all work, health and safety criteria.

Every effort will be made to screen noise and vibration exposure from the general public during the construction phase.

Construction is generally expected to occur during daylight hours, so no regular impact of night construction noise and vibration is expected. Construction noise will be managed in accordance with the refreshed and approved CEMP.

On-airport noise

The immediate environs of the precinct are exposed to noise impacts from aircraft operations, both from aircraft taking off and landing and from ground manoeuvres into and out of aircraft parking positions airside at the Terminal.

The site of the proposal is within the 30-35 Ultimate Capacity ANEF Contours (technically endorsed June 2008). AS2021:2015, Table 2.1, determines that a commercial building within this area is conditionally acceptable. The proposal is therefore consistent with AS2021:2015, similar to existing buildings on Canberra Airport.

Deliveries to the proposal will be generally light vehicles to the loading dock off Brindabella Circuit. Traffic noise levels within or adjacent to the proposal will be well within relevant traffic noise criteria.

As an overall proportion of regional traffic, the impact of this proposal is expected to be very small.

It is likely some people working on the construction of the proposal, or those that later work in the proposal while walking to and from car parking areas, bus stops or other buildings or facilities in the precinct, may be subject to aircraft noise exposure while an aircraft passes for relatively short periods. This situation exists for people who currently work around the Airport and there is no known adverse amenity or work, health and safety issues resulting.

3.5 Wind Studies

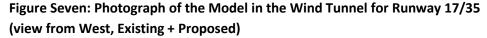
A wind tunnel analysis has been completed on the proposal by independent consultants Windtech. In undertaking its analysis of wind tunnel results Windtech used 63 years of wind climate data for Canberra Airport.

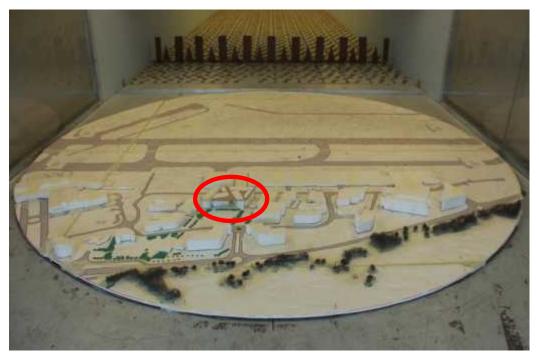
The wind analysis was undertaken by Windtech in accordance with Guideline B of the National Airports Safeguarding Framework (NASF), *Managing the Risk of Building Generated Windshear and Turbulence at Airports* approved in May 2018. In its analysis Windtech note the following:

The variation in mean wind speed due to wind disturbing structures must remain below:

- o 7 knots (3.6m/s) parallel to the runway centreline (or extended runway centreline) at heights below 61m AGL. Any speed deficit change of 7 knots or greater must take place over a distance of at least 100m. The "7 knot along-wind windshear criterion".
- 6 knots (3.1m/s) perpendicular to the runway centreline (or extended runway centreline) at heights below 61m AGL. Any speed deficit change of 6 knots or greater must take place over a distance of at least 100m. The "6 knot across-wind windshear criterion".
- The standard deviation of wind speed must remain below 4 knots (2.1 m/s) at heights below 61m AGL. The "4 knot turbulence criterion".4

The proposed development site is 390 metres from the centreline of the main Runway 17/35. The proponent commissioned Windtech to undertake a wind tunnel analysis as illustrated in photographs of the wind tunnel model in **Figure Seven**.





⁴ Windtech [2018] Wind Tunnel Assessment for the Potential for Wind Shear Canberra Airport, 6 Brindabella Crt. 15 August 2018, page 3.

The Windtech analysis concludes:

The statistical analysis of the likelihood of occurrence of an adverse wind shear event shows that the wind speed deficit criteria limit of 7 knots along-wind and 6 knots cross-wind are not reached.

The RMS turbulence levels have been compared with the 4 knot criteria. The results for the existing building case and the proposed development case exceed the 4 knot criteria. The worst-case turbulence levels with the proposed development are comparable to the existing conditions, however there are increases in the turbulence at specific locations of elevation and chainage. The proposed development does not increase the probability that the maximum turbulence levels will exceed the 4 knot criteria generated by the existing development.⁵

3.6 Air quality

The results of 2018 monitoring air emissions on and in the vicinity of the Airport indicate all measured pollutant concentrations were well below the National Environment Protection (Ambient Air quality) Measure limits. The Canberra Airport Environment Strategy 2015 prescribes air quality monitoring is undertaken every five years, and so accordingly air quality monitoring will be undertaken again in 2023.

Air quality at the Airport and in the ACT generally is regarded as very good and no significant impact has been measured from airport operations. Air quality is not expected to change with this proposal.

3.7 Flora and fauna

The proposal site is currently an on-grade car park bordered by existing buildings and roadways, adjacent the QantasLink Hangar at 9 Brindabella Circuit, within the built environment of Brindabella Business Park. Endangered flora and fauna are not known to be within the vicinity of proposal site.

Brindabella Business Park has been developed as a business park where the office buildings are conceptually pavilions in the Park. Prior to, and since, the endorsement of National Airports Safeguarding Framework (NASF) Guideline C: Managing the Risk of Wildlife Strikes in the Vicinity of Airports in May 2012, Canberra Airport's selection of tree, shrub and grass species has had a focus of mitigating bird and wildlife attraction.

The proponent not only designs, constructs and maintains, but also manages the landscaping at Canberra Airport, including Brindabella Business Park. Landscaping at Brindabella Business Park has been developing and maturing over the past seventeen years and the Airport monitors the landscaping for bird and wildlife attraction. During this time, some species have been removed and replaced by a new species to mitigate bird and wildlife attraction.

Canberra Airport has an established Bird and Wildlife Management Committee that meets regularly and monitors all bird and wildlife activity on the Airport and takes corrective action as required.

⁵ Ibid. Page 4.

3.8 Waste management

The operation of the proposal is likely to result in the generation of some solid waste. However, there is unlikely to be a significant impact on the waste stream generated by the Airport and so no changes to the existing waste management and monitoring processes that apply to the Airport will be required.

3.9 Visual impact and landscape

The proposal will add to the built environment of Brindabella Business Park with the potential for positive visual impacts from certain viewing directions on the Airport. The key viewing audience for the proposal will be people travelling along Brindabella Circuit as well as those in aircraft using the main Runway 17/35.

A major consideration in the landscape planning and design is the use of landscape materials which would minimise bird attraction with the objective of reducing the threat of bird strike to aircraft using the Airport. The proposed landscape design will incorporate strategies of reduced bird habitat, integration of potential water bodies and stormwater treatment and careful plant species selection to effectively reduce the risk of bird strike on operating aircraft.

3.10 Cultural heritage

Indigenous heritage

The archaeological sensitivity of the Airport was developed on the basis of the findings of a two-stage cultural heritage study undertaken in 2001 (Australian Archaeological Survey Consultants 2001) which involved detailed modelling and then test-pitting on the Airport site. The proposed development site is not a known location of archaeologically significant material and was heavily disturbed in creating Brindabella Business Park. In accordance with the *Canberra Airport 2014 Environment Strategy*, in the unlikely event archaeologically significant material is uncovered during works or future land management works they will be reported to Canberra Airport and the AEO and an appropriate management strategy will be developed.

European heritage

The only site with any European heritage relevance within the boundaries of the Airport is on the former RAAF Base Fairbairn located in the North-Eastern sector of the Airport some distance from the proposed development site, therefore an impact on European heritage is not expected.

3.11 Potential construction impacts of the proposal

The following potential impacts have been identified during construction. Should these impacts occur, they will be managed in accordance with the CEMP.

Construction traffic

Construction traffic associated with the works includes the delivery of building materials and equipment as well as vehicle movements associated with the construction workforce. The construction workforce will park in adjacent car parks, which have ample capacity, and not on the site itself.

It is unlikely there will be more than 50 construction vehicles in situ on any one day during the construction period. This volume of traffic will be mostly off-peak and insignificant relative to the daily traffic volumes on Brindabella Circuit which provides road access to the site.

Construction traffic will predominantly access the site throughout daylight hours. All construction traffic will access the site from Brindabella Circuit as shown in **Figure Eight**.

Figure Eight: Construction access to/from 6 Brindabella Circuit



Pedestrians

A pedestrian management plan will be incorporated in information provided to the ABC and implemented throughout construction of the proposal.

Water quality

As usual for construction sites, there will be the need for stormwater control measures. Stormwater control measures will be implemented to control any sediment-laden run-off during excavations for the basement foundations and minor works such as construction of footpaths and parking areas. These will be undertaken in compliance with the refreshed and approved CEMP (refer section 1.9).

Air quality and dust management

There is the potential for some localised dust generation associated with soil excavation. Dust suppression measures, such as watering of exposed soil surfaces from non-potable supply, will be implemented to prevent dust generation as much for safety reasons as for environmental reasons. Emissions from diesel powered construction equipment and exhausts from vehicles travelling to and from the site are considered to be insignificant in both the local and regional traffic contexts.

Erosion and sediment control

If not managed properly, there is potential for low levels of erosion and sedimentation during construction. While any erosion is expected to be minimal due to the flatness of the site, a sediment control plan will be developed prior to construction to mitigate against erosion and sedimentation.

Airport operations

Crane penetrations through the OLS, if required during construction, will be managed to ensure there is no impact on airport operations and in close consultation with ASA and CASA. A NOTAM will be issued as required.

All construction and related works will be managed in accordance with the Regulations set out in MOS Part 139.

There is not expected to be any impact on the operation of runways and taxiways at the Airport during construction of the proposal.

Construction waste

Construction waste will be managed through construction conditions, including via provisions in the *Conditions of Induction Handbook*. Construction waste will be separated where economically and commercially practical and recycled or disposed of at a legally operating waste refuge.

Hazardous materials

Hazardous materials will be managed in accordance with ACT legislation, and will include suitable storage, management and disposal techniques.

3.12 Environment Management System (EMS)

The proponent is committed to managing and developing the Airport in an environmentally sustainable manner and has established an EMS. In co-operation with all stakeholders, the proponent aims to maintain and continuously improve the environmental management of the Airport. The construction and operation of the proposal will be consistent with the EMS.

Prior to the start of construction, the designated contractor(s) must implement the CEMP and a sediment control plan for approval by the proponent. Best practice environmental management measures and the safeguard measures identified in this exposure draft MDP will be incorporated in the refreshed and approved CEMP.

Chapter Four: Traffic Flows and Parking

4.1 Traffic flows

The proponent co-ordinates, owns, plans, designs, constructs and on-completion manages all roads, road connections and car parking on the Airport site. During 2018, the proponent obtained advice from WSP as to the impact on traffic and nearby intersections when all existing buildings in the Brindabella Business Park are tenanted to capacity as well as the addition of the recently approved office development at 9 Molonglo Drive and this proposal. As a result of Brindabella Business Park being an office business park, the study focussed on weekday traffic flows within Brindabella Business Park and its intersections, including the three roundabouts comprising Molonglo Drive and Pialligo Avenue, Brindabella Circuit and Pialligo Avenue and Brindabella Circuit and Rogan Street (the latter on Airport).

The WSP study adopted the weekday AM peak hour for the proposed development as 7.45am to 8.45am, and the PM peak hour as 4.15pm to 5.15pm, and makes the following observations:

The post development modelling results indicate that all of the assessed intersections would continue to operate with good LoS following completion of the development. This means that the vehicle delays would be acceptable⁶.

This means the studies revealed that all intersections will maintain LOS A or LOS B operations.

4.2 Brindabella Business Park Car Parking

The proposal site is currently occupied by an at-trade car park, comprising 266 car spaces and 44 motorcycle spaces, which is used by staff and visitors to Brindabella Business Park. The proposal will be developed with one level of basement car parking with a capacity of not less than 200 car spaces.

In overall terms, Brindabella Business Park will have a capacity of not less than 7,000 car spaces on completion of 6 Brindabella Circuit. The proponent has a history of providing car parking space capacity ahead of demand. This is evident in all Airport precincts, including the Terminal precinct. The proponent plans, designs, builds and manages all car parking on the Airport.

4.3 External road network

The road network serving the Airport is part of the metropolitan and regional arterial road network connecting the Airport with Civic and the Parliamentary Triangle to the West, Queanbeyan to the East, Gungahlin to the North, Tuggeranong and Jerrabomberra to the South and the adjoining NSW hobby farm belt around the ACT. Canberra Airport is situated on the following nearby arterials which are major approach routes:

J	Pialligo Avenue, which is duplicated to Brindabella Business Park;
J	Monaro Highway, which is duplicated to the Molonglo River;
J	Majura Parkway, which is duplicated, connects with the Monaro and Federal Highways; and

⁶ WSP [2018]. New Office Block at 6 Brindabella Business Park, Transport Impact Assessment. 24 July 2018, page 21.

Fairbairn Avenue.

The proponent works collaboratively through the Canberra Airport Planning Co-ordination Forum and other consultative processes with the NCA, the ACT Government and the Commonwealth Department of Infrastructure, Regional Development and Cities to provide appropriate integration of future development within the Majura Valley (i.e. the recent IKEA development on ACT Government land adjacent Majura Park) and to ensure adequate capacity in supporting infrastructure, including roads.

A number of studies of the Airport Interchange have been commissioned by the ACT Government, Roads ACT, and the Economic Development Directorate over the past twelve years. These studies have had regard to the potential new populations of urban renewal and infill in North and South Canberra, greenfield development in Molonglo and Queanbeyan, the ongoing growth of the Gungahlin residential areas, the growth in airline passenger traffic and employment levels at the Airport as forecasted in the Master Plan.

Following completion of the Majura Parkway, the Airport, NCA, ACT Roads and the Department of Infrastructure, Regional Development and Cities continued to meet to oversee road strategies within the vicinity of the Airport, including the Airport Interchange and major approach routes.

These studies identified three network improvement priorities to be built over time in response to metropolitan and regional traffic demand growth:

- 1. Additional lanes on Fairbairn Avenue in both directions from Pialligo Avenue through to the Majura Parkway northbound on-ramp;
- 2. Partial grade separation of the Pialligo Avenue/ Fairbairn Avenue/Beltana Road intersection;
- 3. Staged duplication of Fairbairn Avenue to the War Memorial noting that this was originally going to be built in 1998-99 to satisfy traffic demand.

None of the road upgrades are a result of this proposal or any future development on Canberra Airport, consistent with the approved 2014 Master Plan.

Section 4.5 below addresses ingress and egress traffic flows for Brindabella Business Park.

Figure Nine shows the Airport in the context of the regional road network.

Figure Nine: Airport Interchange



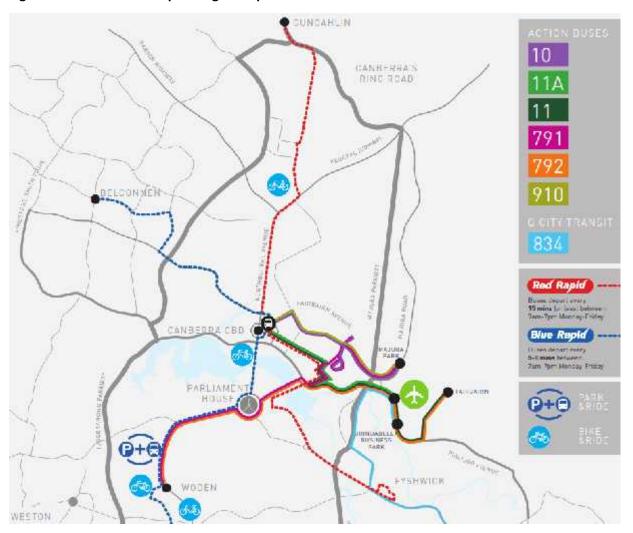
4.4 Public transport

Brindabella Business Park is fully integrated within the wider Canberra and Queanbeyan public transport network as shown in **Figure Ten**. The Airport is now serviced by 138 public bus services each week day and 52 services on a Saturday or Sunday across seven routes as shown in **Table One**, with direct connections every 20 minutes during peak to Woden and the City facilitating easy transfer to services to Tuggeranong, Belconnen and Gungahlin. Around 50 percent of these bus services travel to and from Brindabella Business Park.

Table One: Local Public Transport Serving Canberra Airport

Route Destination	Service Provider	Route Number
City	Transport Canberra	910, 10, 11 and 11A
Woden	Transport Canberra	791 and 792
Queanbeyan	Q City	834

Figure Ten: Bus Services Operating to Airport

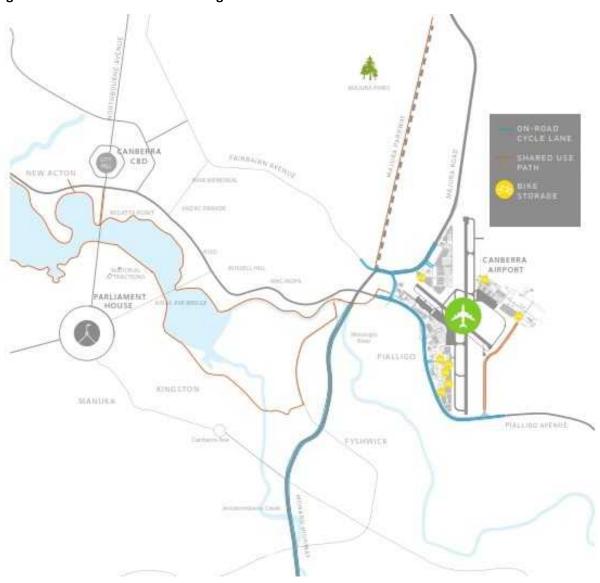


4.5 Sustainable Transport Solutions

Brindabella Business Park is accessible via an off-road shared bike path running along Lake Burley Griffin from the City integrating with paths from all other town centres along the way as shown in **Figure Eleven**.

There are already ample facilities at Brindabella Business Park to securely store bikes while the proposal will likely include additional bike storage and changing amenities. The image below indicates relevant bike paths and facilities.

Figure Eleven: Bike Access and Storage



4.6 Vehicle access

The access design concept for this proposal is for all new traffic, to access and egress the site from points on Brindabella Circuit. Basements access and egress is from the East alignments of Brindabella Circuit, with access for goods from the Eastern alignment of Brindabella Circuit likely to be on the South-East corner of the proposal.

4.7 Pedestrian access

Pedestrian access by additional footpaths for the proposal will be available to bus stops, taxi areas and car parks.

Chapter Five: Community and Economic Impact

5.1 Office market

The Canberra office market is one of the largest in Australia comprising approximately 2.32 million m² NLA PCA (July 2018). Canberra Airport contributes about 9 percent of this stock.

The Australian Government is the major user of Canberra's office buildings with high environmental performance requirements consistent with the private sector modern A-Grade PCA and the GBCA specifications, design principles and performance rating tools.

Over the past 25 years the Canberra office market has experienced ongoing renewal of aged buildings that are unable to meet contemporary environmental performance requirements, provide efficient buildings or indeed a building sufficiently large to lower operating costs arising from colocation. This renewal process is a worldwide trend in response to private and public-sector market demands, work health and safety regulations and tenant focus on higher staff productivity.

The PCA grades office buildings in Canberra from A, the best buildings, to D, the worst buildings. Industry acknowledges both C and D Grade buildings do not meet current market standards and over the next five to ten years these will be adapted to a new use or redeveloped either as new office accommodation or for alternate use such as hotel, serviced apartments or residential use. This has been the experience in Civic, Woden and Belconnen over the last 25 years as tenants relocate from older to newer buildings. Between January 2014 and July 2018, 150,313m² of C and D Grade stock has been withdrawn and is either under urban renewal or adaption.

The PCA July 2018: Australian Office Market Report ACT, reported that there is over 673,115m² of C and D Grade office stock (29 percent of total stock) in Canberra of which some 128,059m² is vacant, 44.3 percent of total vacancy. Most of these vacant buildings will be adapted for alternate use or knocked down and redeveloped consistent with the trend for market renewal.

The PCA reports there is about 90,768m² A-Grade buildings vacant, representing 8.7 percent vacant (July 2018) and available for lease in the Canberra office market. This number is over-stated as buildings leased at Canberra Airport and other locations in 2017 means the A-Grade vacancy is circa 60,000m², circa 5.4 percent vacant. The remaining vacant A-Grade buildings will be leased as market renewal continues. This was the Canberra office market experience during 1996-2007 when the vacancy rate rose from 5.3 percent to over 10 percent and then declined to 1.8 percent. The fall in vacancy to 1.8 percent was notwithstanding growth in supply by 21 percent or over 285,000m² between 1996 and 2007.

In May 2018, JLL reported at a Canberra Research Event focussed on *Strategies to navigate the divergence between prime and secondary grade vacancy rates* that Prime Grade vacancy has compressed to 5.4 percent and in addition noted the following available for rent for tenants seeking to relocate in Civic or Barton;

```
    2 options available <500m², 2 options available 500m² to 999m²</li>
    1 option available 1,000m² to 1,499m²
    No options 1,500m² to 1,999m², and
    3 options > 2,000m²
```

Over the last five years the proponent has constructed no new office space on Canberra Airport.

The proposal is consistent with future market demand in response to market renewal trends over the past 25 years in Canberra as tenants vacate older buildings for newer buildings.

Following the strong market uptake of office space in Brindabella Park over the past 18 months, there is now nominal vacant space available to lease. This strong demand is also being experienced in other Canberra office locations. This uplift in demand is the basis for new projects including 6 Brindabella Circuit.

5.2 Economic impact

The Airport is Canberra's major public transport and only global gateway, including for VIPs travelling to Canberra as the National Capital and the Region. As such the Airport is recognised by the Commonwealth, ACT and NSW Governments, the CBRJO and the community as significant infrastructure and a major economic enabler for Canberra and the Region as the global gateway and as an Aerotropolis.

During 2018 International passenger services have significantly increased at Canberra Airport. Qatar commenced daily services to Doha in February and Singapore Airlines increased their services in May to daily from four times per week. Both services provide a boost to inbound passengers to the National Capital and the Region benefiting local tourism, business operations and education establishments and providing the vehicle for increased exports of business services and the air freight of goods and produce. The launch of Pak Fresh at Canberra Airport in June 2018 will facilitate the export of regional produce both domestically and internationally.

The Hon Paul Fletcher MP, Minister for Urban Infrastructure and Cities, noted in his November 2017 speech to the NSW Division of the PCA that airports can and do have a significant role in igniting the potential of surrounding areas:

Around the world, there is ample evidence that, with good planning, airports can become economic hubs that drive the growth of a region.

..... opportunity to shape a greenfields area into a major urban centre – and a vibrant hub of economic activity to support surrounding commercial development.

Canberra Airport has undergone a diverse redevelopment over the past twenty years as the major public transport and, more recently, global gateway for Canberra and the Region.

A study by PricewaterhouseCoopers (PWC), *Economic scan of Canberra employment* centres: *Canberra International Airport*, June 2017, ranks Canberra Airport as 7 out of 9 of Canberra's hierarchy of employment centres, as shown in **Table 2**. Further, it notes the employment centres have experienced significant transformation and growth over the last ten years. This is highlighted by the considerable imbalance of residential growth in Canberra's North compared to the South.

Table 2: Canberra Hierarchy of Employment Centres

	Employment centres	GRP 2015 (1) (\$'000s)	Contribution to GRP 2015	Long term growth rate (2) 2001-15	Employment 2015
1	Civic	7,767	22.3%	3.5%	48,188
2	Parliamentary Precinct	3,995	11.5%	1.4%	23,472
3	Woden Town Centre	2,902	8.3%	2.2%	19,585
4	Belconnen Town Centre	2,684	7.7%	1.7%	18,392
5	Tuggeranong Town Centre	1,583	4.5%	1.9%	10,730
6	Russell	1,568	4.5%	0.3%	10,681
7	Canberra International Airport	1,331	3.8%	8.6%	12,000
8	Gungahlin Town Centre	1,150	3.3%	5.9%	7,298
9	West Deakin	853	2.4%	2.3%	5,096
	Canberra Town Centres	23,832	68.3%	2.6%	155,442
	ACT	34,887		2.5%	208,201

⁽¹⁾ Gross Regional Product (GRP)

PWC highlights three key changes for Canberra employment centres:

- 1. A shift away from Tuggeranong, Woden and Belconnen.
- 2. A renewed focus on Civic and the North of Canberra through the influx of residential development in Gungahlin and employment growth at Canberra International Airport.
- 3. The strength of retail trade in Belconnen and Woden despite the slowing of the public service output in these Town Centres.

Table 2 shows in 2015 Canberra Airport had 12,000 jobs out of an employment workforce in the ACT of 208,201 with Civic leading the employment base at 48,188. However, by Easter 2019 the Airport workforce will have grown to 16,000 based on international expansion in 2016-2018 and current signed leases and fit-out construction underway.

PWC also notes the Belconnen Town Centre is Canberra's largest retail economy with retail GVA of \$134 million in 2015. Further, Belconnen is transitioning towards industries which service the growing residential population. Considerable residential growth is expected in the Belconnen region through high rise infill projects and broadacre developments in West Belconnen and Lawson.

⁽²⁾ GRP, Compound Annual Growth Rate (CAGR)

PWC also highlights Canberra Airport as follows:

J	\$1,331 million dollar economy, 3.8 percent of the ACT economy.
J	Largest long term (15 year) annual rates of economic growth of all employment centres
	(8.6 percent).
J	The strongest rates of long term annual employment growth (12.5 percent).
J	A series of significant upgrades to the Airport precinct, including major terminal upgrades,
	Majura Park Shopping Centre and the development of Brindabella Business Park has driven
	economic and employment growth in the Majura area.

The Airport is located on the main employment corridor between Belconnen, through the central National Area to Queanbeyan. The Canberra H Plan employment location strategy at **Figure Twelve** locates the Airport as part of the main East-West employment corridor for Canberra. This corridor currently accommodates over 75 percent of Canberra's employment and contains a number of uses, most notably key office employment locations in the City and in the Central National Area (of which the Airport is a part).

The Airport is also located on the North-South (Eastern Broadacre) employment corridor running through the Majura Valley through the Airport and Fyshwick onto Hume (refer Eastern Broadacre below).

The Northern part of the Eastern Broadacre is bounded by the Molonglo River in the South and the Federal Highway in the North. The Majura Parkway, a 100 km/hour freeway, is the main North-South road servicing the community and through local traffic.

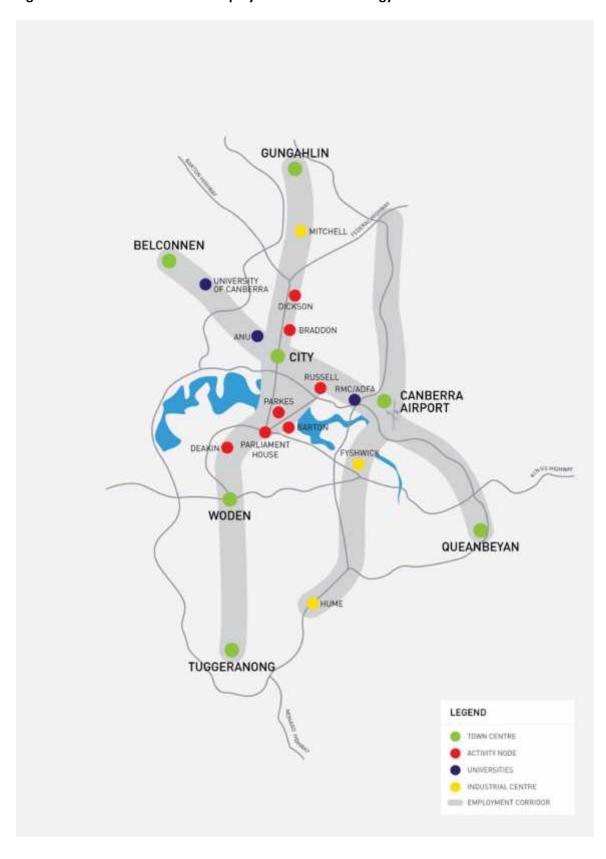
Existing development in the Airport Precinct and Eastern Broadacre area North of the Molonglo River include:

- 1. Education: Royal Military College, Australian Defence Force Academy, Australian Federal Police and Defence Majura Training Area
- 2. Other Defence facilities
- 3. Canberra Airport Aerotropolis
- 4. IKEA
- 5. Pialligo and Majura retail, wineries, cafes, restaurants and function centres

The Eastern Broadacre will become a major new employment growth area of Canberra over the next 5-20 years.

The international Costco and IKEA stores service Canberra and the Region and, in addition, further afield as tourist retail destinations. These stores also mitigate retail revenue loss to other cities, including Sydney.

Figure Twelve: Canberra H Plan employment location strategy⁷



 $^{\rm 7}$ Canberra Airport [2015] Canberra Airport 2014 Master Plan. March 2015.

The development of business parks and other commercial property development are primary use activities at airports worldwide now known as Aerotropolis because they are associated with, are ancillary to, and enhance the operation and the viability of airports. This has been recognised by the ACT Government in Attachment A of the ACT Eastern Broadacre Economic and Strategic Planning Direction Study, which references a number of successful business and technology parks near airports around the world, including the Brindabella Business Park, Canberra Airport.

Canberra Airport development has been undertaken within the policy and planning intent as set out in the National Capital Plan, the ACT Economic and Planning Strategies (2003-2013), that is, consistent "with regional, metropolitan and transport planning issues and addressed with ongoing consultation under the ACT Government and Canberra Airport Pty Ltd MOU, 2010.8

As is evident with the development of Canberra Airport over the past twenty years, the diversity of income generated from non-aviation development similar to the proposal has facilitated aviation development with capacity to service future growth, for example the Terminal precinct and more recently the upgrade of the main runway 17/35 from CAT I to CAT II to facilitate more aircraft landing in low visual conditions.

The ACT Government and the proponent have worked together over the past five years to attract direct international airline services to Canberra. The runway was upgraded to Boeing 747 capability in late 2006 in preparation for future international direct services. The international area of the new Terminal was completed in March 2013 providing two gates for international services. The arrival and departure areas were fitted ready for Singapore Airlines to commence the "Capital Express", Singapore-Canberra-Wellington, in September 2016. Qatar Airways commenced operations in February 2018. As previously stated, both Qatar and Singapore now together provide 14 weekly international services at Canberra Airport.

The NSW Government *Southeast and Tablelands Regional Plan July 2017,* describes Canberra Airport as the catalyst for diverse growth opportunities. The *Draft Future Transport 2056 Regional Services and Infrastructure Plan October 2017* describes Canberra as one of three NSW Gateway Cities with Canberra Airport providing global connectivity.

There are significant economic benefits associated with the development of new office accommodation at Canberra Airport, notably:

J	Increase the supply of 'A-Grade' office accommodation within Canberra;
	Assist in the facilitation of urban renewal off Airport as aged C and D Grade (PCA) office
	buildings are vacated and demolished and/or adapted to other uses, including tourism
	infrastructure of hotels and serviced apartments or residential;
J	Potential to accommodate around 1,400 workers at the proposal; and

⁸ ACT Government [2012] *ACT Planning Strategy 2012.*

Provide easy accessible office space in an area that benefits from multiple location synergies tied to co-location with government and blue-chip tenants, lower costs of doing business (linked to ease of travel), and close proximity to major government institutions with the Nation's Capital.

The proposal further supports Brindabella Business Park and the broader Airport site to be a world-class Airport for an emerging international city region. The proposed office development which is in close proximity to the passenger Terminal precinct, will support the Airport site in its economic contribution to the surrounding region, and enable stronger synergies with nearby employment and export hubs in the Majura Valley Defence corridor.

All of this is in keeping with the Airport's role as a significant contributor to the economy of Canberra as a competitive region.

During construction Canberra Airport expects there will be upwards of 119 jobs created on-airport and, in addition, 111 jobs off-Airport.

On completion and full occupation of the proposal, it is expected the buildings will house up to 1,400 staff. During the week day these additional staff will have the opportunity to enjoy and explore the retail offerings of Brindabella Business Park and Majura Park.

Chapter Six: Consultation

6.1 Approach to consultation

Canberra Airport has a policy of ongoing engagement with key stakeholders in relation to planning, development and operational issues related to Canberra Airport. For the MDP process, the consultation strategy covers the following stages:

- technical consultation during the preparation of the proposal;
- notification to local planning ministers and authorities of the proposal;
- notification to the Canberra Airport Planning Co-ordination Forum and Community Aviation Consultation Group of the proposal, including peak community and industry groups;
- advertising and making available copies of the preliminary draft MDP throughout a public comment period;
- finalisation of the draft MDP for submission to the Minister, including regard to issues raised in the public comment period; and
- advertising and making copies of the MDP available if or when approved by the Minister.



Canberra Airport Community Aviation Consultation Group Meeting

6.2 Stakeholder consultation

In addition to public notices as prescribed by the Act, the proponent will consult with the following organisations about the proposal:

J	Civil Aviation Safety Authority
J	Airservices Australia
J	National Capital Authority
J	Department of Infrastructure, Regional Development and Cities, including AEO and ABC
J	Department of Environment and Energy
J	Department of Defence / RAAF 34 Squadron
J	Department of Prime Minister and Cabinet
J	ACT Chief Minister in his capacity as Minister for Tourism and Minister for Trade, Industry and Investment
J	ACT Minister for Tourism
J	ACT Minister for Planning and Environment
J	ACT Environment, Planning and Sustainable Development Directorate
J	ACT Transport Canberra and City Services
J	Queanbeyan-Palerang Regional Council
J	NSW Department of Planning and Environment
J	Canberra Region Joint Organisation (CRJO)
J	Canberra Airport Planning Co-ordination Forum
J	Canberra Airport Community Aviation Consultation Group
J	The Property Council of Australia, ACT
J	Canberra Business Chamber
J	Qantas Airways
J	Virgin Australia
J	Fly Pelican
J	Singapore Airlines
J	Qatar Airways
J	Cathay Cargo
J	Pilots Union

The proponent intends to consult directly with the proposal's principal neighbouring tenants during the Preliminary Draft MDP phase, as well as undertake public consultation sessions at the Majura Park Shopping Centre and 18-20 Brindabella Circuit in Brindabella Business Park.

Chapter Seven: Statutory Context

A major development as defined under the Act requires the preparation of an MDP which must be approved by the Minister.

The contents of an MDP are set out in section 91 of the Act. Appendix B sets out the consistency of this exposure draft MDP with the requirements and demonstrates this exposure draft MDP is consistent with these requirements.

7.1 Commonwealth environmental impact assessment

The proponent is required to comply with the provisions of the EPBC Act which is the Commonwealth Government's central piece of environmental legislation. The EPBC Act provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places – defined in the EPBC Act as matters of national environmental significance.

The nine matters of national environmental significance to which the EPBC Act applies are:

J	World Heritage properties;
J	National heritage places;
J	Wetlands of international importance (often called 'Ramsar' wetlands after the international treaty under which such wetlands are listed);
J	Nationally threatened species and ecological communities;
J	Migratory species;
J	Commonwealth marine areas;
J	The Great Barrier Reef Marine Park, and
J	Nuclear actions (including uranium mining).

This proposal complies with the provisions of the EPBC Act as the proposal does not impact any of these defined matters of national environmental significance.

7.2 ACT planning regime

The NCA administers the NCP. The proposal is consistent with the NCP.

There are number of plans published by the ACT Government in relation to planning and development of Canberra and the surrounding region. These include the ACT Planning Strategy and the Territory Plan.

In May 2014, the then ACT Chief Minister, Ms Katy Gallagher MLA, provided support for the ongoing development of the Airport site, including non-aeronautical development, in response to the Draft 2014 Master Plan.

ACT Government and Canberra Airport Memorandum of Understanding (MoU)

The ACT Government supports the continuing development of Canberra Airport as an important element of the ACT's economy. The aviation-related activities and non-aviation activities that take place at Canberra Airport's various precincts contribute significantly to the economy of the ACT and the surrounding region. Canberra Airport's economic contribution is destined to grow in the next few decades and the ACT Government will continue to work with Canberra Airport and the Commonwealth to foster that growth. The latest ACT Government and Canberra Airport MoU, agreed in April 2015, addresses integration between the Airport site and the broader ACT and Region. The MoU was signed by Chief Minister Andrew Barr MLA on behalf of the ACT Government.

ACT Planning Strategy

The ACT Government's *Planning Strategy July 2012* states it will 'Ensure Canberra Airport's growth and development is considered with regional, metropolitan and transport planning issues and addressed with ongoing consultation under the ACT Government and Canberra Airport Pty Ltd MOU, 2010.' Canberra Airport and the ACT Government will discuss the proposal at their Integration Committee meetings.

The ACT Government's Eastern Broadacre study has identified a significant area for rezoning within the Majura Valley subject to further planning and environmental studies. The IKEA development is the initial stage of this work.

The ACT Planning Strategy is currently in the early stages of review and in the context of Canberra Airport will likely progress the 2012 document and define the Airport with regard to the 2015 MoU between the ACT Government and Canberra Airport, the May 2016 refresh of the NCP, the soon to emerge Eastern Broadacre policies and the internationalisation of Canberra Airport as the global gateway to the City region.

Territory Plan

The Territory Plan (updated September 2017) is prepared and administered by the ACT Government in respect of all land in the ACT, as shown on Territory Plan maps.

In 2014, a variation was made to the Territory Plan concerning 7.8 hectares of land permitting the development of IKEA on ACT Government land adjacent Majura Park. This supported the sale of a long-term lease of the land to IKEA. Other ACT land West and North of IKEA are under planning as part of the Eastern Broadacre study. This land was rezoned to future urban in the NCP Amendment 86, approved in May 2016. Prior to sale by the ACT Government, this land will be rezoned in the Territory Plan. This variation process is expected to occur in 2019 and the land is likely to be rezoned for land uses similar to IKEA, bulky goods retail, retail and light industrial.

⁹ Gallagher, K. [2014] Submission by the ACT Government on the Canberra International Airport 2013-4 Preliminary Draft Master Plan. June 2014.

This future development in the Majura Valley aligns with international trends of airports provide:

...opportunity to shape greenfields area into a major urban centre – and a vibrant hub of economic activity to support surrounding commercial development.¹⁰

7.3 Development and building approvals

In addition to any MDP requirements, construction of the proposal is subject to the submission of an application for a Building Permit to the ABC in accordance with the Airports (Building Control) Regulations 1996.

There is no requirement for any airspace approval under Part 12 of the Act for the proposal on completion, and all building permits will be obtained in accordance with Provision 5 of the Act.

An Application under Part 12 of the Act may be required for temporary obstacles (cranes) during construction of the office proposal, and the need for any such approval will be determined following consultation with ASA, CASA and the Department of Infrastructure, Regional Development and Cities.

7.4 Master Plan

This office proposal is identified in Chapter 10 of the *Canberra Airport 2014 Master Plan* approved on 16 January 2015 and was also identified in previous Master Plans as part of the development of Brindabella Business Park.

The Master Plan provides a 20-year planning framework for Canberra Airport and considers:

J	The development objectives for Canberra Airport;
J	The future needs of airport users;
J	Proposals for land use and related developments of the airport site;
J	Forecasts relating to noise exposure levels and measures for managing aircraft noise intrusion into significant Australian Noise Exposure levels; and
J	Environmental issues associated with the implementation of the Master Plan and plans for dealing with such environmental impact.

The Master Plan foreshadows a growth in staff across the Airport site to 18,000 people in 2019, and 34,000 people in 2034. This proposal is consistent with the Master Plan.

7.5 Relationship to airport planning

The relationship of the proposal to airport planning at the Airport, as required under sub-regulation 2.04(1) of the Airports (Building Control) Regulations 1996, is presented in the following sections.

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¹⁰ Fletcher, P. [2017] Luncheon Address – NSW Division of Property Council, 3 November 2017

The proponent has previously received approval for eight MDPs, namely:

- 1. 9 Molonglo Drive office development, approved 16 July 2018;
- 2. Hotel development, approved 13 February 2014;
- 3. The Western Concourse Terminal Extension, approved 25 February 2010;
- 4. 15 Lancaster Place, approved 18 April 2008;
- 5. Southern Offices, approved 26 May 2007;
- 6. Outlet Centre, approved 26 April 2006;
- 7. Runway and Taxiway Expansion Program, approved 26 August 2004, and Minor Variation approved 5 April 2006; and
- 8. Redevelopment of Terminal Buildings, approved 4 November 2003.

The proposal is not inconsistent with any of these approved MDPs.

7.6 Environment Strategy

The Environment Strategy prepared under Part 6 of the Act and incorporated with the 2014 Master Plan was approved 16 January 2015. This proposal is consistent with the Environment Strategy because it will not affect an area identified as environmentally significant in the Environment Strategy and is not expected to have any significant environmental or ecological impact.

7.7 Airport Lease

The proponent acquired the long-term Airport Lease for Canberra Airport from the Commonwealth Government in May 1998. This proposal is consistent with the conditions of the Lease in terms of clause 13.1 Development of airport site, defined at clause 13.11 Definition, as follows:

'Good Business Practice' means the good business practices expected of an airport operator having regard to the duties and obligations of the Lessee including, without limitation, providing appropriate facilities for the comfort, ease of access, expeditious movement and efficient use of the Airport Site by passengers and other users.

7.8 Pre-existing interests

When the proponent became the airport-lessee company for Canberra Airport in 1998, it assumed certain pre-existing obligations under various leases and licences and took the lease subject to certain other existing interests.

While many of these existing interests have now expired, some of them remain. The proposal site was vacant, unleased land, and remains so.

Appendices

Appendix A – Consistency of the MDP with statutory requirements

This Appendix indicates the requirements under section 91 of the Act for the contents of an MDP and demonstrates this MDP is consistent with these requirements.

Section 91 Contents of a major development plan	Relevant section of this MDP	
(1A) The purpose of a major development plan, in relation to an air airport development that:	port is to establish the details of a major	
(a) relates to the airport; and	1.5 Objective	
(b) is consistent with the airport lease for the airport and the final master plan for the airport.	7.4 Master Plan 7.7 Airport Lease	
(1) A major development plan, or a draft of such a plan, must set ou	ıt:	
(a) The airport lessee company's objectives for the development; and	1.5 Objective	
(b) the airport-lessee company's assessment of the extent to which the future needs of civil aviation users of the airport, and other users of the airport, will be met by the development; and	2.3 Needs of airport users	
(c) a detailed outline of the development; and	2.1 Office development	
(ca) whether or not the development is consistent with the airport lease for the airport; and	7.7 Airport Lease	
(d) if a final master plan for the airport is in force—whether or not the development is consistent with the final master plan; and	7.4 Master Plan	
(e) if the development could affect noise exposure levels at the airport—the effect that the development would be likely to have on those levels; and	3.4 Noise and vibration	
(ea) if the development could affect flight paths at the airport—the effect that the development would be likely to have on those flight paths; and	2.9 Impact on aviation	
(f) the airport lessee company's plans, developed following consultations with the airlines that use the airport, local government bodies in the vicinity of the airport and—if the airport is a joint user airport—the Department of Defence, for managing aircraft noise intrusion in areas forecast to be subject to exposure above the significant ANEF levels; and	2.3 Needs of Airport Users	
(g) an outline of the approvals that the airport-lessee company, or any other person, has sought, is seeking or proposes to seek under Division 5 or Part 12 [changes to airspace protection] in respect of elements of the development; and	1.6 Major development plan process, 1.7 Building Code of Australia and 3.11 Potential construction impacts of the proposal	
(ga) the likely effect of the proposed developments that are set out in the major development plan, or the draft of the major development plan, on:		
(i) Traffic flows at the airport and surrounding the airport; and	4.5 Traffic flows	

Section 91 Contents of a major development plan	Relevant section of this MDP
(ii) Employment levels at the airport; and	Chapter Five: Community and economic impact
(iii) The local and regional economy and community, including an analysis of how the proposed development fit within the local planning schemes for commercial and retail development in the adjacent area; and	Chapter Five: Community and economic impact
(h) the airport lessee company's assessment of the environmental impacts that might reasonably be expected to be associated with the development; and	Chapter Three: Environment and heritage
(j) the airport lessee company's plans for dealing with the environmental impacts mentioned in paragraph (h) (including plans for ameliorating or preventing environmental impacts); and	Chapter Three: Environment and heritage
(k) if the plan relates to a sensitive development – the exceptional circumstances that the airport-lessee company claims will justify the development of the sensitive development at the airport; and	N/A
(I) such other matters (if any) as are specified in the regulations.	7.8 Pre-existing interests
(2) Paragraphs (1)(a) to (k) (inclusive) do not, by implication, limit paragraph (1)(l).	Noted
(3) The regulations may provide that, in specifying a particular objective, assessment outline or other matter covered by subsection (1), a major development plan, or a draft of such a plan must address such things as are specified in the regulations.	7.8 Pre-existing interests
(4) In specifying a particular objective or proposal covered by paraginal plan, or a draft of a major development plan, must address:	raph (1)(a), (c) or (ga) a major development
(a) The extent (if any) of consistency with planning schemes in force under a law of the State in which the airport is located; and	7.2 ACT planning regime
(b) If the major development plan is not consistent with those planning schemes – justification for the inconsistencies.	N/A
(5) Subsection (4) does not by implication, limit subsection (3)	Noted
(6) In developing plans referred to in paragraph (1) (f), an airport lessee company must have regard to Australian Standard AS2021—2000 (Acoustics—Aircraft noise intrusion—Building siting and construction).	2.3 Needs of Airport Users
(7) Subsection (6) does not, by implication, limit the matters to which regard may be had.	Noted

Appendix B – Land Uses in Majura Park¹¹

This Appendix outlines the permitted uses in the precinct the development site is located.

Category	Permitted and Intended Uses Include
Transport Facility	The use of land or a building for or associated with the movement of goods and people by road, rail and air.
Industry	Environmental, In Bond, Food and Beverage
Facilities to Public, Tenants and Staff	Food and beverage sales, personal service establishment, retail, office , financial establishment, communication facility, cultural facility, club, consulting rooms, community facility (including childcare).
Commercial Accommodation and Tourist Facility	Hotel/Motel, Food and Beverage, Functions, Seminars, Service Station, conference facilities.
Defence	Department of Defence installation, offices and facilities, sales and service of defence products.
Broadacre	As set out in the National Capital Plan
Advertising	Interior and External Signs, Marketing Products and Services

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¹¹ Canberra Airport Pty Limited. [2015] *Canberra Airport 2015 Master Plan*. January 2015.