

# Hobart Airport

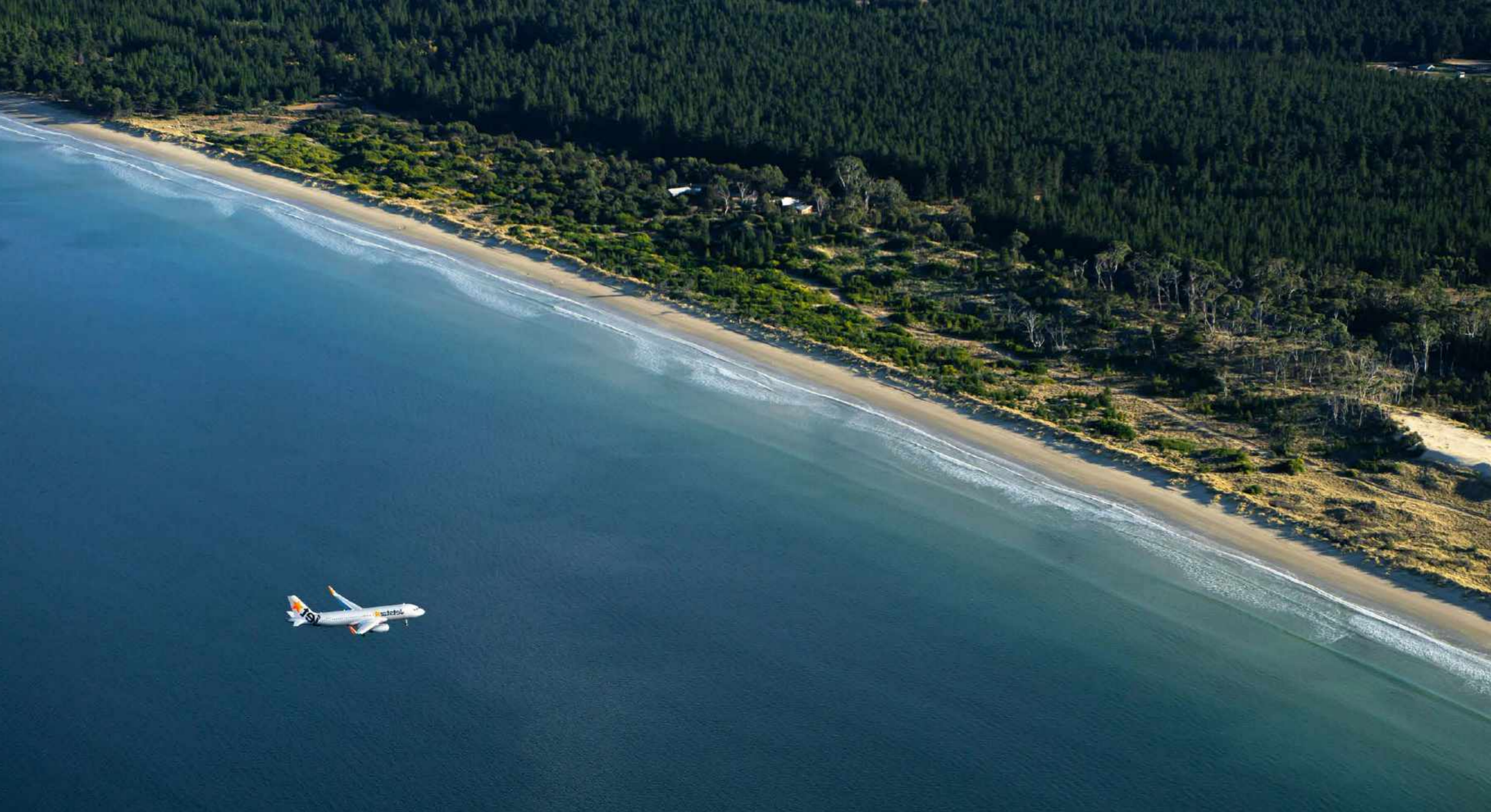
## Master Plan 2022



**Hobart Airport**

TASMANIA

*Connecting Communities*



This Master Plan has been prepared by Hobart International Airport Pty Ltd (ABN 27 080 919 717).

The assessments, forecasts, assumptions and strategies contained in this Master Plan have been prepared as part of Hobart Airport's internal strategic planning processes in accordance with Part 5 of the *Airports Act 1996*; and should not be relied upon by any other person for any other purpose.

While all care has been taken in the development of this Master Plan, it is based on forecasts, assumptions and data that was available at the time of writing.

Bruny Island, North Bruny

# Foreword



**Norris Carter**  
*Chief Executive Officer*

I am pleased to present Hobart Airport's 2022 Master Plan, which outlines the Airport's vision and strategy for the next 20 years.

Connecting communities is at the core of what we do. For an island like Tasmania, an airport plays a particularly important economic and social role. As a critical piece of infrastructure, Hobart Airport is the primary gateway to the city of Hobart and the state of Tasmania, and over 60% of visitors to Tasmania pass through it. With its picturesque landscape and proximity to the city centre, the Airport provides an idyllic first impression and is ideally located for both passenger and logistics operations.

Since opening on the rural property of Llanherne in 1956, Hobart Airport has grown from 120,086 passengers per year to welcoming 2.7 million passengers in 2019 before the COVID-19 pandemic. Over that time, the airport has been developed to serve the growing passenger and freight air service needs of Tasmania, with extensions to the runway and terminal, and the construction of freight facilities. Most recently, international processing facilities were added to the terminal as the airport welcomed the return of international flights to New Zealand in April 2021.

The Airport contributes directly and indirectly to the Tasmanian economy by enabling inbound tourism, exporting of Tasmania's outstanding fresh produce, and providing the aviation gateway for Australia and other countries' scientific endeavours in Antarctica and the Southern Ocean. The Airport's economic contribution is forecast to grow from \$145 million and 1,125 jobs in FY2018 to over \$412 million and 3,500 more jobs by FY2042.

Visitor expenditure by tourists contributed \$2.4 billion to Tasmania's economy in FY2018. By FY2042, passenger numbers are forecast to grow from 2.7 million per year to 5.5 million per year. The Master Plan outlines our plans to develop our terminal and ground transport infrastructure to provide the capacity to meet the forecast.

A key focus will be to deliver a sense of place that is welcoming to visitors and familiar to those returning home.

Demand for Tasmania's fresh produce continues to grow. In 2017, the runway was extended to provide sufficient length for widebody international flights, and airlines responded with seasonal international freight flights bringing Tasmania's fresh produce to the world. Strengthening the older part of the runway to allow widebody aircraft to operate without weight restrictions will unlock the potential for non-stop international passenger and freight flights to Asia. The rapid movement of Tasmania's premium produce to markets worldwide is instrumental in ensuring producers can be internationally competitive and contribute to the growth of the local economy.

Hobart is Australia's gateway to Antarctica, with the Airport complementing the seaport as aviation access to the frozen continent grows. The Australian Antarctic Division is based in Hobart, and Australian and international expeditions contribute to the world's largest concentration of Antarctic and Southern Ocean research.

Sustainability is embedded in everything we do at Hobart Airport, through our three pillars of Inspiring People and Community, A Trusted Business with Strong Growth, and Environmental Stewardship.

By connecting communities, we are more than just an airport. We are a host, a caretaker, a friend, and a genuine member of the countless communities that make up Tasmania and the world.

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# Abbreviations

Acronym	Definition
AAD	Australian Antarctic Division
ACA	Airport Carbon Accreditation
ACI	Airports Council International
AEO	Airport Environment Officer
AEP	Annual Exceedance Probability
AEPR	Airports (Environment Protection) Regulations 1997
AER	Annual Environment Report
Air NEPM	National Environment Protection (Ambient Air Quality) Measure
ALC	Airport lessee company
ANEC	Australian Noise Exposure Concept
ANEF	Australian Noise Exposure Forecast
ANEI	Australian Noise Exposure Index
ARFF	Aviation rescue fire fighting
ATMs	Air transport movements
CASA	Civil Aviation Safety Authority
CEMP	Construction Environmental Management Plan
CEO	Chief Executive Officer
DMS	Data Management System
EMPC Act	<i>Environmental Management and Pollution Control Act 1994</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
ESA	Environmentally Significant Areas
ET	Equivalent Tenement
FTE	Full time equivalent
FTTB	Fibre to the Building
FY	Financial Year
GA	General Aviation
GDP	Gross Domestic Product
GHG	Greenhouse gases
GIF III	Macquarie Global Infrastructure Fund III
GSP	Gross State Product
ha	Hectare
HIAPL	Hobart International Airport Pty Ltd

Acronym	Definition
HLS	Helicopter landing sites
ICAO	International Civil Aviation Organisation
ITS	Intelligent Transportation Systems
kV	Kilovolt
LUPA Act	<i>Land Use Planning and Approvals Act 1993</i>
m2	Square meter
MDF	Main frame distribution
MDP	Major Development Plan
MNES	Matters of National Environmental Significance
NASF	National Airport Safeguarding Framework
NBN	National Broadband Network
NEMP	National Environmental Management Plan 2.0
non-RPT	Non-regular passenger transport
OEMP	Operational Environmental Management Plan
OLS	Obstacle Limitation Surfaces
p.a	Per annum
PANS-OPS	Procedures for Air Navigation Services Aircraft Operations
PBN	Performance based navigation
PFAS	Perfluoroalkyl and Polyfluoroalkyl Substances
PSA	Public Safety Area
PWOL	Pittwater-Orielton Lagoon
RFDS	Royal Flying Doctor Service
RNP	Required Navigation Performance
RPT	Regular Passenger Transport
SID	Standard Instrument Departures
SMP	Site Management Plan
STAR	Standard Instrument Arrival Route
Tasports	Tasmanian Ports Corporation Pty Ltd
TEC	Threatened ecological communities
TSP Act	<i>Threatened Species Protection Act 1995</i>
UPS	Uninterruptable power supply
WONS	Weeds of National Significance





01

# Introduction





**Figure 1.1:** Hobart Airport and surrounds

# 1.1 Introduction

Hobart Airport is the eighth busiest domestic airport in Australia and the busiest curfew-free airport in Tasmania.

Hobart Airport provides significant economic and social benefits to Tasmania by providing services to airlines, moving passengers, and transporting cargo. Since privatisation in 1998, the number of passengers using the Airport has grown from 900,000 to 2.8 million passengers in FY2020. This growth supports the Tasmanian economy in key sectors including tourism, business, freight and research. In terms of economic impact, in FY2018 Hobart Airport provided a direct economic contribution of \$145 million to the Tasmanian economy. Looking forward, the Airport finds itself in a significant phase of growth. By 2042, it is forecast that more than 5.5 million passengers will pass through the Airport, 350,000 of which will be from direct international destinations.

Recent travel restrictions and border closures as a result of COVID-19 have resulted in a dramatic fall in air traffic movements and revenue for airports worldwide. Recovery across the global aviation industry is underway. In some instances, for the purpose of this Master Plan, historical data (pre-COVID-19) has been relied upon to reflect typical air traffic movements and economic activity. Prior to COVID-19, Hobart Airport and its tenants generated 639 direct full-time equivalent (FTE) and 487 indirect FTE jobs. Hobart Airport has a long history of creating employment opportunities for Tasmania. As the Airport grows, so too will employment opportunities.

By 2042 it is anticipated that Hobart Airport will generate more than 3,500 direct and indirect FTE jobs and contribute \$412 million directly to the economy.

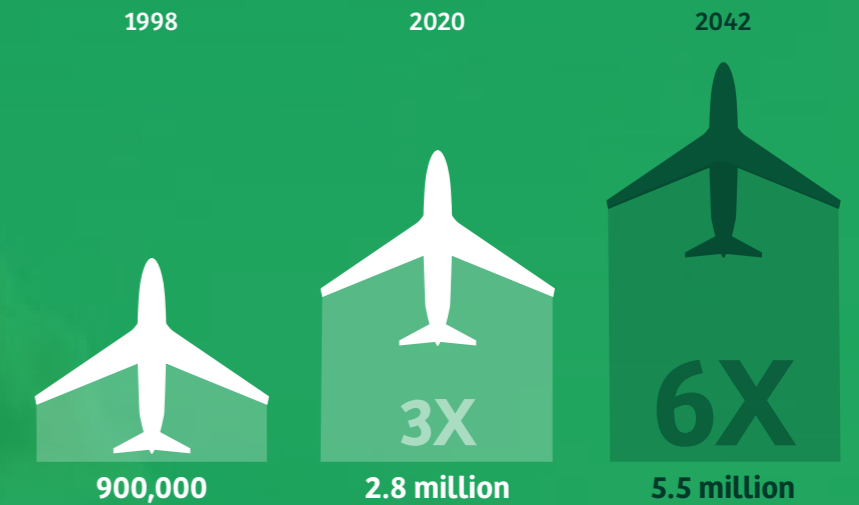
The Master Plan presents the plan for growth to guide future development at Hobart Airport for the next 20 years.

Aeronautical development is planned to accommodate future demand for passenger and freight services. Non-aeronautical development is equally important to the success of Hobart Airport, with new tenants continually providing new and expanded business opportunities.

The 2022 Master Plan also contains Hobart Airport’s Environment Strategy, which considers environmental values and their significance to the State of Tasmania. The Environment Strategy seeks to obtain a balance between aviation operations, areas of identified environmental significance and the continual growth and development of Hobart Airport.

Hobart Airport is located a considerable distance from residential areas (refer **Figure 1.1**). This is a significant advantage to minimise potential conflict between sensitive land uses and aircraft operations, and allows the curfew free status of the Airport to be retained. Planning and safeguarding practices exist under relevant local, State and Commonwealth legislation to assist in the assessment of planning approvals and land use zoning in areas located in close proximity to the Airport.

Hobart International Airport Pty Ltd (HIAPL) will continue to work closely with the community to ensure impacts from all airport operations are carefully managed with consideration to nearby land uses.



Passenger forecast



Airport’s contribution the Tasmanian economy



Full time jobs created by the Airport

# Objectives






Hobart Airport aspires to connect communities, provide a uniquely Tasmanian experience for its visitors and continue to grow as an economic hub that delivers significant opportunities for the local community.

The Airport's recent growth has supported employment and economic prosperity in the region. The vision for Hobart Airport is to continue to be a key driver of Tasmania's successful tourism, freight, and local business sectors as well as the increasingly important Antarctic research sector. The Airport's development is guided by a number of strategic objectives. These objectives (see Table 1.1) frame the way in which the Airport conducts business and continues to develop and change.

During the next 8 years, Hobart Airport plans to undertake the following significant development projects:

- An expansion of our passenger terminal, improving the customer experience within the terminal and supporting the growth of direct international flights
- Funding commitment to strengthen the runway which will ensure Code E aircraft are able to use the runway on a regular timetabled basis
- Development of additional commercial and mixed-use activities
- Small and medium sized format businesses prioritised along Holyman Avenue and/or Tasman Highway

**Table 1.1:** Location of objectives

Objective	Chapter	Location
 <b>Enhance our role in the community</b>	<b>All</b>	Each of the chapters outline the catalyst for socio-economic growth and how Hobart Airport will continue to play a central role in boosting the Tasmanian economy
 <b>Sustainably grow air connectivity</b>	<b>5</b>	Chapter 5 outlines air traffic forecasts and how Hobart Airport will enhance air connectivity, capacity, efficiency, and frequency while ensuring that sustainability and climate change are at the forefront of our thinking
 <b>Facilitate Antarctic and cargo services</b>	<b>2, 4 and 5</b>	Chapters 2, 4 and 5 outline how Hobart Airport can leverage their unique southernmost position to maintain high-value fresh produce for air cargo exports and provide Antarctic connectivity and Southern Border protection
 <b>Enhance customer experience</b>	<b>All</b>	Each of the chapters outlines the need to provide an exceptional customer experience while accommodating airline and passenger growth that is able to respond quickly to economic or aviation industry change
 <b>Diversify property business</b>	<b>2 and 4</b>	Chapter 2 and 4 outline how Hobart Airport will develop a property precinct that hosts unique retail offerings and meets customer expectations

## 1.2 History of Hobart Airport

From humble beginnings opening on the rural property of Llanherne in 1956, through to the unprecedented demand for travel and local produce the State is experiencing today, Hobart Airport has become Tasmania's busiest gateway with 60 per cent of visitors now passing through the Airport.

In 1956, Hobart Airport was commissioned as the primary Regular Passenger Transport (RPT) airport for the region. Hobart Airport's original domestic terminal building and runway were commissioned in 1956 and were re-developed in 1976.

An international terminal was commissioned in 1983 to provide facilities for the then trans-Tasman B727 services. The Airport was further upgraded in 1985 to cater for B767 aircraft, with capability for handling weight restricted B747 operations. At the same time the terminal building was extended, additional apron and car park facilities were constructed, and the runway was extended to 2,251m.

The Federal Airports Corporation assumed ownership and control of both Hobart Airport and Cambridge Aerodrome in January 1988 but sold Cambridge Aerodrome in March 1993.

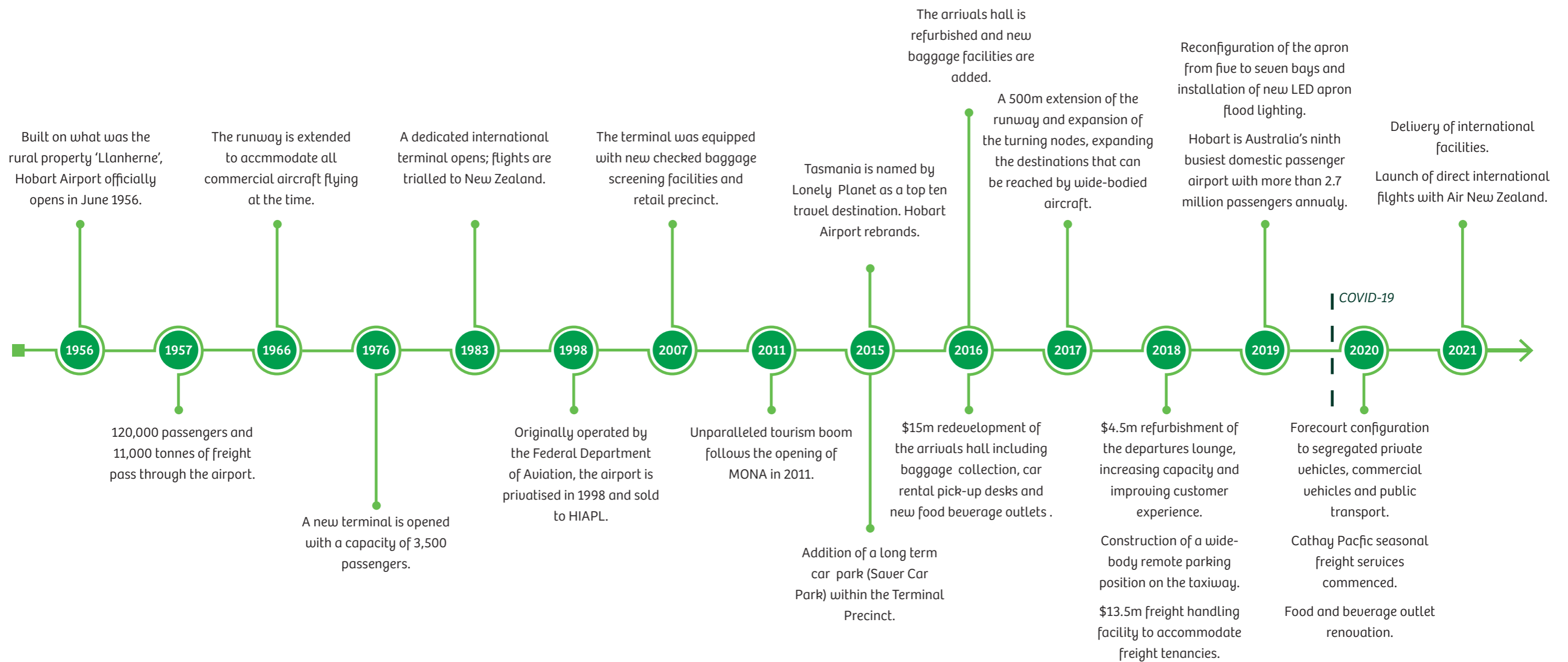
Hobart Airport was privatised in June 1998, with HIAPL entering a 99-year land lease with the Commonwealth Government (50 years plus a 49-year renewal option). Hobart Airport has been operated by HIAPL since 1998, under full State ownership from 2004 as a component of Tasmanian Ports Corporation Pty Ltd (Tasports).

In 2007, the State Government of Tasmania decided to sell Hobart Airport to private organisations. From January 2008 to October 2019, Hobart Airport was owned by the Tasmanian Gateway Consortium – comprising of Macquarie Global Infrastructure Fund III (GIF III), a Macquarie- managed unlisted infrastructure fund with a 51.1% equity investment, and Tasplan (previously Retirement Benefits Fund (RBF)), a Tasmanian superannuation fund with a 49.9% interest.

In October 2019, the ownership of Hobart Airport was acquired by a consortium comprised of both Australian-based and international organisations. 70% of equity interest has been acquired jointly by QIC Ltd, an Australian-based asset manager, and Royal Schiphol Group, a Dutch airport operator. The remaining 30% equity interest is held by the Tasmanian superannuation fund, Spirit Super, formed by the merger of Tasplan and MTAA Super in 2021.

Under the terms of its lease from the Commonwealth, HIAPL is mandated to operate the Airport, to effect capital improvements in accordance with the Airport Master Plan, to protect the environment and to maintain the Airport in good repair. A summary of the development that has occurred at Hobart Airport is shown in **Figure 1.2**.





**Figure 1.2:** Timeline of Hobart Airport development

## 1.3 Hobart Airport today

Hobart Airport is located 17 kilometres east of Hobart, in the City of Clarence and occupies approximately 565 hectares of land. The Airport's unique location, between Barilla Bay and Frederick Henry Bay means that its located a reasonable distance from higher density residential areas. Hobart Airport's operations include the provision of aeronautical services and facilities, including the following core airport infrastructure:

- A single runway system, Runway 12/30 that is 2,727 meters long, 45 meters wide and served by two taxiways
- Taxiways linking the runway to aprons to the east and south of the terminal
- Ground handling facilities including fuel storage
- A domestic terminal facility, with a central check in hall, a baggage hall and a checked baggage x-ray screening system
- Freight facilities leased to commercial tenants
- General aviation facilities primarily to service rotary wing (helicopter), Royal Flying Doctor Service and private jet aircraft
- Airservices Australia facilities and infrastructure - navigation aids, aviation rescue firefighting services and air traffic control tower
- Road, parking, sewerage, drainage, electrical and telecommunications reticulation

The existing Airport layout is shown in **Figure 1.3**. The Airport site contains both; Land that is leased from the Commonwealth, and freehold land. While the freehold land is not governed by the *Airports Act 1996* (Airports Act), for completeness this Master Plan identifies the proposed land uses for both the freehold land as well as for the leasehold land subject to the Airports Act.



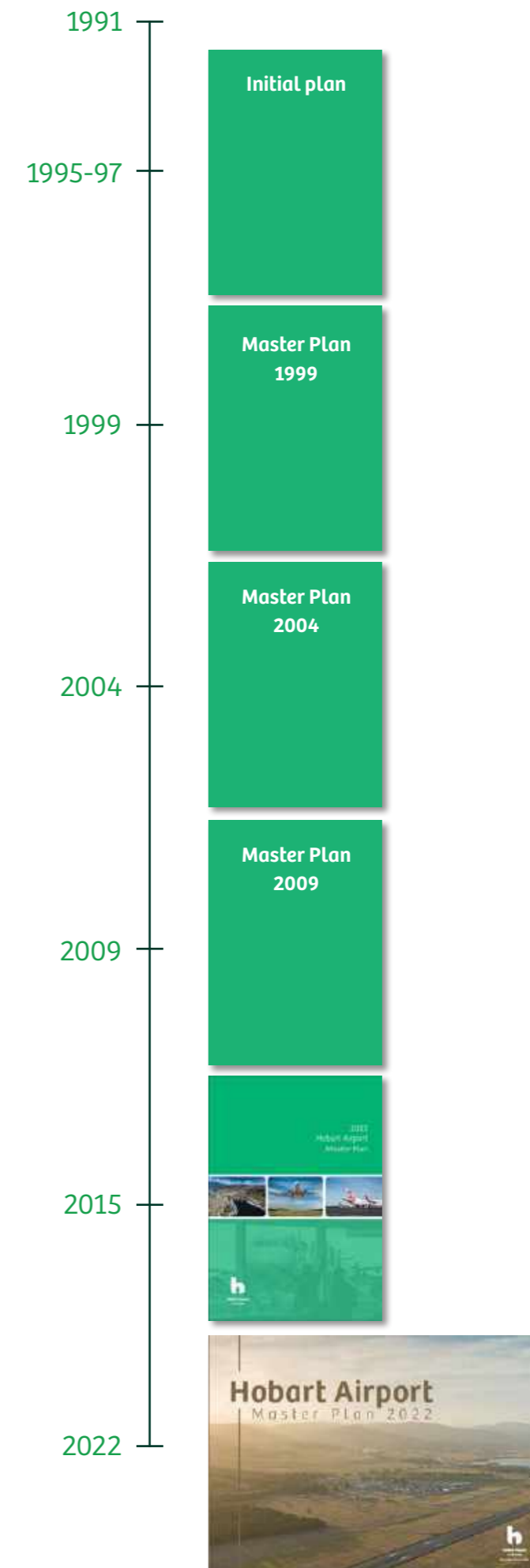
**Figure 1.3:** Existing Airport layout

## 1.4 Prior master plans

The 2022 Master Plan is based on more than 40 years of prior planning (**Figure 1.4**) and reflects the growth and evolution of the Airport since the first Master Plan, developed by the Federal Airports Corporation in 1991.

This initial plan was revised and updated in 1995 and 1997. Following privatisation of Hobart Airport in June 1998, Hobart Airport progressed the 1999 Master Plan and this was approved by the then Minister for Transport and Regional Services. This plan was the first implemented pursuant to the Airports Act and was in turn updated by Hobart Airport in 2004. The 2009 Master Plan aligned with and updated the 2004 plan, reflecting revised forecast growth in passenger, freight and general aviation.

In 2015, the Master Plan was expanded (as per legislative requirements) to include the Airport's Ground Transport Strategy and Environment Strategy.



**Figure 1.4:** Timeline of master planning for Hobart Airport

02

# Economic benefits



# Dashboard of economic benefits



**1.3 million** = **\$ 2.4 billion**

visitors to Tasmania in FY2018

Visitor spending in Tasmania in FY2018



**FY2018**

Direct economic activity at Hobart Airport resulted with a direct contribution to the Tasmanian economy of

**\$ 145 million**



**1125 jobs**

FY2018 direct and indirect FTE jobs

**By 2042**

**+3500 jobs**

direct and indirect FTE jobs

**forecast**

**+1544 jobs**

The largest contribution is projected to be from aviation tenants and the airlines.

**By 2042**

direct contribution of the Airport is expected to be more than

**\$ 412 million**

**2042**

**curfew free status will be responsible for**

**up to 3%**

of the overall future economic contribution.

## 2.1 The economic benefit of an airport

Airports play an essential economic and social role in the community, particularly for Tasmania given its geographic isolation. Through air travel, communities are able to connect with people and markets in a manner that would otherwise not be possible.

The economic and social benefits of an airport can be considered in three categories:

- The **direct impact** (incomes and employment) of the Airport operator and airport tenants
- The **indirect benefits** of the businesses through their purchases from suppliers, creating a multiplier effect of further income and employment
- The **catalytic effect** of aviation related businesses on other sectors of the economy, the public sector and personal well-being

To inform this Master Plan, Hobart Airport undertook a study to quantify the benefits associated with direct impacts and indirect benefits of the Airport to the Tasmanian economy. The economic contribution of Hobart Airport to Tasmania today and into the future was measured using data from tenants and on the Tasmanian economy for each industry it purchases inputs from and sells its outputs to. More specifically, revenue and employment information from airport tenants informed the analysis.

**Table 2.1:** FY2018 economic contribution and employment of Hobart Airport

	Contribution Type	Airport Operations	Tenants	Total
<b>Value Added (\$ million)</b>	Direct	34.9	110.1	145.0
	Indirect	4.1	71.8	75.9
<b>Employment (FTEs)</b>	Direct	60	580	640
	Indirect	35	450	485

## 2.2 Existing economic contribution

In FY2018 direct economic activity at Hobart Airport resulted in a contribution to the Tasmanian economy of \$145 million (**Table 2.1**). This reflects the economic activity pre-COVID-19 as this is more indicative of regular economic performance.

The FY2018 economic activity included a direct contribution or value add to the economy, as measured by Gross State Product (GSP), of approximately \$34.9 million from the operator of Hobart Airport as well as a direct contribution of approximately \$110.1 million from the tenants located at the Airport, of which the largest proportion is from aviation tenants and the airlines.

There are approximately 640 existing direct FTE jobs at the Airport. Around 10% of these FTE jobs are employed directly at the Airport and the remaining 580 FTE workers are employed by the Airport's tenants or airlines. There are currently 50 organisations operating from sites located at Hobart Airport. These organisations carry out a range of services including airlines, fuel providers, maintenance operations, freight and logistics companies, retail outlets, car rental facilities, parking facilities and hotel accommodation.

### Broader economic benefits

As the main aviation gateway to Hobart and southern Tasmania, the existence of Hobart Airport enables the establishment and growth of a broad range of critical sectors in the Tasmanian economy. Most notably, this includes tourism, education and the Antarctic research and air freight sectors.

### Tourism

As a result of COVID-19 and the associated travel restrictions, there was a significant reduction in passenger volumes compared with previous years. It is predicted that annual passengers will resume to pre-COVID-19 levels by 2023. To give a non-COVID impacted indication of tourism, FY2018 data has been used.

In FY2018, there were 1.3 million visitors to Tasmania. An estimated 1.08 million visitors were from mainland Australia and 307,000 were overseas visitors. As a group, they spent \$2.4 billion whilst visiting Tasmania. In FY2018 almost 1.2 million visitors, or 89 per cent of all visitors, travelled to Tasmania by air, the majority of which travelled through Hobart Airport.

### International students

In 2017-18, there were 8,074 international students enrolled in higher education, Vocational Education and Training (VET), schools and other educational institutions in Tasmania. This is equivalent to 1.3 per cent of all international students studying in Australia in 2017. International students provide an important economic contribution to the economy of Tasmania. In 2017-18, an estimated \$150 million was spent by international students in Tasmania on accommodation and living costs and other goods and services, excluding tuition fees. In 2018, 3,162 FTE jobs in Tasmania were supported by international students as a result of the spending by these students on goods and services in the local economy. Students also attract friends and family to visit Tasmania which provide added spending in the economy.

The COVID-19 pandemic and increased travel restrictions has had a significant impact on enrolments of international students across the education sector in Australia. This means there has been subsequent reduction in the contribution of international students to the Australian economy. While the volume of existing international students is low nationwide, it is projected to rise in the coming years back to pre-COVID-19 levels.

### Antarctic research

Hobart is the location of the world's largest single concentration of Antarctic and Southern Ocean research, as well as co-located logistics operations. As Australia's Antarctic 'gateway' and a global gateway to the East Antarctic, Hobart Airport is the base for the Australian Antarctic Division's (AAD) aviation operations. It is currently the home airport for the Airbus A319 intercontinental Antarctic air link service. The Airbus operates regularly from Hobart to the Australian Wilkins runway and the McMurdo runway owned by the United States of America. It primarily transports personnel and equipment for a range of national programs operating in Antarctica. A number of RAAF C-17 flights currently travel between Hobart and Wilkins each season delivering heavy lift cargo for the AAD.

### Air freight

Air freight allows Tasmanian producers to access Australian and overseas markets quickly and efficiently. This is particularly important for time-sensitive products that are perishable or require longer travel distances to market. Tasmania is a large producer of high-value products such as abalone, crayfish, salmon, cut flowers and berries which benefit from air transport. It is estimated that < 2% of freight from Tasmania is currently transported by air, however this proportion is likely to increase with the anticipated commencement of direct international flights.

### Other benefits

There are other important forward-linkage benefits that aviation (and hence the Airport) facilitates in the broader economy. Positive developments in other industries would not take place, or would be smaller, if there was no aviation industry in Hobart. These benefits occur because of the reduction in transport costs (after allowing for the value of time) and improvements in transport quality, due to aviation. Hobart Airport allows day-return or overnight business trips, short leisure trips and urgent freight deliveries, that otherwise would either be impossible or difficult to achieve.

## 2.3 Future economic contribution

The future economic contribution of Hobart Airport to the Tasmanian economy will be driven by tourism, freight and Hobart's strategic role as the gateway to the Antarctic and the Southern Ocean. More specifically, tourism is a key export industry for Tasmania. Prior to the COVID-19 pandemic, in 2019, Tasmania attracted around 305,000 international visitors with an average spending of around \$1,760 per visit. Improving Tasmania's international freight capacity is also anticipated to be a key element in the future economic impact of the Airport so that exporters have access to more direct freight pathways.

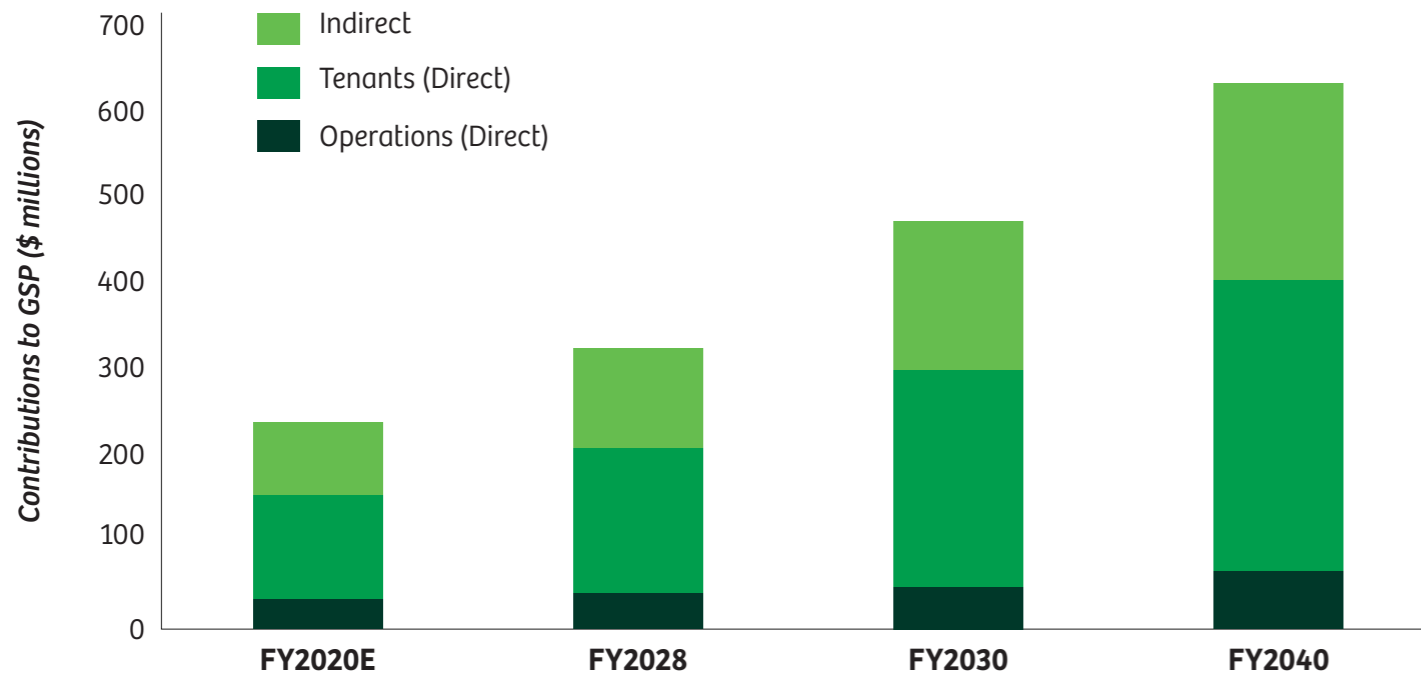
In addition to tourism and freight, Hobart Airport is Australia's gateway to aircraft accessing the Antarctic. Future upgrades to the runway will facilitate larger aircraft accessing the Antarctic and open up support for Defence aviation activities operating from Hobart. These areas will underpin the future economic contribution of Hobart Airport to the Tasmanian GSP and employment.

### Gross State Product and employment

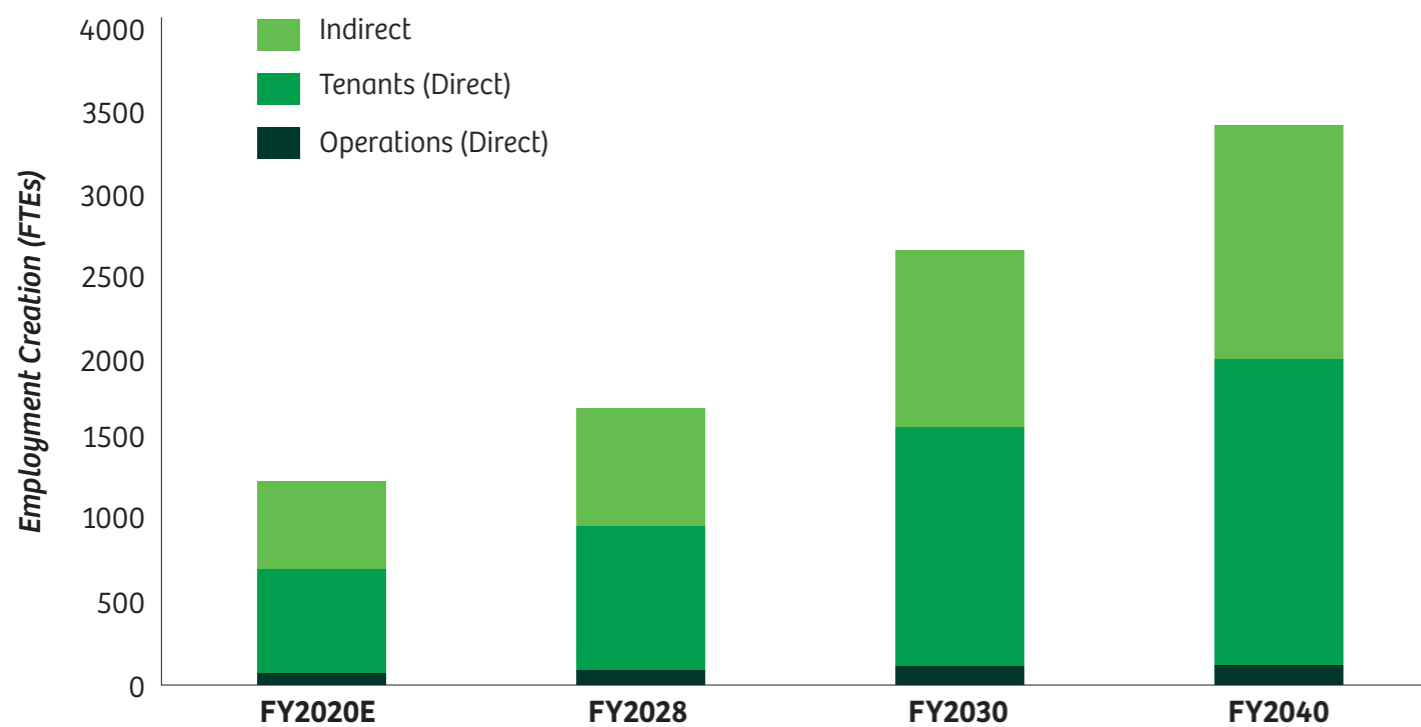
The future direct economic contribution of Hobart Airport and its tenants to Tasmania's GSP is expected to increase. As shown in **Figure 2.1**, by FY2040 the direct contribution of the Airport is expected to be \$412 million, \$71.4 million from the Airport operator and \$340.5 million from airport tenants (as well as the airlines serving the Airport).

This growth can be attributed to both passenger growth and planned development of the landside commercial and industrial precincts. The Airport currently maintains a curfew free flight schedule. It has been estimated that this curfew free status will be responsible for \$6.2 million to \$12.3 million of the overall future economic contribution.

Similarly, employment offered through the Airport is expected to increase. As **Figure 2.2** illustrates, by FY2040 the Airport's total direct and indirect employment contribution to the state is expected to increase more than 3500 FTE jobs. The largest contribution (1544 FTE jobs) is projected to be from aviation tenants and airlines.



**Figure 2.1:** Hobart Airport total contribution to GSP (FY2020E-FY2040)



**Figure 2.2:** Employment creation in Tasmania due to Hobart Airport (FY2020E - FY2040)

### Building Tasmania's future and connecting communities

Bringing Hobart Airport to Code E standards will allow larger aircraft such as Boeing 787 and Airbus A350 to operate from Hobart Airport allowing for the potential to generate significant economic benefits for Tasmania. By supporting larger and heavier aircraft, Code E upgrades will be key in enabling a direct route for passenger flights to Singapore and open up Tasmania to key Asian markets, as well as supporting Hobart's role in the Antarctic.

These upgrades will require a total investment of \$100 million, consisting of \$50 million investment in airport infrastructure over two financial years.

Key benefits include:

- The construction phase (2 years) will generate higher annual Tasmanian Gross Domestic Product (GDP) and employment of \$16.4 million and 197 FTEs respectively
- Over the operating life, this project will generate higher annual Tasmanian GDP and employment of \$122 million and 1,261 FTEs respectively
- Increase Hobart's capabilities as the gateway to the Antarctic, support future Defence aviation activities out of Hobart and will help retain and grow economic activity associated with the Antarctic and Southern Ocean research sector
- A faster route to market for Tasmanian businesses, that allows exports to reach their destination faster, in better quality and at a high premium



03

# National policy and regulatory framework

# Overview

Planning at Hobart Airport is guided by relevant Commonwealth, state and local legislation to ensure development occurs in a well-planned and consistent manner. The relevant legislation differs across the Airport depending on the tenure type of the land on which development is proposed. A summary of the relevant legislation for Hobart Airport is provided in **Table 3.1** and discussed in detail in this section.

**Table 3.1:** Summary of key legislation, policies and guidelines

Legislation type	Commonwealth land	Freehold Land
<b>Primary legislation</b>	<ul style="list-style-type: none"> <li>• Airports Act 1996</li> <li>• Airport Regulations 1997</li> <li>• Airports (Building Control) Regulations 1996</li> <li>• Airport (Environment Protection) Regulations 1997</li> <li>• Airports (Protection of Airspace) Regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Land Use Planning and Approvals Act 1993</li> <li>• Environmental Management and Pollution Control Act 1994</li> </ul>
<b>Other relevant legislation</b>	<ul style="list-style-type: none"> <li>• Environment and Protection Biodiversity Conservation Act 1999</li> </ul>	<ul style="list-style-type: none"> <li>• Local Government (Building and Miscellaneous Provisions) Act 1993</li> <li>• State Policies and Projects Act 1993</li> <li>• Historic Cultural Heritage Act 1995</li> <li>• Aboriginal Heritage Act 1975</li> <li>• Threatened Species Protection Act 1995</li> <li>• Nature Conservation Act 2002</li> <li>• Weed Management Act 1999</li> <li>• Forest Practices Act 1985</li> <li>• National Environment Protection Council (Tasmania) Act 1995</li> </ul>
<b>Land use planning policies and guidelines</b>	<ul style="list-style-type: none"> <li>• Airport Master Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Airport Master Plan</li> <li>• Tasmanian Planning Scheme</li> <li>• Southern Tasmania Regional Land Use Strategy 2010-2035</li> <li>• State Planning Directives</li> <li>• Clarence City Council Strategic Plan 2021-2031</li> </ul>
<b>Other relevant policies and guidelines</b>	<ul style="list-style-type: none"> <li>• National Airports Safeguarding Framework</li> <li>• Hobart City Deal</li> </ul>	<ul style="list-style-type: none"> <li>• State Coastal Policy 1996</li> <li>• State Policy on Water Quality Management 1997</li> </ul>

## 3.1 Commonwealth framework

Hobart Airport is largely located on Commonwealth land. Hobart International Airport Pty Ltd (HIAPL) is the 'Airport lessee company' (ALC) for Hobart Airport, operating under a 50-year lease (plus a renewal option of 49-years) with the Commonwealth Government. HIAPL manages the entire site and is required to develop Hobart Airport to accommodate anticipated demand, to identify capital improvements and provide quality standards expected of a major airport.

### Airports Act 1996

The Airports Act provides the basis for operation and development of the Airport where located on Commonwealth land. Any development proposed on Commonwealth land is subject to the Airports Act, including planning, environmental and building controls.

Under the Airports Act Hobart Airport must develop an airport master plan in accordance with requirements detailed in Appendix A.

In accordance with section 70 of the Airports Act, there is a requirement for the final Master Plan to be approved by the Federal Minister for Infrastructure, Transport, Regional Development, Communications and the Arts (the Minister). The purpose of the Master Plan is to:

- a. Establish the strategic direction for efficient and economic development at the Airport over the planning period of the plan
- b. Provide for the development of additional uses of the Airport site
- c. Indicate to the public the intended uses of the Airport site
- d. Reduce potential conflicts between uses of the Airport site, and to ensure that uses of the Airport site are compatible with the areas surrounding the Airport
- e. Ensure that operations at the Airport are undertaken in accordance with relevant environmental legislation and standards
- f. Establish a framework for assessing compliance at the Airport with relevant environmental legislation and standards
- g. Promote continual improvement of environmental management at the Airport

Section 71A of the Airports Act defines a sensitive development and requires any proposals to be identified in the Master Plan. Sensitive development is classified as a:

- Residential dwelling
- Community care facility
- Pre-school
- Primary, secondary, tertiary or other educational institution; or
- Hospital

A sensitive development does not include:

- An aviation educational facility
- Accommodation for students studying at an aviation educational facility at the Airport
- A facility with the primary purpose of providing emergency medical treatment that does not have inpatient facilities
- A facility with the primary purpose of providing in-house training to staff of an organisation conducting operations at the Airport

Sensitive developments are prohibited on Commonwealth land, but in exceptional circumstances, ministerial approval can be sought to prepare a Preliminary Draft Major Development Plan. There are no sensitive developments planned for Hobart Airport, however, there is a pre-existing childcare facility.

### Airports Amendment Act 2018

The *Airports Amendment Act 2018* was legislated on 28 September 2018. The administrative changes impact both master Plans and major development plans to ensure an efficient regulatory approach. Two changes relate to the preparation of airport master plans which are:

- A Master Plan cycle of an 8 year period for Hobart Airport
- Mandatory inclusion of the Australian Noise Exposure Forecast (ANEF)

These changes have been considered in the preparation of this Master Plan.

### Airports Regulations 1997

The *Airport Regulations 1997* require Hobart Airport to meet several obligations, including:

- Address any obligations passed to HIAPL by the Commonwealth in relation to leases on the Airport in existence before 11 June 1998
- Address any interests in airport land that were in existence before 11 June 1998

Hobart Airport has a number of leases that were in existence prior to 11 June 1998 and are still valid:

- Airservices Australia facilities – control tower, fire station and car park, radio/ electrical maintenance workshop, search and rescue equipment, gym, fire training ground, localiser, glide path, and markers
- Bureau of Meteorology – building, instrument site (west), instrument site (east- anemometer)

Hobart Airport has advised the Bureau that in the future, development may affect operational equipment, however, adequate time will be provided to re-establish instruments in a new location for continuation of climatic records and will not impact aircraft operations.

The 2022 Master Plan does not affect the operation of these sites under pre-existing lease arrangements.



To the best of Hobart Airport's knowledge, the following represent interests for the purposes of the regulations of the following telecommunications, trunk and other services:

- Telstra East Coast and Seven Mile Beach optic fibres
- Telstra incoming optic fibre to Customs Kennel
- Aurora optic fibre along Holyman Avenue
- Water re-use inbound and outbound lines along Holyman Avenue
- Airservices Australia communications
- Incoming high voltage at airport metering point (TasNetworks)
- Incoming high voltage from Pittwater Road
- Numerous TasNetworks poles and associated assets

This Master Plan has been developed to consider all interests existing at the time of writing, including easements, licences, leases and sub-leases. There are no known conflicts or inconsistencies existing between these interests or any proposals in the Master Plan. Hobart Airport will continue to ensure future development will not interfere with the rights granted under any pre-existing interest.

#### **Airports Environment Protection Regulations 1997**

The Airports (Environment Protection) Regulations 1997 (AEPR) establishes a system of regulation and accountability for activities at airports that generate or have potential to generate pollution, excessive noise and promote improving environmental practices for activities carried out at airport sites.

The regulations stipulate the Airport's general duty to avoid polluting, offensive noise and preservation of habitat.

The regulations are facilitated by the Commonwealth appointed Airport Environment Officer (AEO) in order to encourage continual improvement in environmental practices for activities at the Airport.

#### **Environment Protection and Biodiversity Conservation Act 1999**

The provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is regulated by Commonwealth agencies to monitor and control significant environmental impacts. The EPBC Act provides a framework to manage and protect nationally and internationally listed flora, fauna, ecological and heritage places that are declared Matters of National Environmental Significance (MNES).

Hobart Airport acknowledge that potential impacts on MNES may occur during construction, operation and management activities at the airport. All activities are subject to the provisions of the EPBC Act. Any action that will have, or is likely to have a significant impact on any MNES requires approval from the Commonwealth Minister. Hobart Airport is committed to their obligations under the EPBC Act, including the referral and approval permit requirements. The Airport's Environment Strategy (Chapter 11) in this Master Plan has considered all known MNES within Hobart Airport and the provisions of the EPBC Act.

#### **National Airport Safeguarding Framework**

The National Airport Safeguarding Framework (NASF) was developed to ensure the ongoing safety, viability and growth of aviation in Australia and retain significant economic benefits that airports contribute.

Specifically, NASF provides guidance on land use planning and development requirements that might affect airport operations. This can relate to prescribed airspace, windshear, noise, wildlife strike risk, pilot lighting and distraction, wind turbine risk to aircraft, protecting helicopter landing sites and impacts to public safety areas. The NASF principles, as stipulated in each guideline, are to be referenced or incorporated into relevant planning schemes and master plans to guide assessments and approvals for land use and development around identified airports.

The Airport Safeguarding Strategy has been prepared for this Master Plan in accordance with the NASF principles.

#### **Airports (Protection of Airspace) Regulations 1996**

This Commonwealth legislation is applicable to non-Commonwealth land within and in the vicinity of Hobart Airport. These provisions protect the operational airspace from hazards and obstacles to ensure the safe operations of Hobart Airport.

#### **Other Commonwealth Legislation**

A number of Commonwealth agencies control airport operations and activities subject to the following legislation:

- *Airspace Act 2007*
- *Civil Aviation Act 1995*
- Part 139 of the *Civil Aviation Safety Regulations 1998*
- *Aviation Transport Security Act 2004*
- *Aviation Transport Security Regulations 2005*

## 3.2 State and local framework

As Hobart Airport is primarily located on Commonwealth land, this land is pursuant to Section 112 of the Airports Act and is not subject to state and local planning provisions. However, the freehold land at Hobart Airport is subject to state and local planning provisions.

While state and local planning provisions do not apply to Commonwealth land, this Master Plan must demonstrate consistency with these provisions in accordance with Section 71 of the Airports Act. If the master plan is not consistent with the planning provisions, there must be justification for such inconsistencies. This Master Plan considers and is consistent with the Tasmanian Planning Scheme which consists of State Planning Provisions and a Local Provisions Schedule.

### Land Use Planning and Approvals Act 1993

The *Land Use Planning and Approvals Act 1993* (LUPA Act) sets out the planning process in Tasmania, detailing the responsibilities of the Minister for Planning, the Commission and Local Government.

The LUPA Act sets out timeframes and the framework for the process of strategic and statutory planning in Tasmania. The LUPA Act objectives are to:

- Provide sound strategic planning and coordinated action by state and local government
- Establish a system of planning instruments to be the principle set of objectives, policies and controls for the development, use and protection of land
- Ensure that the effects on the environment are considerate of social and economic effects when decisions are made about the use and development of land
- Requires land use and development planning and policy to be integrated with environmental, social, economic, conservation, and resources policies at state, regional and local levels
- Provide for the consolidation of approvals for land use or development and related matters
- Promote the health and wellbeing of all Tasmanians and visitors by ensuring a pleasant, efficient and safe environment for working, living and recreation
- Conserve buildings, areas or other places which are of scientific, aesthetic, architectural, or historical interest, or otherwise of special cultural value
- Protect public infrastructure and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community
- Provide a planning framework which fully considers land capability

### The Greater Hobart Act 2019

The Greater Hobart Act 2019 allows the Greater Hobart Councils which includes Clarence, Glenorchy, Hobart and Kingborough to identify principles and priority areas. This assists Councils and State Government with implementing actions to deliver strategic, efficient and integrated land use planning, and infrastructure outcomes for future land uses.

### Hobart City Deal

The Hobart City Deal (the City Deal) signed on 24 February 2019 represents a shared 10 year vision between the Commonwealth, State and local governments (including Clarence, Glenorchy, Hobart and Kingborough Councils).

The City Deal was enabled by the Greater Hobart Act 2019 and promotes the investment to capitalise on Hobart's natural amenity and build on its position as a vibrant, liveable, and connected global city. The Hobart City Deal seeks to:

- Enhance Hobart Airport's role as a direct international gateway
- Solidify Hobart's world class standing as a gateway to the Antarctic and Southern Ocean
- Establish a reliable, sustainable and cost-effective transport system
- Deliver a diverse range of affordable housing options
- Establish governance to support better strategic planning for the city
- Support Hobart to be a smart, liveable and investment ready city

The City Deal highlights the opportunity for Hobart Airport to be a direct international gateway and enhance its connection to the Antarctic and Southern Ocean. To facilitate international opportunities, the Commonwealth Government committed \$82.3 million over 10 years for border service support for international flights at Hobart Airport, including customs, immigration and biosecurity services. This investment will support international tourists visiting Tasmania and provide Tasmanian businesses with greater access to international markets.

### Tasmanian Planning Scheme

The Tasmanian Planning Scheme effectively commenced on 8 September 2021. The Tasmanian Planning Scheme consists of State Planning Provisions and a Local Provisions Schedule for each municipal area. Hobart Airport is located within the Clarence municipal area. The Clarence Local Provisions Schedule applies on land within the Clarence municipal area, except for Commonwealth-owned land.

While the Clarence Local Provisions Schedule under the Tasmanian Planning Scheme only applies to the freehold land at Hobart Airport, the Airport aligns its growth, development and land use objectives with the Tasmanian Planning Scheme to ensure a consistent and well-planned approach.

The State Planning Provisions provide state-wide consistency by introducing standard planning rules which can be applied by the various Tasmanian local councils as required. Similarly, the Local Provisions Schedules outline the relevant State Planning Provisions, planning controls and objectives for each local municipal area.

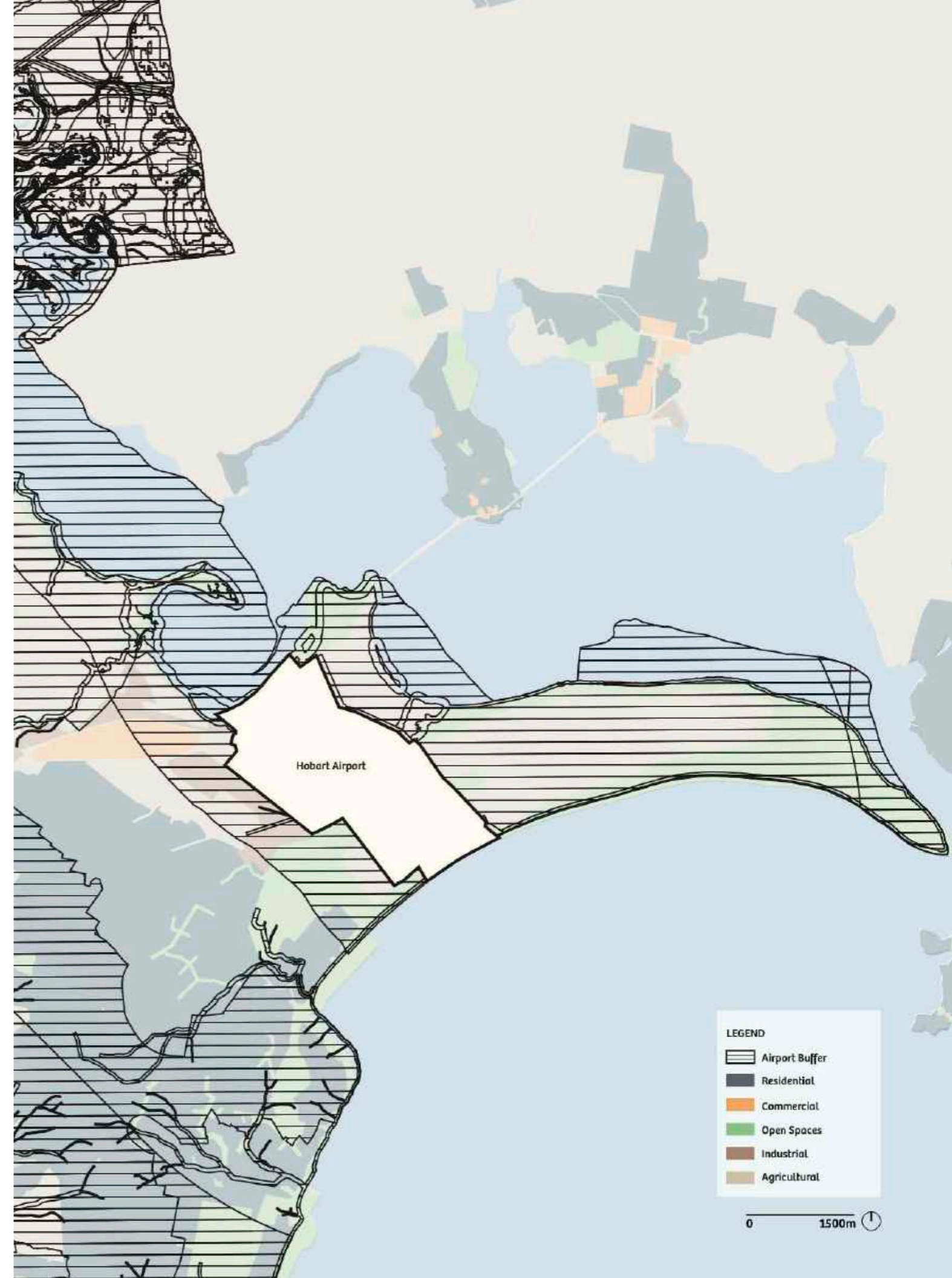
A notable component of the Tasmanian Planning Scheme is the Safeguarding Airports Overlay, which is contained within the State Planning Provisions.

The purpose of the Safeguarding Airports Overlay is to provide uses and development compatible with the safe operation of airports. Furthermore, this overlay incorporates the Obstacle Limitation Surfaces and noise contours in a manner which protects the Airport's operation from the encroachment of development that would otherwise impinge on the Airport's functionality.

The Safeguarding Airports Overlay mapping is illustrated in **Figure 3.1**.

### Southern Tasmania Regional Land Use Strategy 2010-2035

The Southern Tasmania Regional Land Use Strategy 2010 – 2035 contains a vision, strategy and policy to guide and implement across southern Tasmania over a 25-year period. Typically, the strategy is implemented through planning scheme amendments and planning policy. In Strategic Direction 4 – Improving our Economic Infrastructure, the importance of Hobart Airport is highlighted by ‘...Hobart International Airport for movements of passengers and time sensitive products. Maintaining a strong strategic approach to industrial land use, with efficient and cost-effective intrastate road and rail linkages to and from the sea and airports, are vitally important’.



**Figure 3.1:** Safeguarding Airports Overlay mapping

### Ground transport reference plans and strategies

As part of developing the Ground Transport Plan, relevant local and state plans were considered. Of note, the vision for the Southern Integrated Transport Plan 2010 is for “...a transport system that is safe, supports sustainable, liveable communities and promotes industry efficiency and productivity...”.

The key transport strategies discussed in this plan that are applicable to developing the Hobart Airport Ground Transport Plan include:

- Targeting infrastructure upgrades and better use of the existing infrastructure
- Protecting strategic transport hubs through managing future land use development that may impact future infrastructure expansion (e.g. terminal expansion) or demand management opportunities
- Ensuring that infrastructure services existing and future needs of key tourism gateways
- Identifying future transport needs for changes to logistics due to ongoing retail development at the Airport
- Working towards a transport system that supports better environmental outcomes, i.e. reducing air and noise emissions
- Employing smarter technology solutions for transport
- Regulating transport systems
- Educating and informing the public about travel behaviour and options

The City of Clarence has identified strategies that would achieve a similar transport vision to the Department of State Growth which focuses on meeting existing and future infrastructure needs, improving liveability and environmental sustainability. While the City of Clarence has yet to develop a comprehensive transport strategy for the municipality, the 2021-2031 Strategic Plan advocates for more comprehensive, safer and accessible pedestrian and cycle networks and better parking management within high activity areas that are applicable to Hobart Airport. In the most recent Bicycle Strategy and Action Plan (2013-2017), the City has recommended a signed cycling route between the Airport and Tasman Bridge – which would complement the plan for the Tasman Highway to become a Principal On-Road Bicycle Route and encourage cycling facilities to be provided at major transport hubs to reduce car parking demand.

### Other

A number of state and local frameworks may be applicable to airport operations and activities subject to the following legislation:

- Environmental Management and Pollution Control Act 1994
- State Coastal Policy 1996
- State Policy on Water Quality Management 1997



04

# Land Use Plan

# Overview

Development at Hobart Airport plays an integral role in connecting people and driving economic growth for Tasmania. As the primary visitor gateway to the state, Hobart Airport has a responsibility to represent Tasmania and to foster a vibrant, well-functioning, secure and prosperous economic activity centre. The Land Use Plan for Hobart Airport seeks to accommodate sustainable aeronautical and non-aeronautical growth catering to the needs of visitors and local populations, whilst protecting and enhancing ecological and cultural values.

The Land Use Plan sets out the economically, socially and environmentally sustainable development and objectives required to achieve successful aeronautical growth at Hobart Airport, in accordance with the requirements of the Airports Act. The Land Use Plan for Hobart Airport seeks to:

- Protect and provide for the long-term growth of aeronautical operations
- Strengthen the Airport's role as an activity centre and driver of economic growth
- Encourage commercial enterprise that is compatible with aeronautical operations and capitalises on the Airport's strategic location
- Respond to changing passenger, business, community and market needs
- Encourage sustainable development outcomes that create a safe, attractive, and connected place.

## Consistency with the State Planning Provisions

The Land Use Plan for Hobart Airport has been developed with consideration to the State Planning Provisions ensuring development is complementary to the planning intent of the Tasmanian Planning Scheme. The Land Use Plan is consistent with the light industrial zoning adjacent to the Airport and utilises the available infrastructure. While the Master Plan proposes non-aeronautical development to occur on land not required for aviation-related uses, there is no development proposed that is likely to conflict with surrounding land uses or the planning intent of the adjacent areas.

## Development assessment process

There are three key development assessment processes for development proposed within Hobart Airport:

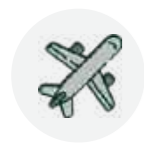
- Development on Commonwealth land assessed and decided by HIAPL against the provisions of this Master Plan
- Major development on Commonwealth land assessed and decided by the Commonwealth Minister in accordance with Part 5, Division 4 of the Airports Act
- Development on freehold land assessed by Clarence City Council in accordance with the Tasmanian Planning Scheme

Once approval has been obtained from the relevant assessor, for certain developments the proponent must obtain a building permit from the Airport Building Controller.

## 4.1 Managing land use

To aid the planning and development of Hobart Airport, the Land Use Plan identifies six precincts mapped in **Figure 4.1**. The purpose of this Land Use Plan is to safeguard land for core aeronautical functions of the Airport, whilst maximising opportunity for economic and commercial growth in a sustainable way. The core aeronautical functions refer to the non commercial activities that drive Hobart Airport operations such as apron handling of aircraft, passenger transfers, the handling of baggage and cargo.

These precincts are effectively 'zones' that are generally consistent with the Tasmanian Planning Scheme and have a specific purpose and development objectives that support consistent land uses. It is critical that the Land Use Plan allows flexibility to ensure that the Airport can respond to operational requirements, business expectations and market demand. This flexibility allows Hobart Airport to function as a key activity centre and economic hub for the region.



**Airfield Precinct**



**Terminal Precinct**



**Aviation Support Precinct**



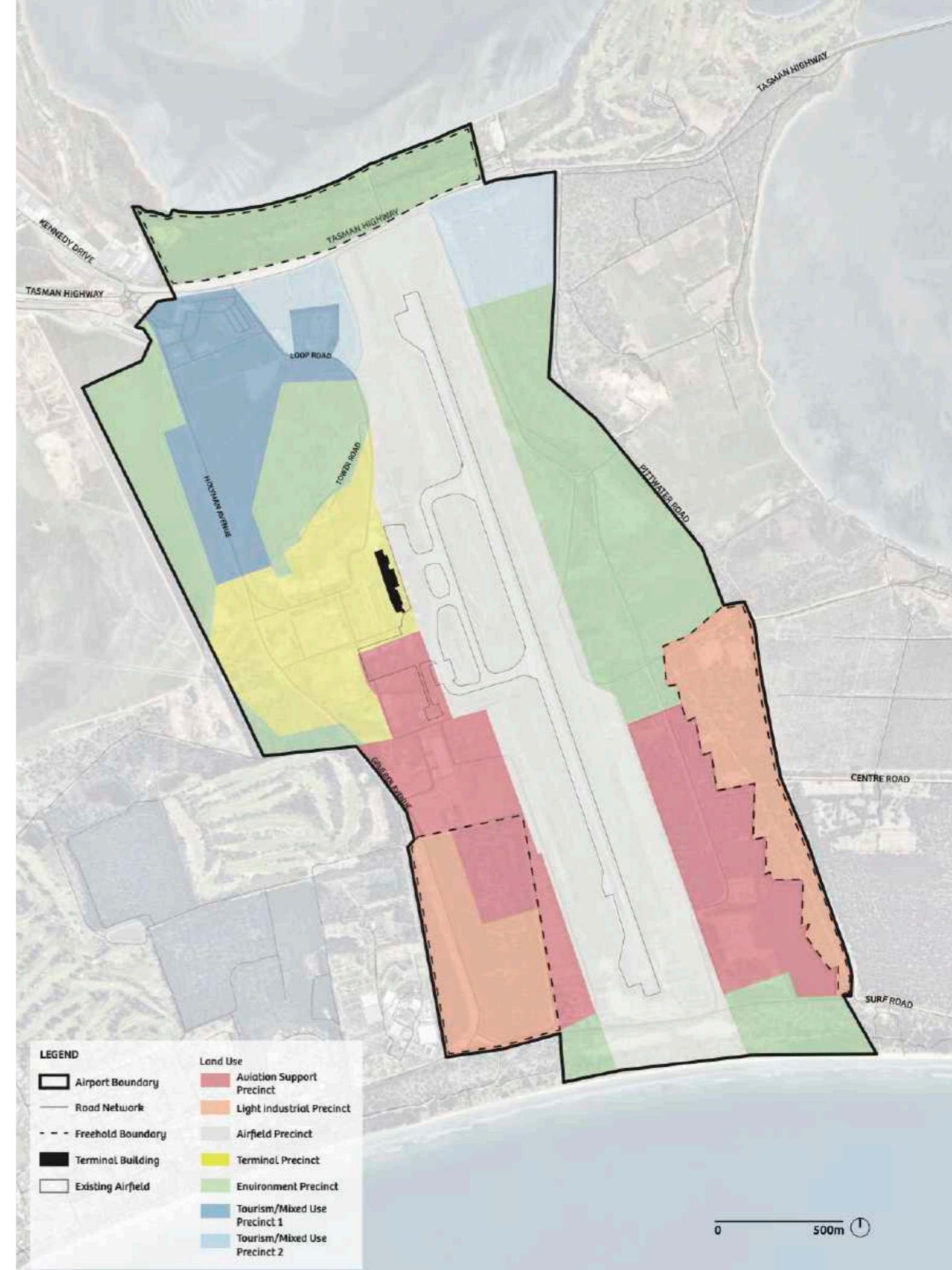
**Tourism and Mixed-Use Precinct**



**Light Industrial Precinct**



**Environment Precinct**



**Figure 4.1:** Land Use Plan



## 4.2 Aeronautical development

Aeronautical development at Hobart Airport is closely linked to the economic growth of Tasmania by connecting Tasmania's agricultural, aquacultural and tourism sectors to interstate and international markets. The Airport's runway, taxiways, aprons and terminal must have capacity to accommodate growth in passengers, freight and logistics and interstate and international flight routes.

The following sections outline the purpose and development objectives for each precinct that have been established to support aeronautical development. Each Precinct has permissible land uses that are consistent with 'Table 6.2 Use Classes' within the Tasmanian Planning Scheme and are shown in **Appendix D**. However, the permissible land uses are not an exhaustive list of the activities which are considered consistent with the purpose of the precinct or compatible with aeronautical development.

Hobart Airport aeronautical development relates to the following precincts:

- Airfield Precinct
- Terminal Precinct
- Aviation Support Precinct



### Airfield Precinct

#### Precinct purpose

To ensure the safe, secure and efficient aeronautical operation of Hobart Airport and support the achievement of the ultimate airfield capacity of the Airport. Key assets within this precinct include the runway, taxiways and aprons.

Development within this precinct supports the safe and effective movement, maintenance and servicing of aircraft, as well as the safe and efficient movement of passengers, employees and goods. Development should support passengers, airline partners and freight services and be designed, constructed and maintained in a manner that allows the continued safe, effective, and efficient operations of the airfield.

Any proposed changes to airfield development will involve consultation with Airservices Australia to ensure Air Traffic Control input is considered through planning and design

#### Development objectives

- To allow for safe landing, take-off, aircraft parking and taxiing activities
- To allow sufficient capacity for existing and future core aeronautical functions
- To cater for aircraft navigation and communications
- To provide for aviation emergency services at the Airport
- To facilitate regulatory compliance

#### Permissible land uses

See **Appendix D** for permissible land uses within the Airfield Precinct.





## Terminal Precinct

### Precinct purpose

To provide an integrated passenger terminal and associated ground transport and commercial facilities that meet the changing needs of passengers, airline partners and visitors. The Terminal Precinct provides an attractive destination and gateway to Tasmania. Development is flexible, timely and supports the needs of domestic and international travellers, airline visitors and workers.

The Terminal Precinct supports compatible and complimentary commercial land uses that benefit from proximity to aeronautical operations and passenger arrivals/departures.

### Development objectives

- To provide high quality and positive customer experiences
- To provide for the safe, secure and efficient operation of passenger, baggage and freight processing, including medical and quarantine related requirements
- To provide high quality, well-equipped facilities and a diverse range of retail and commercial choices to passengers and visitors
- To provide for efficient ground transport options including car parking, car rental, taxi, rideshare and bus services
- To respond to the changing needs of passengers, airline partners, business partners and visitors through flexibility and timely expansion of appropriate facilities
- To create a good urban environment through attractive, legible, safe and balanced built form
- To provide high-quality design outcomes, reflective of Hobart Airport's role as a destination and gateway to Tasmania

### Permissible land uses

See **Appendix D** for permissible land uses within the Terminal Precinct.



## Aviation Support Precinct

### Precinct purpose

To support the optimal and changing needs of passengers, airlines, freight, and emergency services operators. Development provides for an integrated mix of industrial, logistics and related commercial land uses that support aviation operations and maximise the precinct's proximity to airside operations, major transport networks and infrastructure. Development for commercial land uses does not compromise the primary function of the Aviation Support Precinct to support aviation-related operators.

This precinct supports activity related to Antarctic operations and logistics, as outlined in the Tasmanian Antarctic Gateway Strategy. Options for future expansion of this precinct will be necessary to accommodate anticipated growth in the aviation support industry. The freight and logistics uses will consider the National Urban Freight Planning Principles contained within Freight Australia's National Freight and Supply Chain Strategy.

### Development objectives




- To support core aeronautical operations such as maintenance, servicing and refuelling
- To provide for the operation, use and development of aircraft aprons and ground transport interfaces
- To support and respond to the changing needs of aviation-based emergency service operations
- To facilitate land uses that are compatible with, and capitalise on, proximity to airport operations, transport routes, agricultural regions and local populations
- To strengthen Hobart Airport's position as Australia's 'gateway to Antarctica' through the development of facilities and infrastructure that supports Antarctic operations
- To allow general and private aviation operations where they do not jeopardise or impinge upon activities that support passengers, airline and freight

### Permissible land uses

See **Appendix D** for permissible land uses within the Aviation Support Precinct.

## 4.3 Aeronautical development opportunities

**Table 4.1:** Aeronautical development opportunities

Precincts	Short term (up to 8 years)	Long term (up to 20 years)
<b>Airfield</b> 	<ul style="list-style-type: none"> <li>Expansion of the taxiway and apron to accommodate forecast growth in RPT</li> <li>Runway strengthening to support Code E aircraft. This upgrade will support direct international routes to Singapore and open up Tasmania to key Asian markets, while supporting Hobart's role as Australia's Antarctic Gateway. This upgrade will generate an additional \$122.4million in Tasmanian GSP and 1,260 additional local jobs.</li> </ul>	<ul style="list-style-type: none"> <li>Construction of a new freight apron to support freight and Antarctic activities</li> <li>Further development of aprons and taxiways to increase airfield capacity</li> </ul>
<b>Terminal</b> 	<ul style="list-style-type: none"> <li>Redevelopment and expansion of the terminal apron and building</li> <li>Reconfiguration of the terminal forecourt</li> <li>Establishment of a new car rental area</li> </ul>	<ul style="list-style-type: none"> <li>Further staged development and expansion of the terminal building</li> <li>Additional mixed-use, tourism and retail operations servicing the needs of visitors and passengers</li> <li>Additional transport-related facilities</li> </ul>
<b>Aviation Support</b> 	<ul style="list-style-type: none"> <li>Further establishment of the freight and logistics area. This may involve development of freight handling, logistics, warehousing, storage, processing, manufacturing and other aligned facilities</li> </ul>	<ul style="list-style-type: none"> <li>Expansion and further development of aeronautical-based emergency services and other services</li> </ul>

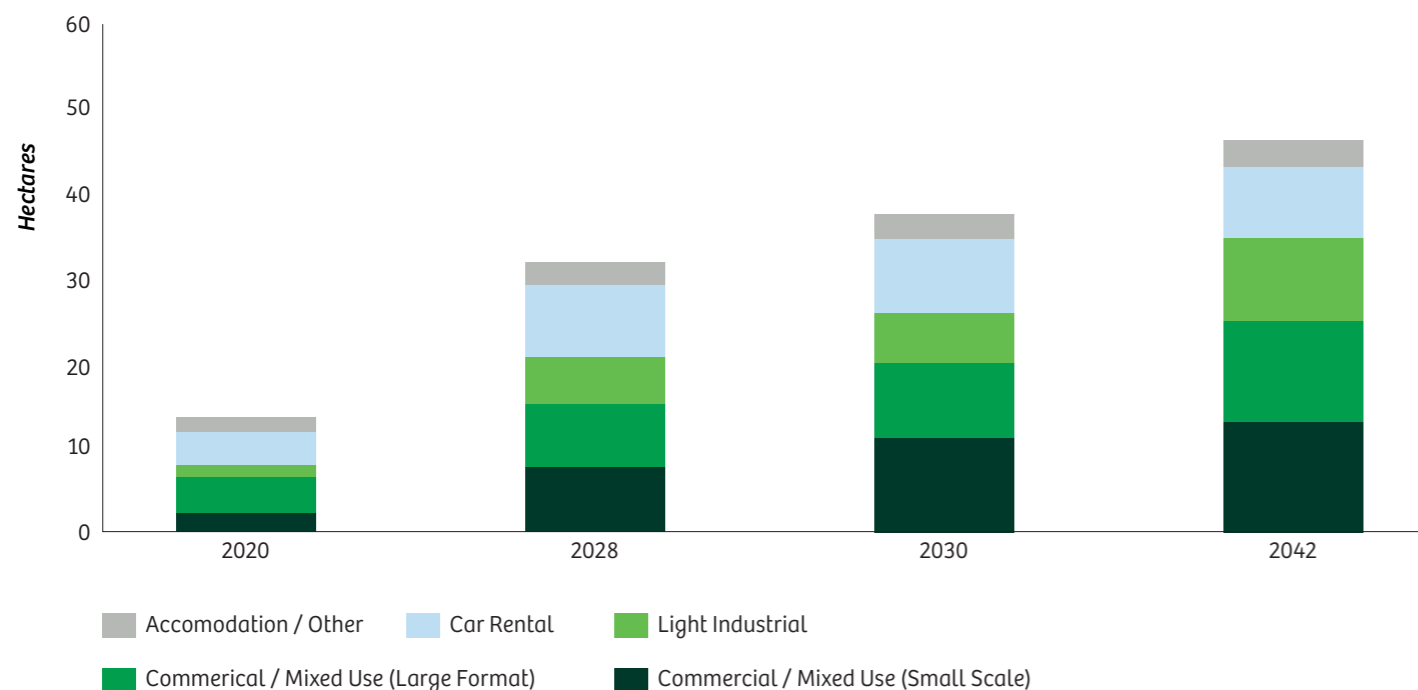


## 4.4 Non-aeronautical development

Non-aeronautical development at Hobart Airport seeks to create a vibrant and diverse destination that reflects the role of Hobart Airport as a visitor gateway and economic hub for the state. Future development will reflect the continued growth of Hobart Airport as well as the wider Tasmanian economy. While non-aeronautical development may capitalise on the strategic location of being close to the airport, it also leverages proximity to agricultural regions, transport routes and residential populations.

A range of activities and enterprises are supported in the non-aeronautical development precincts, including business, retail, food services, professional services, community, recreation, entertainment, tourism operations and visitor accommodation. **Figure 4.2** shows the cumulative non-aeronautical commercial development at the Airport which is anticipated to grow steadily over the next 20 years. These activities will provide choice, convenience and experiences for both locals and visitors, and employment opportunities.

The following sections outline the purpose and development objectives for each precinct established for non-aeronautical development. Each precinct has permissible land uses that are consistent with 'Table 6.2 Use Classes' within the Tasmanian Planning Scheme and are shown in **Appendix D**. However, the permissible land uses are not an exhaustive list of the activities which are considered consistent with the purpose of the precinct or compatible with non-aeronautical development.



**Figure 4.2:** Cumulative commercial development



## Tourism and Mixed-Use Precinct

### Precinct purpose

The purpose of the Tourism and Mixed-Use Precinct is to provide a vibrant and diverse mixed-use activity centre that represents Hobart and Tasmania as a destination. This precinct is intended to accommodate activities such as retail, commercial, business, tourism, visitor accommodation, entertainment and recreation in a manner that encourages and responds to visitor and local demand.

The Tourism and Mixed Use Precinct 1 will be targeted for development in the first instance to make efficient use of existing infrastructure and to consolidate existing uses and non-aeronautical developments.

The Tourism and Mixed Use Precinct 2 identifies land that is located within an ESA. This means that future development within these areas must consider the existing environmental values. While there are no specific development proposals currently identified for this precinct, HIAPL will consider proposals on a case by case basis, subject to demand. Proposals must demonstrate consistency with the development objectives and be located and designed to consider management actions that minimise impacts on the environmental values of the land.

### Development objectives

- To create a destination that is reflective of Tasmania and has strong sense of place
- To facilitate land uses that are consistent with commercial, business and tourism activity centres, providing people with a range of retail, professional services and experience-based opportunities
- To facilitate activities that are compatible with, and capitalise on, proximity to airport operations, transport routes, agricultural regions and local populations
- To allow for a wide range of land uses in clusters of complementary business types
- To create good urban environments through attractive, legible, safe and balanced built form
- To facilitate high quality, sustainable design outcomes that achieve high standards of environmental performance
- To provide tourism opportunities for airport visitors, passengers and the local community
- To allow for compatible use or development in the Tourism and Mixed Use Precinct 2 where there is demand and impacts on the environmental values of the land are appropriately considered

### Permissible land uses

See **Appendix D** for permissible land uses within the Tourism and Mixed-Use Precinct 1 and 2.



## Light Industrial Precinct

### Precinct purpose

To provide for a variety of complimentary and synergistic light industrial uses involving the manufacturing, processing, repair, storage and distribution of goods and materials, where impacts are minimal or can be managed to minimise conflict that results in loss of amenity for any other uses.

Development is to capitalise on the proximity to the airport, transport routes, agricultural regions and local populations.

The land identified within the Light Industrial Precinct Area is currently freehold tenure and owned by Hobart Airport. As such, this area is not subject to provisions of the Airports Act. Future development of this area falls within the jurisdiction of the Clarence City Council and the provisions of the Tasmanian Planning Scheme.

### Development objectives

- To provide for a range of industrial, commercial, business and other compatible enterprises
- To consolidate and cluster operations that will encourage long term economic growth
- To facilitate activities that are compatible with, and capitalise on, proximity to airport operations, transport routes, agricultural regions and local populations
- To create good urban environments through attractive, legible, safe and balanced built form
- To facilitate high quality, sustainable design outcomes that achieve high standards of environmental performance

### Permissible land uses

See **Appendix D** for permissible land uses within the Light Industrial Precinct.



## Environment Precinct

### Precinct purpose

To provide for the management, protection, and continued improvement of areas that are identified as having environmentally significant biodiversity and cultural values. These areas will be managed in a way that protects these values, while also allowing for the safe and efficient operation of the airport. Where appropriate, this precinct allows for nature-based recreation and utility land uses.

Development within the Environment Precinct must be located to minimise potential impacts on existing environmental values and implement management actions to ensure these values are protected, conserved and restored.

The northern portion of the Environment Precinct is freehold tenure owned by Hobart Airport. As such, this area is not subject to provisions of the Airports Act. Future development of this area falls within the jurisdiction of the Clarence City Council and the provisions of the Tasmanian Planning Scheme.

### Development objectives




- Maintain the area for environmental value and flood management upgrades
- Actively manage and improve any threatened flora species populations
- Protect cultural values

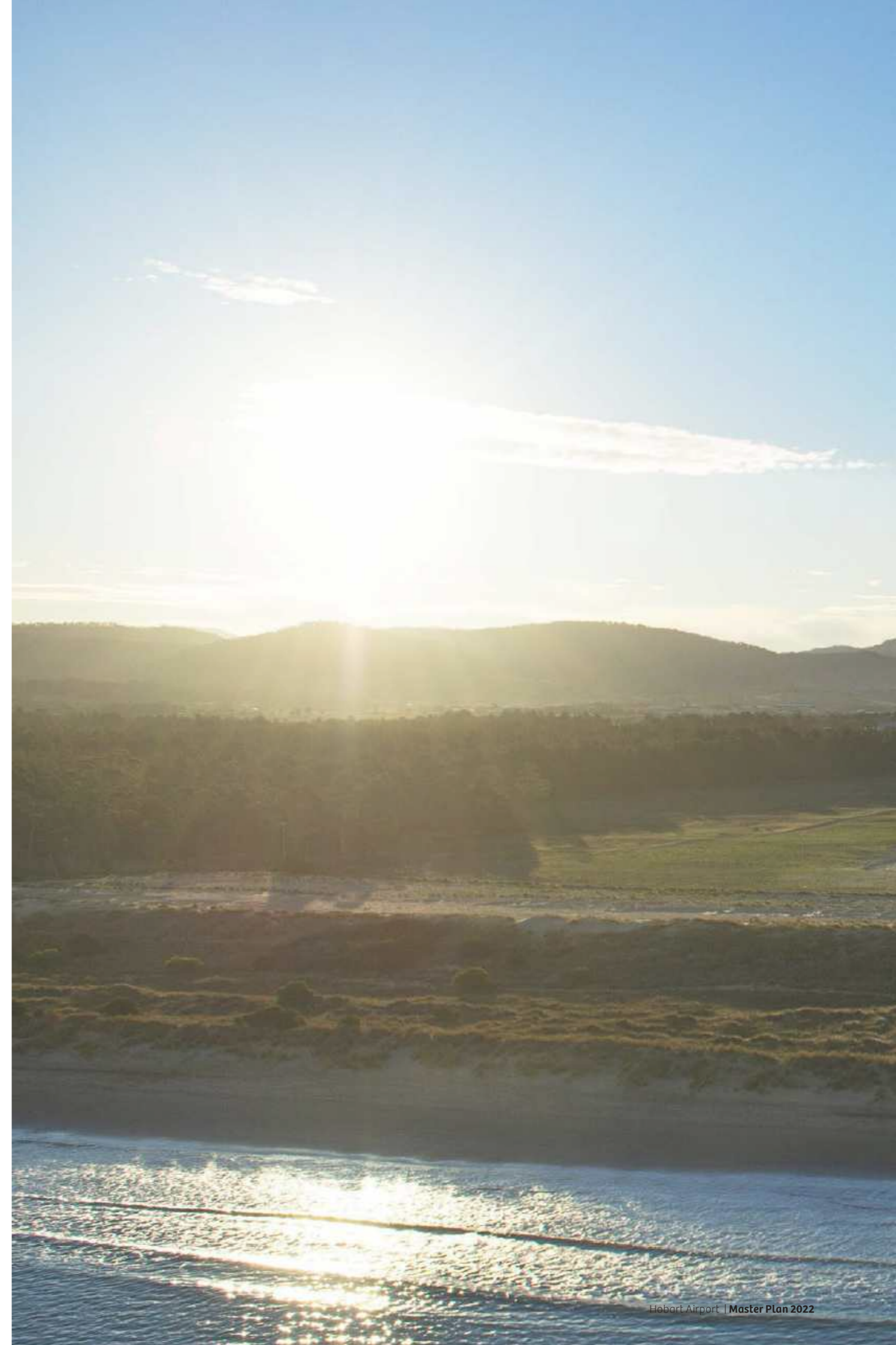
### Permissible land uses

See **Appendix D** for permissible land uses within the Environment Precinct.

## 4.5 Non-aeronautical development opportunities

**Table 4.2:** Non-aeronautical development opportunities

Precincts	Short term (up to 8 years)	Long term (up to 20 years)
<b>Tourism / Mixed Use</b> 	<ul style="list-style-type: none"> <li>Initial development of mixed-use retail, commercial and business development</li> <li>Expansion of food and beverage outlets, sales and service offerings</li> <li>Tourism operations, entertainment, community and recreation development</li> </ul>	<ul style="list-style-type: none"> <li>Development of the Tourism/Mixed Use Precinct 2 including land uses such as tourism operations, entertainment, recreation, community and visitor accommodation offerings</li> </ul>
<b>Light Industrial</b> 	<ul style="list-style-type: none"> <li>Initial development of the Light Industrial Precinct which will include land uses that are consistent with the permissible land uses for the Light Industrial Precinct detailed in <b>Appendix D</b></li> </ul>	<ul style="list-style-type: none"> <li>Further development of light industrial uses consistent with the objectives of the precinct</li> <li>Development of compatible commercial, tourism operation and visitor accommodation uses</li> </ul>
<b>Environment</b> 	<ul style="list-style-type: none"> <li>Activities allowing for the management, protection, and continued improvement of environmental areas, and the safe and efficient operation of the airport</li> <li>Any services, infrastructure and utilities required to facilitate airport development</li> </ul>	<ul style="list-style-type: none"> <li>Activities allowing for the management, protection, and continued improvement of environmental areas, and the safe and efficient operation of the airport</li> <li>Nature-based recreation</li> <li>Any services, infrastructure and utilities required to facilitate airport development</li> </ul>





05

# Air traffic forecasts



# 5.1 Existing context

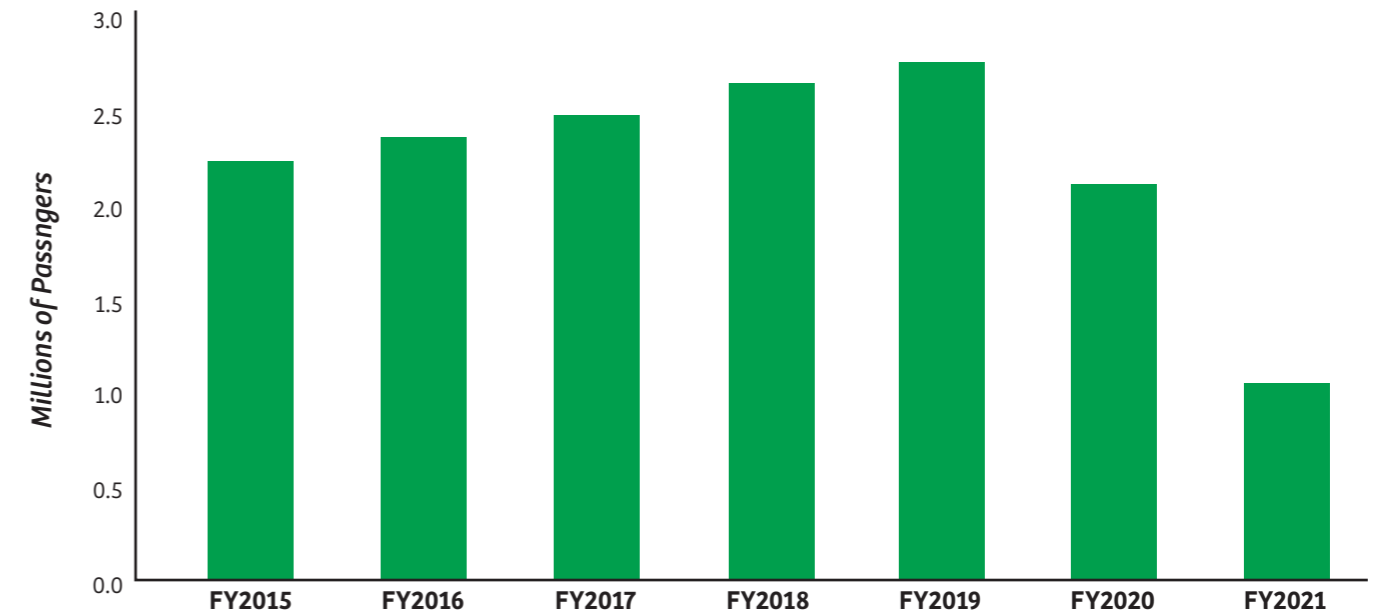
## Existing passenger numbers and aircraft movements

Since 2015, the number of airport passengers increased from 2.2 million passengers annually to 2.7 million in 2019, as shown in **Figure 5.1**. This growth rate of 5.6% p.a. exceeded the 2015 Master Plan passenger forecast by approximately 100,000 passengers.

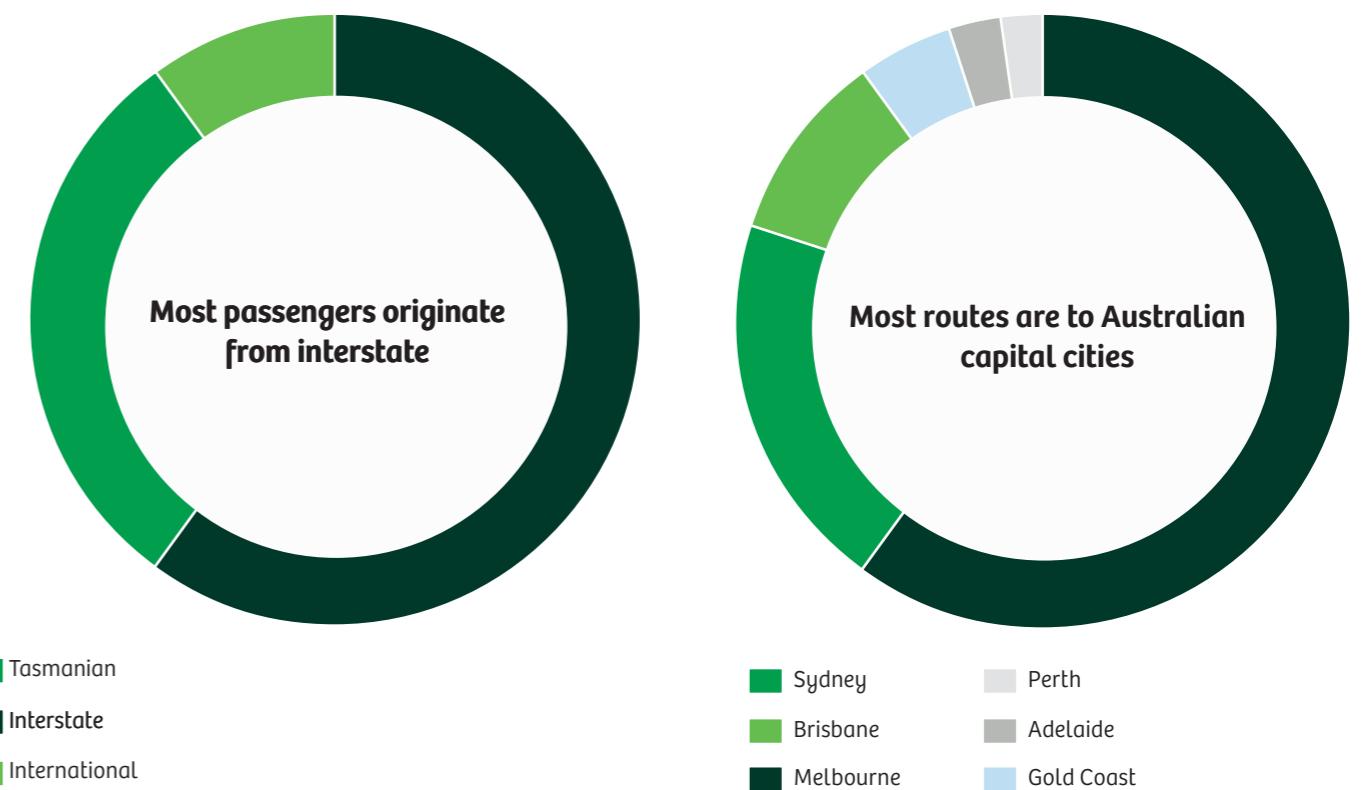
As a result of COVID-19, 2.0 million passengers were recorded in 2020. This further decreased in 2021 to 1.0 million, bringing the passenger decline to 65% compared to the forecast prior to COVID-19. **Figure 5.2** shows that most passengers through Hobart Airport originated from interstate travel (i.e. Sydney).

Passengers at Hobart Airport have a balanced mix of travel purposes, comprising business, holiday and travel to visit family and friends. The travel types are relatively resistant to external market shocks.

Since 2015, Hobart Airport has increased flight frequency, added more routes and more carriers. The annual number of aircraft movements has increased from 16,789 to 19,095 aircraft p.a. The regular transport routes are shown in **Figure 5.3**.



**Figure 5.1:** Historical annual passengers at Hobart Airport (FY2015-2021)

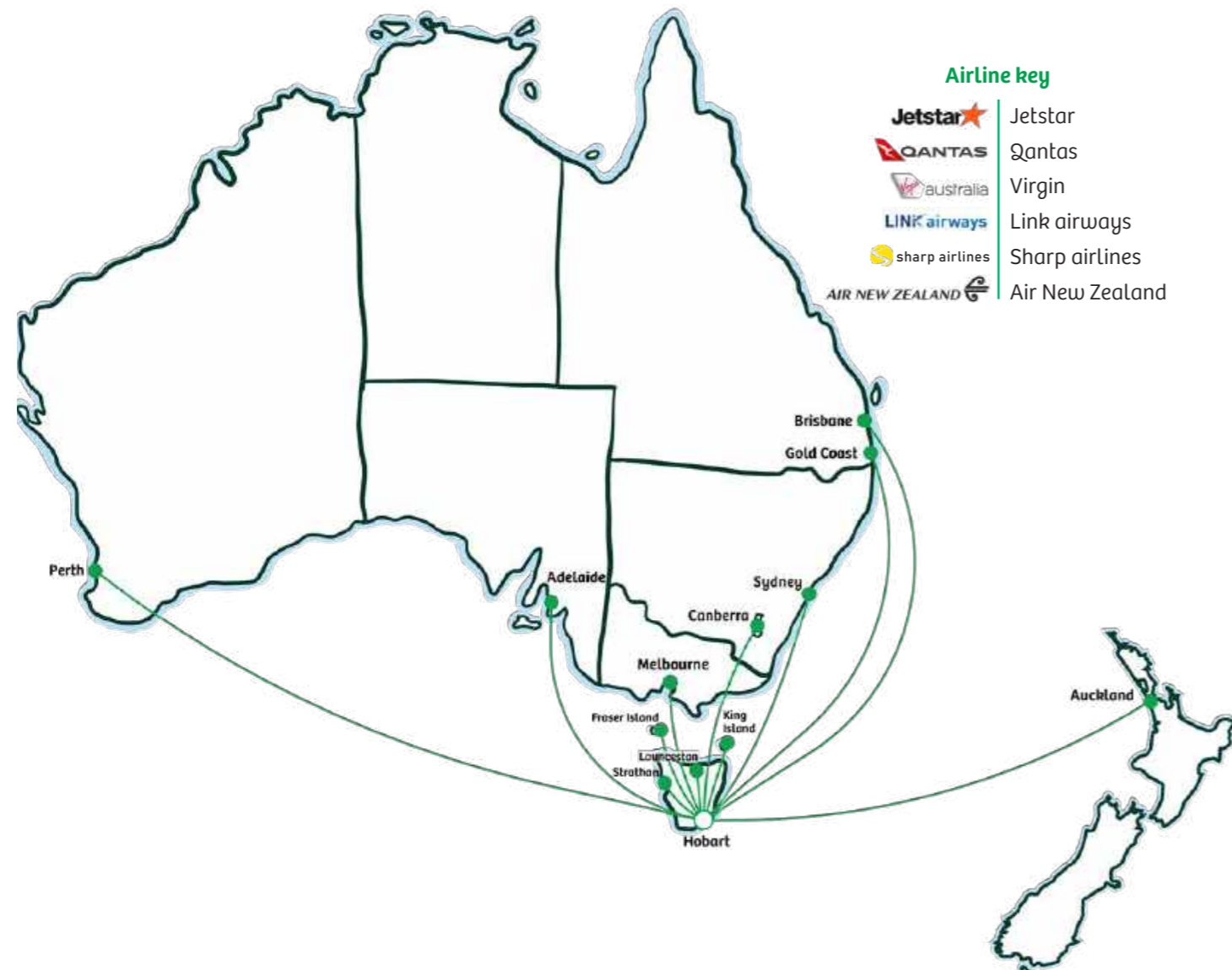


**Figure 5.2:** Passenger origins and route composition % (2018)

## 5.2 Forecasting approach

The main changes to the flight schedule since the 2015 Master Plan include:

- 2016 Qantas increased services from 35 to 46 per week
- 2017 Jetstar added a new direct service between Hobart and Adelaide
- 2018 Virgin Australia added a new direct service between Hobart and Perth
- 2020 Qantas and Link Airways added a new direct service between Hobart and Canberra
- 2021 Jetstar added a new direct service between Hobart and Gold Coast
- 2021 Air New Zealand added a new direct service between Hobart and Auckland
- Overall increased frequency to Sydney, Melbourne and Brisbane



**Figure 5.3:** Regular transport routes

Airport forecasting is used to guide future airport development and ensure airports can accommodate anticipated growth. Prior to the COVID-19 pandemic, Hobart Airport experienced one of the highest growth rates of any Australian airport. The approach adopted to forecast passenger numbers at Hobart Airport involves a number of elements:

- A review of traffic history available (including fixed-wing and rotary aircraft operations) for passenger traffic for Australia and Australian airports
- Analysis of the aviation and business environment, current airline schedules and proposed new services
- Modelling to forecast airport growth (for international markets these contain estimates of the responsiveness of passenger traffic to general economic activity (measured by GDP), airfares and exchange rates. The main influences on domestic growth are Australian GDP/GSP and airfares)

Like all airports, COVID-19 impacted passenger volumes at Hobart Airport. Traffic forecasts for Hobart Airport considered the potential lingering impacts of COVID-19 such as the shape of recovery for commercial flights, aviation workforce and freight rates. In addition to COVID-19, forecasting future passenger numbers at Hobart Airport considered the following factors:

- The local and international drivers of demand such as population growth, propensity to travel, and exchange rates
- The strength of the Tasmanian and Australian economies, within a global context
- Increased capacity of existing and new airlines
- Airline costs (including oil prices), airfares and other travel costs



## 5.3 Passenger and aircraft forecasts

Prior to COVID-19 passenger numbers were anticipated to grow at an annual rate of 2.8% by FY2042, resulting in almost 2.5 million additional passengers for Hobart Airport. However, as a result of COVID-19, this forecast became skewed as the amounts of flights and passengers significantly decreased globally.

### Passenger transport

It is anticipated growth will return to pre-COVID-19 levels in FY2023, where passenger numbers are forecast to increase from 2.9 million passengers to 5.5 million passengers (see **Figure 5.4**). This represents an annual growth rate of around 3.4% from 2023. International travel is projected to account for around 7% of passenger movements by 2042.

Projected passenger growth and the continuation of regular international services is underpinned by the infrastructure pipeline at Hobart Airport. Bringing the existing runway to Code E standards to accommodate Code E or larger aircraft is also central to realising this vision. The accommodation of larger aircraft will be critical to sustaining and growing Tasmania's tourism industry, international freight capacity and Hobart's strategic role as the gateway to the Antarctic and the Southern Ocean.

### Hobart Airport has successfully secured an international route with Air New Zealand and recognises the future economic opportunity in securing additional international routes.

International passenger operations commenced flights in 2021 with seasonal flights between Hobart and Auckland, New Zealand. As significant interest in the growing Tasmanian tourism market continues, Hobart Airport have identified a number of opportunities to operate International services to further destinations with large (Code E) International aircraft such as a B787. The international destinations being considered by the airport and airlines suggests the forecast of international passengers to grow to 340,000 annual passengers by 2042 which present enormous economic benefits to Hobart and the broader Tasmanian community.

### Non-regular passenger transport

At Hobart Airport, non-regular passenger transport (non-RPT) comprises general aviation, freight services, Royal Flying Doctor Services, and Antarctic flights as displayed in **Figure 5.5** and **Figure 5.6**. Over the past 10 years, the Airport has experienced variable numbers of air transport movements (ATMs); on average approximately 1,200 ATMs per year. In FY2021, 1,850 ATMs are expected, and this is forecast to increase to 3,290 ATMs in 2042, representing a growth of 3.4% p.a. as displayed in **Figure 5.5**.

### Royal Flying Doctor Service

Royal Flying Doctor Service (RFDS) provides an important medical service to Tasmania and Victoria. In FY2018, the RFDS accounted for 42% of the non-RPT traffic. By FY2042, RFDS is expected to still contribute to a significant portion (approximately 37%) of non-RPT ATMs.

### General aviation

Hobart Airport does not experience significant general aviation (GA) traffic. The majority of GA operates from the nearby Cambridge Aerodrome which is not expected to change over the planning period. Helicopter movement forecasts recognise rescue helicopters based at Hobart Airport and other Hobart Airport rotary operations, including flight training.

Hobart Airport periodically hosts additional aircraft movements of various sizes to facilitate charter operations, firefighting and military activities.

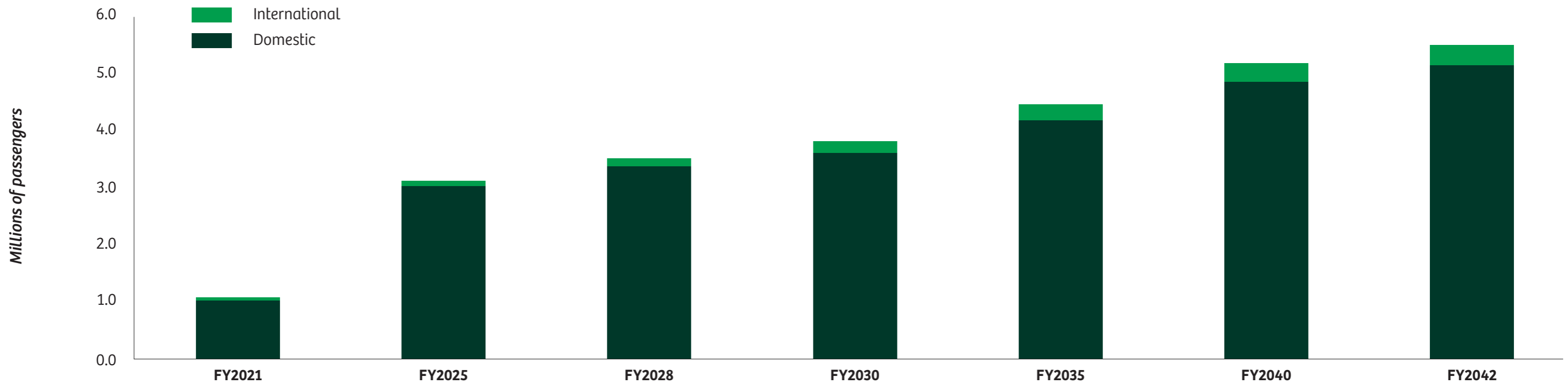
### Air freight

The demand for exports of high value, highly perishable Tasmanian products is a significant driver of local industry. Hobart Airport has also recently completed the first phase of its Freight Handling Facility with Cathay Pacific. As a result, freight is expected to increase from 660 ATMs p.a. in FY2019 to 960 ATMs p.a. by 2042. The majority of freight transported from Hobart Airport is contained in the belly of passenger aircraft with only 9 dedicated freight aircraft weekly.

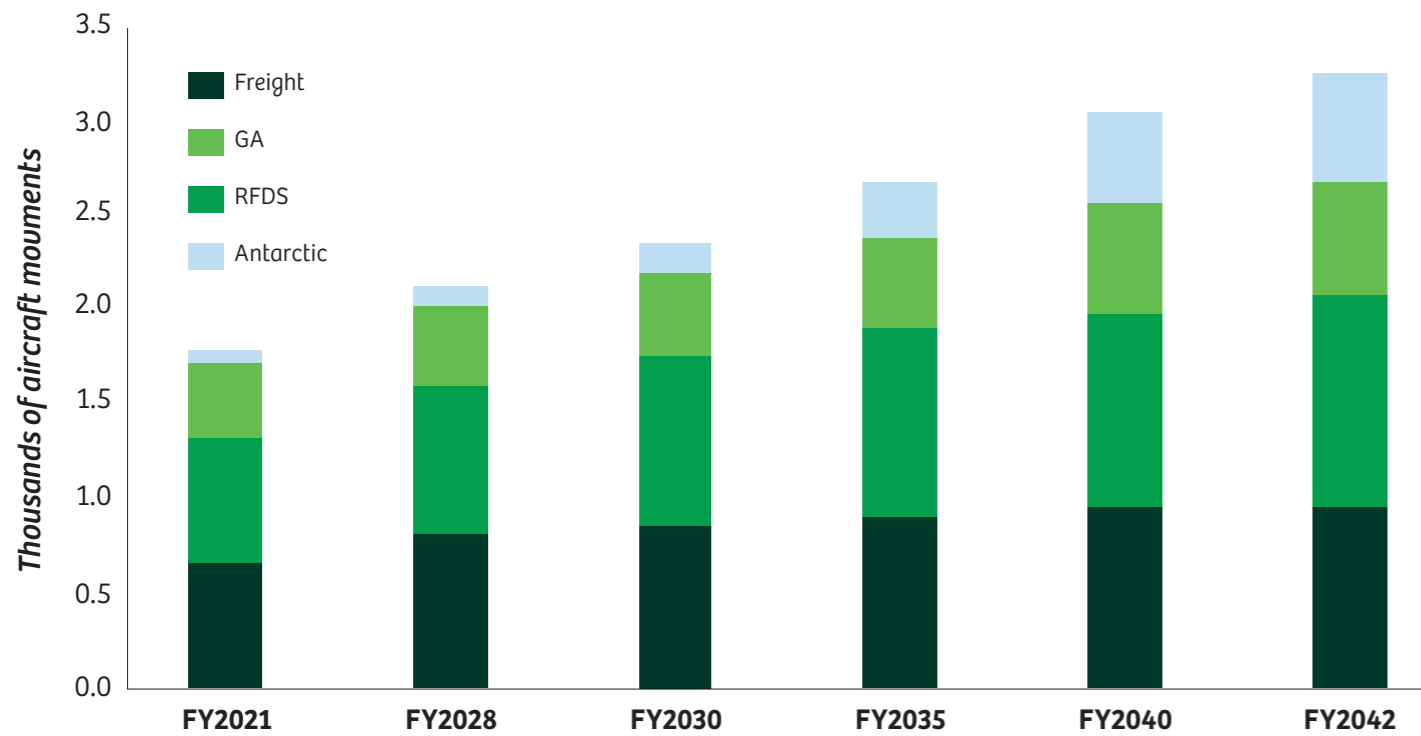
### Antarctic flights

The Airport is currently the home for the AAD intercontinental air services. Regular operations from Hobart to Australia's Wilkins and the United States' McMurdo runways involve personnel and equipment transport for a range of national programs operating in Antarctica. The runway extension, completed in 2017, allows for larger payloads and longer-range flights. This will meet the needs of several international Antarctic programs with aviation requirements in East Antarctica.

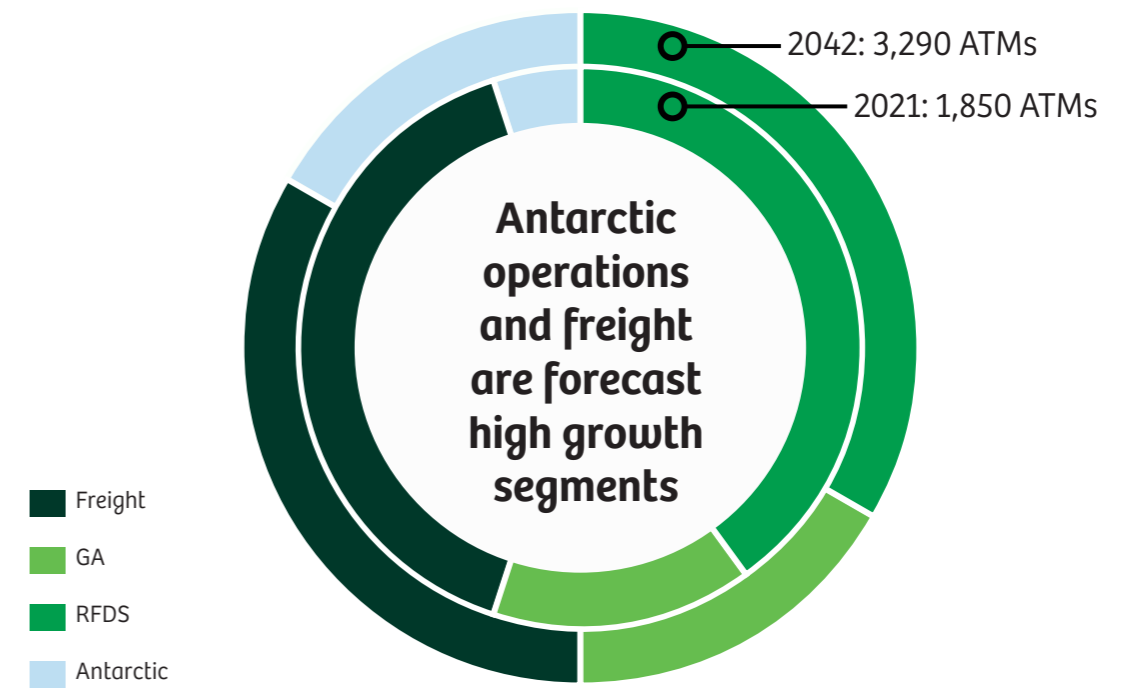




**Figure 5.4:** Annual passengers forecast (FY2021-FY2042)



**Figure 5.5:** Forecast annual non-RPT aircraft movements (FY2021 – FY2042)



**Figure 5.6:** Composition (%) of non-RPT aircraft movements (2021,2042)

## 5.4 Busy hour forecasts

Part of the process for the Master Plan was a forecast for the busy hour of passenger and aircraft movements. Infrastructure is developed at Hobart Airport to adequately meet the anticipated demand during these busy periods.

These forecasts are used to size terminal areas, determine the number of facilities required (i.e. security screening units, check-in desks) and determine appropriate airfield development (i.e. number of aircraft stands and extensions of Taxiway Alpha to each runway end).

As shown in **Table 5.1** the number of passengers arriving during a busy hour is forecast to increase from 310 passengers to 1,570 in the year 2042. The low peak hour passenger experienced in 2021 compared to 2015 is due to the impact of COVID-19.

The forecast of aircraft parking (or stand demand) is provided in **Table 5.2** relative to aircraft size.

The key assumptions for this forecast include:

- Code E (i.e. B787 aircraft) international operations commence during financial year 2022/23
- Domestic services are expected to continue to be serviced by Code C (i.e. B737 or A320) type aircraft
- Contingency positions are provided for schedule flexibility and for unscheduled aircraft maintenance

**Table 5.1:** RPT busy hour passenger and aircraft movements

Busy Hour	Passengers		Aircraft Movements		
	Year	Arriving	Departing	Arriving	Departing
2015		780	720	5	5
2021		310	310	3	3
2028		990	1000	7	7
2040		1460	1480	10	10
2042		1570	1590	11	11

**Table 5.2:** RPT Aircraft stand demand forecasts

Year	Stand Type		
	Code C	Code E	Total
2015	6	0	6
2021	3	0	3
2028	8	1	9
2040	10	1	11
2042	11	2	13

06

# Aviation Plan

Hobart Airport continues to offer airlines and passengers a high level of service and amenity. It is important that investment in the Airport reflects the forecast growth in passengers, aircraft movements and subsequent demand for infrastructure. Aviation development presented in this Master Plan is focused on maintaining the Airport's capacity, safety and passenger amenity. The planned infrastructure for both the terminal and the airfield is considered vital to support forecast passenger growth and aircraft movements.

## 6.1 Existing terminal

The previous Master Plan set out the vision for growth and delivery of strategic infrastructure to allow the Airport to meet the needs of airlines and their passengers.

Since that time, the following significant projects have been completed:

- 2016 a new arrivals hall was unveiled to increase passenger amenity and offer a uniquely Tasmanian experience for passengers
- 2018 a \$4.5m refurbishment of the departures lounge was completed to improve customer experience (**Figure 6.1**)
- 2020 new food and beverage outlets were opened to improve the dining experience in the terminal and the forecourt was reconfigured to better manage traffic flow to and from the terminal
- 2021 construction of international processing facilities were completed to service the direct trans-Tasman international routes

The current terminal is approximately 11,000 m<sup>2</sup>, with passenger numbers nearing capacity during peak times.



**Figure 6.1:** Refurbished departures lounge (2018)

## 6.2 Terminal development

Hobart Airport is focused on creating a uniquely Tasmanian experience for guests and strives to ensure our community is passionate about the Airport.

Whilst a number of terminal improvements have been completed, a Major Development Plan (MDP) was approved in late 2019 to expand the existing terminal. The terminal expansion was required to offer an improved experience for airport visitors and cater for projected domestic and international passenger growth. The benefits of the expansion included an enhanced passenger experience by making arrivals and departures more efficient, and providing an opportunity to express some of Tasmania's unique culture through commercial offerings that enhance the first and last impressions of Tasmania.

Some key aspects of the expansion included:

- Expanded domestic departures footprint to facilitate passenger growth
- An international processing facility for Code C and Code E aircraft operations
- Expanded retail and food and beverage offers
- Expanded baggage handling services
- Capacity to meet new enhanced security requirements for passengers and baggage

As a result of COVID-19 and the reduced passenger numbers, Hobart Airport are reviewing the approved MDP for potential design changes. Hobart Airport acknowledge if significant changes to the approved MDP occur, an MDP Amendment will be required, in consultation with the Commonwealth. Hobart Airport is committed to working with airline partners, regulatory authorities, border agencies, stakeholders and service providers through this process of revised design and development.





## 6.3 Existing airfield

### Runway 12/30

Hobart Airport has a single runway which is 2,727m in length and 45m in width. Runway 12/30 is aligned in a north-west and south-east direction. Approval of an MDP in 2016 enabled the completion of a 500m runway extension project in 2017 allowed for heavier and larger aircraft to take-off from Hobart and travel further distances. Turning nodes were also expanded to an 85 metres width to accommodate the larger turning circle of wide-bodied aircraft. This development increases the Airport's capacity for international flights, presents new logistics opportunities for local producers and secures the Airport's position as a key Antarctic gateway.

### Taxiways

The runway is serviced by a parallel taxiway which extends along the centre third of the runway length. The regular passenger transport (RPT) apron has two entry and exit taxiways leading onto the parallel taxiway, with one providing access for wide-body aircraft. The passenger apron is located directly in front of the passenger terminal.

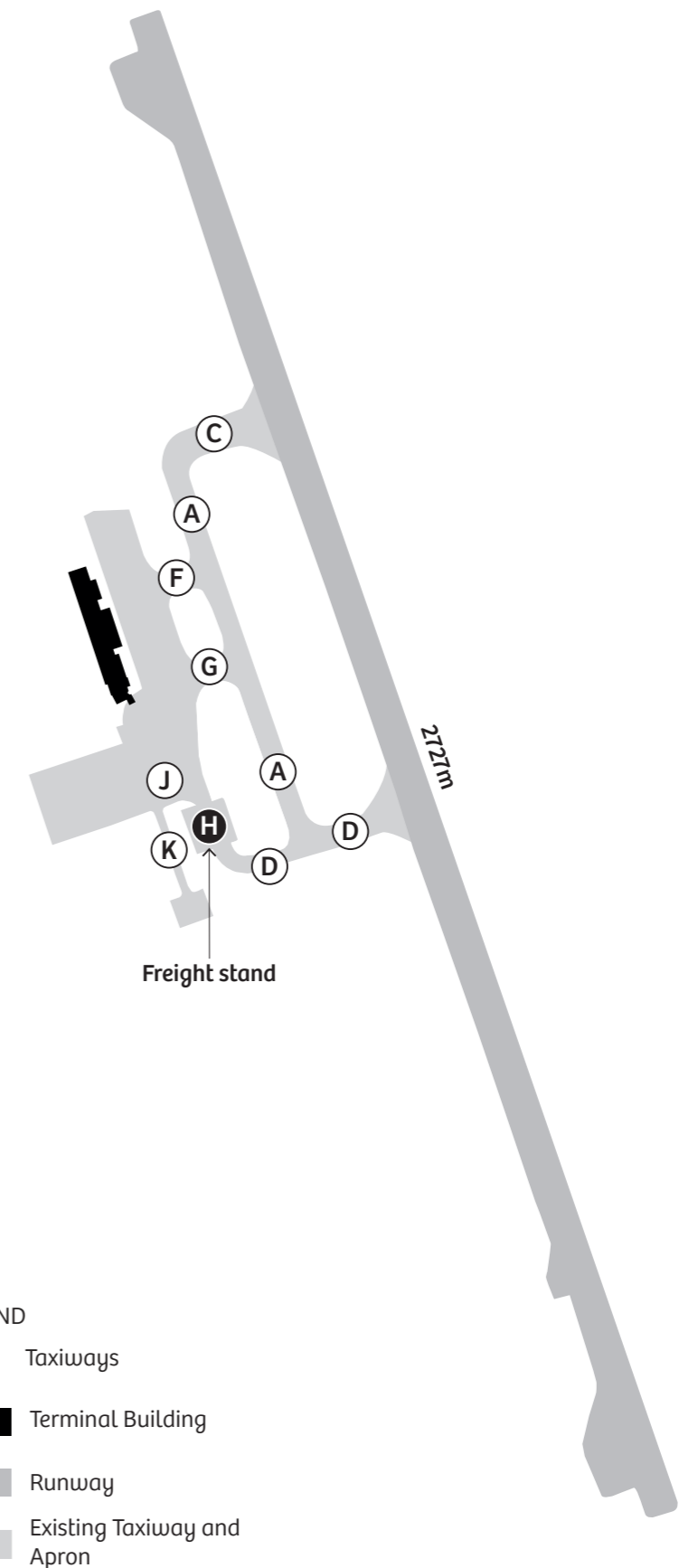
All taxiways (except the GA Taxiway Kilo) are at least 23 metres wide and constructed of flexible pavement with an asphalt wearing course. The taxiways are mapped in **Figure 6.2** with the letters identifying each taxiway. Wide fillets on taxiway corners provide a route for wide-body aircraft from the RPT apron to the runway.

### Aircraft parking aprons

Hobart Airport has a contiguous international and domestic RPT apron, together with separate freight and GA aprons. The RPT apron has seven parking positions for narrow-body (B737/A320 size) aircraft. A Code E parking position is available on Taxiway Hotel (marked as Freight Stand in **Figure 6.2**).

In 2019, all bays on the RPT apron were converted to a power-in / push-back operation. A power-in, push-back operation involves an aircraft taxiing to its parking stand under its own power and on departure, manoeuvring out of the stand with the assistance of a tug vehicle. Converting to this method (as opposed to prior power-in / power-out approach) allowed for a more efficient parking layout and consequently increased the aircraft stand capacity from 5 to 7 positions.

Passengers currently board the aircraft by walking along the terminal face and then on the apron via designated walkways.



**Figure 6.2:** Existing runway configuration

## 6.4 Airfield development

Hobart Airport's airfield is a critical network of runway, taxiways and aircraft parking aprons. Careful consideration and planning of the airfield has been completed to enable Hobart Airport to realise the future aeronautical development opportunities. Airfield development is required to accommodate the forecast increase in air traffic movements. As discussed in **Chapter 5**, currently 6 aircraft arrive within an hour in busy times. Additionally, direct international flights will increase the number of regular aircraft using the airfield infrastructure.

Increasing airfield capacity, and maintaining compliance for wide-body aircraft, requires a number of upgrades. A summary of planned airfield development by 2030 (**Figure 6.3**) and 2042 (**Figure 6.4**) includes:

- Airfield pavement remediation and strengthening to facilitate Code E aircraft
- The addition of a further 6 RPT parking bays
- Extension of Taxiway Alpha to both runway ends
- Construction of a new non-RPT freight apron

All future terminal and airfield infrastructure will be developed with close and timely engagement with Airservices Australia to ensure appropriate line of sight from either the air traffic control tower or any potential active airfield camera technology is possible. Additionally, Airservices will be engaged to ensure the protection of the flight procedures and protection surfaces for Hobart Airport are maintained to prevent any construction or building developments posing a hazard to aircraft operations.

**Figure 6.5** shows the development plan for Hobart Airport beyond 2042 with the planned airfield developments and the land use precincts.

### Runway 12/30

Increasing the runway length in 2017 has considerably expanded the destinations that can be reached by wide-bodied aircraft, particularly the more modern aircraft such as Airbus A350-900 and Boeing B787-900. It is anticipated that no further changes to the length of the runway are required during the Master Plan period, however additional compliance activities will be undertaken for long term international operations.

In the short term (up to 8 years), pavement remediation and strengthening will be required to upgrade the runway to support Code E aircraft. This will enable direct Hobart-Singapore passenger flights and bring in additional visitors and tourism dollars to Tasmania. It will also provide a faster route to market for Tasmanian businesses and add to Hobart's capabilities as the Gateway to the Antarctic. The strengthening program will be conducted in a manner which is commensurate with the forecast volume of wide-body aircraft.

### Taxiways

The taxiways will be expanded throughout the planning period in order to accommodate larger and more frequent aircraft movements. Wide-body aircraft require a larger footprint for taxiing and parking; this will be accommodated by an infill of the existing taxiways and progressive expansion of the taxiway network. These developments are summarised in **Table 6.1** and mapped in **Figures 6.2** and **6.3**.

In the short term (up to 8 years), pavement strengthening will also be required in some sections of the taxiway. This will be carried out to accommodate larger, and more frequent aircraft movements.

**Table 6.1:** Planned development of the taxiway network

Taxiway developments	
2022-30	<ul style="list-style-type: none"> <li>• Fillet widening to accommodate Code E aircraft movements</li> <li>• Taxiway fillet widening for Code E aircraft compliance</li> </ul>
2030-42	<ul style="list-style-type: none"> <li>• Northern taxi-lane connection to Taxiway Alpha</li> <li>• Taxiway Alpha expansion prior to 2040, connect to Runway 12/30 (17,000m<sup>2</sup>)</li> </ul>

### Aircraft parking aprons

Stand capacity for RPT aircraft increased from 5 to 7 stands in 2019 through the change to power-in / push-back operations. Demand for parking positions will continue to increase throughout the planning period. By 2042, a total of 13 parking positions are forecast to be required for RPT aircraft. A staged approach is proposed to deliver an apron expansion which will adequately meet this demand. These developments will be compliant with relevant legislation and are summarised in **Table 6.2** below.

**Table 6.2:** Planned developments of the RPT apron

RPT apron developments (additions)	
2022-30	<ul style="list-style-type: none"> <li>• 1 x wide-body stand</li> <li>• Apron infill (12,000m<sup>2</sup>)</li> </ul>
2030-42	<ul style="list-style-type: none"> <li>• 2 x narrow-body stand</li> <li>• 1 x wide-body stand</li> <li>• Apron infill (14,300m<sup>2</sup>)</li> </ul>

Non-RPT aircraft movements, primarily freight, are also forecast to increase significantly over the planning period. In particular, the apron footprint will be required to accommodate larger Code E freight and Antarctic aircraft. A dedicated freight apron towards the south of the existing apron footprint will be developed. There will be several benefits to this configuration:

- Freight traffic is less likely to interfere with RPT operations
- Freight and Antarctic aircraft would be parked in close proximity to the newly developed 'freight precinct'
- Dedicated parking positions provided for new freight traffic

These developments are summarised in **Table 6.3** and shown in **Figure 6.4**.

**Table 6.3:** Planned development of the Non-RPT

Non-RPT Apron (freight) developments	
2030-42	<ul style="list-style-type: none"> <li>• 2 x wide-body stand and freight apron expansion</li> <li>• Up to 42,000m<sup>2</sup> additional freight apron footprint</li> </ul>

## 6.5 Other aviation uses

### Existing uses and future development

The airfield infrastructure supports a number of other aviation uses including:

- Air traffic control
- Airport operational services
- Airline support facilities
- General aviation
- Aviation rescue firefighting (ARFF)
- Royal Flying Doctor Service (RFDS)
- Maintenance facilities
- Aviation fuel facilities

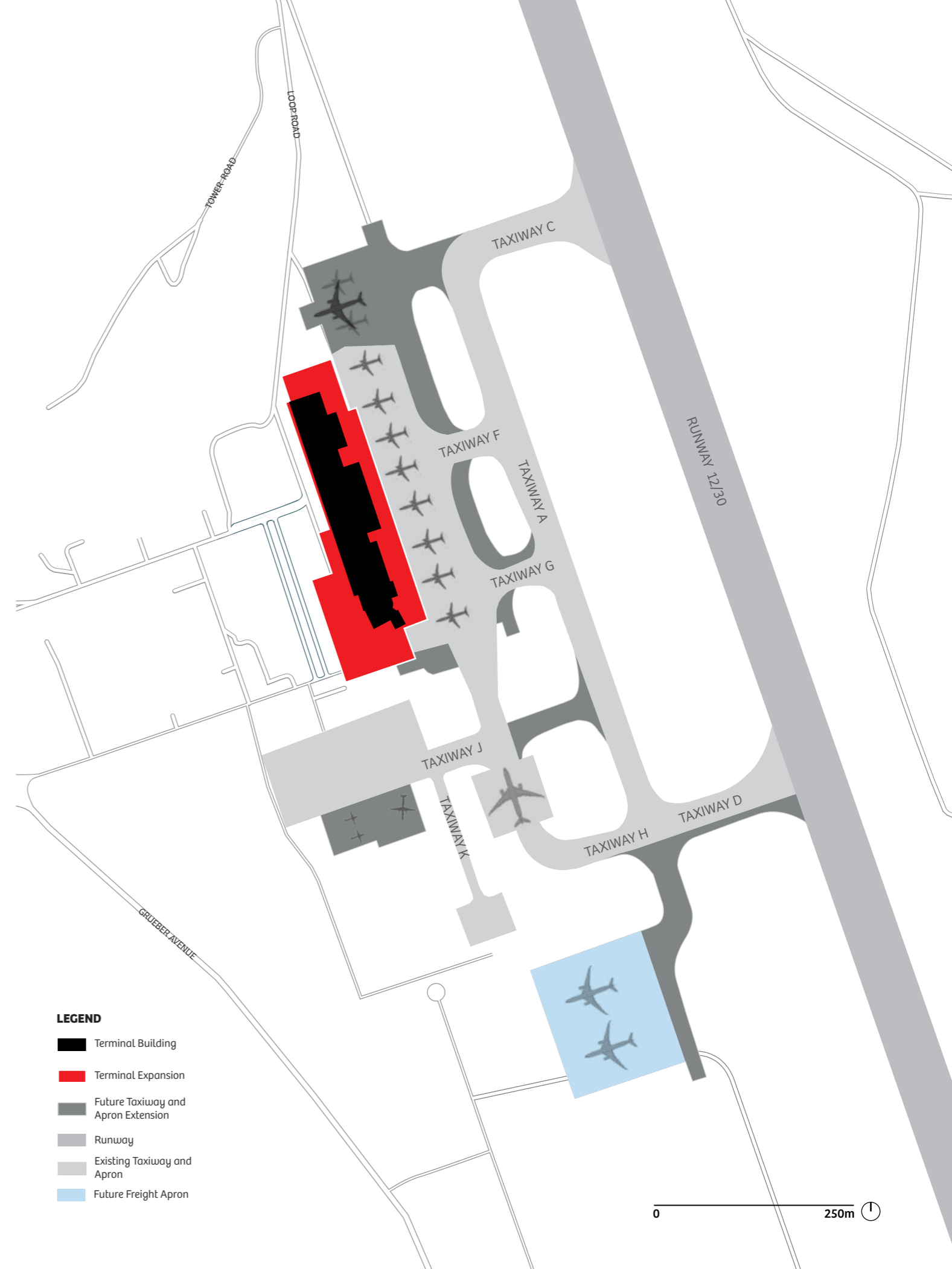
Hobart Airport does not foresee significant future GA development as most activity occurs at Cambridge Aerodrome. GA activity at Hobart Airport will remain in its existing location with scope for limited development as required. To meet the forecast demand, provision for helicopter operations and parking is expected to be expanded in the short term (up to 8 years).

These developments are summarised in **Table 6.4** and shown in **Figures 6.3** and **6.4**.

**Table 6.4:** Planned development of other aviation uses

Other aviation use development	
<b>2022-30</b>	<ul style="list-style-type: none"> <li>• Provisioning for wide-body refuelling</li> </ul>
<b>2030-42</b>	<ul style="list-style-type: none"> <li>• Relocation of ARFF facilities to the eastern side of the runway</li> <li>• Standalone facilities for airline engineering and storage</li> </ul>

The planned development or relocation of facilities serving aviation operations such as ARFF, ATC or the Bureau of Meteorology will be managed with timely and close consultation with all stakeholders to maintain levels of service and safety across the Airport.



**Figure 6.3:** Airfield development 2030

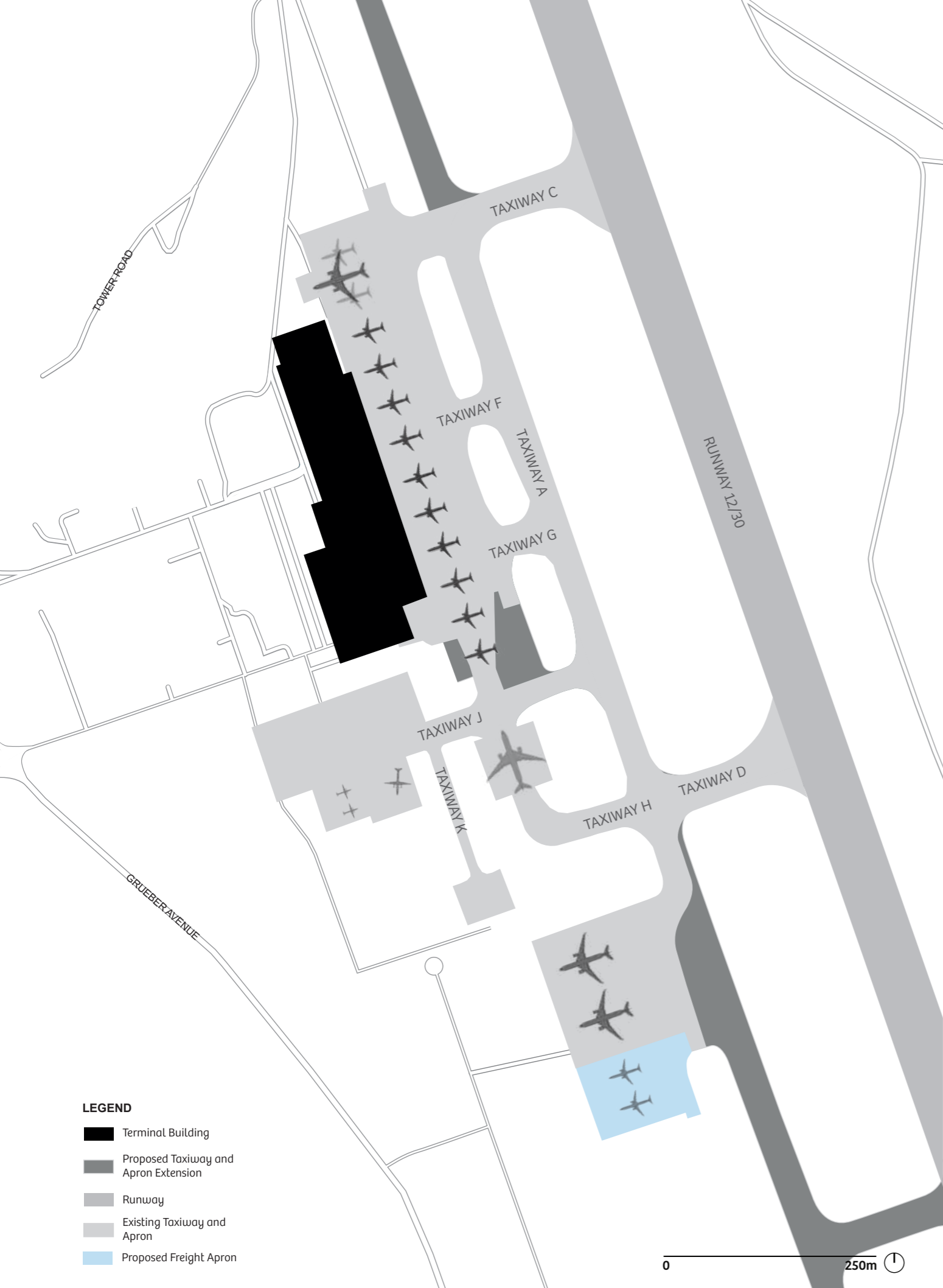


Figure 6.4: Airfield development 2042

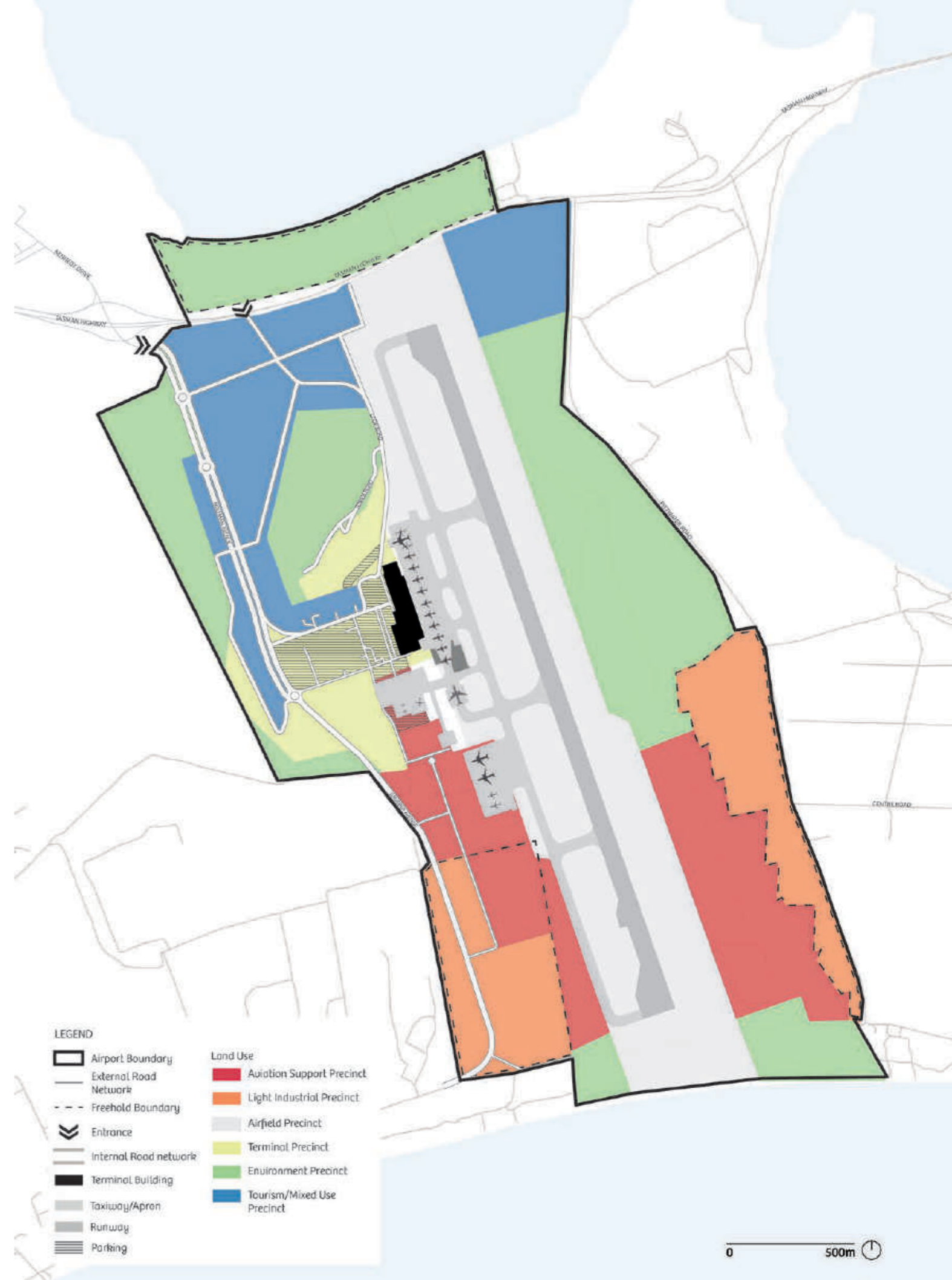


Figure 6.5: Hobart Airport 2042 development plan



07

# Ground Transport Plan

# Objectives



## Accessible

Improve ground transport access for all modes of travel



## Integrated

Integrate the ground transport network with future changes to the land use precincts



## Safe and sustainable

Improve safety, sustainability and prevent congestion



## Equitable

Provide a range of ground transport modes and equitable access for airport users



## Capacity

Provide a network capable of meeting forecast growth in all modes of transport

Efficient ground transport at Hobart Airport is essential for the success of existing operations and future development. Ground transport access to Hobart Airport is largely road-based, and most airport users arrive by private car, rental car or taxi.

The Ground Transport Plan ensures that both passenger growth and commercial development needs are met.

Passenger volume is expected to grow strongly during the next 20 years, and the land-use planning proposed (in **Chapter 4**) will drive airport commercial and logistics growth.

Traffic levels, around the Airport and Hobart generally, are also increasing given the growth in nearby Cambridge Park and the eastern townships of Sorell and Midway Point. This will impact the effectiveness of the Tasman Highway to cater for both airport and non-airport traffic.

This chapter provides details of the Ground Transport Plan for Hobart Airport, including:

- Objectives of ground transport planning
- Existing transport infrastructure
- Existing and forecast transport demand
- Proposed ground transport development to serve the forecast demand within an eight- and twenty-year period

The objectives of the Ground Transport Plan are shown to the left and are supported by a number of more specific functional aims, described on the following page.



# Functional aims of the transport network



## Road

Support a variety of transport functions and vehicle types that provide reliable access to the terminal and surrounding precincts



## Car parking

Accommodate future parking demand, and provide airport users with a choice of parking product



## Vehicle rental

Provide well-connected vehicle rental facilities, including ready bays, back-of-house service areas, overflow parking and customer service desks



## Bus

Provide appropriate infrastructure and work with transport providers to deliver safe, affordable, and frequent services in line with demand and public expectations



## Taxi and rideshare

Provide required infrastructure including separate holding areas and terminal queueing lanes to support the efficient pick-up/drop-off of airport customers



## Active transport

Provide a safe and well connected network to accommodate the needs of pedestrians and cyclists



## 7.1 Existing ground transport network

### External network

Hobart Airport is accessed via the Tasman Highway, providing connection to the broader regional road network. This includes Greater Hobart to the west, and Sorell and the East Coast Region to the east.

Holyman Avenue connects to the Tasman Highway via a roundabout interchange and provides the primary access link through the Airport (**Figure 7.1**). Hobart Airport is also connected to the Tasman Highway via an intersection at Back Road which provides alternate access to the Airport. Undeveloped airport land east of the runway can be accessed from the Tasman Highway via Pittwater Road.

### Internal network

The internal road network provides connectivity to the terminal as well as non-aeronautical development precincts. The internal road network is a single lane in each direction unless otherwise noted or illustrated in **Figure 7.2**. The key internal roads at Hobart Airport include:

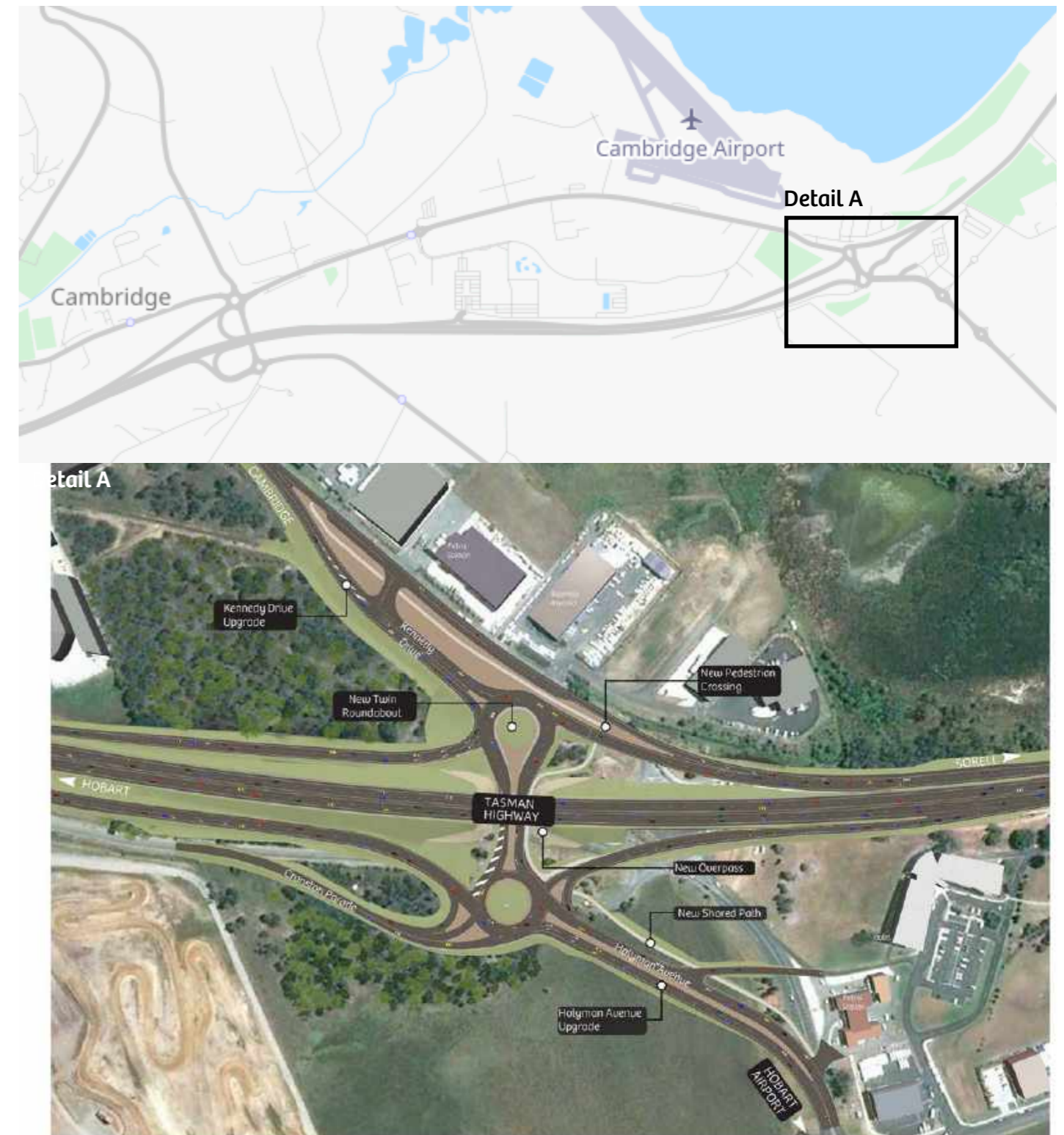
- Holyman Avenue
- Addison Drive
- Long Street
- Grueber Avenue

At present, there are no capacity issues evident on the key roads within the internal road network other than temporary congestion at the terminal drop-off areas in peak periods.

### Car parking

There are approximately 1,210 car parking spaces at Hobart Airport with the following options available:

- Premium Car Park (100 spaces): for pick-up/drop-off and short term parking closest to the terminal and valet parking
- Main Car Park (370 spaces): provides parking for short and longer term stays
- Saver Car park (530 spaces): located further from the terminal and provides a more economical alternative for longer stay users
- Employee Car park (210 spaces): for airport employees or other authorised personnel



**Figure 7.1:** External connectivity

### Vehicle rental

Vehicle rental (including car and campervan rental) is a popular mode of transport for visitors to Tasmania, with approximately 22% of all air passengers choosing this as their preferred mode of transport.

There are currently seven car rental companies operating at Hobart Airport, providing a range of rental options.

### Bus services

SkyBus services were introduced to Hobart Airport in July 2018. SkyBus operates express services between Hobart Airport and Hobart Central Business District 365 days a year, providing a flexible timetable to meet flight departures and arrivals.

### Taxis

A taxi pick-up is located at the front of the terminal. Taxi drop-off occurs along the commercial lane of the terminal forecourt. There is a dedicated area for taxi staging.

### Rideshare

Rideshare services (such as Uber) also operate at Hobart Airport. Rideshare vehicles currently have an informal designated holding area on Loop Road. Passengers are picked-up and dropped off via the commercial lane.

### Pedestrians and cyclists

Pedestrian activity mostly occurs within areas associated with the terminal and ground transport. In recent years a pedestrian footpath has been established along Holyman Avenue, linking the Terminal to commercial and mixed-use precincts.

The cycling network at Hobart Airport is currently limited to cycle lanes on Grueber Avenue. Future plans may include creating connectivity along Holyman Avenue to link with the external cycle network.

### Freight

Freight vehicles currently use internal roads to access freight operations in the Terminal and Freight and Logistics precincts. Freight vehicle movements predominantly occur via Holyman and, Grueber Avenue, and Loop and Long Street.



Figure 7.2: Existing transport network 2022

## 7.2 Traffic demand

### Existing traffic demand

In 2018, prior to the COVID-19 pandemic, there was an average of 7,200 vehicle trips made to and from Hobart Airport per day. Of these, the majority (6,650 daily trips) related to travelling passengers, while 400 daily vehicle trips (out of 700 employees in total) were airport employees and around 150 trips related to freight and logistics.

### Mode share

Air passengers utilise a number of transport modes. Mode choice is influenced by a number of factors, including availability, cost, ease and accessibility. **Figure 7.3** shows the mode share split for air passengers as of 2018 (prior to the COVID-19 pandemic).

### Daily profile

Flight scheduling and other airport activities impact the capacity of the ground transport network. As such, there is a sharp morning peak between 9am and 10am, with smaller, flatter peaks until 6:30pm, leading to an eventual decline in activity after 8:30pm. The daily flight schedule has a direct impact upon the use of the group transport network. Historical data from 2018 (pre-COVID-19) when the Airport was fully operational shows a sharp morning peak between 9am and 10am and smaller, flatter peaks throughout the day until 8:30pm.

### Forecast traffic demand

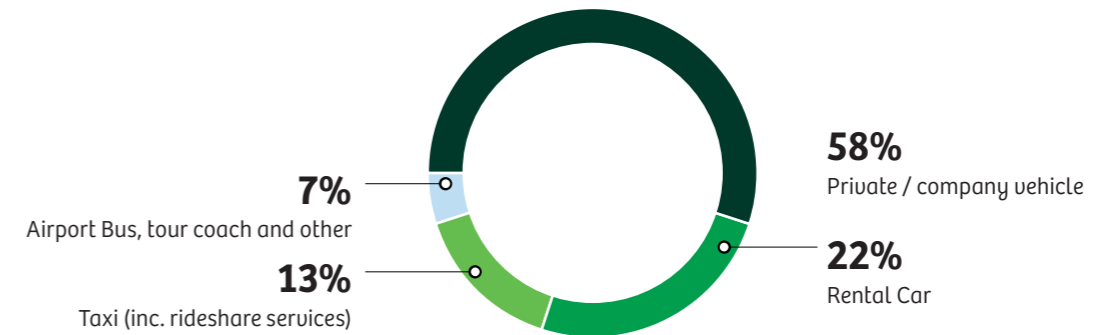
Forecasts for ground transport demand considers passenger, employment, commercial and freight demand. Forecasts have been informed by a number of data sources including:

- Forecast passenger growth (as per **Chapter 5**)
- Transaction data (for existing ground transport modes)
- Traffic surveys undertaken in 2018

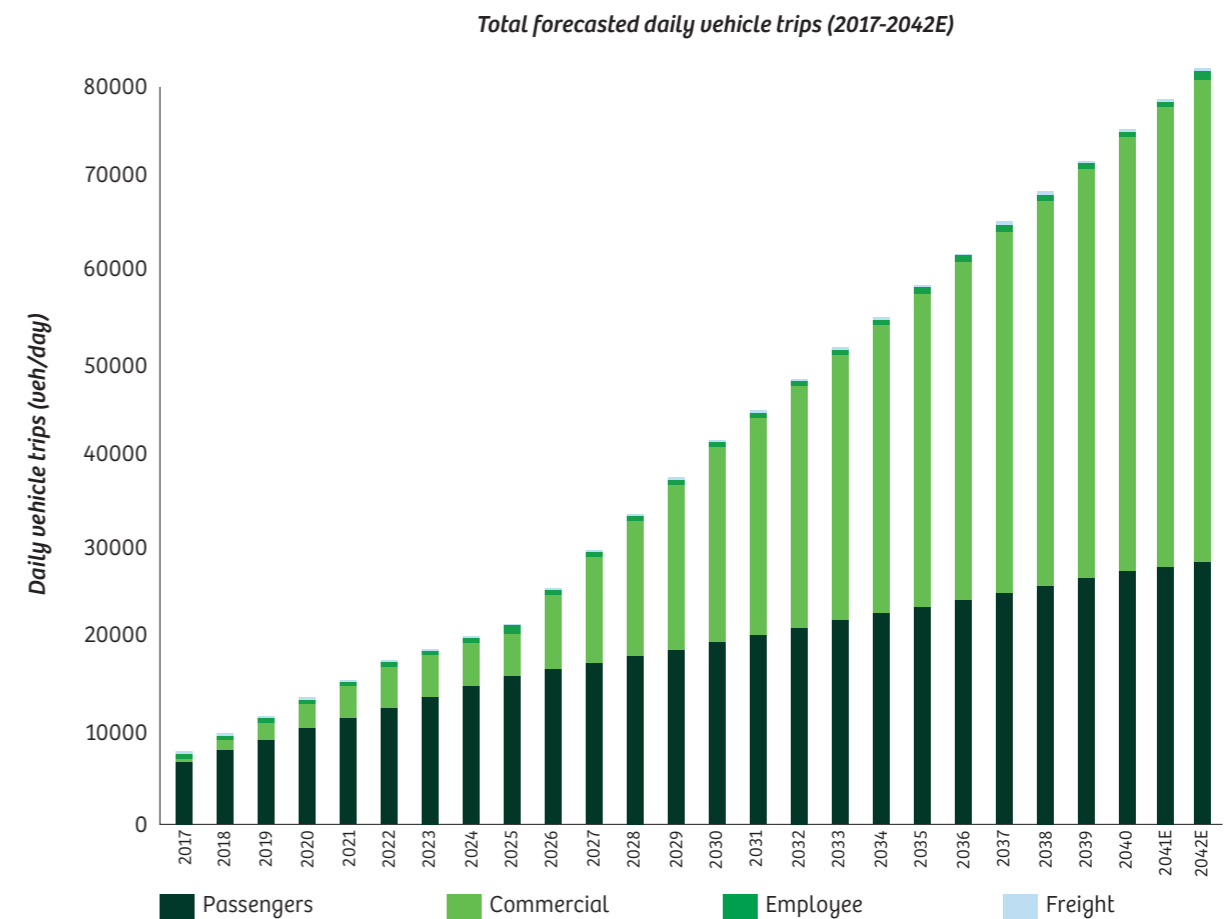
Demand for ground transport access is expected to increase significantly due to the development of commercial precincts, with some increases due to growth in passenger numbers. By 2030, it is estimated there will be a total 42,000 daily trips generated by the Airport, and nearly 80,000 daily trips by 2042.

As **Figure 7.4** highlights, the most significant increases in daily trips will be generated by future commercial development, particularly from 2026 onwards.

Traffic levels on roads and highways around the Airport are also forecast to increase, due to residential and commercial growth around Cambridge Park, Sorell and Midway Point.



**Figure 7.3:** Mode share for air passenger related trips



**Figure 7.4:** Forecast number of daily trips by trip purpose

## 7.3 Future ground transport network

### External network

The Tasman Highway provides primary access to the Airport from Hobart and Sorell. The highway currently experiences congestion and is expected to experience a doubling of traffic demand in the next 20 years. To reduce congestion and improve travel time reliability, the Tasmanian Government has developed the Tasman Highway - Sorell to Hobart Corridor Plan. This plan identifies high priority, medium priority, and long term solutions to improve the levels of service, road safety and transport needs of the region. Key solutions that will improve efficient access to Hobart Airport include:

- Providing dedicated transit lanes for high occupancy vehicles, including buses, taxis, and vehicles with multiple occupants.
- Incorporating Intelligent Transportation Systems (“ITS”) between the Tasman Bridge and Mornington to manage traffic more efficiently.
- Upgrading and building new interchanges between Hobart and the Airport to increase capacity and efficiency of the highway

Future development that is currently planned for Hobart Airport is not expected to result in an increase in traffic that will exceed the anticipated capacity of the external roads in 2042. However, Hobart Airport will continue to engage with the relevant State and Local Government authorities, including the Transport and Infrastructure Group within the Department of State Growth who are responsible for the management of the external road network to ensure the carrying capacity remains suitable to support new development.

### Internal network

The development of the ground transport network is proposed to mitigate congestion as the Airport continues to grow. The Ground Transport Plan has been designed to meet the forecast demand and, as a result, supports the broader development objectives of this Master Plan.

- To minimise throughput on Addison Drive, it is intended that all cars exiting the car rental pick-up area will exit the Airport via Loop Road, Tower Road and Llanherne Drive
- To accommodate increased traffic volumes, and the planned vehicle rental back-of-house sub precinct, the Grueber Avenue / Long Street intersection may be upgraded to a signalised intersection
- To establish new internal access roads where new precincts are established for commercial, freight, industrial or mixed-use development.
- To increase efficiency within the Airport precinct by providing adequate wayfinding for all transport modes throughout the transport network

Freight traffic management within the Airport precinct will also be managed by Hobart Airport. A summary of the road network plan is illustrated in **Figure 7.5** and **Figure 7.6**. This gives an overview of the changes required over the short-term (8 year) and long-term (20 year). **Table 11** also provides a summary of the key transport network changes on and around the Airport site that will be required.

## 7.4 Car parking and vehicle rental

### Car parking

The total car parking capacity has been reduced from approximately 1,800 to 1,210 spaces with the realignment of Addison Drive. It is expected that there will be a demand for over 7,000 trips to use the car park over the day by 2042. Given that currently 66% of spaces are for longer stay including employees, there is less capacity for the short term higher turnover demand. With this considerably higher demand for both long term and short term spaces, it is expected that additional car parking capacity will be required.

Hobart Airport will continue to monitor and assess the demand for parking at the Airport to ensure there is sufficient parking to service the demand. This includes accommodating the emergence of electric vehicles and providing the required provisions for charging points and other facilities into car parking areas.

Hobart Airport’s Accessibility Working Group will also ensure the provision of accessible car parking spaces is in accordance with relevant and updated Australian Building Code requirements of AS/NZ 2890.1.

### Vehicle rental

Vehicle rental will continue to provide a flexible choice to customers with a variety of rental options available within Hobart Airport.

Vehicle rental back-of-house operations (including storage and wash bay facilities) are currently located in the Terminal Precinct. To optimise the allocation of space within the Terminal Precinct and cater to the tandem growth requirements of rental operators and passenger car parking, it is planned to relocate vehicle rental back-of-house to a new development precinct. It is proposed that this new precinct be located south-west of Holyman Avenue (**Figure 7.5**).

Relocation will allow existing and future rental operators to expand their operation and serve the growing Tasmanian tourism market. It will also facilitate the expansion of car rental pick-up/drop-off areas, enabling diversification of car parking into areas formerly used for car rental back-of-house.

## 7.5 Public and active transport

### Bus services

The Tasman Highway - Sorell to Hobart Corridor Plan includes the establishment of transit lanes in both directions between the Cambridge Interchange (intersection of Holyman Avenue and Tasman Highway) and the Tasman Bridge to enable priority access for buses and other vehicles carrying multiple occupants. Bus frequency will also be improved along the corridor. These government initiatives provide an opportunity for improved bus connections to Hobart Airport, including the continued, reliable provision of SkyBus services. The provision of equitable and sustainable transport options will continue to be a priority for Hobart Airport.

### Taxis

Taxis are now able to use the dedicated commercial lane through the Airport forecourt, allowing a more efficient pick-up/drop-off. Taxi movements will continue to be facilitated by dedicated staging area and use of the commercial pick-up/drop-off lane.

### Rideshare

The rideshare market will continue to take a larger mode share of trips accessing the Airport into the future. Hobart Airport will support passenger choice towards this mode by establishing a dedicated rideshare staging area and facilitating the efficient movement of this mode through the commercial pick-up/drop-off lane.

### Pedestrians and cyclists

Increased flights and general transport demand will require improved management of safe and efficient pedestrian movements. Areas of focus include the Terminal forecourt pick-up/drop-off and routes through car parks. The safe movement of pedestrians including the minimisation of conflict between pedestrians and vehicles will continue to be a focus, aided by clear and intuitive wayfinding, separation zones and well-located crossings. Pedestrian management will also be assisted with the use of traffic controllers where necessary.

Cycling is an affordable, environmentally sustainable and viable transport option for airport users, particularly employees. Where possible, off-road and on-road cycling paths and end-of-trip facilities will be incorporated into new developments and precincts. The improvements of the connection between Hobart Airport and the external bicycle network will take place over time, with the overall intention of creating a fully connected and safe network for cyclists visiting or moving through the Airport precinct.

## 7.6 User accessibility

In 2019, Hobart Airport invested in five Awi-ramps to offer more accessible boarding to passengers, reducing the risk of injury to passengers and supporting better access for passengers requiring assistance. The Awi-ramps provide step-free access directly from the ground to the aircraft door and are used on the majority of Hobart flights for all passengers to board and disembark planes.

Within the Hobart Airport terminal car park, customers with a valid disability permit or seniors card are entitled to 30 minutes free parking to allow safe and timely access to the terminal. Additionally, if customers have a disabled parking permit, they are entitled to utilise one of the dedicated disabled car spaces in the Premium or Terminal Car Park located close to the terminal for improved access. Hobart Airport offers the opportunity to contact the Airport team 5 business days in advance of a journey to engage with airlines to help identify any other accessibility options which may further support the customer journey.

Future development at Hobart Airport will continue to progressively improve and upgrade all publicly accessible areas in addition to projects already delivered enhancing access and passenger movements.

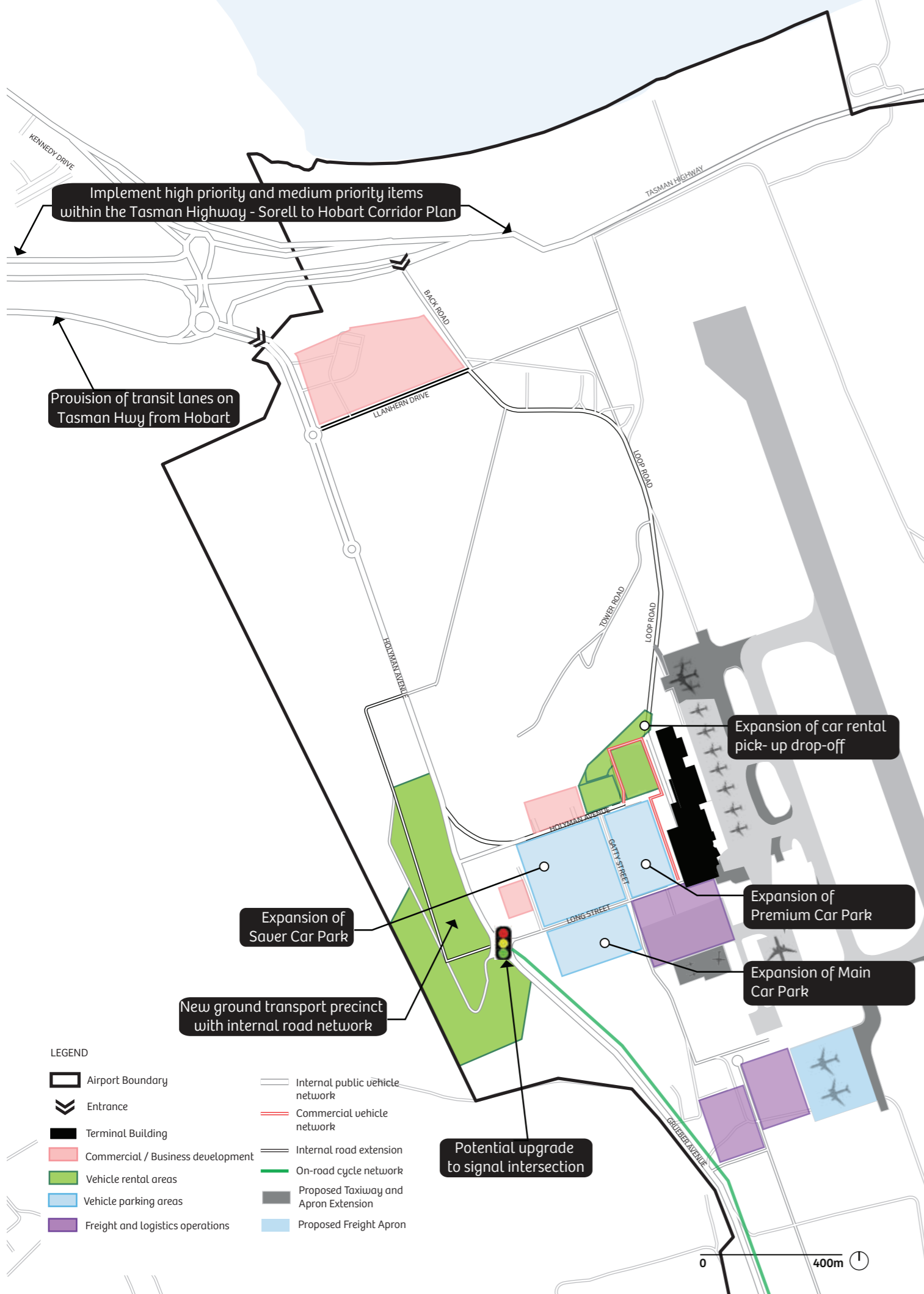
Further, Hobart Airport recognises the need for its passenger facilities to comply with the Disability Standards for Accessible Public Transport 2002 as of 31 December 2022. The completion of the terminal expansion project currently in progress will ensure airport wide compliance to the standards and Hobart Airport's Accessibility Working Group will continue to review and improve public and active transport options to the Airport in accordance with any updates to the Australian Standards.



## 7.7 Ground transport initiatives

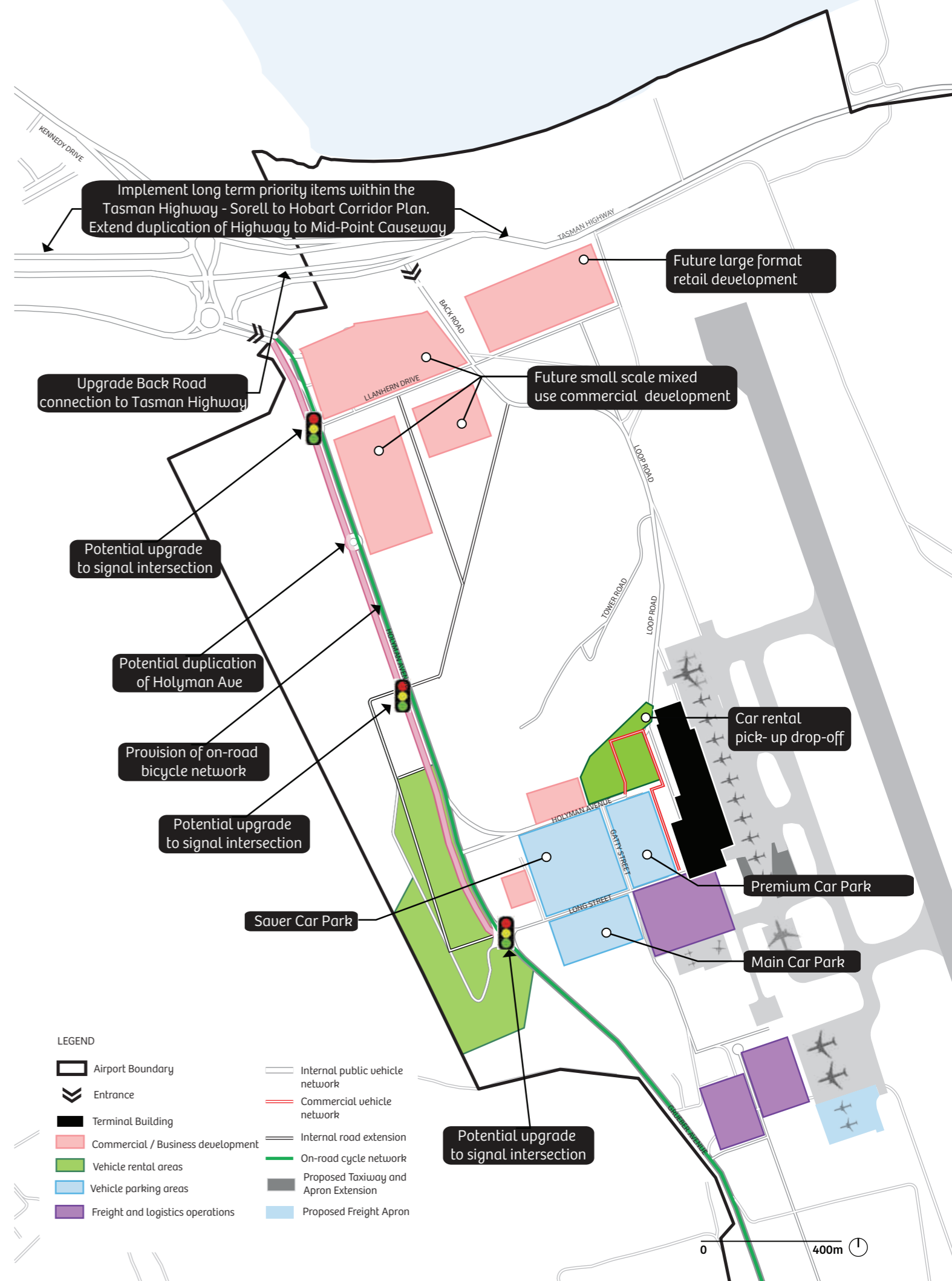
**Table 7.1:** Summary of ground transport initiatives

	Short term (up to 8 Years)	Long term (up to 20 years)
<b>External road network</b>	<ul style="list-style-type: none"> <li>Implementation of high priority and medium priority items within the Tasman Highway - Sorell to Hobart Corridor Plan</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of long term priority items within the Sorell to Hobart Corridor Plan</li> <li>Upgrade secondary entry point (Back Road) off Tasman Highway into the Tourism and Mixed Use Precinct</li> <li>Construct dual lane highway from the Tasman Highway Interchange to the Midway Point Causeway</li> </ul>
<b>Internal road network</b>	<ul style="list-style-type: none"> <li>Additional internal roads to support the development of the freight, commercial, mixed use and industrial precincts</li> <li>Potential signalisation of the Grueber/Long Street Intersection</li> <li>Minor alterations to improve efficiency and flow of traffic through the Terminal Precinct</li> <li>Improvement and upgrade of existing internal roads to support aeronautical and non-aeronautical development</li> </ul>	<ul style="list-style-type: none"> <li>Potential continuation of the duplication of Holyman Avenue to Grueber Avenue/Long Street intersection</li> <li>Additional internal roads to support the development of the freight, tourism and mixed use and industrial precincts</li> <li>Increase kerbside capacity along Addison Drive</li> <li>Alterations to facilitate future Terminal expansion and passenger growth</li> </ul>
<b>Car parking</b>	<ul style="list-style-type: none"> <li>Integration of electric vehicle charging stations</li> <li>Reconfigure the car park and car rental facilities</li> <li>Expand and diversify car parking products, including accessible car parking options</li> </ul>	<ul style="list-style-type: none"> <li>Continual assessment and adaptation to support passenger and commercial growth and user choice</li> </ul>
<b>Public transport</b>	<ul style="list-style-type: none"> <li>Provision of transit lanes on Tasman Highway between the Tasman Bridge and Hobart Airport interchange</li> <li>Additional SkyBus services, in line with demand</li> </ul>	<ul style="list-style-type: none"> <li>Regular engagement with State and Local Government to facilitate equitable and sustainable access to the Airport</li> </ul>
<b>Taxi and rideshare</b>	<ul style="list-style-type: none"> <li>Creation of formal rideshare staging facility</li> <li>Potential relocation of taxi staging area to allow optimal ground transport space allocation</li> </ul>	<ul style="list-style-type: none"> <li>Continued optimisation of staging facilities and commercial pick-up/drop-off lanes</li> </ul>
<b>Vehicle rental</b>	<ul style="list-style-type: none"> <li>Investigate provision of shared fuel facilities that includes appropriate fuel pollution prevention for new fuel infrastructure such as bunding and containment. All fuel facilities must meet Australian Standards including AS 1692—2006 Steel tanks for flammable and combustible liquids and best environmental and industry practices.</li> <li>Relocate vehicle rental back-of-house (storage and work bays), allowing operator growth</li> <li>Expand car rental pick-up/drop-off area, improving customer experience</li> <li>Provide formal overflow rental vehicle storage area</li> </ul>	
<b>Active transport</b>	<ul style="list-style-type: none"> <li>Improvement of pedestrian wayfinding</li> <li>New cycling infrastructure and end of trip facilities in new precincts and development</li> </ul>	<ul style="list-style-type: none"> <li>Fully connected internal cycling network</li> <li>Continual reassessment and management of pedestrian movements in and through the Airport Precinct.</li> </ul>



**Figure 7.5:** Ground Transport Plan 2030

Hobart Airport | Master Plan 2022



**Figure 7.6:** Ground Transport Plan 2042

08

Utilities and  
services  
infrastructure



# Overview

Utilities are a key part of successful operations at Hobart Airport. Maintenance and the development of utilities is required to ensure operational continuity and support future development.

The primary objective of the utilities plan is to:

- Optimise the performance of existing assets
- Invest in the capacity of utilities infrastructure to support the projected growth of the Airport
- Provide for a resilient utility network
- Undertake a structured approach to the development of new utility services

## 8.1 Existing utilities and services infrastructure

### Electricity

Hobart Airport owns and operates an 11kV network. TasNetworks provides the power supply at two intake points, Cambridge Zone substation, and Pittwater Road overhead line. The Hobart Airport 11kV reticulation consists of a combination of overhead lines and underground cables.

Since the 2015 Master Plan, the network has been augmented during various projects, including:

- Establishment of two 7.5MVA feeds from Cambridge Zone substation to support the Tourism and Mixed-Use Precinct
- Upgrades to the cable network within Holyman Avenue
- Installation of the new ring main unit and removal of overhead lines, replaced with underground cabling during the construction of Grueber Avenue
- Installation of high voltage equipment to feed the new freight precinct off Grueber Avenue

### Telecommunications

Telecommunication services at Hobart Airport are serviced by optic fibre services installed by Telstra running through the site, north to south, and connecting to the main distribution frame (MDF) room. The MDF also accommodates other supporting hardware like uninterruptible power supply (UPS) and battery power systems.

### Water supply

The primary water main connects to the reticulated water supply within the Tasman Highway and runs along Holyman Avenue. The existing system has separate water and fire systems, with on-site water storage for backup supply in the event of fire.

### Stormwater and flooding

The existing onsite stormwater infrastructure includes a network of open swale and piped drains. Stormwater drains to Barilla Bay to the north and to Pittwater to the east. Stormwater quality entering these waters remains an important consideration due to the sensitive nature of these surface waters.

### Sewerage

The Hobart Airport sewerage network spans the Airport terminal and neighbouring development sites with a total Equivalent Tenement (ET) of approximately 600kL/ET. The site is currently serviced with a rising main that runs from the Tasman Highway, along Holyman Avenue and connects to an existing TasWater sewerage treatment plant on the site. There is a need in the future to confirm the capacity of the Cambridge Sewerage Treatment Plant to service proposed future developments. Freehold titles will have services installed as development progresses and as required in these precincts.

## 8.2 Planned utilities and services infrastructure

As the Airport expands, upgrades will be required in the initial (8 year) and long (20 year) term. Investment in the utilities and services infrastructure will respond to the growth of the Airport in a strategic and timely manner. A summary of the planned infrastructure upgrades are in **Table 8.1**.

**Table 8.1:** Planned utilities and services infrastructure upgrades

	Short term (up to 8 Years)	Long term (up to 20 years)
<b>Electricity</b>	<ul style="list-style-type: none"> <li>Augment the primary ring along Holyman Avenue, Loop Road (line replacement and establishment of substations)</li> <li>Increase capacity along Pittwater Road (light industry precinct)</li> <li>Install Emergency Power Plant and secondary high voltage ring for the terminal precinct</li> </ul>	<ul style="list-style-type: none"> <li>Develop underground cable and kiosk substations in the non-aeronautical precincts</li> </ul>
<b>Telecommunications</b>	<ul style="list-style-type: none"> <li>Establish a Fibre to the Building (FTB) NBN connection</li> <li>Augment the old telecommunication services as the terminal is redeveloped</li> <li>Relocate works of pit and pipe infrastructure as terminal and landside development occurs</li> <li>Maintain the secondary lead to prevent single entry point failure</li> </ul>	<ul style="list-style-type: none"> <li>Install new pits and pipes in a structured manner within the Terminal Precinct</li> <li>Install a new single-mode fibre backbone throughout the site in a structured manner, creating a resilient IT network</li> <li>Install private network fibre optic cabling</li> <li>Provide a 'dual-homed' communication network</li> </ul>
<b>Water supply*</b>	<ul style="list-style-type: none"> <li>Resize and relocate the existing terminal precinct ring main as the terminal building is developed to allow for additional future developments. Allow for increased capacity to supply neighbouring precincts</li> </ul>	<ul style="list-style-type: none"> <li>Provide upgraded/new provisional water supplies to the Aviation Support, Tourism and Mixed-Use and Light Industrial precincts for future development</li> </ul>
<b>Stormwater and flooding</b>	<ul style="list-style-type: none"> <li>Investigate the required flooding risk mitigation based on new developments at the Airport</li> </ul>	<ul style="list-style-type: none"> <li>Realign the major infrastructure depths suited to a 1% AEP</li> </ul>
<b>Sewerage</b>	<ul style="list-style-type: none"> <li>Resize and locate the existing terminal precinct sewer infrastructure as the terminal building is developed to allow for additional future developments</li> </ul>	<ul style="list-style-type: none"> <li>Provide upgraded/new provisional sewer mains to Aviation Support, Tourism and Mixed-Use and Light Industrial precincts to accommodate developments</li> </ul>

\*Note: Any proposed changes to the Airport's water supply system, will need to be reviewed by Airservices.



09

# Aircraft noise

# Overview

The NASF states that “...aircraft noise is the most significant cause of adverse community reaction to the operation and growth of airports. Noise can impact adversely on residents, workers and visitors in the vicinity of airports...”

Hobart Airport is uniquely positioned with residential areas located approximately 2 km away. The Airport also has the geographical benefit of being surrounded by water at both runway ends and a significant portion of Crown Land to the east. Nevertheless, it is important for Hobart Airport to manage aircraft noise in conjunction with airport operations to minimise any potential impacts on neighbouring communities.

The Master Plan uses noise modelling outputs to geographically represent the distribution of noise based on existing runway operations. This noise modelling should also be used by Local and State governments to assist in future residential planning and development to ensure Hobart Airport operations are not compromised.

Hobart Airport has the benefit of operating 24 hours a day, 7 days a week. This presents an opportunity for Hobart and the wider regions of Tasmania along with providing significant economic benefit. Hobart Airport will continue to work with the community and key stakeholders to monitor potential noise impacts to ensure an appropriate level of amenity is maintained.

The noise modelling in this Master Plan does not include Cambridge Aerodrome. Cambridge Aerodrome caters for recreational aircraft and general aviation traffic and plays an important and continuing role in the aviation network of southern Tasmania.

Airservices Australia manages flight paths and airspace. Hobart Airport does not have responsibility or control over the design of the airspace or instrument procedures.

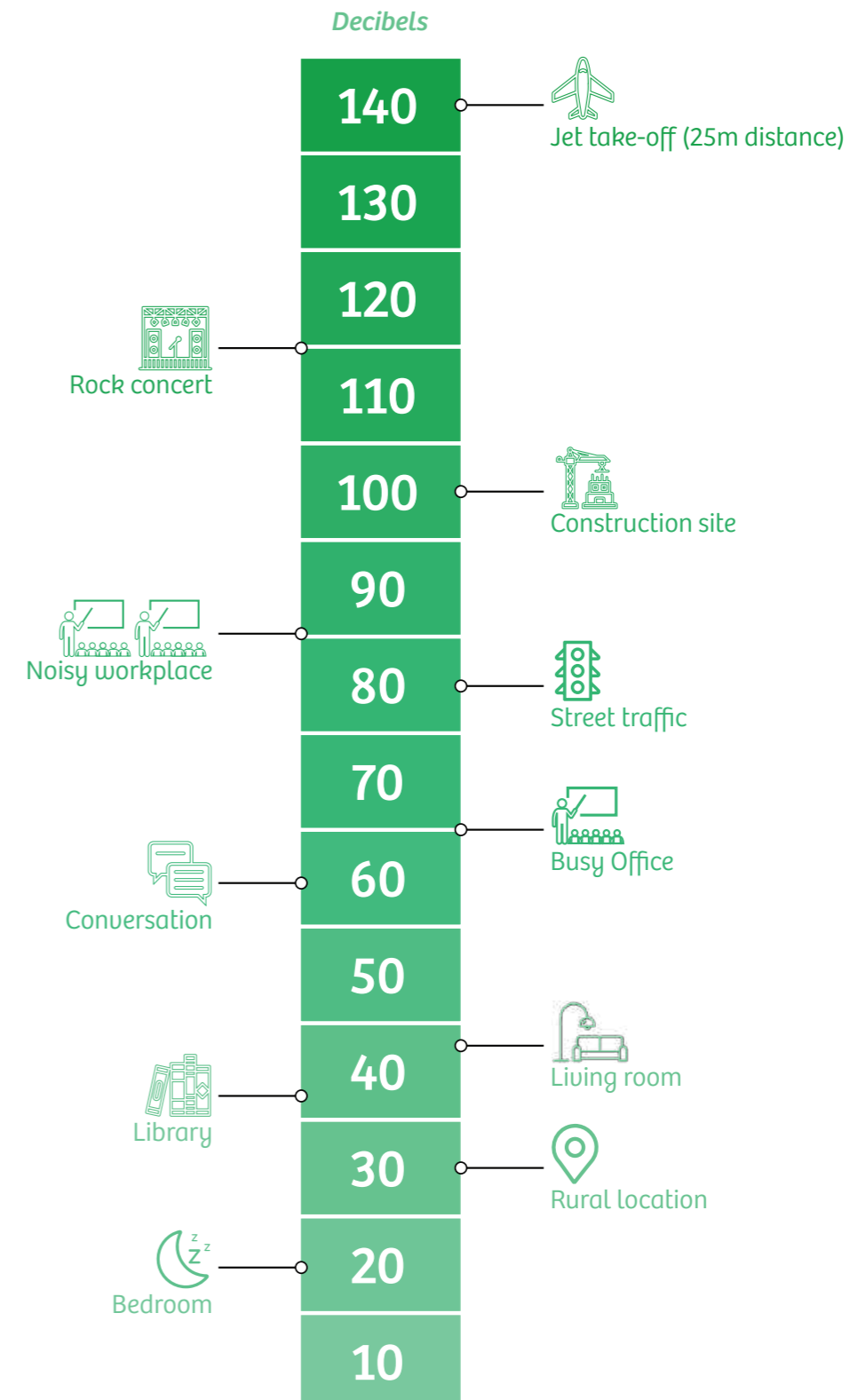


Figure 9.1: Example noise levels

## 9.1 Noise forecast

The Australian Noise Exposure Forecast (ANEF) is the primary noise metric in Australia to guide land use planning around airports. The Airports Act requires the calculation of ANEF contours for use in assessing existing and future noise exposure patterns.

### Australian Standard AS2021-2015 Acoustics

Aircraft Noise Intrusion—Building Siting and Construction describes the ANEF system and details compatible land uses near airports.

### Australian Noise Exposure Index

The Australian Noise Exposure Index (ANEI) is a contour map that shows actual historical aircraft noise levels over a given. An ANEI for 2017-18 are shown in **Appendix C**.

### Australian Noise Exposure Concepts

An Australian Noise Exposure Concept (ANEC) is a set of contours based on predicted future aircraft operations. ANEC maps are based on various assumptions and cannot be used for land use planning. An ANEC or set of ANECs can be converted into an ANEF which is assessed for technical accuracy by Airservices and is subsequently endorsed.

### Australian Noise Exposure Forecast

The ANEF at Hobart Airport has been developed for a long term capacity scenario, which considers the future demands forecast over the next 20 years. The ANEF has included assumptions that international aircraft will utilise Hobart Airport in the near future. The ANEF chart shows the cumulative noise effect of a full year of operations so that seasonal weather changes and airline schedules are considered.

Each Master Plan period has included an updated ANEF, and a new version has been prepared as part of this Master Plan. The noise modelling for the ANEF has been based on a 20-year forecast of domestic and international traffic growth rates. The latest expected growth rates have been used accounting for COVID-19. The ultimate ANEF is the finalisation of an appropriate ANEC which represents the operational procedures and all published flight paths. As a result noise contours have been developed, and reviewed by Airservices.

### Limitations of the ANEF

AS2021-2015 incorporates the ANEF to guide acceptability of land use planning and development adjacent to airport. The ANEF is an indicative area subject to noise exposure; it does not mean that development outside of the ANEF line would not be affected by aircraft noise or that developments should be approved without consideration of the noise impacts.

AS2021-2015 is used as a guide to assess whether noise attenuation measures are required for a particular land-use or development in the various ANEF zones. The AS2021-2015 does not consider other land uses or development that might surround the subject site, i.e. ambient noise might not be considered which might obscure aircraft noise. The ANEF does not account for the type of aircraft or frequency that might cause noise impacts. The NASF and associated N-contours have been developed which reflect the number of noise events and associated decibel level.

## 9.2 Aircraft noise assessment

The aircraft noise assessment aligns with the NASF principles (as described in Chapter 10). More specifically, aircraft noise relates to NASF Guideline A – Managing Impacts of Aircraft Noise which recommends that:

“There is a need to treat future development and existing development differently. Where there is no major existing or approved development, there is scope to plan ahead to take account of potential noise disturbance and in particular to minimise the zoning of noise exposed land for residential development”.

There are a number of considerations that relate to aircraft noise in assessing development and policy decisions in close proximity to Hobart Airport. These include the following:

- NASF Guidelines
- ANEF
- Flight paths and aircraft activity
- N-contours
- Tasmanian Planning Scheme and State Planning Provisions

### N-Contours

The N-contour metric has been developed to assist with the ANEF limitations and is a complementary way to communicate potential noise impacts. The N-contours show the potential noise events that are more than a particular decibel level at a specific location.

In addition, the N-contours report the number of events during night or a particular period of the day and are presented in a clearer format for easier comprehension in the community.

For example, N70 is an event that generates noise at or more than 70 decibels, which is said to disrupt a conversation or television viewing inside a house with a window or door open.

As with the ANEF metric, the N-contours are represented on a map, and noise may be experienced outside of these areas. Example noise Levels are shown in **Figure 9.1**.

### Scenarios

To provide the community and local planners with a visualisation of the long term noise impact of operations at Hobart Airport, a 20 year traffic forecast was developed for noise modelling, using a moderate rate of growth.

Noise models have been calculated for the following scenarios:

- ANEF based on 20 year traffic forecast (endorsed by Airservices Australia)
- ANEI based on actual traffic for full year 2018-2019
- ANEC based on an ultimate capacity model for the existing infrastructure at Hobart Airport
- N-contours based on 20 year traffic forecast
  - N70 day-time (7am to 7pm)
  - N70 night-time (7pm to 7am)
  - N60 day-time (7am to 7pm)
  - N60 night-time (7pm to 7am)

### Noise modelling methodology

Aircraft noise modelling has been derived using the Aviation Environmental Design Tool (AEDT) to simulate noise impacts. The modelling has taken into consideration of the following factors:

- Approximate Altitude of aircraft operating on flight tracks
- Aircraft type
- Number of aircraft per average annual day and average annual evening
- Typical weather conditions (2011 to 2020 from the Bureau of Meteorology data)
- Local Terrain (Retrieved from NASA's Shuttle Radar Topography Mission data)

The Hobart Airspace Design Review Final Report and CASA approval for the Airspace Change Proposal on 8 May 2019 introduced changes to Hobart's Airspace. These changes include new Standard Instrument Departures (SIDs) and Standard Instrument Arrivals (STARs) procedures. The noise model was developed to show the new airspace design and has introduced new flight tracks as well as removing former flight tracks. Due to the changes in how Hobart's airspace will operate in the future, there will be notable differences in the noise footprint. Modelled flight tracks are shown in **Figures 9.2 and 9.3**, Helicopter tracks are shown in **Figure 9.4** and ultimate practical capacity ANEF are shown in **Figure 9.5**.

The modelled aircraft types and forecast schedules were based on forecasts provided in **Chapter 5**. Traffic patterns are based on existing operations at Hobart Airport.

## 9.3 Approach to managing aircraft noise

The geographical location of Hobart Airport assists with managing aircraft noise due to the runway being situated between bodies of water and open space located to the east. The local planning provisions by Clarence City Council has assisted with mitigation of aircraft noise as sensitive uses are not located or subject to exposure above the significant ANEF levels.

Therefore, Hobart Airport has not been required to develop any plans for the management of aircraft noise intrusion over existing residences and relies on Airservices Australia to minimise aircraft noise impacts where possible through safe and efficient airspace and procedure design. If any such plans were required Hobart Airport would have regard to the AS2021-2015 building site acceptability standards as shown in **Appendix B** and the view of airlines and relevant government bodies.

However, notwithstanding the above, Hobart Airport is mindful of the impact aircraft noise has on the local communities and will continue to act as an active advocate for the community to engage with aircraft operators and Airservices to minimise any potential noise impacts where appropriate.



## 9.4 Noise modelling results

### ANEF

The standard 20 year ANEF contours for Hobart Airport are shown in **Figure 9.5**. The ANEF has been endorsed by Airservices Australia for technical accuracy.

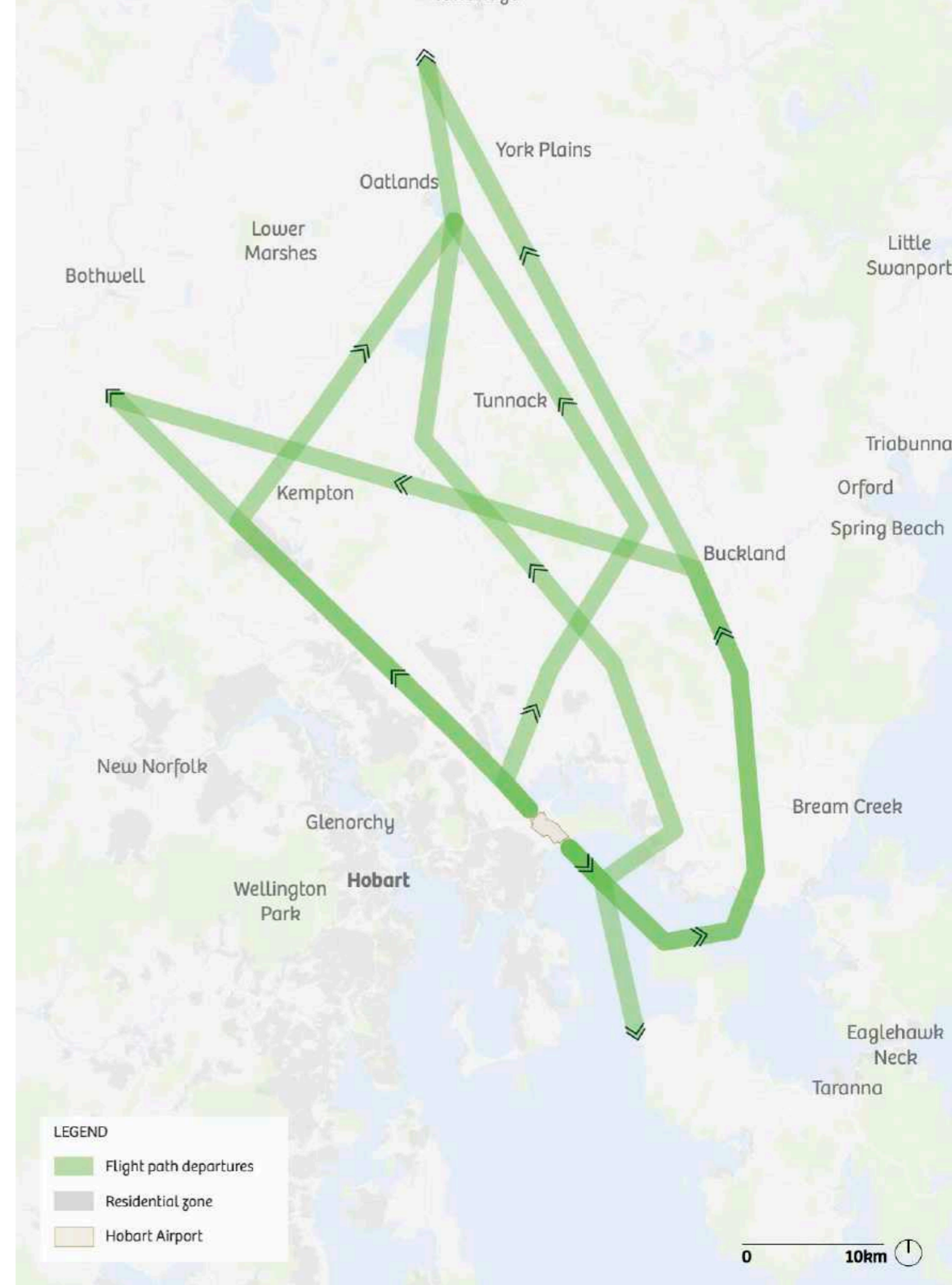
A comparison of the existing 2015 ANEF and the 2022 ANEF is shown in **Figure 9.6**. The key differences between the existing and new ANEF are primarily due to the input assumptions including changes in flight paths and forecasts, and changes to the modelling software required by Airservices Australia.

### N60 and N70

Having recognised the limitations of the ANEF for community consultation, NASF Guideline A recommends using the N60 and N70 noise contours to supplement the ANEF. Hobart Airport have developed N60, N65 and N70 contours which have a number of distinctions and advantages over the ANEF such as:

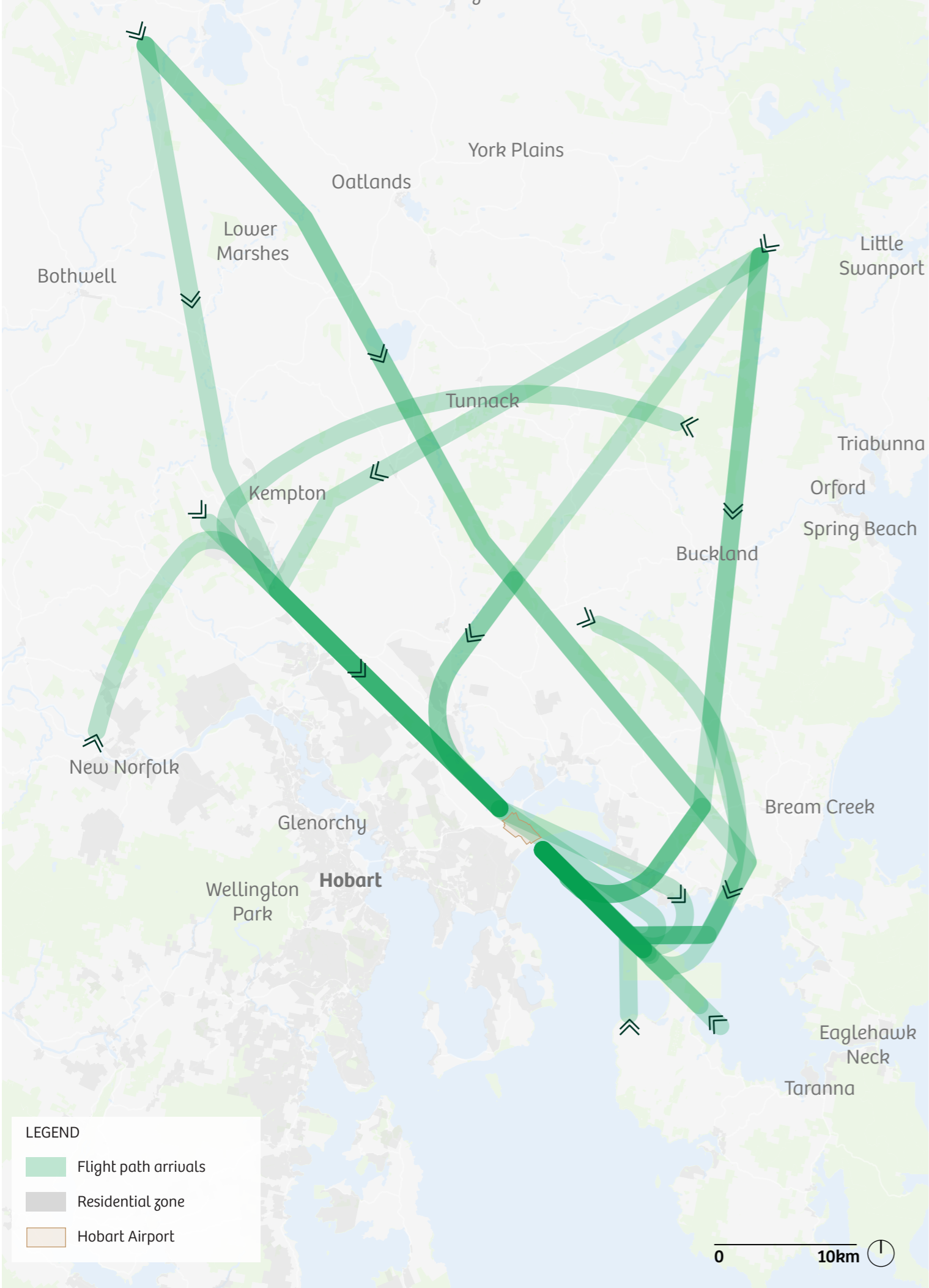
- N-contours show noise by the number of single events, which is how individuals generally perceive and experience noise
- N-contours can be useful for describing aircraft noise in a meaningful way for specific scenarios e.g. number of events at night or sensitive times

**Figure 9.7** and **Figure 9.8** show the N60 contours for both daytime (7am to 7pm) and night-time (7pm to 7am) periods. Similarly, **Figures C2 – C5** under **Appendix C - Maps** shows the N65 and N70 contours.



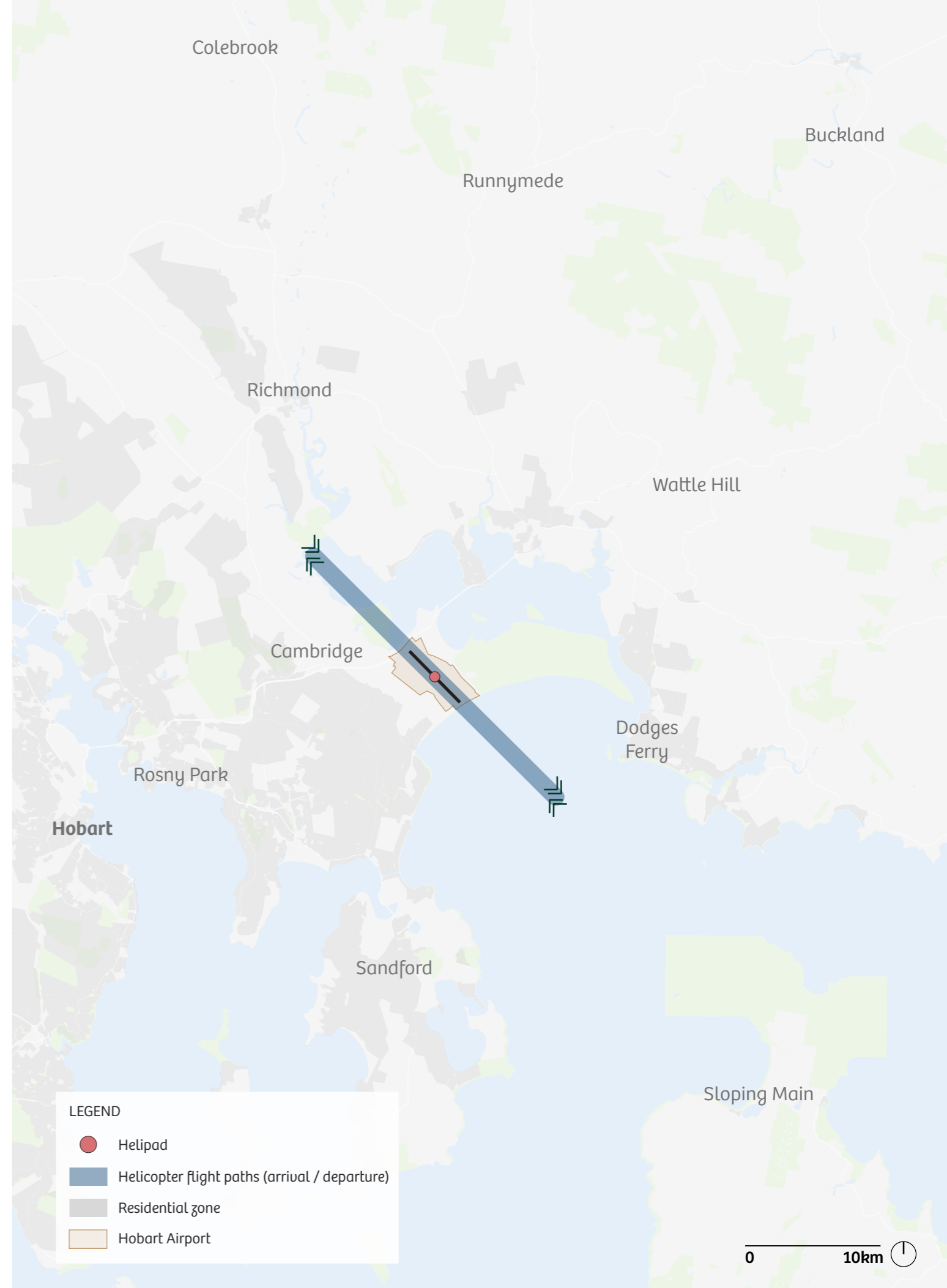
**Figure 9.2:** Departure flight paths





**Figure 9.3:** Arrival flight paths

Hobart Airport | Master Plan 2022



**Figure 9.4:** Helicopter flight paths

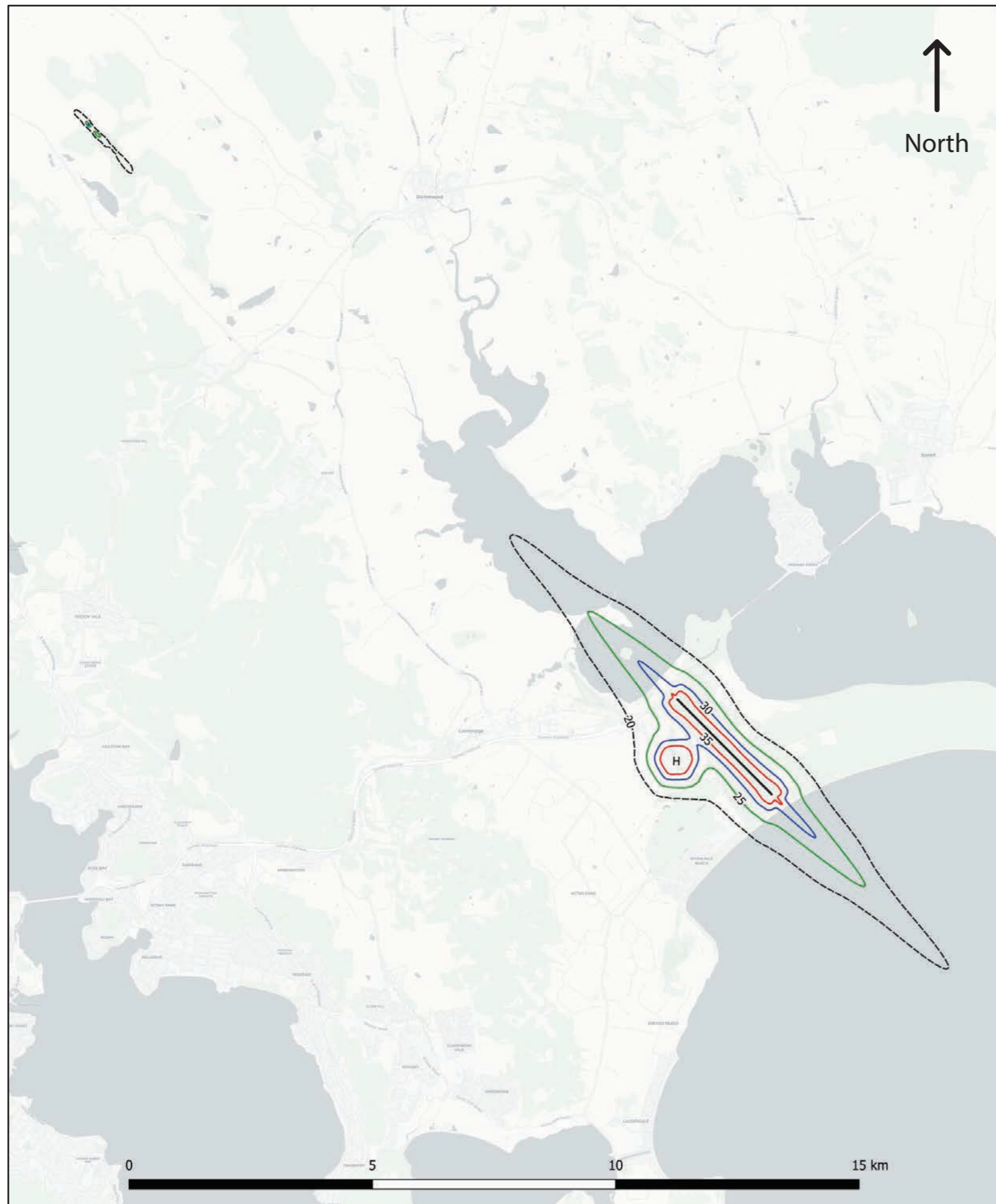


Table 2.1 - ANEF acceptability criteria (as published in AS 2021:2015)

Building type	ANEF zone of site		
	Acceptable	Conditionally acceptable	Unacceptable
House, home unit, flat, caravan park	Less than 20 ANEF <sup>1</sup>	20 to 25 ANEF <sup>2</sup>	Greater than 25 ANEF
Hotel, motel, hostel	Less than 25 ANEF	25 to 30 ANEF	Greater than 30 ANEF
School, university	Less than 20 ANEF <sup>1</sup>	20 to 25 ANEF <sup>2</sup>	Greater than 25 ANEF
Hospital, nursing home	Less than 20 ANEF <sup>1</sup>	20 to 25 ANEF	Greater than 25 ANEF
Public building	Less than 20 ANEF <sup>1</sup>	20 to 30 ANEF	Greater than 30 ANEF
Commercial building	Less than 25 ANEF	25 to 35 ANEF	Greater than 35 ANEF
Light industrial	Less than 30 ANEF	30 to 40 ANEF	Greater than 40 ANEF
Other industrial	Acceptable in all ANEF zones		

**Notes**

- The actual location of the 20 ANEF contour is difficult to define accurately, mainly because of variation in aircraft flight paths. Because of this, the procedure of Clause 2.3.2 may be followed for building sites outside but near to the 20 ANEF contour.
- Within 20 ANEF to 25 ANEF, some people may find that the land is not compatible with residential or educational uses. Land use authorities may consider that the 'incorporation of noise control features in the construction of residences or schools is appropriate
- There will be cases where a building of a particular type will contain spaces used for activities which would generally be found in a different type of building (e.g. an office in an industrial building). In these cases Table 2.1 should be used to determine site acceptability, but internal design noise levels within the specific spaces should be determined by Table 3.3.
- This Standard does not recommend development in unacceptable areas. However, where the relevant planning authority determines that any development may be necessary within existing built-up areas designated as unacceptable, it is recommended that such development should achieve the required ANR determined according to Clause 3.2. For residences, schools, etc., the effect of aircraft noise on outdoor areas associated with the buildings should be considered.
- In no case should new development take place in greenfield sites deemed unacceptable because such development may impact airport operations.

Runway	Aircraft	Arrival			Departure			Grand Total
		Day	Night	Total	Day	Night	Total	
12	Airbus A320-200 Series	4.97	1.39	6.37	4.97	1.39	6.37	12.73
	Airbus A321-200 Series	4.82	1.35	6.17	4.82	1.35	6.17	12.35
	Airbus A330-300 Series	0.09	0.03	0.11	0.09	0.03	0.12	0.23
	Boeing 737-800 Series	10.37	2.90	13.27	10.37	2.90	13.27	26.55
	Boeing 777-300 Series	0.09	0.03	0.11	0.09	0.03	0.11	0.23
	Boeing 787-8 Dreamliner	0.56	0.16	0.72	0.56	0.16	0.72	1.44
	Boeing C-17A	0.16	0.05	0.21	0.16	0.05	0.21	0.41
	Gulfstream G550	0.16	0.05	0.21	0.16	0.05	0.21	0.42
	Raytheon Beech 1900-D	0.67	0.19	0.86	0.67	0.19	0.86	1.71
12 Total		21.91	6.13	28.04	21.91	6.13	28.04	56.07
30	Airbus A320-200 Series	5.66	1.58	7.24	5.66	1.58	7.24	14.48
	Airbus A321-200 Series	5.49	1.53	7.02	5.49	1.53	7.02	14.04
	Airbus A330-300 Series	0.10	0.03	0.13	0.10	0.03	0.13	0.26
	Boeing 737-800 Series	11.80	3.30	15.10	11.80	3.30	15.10	30.19
	Boeing 777-300 Series	0.10	0.03	0.13	0.10	0.03	0.13	0.26
	Boeing 787-8 Dreamliner	0.64	0.18	0.82	0.64	0.18	0.82	1.64
	Boeing C-17A	0.18	0.05	0.23	0.18	0.05	0.23	0.47
	Gulfstream G550	0.19	0.05	0.24	0.19	0.05	0.24	0.47
	Raytheon Beech 1900-D	0.76	0.21	0.98	0.76	0.21	0.98	1.95
30 Total		24.91	6.97	31.88	24.91	6.97	31.88	63.76
Helipad	Bell 206B-3	3.45	0.96	4.41	3.45	0.96	4.41	8.83
	Bell 430	3.65	1.02	4.67	3.65	1.02	4.67	9.34
	Eurocopter EC-130	3.92	1.10	5.02	3.92	1.10	5.02	10.04
Helipad Total		11.02	3.08	14.10	11.02	3.08	14.10	28.20
<b>Grand Total</b>		<b>57.84</b>	<b>16.18</b>	<b>74.02</b>	<b>57.84</b>	<b>16.18</b>	<b>74.02</b>	<b>148.04</b>

Runway	Latitude	Longitude
12	-42.8282	147.5010
30	-42.8367	147.5317
Helipad	-42.8392	147.5006

**Notes**

- Terrain has been included in the calculation of the ANEF contours
- ANEF contours modelled with AEDT 3e
- Co-ordinate system: WGS84
- Where figures have been rounded, there may be discrepancies between the total presented and the sum of the items in that column

Issue date: 20 SEP 2022  
 Drawn by: To70 Aviation


**ENDORSEMENT FOR TECHNICAL ACCURACY**

**STANDARD ANEF**

**MALE\_C** Digitally signed by MALE\_CG

Date: 2022.10.07 15:52:46 +10'00'

**Network Planning & Optimisation**



The aircraft noise contours on this chart have been calculated using an appropriate modelling process. Airservices Australia has, in accordance with the approved manner of endorsement, considered the physical ultimate capacity of the existing or proposed runway/s in its endorsement process.

The data input and assumptions made in that process are derived in part from external sources. Airservices Australia makes no warranty in respect of that information and excludes all liability for any loss arising from reliance on that information.

Figure 9.5: Long-term (20-year) endorsed ANEF (2042)

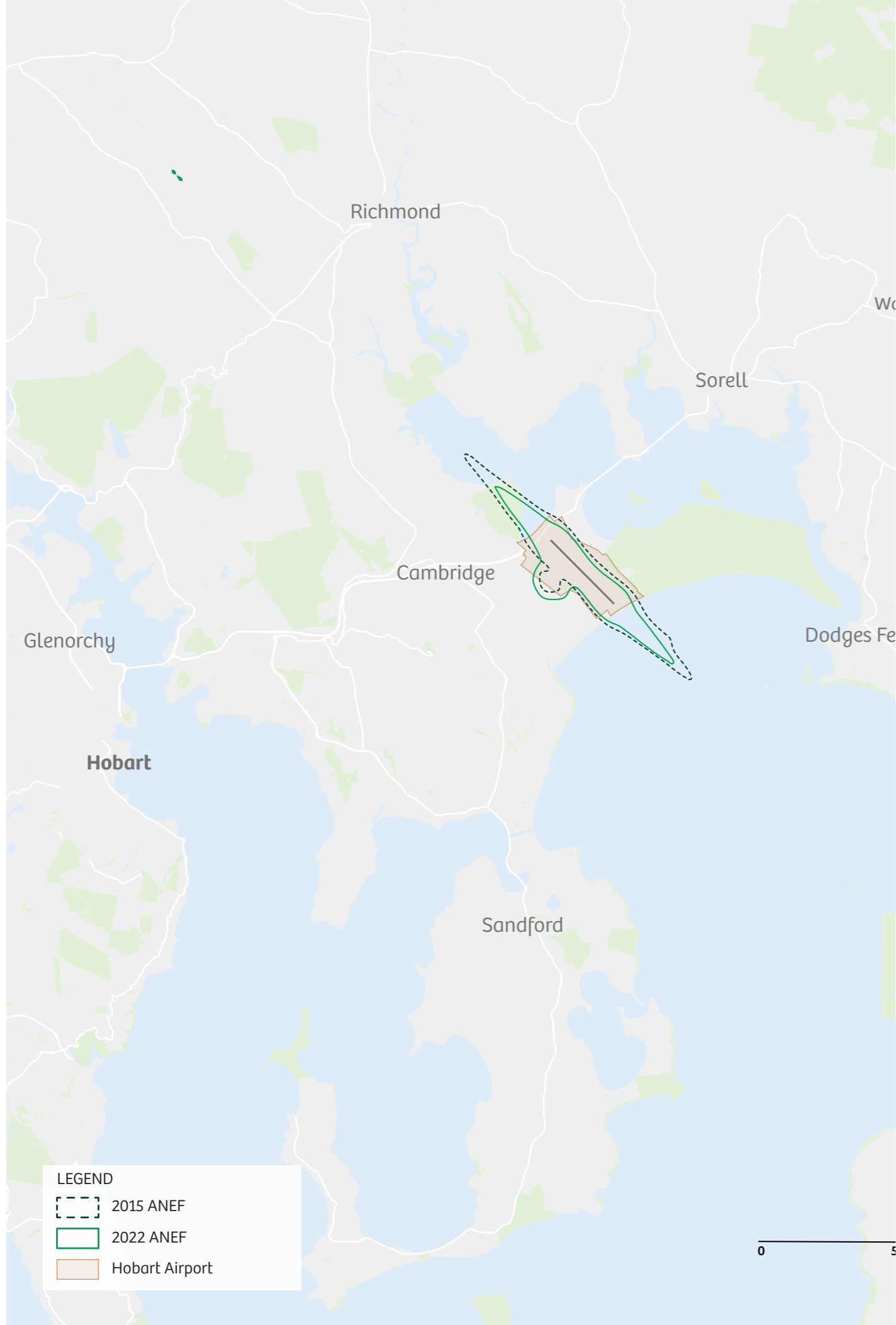


Figure 9.6: Existing 2015 ANEF and the 2022 ANEF

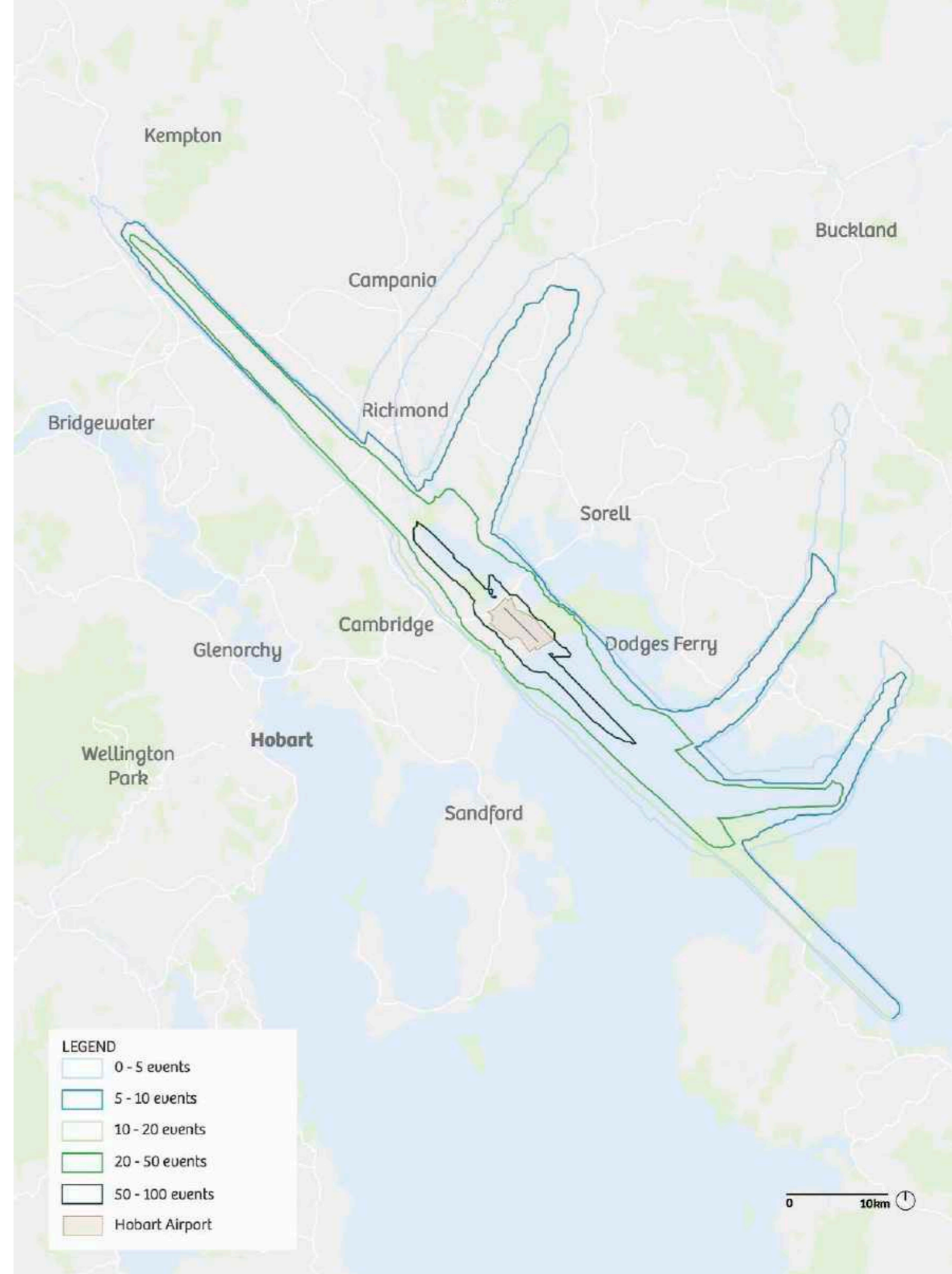


Figure 9.7: N60 day contours

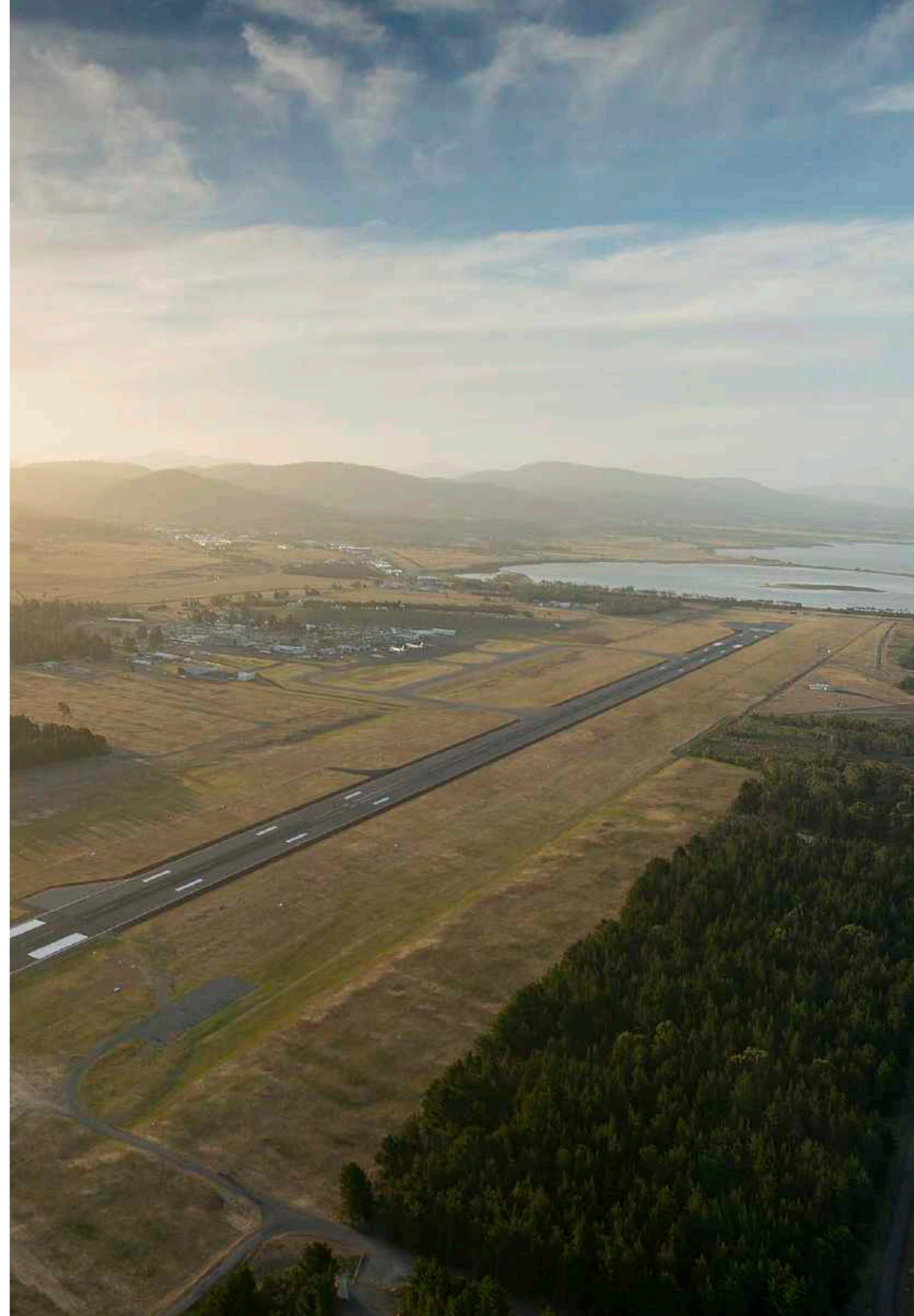
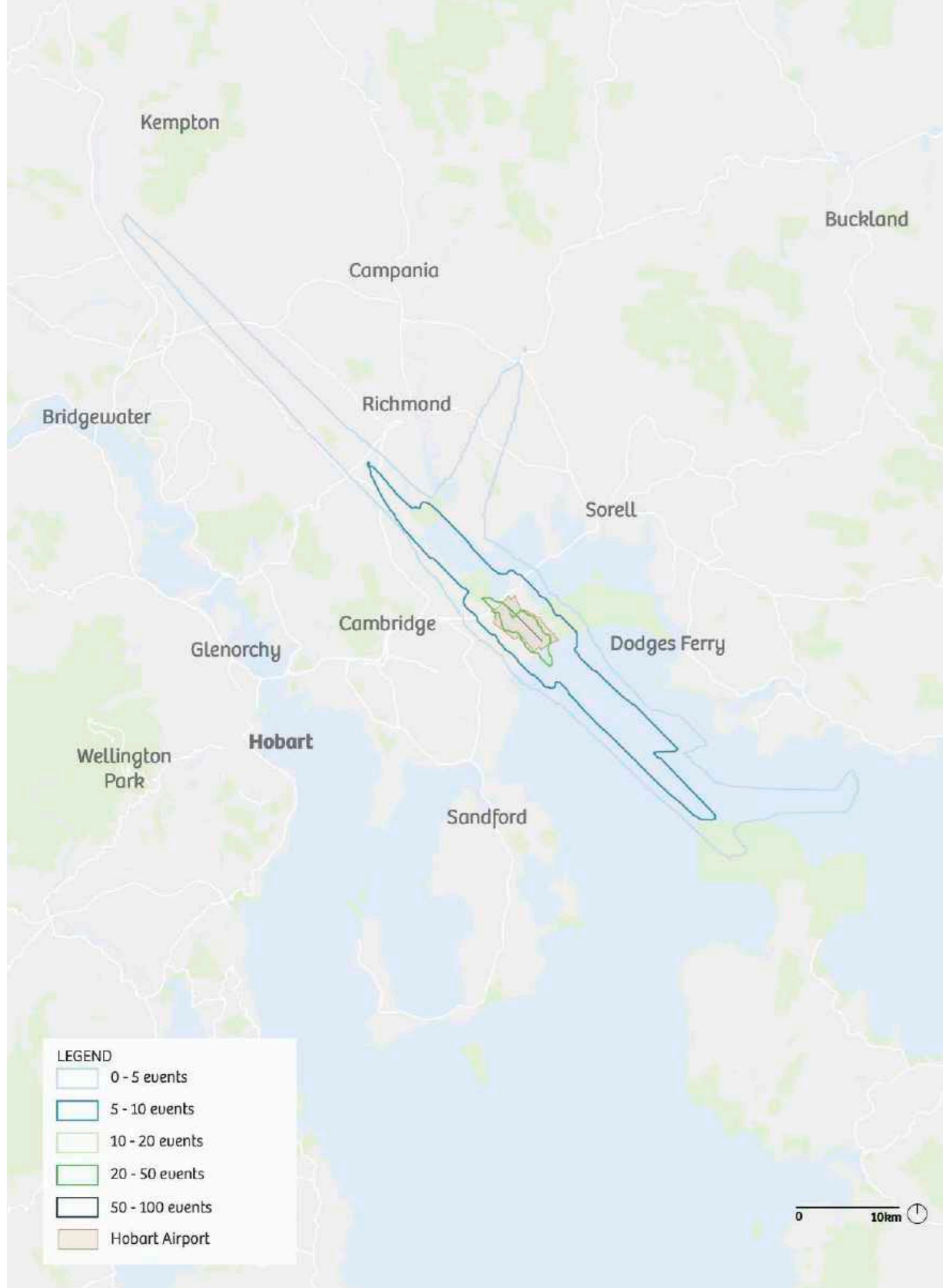


Figure 9.8: N60 night contours

# 10

# Airport safeguarding strategy

# Overview

The long-term safeguarding of Hobart Airport's aviation operations is a key function of the Airport's master planning process. Airport safeguarding seeks to protect the long-term capacity, safety and efficiency of airport operations, including aircraft safety and the protection of operational airspace.

To ensure the protection of airport operations, it is critical that strategic planning for the region recognises and protects Hobart Airport as the gateway into the State of Tasmania. As part of airport safeguarding, any new land use or development around the Airport should not compromise aircraft safety and long-term operations and should avoid or minimise incompatible land uses. A key component of airport safeguarding also involves the management and, where possible, the minimisation of the impact of airport operations on the community.

The National Airports Safeguarding Framework provides a set of principles and guidelines that can be applied in combination with local planning provisions under the Tasmanian Planning Scheme to assist in airport safeguarding.

## 10.1 Airspace protection

Operational airspace is prescribed to ensure that arriving and departing aircraft from the Airport are not adversely affected by high terrain, natural obstacles, such as trees, or the building of structures or other land use activities.

Part 12 of the Airports Act provides that the airspace around specific airports may be declared as Prescribed Airspace to legally protect the airspace for the safe arrival and departure of aircraft.

Operational airspace is considered in two forms:

- Airspace which is protected through Obstacle Limitation Surfaces (OLS) designed to provide protection for when the pilot is flying by sight.
- Procedures for Air Navigation Services Aircraft Operations (PANS-OPS), designed to provide protection for when the pilot is flying by instruments only. This surface cannot be penetrated by any objects

Prescribed airspace may also include protection for important communications, navigation and surveillance facilities, such as radar.

Under the Airports Act and APAR, local councils which fall within Hobart Airport's Prescribed Airspace are required to review all building and planning applications for any potential infringements on Prescribed Airspace. It is an offence to carry out a controlled activity (an intrusion into Prescribed Airspace) without approval, or to breach a condition of a controlled activity approval. Under the APAR, local councils are required to refer potential 'controlled activities' to Hobart Airport for assessment.

This referral process is critical to the safeguarding of Hobart Airport and provides Hobart Airport with the opportunity to assess proposed developments, both on-airport and off-airport to ensure there is no impacts on safe airport operations. Planning applications are assessed through the provisions of the Safeguarding of Airports Overlay under the Tasmanian Planning Scheme, with consideration to the Airports Act, APAR and NASF Guidelines. Hobart Airport will continue to work with local councils to highlight the importance of Prescribed Airspace and the required compliance with the APAR.

## 10.2 Hobart airspace changes

Airservices Australia is responsible for the air traffic management in Australian airspace and introduced changes to flight paths around Hobart Airport in September 2017. These changes planned to organise aircraft departing from or arriving into Hobart Airport onto standard routes called Standard Instrument Departures (SIDs) and Standard Instrument Arrivals (STARs).

The implementation of these flight paths were associated with advanced Performance Based Navigation (PBN) instrument procedures which utilise satellite-based navigation systems to improve air navigation safety and efficiency when landing and departing at Hobart Airport and the use of satellite navigation systems is required by CASA. In response to community feedback, Airservices amended the arrival flight path for Runway 30 which was implemented in March 2018.

Following the changes Airservices undertook a review of the Hobart Airspace using a 'greenfield approach', with safety of air navigation as the primary consideration and a design horizon of 2028 for longevity of the design.

In March 2019, after extensive consultation with stakeholders and the local community, Airservices delivered the Hobart Airspace Design Review Final Report and CASA approval was received for the Airspace Change Proposal on 8 May 2019.

Implementation of the final design and associated airspace was completed in 2019 and the airspace protection surfaces described and illustrated within this Master Plan reflect the implemented airspace changes.

In 2022, following the significant impact of COVID-19 on the aviation industry Airservices launched a consultation program to investigate noise abatement procedures for Runway 30 arrivals and have outlined future opportunities to further develop and improve flight paths and instrument procedures following feedback from the local community. These considerations will be explored in 2023 by Airservices and include:

- Moving the Runway 30 Required Navigation Performance Authorisation Required (RNP-AR) procedure 2-3km to the east
- Move the Runway 30 arrivals over the east coast (over water)
- Implement improved departures and arrival procedures for New Zealand route

Further details on these opportunities can be sought from Airservices Community Engagement team via the following email address: [communityengagement@airservicesaustralia.com](mailto:communityengagement@airservicesaustralia.com).

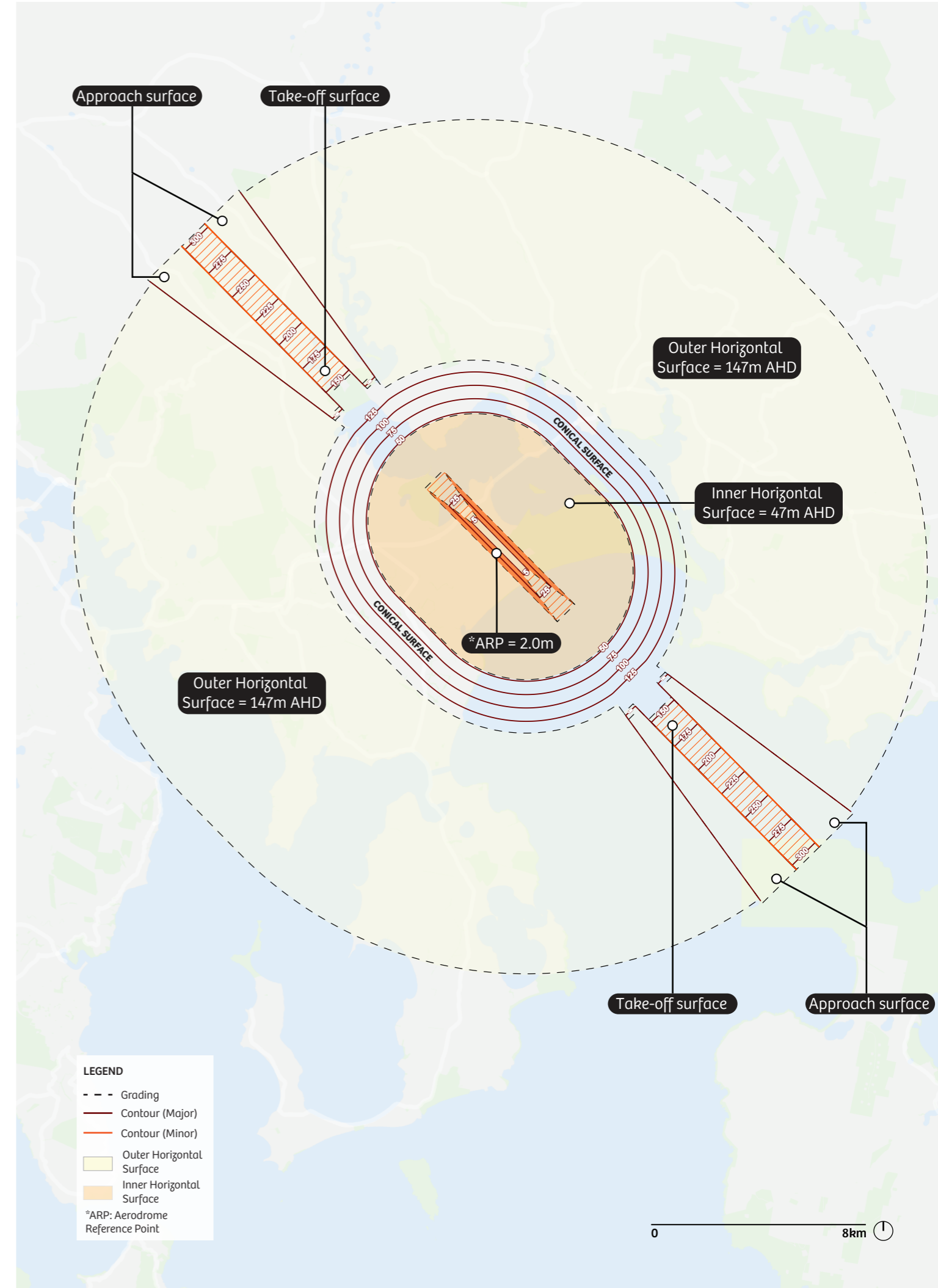


Figure 10.1: Hobart Airport OLS

## 10.3 Performance based navigation

The increasing availability of performance based navigation (PBN) instrument approach procedures allow aircraft to fly more efficient flight paths to and from the runways which in turn can reduce carbon emissions that benefits the environment not only in the immediate airport surrounds but also in a global context. These procedures are based on navigation guidance provided by GPS satellites.

Australia has implemented PBN approach and departure procedures at all airports serviced by regular public transport flights as recommended by the International Civil Aviation Organisation (ICAO), the United Nations agency that sets the standards and recommended practices for international aviation across the world. The PBN approach and departure procedures are recognised globally as the safest, most efficient and environmentally effective flight procedures available today.

The PBN instrument approach procedures that have been implemented at Hobart include:

Required Navigation Performance (RNP) approaches to both Runway 12 and 30 that provide significant flight route length reductions, lower minimum altitudes near the runway, route design that reduces noise to other areas and reduced carbon emissions as well as more reliable scheduled landings; and Baro-VNAV components added to RNAV(GNSS) approaches to both Runway 12 and 30 that provide a lower minimum altitude near the runway and therefore more reliable scheduled landings

Two new instrument approach procedures based on a ground-based navigation system called VOR have also been implemented at Hobart International Airport. These procedures cater for older generation aircraft that use Hobart International Airport. These procedures are not as efficient as PBN but have been designed to provide the most efficient routes to a runway aligned final approach track.

The Standard Instrument Arrivals (STARs) and Standard Instrument Departures (SIDs), along with the new approach and departure procedures have been designed in consultation with local communities so that they limit the noise impact to the maximum extent possible.

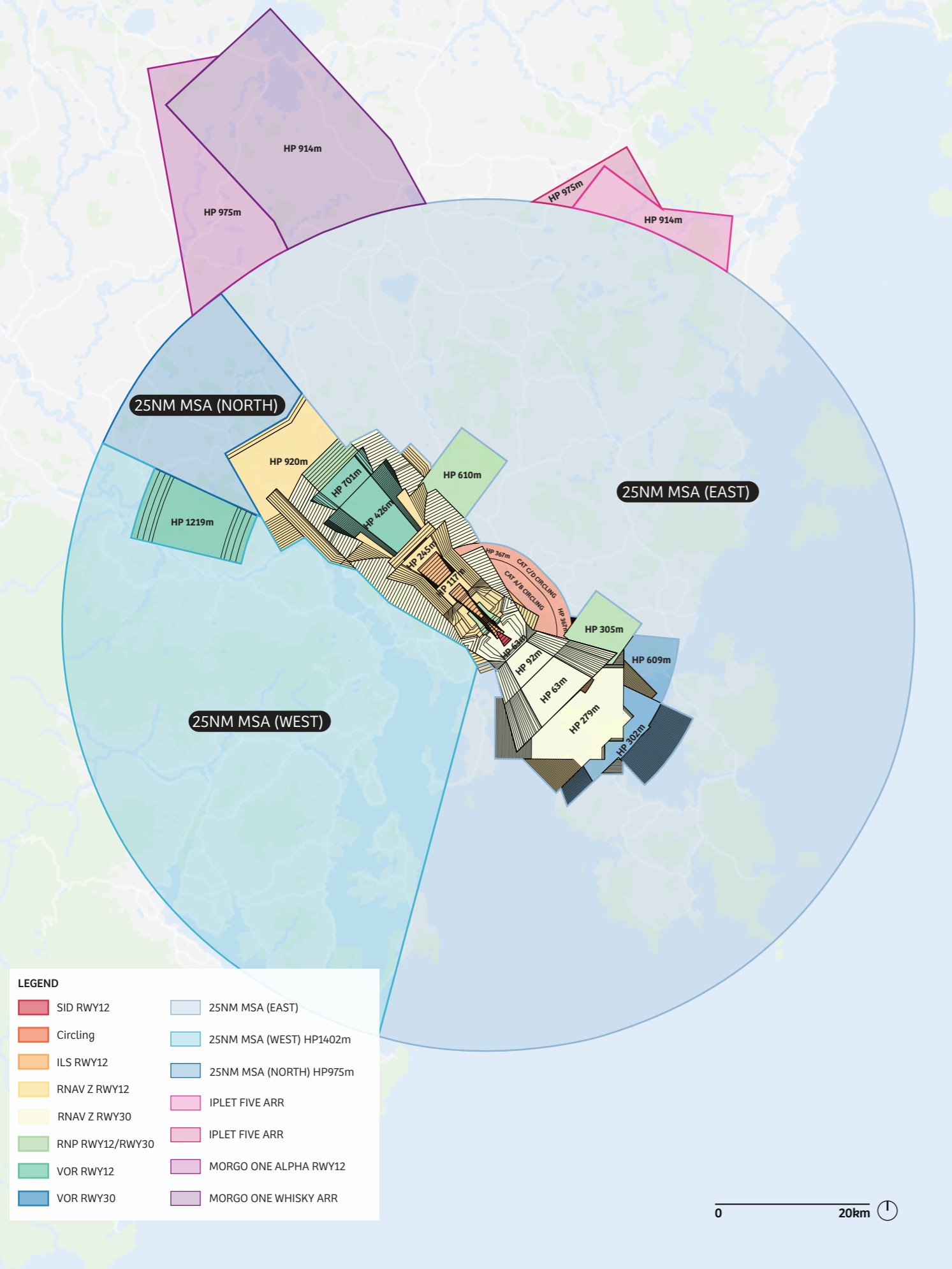


Figure 10.2: Hobart Airport PANS-OPS



## 10.4 National Airports Safeguarding Framework

The intent of the regulations is to protect aircraft operations in the vicinity of aerodromes. The physical layout of the aerodrome and, in particular, its runways determine the associated airspace volumes.

The NASF applies to all commonwealth airports in Australia. The National Airports Safeguarding Framework (NASF) is considered and used to assist with the planning and development around Hobart airport this includes all development activity that may penetrate operational airspace and/or affect navigational procedures for aircraft. This aims to:

- Improve community amenity by minimising aircraft noise-sensitive developments near airports
- Improve safety outcomes by ensuring aviation safety requirements are recognised in land use planning decisions through guidelines being adopted by jurisdictions on various safety related issues
- Pursuant to the NASF agreement, it is the responsibility of each jurisdiction to implement the framework into their respective planning systems. All NASF principles and guidelines are considered for any on-airport development during the development approval process.

NASF is comprised of seven principles and nine guidelines which are shown in the following sections. For further information of the individual NASF guidelines please visit the National Airports Safeguarding Framework Portal via <https://www.infrastructure.gov.au/>.

### NASF Principle:

1.

The safety, efficiency and operational integrity of airports should be protected by all governments, recognising their economic, defence and social significance

2.

Airports, governments and local communities should share responsibility to ensure that airport planning is integrated with local and regional planning

3.

Governments at all levels should align land-use planning and building requirements in the vicinity of airports

4.

Land-use planning processes should balance and protect both airport/aviation operations and community safety and amenity expectations

5.

Governments will protect operational airspace around airports in the interests of both aviation and community safety

6.

Strategic and statutory planning frameworks should address aircraft noise by applying a comprehensive suite of noise measures

7.

Airports should work with governments to provide comprehensive and understandable information to local communities on their operations concerning noise impacts and airspace requirements.

## NASF Guidelines:



### GUIDELINE A

#### Measures for Managing Impacts of Aircraft Noise

Addressed in Chapter 9 Aircraft Noise, the use of a complementary suite of noise metrics, including the Australian Noise Exposure Forecast (ANEF) system and frequency based noise metrics, will inform the strategic planning and provide communities with comprehensive and understandable information about aircraft noise.

Hobart Airport's forecasted ANEF is shown in **Figure 9.5**. The N60 day and night contours are located in **Figure 9.6** and **Figure 9.7**. Additional N Contours are located in **Appendix C - Aircraft Noise Maps**.



### GUIDELINE B

#### Managing the Risk of Building Generated Windshear and Turbulence at Airports

Presents a layered risk approach to the siting and design of buildings near runways and assists land use planners and airport operators reduce the risk of building generated windshear and turbulence to aircraft operations.

Windshear and turbulence effects can present a safety hazard in the form of varied wind conditions for aircraft in their critical phases of flight (take-off and landing). Such conditions may also affect meteorological equipment supplying information to aircraft operators.

If a new building development is proposed within the windshear envelopes shown in **Figure 10.3** and the building penetrates the 1:35 surface, an assessment will be required to assess not only the impact of the new building but also any potential combined effects of existing surrounding buildings.



Figure 10.3: Windshear assessment area

## NASF Guidelines:



### GUIDELINE C

#### Managing the Risk of Wildlife Strikes in the Vicinity of Airports

Provides guidance to help protect against wildlife hazards originating on or off the Airport. Many existing airports are surrounded by areas that are attractive to wildlife, especially birds, but appropriate land-use planning decisions and the way in which existing land-use is managed in the vicinity of airports can significantly reduce the risk of wildlife.

The three buffer zones are consistent with advice from ICAO illustrated in **Figure 10.4** which seek to mitigate the risks of wildlife strikes through land use actions. Specific land uses can be linked to increased wildlife attraction and would result in further monitoring, mitigations or restrictions. For example, a waste facility located within buffer zone A (3km radius) presents a high risk for wildlife strikes and would be listed as an incompatible land use.



### GUIDELINE D

#### Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation

Guideline D provides advice on the location and safety management of these and other similar structures.

Currently there is no specific off-airport planning controls relating to NASF Guideline D. Any wind farm development in close proximity to Hobart Airport or within the Airport Obstacle Limitation Area overlay prescribed under the Safeguarding of Airports Code would be controlled to avoid impacts with aircraft operations.

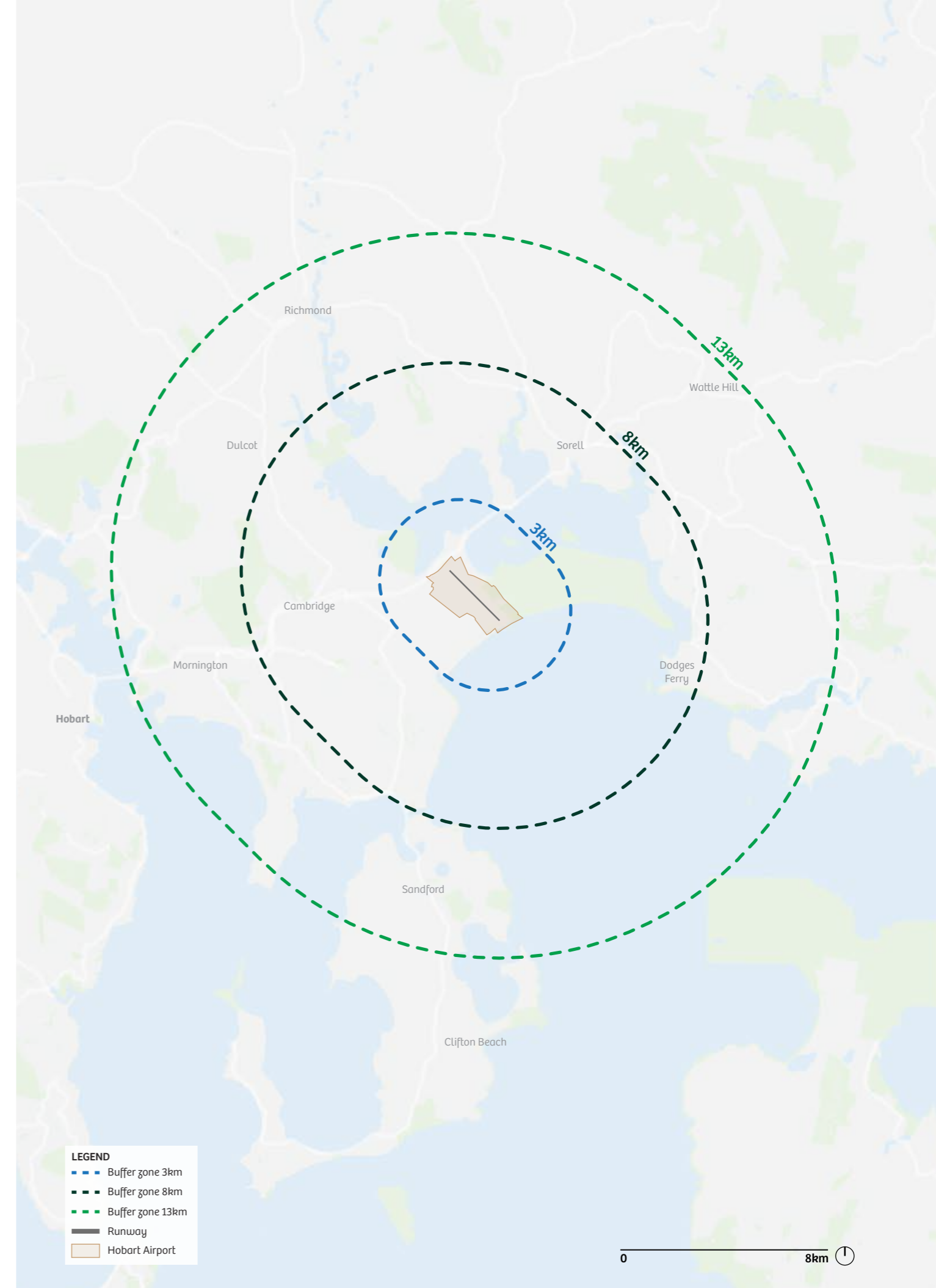


Figure 10.4: Hobart Airport wildlife buffer zones

## NASF Guidelines:



### GUIDELINE E

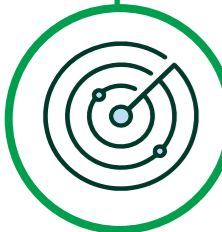
#### Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports

Provides guidance on the risks of distraction to aircraft pilots from lighting (man made and natural reflections or glare) and how these can be minimised or avoided.

Lights within 6 kilometres of the airport fall into a category most likely to be subjected to the provisions of Regulation 94 of the Civil Aviation Regulations 1998 which addresses lighting that has the potential to endanger the safety of aircraft. This regulation forms the basis of NASF Guideline E.

The primary mitigation is the reduction or restriction of light emitted or glare reflected above the horizon from a source, however the colour of light which could cause pilot confusion with aeronautical ground lighting is also a consideration. The proliferation of large scale solar panel arrays on warehouses are an emerging challenge for airports due to the risk of reflections and glare and will be considered by Hobart Airport in development approvals within the light control zones.

A map of the 6km zone from the runway and the four light control zones (A,B,C,D) specific to aircraft approaching and departing from Hobart Airport is illustrated in **Figure 10.5**.



### GUIDELINE F

#### Managing the Risk of Intrusions into the Protected Airspace of Airports

To protect these surfaces outside of the Airport boundary, the OLS (**Figure 10.1**) and PANS-OPS (**Figure 10.2**) are reflected in the Safeguarding of Airports Overlay under the Tasmanian Planning Scheme. The Planning Scheme recognises that the Airport flight paths should be protected from 'inappropriate development' to allow 'safe air navigation for aircraft approaching and departing the airfield'.

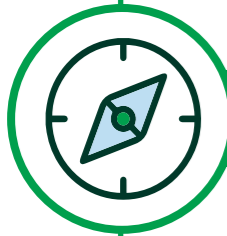
New structures should be designed, or other activities controlled, to ensure that they do not intrude into the present and future prescribed airspace surfaces.

The future developments illustrated and described by Hobart Airport within this Master Plan do not trigger any changes to the OLS or PAN-OPS surfaces. If any future development is identified to impact a protection surface, close engagement with the proponent and Airservices Australia will be undertaken to ensure the development does not pose a hazard to aircraft operations or restrict the operation of the Airport.



Figure 10.5: Maximum lighting intensity zones

## NASF Guidelines:



### GUIDELINE G

#### Protecting Aviation Facilities – Communications, Navigation and Surveillance (CNS)

Communications, navigation and surveillance (CNS) equipment are critical to providing safe and efficient operations for all activities relating to aircraft operations such as approaching an airport runway, navigating between two points in the sky, communicating with air traffic controllers and confirming an aircraft location (on the ground or in the sky) when visual or line of sight confirmation cannot be made.

Primarily CNS equipment is sited and maintained by Airservices or the Department of Defence. When required, these organisations provide mapping of relevant equipment to assess the potential of an infringement and any impact on performance of the equipment or facility.

This guideline assists land use planners during the consideration of these facilities when assessing development proposals, rezoning requests and during development of strategic land use plans. It provides guidance for interactions with Airservices and the Department of Defence on when to consult on development proposals and obtaining up to date geographical locations for these facilities.



### GUIDELINE H

#### Protecting Strategically Important Helicopter Landing Sites

The protection of helicopter landing sites (HLS) from development has been critical in recent years especially those associated with emergency services.

Guideline H seeks to provide a consistent national approach for land-use planning in the vicinity of these facilities. State and territory governments are responsible for identifying HLS that are considered to be of strategic importance, or those that are to be protected in the interest of public safety.



### GUIDELINE I

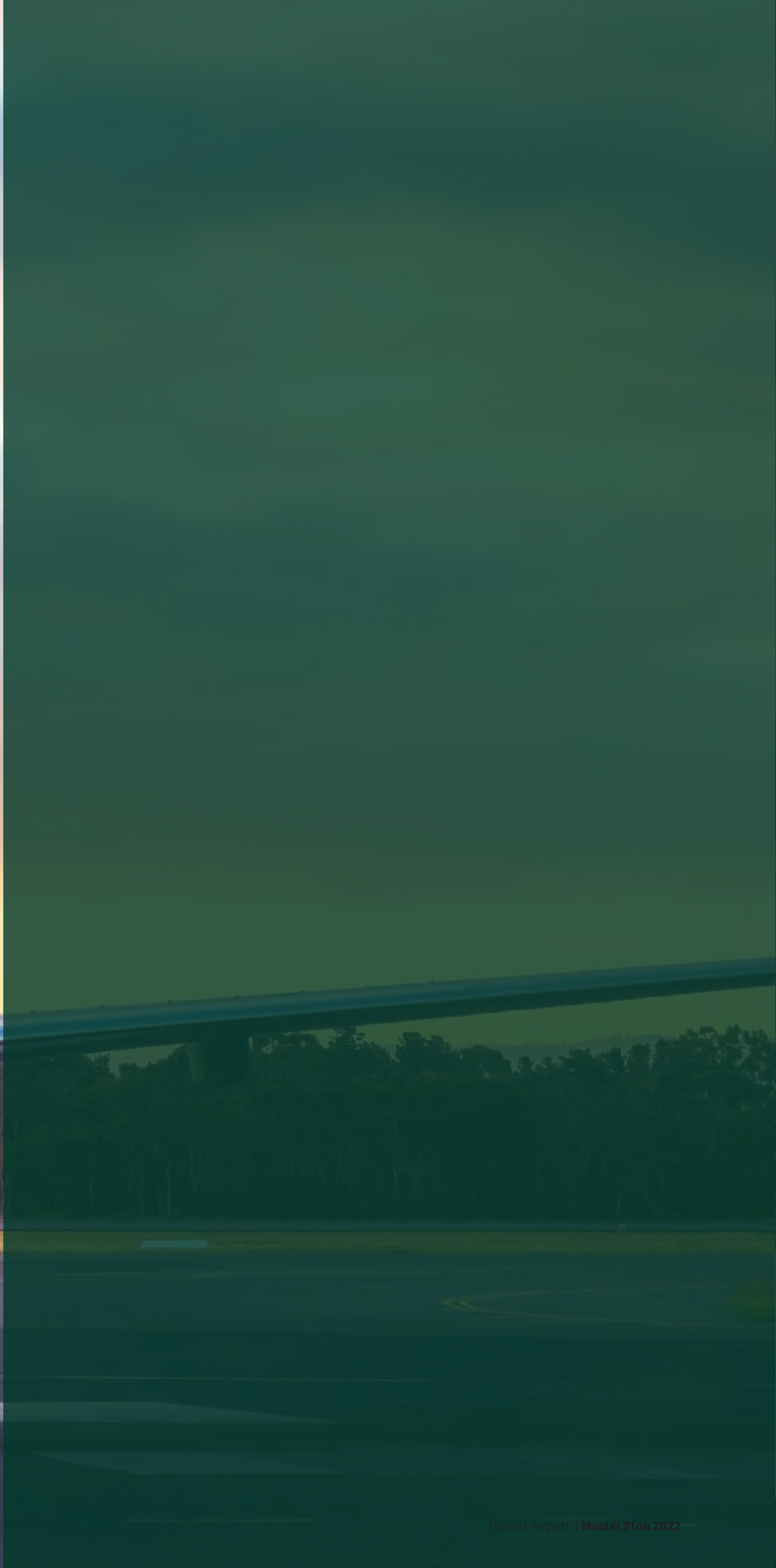
#### Managing the Risk in Public Safety Areas at the Ends of Runways

Public Safety Areas (PSAs) are designated areas of land at the end of airport runways within which certain planning restrictions may apply. While air crashes are rare events, the majority occur in the vicinity of airports during take-off and landing.

The PSA Guideline was developed to mitigate the risk of on-ground fatalities from an aircraft incident, by informing a consistent approach to land-use at the end of Australian airport runways. A PSA map is shown in **Figure 10.6**.



Figure 10.6: Hobart Airport public safety areas





11

# Environment strategy

# Overview

The principles of the Hobart Airport Environment Policy underpin this Environment Strategy. These principles include the following:

- We recognise our responsibility to the Airport environment and actively manage this by integrating sustainability principles into our decision making, planning, design, development, service delivery and procurement processes
- We minimise our environmental impact by aiming for best practice in all activities, undertaking monitoring with a focus on continual improvement
- We actively respond to climate change by managing and reducing carbon emissions
- We are sensitive to and responsible in dealing with matters of indigenous and cultural heritage
- We will comply with relevant legislation and other standards pertaining to the environment
- We are committed to engage, educate and collaborate to ensure we balance environmental, social and business needs as we operate and grow

## 11.1 Environment strategy

Hobart Airport is located in an area surrounded by a mix of residential, rural, commercial, industrial and recreational land uses. This includes Llanherne Golf Club (adjacent to the western boundary), The Pines Landscape and Garden Supplies Store (100 meters north-east of the northern boundary), Barilla Bay Oyster Farm (offices 50 meters to the north), Seven Mile Beach and dune system (within the Airport boundary), and rural residential areas (1 kilometre south-east in Acton Park).

Hobart Airport's Environment Strategy has been prepared to meet the requirements of the Airports Act. More specifically, this strategy details:

- The environmental management framework
- Areas of environmental significance
- Potential sources of environmental impact
- Measures we take to prevent, control or mitigate environmental impacts

Our objectives and commitments against each of the key areas of focus include:

- Biodiversity
- Land
- Water
- Climate change
- Waste
- Cultural heritage
- Local air quality
- Ground-based noise
- Hazardous materials



## 11.2 Key achievements 2015-2021

Hobart Airport has delivered a number of significant environmental and cultural achievements since the 2015 Master Plan.

### Biodiversity

**2017**

Echidna Tracking and Relocation Project was undertaken which involved working with the University of Tasmania to determine a suitable management approach for echidna movements airside.

**2019**

A 'virtual fence' was installed along a 1km area that was subject to high numbers of wildlife roadkill. In the first 12 months it resulted in a 63% reduction in animal fatalities compared to the previous year.

**2021**

A mosaic burn of Environment Protection and Biodiversity Conservation Act listed grasslands was undertaken in consultation with traditional land managers. This process was intended to improve the integrity of the grassland, while offering an educational opportunity for other land management agencies and Hobart Airport. It also provided an opportunity to strengthen relationships with First Nations people and understand traditional land management practices.

### Cultural heritage

**2021**

Hobart Airport commenced their reconciliation journey in consultation with Reconciliation Tasmania and developed their Reflect Reconciliation Action Plan.

### Climate change

**2017**

Achievement of Airports Council International (ACI) Airport Carbon Accreditation (ACA), Level 2 Carbon Accreditation.

**2018**

Hobart Airport completed a High Intensity Runway Light Project, replacing Halogen with LED lighting improving operations and reducing emissions and energy use by approximately 20%.

**2020**

Installation of a new baggage claim conveyor belt system reducing energy consumption by almost 70%.

**2022**

Submission of ACI ACA, Level 3 Carbon Accreditation for the 2021 year.

### Waste

**2019**

Waste Segregation Project diverted an additional 20% of general waste from landfill. This was largely achieved by segregating terminal waste into three streams: co-mingled recycling (glass, plastics and paper), organics waste and general waste.

The Administrative Office introduced six stream waste segregation (organics, soft plastics, paper, cardboard, landfill, glass)



## 11.3 Environmental management

Under the Airports Act (Division 3 Section 70 (2)) in relation to environmental management, an Airport Master Plan details the airports lessee's plans to:

- Ensure all airport operations are undertaken in accordance with relevant environmental legislation and standards
- Establish a framework for assessing legislative compliance in relation to environmental matters
- Promote continual improvement of environmental management at the airport

Through the application of this Environment Strategy, Hobart Airport's aim for environmental management is to promote continuous improvement and minimise potential adverse impacts as a result of airport activities. These can be achieved through the application of regulations, allocation of responsibilities and comprehensive environmental management systems and processes, which includes ongoing monitoring and reporting. The framework for environmental management at Hobart Airport (**Figure 11.1**) consists of:

- Key Commonwealth and Tasmanian environmental legislation and regulations
- Hobart Airport 2022 Master Plan which includes the Airport Environment Strategy
- Regulatory oversight by the Commonwealth Government, the Airport Environment Officer and Airport Building Controller

### Environmental responsibilities and training

Hobart Airport adopts a continuous improvement and risk-based approach to environmental management. Management systems and specific responsibilities are used to achieve a high standard of environmental management. Hobart Airport more broadly, consists of other businesses and organisations on the airport site conducting a diverse range of aviation and nonaviation activities. Hobart Airport's responsibility is to ensure tenant and contractor operations are managed appropriately, comply with Hobart Airport's environmental policies, the AEPR and prevent environmental harm.

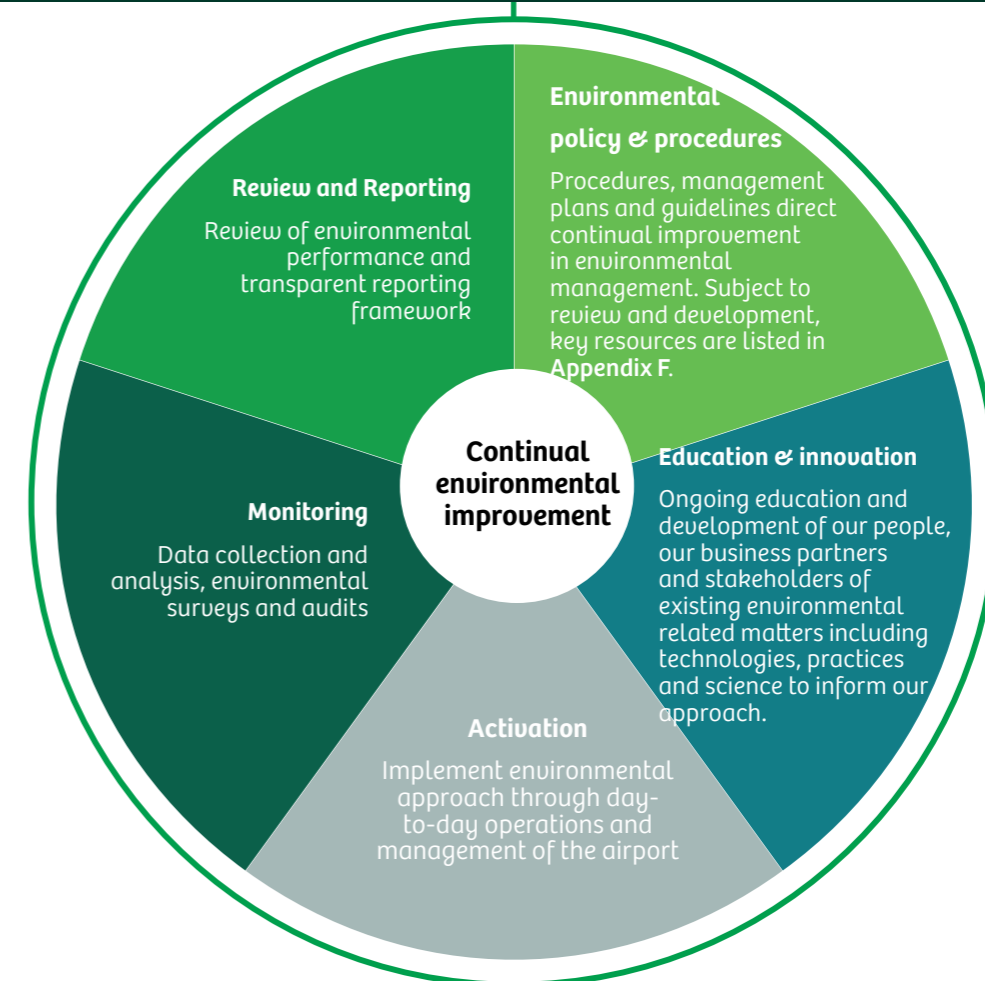
All users at Hobart Airport are involved in environmental training, which is specific to their role at Hobart Airport to ensure awareness and responsibility for the environment. Project specific related training includes:

- Asbestos awareness
- Wildlife management
- Waste segregation
- Noise exposure
- Chemical contaminants
- Weed management

Contractors and tenants at Hobart Airport must prepare a site-specific construction environmental management plan (CEMP) and operational environmental management plan (OEMP), where necessary, to ensure appropriate environmental management procedures are in place prior to works/operations commencing. Hobart Airport has developed CEMP and OEMP Guidelines that describes airport-wide requirements for inclusion in the respective CEMPs and OEMPs.

Environmental legislation and regulations	
Commonwealth	State Government
<ul style="list-style-type: none"> <li>• Airports Act 1996 (amended 2018)</li> <li>• Airports (Building Control) Regulations 1996</li> <li>• Airports (Environment Protection) Regulations 1997</li> <li>• Airports Regulations 1997</li> <li>• Environmental Management and Pollution Control Act 1994 (EMPCA)</li> <li>• Environmental Management and Pollution Control (Waste Management) Regulations 2020</li> <li>• Environment Protection Biodiversity and Conservation Act 1999</li> <li>• Hazardous Waste (Regulation of Exports and Imports) Act 1989</li> <li>• National Environment Protection (Assessment of Site Contamination) Measure 1999, (amended May 2013)</li> <li>• National Water Quality Management Strategy</li> <li>• PFAS National Environmental Management Plan 2.0 [HEPA 2020], as amended from time to time;</li> <li>• Weed Management Act 1999</li> </ul>	<ul style="list-style-type: none"> <li>• Land Use Planning and Approvals Act 1993</li> <li>• Nature Conservation Act 2002</li> <li>• Threatened Species Protection Act 1995</li> <li>• Tasmanian Forest Practices Act 1985</li> </ul>

### Hobart Airport Master Plan - Environment Strategy



**Figure 11.1:** Environment management framework

**Note:** Updated legislation will be applied when required.

**Table 11.1** specifies key environmental management responsibilities for personnel at Hobart Airport.

**Table 11.1:** Environmental responsibilities of personnel

Personnel	Responsibilities
<b>Hobart Airport Board and Executive</b>	<ul style="list-style-type: none"> <li>• Performance of Hobart Airport</li> <li>• Regular policy review</li> <li>• Ensuring appropriate allocation of resources</li> </ul>
<b>Hobart Airport Management and Staff</b>	<ul style="list-style-type: none"> <li>• Management of performance, incidents and improvement opportunities</li> <li>• Resource prioritisation</li> <li>• Ensuring statutory requirements and responsibilities are included within all relevant tenant leases and licences, to ensure operations are managed appropriately, complying with Hobart Airport’s environmental policies, relevant regulation and legislation</li> <li>• Ensuring contractors and tenants perform their legal responsibility to minimise environmental impacts by performing regular audits and spot checks</li> <li>• Development and delivery of relevant inductions, training and communications</li> <li>• Managing incidents reported from staff, tenants and contractors</li> <li>• Regular monitoring and reporting of key environmental parameters.</li> <li>• Communication and collaboration with the Commonwealth and the Airport Environment Officer (AEO)</li> <li>• Integration of environmental parameters within contracts, consultancies, developments and operational works</li> </ul>
<b>Contractors and Tenants</b>	<ul style="list-style-type: none"> <li>• Integrate relevant regulations and approvals in project/works planning and daily operations</li> <li>• Maintain a CEMP for all construction activities which interact with the environment</li> <li>• Review and maintain OEMP for Tier 1 tenants and others as necessary</li> <li>• Plan, identify and address environmental risks on projects and implement the appropriate mitigation measures</li> <li>• Complete induction requirements</li> <li>• Report and learn from incidents and hazards</li> </ul>

### Management systems and processes

Hobart Airport uses a risk-based approach to environmental management in accordance with the AEPR 1.06, 4.04 and the Airport Regulations 5.02B. The BA365 system supports this management approach, along with the Environmental Risk Register that captures environmental risks, impacts and respective mitigation measures.

BA365 provides the mechanism to report and track:

- Incident and hazard reporting, registers and actions
- Investigations
- Training and personnel compliance certification and licencing
- Regular reviews and updates of management plans in accordance with AEPR 4.04
- Scheduled activities

In addition, Hobart Airport’s Document Management System stores all approved environmental related policies and procedures. The system also enables tracking of review dates and version control.

### Monitoring

Environmental monitoring is a key part of environmental management and includes routine monitoring and ad hoc or incident related monitoring as described in **Table 11.2**. In accordance with the AEPR, Hobart Airport monitors the levels of pollution in the air, water or soil to evaluate compliance, identify issues and obtain environmental performance information as well as identify opportunities for improvement.

### Incident management

Hobart Airport manages incidents and reporting in accordance with regulations and legislation detailed in **Figure 11.1**. Incident risk, reporting, triggers and actions are documented in the Incident Escalation Matrix and Incident Management Procedure. Further, specific triggers for reporting incidents will be contained within site management plans, in accordance with the AEPR 6.04 and 6.05. All staff, tenants and contractors must report incidents and near miss activities to Hobart Airport. Integrated into the BA365 system, incident reporting and subsequent review allow for corrective actions to be undertaken, with a longer term view to improve environmental performance across all Hobart Airport operations. Future remediation efforts will include incidents and operations involving fuel and will be undertaken in accordance with the regulations and legislation listed in **Figure 11.1**.

### Environmental reporting

Regular audit and reviews of projects, contractors and operations provide opportunities to improve environmental practices and compliance with the AEPR. Environmental reporting is a key component of Hobart Airport’s risk management framework. Risk registers and incident data are reported and reviewed by the Board of Directors, CEO, and Hobart Airport staff on a regular basis. Under the AEPR, Hobart Airport as the ALC is required to prepare and submit an Annual Environment Report (AER) to the Commonwealth via the AEO. The AER reports on the environmental performance of the Airport on an annual basis.

### Tenancy auditing

Tenancy auditing requirements are determined by the tenant’s operational activities and associated environmental risk levels in accordance with the regulations and legislation listed in **Figure 11.1**. Tier 1 tenants are those who undertake activities with the highest likelihood to significantly impact environmental values. Tier 1 tenants (high environmental risk tenants) are required by Hobart Airport to provide evidence of a functional OEMP. High environmental risks include, fuel stations and storage, car rental agencies, and hazardous chemicals storage. Tier 2 and Tier 3 tenants (lower environmental risk tenants) undertake lower risk activities and are audited every 2 - 3 years (respectively).

**Table 11.2:** Overview of environmental monitoring and reporting

Monitoring and reporting activity	Frequency	Supporting documents (reporting and monitoring complies with the relevant environmental legislation and regulations detailed in Figure 11.1)
<b>Biodiversity</b>		
Threatened flora management	Annually (or as required)	<ul style="list-style-type: none"> <li>Hobart Airport Seven Mile Beach Conservation Area Management Plan 2017-2022</li> <li>Hobart Airport Weed Management Plan 2019</li> <li>Hobart Airport Grassland Aboriginal Land Management and Monitoring Plan 2022</li> <li>Wildlife Hazard Management Plan 2022</li> <li>Site specific Remediation Action Plans</li> </ul>
Weeds	Ongoing	
Fauna		
<b>Land</b>		
Hazardous materials	As required and through tenant audit procedures	<ul style="list-style-type: none"> <li>Storage and Handling of Contaminated Substances Procedure</li> <li>Audits of CEMP and OEMP, as necessary</li> <li>Site specific stockpile management plans</li> </ul>
Soil contamination	As required	
<b>Water</b>		
Ground water monitoring	Annually	<ul style="list-style-type: none"> <li>Hobart Airport PFAS Management Strategy and Implementation Plan 2020</li> <li>Contaminated sites register</li> </ul>
Surface water monitoring	Bi-annually	
Tier 1 Tenant ground and/or water sampling	As specified in OEMP or as part of tenant audit requirements	
Interceptor traps		
<b>Climate change</b>		
Climate risk register	Annually	<ul style="list-style-type: none"> <li>Climate Change Adaptation Plan 2020</li> <li>Integrated Carbon Management Plan 2022</li> </ul>
<b>Waste</b>		
Water consumption	Monthly / Annually	<ul style="list-style-type: none"> <li>Waste Management Strategy 2021-24</li> </ul>
Electricity consumption		
Waste and diversion activities/volumes		
Carbon footprint - Greenhouse Gas (GHG) Calculator and reporting		
<b>Cultural heritage</b>		
Historic heritage surveys	As required	<ul style="list-style-type: none"> <li>Hobart Airport's Cultural Heritage Management Plan 2020</li> <li>Hobart Airport Reconciliation Action Plan 2022</li> </ul>
Indigenous heritage surveys		
<b>Local air quality</b>		
Air quality monitoring	As required	<ul style="list-style-type: none"> <li>Tenant environmental risk level determination as specified by individual lease arrangements.</li> </ul>
<b>Ground-based noise</b>		
Ground-based noise monitoring	As required	<ul style="list-style-type: none"> <li>Tenant environmental risk level determination as specified by individual lease arrangements.</li> </ul>
<b>Other</b>		
Tenancy audits	1-3 years (based on tenancy types)	<ul style="list-style-type: none"> <li>AEPR</li> </ul>
Incident reporting and management	As required	
BA 365 (reporting and management framework)		
Site Management Plan		

## 11.4 Biodiversity

### Objectives

- Identify, observe and conserve biodiversity values at Hobart Airport
- Undertake appropriate wildlife management

Biodiversity values are significant across areas of land managed by Hobart Airport. Our environmental efforts focus on the variety of flora and fauna species including the terrestrial, marine and freshwater ecosystems they are associated within.

Our operations are conscious of the adjacent environmental land values, such as Barilla Bay where the Ramsar significant wetland Pittwater-Orielton Lagoon (PWOL) is located and recognised as significant with relation to migratory and shore birds, saltmarshes and general biodiversity. The biodiversity values at Hobart Airport are identified as Environmentally Significant Areas (ESA) shown in **Figure 11.4** (in accordance with section 71(2)(h) of the Airports Act). The ESAs consist of known flora and vegetation communities that have high biodiversity and/or conservation values, identified by the relevant Tasmanian and Commonwealth conservation bodies. It is appreciated that the identified flora and vegetation communities are consistent with the threatened ecological communities (TEC) listed under the Environment Protection and Biodiversity Conservation Act. If development is to be proposed in or within proximity to a mapped ESA or TEC, an environmental assessment of the potential impacts would be required in accordance to the Commonwealth assessment guidelines and the Airport Environmental Protection Regulations 1997.

No changes have been made to the management and/or extent of the ESAs since the 2015 Hobart Airport Master Plan.

### Flora

Hobart Airport includes flora and collective vegetation communities that are environmentally significant at both Commonwealth and State levels. **Table 11.3** identifies the known Commonwealth and State threatened plant and vegetation communities species within Hobart Airport. The known State threatened flora and vegetation communities species are mapped on **Figure 11.2**.

### Weeds

The Airport is surrounded by a range of land use types, predominantly rural residential areas, semi-industrial areas and coastal environments. Combined with the nature of activities on airport land and the level of maintenance and disturbance required, the Airport is susceptible to weed invasion and potential infestation of species that exist within the surrounding land areas. Weed management at the Airport is an ongoing maintenance task, required for operational, legislative and environmental reasons.

Weeds of National Significance (WONS) are those species listed at the Commonwealth level that have been identified due to their invasiveness, impacts on the environment and potential for spread and socioeconomic impacts. Declared weeds are those listed at a state level in Tasmania under the Weed Management Act 1999, and environmental weeds comprise all other weed species. Hobart Airport undertakes ongoing weed management to mitigate potential impacts from weed invasion.

### Fauna

A targeted fauna assessment undertaken in 2014, identified potential habitat on Airport land for threatened fauna species. The fauna species that were identified during the field survey and regular camera trap observations are located in **Table 11.4**. Hobart Airport prepares species abundance reporting in accordance with the Wildlife Hazard Management Plan 2020. The Plan ranks species in terms of safety risk associated with aircraft, and associated management approaches and activities.

As an example, the Echidna Tracking and Relocation Project undertaken in 2017 assisted our understanding of the species movements and identification of suitable management approaches to safely relocate echidnas away from the runway. **Tables 11.5** identifies the high and moderate risk species to Hobart Airport operations.

**Table 11.3:** Known environmentally significant flora and vegetation communities

Vegetation of National and State Significance	
Commonwealth Matters of National Environmental Significance (EPBC 1999)	
Threatened ecological communities	Status
Lowland Native Grassland of Tasmania	Critically Endangered
Tasmanian Forests and Woodlands dominated by black gum or Brookers gum ( <i>Eucalyptus ovata</i> / <i>E. brookeriana</i> )	Critically Endangered
Subtropical and Temperate Coastal Saltmarsh	Vulnerable
Known threatened flora species	Status
Milford Leek-orchid ( <i>Prasophyllum milfordense</i> )	Critically Endangered
Swamp Everlasting, Swamp Paper Daisy ( <i>Xerochrysum palustre</i> )	Vulnerable
State listed vegetation communities (Nature Conservation Act 2002)	
Threatened vegetation communities	Status
Forest and woodland ( <i>Eucalyptus ovata</i> )	Endangered
Coastal forest and woodland ( <i>Eucalyptus viminalis</i> – <i>Eucalyptus globulus</i> )	Vulnerable
State listed threatened flora (Threatened Species Protection Act 1995)	
Known threatened flora species	Status
Lemon Beauty Heads ( <i>Calocephalus citreus</i> )	Endangered
Poison lobelia ( <i>Lobelia pratioides</i> )	Vulnerable
Leafy Groundsel ( <i>Senecio squarrosus</i> )	Rare
Narrow New-Holland daisy ( <i>Vittadinia muelleri</i> )	Rare
Roundleaf Wilsonia ( <i>Wilsonia rotundifolia</i> )	Rare
Variable Raspwort ( <i>Haloragis heterophylla</i> )	Rare
Woolly New-Holland Daisy ( <i>Vittadinia gracilis</i> )	Rare



**Figure 11.2:** Threatened vegetation communities

**Table 11.4:** Fauna species identified at Hobart Airport

Fauna species	Commonwealth status (EPBC)	State status
Tasmanian Devil ( <i>Sarcophilus harrisi</i> )	Endangered	Endangered
Southern brown bandicoot ( <i>Isodon obesulus</i> )	Endangered	Not listed
Spotted-tailed Quoll ( <i>Dasyurus maculatus</i> )	Vulnerable	Rare
Eastern-barred bandicoot ( <i>Perameles gunni</i> )	Vulnerable	Not listed
Tussock skink ( <i>Pseudemoia pagenstecheri</i> )	Not listed	Vulnerable
Tasmanian Beltong ( <i>Bettongia gaimardi</i> )	Not listed	Not listed
Short-beaked Echidna ( <i>Tachyglossidae aculeatus</i> )	Not listed	Not listed
Tasmanian Pademelon ( <i>Thylogale billardierii</i> )	Not listed	Not listed
Bennett's Wallaby ( <i>Macropus rufogriseus</i> )	Not listed	Not listed
Brush-tail Possum ( <i>Trichosurus vulpecula</i> )	Not listed	Not listed

**Table 11.5:** Identified high risk and moderate risk species to Hobart Airport operations

High risk species	Moderate risk species
European rabbit ( <i>Oryctolagus cuniculus</i> )	Australian Magpie ( <i>Gymnorhina tibicen</i> )
Echidna ( <i>Tachyglossidae</i> )	Black Currawong ( <i>Strepera fuliginosa</i> )
Masked lapwing ( <i>Vanellus miles</i> )	Black-faced Cormorant ( <i>Phalacrocorax fuscescens</i> )
Pacific gull ( <i>Larus pacificus</i> )	Chestnut Teal ( <i>Anas castanea</i> )
Silver gull ( <i>Chroicocephalus novaehollandiae</i> )	Common Starling ( <i>Sturnus vulgaris</i> )
Tasmanian Native Hen ( <i>Tribonyx mortierii</i> )	European Brown Hare ( <i>Lepus europaeus</i> )
Yellow-tailed black cockatoo ( <i>Zanda funerea</i> )	Forest Raven ( <i>Corvus tasmanicus</i> )
	Galah ( <i>Eolophus roseicapilla</i> )
	Great Cormorant ( <i>Phalacrocorax carbo</i> )
	Grey currawong ( <i>Strepera versicolor</i> )
	Kelp Gull ( <i>Larus dominicanus</i> )
	Musk Lorikeet ( <i>Glossopsitta concinna</i> )
	Pacific Black Duck ( <i>Anas superciliosa</i> )
	Swamp Harrier ( <i>Circus approximans</i> )
	Wedge-tailed Eagle ( <i>Aquila audax</i> )

**Key potential impacts**

Airport related activities that have the potential to impact biodiversity include:

- Mowing and landscaping which may result in habitat loss or destruction and reduce biodiversity and increase opportunities for weed invasion
- Pest and weed control which may impact on non-targeted species
- Tree removal which may impact on habitat or species values
- Planned burning of vegetation
- Land clearance for construction projects e.g. roads, car parks, new developments
- Construction activities that have the potential to generate dust, noise and changes to surface water and groundwater conditions
- Construction and operational activities that have the potential to impact on adjacent Ramsar listed wetland values
- The generation of noise and light pollution during construction of airport infrastructure and operation of the airport

### Management actions

Potential impacts to biodiversity values will be avoided or minimised by:

- All threatened grassland areas are regularly monitored and managed to remove weeds and ensure viability of species regeneration in accordance with the Hobart Airport Grassland Management Plan
- Weed control activities are undertaken and reviewed annually in accordance with the Hobart Airport Weed Management Plan. Weeds are prioritised based on current listing (i.e. WONS, State Declared or environmental weeds), operational reasons or areas that are at risk of weed transfer
- Fauna and flora monitoring and project specific investigations are undertaken (as required), including mapping, condition monitoring of vegetation communities and targeted flora and fauna investigations in accordance with the Hobart Airport Wildlife Hazard Management Plan
- Airport tenants, contractors and operators are required to ensure appropriate measures are implemented to manage potential impacts to biodiversity values associated with specific activities
- Monitoring of fauna using camera trap technology and incorporate findings into the Hobart Airport Wildlife Hazard Management Plan.

Hobart Airport’s commitment to avoiding, reducing and managing impacts associated with biodiversity is outlined in **Table 11.6**.

**Table 11.6:** Biodiversity targets

Biodiversity targets	Timeframe
Undertake Grassland Cultural Burning (under EPBC Act)	Short term 1-2 years
Update Seven Mile Beach Conservation Management Plan	
Condition assessment of the Commonwealth listed Saltmarsh community east of the runway	
Ecological assessment of the acquired land on Barilla Bay	
Targeted floristic assessment of orchid species in areas of high likelihood	Long term 3-5 years
Assessment of EPBC Act listed species and targeted threatened species populations during optimal flowering periods and update environmental mapping	Annually (at minimum)
Liaison with relevant Tasmanian and Commonwealth departments regarding biodiversity issues	
Ensure all CEMPs and OEMPs incorporate measures such as silt traps, run-off control to avoid, mitigate and minimise potential adverse impacts to biodiversity values	
Raise awareness of biodiversity values and opportunities to enhance values through tenant audits	
Monitor and manage weeds and pests	
Review operational activities and procedures to ensure potential impacts to adjacent Ramsar wetlands are avoided or mitigated through pollution prevention and managing surface water runoff (noting potential impacts are subject to approval under the EPBC Act)	

## 11.5 Land

### Objectives

- To minimise adverse impacts on land and soil and manage and rehabilitate sites of known contamination in accordance with relevant standards and regulations

Hobart Airport carefully manages operations to ensure the Airport does not adversely affect the condition of the land within the Airport boundary and surrounds.

### Environmentally Significant Areas

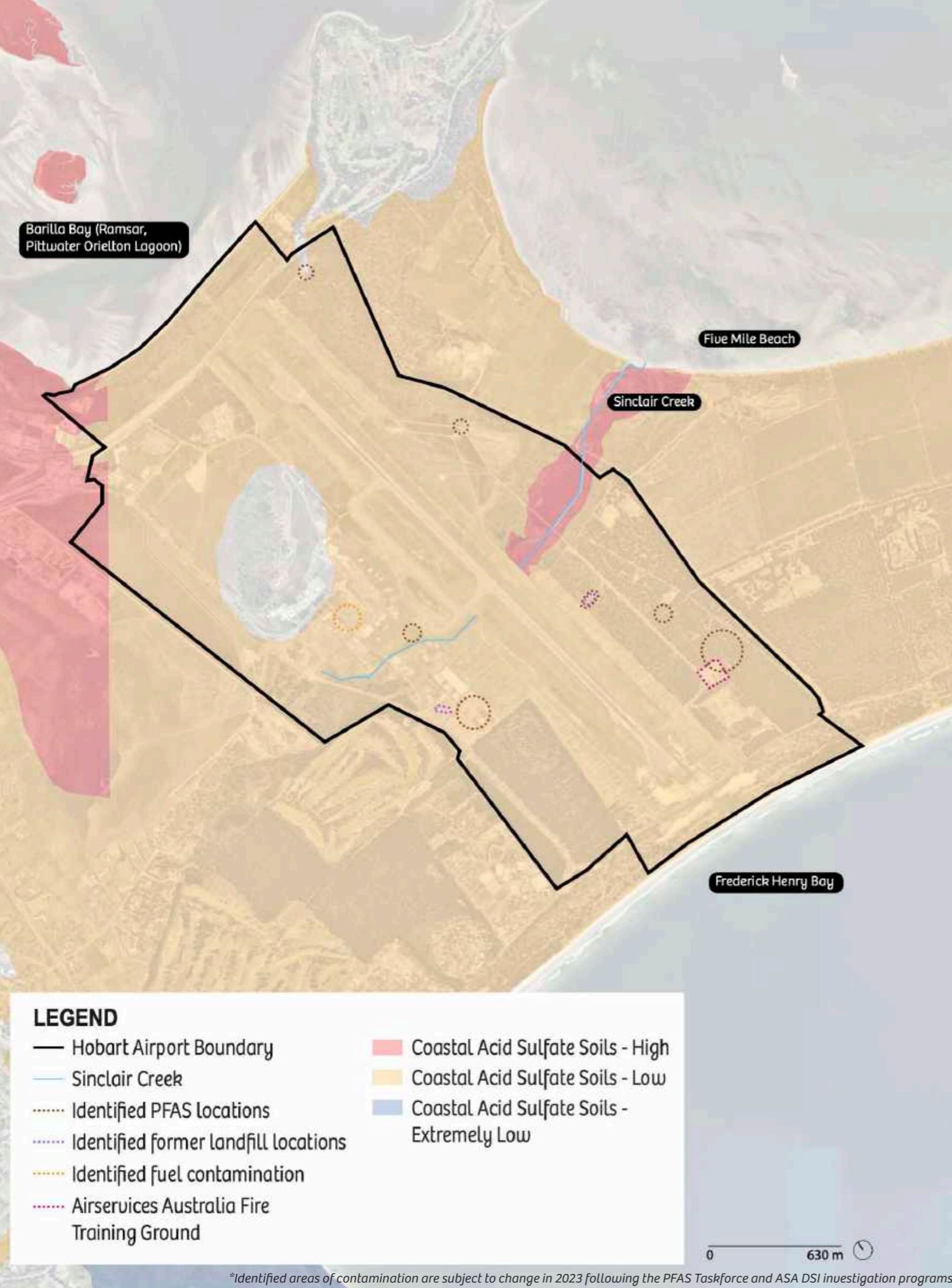
In addition, Hobart Airport manage the identified Environmentally Significant Areas (ESA) shown in **Figure 11.4**. These ESAs consist of flora and vegetation communities that have high biodiversity and/or conservation values, identified in consultation with relevant Tasmanian and Commonwealth conservation bodies. This process aligns with the Airports Act and regulations. No changes have been made to the continuous management and/or extent of ESAs since the 2015 Master Plan.

### Known areas of contamination

Hobart Airport has been extensively modified for, or as a result of, aviation related operations. Standard and historical operations, such as asbestos use, fuel storage and distribution and firefighting training, has resulted in soil contamination at a number of areas within the Airport. The known areas of contamination are identified in **Figure 11.3** including a retired landfill site, PFAS and locations of fuel spills.

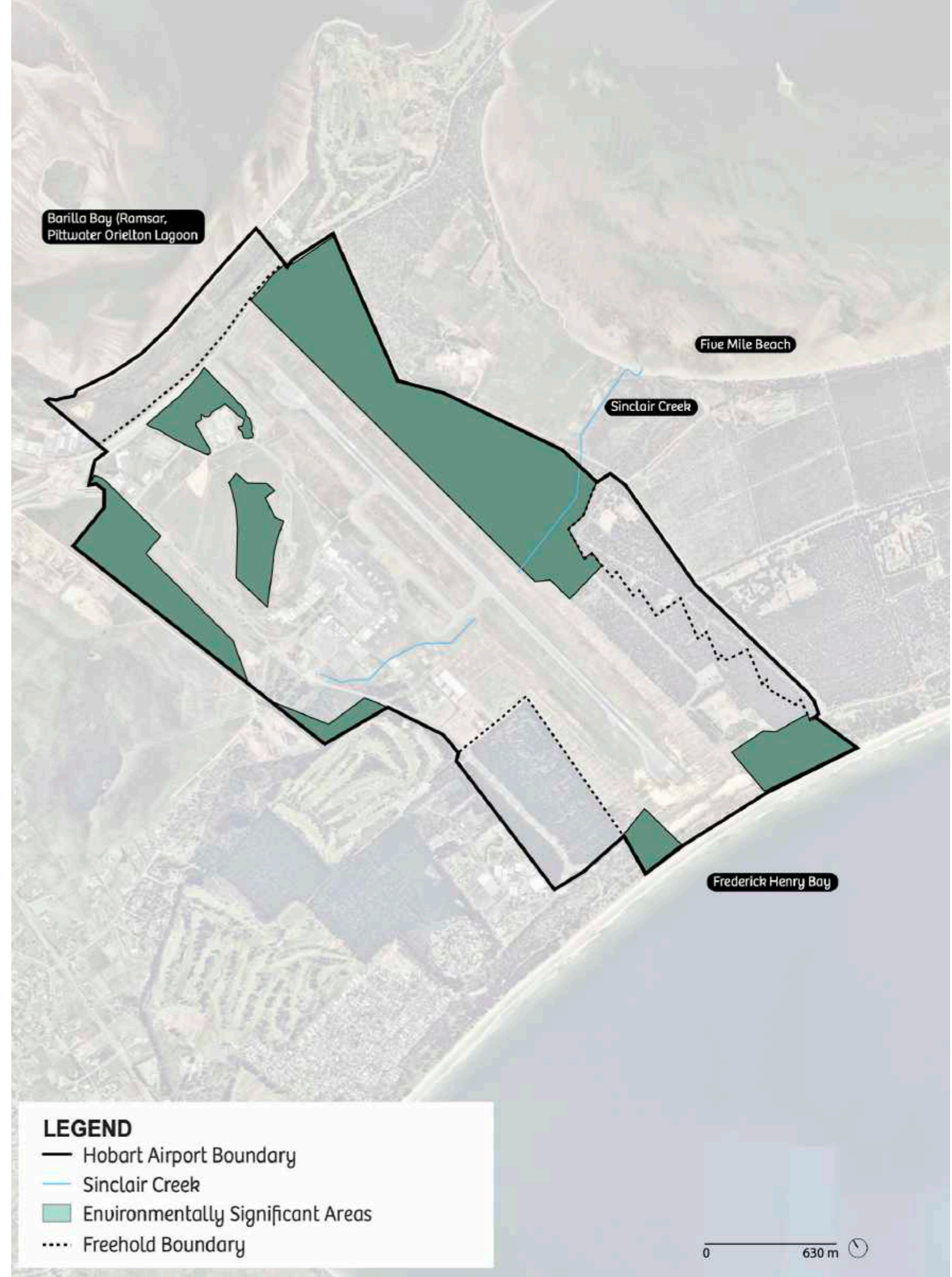
PFAS involves manufactured chemicals that bioaccumulate in the environment and over time the chemicals migrate into surrounding soils, groundwater and surface water. At Hobart Airport, PFAS chemicals were used by various organisations in fire fighting foam. The use of PFAS was phased out in 2010. Since this time a number of investigations have been undertaken to understand the extent of distribution and levels of contamination of PFAS. Hobart Airport has developed a PFAS Strategy and Implementation Plan that identifies the responsibilities and actions required for management of PFAS contaminated areas.

Management of the two retired landfill sites reflects Preliminary Site Investigation findings that determined the two sites contain inert materials considered low risk to environmental and human health risk when left undisturbed.



\*Identified areas of contamination are subject to change in 2023 following the PFAS Taskforce and ASA DSI investigation programs

**Figure 11.3:** Known areas of contamination and acid sulfate soils



**Figure 11.4:** Environmentally Significant Areas



### Key potential impacts

Future development and operational activities at the Airport have the potential to impact on soil through:

- Storage, handling, use and disposal of fuels, oils, chemicals and hazardous materials
- Above ground and underground storage systems for these items
- Inappropriate disposal of waste generated from activities and construction projects
- Vehicle and aircraft maintenance and washing
- Car parking and potential for contaminated runoff from hardstand areas
- Firefighting training
- Disturbance of contaminated soils from excavation activities, former waste disposal sites and asbestos
- Importation of fill
- Landscaping and vegetation removal that may cause erosion

### Management actions

All developments at the Airport undergo an environmental assessment in accordance with Tasmanian and Commonwealth regulations, detailed in **Figure 11.1**. Preventing contamination is an ongoing priority, and all practicable measures are undertaken to minimise the risks of contamination occurring, while ensuring appropriate management of known contamination sites. This is achieved by:

- Appropriate measures included in tenant OEMP to manage and where necessary remediate impacts to soil and water quality associated with their activities
- Implementation of appropriate measures in contractor CEMP to manage potential impacts to soil and water quality associated with their activities
- Monitoring and project specific investigations are undertaken (as required)
- Data sharing from monitoring, reporting and evaluation with regulatory agencies
- SMP16 Stockpile Management
- Annual groundwater and biannual surface water monitoring to assess contamination levels of retired landfill sites
- PFAS management, followed by Hobart Airport to work closely with agencies such as Airservices on projects that relate to PFAS management and remediations
- Airside spills are mitigated and managed in accordance with Hobart Airport's Airside Spill Management Plan
- Contamination testing associated with the removal of hydrocarbon storage systems, in accordance with AEPR 6.07
- Minimising stormwater and wastewater that is contaminated above guideline values from being discharged from the airport into sensitive receiving environments such as Barilla Bay and Pitt Water

### Hobart Airport's commitment

Hobart Airport's commitment to avoiding, managing and reducing impacts associated with land is outlined in **Table 11.7**.

**Table 11.7:** Land targets

Land targets	Timeframe
Undertake investigations to identify, revise and improve management of contaminated areas (including asbestos, hydrocarbons, PFAS etc)	Short term 1-2 years
Decommissioning and removal of remaining underground storage tanks, including contamination testing associated with the removal of hydrocarbon storage systems	
Develop site management plans for the retired landfill sites to incorporate findings from the Preliminary Site Investigation to guide ongoing monitoring and site security	
Review and update Contaminated Sites Register including integration with Geographic Information Systems	Annually (at minimum)
Tenant audits and construction audits will be conducted at a time subject to the duration of the project	
Site specific assessments of potential contaminants prior to disturbance or development	As required
Within tenant OEMP and contractor CEMP incorporate Commonwealth and Tasmanian regulations and guidelines - detailed in <b>Figure 11.1</b> for the management of soil and water	
Implement mitigation measures as part of CEMPs and/or OEMPs where the potential for disturbance of acid sulphate soils exist	
Undertake investigations of potential contaminated sites prior to disturbance or development, including analytical testing where relevant	
Investigate appropriate management options for the storage and disposal of contaminated soil, water and other substances / materials in compliance with regulations detailed in <b>Figure 11.1</b>	
Support and / or undertake remediation actions where required for fuel spills in accordance with regulations detailed in <b>Figure 11.1</b>	

# 11.6 Water

## Objectives

- Minimise the adverse impacts to ground and surface water as a result of Hobart Airport and tenant activities.

Hobart Airport has an extensive internal hydrology network of piped, open lined and unlined drains which provides the majority of stormwater drainage throughout the site. Sinclair Creek, originating upstream of Hobart Airport is a modified drainage line that receives flows from the Meehan Range (south of Hobart Airport), through varied land tenures, via the Airport grounds and ultimately through the EPBC listed saltmarsh into Five Mile Beach and the receiving waters of Pitt Water Orielton Lagoon.

Airservices firefighting training ground at Hobart Airport produces wastewater from training exercises and rainfall. A research and development trial into the treatment of PFAS impacted water was initiated by Airservices in 2017, with the first of two treatment trial processes commissioned in September 2018 on site. The purpose of the trials is to assess the potential for the effective treatment of PFAS impacted wastewater along with other co-contaminants from the training ground.

Detailed site investigations have been undertaken to confirm levels of contamination across the airport site. Management actions/ strategies will be developed following. The PFAS Strategy will be extended to include outcomes of the DSI.

## Key potential impacts

Airport related activities that have the potential to impact surface and/or ground water quality include:

- Above ground storage tanks generally for fuel and oil
- Underground storage tanks (a decommissioning and removal program is in place)
- Known contaminated sites
- Car parking and operational areas
- Vehicle workshops and wash down bays
- Disused landfill sites
- Wastewater treatment plant discharges
- Refuelling activities
- Firefighting training
- General litter; and
- Construction related activities

## Management actions

Monitoring and managing surface and ground water is a key focus of Hobart Airport due to the long term use of the site and the historical use of chemicals, oils and fuels on site and activities offsite that may impact

water quality.

As of 2019, surface water quality monitoring is undertaken twice yearly in March and September. Historical trends demonstrate fluctuations in levels of nutrients and thermotolerant coliforms across Hobart Airport.

Due to the increasing awareness of the emerging contaminant of concern, PFAS, Hobart Airport includes PFAS testing parameters at key ground water and surface water monitoring sites.

Ground water is tested annually on the boundary well network at the site, to satisfy regulatory compliance requirements (detailed in Figure 11.1). Testing results enable the assessment of ground water quality against criteria for protection of human health, environmental health and water quality criteria and to identify possible seasonal variation in contaminant concentrations.

Tier 1 tenants with potential to impact water quality are required to undertake regular ground and surface sampling and where required, apply management approaches to minimise adverse impacts on water quality. Where monitoring involves collection of samples requiring analysis, these are submitted to a National Association of Testing Authorities (NATA) accredited laboratory for analysis. This process is followed by Hobart Airport, contractors and tenants to ensure compliance with regulations (Figure 11.1). Hobart Airport undertakes regular communication with tenants on stormwater control devices, filtering (servicing and maintenance) and the effectiveness of site specific mitigation measures.

## Hobart Airport's commitment

Hobart Airport's commitment to avoiding or reducing impacts associated with water is outlined in **Table 11.8**.

**Table 11.8:** Water targets

Water targets	Timeframe
Support Tier 1 tenants and relevant contractors to ensure compliance with regulations (Figure 11.1) specific to discharge events, complaints and/or impacts	Short term
Develop ground and surface water monitoring program that describes procedure and review process in collaboration with AEO	1-2 years
Liaison with Commonwealth agencies and Air Services to investigate surface and groundwater contamination and to identify new management measures	Annually (at minimum)
Monitoring and investigating water efficiency opportunities across Hobart Airport operations and tenants	
Undertake annual audits and communicate with tenants and contractors regarding storm water control devices (servicing and maintenance) and effectiveness of mitigation measures	
Review Site Management Plan (SMP) relevant to water quality, update in the Data Management System and share with staff, tenants and contractors as relevant	As required
Ensure tenant OEMP and contractor CEMP identify water quality risks and appropriate mitigation measures are in place and effective	

# 11.7 Climate change

## Objectives

- Understand the risks that a changing climate may pose to future development and operations at Hobart Airport
- Minimise the generation of greenhouse gas (GHG) emissions
- Identify and implement appropriate climate change adaptation measures to manage risks

Climate change has the potential to disrupt or damage existing and future infrastructure assets that are essential for operations at Hobart Airport. The long life and criticality of the Airport to Tasmania means addressing climate risk and resilience from the earliest stages of asset planning and project design is increasingly important.

## Key potential impacts

The Climate Change Adaptation Plan 2020 identified the following key potential impacts of climate change:

- Airport disruptions due to damage from extreme events (bushfire, flooding, storm and freeze-thaw cycles)
- Increased frequency and cost of repair and maintenance activities due to extreme weather events (especially repair of electrical conduits systems and pavements)
- Increased exposure of staff and public to extreme events (including heatwaves, storm events, lightning strikes, smoke inhalation, debris and hail) causing increased number of health and safety incidents
- More stringent biosecurity requirements and potential for disease outbreaks due to global increase of communicable diseases due to warmer temperatures

## Management actions

Active measures are implemented to understand and manage our climate change impacts. These include:

- Monitor and reduce our carbon footprint
- Implement measures in the Climate Change Adaptation Plan to increase our understanding of the Airport’s exposure to climate risk
- Integrate climate change considerations across Hobart Airport policy and strategy
- Plan for climate events through procurement, design and construction of major projects and capital work investments
- Review opportunities to reduce disruption from climate hazards to operations, including ongoing operations, repairs and maintenance
- Work with external stakeholders to consider climate risk, including advocacy and interdependencies

## Reducing our carbon footprint

Hobart Airport developed a Carbon Management Plan (2019) to align with the priority areas of the Tasmanian Government’s Climate Change Action Plan (2017-2021). In 2022 Hobart Airport expanded the emissions and

climate change management plans to develop the Integrated Carbon Management Plan (ICMP). This ICMP details how the Airport monitors its carbon footprint, documents changes, and develops improvement measures to reduce its carbon footprint. The ICMP aligns with the Airports Council International (ACI) Airport Carbon Accreditation (ACA) program. The ACA program requires emissions to be reported in line with international Greenhouse Gas (GHG) Protocol accounting standards. Hobart Airport has committed to achieve net zero by 2035 based on 2019 emissions while adhering to the ACA framework.

In 2019 Hobart Airport achieved Level 2 ACA, demonstrating capacity to measure and reduce emissions. Moving forward Hobart Airport is striving to participate in ACA program beyond Level 2. This requires efforts to reduce emissions under the direct control of Hobart Airport, engagement and influence with stakeholders to reduce their emissions and accountability for specified emissions associated with operations. Offsetting unavoidable emissions is a component of the ACA program.

## Hobart Airport’s commitment

Hobart Airport’s commitment to avoiding, managing or reducing impacts associated with climate change are identified in **Table 11.9**.

**Table 11.9:** Climate change targets

Climate change targets	Timeframe
Develop an Energy Strategy that will include information such as existing capacity, existing demand (including EV) as well as options, costs and benefits of expansion into renewables including solar, and LV network upgrades	Short term 1-2 years
Achieve ACA Level 4 Accreditation	Long term 3-5 years
Investigate energy storage projects to reduce electricity consumption and carbon emissions	
Investigate and support the rollout of electric vehicle charging stations	
Investigate Airport-led passenger offset program options, as voluntary choice to offset travel emissions	Annually (at minimum)
Maintain a GHG inventory of Hobart Airport’s emissions	
Investigate actions to guide and influence tenants to achieve carbon reduction from their business operations	
Undertake LED lighting upgrades where feasible for existing and new lighting infrastructure	
Climate change risk assessment and associated actions in relevant areas, such as works, planning, tenant lease	
Investigate ethical offset purchases for unavoidable emissions	
Review of accreditation through the ACA program	

# 11.8 Waste

## Objectives

- Minimise unnecessary use of resources such as electricity, gas and water
- Minimise carbon emissions and the generation of waste requiring disposal to landfill
- Monitor and improve the carbon footprint of the Airport through recycling and recovering of beneficial materials

The majority of Hobart Airport’s waste comes from the terminal building. Waste management services are supplied for the terminal building, car parking areas and Hobart Airport offices. Quarantine waste is a regulatory requirement in Tasmania and constitutes all waste collected from aircraft and in airside areas. All quarantine waste is buried in landfill in accordance with Tasmanian requirements.

Hobart Airport’s Waste Management Strategy aligns with Tasmanian Government’s Rethink Waste initiative, with the aim to avoid waste through the development and implementation of waste management and diversion projects and raise awareness of best practice waste management. Recently Hobart Airport has successfully increased the amount of waste diverted from landfill by 25% based on 2017 levels.

## Key potential impacts

Future development and operational activities that apply to waste and resource use include:

- Recycling, reuse and varied alternatives to landfill
- Electricity for activities such as lighting, air conditioning and refrigeration
- Consumption of fuel for the use of aircraft, vehicles, machinery and plant
- Water consumption for amenities, aircraft and vehicle washing, firefighting, kitchens and cleaning
- Greenhouse gas emissions generated from the use of aircraft, vehicles, machinery and plant

## Management actions

Hobart Airport has implemented the following actions to understand and manage waste:

- Monitor and improve waste and recycling quantities in the terminal
- Assess locations and use of refuse and recycling bins in the terminal and car parks
- Installation of water refill stations to encourage re-use of water bottles
- Include resource use and waste management requirements in tenants lease agreements and/or OEMP
- Engage with tenants and contractors to identify opportunities and specific actions to reduce land and water waste for inclusion in their respective CEMP and/or OEMP in accordance with Tasmanian waste management standards and Hobart Airport’s Waste Management Strategy. Such actions may include:
  - One management body for waste
  - Waste segregation procedures
  - Maintain a waste tracking register

## Hobart Airport’s commitment

Hobart Airport’s commitment to avoiding, managing or reducing impacts associated with waste is identified in **Table 11.10**.

**Table 11.10:** Waste targets

Waste targets	Timeframe
Improve the function and design of the external waste collection station in future Terminal design	Short term
Review and update Hobart Airport’s Waste Management Strategy	1-2 years
Increase the diversion of waste to landfill	Annually (at minimum)
Identify opportunities to improve efficiency in natural resource use, waste reduction and recycling during tenant audits	
Improve segregation of waste in car parking areas	
Monitoring of waste and recycling actions undertaken by contractors	
Identify opportunities for new contractors and tenants to maintain a waste tracking register as part of their CEMP/OEMP in accordance with Tasmanian waste management regulations	
OEMPs and CEMPs to include provision of hazardous waste certification at either, the conclusion of construction works and or annually, as per regulations detailed in <b>Figure 11.1</b>	

## 11.9 Cultural heritage

### Objectives

- Understand, preserve and manage sites of indigenous and non-indigenous cultural and heritage significance
- Comply with key legislative requirements and consult with government departments, community groups and organisations

Hobart Airport has areas of Aboriginal and historic heritage values. The airside land contains a number of documented Aboriginal heritage sites, comprising of isolated stone artefacts, and artefact scatters. The exact location of the heritage sites are confidential, however, all future development and planning at the Airport will consider the existing Aboriginal heritage values of these sites.

The Airport has two recognised historic heritage sites shown in **Figure 11.5**. These sites are:

- **Llanherne House:** a small stone cottage currently used as office space by Airservices. Llanherne House is permanently listed on the Tasmanian Heritage Register (THR)
- **Hobart Air Traffic Control Tower:** Commonwealth heritage listed in 2018. The tower was commissioned in 1958 and is one of the oldest operational towers in Australia

No changes have been made to the management of cultural heritage at Hobart Airport since the 2015 Master Plan.

### Key potential impacts

Airport activities that have the potential to impact Aboriginal and historic cultural heritage values may include:

- Disturbance to Aboriginal heritage values, such as artefact and scatters, during ground disturbance works
- Lack of awareness of historic and Aboriginal heritage values, resulting in disturbance or loss of these values
- Disturbance to heritage assets and inappropriate management, resulting in loss of historic heritage values

### Management actions

Cultural heritage values are managed in accordance with relevant Commonwealth and Tasmanian legislation listed in Figure 11.1. Hobart Airport is guided in management by the following:

- Hobart Airport's Reflect Reconciliation Action Plan (2021)
- Llanherne House Maintenance Cultural Heritage Management Plan

Contractors are required to develop their CEMP in accordance with the relevant legislation. Similarly, tenants lease or OEMP apply relevant legislation to avoid potential impacts to cultural heritage values.

### Hobart Airport's commitment

Hobart Airport's commitment to avoiding, managing or reducing impacts associated with cultural heritage is identified in **Table 11.11**.

**Table 11.11:** Cultural heritage targets

Cultural heritage targets	Timeframe
Review and update the Hobart Airport Cultural Heritage Management and Action Plan	Short term 1-2 years
Implement measures outlined in the Reconciliation Action Plan	Annually (at minimum)
Provide ongoing maintenance to the historic heritage values in accordance with Llanherne House Heritage Management Plan	
Engage with Aboriginal Heritage Tasmania, prior to any development work in areas of previously recorded heritage value	
Prepare unanticipated Discovery Plans in project areas that have previously reported values	
Liaison with State and Commonwealth Government departments and community groups regarding activities that may impact cultural heritage values at the Airport	
Engage with traditional land managers to conduct mosaic burns of EPBC Act listed grasslands within and surrounding the Airport	
Continue to include appropriate heritage management measures in contractors CEMP	
Include appropriate heritage management measures in tenants OEMP and/or lease agreements	
Raise awareness of heritage values through tenant auditing	

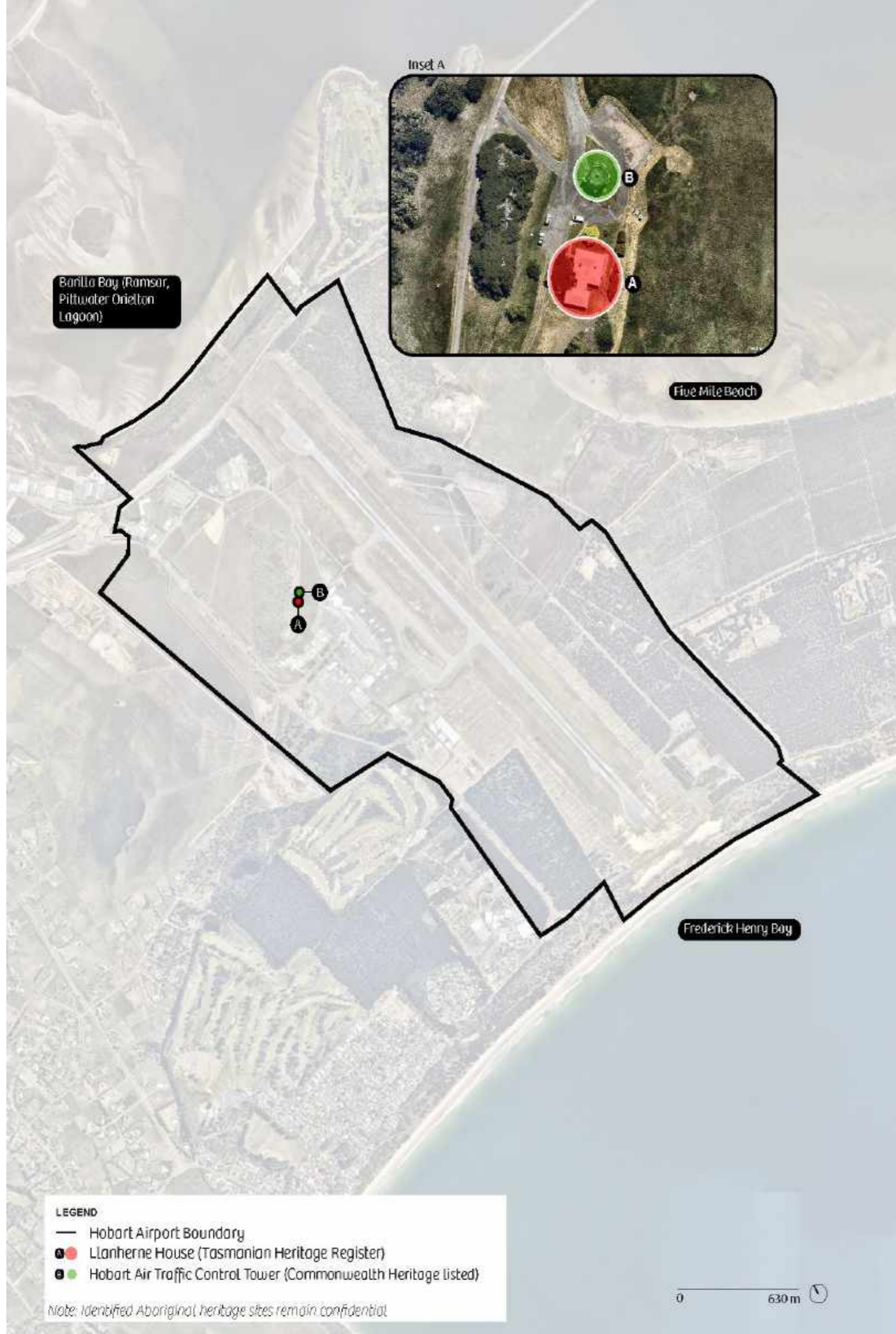


Figure 11.5: Cultural heritage areas



## 11.10 Local air quality

### Objectives

- Minimise impacts to air quality resulting from airport operations
- Continual improvements in the management of ozone depleting substances

National air quality standards are defined in the National Environment Protection (Ambient Air Quality) Measure (Air NEPM). The objective of the Air NEPM is to protect human health from poor air quality.

Under the Airport (Environment Protection) Regulations 1997, Hobart Airport is responsible for managing air emissions generated by ground-based activities within the Airport boundary. Air quality outside the boundary is subject to the provisions of the Tasmanian Environmental Management and Pollution Control Act 1994.

Air emissions generated by aircraft are regulated under separate legislation and are the responsibility of Airservices Australia and airlines.

### Key potential impacts

The key potential environmental impacts of adverse air quality include the release of air pollutants, GHG emissions and ozone depleting substances, dust and smoke generation, reduced visibility, smothering ecological systems, and infrastructure and offensive odours.

Airport related activities that have the potential to impact air quality include:

- Hot fire training exercises and dark smoke emissions by the Aviation Rescue Fire Fighting (ARFF) at the firefighting training grounds
- Removal or damage to asbestos containing material resulting in the release of asbestos fibres
- Vehicle emissions from airport operators, passengers and visitors to the Airport
- Refuelling activities
- Construction and development activities which can lead to dust generation and reduced visibility for aircraft
- The use of air conditioners and refrigerators that use ozone depleting substances
- Vegetation burn offs

### Management actions

Potential air quality issues are managed by:

- Regular compliance inspections, including mandatory CEMPs for operation and construction activities
- Implementation of measures to reduce our carbon footprint demonstrated through adherence to Hobart Airport's Integrated Carbon Management Plan
- Air quality management and mitigation measures in relevant OEMP for tenants and/or lease agreements
- Documentation and reporting, which include hot fire reports, Asbestos Register, ozone depleting substances register and environmental compliance register

### Hobart Airport's commitment

Hobart Airport's commitment to avoiding or reducing impacts associated with local air quality is identified in **Table 11.12**.

**Table 11.12: Air quality targets**

Air quality targets	Timeframe
Review and update of the environmental risk register and environmental compliance register	Short term 1-2 years
ARFF training reports, notifications and liaison as required	Annually (at minimum)
Review and update, where necessary, Hobart Airport's Integrated Carbon Management Plan to identify specific opportunities to reduce our carbon footprint	
Review of contractor CEMPs to ensure potential air quality impacts are addressed	
Liaison with government department regarding air quality initiatives / requirements where relevant to airport operations	
Review and update of the Hobart Airport asbestos and ozone depleting substances register and Geographical Information System (GIS)	
Include in relevant tenant lease agreements and OEMPs management of potential air quality impacts	

## 11.11 Ground-based noise

### Objectives

- Management and mitigation measures to reduce ground-based noise emission from airport operations
- Engage with government and community stakeholders on issues related to ground-based noise emissions.

Noise requirements under legislation and regulations specified in Figure 11.1 apply to noise associated with ground-based airport activities, excluding aircraft noise (except for ground running and idling on aprons). Noise generated while flying, landing, taking off and/or taxiing, is addressed in **Chapter 9**.

### Key potential impacts

While most noise issues relate to aircraft in the air, ground-based noise, if unmanaged, can potentially impact on the local community, airport tenants and the environment. Ground-based noise is generated from a number of sources on the Airport including:

- Road traffic
- Ground running of aircraft
- General vehicle use
- Tenant activities
- Operation of stand-by generation
- Maintenance activities
- Construction and demolition projects

### Management actions

Hobart Airport implements the following measures to avoid and minimise potential impacts associated with ground-based noise:

- Review and implementation of noise control measures in contractor CEMPs and OEMP of relevant tenants
- Tenant and construction audits
- Documentation of noise related complaints received from stakeholders or the public
- Inclusion of activities with potential ground-based noise emissions in the environmental risk register
- Discussion of potential noise related issues on quarterly basis with Community Aviation Consultation Group
- Review of mitigation measures implemented by tenants and effectiveness for ground-based noise during annual audits

### Hobart Airport's commitment

Hobart Airport's commitment to avoiding or reducing impacts associated with ground-based noise is identified in **Table 11.13**.

**Table 11.13:** Ground based noise targets

Ground based noise targets	Timeframe
Monitor complaints register regarding ground-based noise issues	Annually (at minimum)
Undertake noise quality assessments where impacts persist and implement measures to decrease ground base noise activities or impacts	
Participate in government programs or initiatives on noise mitigation schemes	



## 11.12 Hazardous materials

### Objectives

- To ensure the storage, handling and use of hazardous materials is carried out in accordance with applicable legislation and standards

Hazardous materials are defined in the Dangerous Substances (Safe Handling) Act 2005 as ‘substances with the potential to cause harm to persons, property or the environment’. To prevent this potential harm, hazardous materials are handled and used in an appropriate manner.

### Key potential impacts

A number of hazardous materials are stored, handled and consumed within the Airport and remain necessary to airport operations, including:

- Bulk fuel storage and handling
- Refuelling of aircraft and vehicles
- Use of cleaning agents for aircraft and vehicle washdown
- Aircraft, vehicle and mechanical plant and electrical equipment maintenance (i.e. batteries, de-icing chemicals, fuel)
- Handling of asbestos, paint, solvents (and other hazardous materials) during construction, earthworks and demolition
- General airport operation, construction, maintenance and landscaping, including weed and animal pest control (i.e. use of pesticides and herbicides)
- Operation of wastewater treatment plants, sludge from sumps, triple interceptors and wastewater treatment (biosolids)
- Disturbance to known contaminated sites (e.g. PFAS source areas, underground storage tanks and former landfills)
- Quarantine waste

These activities have the potential to cause adverse impacts to the local environment and human health through contaminated air, land and soil, and surface and groundwater.

### Management actions

Hobart Airport ensures hazardous materials used in airport operations are managed appropriately in accordance with Australian Standards and relevant legislation. Through the CEMPs, contractor works are undertaken in accordance with SMP01 – Storage and Handling of Contaminating Substances. SMP01 is updated and reviewed annually.

Airport tenants retain the responsibility for hazardous materials held in individual premises. Management of hazardous materials is documented in tenants OEMP and reviewed through the annual audit process.

During technical investigations and/or remediation works, the areas for storage of contaminating substances will be assessed by a suitably qualified person on a case by case basis and agreed by Hobart Airport. These storage areas will be dependent on factors such as contamination concentration, type and length of storage and quantity in accordance with the relevant regulations and legislation in Figure 11.1.

### Hobart Airport’s commitment

Hobart Airport’s commitment to avoiding, managing or reducing impacts associated with hazardous materials is identified in **Table 11.14**.

**Table 11.14:** Hazardous materials targets

Hazardous substances targets	Timeframe
Review of Hobart Airport procedures including SMP01, Asbestos Register, Contaminated Site Register	Annually (at minimum)
Liaison with tenants on mitigation measures for the handling and storage of contaminating substances during audits and documented within OEMP	
Surface water and groundwater monitoring to understand existing levels and movement of contamination, including the retired landfill sites	
Review and update the PFAS Management Plan	As required
Ensure potentially hazardous waste is classified and disposed of by a licensed contractor to an appropriate receiving facility, with associated certification	
Review contractor CEMP and tenant OEMP to ensure appropriate storage, handling and disposal of hazardous materials	
Review legislative changes in hazardous materials management, implement changes as required for Hobart Airport operations, contractors and tenants	



h

**12**

**Consultation  
strategy**

# 12.1 Consultation strategy and activities

## Overview

During the preparation of this Master Plan, Hobart Airport developed a consultation strategy that included a series of formal and informal engagement activities with a range of government, industry and community representatives. The consultation activities aimed to:

- Present opportunities for stakeholders and the community to engage with Hobart Airport to better understand the changes and objectives of the 2022 Master Plan prior to public exhibition
- Provide information about the Master Plan to stakeholders and the community prior to submission
- Address consultation requirements under Section 79 of the Airports Act

An overview of the consultation activities undertaken during the master planning process is provided in **Table 12.1**, with a more detailed overview of the core consultation activities undertaken in each master planning phase provided in the following subsections.

**Table 12.1:** Consultation activities

	Informal consultation	Formal pre-release	Formal public exhibition period
Legislated consultation activities	<ul style="list-style-type: none"> <li>• Discussions and briefings with airlines</li> <li>• Discussions and briefings with state government agencies</li> <li>• Discussions and briefings with local government authorities</li> </ul>	<ul style="list-style-type: none"> <li>• Consultation with airlines</li> <li>• Consultation with the Commonwealth government agencies</li> <li>• Consultation with state government agencies</li> <li>• Consultation with local government authorities</li> </ul>	<ul style="list-style-type: none"> <li>• Letters to relevant Tasmanian Government Ministers, local government authorities, key agencies and airport tenants</li> <li>• Advertisement in the local newspaper (i.e. The Mercury and community publications)</li> <li>• A copy of the Master Plan and related information on Hobart Airport’s website</li> <li>• Copies of the Master Plan available for inspection or purchase</li> </ul>
Additional consultation activities	<ul style="list-style-type: none"> <li>• Informal discussions with key stakeholders</li> <li>• Business as usual briefings with airport stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings and briefings with industry</li> <li>• Business as usual briefings with airport stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Community briefings</li> <li>• Additional stakeholder meetings</li> <li>• Business as usual briefings with airport stakeholders</li> </ul>

## Exposure Draft Master Plan

The Exposure Draft Master Plan was the first version of the Master Plan that was released to key stakeholders to ensure the draft was satisfactory to be released for public comment. The following key stakeholders were consulted on this version of the Master Plan:

- Commonwealth government agencies
- State government agencies
- Local government
- Civil Aviation Safety Authority
- Airservices Australia
- Industry groups
- Airlines
- Community Aviation Consultation Group

Of note, **Table 12.2** identifies the key stakeholders with reference to the specific sections of the Master Plan that they were consulted on. Additionally, a range of informal meetings have been undertaken with these stakeholders to discuss the objectives of the Master Plan and any feedback. All comments received in this stage were reviewed and assessed and if appropriate, changes were made to the Master Plan to address the feedback.

## Preliminary Draft Master Plan

In accordance with Section 79 of the Airports Act the following stakeholders were advised, in writing, of the Preliminary Draft Master Plan:

- the Minister, of the state in which the airport is situated, with responsibility for town planning or use of land
- the authority of that state with responsibility for town planning or use of land
- each local government body with responsibility for an area surrounding the airport

The Preliminary Draft was released for public comment for 60 business days between Thursday 11 August 2022 and Wednesday 2 November 2022, as required under the Airports Act. As part of the public comment period, a notice was placed in the local newspaper (i.e. The Mercury) which included:

- Notification that Hobart Airport has prepared the Preliminary Draft Master Plan and the public comment period
- The places where copies were available for inspection and/or purchase
- Notification that a copy of the Preliminary Draft Master Plan was available on the Airport’s website during the comment period at [www.hobartairport.com.au](http://www.hobartairport.com.au)
- An invitation for members of the public to give written feedback on the Preliminary Draft Master Plan

### Submission to the Minister

Once the formal public period was complete, all written submissions were reviewed and assessed, and where appropriate changes were made to the Preliminary Draft Master Plan to address the comments. It is noted that only written comments received directly by Hobart Airport were recorded as formal submissions.

After the Preliminary Draft Master Plan was updated to address the comments, the Draft Master Plan was formally submitted to the Commonwealth Minister for Infrastructure, Transport, Regional Development, Communications and the Arts for approval under the Airports Act.

The submission to the Minister was supported by the following information in accordance with the Airports Act:

- Copies of comments received from members of the public
- A written certificate signed on behalf of Hobart Airport containing a list of names of the people/ organisations that provided written comments, a summary of the comments received and evidence that Hobart Airport has given due regard to those comments

### Publication of the final Master Plan

Once the Minister has approved the Draft Master Plan, any subsequent changes are incorporated, and the final Master Plan is published, and stakeholders are notified by:

- An advertisement in the local newspaper (i.e. The Mercury)
- Notification on Hobart Airport's website, with a copy of the final Master Plan made available
- Printed copies of the final Master Plan are made available for inspection and purchase

**Table 12.2:** Additional consultation activities

Chapter	Key stakeholders
Environment Strategy	<ul style="list-style-type: none"> <li>• Department of Infrastructure, Transport, Regional Development, Communications and the Arts (Cth) and the Airport Environment Officer</li> <li>• Department of Climate Change, Energy, the Environment and Water (Cth)</li> <li>• Department of Natural Resources and Environment Tasmania (Tas)</li> <li>• Department of State Growth (Tas)</li> <li>• Airservices Australia</li> <li>• Civil Aviation Safety Authority</li> <li>• Clarence City Council</li> </ul>
Aviation Plan	<ul style="list-style-type: none"> <li>• Civil Aviation Safety Authority</li> <li>• Airservices Australia</li> </ul>
Airport Safeguarding Strategy	<ul style="list-style-type: none"> <li>• Civil Aviation Safety Authority</li> <li>• Airservices Australia</li> <li>• Airports Branch within the Department of Infrastructure, Transport, Regional Development, Communication and the Arts (Cth)</li> <li>• Local government authorities (Clarence City Council, Hobart City Council and Sorell City Council)</li> </ul>
Ground Transport Plan	<ul style="list-style-type: none"> <li>• Transport and Infrastructure Group within the State Department of State Growth (Tas)</li> <li>• Transport Tasmania (Tas)</li> <li>• Clarence City Council</li> </ul>
Land Use Plan	<ul style="list-style-type: none"> <li>• Department of State Growth (Tas)</li> <li>• Clarence City Council</li> </ul>
General	<ul style="list-style-type: none"> <li>• Hobart Airport Community Aviation Consultation Group</li> <li>• Hobart Airport Planning Coordination Forum</li> <li>• Airlines</li> <li>• Cambridge Aerodrome</li> <li>• Airport lessees and tenants</li> <li>• Tourism Tasmania</li> </ul>



**13**

# Implementation Plan

# Overview

Implementation and delivery is a process that remains flexible, ensuring development is aligned to market conditions and user requirements.

The ability to achieve the Hobart Airport vision through both aeronautical development and commercial growth will enable businesses to maximise their benefits and operate in a sustainable manner contributing to the Tasmanian economy.

Hobart Airport is responsible for achieving a number of development opportunities, however, collaborative support is required from other key agencies, and all levels of government to achieve the vision. The continued operation of Hobart Airport requires ongoing safeguarding and requires support from all levels of government, particularly around land use planning and policy decisions.

The timing of development and infrastructure is subject to passenger and aircraft growth. Hobart Airport will continue to pursue growth and development opportunities, noting that both are subject to market and external conditions. For these reasons, the implementation plan may change over time. This section outlines the 8-year implementation plan and 20-year implementation plan for Hobart Airport based on the commitments identified in this master plan.

## 13.1 8-year Implementation Plan

The initial period for the Master Plan is 8 years. The 8-year implementation plan has been developed based on the commitments identified in this master plan for the short term. It is important to note that as the Environment Strategy relates to the initial planning period, the environmental improvement measures have been incorporated into the 8-year implementation plan.

**Table 13.1:** 8-year implementation plan

Project / element	8-year implementation
<b>Airfield development</b>	
<b>Runway</b>	<ul style="list-style-type: none"> <li>Runway strengthening to support Code E aircraft. This upgrade will support direct international routes to Singapore and open Tasmania to key Asian markets, and support Hobart's role as Australia's Antarctic Gateway.</li> </ul>
<b>Taxiway</b>	<ul style="list-style-type: none"> <li>Fillet widening to accommodate Code E aircraft movements</li> </ul>
<b>RPT apron</b>	<ul style="list-style-type: none"> <li>One wide-body stand</li> <li>Apron infill (12,000m<sup>2</sup>)</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>Potential expansion of the terminal to align with passenger growth</li> <li>Provision for wide-body refuelling</li> </ul>
<b>Non-airfield development</b>	
<b>Freight</b>	<ul style="list-style-type: none"> <li>Additional freight handling and storage facilities within the Aviation Support Precinct</li> </ul>
<b>Retail</b>	<ul style="list-style-type: none"> <li>Development of precinct for commercial and retail uses</li> </ul>
<b>Terminal</b>	<ul style="list-style-type: none"> <li>Expansion to the existing terminal to accommodate domestic and international passenger growth</li> </ul>
<b>Ground transport development</b>	
<b>External road network</b>	<ul style="list-style-type: none"> <li>Implementation of high priority and medium priority items within the Tasman Highway - Sorell to Hobart Corridor Plan (Tasmanian Government)</li> </ul>
<b>Internal road network</b>	<ul style="list-style-type: none"> <li>Additional internal roads to support the development of the freight, commercial, mixed use and industrial precincts</li> <li>Potential signalisation of Grueber/Long Street Intersection</li> <li>Minor alterations to improve efficiency and flow of traffic through the Terminal Precinct</li> <li>Improvement and upgrade of existing internal roads to support aeronautical and non-aeronautical development</li> </ul>
<b>Car parking</b>	<ul style="list-style-type: none"> <li>Integration of electric vehicle charging stations</li> <li>Reconfigure the car park and car rental facilities</li> <li>Expand and diversify car parking products</li> </ul>



Project / element	8-year implementation
<b>Public transport</b>	<ul style="list-style-type: none"> <li>Provision of transit lanes on the Tasman Highway between the Tasman Bridge and Hobart Airport interchange by the Tasmanian Government</li> <li>Additional SkyBus services, in line with demand</li> </ul>
<b>Taxi and rideshare</b>	<ul style="list-style-type: none"> <li>Creation formal rideshare staging facility</li> <li>Potential relocation of taxi staging area to allow optimal ground transport space allocation</li> </ul>
<b>Vehicle rental</b>	<ul style="list-style-type: none"> <li>Potential provision of shared fuelling facilities</li> <li>Relocate vehicle rental back-of-house (storage and work bays) to a new development precinct, allowing operator growth</li> <li>Expand car rental pick-up/drop-off area, improving customer experience</li> <li>Provide formal overflow rental vehicle storage area</li> </ul>
<b>Active transport</b>	<ul style="list-style-type: none"> <li>Improvement of pedestrian wayfinding</li> <li>New cycling infrastructure and end of trip facilities in new precincts and developments</li> </ul>
<b>Utilities infrastructure development</b>	
<b>Electricity</b>	<ul style="list-style-type: none"> <li>Augment the primary ring along Holyman Avenue, Loop Road</li> <li>Increase capacity along Pittwater Road</li> <li>Install Emergency Power Plant and secondary high voltage ring for the terminal precinct</li> </ul>
<b>Telecommunication</b>	<ul style="list-style-type: none"> <li>Establish FFTB</li> <li>Augment telecommunication services as part of terminal redevelopment</li> <li>Reconfigure pit and pipe infrastructure as part of terminal and landside development</li> <li>Maintain the secondary lead to prevent single entry point failure</li> </ul>
<b>Water supply</b>	<ul style="list-style-type: none"> <li>Resize and relocate the existing terminal precinct ring main as the terminal building is developed to allow for additional future developments. Allow for increased capacity to supply neighbouring precincts.</li> </ul>
<b>Stormwater and flooding</b>	<ul style="list-style-type: none"> <li>Incorporate the required flooding risk mitigation based on new developments</li> </ul>
<b>Sewerage</b>	<ul style="list-style-type: none"> <li>Resize and locate the existing terminal precinct sewer infrastructure as the terminal building is developed to allow for additional future developments</li> </ul>

Project / element	8-year implementation
<b>Environment strategy priorities</b>	
<b>Biodiversity</b>	<ul style="list-style-type: none"> <li>Update Seven Mile Beach Conservation Management Plan (grassland and coastal areas)</li> <li>Targeted floristic assessment of orchid species in areas of high likelihood</li> <li>Ecological assessment of the acquired land on Barilla Bay and Tasman</li> <li>Condition assessment of the Commonwealth listed Saltmarsh community east of the runway</li> <li>Annual (at minimum) monitoring of fauna using camera trap technology and incorporate findings into the Airport's Wildlife Hazard Management Plan</li> <li>Annual review of Hobart Airport Weed Management Plan</li> <li>Annual (at minimum) assessment of targeted threatened species populations during optimal flowering periods and updated mapping</li> <li>Annual (at minimum) monitoring and management of pest and weeds</li> </ul>
<b>Land and water</b>	<ul style="list-style-type: none"> <li>Annual review and update of contaminated sites register including integration with geographic information systems</li> <li>Annual (at minimum) surface water quality and groundwater monitoring</li> <li>Annual (at minimum) engagement with TasWater regarding wastewater discharges and potential impacts or complaints</li> <li>Communication with tenants on stormwater control devices (servicing and maintenance) and effectiveness of mitigation measures</li> </ul>
<b>Climate change</b>	<ul style="list-style-type: none"> <li>Review energy demand on non-operational equipment (e.g. terminal advertising, information displays etc)</li> <li>Invest in energy storage projects that reduce energy consumption and lower carbon emissions</li> <li>Identify actions to guide and influence airport tenants in achieving carbon reduction from their business operations.</li> <li>Monitor carbon footprint</li> <li>Implement the Climate Change Adaptation Plan</li> <li>Achieve ACA Level 4 Accreditation – Carbon Neutrality</li> <li>Undertake LED lighting upgrades as required for existing and new lighting infrastructure</li> </ul>

Project / element	8-year implementation
<b>Waste</b>	<ul style="list-style-type: none"> <li>Improve the function and design of the external waste collection station by incorporating redesign of waste collection centre(s) in future Terminal design</li> <li>Review Waste Management Strategy 2021-24</li> <li>Liaise with and engage tenants on the benefits of using Hobart Airport to manage waste streams</li> <li>Continue to increase waste diversion from landfill; expansion of organic waste recycling</li> <li>Improve the segregation of waste in car parking areas</li> </ul>
<b>Cultural heritage</b>	<ul style="list-style-type: none"> <li>Update the Hobart Airport Cultural Heritage Management Plan and Management Action Plan</li> <li>Implement the measures outlined in the Reconciliation Action Plan</li> <li>Annual review of site management procedures relevant to heritage values, update as required</li> <li>Ensure the Heritage Management Plan for the Hobart Air Traffic Control Tower is reviewed and updated every 5 years</li> <li>Annual (at minimum) maintenance of historic heritage values in accordance with the relevant Heritage Management Plan</li> <li>Annual (at minimum) engagement with Aboriginal Heritage Tasmania, prior to any development work in areas of previously recorded heritage value</li> </ul>
<b>Air quality</b>	<ul style="list-style-type: none"> <li>Review of ARFF training reports and notification and liaison as required</li> <li>Review of contractor CEMPs to ensure potential air quality impacts are addressed</li> <li>Liaise with Government Department regarding air quality initiatives/ requirements where relevant to airport operations</li> <li>Review and update of the environmental risk register and environmental compliance register</li> <li>Review and update of the Hobart Airport asbestos and ozone depleting substances register and Geographical Information System</li> </ul>

Project / element	8-year implementation
<b>Ground-based noise</b>	<ul style="list-style-type: none"> <li>Review of contractor CEMPs to ensure potential ground-based noise impacts are addressed</li> <li>Update complaints register regarding ground-based noise issues</li> <li>Undertake noise quality assessments where impacts persist and remain unresolved</li> <li>Participate in government noise mitigation programs or initiatives</li> </ul>
<b>Hazardous substances</b>	<ul style="list-style-type: none"> <li>Review relevant legislation changes in waste management and implement as required, including internal SMPs e.g. disposal of controlled waste</li> <li>Continue to liaise with tenants on mitigation measures for the handling and storage of contaminating substances during annual audits</li> <li>Ensure all potentially hazardous waste is classified and disposed of by a licensed contractor to an appropriate receiving facility</li> <li>Review of contractor CEMPs to ensure the storage and handling of contaminating substances are addressed appropriately</li> </ul>
<b>Resource use</b>	<ul style="list-style-type: none"> <li>Undertake LED lighting upgrades as required for existing and new lighting infrastructure</li> <li>Review energy demand on non-operational equipment (e.g. terminal advertising, information displays etc)</li> <li>Invest in energy storage projects that reduce energy consumption and lower carbon emissions</li> <li>Promote water reuse from the WWTP when quality is suitable for reuse</li> </ul>

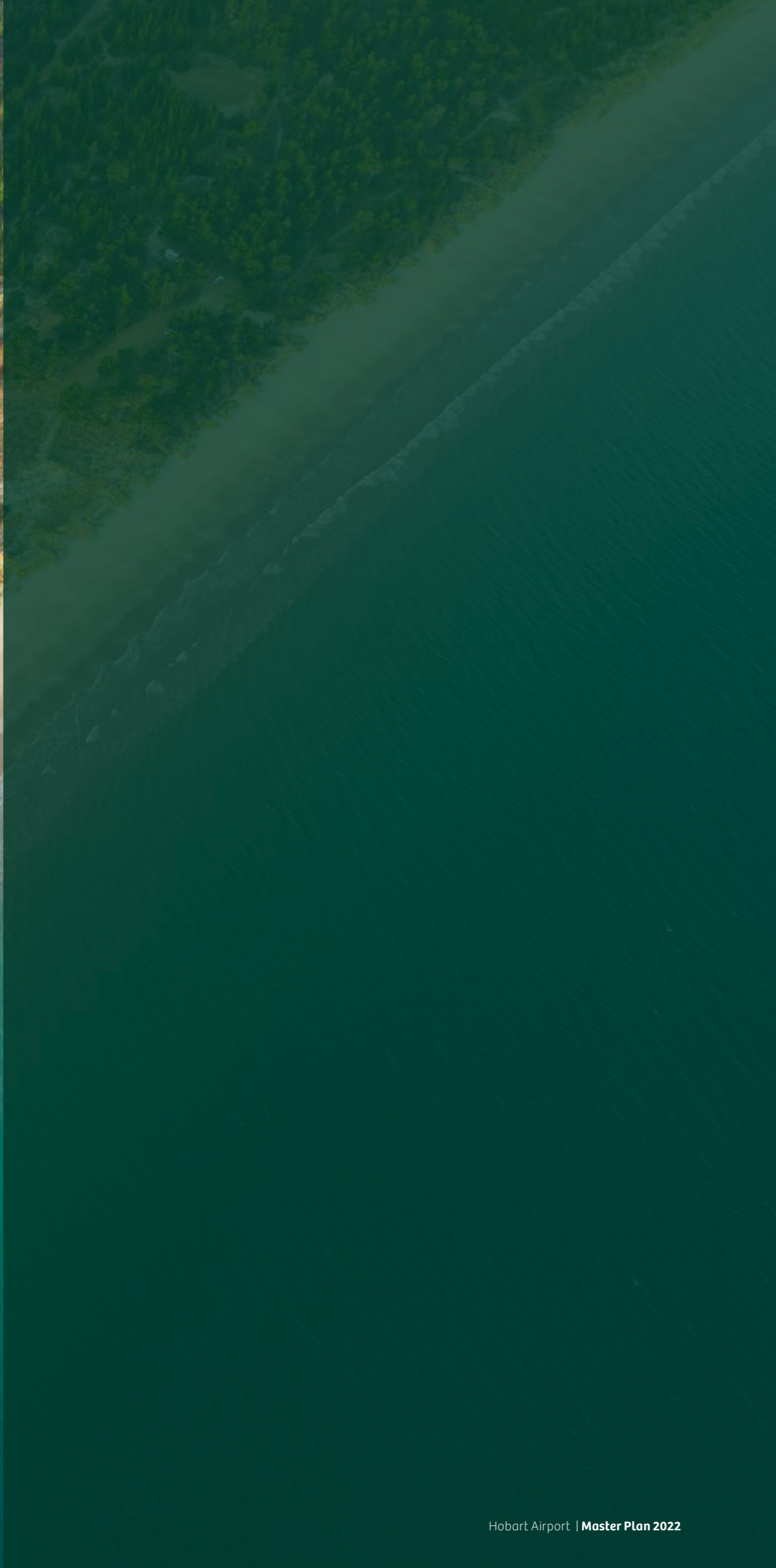
## 13.2 20-year Implementation Plan

The Master planning period of 20 years provides an opportunity to capture implementation activities between years 8 and 20, through to 2042, as shown in **Table 13.2**. Direct and indirect investment allocated for a number of activities and developments over the long term presents an opportunity to ensure the Master Plan priorities and development objectives are achieved.

**Table 13.2:** 20-year (2042) implementation plan

Project / element	20-year implementation
<b>Airfield development</b>	
<b>Taxiway</b>	<ul style="list-style-type: none"> <li>Taxiway fillet widening for Code E aircraft compliance</li> <li>Northern taxi-lane connection to Taxiway Alpha</li> <li>Taxiway Alpha expansion, connection to Runway 12/30 (17,000m<sup>2</sup>)</li> </ul>
<b>RPT apron</b>	<ul style="list-style-type: none"> <li>Two narrow-body stand</li> <li>One wide-body stand</li> <li>Apron infill (14,300m<sup>2</sup>)</li> </ul>
<b>Non-RPT</b>	<ul style="list-style-type: none"> <li>Two wide-body stand and freight apron expansion</li> <li>Up to 42,000m<sup>2</sup> additional freight apron footprint</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>Relocation of ARFF facilities to the eastern side of the runway</li> <li>Standalone facilities for airline engineering and storage</li> </ul>
<b>Non-airfield development</b>	
<b>Freight</b>	<ul style="list-style-type: none"> <li>Development of additional freight handling and storage facilities</li> <li>Facilities with direct access to air freight services (approximately 0.3 ha)</li> </ul>
<b>Antarctic facilities</b>	<ul style="list-style-type: none"> <li>Precinct expansion to further support Antarctic operations</li> </ul>
<b>Light Industrial Precinct</b>	<ul style="list-style-type: none"> <li>Development of light industrial and logistics activity and agri-business (approximately 0.2 ha)</li> </ul>
<b>Retail</b>	<ul style="list-style-type: none"> <li>Mixed-used retail development (approximately 19 ha)</li> </ul>
<b>Ground transport development</b>	
<b>External road network</b>	<ul style="list-style-type: none"> <li>Implementation of long term priority items from the Tasman Highway - Sorell to Hobart Corridor Plan</li> <li>Upgrade secondary entry point (Back Road) off Tasman Highway into the commercial / mixed use precinct</li> <li>Construct dual lane highway from the Tasman Highway Interchange to the Midway Point Causeway</li> </ul>

Project / element	20-year implementation
<b>Internal road network</b>	<ul style="list-style-type: none"> <li>Potential continuation of the duplication of Holyman Avenue to Grueber Avenue/Long Street intersection</li> <li>Additional internal roads to support the development of the freight, commercial, mixed use and industrial precincts Increase kerbside capacity along Addison Drive</li> <li>Alterations to facilitate future Terminal expansion and passenger growth</li> </ul>
<b>Car parking</b>	<ul style="list-style-type: none"> <li>Regular assessment and adaptation to support passenger and commercial growth and visitor choice</li> </ul>
<b>Public transport</b>	<ul style="list-style-type: none"> <li>Regular engagement with local and state government to facilitate equitable and sustainable access to the Airport</li> </ul>
<b>Taxi and rideshare</b>	<ul style="list-style-type: none"> <li>Continued optimisation of staging facilities and commercial pick-up/drop-off lanes</li> </ul>
<b>Active transport</b>	<ul style="list-style-type: none"> <li>Fully connected internal cycling network</li> <li>Regular reassessment and management of pedestrian movements in and through the Airport precinct</li> </ul>
<b>Utilities infrastructure development</b>	
<b>Electricity</b>	<ul style="list-style-type: none"> <li>Develop underground cable and kiosk substations in the non- aeronautical precincts</li> </ul>
<b>Telecommunications</b>	<ul style="list-style-type: none"> <li>Install new pits and pipes in a structured manner within the Terminal Precinct</li> <li>Install a new single-mode fibre backbone throughout the site in a structured manner to enable the installation of a new resilient Information and Communications Technology network</li> <li>Install private network fibre optic cabling</li> <li>Provide a 'dual-homed' communication network to provide redundancy</li> </ul>
<b>Water supply</b>	<ul style="list-style-type: none"> <li>Provide upgraded/new provisional water supplies to Aviation, Local Business, Mixed use and Light Industry precincts for future development</li> </ul>
<b>Stormwater and flooding</b>	<ul style="list-style-type: none"> <li>Realign the major infrastructure depths suited to a 1% AEP</li> </ul>
<b>Sewerage</b>	<ul style="list-style-type: none"> <li>Provide upgraded/new provisional sewer mains to Aviation, Local Business, Mixed use and Light Industry precincts to accommodate development</li> </ul>



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# References

# References

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- Airports Act 1996* (Cth) (Australia).
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- Southern Tasmanian Councils Authority (2010) Southern Integrated Transport Plan 2010.
- Southern Tasmanian Councils Authority (2018) Southern Tasmania Regional Land Use Strategy 2010- 2035.
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- State Coastal Policy 1996 (Tas) (Tasmania).
- Tasman Highway - Sorell to Hobart Corridor Plan 2020 (Tas) (Tasmania).
- Threatened Species Protection Act 1995* (Tas) (Tasmania).





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# Appendices

# Appendix A - Regulatory requirements

The Hobart Airport Master Plan has been prepared in accordance with the requirements of the Airports Act 1996 and other relevant regulations; the **Table A1** below details the reference as addressed within this Master Plan.

**Table A1:** Reference to regulatory requirements

Airports Act 1996		Master Plan Reference
<b>71(2)</b>	Contents of draft or final Master Plan	
<b>(a)</b>	the airport lessee company's development objectives for the airport;	Chapter 1
<b>(b)</b>	the airport lessee company's assessment of the future needs of civil aviation users of the airport, and other users of the airport, for services and facilities relating to the airport;	Chapters 5, 6 and 7
<b>(c)</b>	the airport lessee company's intentions for land use and related development of the airport site, where the uses and developments embrace airside, land-side, surface access and land planning/zoning aspects;	Chapters 4, 6 and 7
<b>(d)</b>	an Australian Noise Exposure Forecast (in accordance with regulations, if any, made for the purpose of this paragraph) for the areas surrounding the airport;	Chapter 9
<b>(da)</b>	flight paths (in accordance with regulations, if any, made for the purpose of this paragraph) at the airport;	Chapter 9
<b>(e)</b>	the airport lessee company's plans, developed following consultations with the airlines that use the airport and local government bodies in the vicinity of the airport, for managing aircraft noise intrusion in areas forecast to be subject to exposure above the significant ANEF levels;	Chapters 9 and 10
<b>(f)</b>	the airport lessee company's assessment of environmental issues that might reasonably be expected to be associated with the implementation of the plan;	Chapter 11
<b>(g)</b>	the airport lessee company's plans for dealing with the environmental issues mentioned in paragraph (f) (including plans for ameliorating or preventing environmental impacts);	Chapter 11

Airports Act 1996		Master Plan Reference
<b>(ga)</b>	<p>in relation to the first 5 years of the Master Plan</p> <ul style="list-style-type: none"> <li>a plan for a ground transport system on the landside of the airport that details:</li> <li>a road network plan; and</li> <li>the facilities for moving people (employees, passengers and other airport users) and freight at the airport; and</li> <li>the linkages between those facilities, the road network and public transport system at the airport and the road network and public transport system outside the Airport; and</li> <li>the arrangements for working with the State or Local authorities or other bodies responsible for the road network and the public transport system; and</li> <li>the capacity of the ground transport system at the Airport to support operations and other activities at the Airport; and the likely effect of the proposed developments in the Master Plan on the ground transport system and traffic flows at, and surrounding, the Airport;</li> </ul>	Chapter 7
<b>(gb)</b>	in relation to the first 5 years of the Master Plan – detailed information on the proposed developments in the Master Plan that are to be used for: commercial, community, office or retail purposes; or for any other purpose that is not related to airport services;	Chapters 4 and 13
<b>(gc)</b>	<p>in relation to the first 5 years of the Master Plan</p> <ul style="list-style-type: none"> <li>the likely effect of the proposed developments in the Master Plan on: employment levels at the Airport; and</li> <li>the local and regional economy and community, including an analysis of how the proposed developments fit within the planning schemes for commercial and retail development in the area that is adjacent to the Airport;</li> </ul>	Chapters 2 and 3



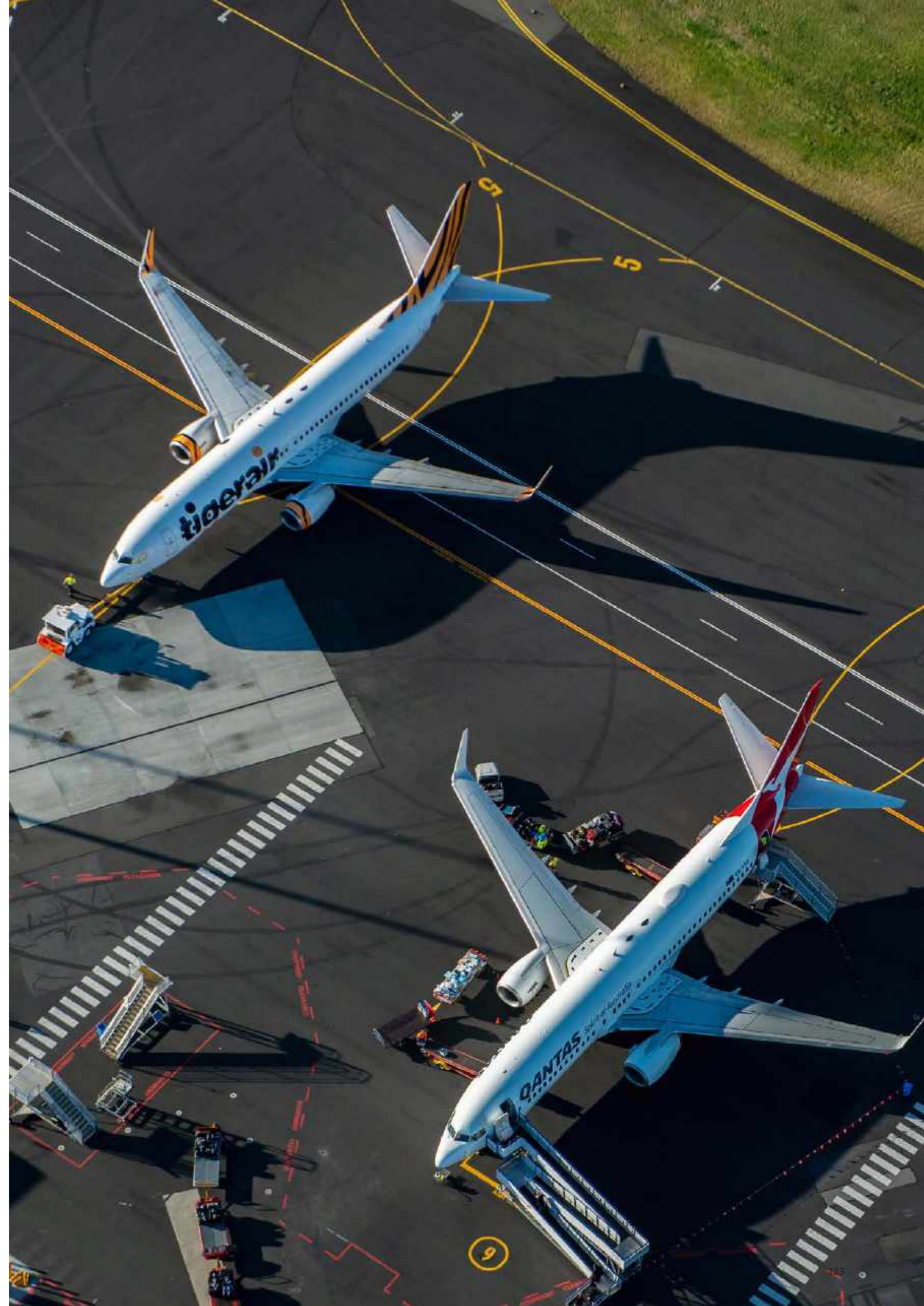
Airports Act 1996		Master Plan Reference
<b>(h)</b>	<p>an environment strategy that details:</p> <p>the Airport lessee company's objectives for the environmental management of the Airport; and</p> <p>the areas (if any) within the Airport site which the Airport lessee company, in consultation with State and Federal conservation bodies, identifies as environmentally significant; and</p> <p>the sources of environmental impact associated with airport operations and the studies, reviews and monitoring to be carried out by the Airport lessee company in connection with the environmental impact associated with airport operations; and</p> <p>the time frames for completion of those studies and reviews and for reporting on that monitoring; and</p> <p>the specific measures to be carried out by the Airport lessee company for the purposes of preventing, controlling or reducing the environmental impact associated with airport operations; and</p> <p>the time frames for completion of those specific measures; and</p> <p>details of the consultations undertaken in preparing the strategy (including the outcome of the consultations); and</p> <p>any other matters that are prescribed in the regulations.</p>	Chapters 10, 11 and 12
<b>71(6)</b>	<p>In specifying a particular objective or proposal covered by section 71(2) (a), (c), (ga), (gb) or (gc), a draft or final Master Plan must address:</p> <p>the extent (if any) of consistency with planning schemes in force under a law of the State in which the Airport is located; and</p> <p>if the draft or final Master Plan is not consistent with those planning schemes—the justification for the inconsistencies.</p>	Chapters 4, 6 and 7
<b>71(8)</b>	<p>In developing plans referred to in paragraph (2)(e), an airport lessee company must have regard to Australian Standard AS 2021—2015 ("Acoustics—Aircraft noise intrusion—Building siting and construction") as in force or existing at that time.</p>	Chapter 9
<b>71(a)</b>	<p>1. A draft or final Master Plan must identify any proposed sensitive development in the plan.</p> <p>2. The planning period must be for 20 years, however the environment strategy must relate to a period of 8 years</p>	Chapters 3 and 11

Airports Act 1996		Master Plan Reference
Airports Regulations 1997		
<b>5.02(1)</b>	<p>For paragraph 71 (2) (j) of the Airports Act, the following matters are specified:</p> <p>a.any change to the OLS or PANS-OPS surfaces for the Airport concerned that is likely to result if development proceeds in accordance with the Master Plan;</p> <p>b.for an area of an airport where a change of use of a kind described in subregulation 6.07 of the Airports (Environment Protection) Regulations 1997 is proposed:</p> <p>i.the contents of the report of any examination of the area carried out under regulation 6.09 of those Regulations; and</p> <p>ii.the Airport lessee company's plans for dealing with any soil pollution referred to in the report</p>	Chapter 10
<b>(2)</b>	<p>An airport Master Plan must, in relation to the landside part of the Airport, where possible, describe proposals for land use and related planning, zoning or development in an amount of detail equivalent to that required by, and using terminology (including definitions) consistent with that applying in, land use planning, zoning and development legislation in force in the State or Territory in which the Airport is located</p>	Chapter 4
<b>5.02A (2)</b>	<p>The environment strategy must specify any areas within the Airport site to which the strategy applies that the Airport lessee company for the Airport has identified as being a site of indigenous significance, following consultation with:</p> <p>a.any relevant indigenous communities and organisations; and</p> <p>b.any relevant Commonwealth or State body.</p>	Chapter 11
<b>(3)</b>	<p>The environment strategy must specify the Airport lessee company's strategy for environmental management of areas of the Airport site that are, or could be, used for a purpose that is not connected with airport operations</p>	Chapter 11
<b>(4)</b>	<p>The environment strategy must specify:</p> <p>a.the training necessary for appropriate environment management by persons, or classes of persons, employed on the Airport site by the Airport lessee company or by other major employers; and</p> <p>b.the training programs, of which the Airport lessee company is aware, that it considers would meet the training needs of a person mentioned in paragraph (a).</p>	Chapter 11

Airports Regulations 1997	Master Plan Reference
<p><b>5.02B (2)</b> In specifying its objectives for the Airport under subparagraph 71 (2) (h) (i) of the Airports Act an airport lessee company must address its policies and targets for:</p> <ul style="list-style-type: none"> <li>a.continuous improvement in the environmental consequences of activities at the Airport; and</li> <li>b.progressive reduction in extant pollution at the Airport; and</li> <li>c.development and adoption of a comprehensive environmental management system for the Airport that maintains consistency with relevant Australian and international standards; and</li> <li>d.identification, and conservation, by the Airport lessee company and other operators of undertakings at the Airport, of objects and matters at the Airport that have natural, indigenous or heritage value; and</li> <li>e.involvement of the local community and airport users in development of any future strategy; and</li> <li>f.dissemination of the strategy to sub-lessees, licensees, other airport users and the local community</li> </ul>	Chapter 11
<p><b>(3)</b> In specifying under subparagraph 71 (2) (h) (ii) of the Airports Act, the areas within the Airport site it identifies as environmentally significant, an airport lessee company must address:</p> <ul style="list-style-type: none"> <li>a.any relevant recommendation of the Australian Heritage Council; and</li> <li>b.any relevant recommendation of the Department of Environment regarding biota, habitat, heritage or similar matters; and</li> <li>c.any relevant recommendation of a body established in the State in which the Airport is located, having responsibilities in relation to conservation of biota, habitat, heritage or similar matters.</li> </ul>	Chapter 11

Airports Regulations 1997	Master Plan Reference
<p><b>(4)</b> In specifying the sources of environmental impact under subparagraph 71 (2) (h) (iii) of the Airports Act, an airport lessee company must address:</p> <ul style="list-style-type: none"> <li>a.the quality of air at the Airport site, and in so much of the regional airshed as is reasonably likely to be affected by airport activities; and</li> <li>b.water quality, including potentially affected groundwater, estuarine waters, and marine waters; and</li> <li>c.soil quality, including that of land known to be already contaminated; and</li> <li>d.release, into the air, of substances that deplete stratospheric ozone; and</li> <li>e.generation and handling of hazardous waste and any other kind of waste; and</li> <li>f.usage of natural resources (whether renewable or non-renewable); and</li> <li>g.usage of energy the production of which generates emissions of gases known as 'greenhouse gases'; and</li> <li>h.generation of noise.</li> </ul>	Chapter 11
<p><b>(5)</b> In specifying under subparagraph 71 (2) (h) (iv) of the Airports Act the studies, reviews and monitoring that it plans to carry out, an airport lessee company must address:</p> <ul style="list-style-type: none"> <li>a. the matters mentioned in sub-regulation 5.02A (2) and sub-regulations 5.02B (3) and (4); and</li> <li>b. the scope, identified by the Airport lessee company, for conservation of objects and matters at the Airport that have natural, indigenous or heritage value; and</li> <li>c. the approaches and measures identified by the Airport lessee company as its preferred conservation approaches and measures; and</li> <li>d. the professional qualifications that must be held by a person carrying out the monitoring; and</li> <li>e. the proposed systems of testing, measuring and sampling to be carried out for possible, or suspected, pollution or excessive noise; and</li> <li>f. the proposed frequency of routine reporting of monitoring results to the Airport environment officer (if any) for the Airport, or to the Secretary</li> </ul>	Chapter 11

Airports Regulations 1997		Master Plan Reference
(6)	In specifying under subparagraph 71 (2) (h) (vi) or 3(h)(vi) of the Airports Act, the measures that it plans to carry out for the purposes of preventing, controlling or reducing environmental impact, an airport lessee company must address: a.the matters mentioned in subregulations (2) to (4); and b.the means by which it proposes to achieve the cooperation of other operators of undertakings at the Airport in carrying out those plans.	Chapter 11
(7)	An airport lessee company, in specifying the company's strategy for environmental management under subregulation 5.02A(3), must address the matters in subregulations (2) to (6).	Chapter 11



## Appendix B - Acceptable noise levels

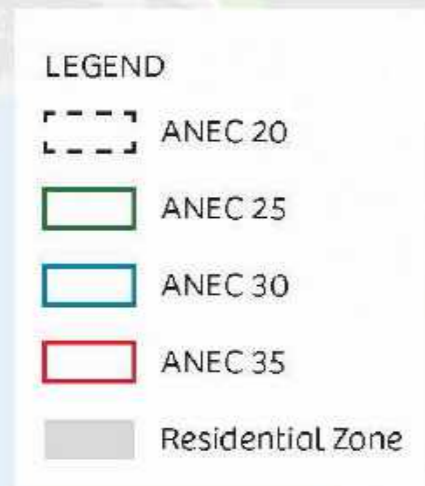
**Table B1:** AS2021-2015 Building site acceptability based on ANEF zones

Building type	ANEF zone of site		
	Acceptable	Conditional	Unacceptable
House, home unit, flat, caravan park	Less than 20 ANEF (Note 1)	20 to 25 ANEF (Note 2)	Greater than 25 ANEF
Hotel, motel, hostel	Less than 25 ANEF	25 to 30 ANEF	Greater than 30 ANEF
School, university	Less than 20 ANEF (Note 1)	20 to 25 ANEF (Note 2)	Greater than 25 ANEF
Hospital, nursing home	Less than 20 ANEF (Note 1)	20 to 25 ANEF	Greater than 25 ANEF
Public building	Less than 20 ANEF (Note 1)	20 to 30 ANEF	Greater than 35 ANEF
Commercial building	Less than 25 ANEF	25 to 30 ANEF	Greater than 35 ANEF
Light industrial	Less than 30 ANEF	30 to 40 ANEF	Greater than 40 ANEF
Other industrial	Acceptable in all ANEF zones		

### Notes

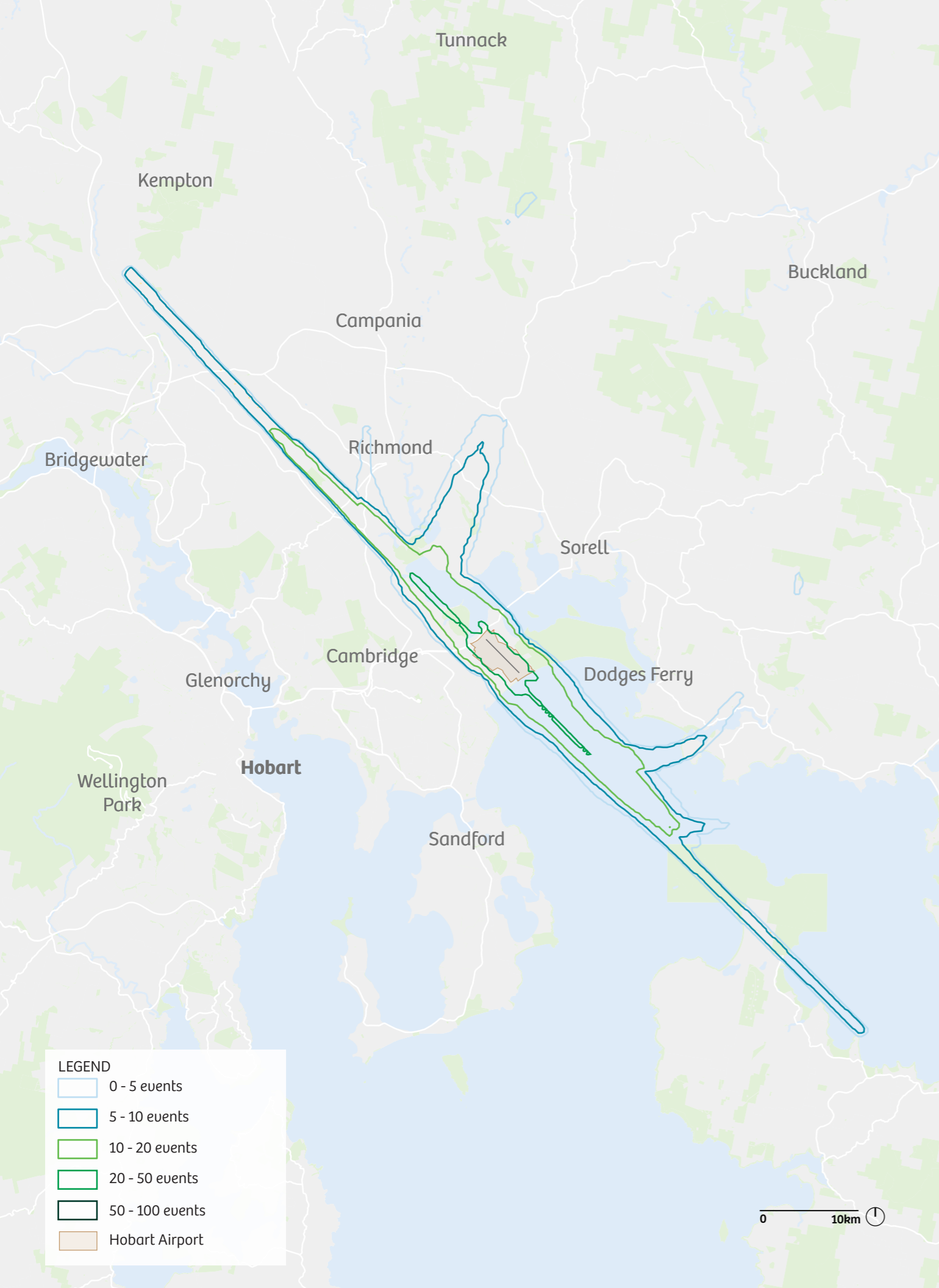
- 1.The actual location of the 20 ANEF contour is difficult to define accurately, mainly because of variation in aircraft flight paths. Because of this, the procedure of Clause 2.3.2 may be followed for building sites outside but near to the 20 ANEF contour.
- 2.Within 20 ANEF to 25 ANEF, some people may find that the land is not compatible with residential or educational uses. Land use authorities may consider that the 'incorporation of noise control features in the construction of residences or schools is appropriate.
- 3.There will be cases where a building of a particular type will contain spaces used for activities which would generally be found in a different type of building (e.g. an office in an industrial building). In these cases Table 2.1 should be used to determine site acceptability, but internal design noise levels within the specific spaces should be determined by the table above.
- 4.This Standard does not recommend development in unacceptable areas. However, where the relevant planning authority determines that any development may be necessary within existing built-up areas designated as unacceptable, it is recommended that such development should achieve the required ANR determined according to Clause 3.2. For residences, schools, etc., the effect of aircraft noise on outdoor areas associated with the buildings should be considered.
- 5.In no case should new development take place in greenfield sites deemed unacceptable because such development may impact airport operations.

## Appendix C - Aircraft noise maps

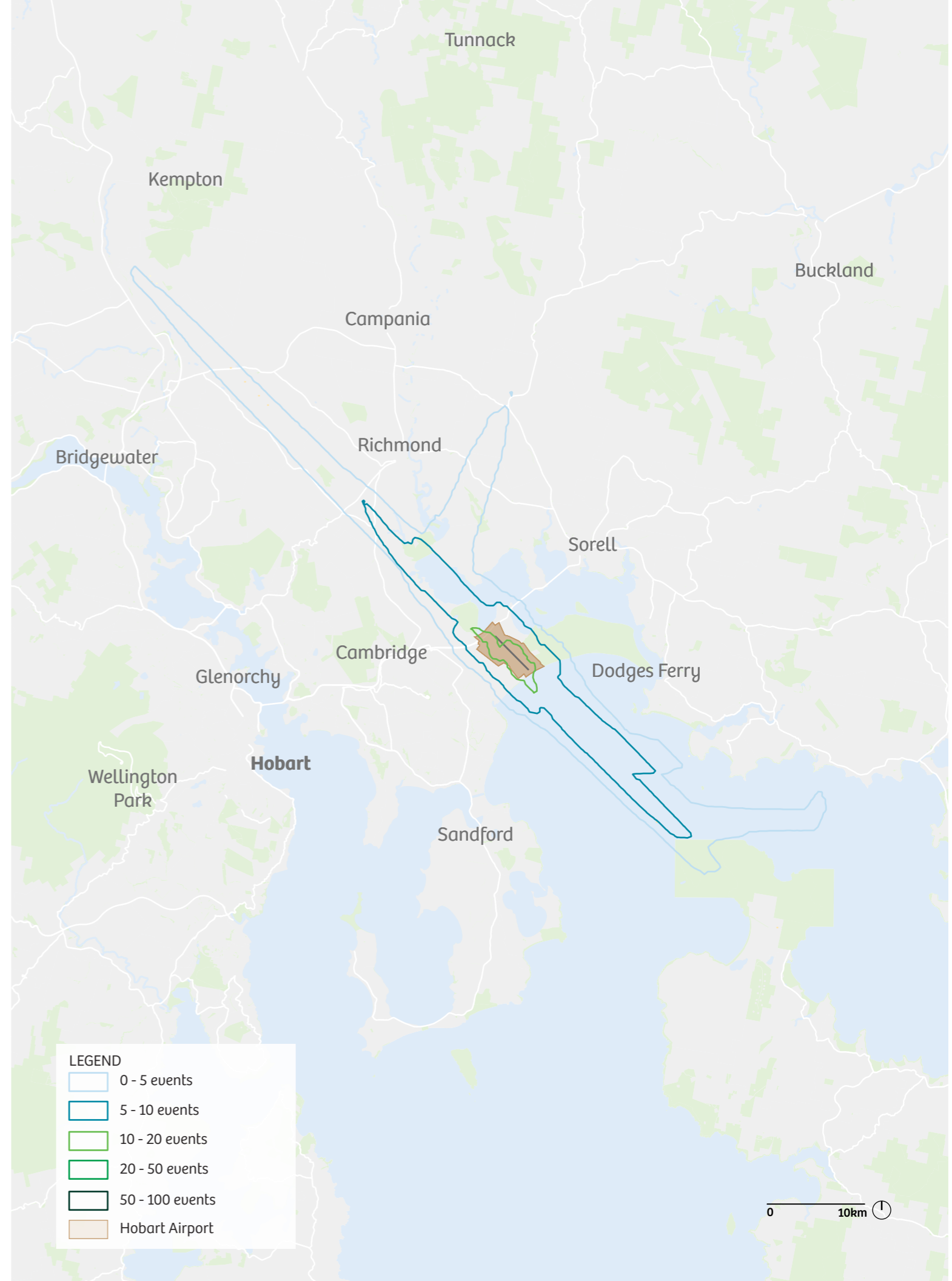


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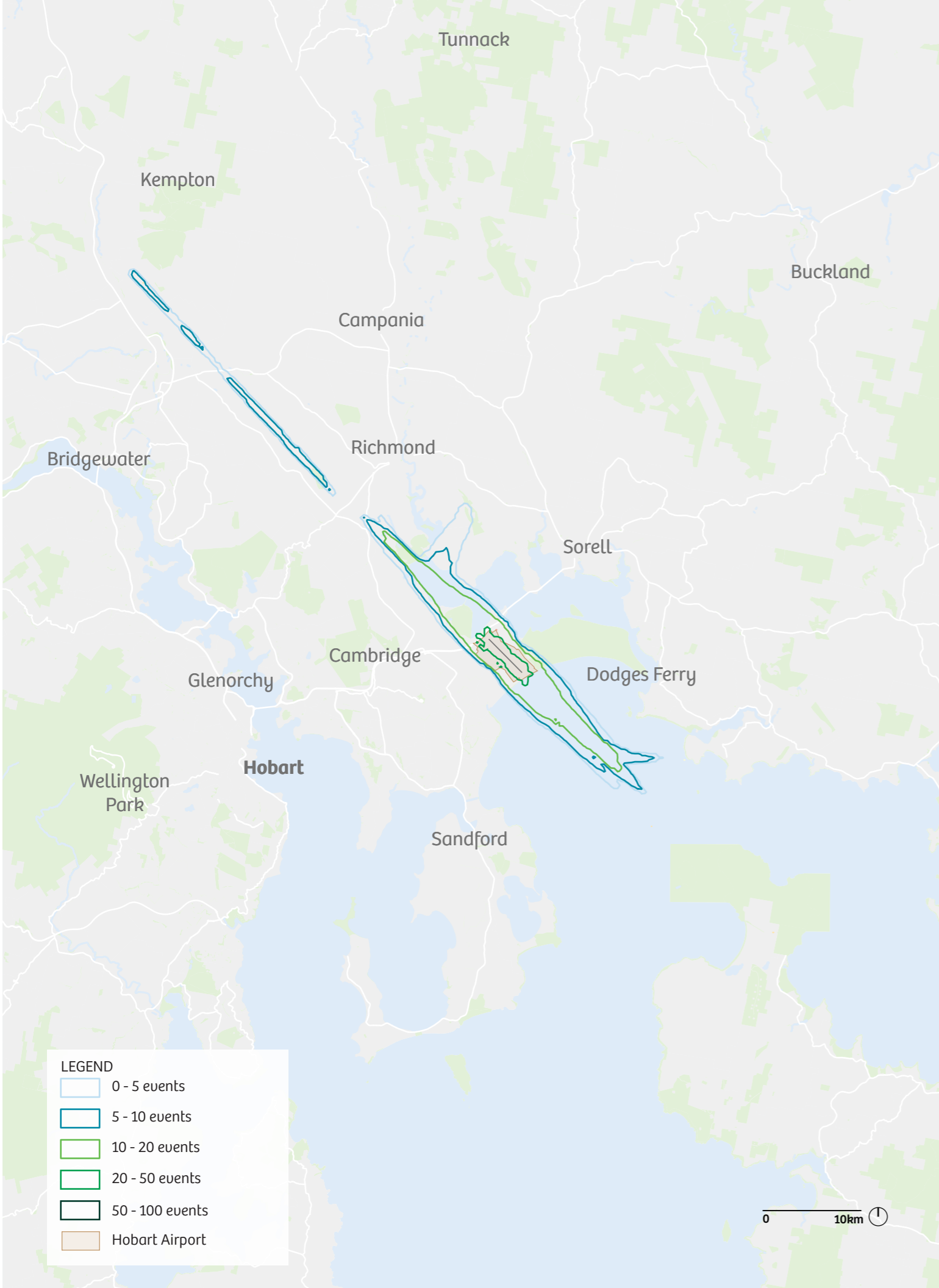
Figure C1: ANEI 2017 - 2018



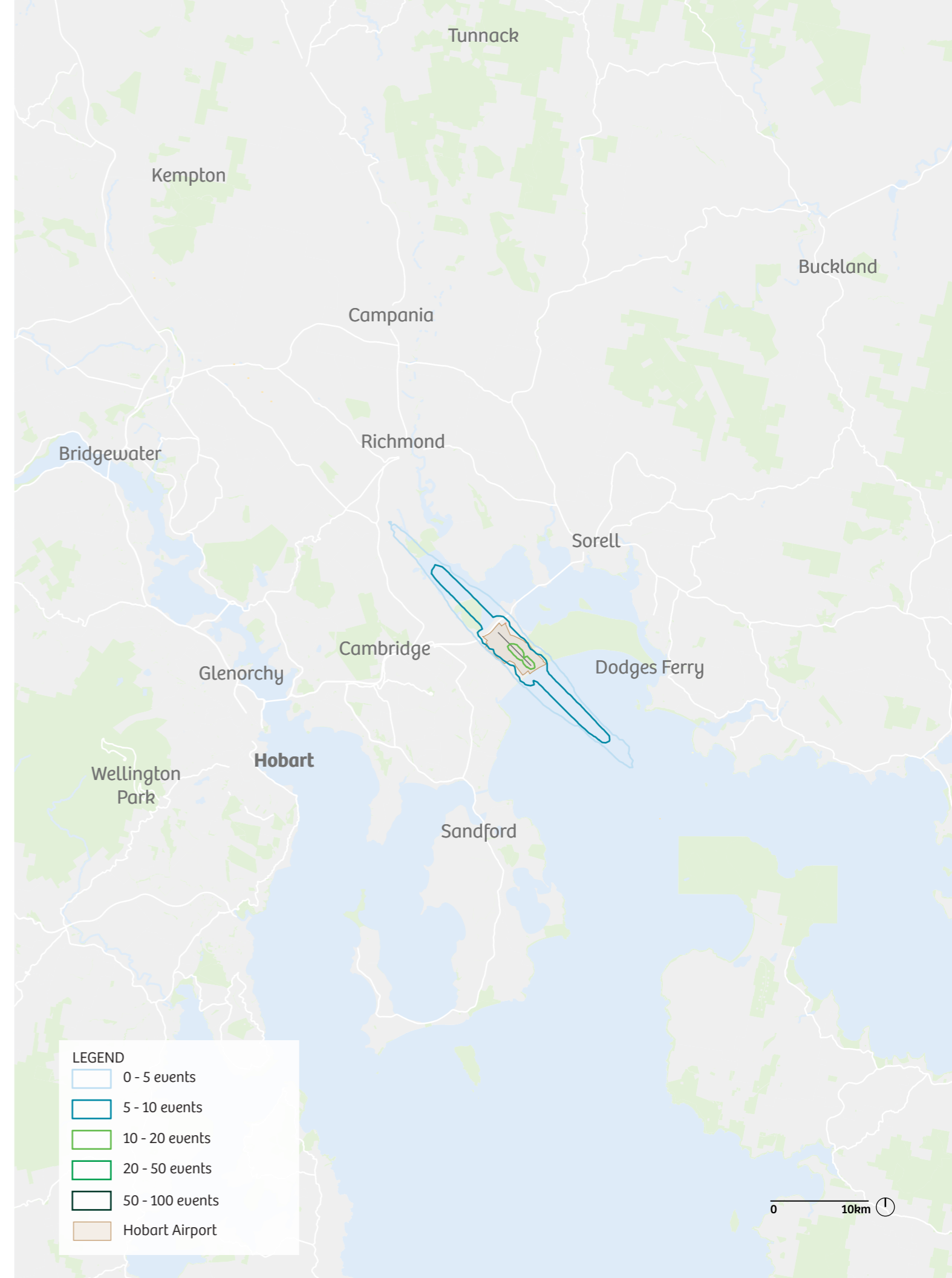
**Figure C2:** N65 Day Contours



**Figure C3:** N65 Night Contours



**Figure C4:** N70 Day Contours



**Figure C5:** N70 Night Contours

# Appendix D - Permissible land uses

## Legend

 Permissible uses

**Table D1:** Permissible land use definitions

Use class	Description	Aeronautical development			Non-aeronautical development		
		Airfield	Terminal	Aviation Support	Tourism Mixed Use	Light Industrial	Environment
<b>Bulky goods sale</b>	Use of land for the sale of heavy or bulky goods which require a large area for handling, storage and display. Examples include garden and landscaping materials suppliers, rural suppliers, timber yards, trade suppliers, showrooms for furniture, electrical goods and floor coverings, and motor vehicle, boat or caravan sales.				Precinct 1		
<b>Community meeting and entertainment</b>	Use of land for social, religious and cultural activities, entertainment and meetings. Examples include an art and craft centre, place of worship, cinema, civic centre, function centre, library, museum, public art gallery, public hall and theatre, community centre and neighbourhood centre.				Precinct 1 Precinct 2		
<b>Domestic animal boarding and training</b>	Use of land for breeding, boarding or training domestic animals. Examples include an animal pound, cattery and kennel.				Precinct 1 Precinct 2		
<b>Educational and occasional</b>	Use of land for educational or short-term care purposes. Examples include a childcare centre, day respite centre, employment training centre, kindergarten, primary school, secondary school and tertiary institution.				Precinct 1 Precinct 2		
<b>Emergency services</b>	Use of land for police, fire, ambulance and other emergency services including storage and deployment of emergency vehicles and equipment. Examples include ambulance station, fire station and police station.				Precinct 1 Precinct 2		
<b>Equipment hire and machinery sales</b>	Use of land for displaying, selling, hiring or leasing plant, equipment or machinery, associated with, but not limited to, cargo-handling, construction, earth-moving, farming, industry and mining.				Precinct 1		
<b>Food services</b>	Use of land for selling food or drink, which may be prepared on the premises, for consumption on or off the premises. Examples include a cafe, restaurant and take away food premises.				Precinct 1 Precinct 2		
<b>General retail and hire</b>	Use of land for selling goods or services, or hiring goods. Examples include an adult sex product shop, amusement parlour, beauty salon, betting agency, bottle shop, cellar door sales, commercial art gallery, department store, hairdresser, market, primary produce sales, local shop, shop, shop front dry cleaner and supermarket.				Precinct 1		
<b>Hotel industry</b>	Use of land to sell liquor for consumption on or off the premises. If the land is so used, the use may include accommodation, food for consumption on the premises, entertainment, dancing, amusement machines and gambling. Examples include a hotel, bar, nightclub, adult entertainment venue and tavern.				Precinct 1		
<b>Manufacturing and processing</b>	Use of land for manufacturing, assembling or processing products other than Resource Processing. Examples include boat building, brick making, cement works, furniture making, glass manufacturing, metal and wood fabrication, mineral processing and textile manufacturing.				Precinct 1		
<b>Natural and cultural values management</b>	Use of land to protect, conserve or manage ecological systems, habitat, species, cultural sites or landscapes and may include track work and maintenance, park management outbuildings and offices, park entry signs, visitor information signs, information and interpretation booths.				Precinct 1 Precinct 2		
<b>Quarantine facility and/or processing</b>	Use of land for a facility which organisms are raised or held in isolation to prevent pathogen introduction or the spread of disease.						



Use class	Description	Aeronautical development			Non-aeronautical development		
		Airfield	Terminal	Aviation Support	Tourism Mixed Use	Light Industrial	Environment
<b>Recycling and waste disposal</b>	Use of land to collect, dismantle, store, dispose of, recycle or sell used or scrap material. Examples include a recycling depot, refuse disposal site, scrap yard, vehicle wrecking yard and waste transfer station.						
<b>Research and development</b>	Use of land for electronic technology, biotechnology, or any other research and development purposes, other than as part of an educational use.				Precinct 1		
<b>Service industry</b>	Use of land for cleaning, washing, servicing or repairing articles, machinery, household appliances or vehicles. Examples include a car wash, commercial laundry, electrical repairs, motor repairs and panel beating.				Precinct 1		
<b>Sports and recreation</b>	Use of land for organised or competitive recreation or sporting purposes including associated clubrooms. Examples include a bowling alley, fitness centre, firing range, golf course or driving range, gymnasium, outdoor recreation facility, children's play centre, swimming pool, race course, sports ground, and major sporting facility.				Precinct 1 Precinct 2		
<b>Storage</b>	Use of land for storage or wholesale of goods, and may incorporate distribution. Examples include boat and caravan storage, self storage, contractors yard, freezing and cool storage, liquid fuel depot, solid fuel depot, vehicle storage, warehouse and woodyard.				Precinct 1		
<b>Tourism operation</b>	Use of land specifically to attract tourists, other than for accommodation. Examples include a theme park, visitor centre or interpretation centre, wildlife park and zoo.				Precinct 1 Precinct 2		
<b>Transport depot and distribution</b>	Use of land for distributing goods or passengers, or to park or garage vehicles associated with those activities, other than Port and Shipping. Examples include an airport, bus terminal, council depot, heliport, mail centre, railway station, road or rail freight terminal and taxi depot.				Precinct 1		
<b>Utilities</b>	Use of land for utilities and infrastructure including: (a) telecommunications; (b) electricity generation; (c) transmitting or distributing gas, oil, or electricity; (d) transport networks; (e) collecting, treating, transmitting, storing or distributing water; or (f) collecting, treating, or disposing of storm or floodwater, sewage, or sullage. Examples include an electrical sub-station or powerline, gas, water or sewerage main, optic fibre main or distribution hub, pumping station, railway line, retention basin, road, sewage treatment plant, storm or flood water drain, water storage dam and weir.				Precinct 1 Precinct 2		
<b>Vehicle fuel sales and services</b>	Use of land primarily for the sale of motor vehicle fuel and lubricants, and if the land is so used, the use may include the routine maintenance of vehicles. An example is a service station.				Precinct 1		
<b>Vehicle parking</b>	Use of land for the parking of motor vehicles. Examples include single and multi-storey car park.				Precinct 1		
<b>Visitor accommodation</b>	Use of land for providing short or medium-term accommodation for persons away from their normal place of residence on a commercial basis or otherwise available to the general public at no cost. Examples include a backpackers hostel, camping and caravan park, holiday cabin, motel, overnight camping area, residential hotel and serviced apartment complex.				Precinct 1		
<b>Passive Recreation</b>	Use of land for informal leisure and recreation activities principally conducted in the open. Examples include public parks, gardens and playgrounds, and foreshore and riparian reserves.				Precinct 1 Precinct 2		

Use class	Description	Aeronautical development			Non-aeronautical development		
		Airfield	Terminal	Aviation Support	Tourism Mixed Use	Light Industrial	Environment
<b>Business and professional services</b>	Use of land for administration, clerical, technical, professional or similar activities. Examples include a bank, call centre, consulting room, funeral parlour, medical centre, office, post office, real estate agency, residential support services, travel agency and veterinary centre.				Precinct 1		
<b>Residential</b>	Use of land for self-contained or shared accommodation. Examples include a secondary residence, boarding house, communal residence, home-based business, home-based child care, residential care facility, residential college, respite centre, assisted housing, retirement village and single or multiple dwellings.						
<b>Custodial facility</b>	Use of land, other than psychiatric facilities, for detaining or reforming persons committed by the courts or for the purpose of court proceedings or police investigations. Examples include a prison, remand centre and any other type of detention facility.				Precinct 1		
<b>Hospital services</b>	Use of land to provide health care (including preventative care, diagnosis, medical and surgical treatment, rehabilitation, psychiatric care and counselling) to persons admitted as inpatients. If the land is so used, the use includes the care or treatment of outpatients.				Precinct 1		
<b>Resource processing</b>	Use of land for treating, processing or packing plant or animal resources. Examples include an abattoir, animal saleyard, cheese factory, fish processing, milk processing, winery, brewery, cidery, distillery, and sawmilling.				Precinct 1 Precinct 2		
<b>Pleasure boat facility</b>	Use of land to provide facilities for boats operated primarily for pleasure or recreation, including boats operated commercially for pleasure or recreation. Examples include a marina, boat ramp and jetty.				Precinct 1 Precinct 2		
<b>Crematoria and cemeteries</b>	Use of land for the burial or cremation of human or animal remains, and if land is so used, the use includes a funeral chapel.				Precinct 1		
<b>Resource development</b>	Use of land for propagating, cultivating or harvesting plants or for keeping and breeding of livestock or fishstock. If the land is so used, the use may include the handling, packing or storing of produce for dispatch to processors. Examples include agricultural use, aquaculture, controlled environment agriculture, crop production, horse stud, intensive animal husbandry, plantation forestry, forest operations, turf growing and marine farming shore facility.				Precinct 1 Precinct 2		
<b>Extractive industry</b>	Use of land for extracting or removing material from the ground, other than Resource Development, and includes the treatment or processing of those materials by crushing, grinding, milling or screening on, or adjoining the land from which it is extracted. Examples include mining, quarrying, and sand mining.						

# Appendix E - Glossary of terms

**Table E1:** Glossary of terms

Term	Definition
<b>Annual Exceedance Probability (AEP)</b>	A 1% AEP flood is a flood which has a 1% chance of occurring in any year.
<b>Airport Master Plan</b>	The principal planning document required under the <i>Airports Act 1996</i> that sets out a 20-year plan for each leased federal airport.
<b>Aircraft noise contours</b>	Contours that display the existing or forecast aircraft noise exposure patterns around an airport. These contours help land-use planning authorities decide on acceptable development in close proximity to the Airport.
<b>Airservices Australia</b>	The Australian Government agency providing air traffic control management and related airside services to the aviation industry.
<b>Airside</b>	The aircraft movement area of an airport and adjacent land and buildings that are access-controlled.
<b>Aircraft apron</b>	The part of an airport where aircraft are parked and serviced, enabling passengers to board and disembark and freight to be loaded and unloaded.
<b>Australian Noise Exposure Concept (ANEC)</b>	A set of contours based on hypothetical aircraft operations at an airport in the future. As ANEC maps are based on hypothetical assumptions and may not have been subject to review or endorsement, they have no official status and cannot be used for land-use planning, however, an ANEC can be turned into an ANEF.
<b>Australian Noise Exposure Forecast (ANEF)</b>	A system developed as a land-use planning tool aimed at controlling encroachment on airports by noise-sensitive buildings. The system underpins Australian Standard AS2021 'Acoustics – Aircraft noise intrusion' <ul style="list-style-type: none"> <li>• Building siting and construction</li> </ul> <p>The standard contains advice on the acceptability of building sites based on ANEF zones. ANEFs are the official forecasts of future noise exposure patterns around an airport because they constitute the contours on which land-use planning authorities base their controls.</p>
<b>Australian Noise Exposure Index (ANEI)</b>	Contours developed under the ANEF framework showing historic noise exposure patterns used in environmental reporting and benchmarking.
<b>ATM</b>	Air Transport Movement which is defined as a landing or takeoff of an aircraft.
<b>BA365</b>	BA365 is a predictive, real-time risk management tool that provides the mechanism to report and track: <ul style="list-style-type: none"> <li>• Incident and hazard reporting, registers and actions</li> <li>• Investigations</li> <li>• Training and personnel compliance certification and licencing, and</li> <li>• Scheduled activities</li> </ul>

Term	Definition
<b>Busy day</b>	The representative 'busy day' is based on International Air Transport Association methodology and is defined as the second busiest day of the average week in the peak month. The methodology considers both domestic and international activity separately and in combination to ensure that both are properly represented.
<b>Busy hour</b>	The sliding 60-minute period during which the maximum total traffic load in a given 24-hour period occurs.
<b>CEMP</b>	Construction Environmental Management Plan developed to protect the environment and public safety during any proposed works.
<b>Civil Aviation Safety Authority (CASA)</b>	An independent statutory body responsible for regulating aviation safety in Australia and the safety of Australian aircraft overseas.
<b>Code C aircraft</b>	Classified as a narrow-body aircraft with a wingspan of between 24 metres and up to but not including 36 metres. Examples are the Airbus A320 series and Boeing 737 series.
<b>Code E aircraft</b>	Classified as a wide-body aircraft with a wingspan of between 52 metres and up to but not including 65 metres. Examples are the Airbus A330 or A340 and Boeing 747 or 777/787.
<b>Prescribed airspace</b>	Airspace of defined dimensions within which air traffic control services are provided in accordance with airspace classifications.
<b>Curfew</b>	A restriction on certain flights taking off or landing from specified airports at designated times.
<b>Ground support equipment (GSE)</b>	Airport support equipment – for example, aircraft pushback tractors, baggage tugs, ground power units and engine air start units.
<b>Landside</b>	The area of an airport and buildings to which the public normally has free access.
<b>Major Development Plan (MDP)</b>	A requirement under the Airports Act for airport lessee companies to provide information to the Australian Government and the public about significant planned development on leased federal airport sites.
<b>Non-aviation development</b>	Non-aviation commercial developments, such as retail outlets and office buildings, on airport sites.

# Appendix F - Environmental policies & procedures

Term	Definition
<b>Obstacle Limitation Surfaces (OLS)</b>	A series of surfaces that define the volume of airspace at and around an aerodrome to be kept free of obstacles in order to permit the intended aircraft operations to be conducted safely and to prevent the aerodrome from becoming unusable by the growth of obstacles.
<b>Precision Approach Path Indicator (PAPI)</b>	A visual aid that provides guidance information to help a pilot acquire and maintain the correct approach (in the vertical plane) to an airport.
<b>Procedures for Air Navigation Services – Aircraft Operations (PAN-OPS)</b>	A set of International Civil Aviation Organization rules for designing instrument approach and departure procedures at aerodromes.
<b>Regular Public Transport (RPT)</b>	A general public flight service performed on a fixed schedule and specified air routes for specific fees.
<b>Taxiway</b>	A path on an airport connecting runways with apron, hangars, terminals and other facilities.



## Hobart Airport environmental policies & procedures (documents are reviewed by Hobart Airport annually/bi-annually or as otherwise determined necessary by the airport and can be provided to the Department as required to meet compliance)

Aboriginal Sites Index and Status	SMP01 Storage and Handling of Contaminating Substances
Airside Spill Procedure	SMP02 Asbestos Management
Asbestos Register	SMP03 Air Quality and Noise
Biodiversity Policy	SMP04 Waste Management
Biosecurity Risk Response Procedure	SMP06 Stormwater and Runoff Treatment
Climate Change Adaptation Plan 2020	SMP07 Protection of Environmentally Significant Areas
Construction Environmental Management Plan Guidance	SMP08 Vegetation Management
Contaminated Land Policy	SMP10 Weed Control
Energy Use Reduction Policy	SMP13 Site Environmental Awareness
Environment Policy	SMP14 Llanherne House Maintenance Cultural Heritage Management Plan
Incident Management Process	SMP15 Environmental Monitoring
Incident Report Form	SMP16 Stockpile Management
Integrated Carbon Management Plan	Sustainability Strategy
Legislative Register	Waste Management Policy
Llanherne House – Cultural Heritage Management Plan	Waste Management Strategy
Mandatory Reportable Incident Matrix	Water Policy
PFAS Strategy and Implementation Plan	Wildlife Hazard Management Plan
SEMF (2017) Hobart Airport – Aviation Rescue Fire Fighting Services: Preliminary Site Investigation	



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