Summary Master Plan 2026

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We are pleased to share with you Auckland Airport's Master Plan 2026.

Auckland Airport's Master Plan is a blueprint for how we will manage journeys for decades to come. While it is a long-term view, we are underway with the biggest upgrade since the airport opened 60 years ago, across 400,000sqm of airfield infrastructure, transportation, and terminals. This Master Plan guides our path, ensuring we build what is needed, in the right place, and at the time it is needed.

The site of Auckland Airport on Manukau Harbour has always been a place of journeys, whether it be migratory seabirds that for millennia have come to our shores, the arrival of seagoing waka, or the waka rererangi – the aircraft – that have been a feature of this site for nearly 100 years.

Today, Auckland Airport is a vital enabler of Aotearoa New Zealand's economic and social potential. It is crucial to the nation's wellbeing and prosperity, hosting close to 19 million travellers, managing more than 158,000 aircraft movements, and moving about $26 billion in trade. This makes us not only New Zealand's largest airfreight port but the third-biggest trade port, behind Ports of Auckland and Tauranga, in terms of cargo value.

Auckland Airport is the nation's primary border, the place of arrival or departure for 73% of overseas visitors and voyaging New Zealanders. It's also where 25,000 people work on a 1581ha precinct that is the base for a multitude of aeronautical, logistics, commercial, retail and hospitality companies, supporting $35.1 billion in economic output.

This is a dynamic period for Auckland Airport as we transform the airport experience for travellers and create enduring value for New Zealand and for our aviation customers and partners.

Our infrastructure investment in future capacity will not only bring improvements for travellers – reduced delays and congestion, creating comfortable dwell spaces, and encouraging competitive airfares and greater choice of airlines – but is forecast to support $54.9 billion in economic output and $41.1 billion worth of trade by the early 2030s. It's a show of confidence in the long-term ambitions of our city, Tāmaki Makaurau Auckland, and our country.

We are on a journey of many stages. Our Master Plan will guide our pathway forward as we build resilient infrastructure.

E mahi ana mātou mō Aotearoa - we are working for New Zealand.

About this Master Plan

This Master Plan considers the Auckland Airport precinct and its operations holistically, with our aeronautical assets at the core.

This enables a phased approach to development, effectively addressing current needs while anticipating future requirements in alignment with projected demand.

The airport's infrastructure upgrades and developments will have the capacity for around 38 million travellers by late 2040s.

This Master Plan is a guideline and should be treated as a living document, subject to regular revisions and updates.

The Master Plan therefore, does not specify detailed plans, specifications or improvements, or advocate for particular development. It protects the appropriate areas of land and pathways for those developments to be constructed when demand requires.

The horizons identified within the Master Plan are crucial because they allow for a prudent staged approach to development, addressing immediate needs and preparing for future requirements in line with demand projections.

The core principles established in the 2014 Master Plan continue to underpin the airport's development strategy: terminal integration, a northern runway, pier development, and a rapid transit corridor will be the key drivers shaping the future of the airport.

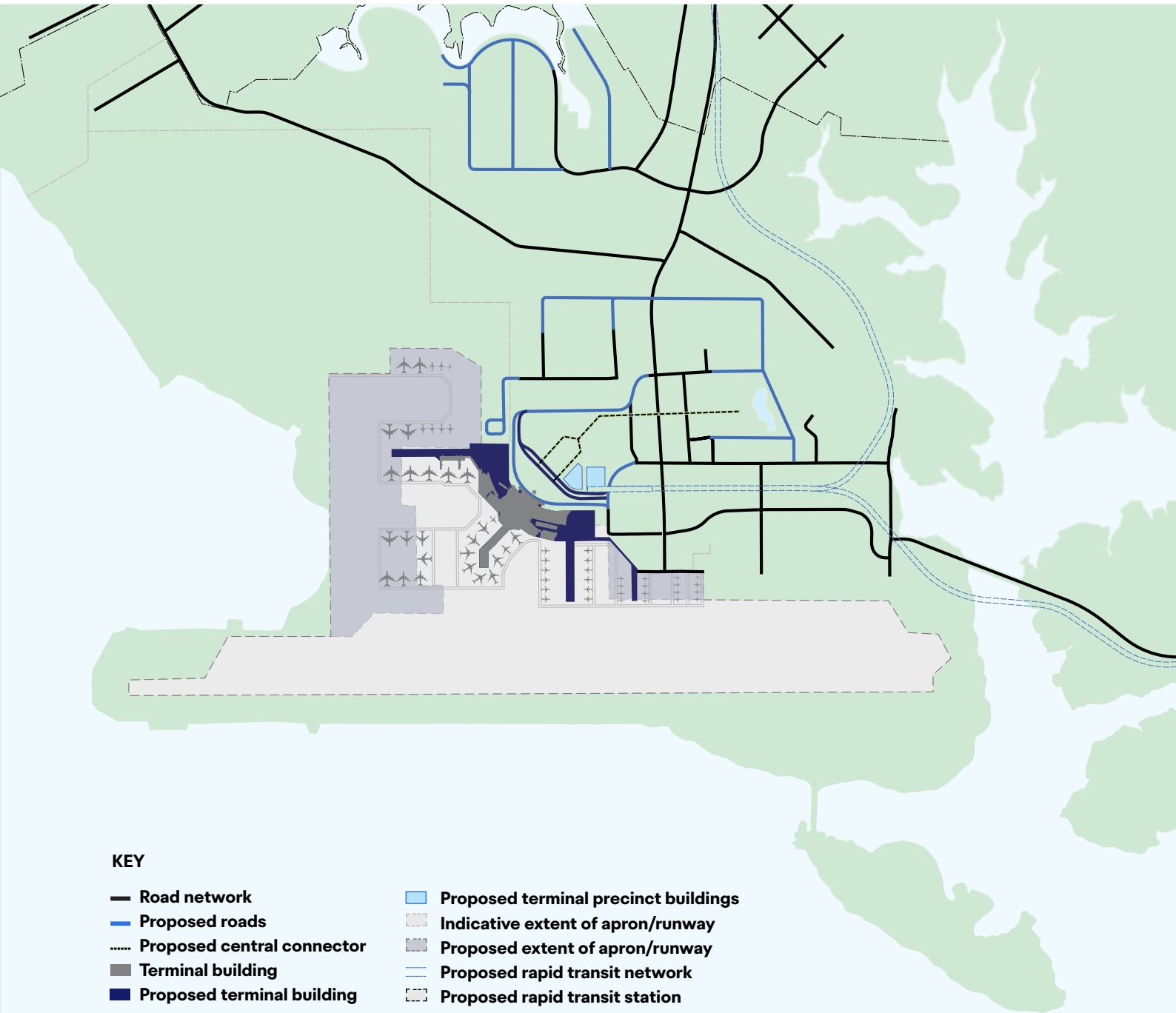
A cargo precinct has been identified as a new principle and incorporated into the 2026 Master Plan, to emphasise the importance of integrated development.

Master Plan evolution and key developments

2014 Master Plan – by 2022 Phase

The 2014 Master Plan outlined the strategic vision for Auckland Airport's growth. It assumed that by 2022 several projects would already be completed:

- The Domestic Jet Terminal (DJT)
- Demolition of the existing domestic terminal building (DTB)
- Expansion of the international terminal building (ITB)
- Provision for rapid transit & changes to the roading network.



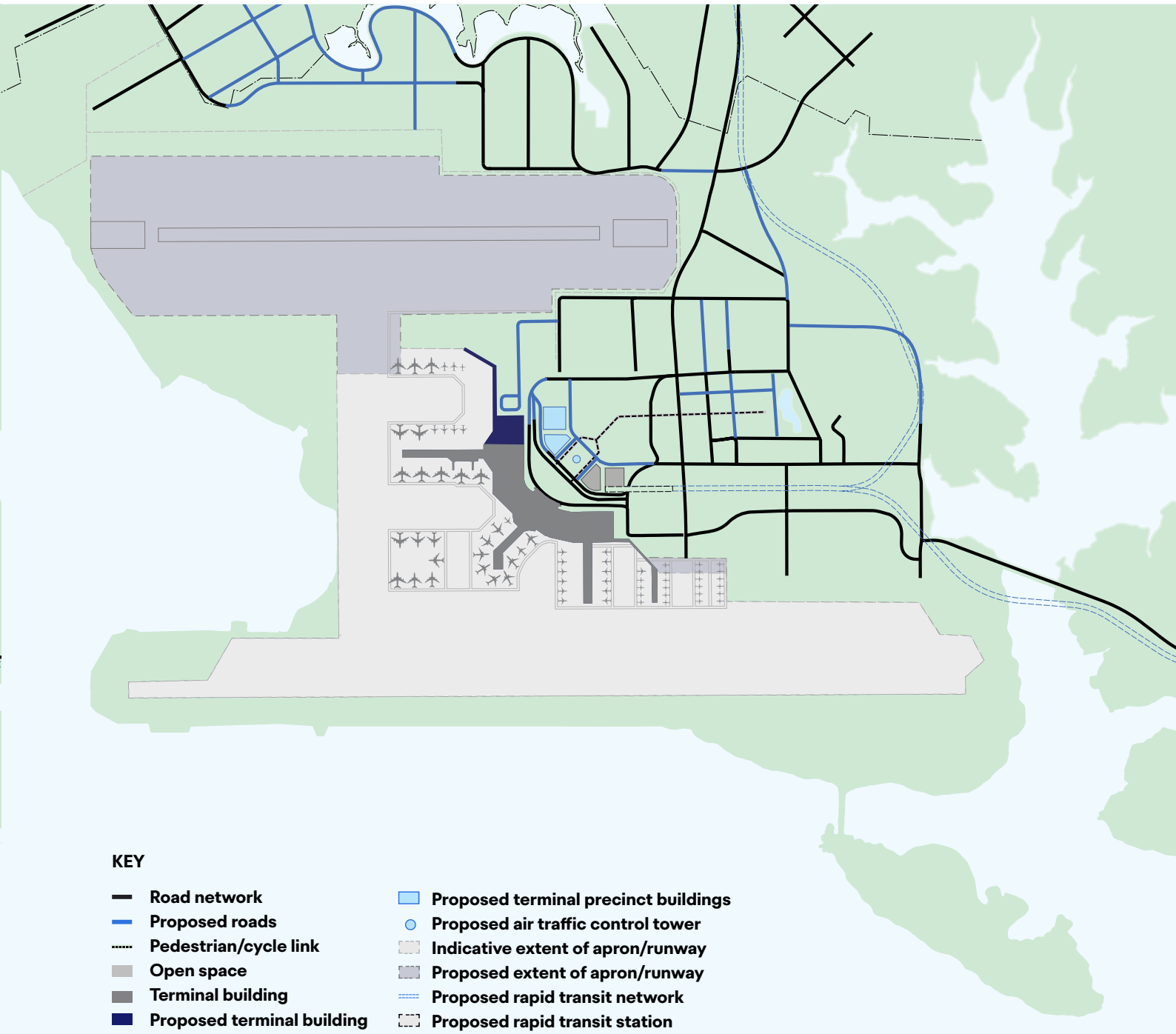
2014 Master Plan – by 2030 Phase

Looking ahead to 2030, the 2014 Master Plan anticipated additional critical development, including:

- Construction of the northern runway
- Further expansion of the ITB
- Additional aircraft stands.

These developments and timing were driven by projected demand and infrastructure needs, and reflected a phased approach to ensure airport capacity was aligned with growing demand and evolving aviation trends.

Embedded within Auckland Airport's ways of working is the ability to adapt dynamically, respond to change and meet the evolving needs of customers. Hence, some of these projects have been revisited to account for a change in passenger forecasts as a result of the Covid-19 pandemic, technology advancements, a focus on efficiency, and the strategic optimisation of existing infrastructure.



Key achievements since the 2014 Master Plan

Since 2014, numerous developments have been successfully delivered. Alongside these projects, Auckland Airport implements an ongoing maintenance program—covering pavement renewals, buildings, and utilities—to ensure safe and efficient airport operations.

Terminal and Airside

Pier B non-contact stands

This 250,000 sqm development commissioned in October 2025, expands taxiway capacity and adds aircraft parking stands designed for large aircraft such as the Airbus A380.

The six new stands respond to the need for extra stands and associated taxiways (TWYs) to accommodate the forecasted international demand. The stands are Multiple Aircraft Ramp Systems (MARS), each able to accommodate two small narrow-body aircraft or one single wide-body aircraft.

This project delivered pipework and treatment ponds to meet drainage requirements for the Pier B Northern stand development, the terminal precinct, future cargo development and north-western non-contact stands.

LED runway lights

Six hundred new LED runway lights are in place on the existing runway since November 2024. These lights have replaced the halogen lamp system.

New LEDs use up to 70% less energy and last 15 times longer than halogen lighting contributing towards Auckland Airport's strategy of investing in low carbon options as part of the infrastructure renewal programme.

Domestic terminal improvements

Auckland Airport enhanced the traveller experience in the domestic terminal by upgrading bathrooms, wayfinding, entry portals, and general areas, including ceilings, flooring, and seating. These improvements were part of ongoing efforts to ensure the terminal remains comfortable and functional for travellers.

International airside dwell space and Pier B extension

The new international dwell, which opened in 2017, introduced a variety of retail and food and beverage options, along with enhanced waiting areas for travellers preparing to board their flights. This development featured a mix of in-terminal restaurants, casual dining, grab-and-go outlets, and fast-food retailers, providing a comfortable and relaxed space for travellers without access to an airline lounge program.

Later in 2017, the Pier B extension was commissioned, adding two new gate lounges and airbridges to accommodate international flights.

Landside and Roading

George Bolt Memorial Drive and Laurence Stevens Drive upgrades

Since 2014, several upgrades have been made to the roading network to enhance traffic flow. These include optimising traffic light phasing and lane configurations at the intersection of George Bolt Memorial Drive and Tom Pearce Drive, updating lane configurations at the George Bolt Memorial Drive and Laurence Stevens Drive roundabout, and implementing a new transit lane system across the airport precinct between December 2017 and 2020 for buses and high-occupancy vehicles.

Park & Ride South

Park & Ride South opened in June 2024 and provides 3,000 parking spaces. A free shuttle bus connects travellers and other users to/from the domestic or international terminal every 10 – 12 minutes. Electric vehicle charging spaces are available to use.

Transport Hub

The 70,000sqm Transport Hub opened in April 2024 as the most significant advancement in the transport system at the international terminal.

The Transport Hub has been situated to service the new integrated domestic terminal and to accommodate any future rapid transit to deliver travellers directly to the airport terminal precinct. The building incorporates a 1.2MW solar array on its 14,000sqm roof that supplies energy to the car park building, EV charging facilities and the commercial offices on its upper floors.

Non-aeronautical

Auckland Airport continues to expand the Landing business park, supporting the logistics, technology, and light industrial sectors. Several developments have received top industry accolades, recognising both individual buildings and the overall precinct design.

Near the terminal, Auckland Airport has developed hotels to accommodate both business and leisure travellers, with Te Arikinui Pullman Hotel being the latest addition.

The Non-aeronautical development section of this Master Plan provides additional information on these topics.

Auckland Airport Master Plan 2026 - a snapshot

Building for the long-haul

This Master Plan looks at the development of Auckland Airport to the late 2040s, segmented into intervals that align with our capital planning cycles.

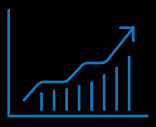
Airport growth forecasts

Passenger forecasts are a critical component of an airport Master Plan, providing the foundation for developing a robust and efficient development pathway to accommodate future growth.

Master Plan considerations

In developing this Master Plan a range of factors have been considered that over the life of the plan will influence the airport's growth.

Drivers of passenger forecasts



Fleet developments

Energy transition & future fuel

Environmental management & sustainability

Digital & technology

Land use planning

This Master Plan looks at four distinct precincts with priority given to aeronautical-related activities.

Airside precinct

Terminal precinct

Surface access

Non-aero precincts

Airport growth forecasts

Passenger forecasts anticipate changes in passenger numbers, aircraft movements and cargo volumes.

Passenger forecasts provide the baseline to ensure the airport can handle growth without sacrificing service quality or compromising safety standards.

Accurate passenger forecasts also help determine the necessary size and timing of airport expansions such as runway additions or terminal enhancements.

In 2024 a set of revised* passenger, aircraft movements and cargo tonnage forecasts covering the Master Plan period was produced.

These forecasts provide insight into long-term infrastructure demand and should be viewed as indicative trends. Activity levels over the short to medium term will differ as a range of externalities will combine to result in fluctuation in actual demand in any given year.

Figure 1: Summary of forecasts results

Passengers (mppa)*

FY25	FY29	END STATE
18.7	23.0	**37.9**
	↑3.6% p.a. (FY24-FY29)	↑3.0% p.a. (FY29-onwards)

Movements ('000)

FY25	FY29	END STATE
157.0	178.2	**260.8**
	↑2.5% p.a. (FY24-FY29)	↑2.1% p.a. (FY29-onwards)

Domestic passengers (mppa)*

FY25	FY29	END STATE
8.4	10.1	**14.8**
	↑3.6% p.a. (FY24-FY29)	↑2.2% p.a. (FY29-onwards)

International passengers (mppa)* (includes transit)

FY25	FY29	END STATE
10.3	12.9	**23.1**
	↑3.6% p.a. (FY24-FY29)	↑3.5% p.a. (FY29-onwards)

Passengers

Passenger volumes are expected to increase at an average annual rate of 3.7% between FY24 and FY29, and 3% from FY29.

Table 1: Annual passenger growth for the Master Plan period

	Million passengers annually		
Route	FY28	FY33	END STATE
Domestic-trunk	7.0	8.0	10.9
Domestic-regional	2.7	3.1	3.9
International short-haul	6.2	7.4	11.8
International long-haul	4.7	5.8	10.0
Transits	0.8	0.9	1.3
TOTAL	**21.4**	**25.2**	**37.9**

*Accounting for engine issues and aircraft delivery delays. ^mppa = million passengers per annum.

Aircraft movements

Growth in aircraft movements is expected to average 2% p.a. until the end of the Master Plan period.

Table 2: Annual aircraft movement for the Master Plan period

	Annual aircraft movements		
Segment	FY28	FY33	END STATE
Domestic-trunk	45,800	51,000	65,500
Domestic-regional	60,700	65,700	79,000
International short-haul	34,700	41,200	63,000
International long-haul	20,400	24,400	37,500
Total commercial	**161,600**	**182,250**	**245,000**
Freighter	6,800	7,400	8,900
Non-commercial	5,300	5,700	6,900
TOTAL	**173,700**	**195,400**	**260,800**

Cargo and freight

International cargo volumes are projected to grown annually by circa 1.4% p.a. until the end of the Master Plan period, when about 223,000 tonnes will be handled at the airport.

Table 3: Annual cargo tonnes for the Master Plan period

	Cargo tonnes		
Segment	FY28	FY33	END STATE
Cargo	167,000	181,500	223,000

Land use planning

Auckland Airport serves as a complex network of activities and tenants with unique requirements.

For this reason, the airport land is divided into four precincts with individual purposes, objectives and development strategies.

This Master Plan looks at these precincts, which are listed according to the airport hierarchy giving priority to aeronautical-related activities.

It refers to airport infrastructure using the names and terminology in use today (such as piers, stands, and terminals) to provide clarity and continuity. Over time, these names may evolve as part of a considered naming convention framework that supports a more customer centred experience, recognising that clear, intuitive naming supports users to better understand and navigate places, spaces, and systems.

Airside precinct

The airside precinct accommodates the infrastructure, systems and surfaces required for the safe and efficient movement and servicing of aircraft on the ground.

Key infrastructure includes runways, taxiways, aprons, helipads, navigational aids, and other aviation-related facilities.

Terminal precinct

The terminal precinct serves as the critical interface between the airfield and ground transportation precincts. Its core purpose is to process and streamline international, domestic and regional passenger flows, manage baggage and provide a range of services to enhance the experience of airport customers.

Surface access precinct

This precinct encompasses all transport activities and infrastructure that provide connectivity to, from and across the airport site. It includes the terminal pick-up and drop-off (PUDO) areas, car parks, waiting zones and the roading network. This precinct must also support the seamless connectivity between private and public transport modes.

Non-aero precincts

The non-aeronautical precincts are designated areas within airport land that accommodate a range of commercial activities that complement the core aeronautical operations, catering for both travelling and non-travelling public. Auckland Airport's commercial property portfolio comprises business and industrial parks, hotels and retail areas that are home to some of the world's leading businesses and brands. The main non-aeronautical precincts within the airport are The Landing and The Quad.

Airside precinct

The airside precinct accommodates the infrastructure, systems and surfaces required for the safe and efficient movement and servicing of aircraft on the ground.

The existing precinct

Auckland Airport is a single runway airport. Runway 05R/23L measures 3,565 metres by 75 metres (including shoulders) and is capable of handling Code F aircraft. The network of taxiways provides the airfield with access for a wide range of aircraft, from smaller eight-seaters to the A380.

The existing runway is served by a full parallel taxiway that provides access to both the domestic and international aprons. The international apron is equipped with aircraft stands that can accommodate both narrow-body and wide-body aircraft.

The domestic apron, located adjacent to the domestic terminal, provides parking positions for jets and turboprop aircraft.

Transitioning towards a dual-runway airport

Recent studies have highlighted that the northern runway, which will run in parallel to the existing runway, will be required.

The entry and exit taxiways, number of parallel taxiways, declared distances, safety areas, and precise locations have all been confirmed in the Auckland Unitary Plan. These details were previously discussed and agreed with both internal and external stakeholders.

The future dual-runway configuration will provide Auckland Airport with segregated runway operations, capable of accommodating up to Code F aircraft. This runway configuration will also allow simultaneous operations on both runways, without the need for increased aircraft separation or additional sequencing procedures.

Apron configuration

Auckland Airport's apron is divided into three main areas, linked to the traffic segment each terminal serves. With the opening of the new Domestic Jet Terminal and the eventual closure and demolition of the existing domestic terminal, the apron dynamics and allocation principles are set to change.

Aircraft parking positions are assigned to the apron matching the traffic segment of each flight, though some restrictions are applied across the apron based on operational or regulatory requirements. In the future, operational requirements may be lifted or changed. Cargo aircraft do not have a dedicated apron and are allocated to non-contact stands.

Future requirements for aircraft stands

Based on the traffic forecasts, the future apron requirements will be planned with the following considerations:

Regional stands: additional stands will be aligned with Piers A3 and A4.

Domestic stands: expansion will focus on the development of a new Pier A2.

International stands: capacity will be enhanced through the development of Pier C and western non-contact stands.

Cargo operations: will continue to be carried out from commercial parking positions in the vicinity of the cargo precinct, until the implementation of the northern runway 05L/23R unlocks the possibility of a dedicated apron adjacent to The Landing business park.

A map of the future stands and piers at Auckland Airport is provided in the Appendix of this document.

Support facilities

Support facilities provide secondary aeronautical services complementary to commercial passenger operations.

These facilities include:

- Cargo
- Aircraft maintenance
- Fixed-base operators
- Heliport
- Air traffic control
- Rescue and firefighting
- Wildlife
- Air catering
- Airside access checkpoints

Terminal precinct

The terminal precinct serves as the critical interface between the airfield and the surface access precincts, accommodating the different terminal buildings.

Its purpose is to process and streamline international, domestic and regional traveller flows, manage baggage, and provide a range of services to enhance the experience of airport customers.

The current dual-terminal system

Auckland Airport currently operates under a dual-terminal arrangement, with one building dedicated to international traffic and the other terminal catering to domestic and regional flights.

International terminal

The international terminal building (ITB) is located proximate to the centre and west of the airfield and is serviced by two international piers; Pier A and Pier B, as well as a number of non-contact stands.

Travellers check-in at ground level using a mix of traditional check-in desks, self-service kiosks and automated bag drops. Departures processing occurs at Level 1 with Customs processing followed by Aviation Security screening. Travellers then move through to a high-quality retail and food and beverage offering.

Arriving international travellers complete primary line immigration processes at level 1 and then go down to baggage reclaim at ground level, before completing secondary processing for Biosecurity and Customs before exiting into the landside arrivals area.

For travellers transiting between international flights, an airside transit facility is provided.

Domestic terminal

Domestic and regional operations at Auckland Airport are handled through the domestic terminal building (DTB). This is a legacy building that opened in 1966 and has served Auckland Airport well, but is approaching the end of its useful life.

Domestic jet operations are mainly serviced via contact stands and airbridges, with all travellers needing to complete Aviation Security processing prior to travel. Air New Zealand and Jetstar operate domestic destinations.

Regional services are operated by Air New Zealand, Air Chathams and Barrier Air and are based at the eastern end of the terminal. Regional services range from six-seat propeller aircraft to 68-seat turbo-prop aircraft. Travellers are not security screened for regional services.

Evolving the dual-terminal concept

Future terminals

While the existing terminal configuration has served Auckland Airport for many years, it hinders connecting journeys from secondary domestic cities to major international destinations, creating two different service standards, forcing the duplication of services and resources, and preventing a cohesive and balanced expansion strategy for the longer term.

This Master Plan confirms a very clear terminal development strategy: to integrate domestic and international operations under one roof. This ambition will be delivered through the new Domestic Jet Terminal, a landmark project that, once operational, will transform the existing international terminal into the integrated terminal.

After domestic jets move to the integrated terminal building, the existing DTB will be reconfigured in the short-term to serve regional operations. This will enable the staged development of future regional piers and a new fit-for-purpose terminal.

Regional operations will eventually move to the new, dedicated regional terminal for a streamlined process, reduced walking distances, and a cost-effective development.

Surface access precinct

Auckland Airport's overarching surface access vision for the network is 'connecting people and place through seamless journeys'.

Planning a network suitable for the future

Auckland Airport and the wider network need to be able to accommodate the growth in demand that is expected to occur across the Master Plan period, while also ensuring a continued 'terminal-first' approach to planning.

Reliable

Ensuring reliable travel within the precinct for all modes, to provide confidence that people, goods and services will reach their destinations safely and on time.

Resilient & responsive

Ensuring redundancy in the system to cater for unforeseen events and to adapt to climate-change impacts.

Guiding principles

Setting the foundation for an accessible and well-connected airport, supporting its role as a key regional and international transport hub.

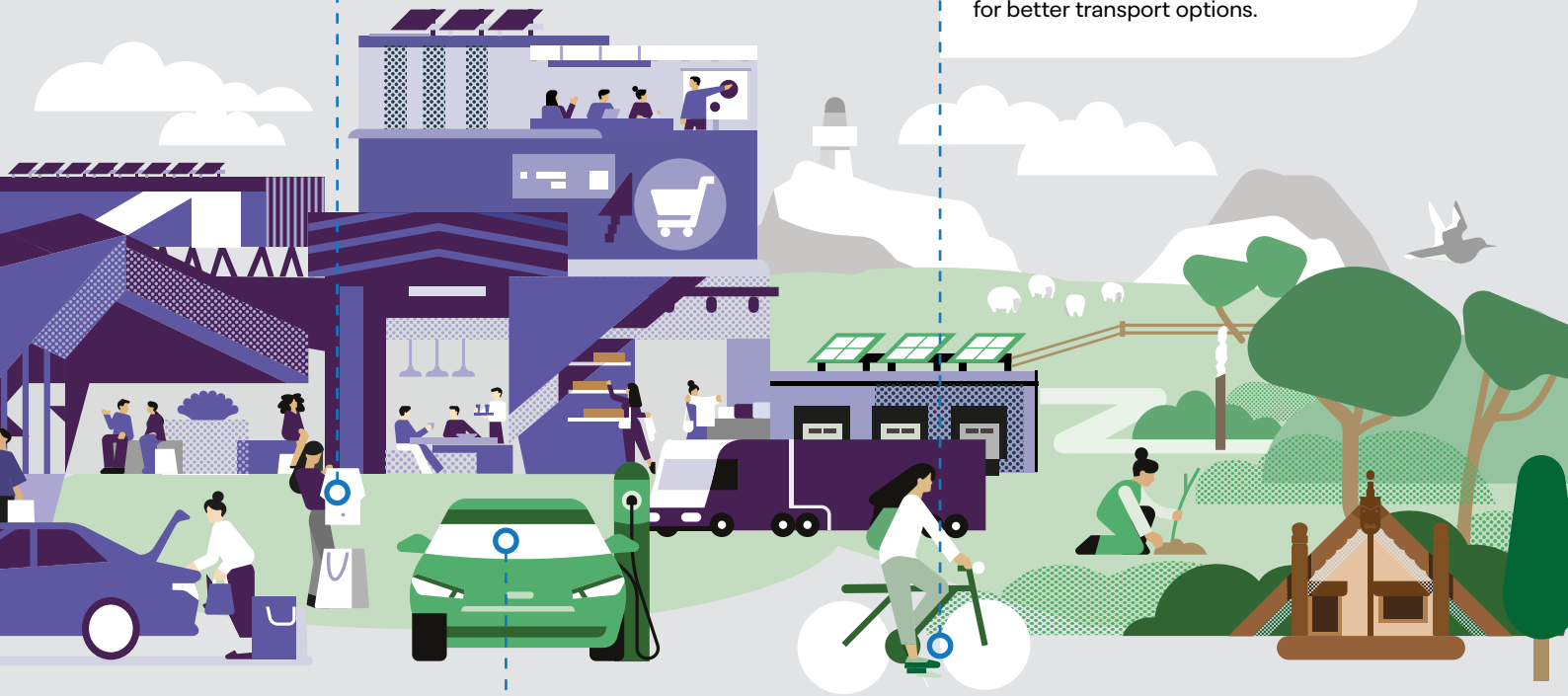
Creating a robust, efficient and sustainable transport network that meets the needs of air travellers, staff, businesses on the precinct and in the wider community.

Customer experience

Providing seamless access across the precinct to create positive travel experiences for all of Auckland Airport.

Better travel choices

Deliver a multi-modal network that encourages travel choices and advocate for better transport options.



Environmentally sustainable

A system that seeks to reduce vehicle emissions.

Managing surface access in and around Auckland Airport to ensure people and freight travelling to/from the airport precinct reach destinations on time and safely.

Being able to accommodate the growth in travellers, freight and commuter movements expected over the Master Plan horizon.

Non-aeronautical Precincts

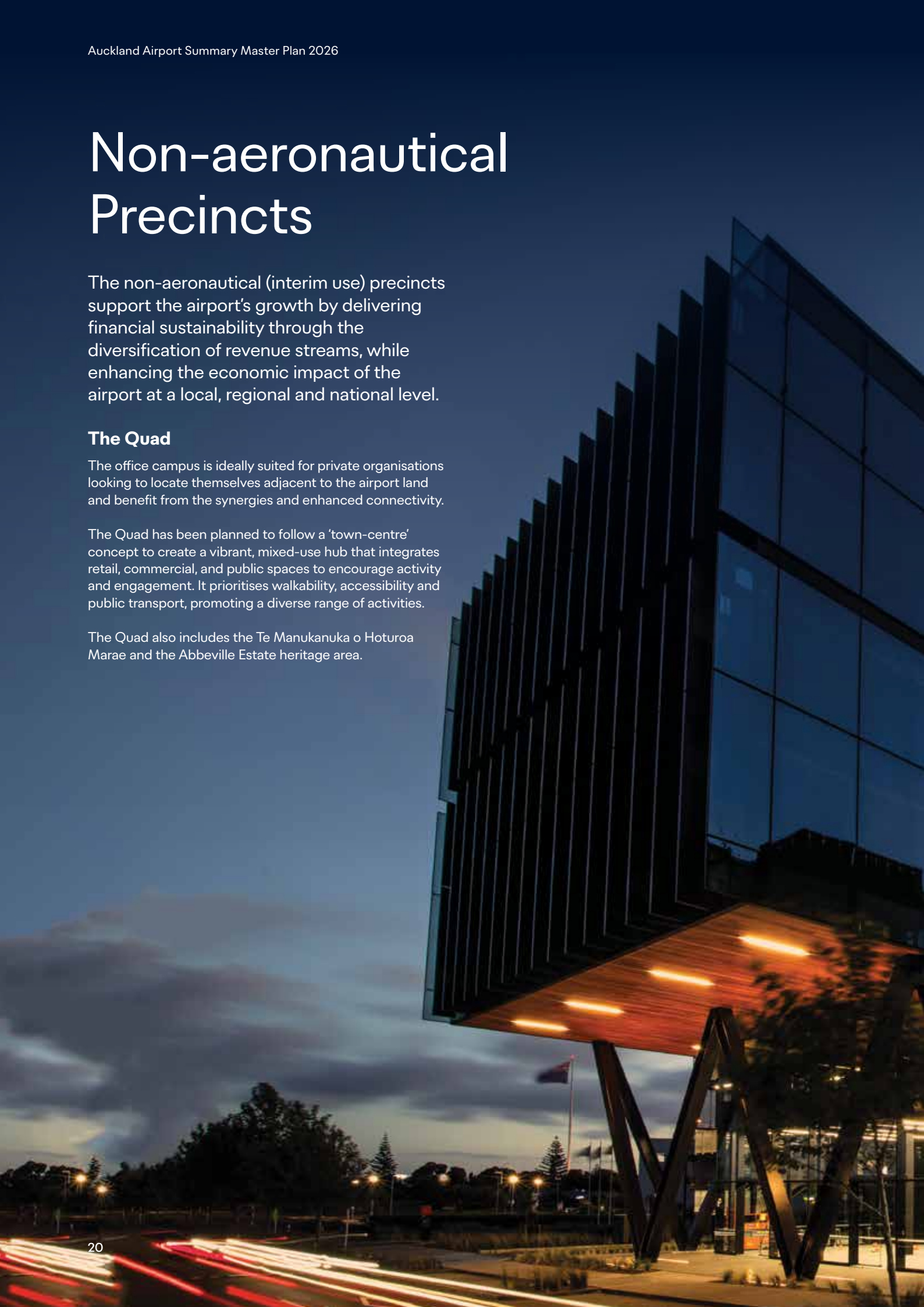
The non-aeronautical (interim use) precincts support the airport's growth by delivering financial sustainability through the diversification of revenue streams, while enhancing the economic impact of the airport at a local, regional and national level.

The Quad

The office campus is ideally suited for private organisations looking to locate themselves adjacent to the airport land and benefit from the synergies and enhanced connectivity.

The Quad has been planned to follow a 'town-centre' concept to create a vibrant, mixed-use hub that integrates retail, commercial, and public spaces to encourage activity and engagement. It prioritises walkability, accessibility and public transport, promoting a diverse range of activities.

The Quad also includes the Te Manukanuka o Hoturoa Marae and the Abbeville Estate heritage area.



The Landing

The Landing is an expansive 146ha business park located north of the proposed northern runway.

The Landing is home to a number of the world's largest third-party logistics (3PL) and logistics companies.

This precinct will be further developed, driven by specific market opportunities for light industrial activities from private businesses and parties.

At the beginning of 2026, Auckland Airport acquired an additional 81ha of land with the intention of developing portions of the site into an industrial business park in the future.

Hotels

The Te Arikinui Pullman Auckland Airport is the most recent addition to Auckland's hospitality scene, and it is the only 5-star hotel in the precinct.

The hotel is named Te Arikinui in honour of Dame Te Atairangikaahu, the first Māori Queen, reflecting the commitment to acknowledging and celebrating New Zealand's Māori heritage.

The Novotel, opened in 2011, is a 4.5 star hotel. It features a modern restaurant, bar, and has meeting and conference room facilities. Its location just a short walk from the international terminal and next to the Te Arikinui Pullman, makes it incredibly convenient for early-morning flights, layovers, or business meetings.

Auckland Airport's development includes the ibis hotel and hotel number 4 that was under construction before the COVID-19 pandemic. Work will recommence on hotel number 4 as soon as it is deemed viable.

Environment & sustainability

Auckland Airport is for the world we'll travel tomorrow. A world where we uplift the communities we connect and protect the nature we explore.

This approach is embedded in Auckland Airport's operations and is a key consideration of our Master Plan. This is made even more important by the natural and cultural significance of our location on the Māngere peninsula and the shores of Te Manukanuka o Hoturoa (the Manukau Harbour), and our proximity to residential and business areas. Auckland Airport is committed to being a climate-resilient, low-carbon gateway for New Zealand.

The physical effects of a changing climate are already being felt across the country, with flooding and inundation in extreme weather events presenting the key physical climate-related risk to Auckland Airport. As an inter-generational asset of national significance, Auckland Airport must and is responding to this risk through the spatial layout and new infrastructure reflected throughout the Master Plan.

Auckland Airport also has a role to play in the decarbonisation of aviation by ensuring infrastructure is in place to service new aircraft technologies and fuels as they become available. Sustainable aviation fuel (SAF) can be delivered to aircraft via Auckland Airport's fuel hydrant system, and the Master Plan has considered infrastructure and space that will be required as new, low-emissions aircraft technology is adopted, such as electric and hydrogen-fuelled aircraft. Auckland Airport will continue to engage with airline partners to understand and support their future requirements.

Similarly, Auckland Airport is future-proofing its transport network to enhance connectivity and provide for low-emission transport modes. The Master Plan accommodates a variety of transport options and strategies, including active modes such as cycling and walking, rapid transit (bus and light rail) and the anticipated increase in EVs for both private and public transport.

These carbon reduction initiatives are part of a broader effort to reduce carbon emissions across the entire supply chain. Auckland Airport has been taking proactive steps to reduce its direct carbon emissions and has publicly disclosed a decarbonisation pathway to achieve a 90% reduction of direct emissions by 2030 compared to the 2019 baseline. This pathway is aligned with the capital plan and includes phasing out fossil fuel use and securing a supply of renewable electricity. Auckland Airport's progress to date has been recognised with a Level 4 (Transformation) Airport Carbon Accreditation from Airports Council International (ACI), putting Auckland Airport among the world's leading in terms of sustainability.

More broadly, Auckland Airport strives to exceed environmental obligations and continually improve its environmental performance, including through best-practice stormwater management and biodiversity enhancement that befits its significant location, while ensuring effective bird-strike risk management. Continuation of these initiatives is reflected in the Master Plan, including scope for developing and upgrading stormwater treatment infrastructure.

Auckland Airport cannot manage noise effects solely within its landholding but remains committed to adhering to Designation 1100 for aircraft noise management. This includes ensuring noise from aircraft operations does not exceed 65dB Ldn outside the High Aircraft Noise Area (HANA) and 60 dB Ldn anywhere outside the Moderate Aircraft Noise Area (MANA).

Look to the future

The aircraft manufacturing industry is undergoing significant change, with the need to balance the continuing growth in demand for air travel with an increased focus on sustainability and fuel efficiency.

Fleet development and future aircraft concepts

In response to the carbon reduction challenge, manufacturers are exploring alternative propulsion systems, such as hydrogen fuel cells, and the use of advanced light-weight materials to improve aircraft efficiency. Carbon reduction is also driving the advent of new aircraft concepts. These advancements are not only expected to revolutionise the way we fly, but may also necessitate modifications to airport infrastructure and operations.

Fleet development

Small aircraft with hybrid-electric propulsion are expected to enter service this decade, while regional aircraft could be available by the mid-2030s. Larger commercial aircraft might be introduced from 2040 onwards.

It is expected that during the Master Plan period, both domestic and foreign carriers will continue to operate a mix of narrow-body and wide-body jets to support the domestic and international networks, with turboprops and the next generation of 'net-zero' aircraft serving the regional routes. It is also expected that domestic carriers will average an increased number of seats per aircraft and higher load factors over time.

The aviation industry has committed to achieving net-zero emissions by 2050, aligning with the Paris Agreement's goals to limit global warming. However, the path to net-zero by 2050 is complex and requires significant advancements in technology and infrastructure.

In November 2023, Auckland Airport announced a collaboration with Heart Aerospace, joining the company's advisory board to help propel innovation in sustainable aircraft. Heart Aerospace is at the forefront of developing electric regional aircraft, designed for short-haul flights with lower environmental impact. This aligns with Auckland Airport's goals to reduce emissions and prepare for the future of green aviation. Auckland Airport will work with Heart Aerospace to share information as the technology develops, including around charging options and infrastructure.

Electric and Hybrid

While it is unknown at this stage if wholesale electrification of the aviation sector will be possible, there is scope for regional and domestic flights to be early adopters and make use of hybrid or electric aircraft in the short-to-mid-term to transport travellers and freight.

The plan to achieve an 80-seat electric aircraft may be technically and economically viable by 2035 according to the International Air Transport Association (IATA), whereas larger 180-seat commercial aircraft that could compete against today's narrow-body jets are not expected until the 2040s or beyond.

The transition to electric and hybrid aircraft will pose challenges, particularly in terms of infrastructure. Auckland Airport will likely need to upgrade its electrical systems to handle the increased demand for high-capacity charging stations and a reliable power supply.

Hydrogen

Hydrogen-powered aircraft still are in the early stages of technological development and are expected to require one or two more decades to mature into a viable concept.

There are a number of challenges to widespread adoption of hydrogen as an aviation fuel in New Zealand, ranging from aircraft technology and green hydrogen generation facilities, to transport and storage solutions and firefighting techniques.

With regard to aircraft technology and potential fleet replacements:

- No significant replacement technologies are expected before 2035 for the current turboprop aircraft fleet.
- Until 2035, hydrogen technology is only likely to be deployed for nine-seat aircraft and below in the form of test flights with ranges between 200-400km. Larger aircraft (30-50 seats) before 2035 may involve hybrid gas turbine and electric concepts.

Because hydrogen cannot be combined with existing aviation fuel, its implementation will require separate transport and storage infrastructure, triggering major developments at Auckland Airport. Onsite hydrogen production or liquification has not been considered at this stage.

Longer term, larger commercial aircraft are likely to use liquid hydrogen in hybrid hydrogen-electric engines due to its improved energy density and performance.

Digital and technology

Auckland Airport is making a major shift by integrating physical and digital systems across the entire precinct, to improve connectivity and drive a complete operational transformation.

Technology as an enabler of seamless travel

At the core of this transformation is robust technology infrastructure, reliable networks and devices that boost efficiency and seamlessly support the airport's critical functions. Cutting-edge data and analytics platforms will provide a comprehensive operational view, enabling smarter, faster decision-making and improved situational awareness.

One of the most significant advancements in modern airports is the implementation of biometric screening and e-gates. These systems enable faster, more efficient and more secure passenger processing by integrating facial recognition, fingerprint, and iris scanning.

Travellers will also benefit from enhanced experience with real-time digital tools and intuitive wayfinding displays for effortless navigation. Smart wayfinding displays and digital signage will also provide real-time updates on flights, gate changes and baggage claim belts.

In addition, the rise of mobile applications and AI-driven chatbots is transforming how passengers interact with airport services. From virtual assistants that provide real-time updates on delays and terminal changes to AI-powered customer service solutions, these innovations help reduce stress and improve the overall travel experience. With personalised notifications and tailored recommendations, airports can offer a seamless, connected journey from check-in to boarding.

Looking ahead, the integration of Internet of Things (IoT) technologies promises to enhance operational efficiency further. Smart sensors embedded throughout airport facilities can monitor foot traffic, optimise energy usage, and predict maintenance needs in real time. This data-driven approach ensures that airports operate at peak efficiency while maintaining a comfortable and hassle-free environment for travellers.

Automation and self-service

Automation and self-service technologies have the power to revolutionise airport operations. Auckland Airport is embracing this shift with forward-thinking initiatives such as the Check-in Hall Extension and Reconfiguration Programme. This development is transforming the check-in process by replacing traditional equipment with state-of-the-art self-service kiosks (SSKs) and automated bag drops (ABDs), making the journey faster and more convenient for travellers.

Automated border control systems (inbound and outbound) leverage the increased adoption of biometric passports. They present a compelling case by enhancing security and streamlining passenger processing by significantly reducing wait times and improving the overall efficiency of border control operations.

Auckland Airport & Te Ao Māori (The Maori World)

Auckland Airport recognises the cultural, historical, and spiritual significance of the land we operate on, and the long-standing connections that mana whenua hold with this area.

These connections are reflected through Crown recognised interests, such as those of Te Ākitai Waiohua, as well as through the whakapapa, history, and ongoing occupation of other iwi with ties to this whenua. The relationships of iwi to this place are significant and continue to shape the identity and the cultural narratives of the area.

As the gateway to Aotearoa, we have the privilege of reflecting the richness of Māori culture in the experience of travellers. Our design approach seeks to honour both the broader Māori identity of Aotearoa and the distinct, place-based relationships of mana whenua. We work with mana whenua to incorporate values, narratives, and tikanga where appropriate, while also ensuring our spaces express the wider Māori story that welcomes visitors to Aotearoa.

Our relationships with iwi focus on areas where our operations and development interact most closely with mana whenua interests, such as environmental planning, stormwater, and resource consents. Through regular engagement, we aim to provide visibility of projects, understand the perspectives of mana whenua, and ensure these views are appropriately considered in our planning and decision-making.

Auckland Airport values its long-standing relationship with Waikato-Tainui, which began in 2003 with an agreement signed with the late Te Arikinui Te Atairangikaahu to establish Te Manukanuka o Hoturoa Marae. Unique within a commercial precinct, the marae continues to serve as a cultural centre and place of welcome under Tainui tikanga, and will celebrate its 20 year anniversary in November 2026. Over time, this relationship has grown into a commercial partnership that includes the development and co-ownership of Te Arikinui Pullman Auckland Airport and the Novotel Auckland Airport Tainui.

Looking ahead, we remain committed to maintaining constructive relationships with mana whenua and exploring opportunities to strengthen how Māori perspectives are reflected across our operations and future development.

Appendix

The airside precinct today

The future airside precinct

The terminal precinct today

The future terminal precinct

The surface access precinct today

The future surface access precinct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The airside precinct today

1. Existing runway

The existing runway, 05R/23L, measures 3,535 metres by 75 metres and is capable of handling Code F (A380) aircraft. The network of taxiways provides the airfield with access for a wide range of aircraft, from smaller eight-seaters to the A380.

2. International apron

Served by Pier A and Pier B and by both contact stands and non-contact stands. Non-contact stands are supported by bus lounges.

3. Domestic apron

Provides parking positions for Code C jets (A320 and A321). Domestic destinations are: Christchurch, Dunedin, Wellington, Queenstown, Invercargill.

4. Regional apron

Provides parking positions for turboprops aircraft which aircraft service New Zealand regional airports from Auckland.

5. ITB – Pier A

Serves international flights. Stands can accommodate both narrow-body and wide-body aircraft. Limited A380 capability.

6. ITB – Pier B

Serves international flights with the ability to accommodate large aircraft such as A380 and narrow-body aircraft.

7. Domestic terminal

Serves flights to domestic and regional destinations.

8. Air traffic control tower

Provides air traffic control services to ensure safe and efficient airspace operations and management.

9. Aviation rescue & fire fighting

Besides its aeronautical response duties, Auckland Airport's emergency services team is an industry fire brigade and an allied emergency service with Fire & Emergency New Zealand and St John Ambulance. This arrangement extends Auckland Airport's areas of responsibility beyond the aviation response zone. Auckland Airport's emergency services also include hovercraft operations.

10. Checkpoint Charlie

Regulated access point to the airside.

11. Checkpoint Bravo

Regulated access point to the airside. Today mainly accessed by maintenance, engineering services and Auckland Airport employees.

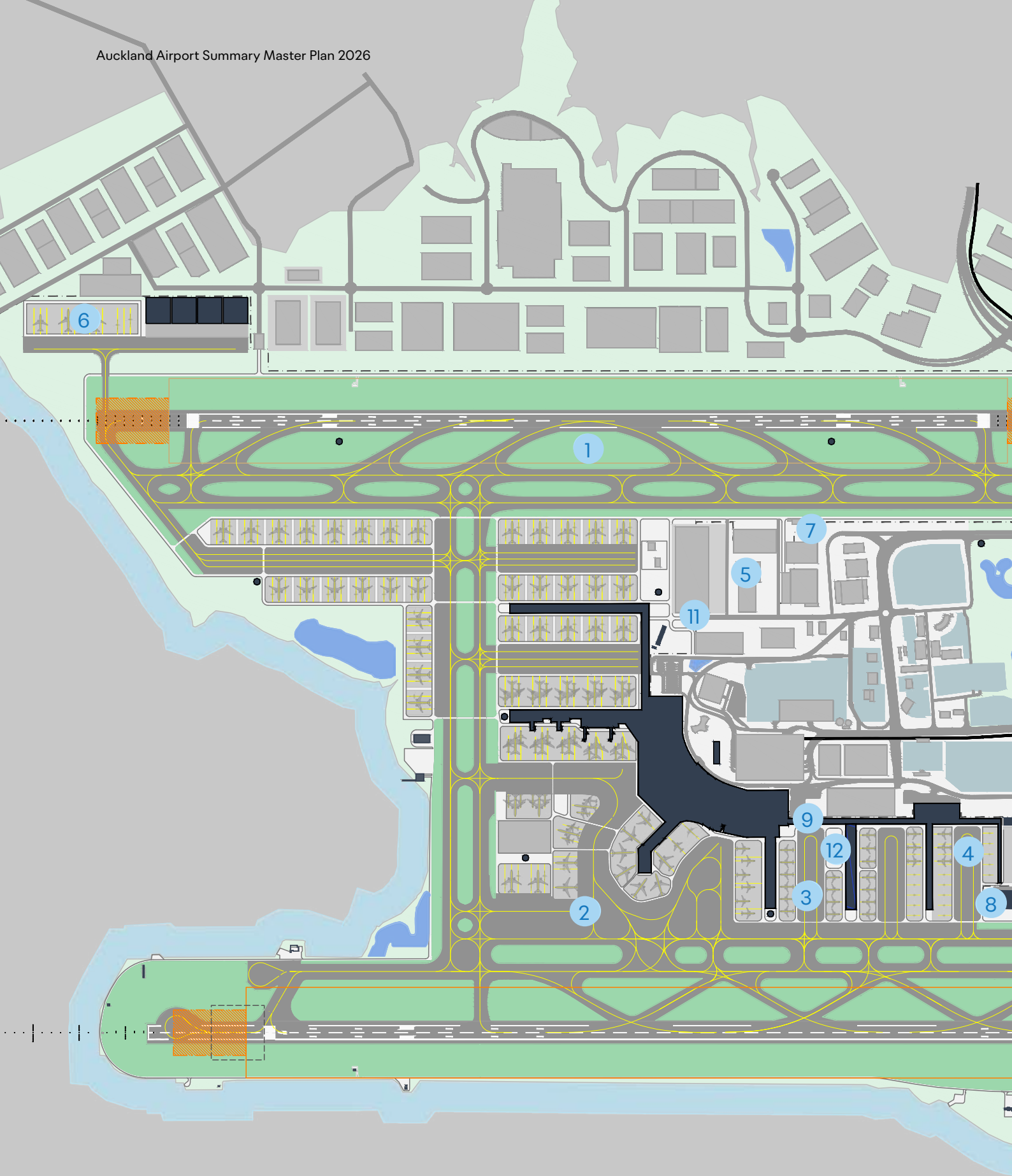
12. Air New Zealand base

Air New Zealand perpetual leased land. This land is safeguarded in the Master Plan for Air New Zealand use.

13. Charlie 1 apron

Provides hangarage for commercial airlines and FBO facilities.

Construction site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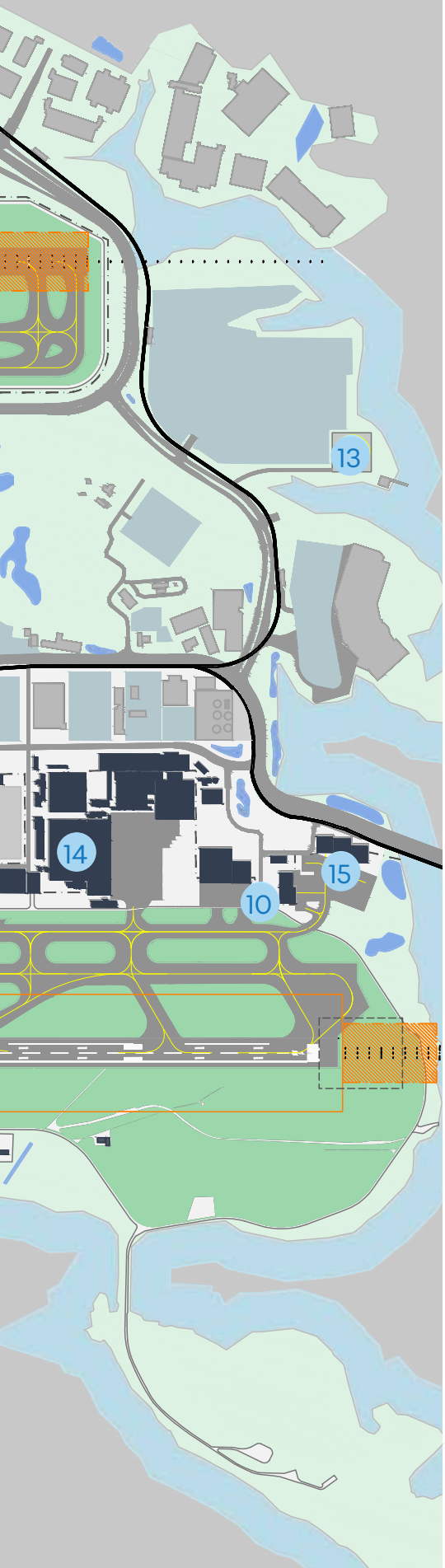


The future airside precinct

1. Northern runway

The northern runway 05R/23L has a take-off distance of 2,950 metres in each direction. International and cargo traffic, both long-haul and short-haul will primarily be assigned to the northern runway.

2. International apron

Served by Pier A, Pier B and the addition of Pier C. Additional number of stands is required to meet future demand.

3. Domestic apron

Served by Pier A1 and A2. Supports forecast increase in domestic traffic over the period of the Master Plan. These piers have been planned with flexibility in mind to support any future changes in aircraft type and technology.

4. Regional apron

Will provide stands for both turboprop and jet (A320/A321) aircraft.

5. Cargo precinct

Consolidated cargo location to provide optimal operational synergies for all carrier types in the medium to long term. Key purpose is to enhance operations and capitalise on economies of scale.

6. Future cargo apron

Site safeguarded as/if future demand requires.

7. Aviation rescue & firefighting

A new facility will support the northern runway and surrounding areas.

8. Aviation rescue & firefighting

A new facility becomes the southern station to support the existing runway and surrounding areas. Additional hovercraft ramps will be provided for.

9. Checkpoint Charlie

Regulated access point providing airside access. Demand is expected to increase over time.

10. Checkpoint Bravo

Regulated access point providing airside access. Users are expected to change over time.

11. Checkpoint Delta

Regulated access point to serve the cargo precinct area.

12. Air traffic control tower

Provides air traffic control services to ensure safe and efficient airspace operations and management.

13. Heliport

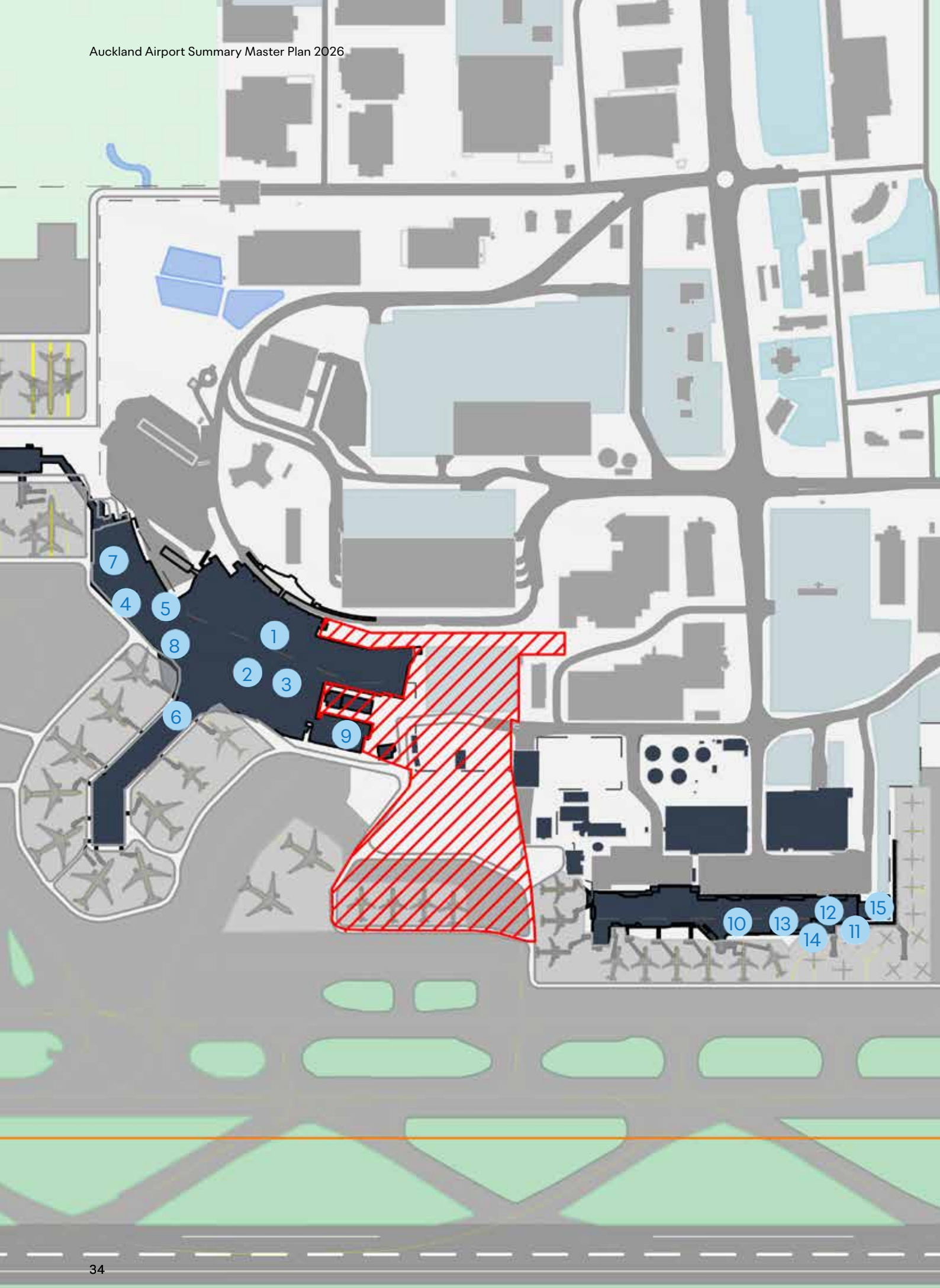
Located on eastern side of the airport this site supports future helicopter operations.

14. Air New Zealand base

Air New Zealand perpetual-leased land. This land is safeguarded in the Master Plan for any future expansions.

15. Charlie 1 apron

Provides hangarage for commercial airlines and FBO facilities.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The terminal precinct today

Auckland Airport operates under a dual-terminal arrangement, with one building dedicated to international traffic and the other terminal catering to domestic and regional flights.

The current mode of operation is expected to be in place for domestic jet and regional travel until the Domestic Jet Terminal opens in late 2029. Regional services are forecast to operate in the domestic terminal until a new dedicated terminal is built.

1. Existing international terminal

Services international travellers.

2. All international airline check-in

Travellers check-in at ground level, using a mix of traditional check-in desks, self-service kiosks and automated bag drops.

3. International departures

Aviation Security and emigration: Departures processing occurs at level 1 with Customs and emigration processing followed by Aviation Security screening to a computer tomography (CT) standard.

4. International dwell space area

Retail and F&B: High quality retail and food and beverage offering that was delivered as part of the expansion of the international departures in 2017.

Airline Lounges: three dedicated airline lounges and one pay-per-use lounge facility.

5. International arrivals, immigration, Customs and biosecurity

Arriving international travellers, complete primary-line immigration processes (via e-gate or manned booth) at level 1 and then go down to baggage reclaim, before completing secondary processing for biosecurity and Customs before exiting the into landside arrivals area.

6. International-to-international transit

For travellers connecting from one international flight to another, an airside facility with CT screening is provided. This enables seamless connectivity into the main international airside area.

7. Pier A & B gate lounges

Travellers then proceed to gate lounges on Pier A and Pier B to board their aircraft. Pier A and B provide bus services to non-contact stands during peak periods.

8. International terminal logistics and storage

Back-of-house (BOH) is provided for on-site storage, operational offices, recycling and waste management.

9. Baggage handling system (BHS)

The existing BHS is a network of equipment and processes used to handle and transport traveller's luggage.

10. Domestic terminal (DTB)

Serves domestic and regional travellers.

11. Domestic jet operations

Predominantly serviced via contact stands and airbridges. All travellers need to complete Aviation Security processing prior to travel.

10 x contact stands with aerobridges
4 x non-contact stands mostly used for overnight parking

12. Domestic terminal check-in and baggage systems (inbound and outbound)

Air New Zealand and Jetstar operate domestic jet services from the DTB. Air New Zealand's operations are located in the centre of the terminal and Jetstar's at the western end, with separate check-in and baggage systems for each airline.

13. DTB retail and food and beverage

Provided landside for domestic and regional travellers, and airside for domestic travellers only.

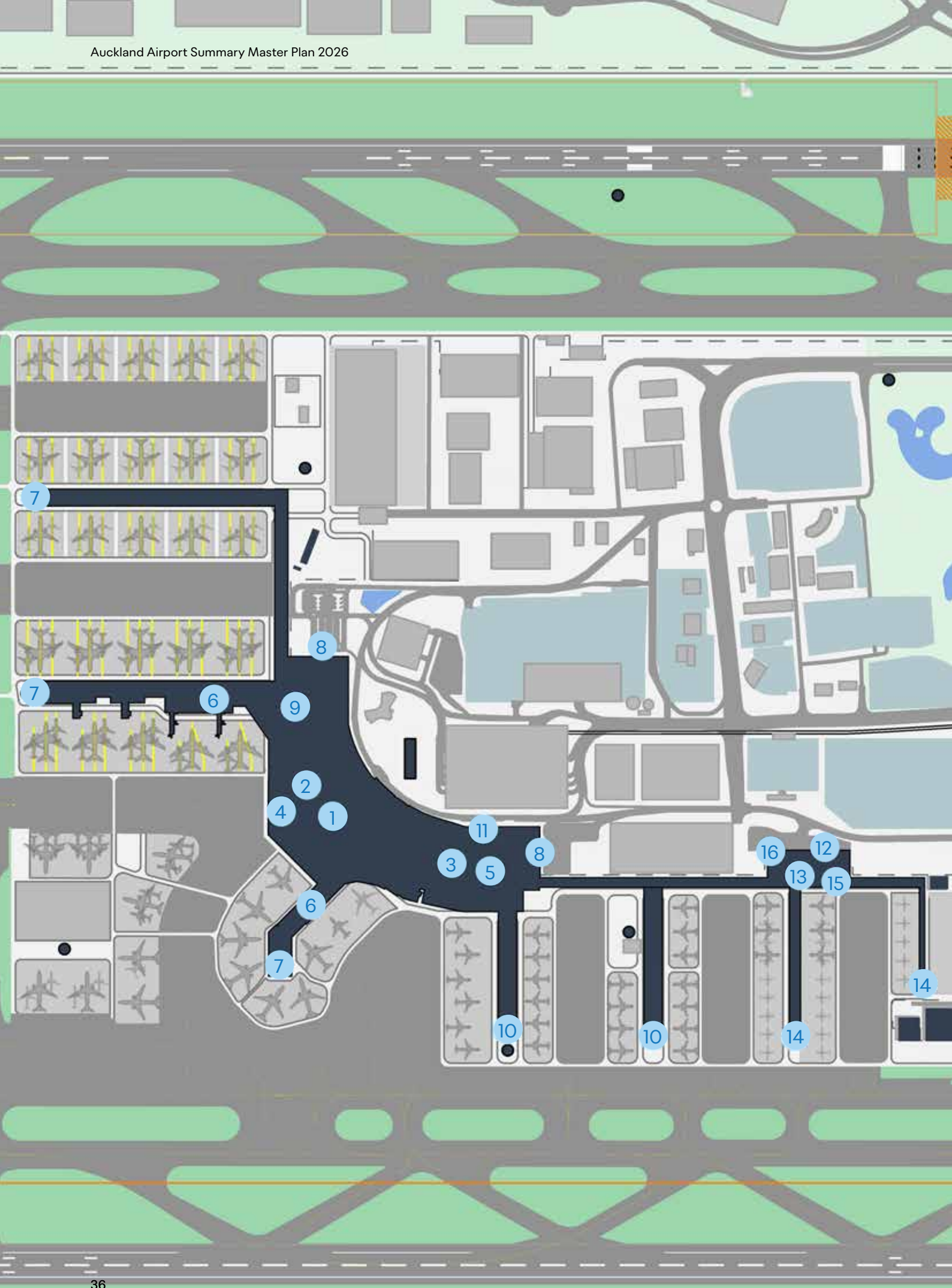
14. DTB airline lounges

Air New Zealand has two airline lounges - one airside for domestic travellers and one landside for regional travellers.

15. Regional operations

Air New Zealand, Air Chathams and Barrier Air Services are based in the eastern end of the DTB. Currently no security screening is required. Travellers access aircraft via covered walkways.

Construction site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The future terminal precinct

The 2026 Master Plan reinforces the terminal development strategy to integrate domestic and international operations under one roof.

This ambition will be delivered through the new Domestic Jet Terminal, a landmark project that will transform the existing international terminal into the integrated terminal.

1. The integrated terminal

A unified facility that accommodates both domestic and international travellers under one roof. Integration improves operational efficiency, enhances passenger convenience and promotes long-term sustainability.

2. All airline check-in

Auckland Airport will have replaced all check-in equipment with self-service kiosks (SSK) and automated bag drops (ABDs). Off-airport and remote processes could allow travellers to carry out part of the checks and processes ahead of their trip to reduce the time required for airport processing.

3. International & domestic departures

A co-located security process will initially be implemented in the integrated terminal to provide side-by-side security screening of domestic jet and international travellers. Outbound border control will continue to be facilitated by a mix of e-gates and traditional desks. The majority of travellers are expected to be able to be processed by e-gates.

4. International dwell area

International gate lounges and dwell spaces have grown to the north and west, aligned to the development of the airfield. The retail and food & beverage areas have been progressively adjusted as the integrated terminal has expanded to capture the new centre of gravity of the building. Airline lounge space has been safeguarded for on the upper levels of the integrated terminal building.

5. Baggage handling system (BHS)

The upgraded BHS features an integrated individual carrier system (ICS), a new early baggage store system (EBS), hold baggage screening (HBS) Level 3 compliance, and inbound baggage offloads that feed the domestic baggage reclaim hall.

6. International-to-international transit

For travellers connecting from one international flight to another, an airside facility with CT screening is provided which enables seamless connectivity into the main international airside area. Additional international-to-international transit points are implemented to meet growth.

7. International gate lounges

Travellers proceed to gate lounges on Pier A, B and C to board their aircraft.

8. Logistics and storage

The terminal will be served by two truck docks, to allow for reduced distances for goods deliveries.

9. International arrivals

Automated border control systems use the growing adoption of biometric passports. The baggage reclaim hall will be expanded to meet capacity growth.

10. Domestic gate lounges

Travellers proceed to gate lounges on Pier A1 and A2 to board their aircraft.

11. Domestic arrivals

Accommodates reclaim belts for all arriving travellers from domestic ports.

12. The new regional terminal

The new terminal is planned to cater for regional services. Auckland Airport has assumed at some point in the future, screening of regional passengers and bags will be introduced at all Tier II regional airports and the design for the new regional terminal has been developed on this basis, with flexibility to operate as an unscreened facility in the interim.

13. Regional terminal check-in

Check-in is expected to use self-service kiosks and automated bag drops. Where it will add value, biometric technology may be considered.

14. Regional terminal departures lounge and piers

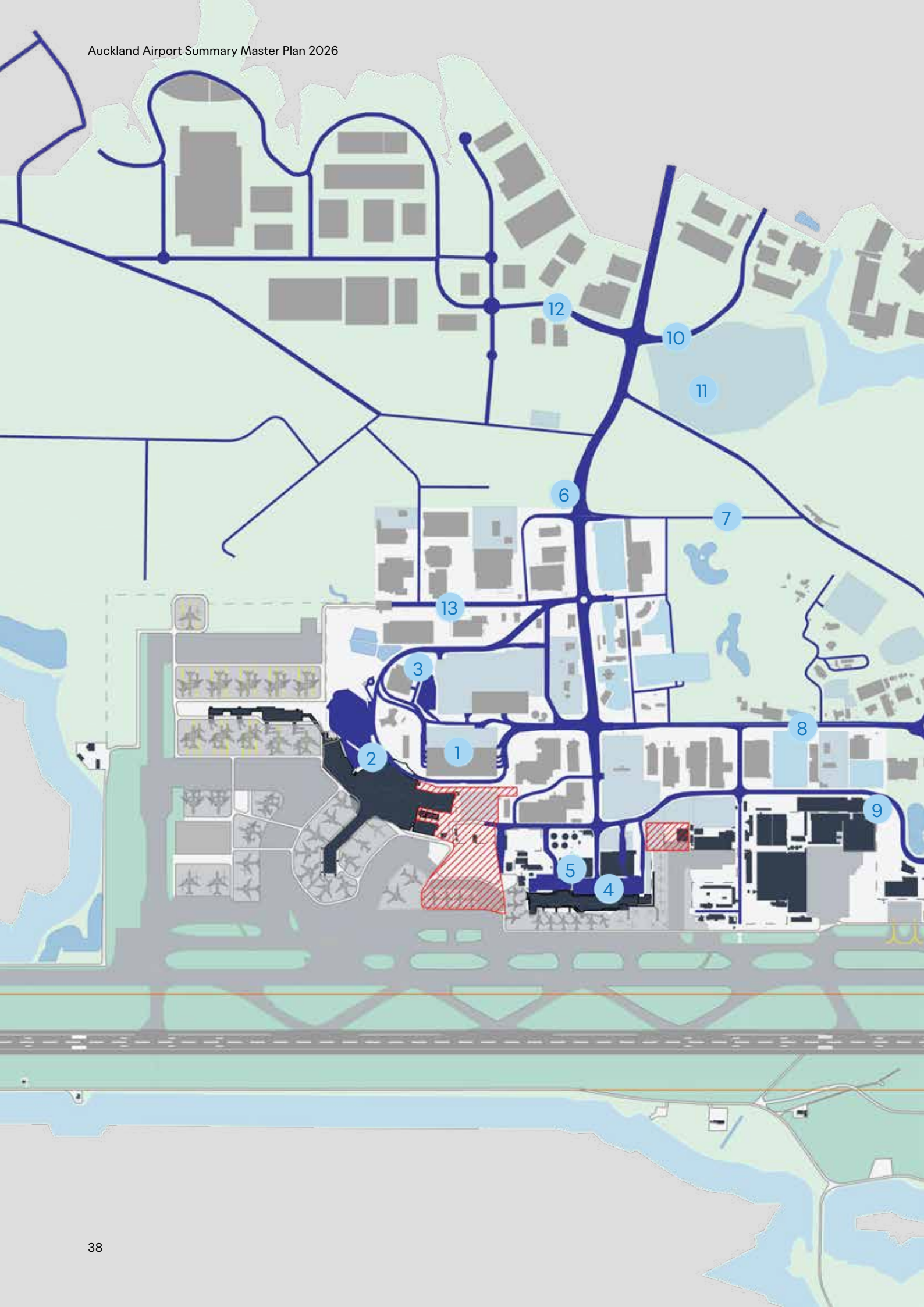
Access to airside areas will be controlled by boarding pass scanners or biometric checks. Regional operations are expected to be based on a call-to-gate operation.

15. Regional baggage handling system

The baggage handling system is expected to be a simple conveyor-based system. It is expected that regional screening of bags will be required by this time.

16. Regional dwell areas, retail and F&B

Landside dwell will be minimised to enable travellers to progress to airside quickly and intuitively. Seating, selected food and beverage options, and essential travel services will be available for welcomers and farewellers.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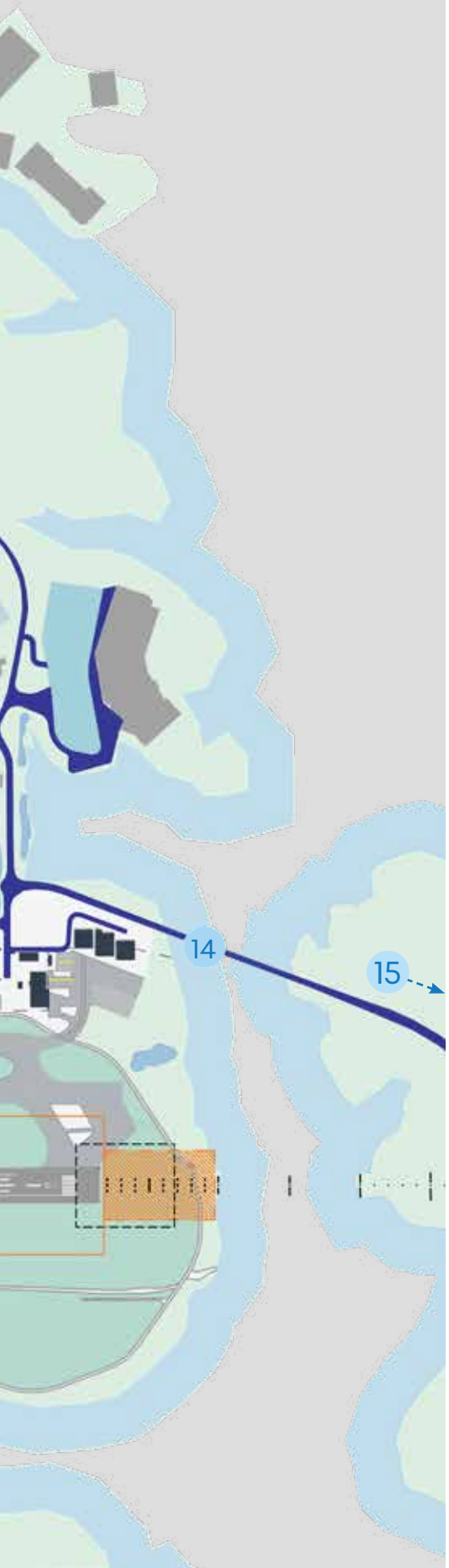


Surface access precinct today

As one of the Auckland region's three road controlling authorities, Auckland Airport owns and operates around 24km of roads accommodating more than 80,000 vehicle movements per day. Auckland Airport takes a 'terminal first' approach to planning its roads, parking, forecourts and sustainable transport.

1. Transport Hub

Offers public pick-up and drop-off for international travellers. Also provides valet parking, rental car outlets and more than 2,000 car parking spaces.

2. Inner Terminal Road

Currently closed and expected to reopen early 2027.

3. Ray Emery Drive

Connects the international terminal to George Bolt Memorial Drive.

4. Domestic pick-up & drop-off

Serves domestic and regional travellers. Also allows domestic terminal logistics and services traffic.

5. Domestic terminal car parks

Provides around 1,000 car parks close to the domestic terminal. Rental car companies are located in the domestic terminal.

6. George Bolt Memorial Drive

The main access point from the north, connecting the precinct to State Highway 20A.

7. Te Ara Kōrako Drive

Provides one wait zone close to the terminals.

8. Tom Pearce Drive

East-west connection of the airport precinct.

9. Laurence Stevens Drive

Used by the Airport Link bus to connect Auckland Airport to Puhinui Station and Manukau Bus station. It also provides one wait zone.

10. Verissimo Drive

Connects Park & Ride North to the roading network.

11. Park & Ride North

Provides 4,370 car parks. The Park & Ride shuttle offers free transfer services to the terminals.

12. Landing Drive

Provides access to the business park, where non-aeronautical facilities have been developed.

13. Manu Tapu Drive

Provides access to cargo terminal operator's buildings.

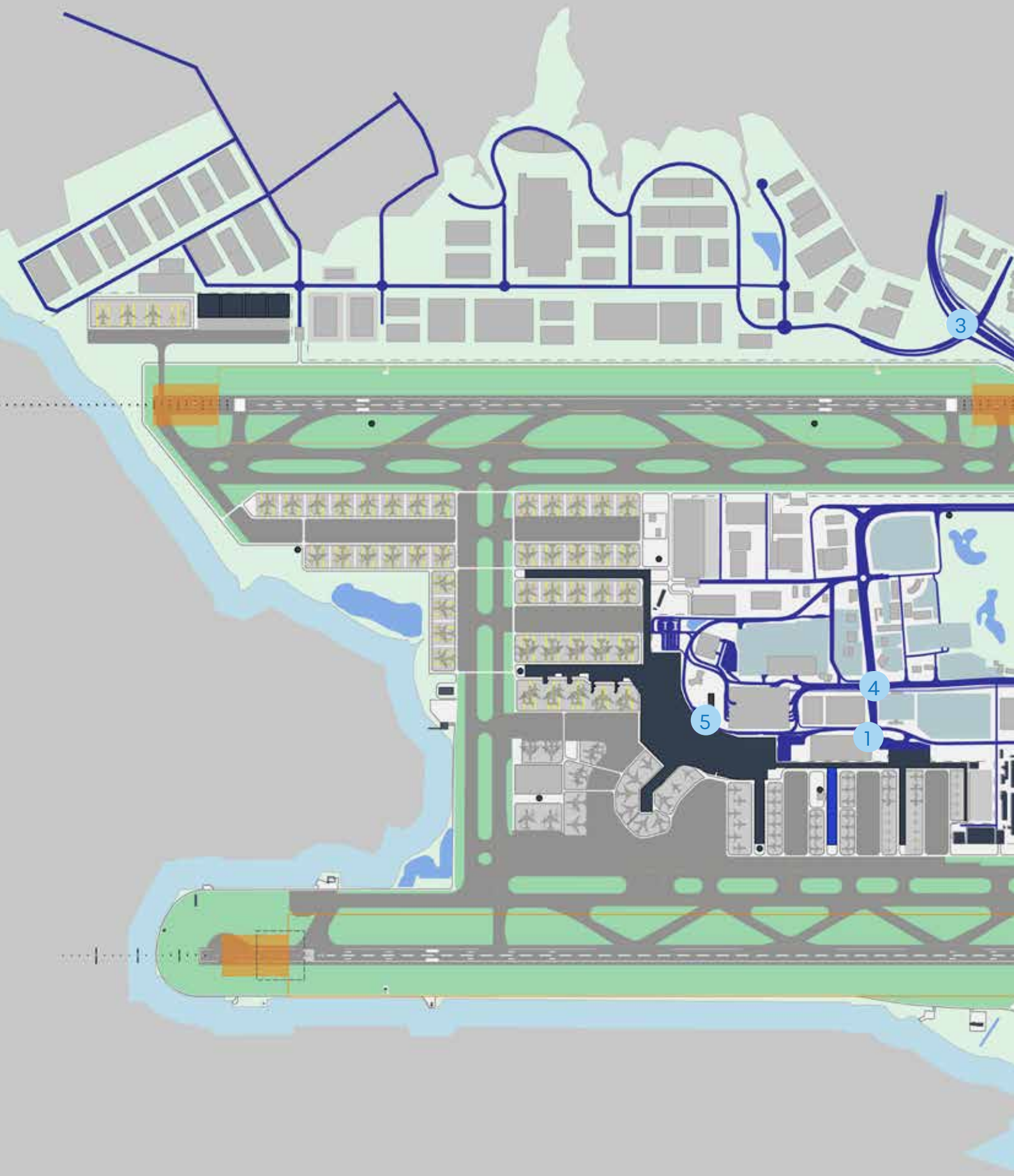
14. Puhinui Road

Main access point from the east, connecting the precinct to State Highway 20B. Provides two wait zones close to the terminals.

15. Park & Ride South

Provides 3,000 car parks. The Park & Ride shuttle offers free services to the terminals.

Construction site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Surface access precinct future

Auckland Airport wider network will be able to accommodate the growth in demand, setting the foundation for an accessible and well connected airport.

1. Regional Terminal Access Road

Will offer public pick-up and drop off for regional travellers.

2. Eastern Ring Road (including an interchange at Landing Drive)

Will become the main access point from the north once the northern runway is developed.

3. George Bolt Memorial Drive/Landing Drive Verissimo Drive intersection upgrade

The intersection is upgraded to accommodate growth in demand and new road layout.

4. George Bolt Memorial Drive/Tom Pearce Drive intersection upgrade

The intersection is upgraded to accommodate growth in demand and new road layout.

5. Inner Terminal Road upgrade

The road layout is upgraded to accommodate public services and commercial use.

6. Laurence Stevens Drive upgrade

The road layout is upgraded to accommodate growth in demand.

7. Nixon Road upgrade

The road layout is upgraded to accommodate growth in demand.

8. Puhinui Road upgrade

The road layout is upgraded to accommodate growth in demand.

9. Pūkaki Bridge upgrade

The road layout is upgraded to accommodate growth in demand.

10. Tom Pearce Drive / Jimmy Ward Crescent intersection upgrade

The intersection is upgraded to accommodate growth in demand and new road layout.

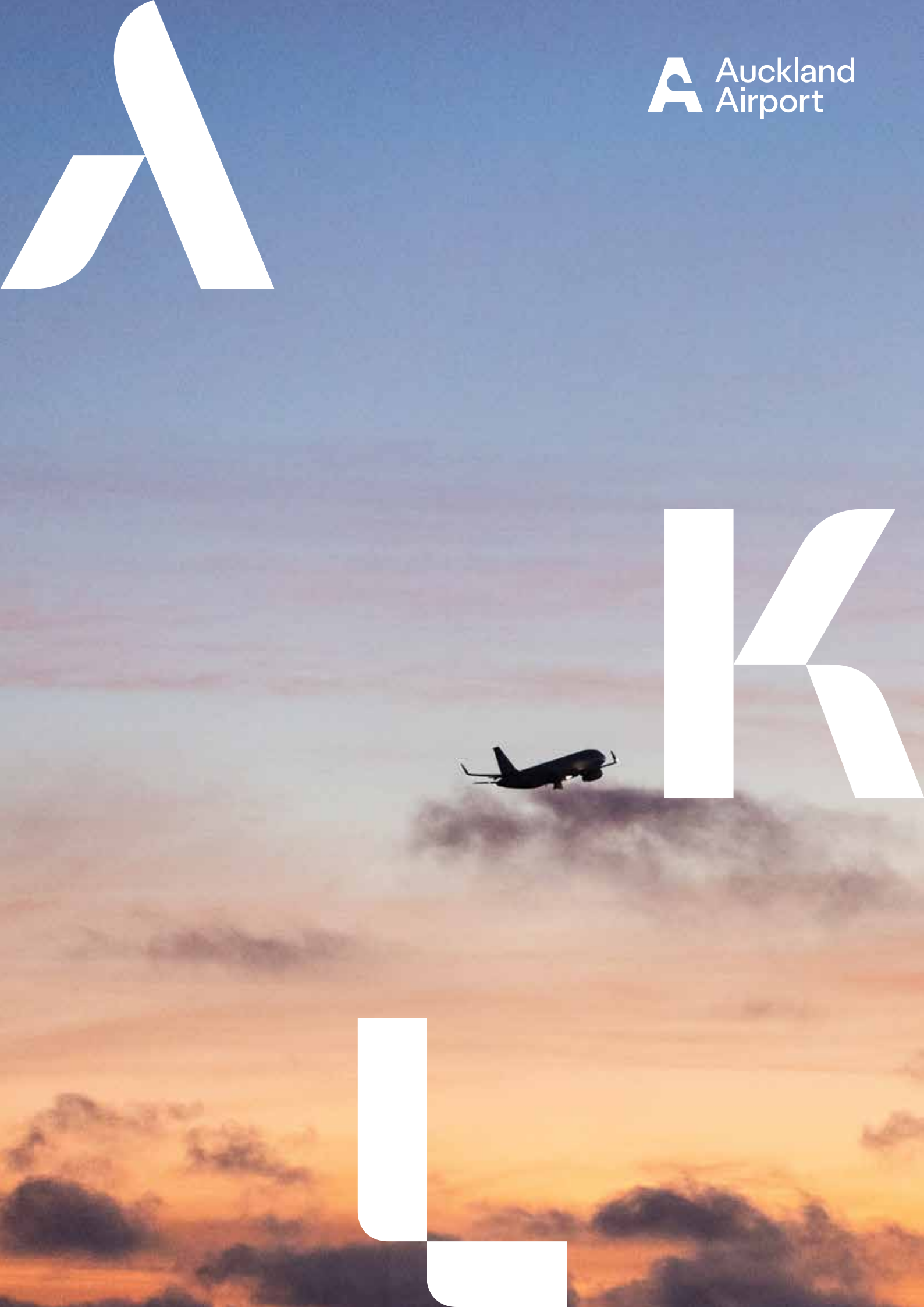
11. Tom Pearce Drive upgrade

The road layout is upgraded to accommodate growth in demand.

Abbreviations

3PL	Third-Party logistics
ABDs	Automatic bag drops
ACI	Airport Carbon Accreditation
BHS	Baggage Handling System
CT	Computer termography
DTB	Domestic Terminal Building
FBO	Fixed Base Operators
FY	Financial Year
HANA	High Aircraft Noise Area
IATA	International Air Transport Association
IoT	Internet of Things
ITB	International Terminal Building
MANA	Moderate Aircraft Noise Area
mppa	million passengers per annum
PUDO	Pick-up and Drop-Off
SAF	Sustainable Aviation Fuel
SSKs	Self Service Kiosks


TC2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