# COUNCIL AGENDA ADDENDUM

# **ORDINARY COUNCIL MEETING**

26 February 2020



FRANCIS GREENWAY CENTRE 170 GEORGE STREET LIVERPOOL

## ADDENDUM ITEMS

PAGE

## **City Economy and Growth Report**

	Endorsement of submission on Draft Western Sydney Aerotropolis Plan and Aerotropolis Planning Package	
EGROW 07		
Strategic Direction	Generating Opportunity	

Strategic Direction	Create an attractive environment for investment
File Ref	039303.2020
Report By	Cameron Jewell - Strategic Planner
Approved By	Tim Moore - Director, City Economy and Growth / Deputy CEO

### **EXECUTIVE SUMMARY**

The planning package for the Western Sydney Aerotropolis is currently on public exhibition until 28 February 2020. The package comprises the draft Western Sydney Aerotropolis Plan (WSAP), State Environmental Planning Policy (SEPP) Discussion Paper, and draft Stage 1 Development Control Plan (DCP).

A submission on the planning package has been prepared, comprising a summary of recommendations, detailed recommendations with rationale, and an attachment summarising community concerns raised during both the Rural District Forum and Rural Reference Group.

The submission is divided into the following themes:

- Effectively managing airport noise impacts;
- Delivering a high-quality urban form;
- Achieving social and economic sustainability;
- Ensuring sustainable land transport;
- Achieving environmental sustainability;
- Protecting agricultural industries; and
- Appropriate delivery and governance

The submission makes the following major recommendations:

- Further controls should be in place to reduce noise impacts for noise-sensitive land uses near, but outside of, the 20 ANEC contour.
- Further support for agriculture, namely allowing extensive agriculture and intensive plant agriculture to be permitted with consent in order to provide more flexibility for landowners during the long-term transition of the Aerotropolis.

1068



### ORDINARY MEETING 26 FEBRUARY 2020 CITY ECONOMY AND GROWTH REPORT

- Community expectation that land to be rezoned to the new Environment and Recreation Zone for public purpose should be acquired by the State Government. Acquisition is necessary in order to meet the vision of the Western Parkland City, which includes accessible green spines. Clarity regarding acquisition plans for the Environment and Recreation zoned land and timeframes should be provided to landowners for certainty.
- If acquisition is not being pursued across the entire Environment and Recreation zone, the extent of the zone is recommended to be reduced to allow landowners increased utilisation of land while managing flood risk.
- Indicative timeframes for the rezoning of non-initial precincts should be included to provide certainty to landowners, namely the Dwyer Road, Kemps Creek and Rossmore precincts.
- Affordable housing targets should be set at at-least 10 per cent of residential floor area on privately owned land, and higher on government-owned land, reflecting the increase in land value from rezoning, and achieving the Western City District Plan target.
- The full extent and alignment of Council's Fifteenth Avenue Smart Transit (FAST) Corridor should be shown in the WSAP.
- Further controls related to sustainable transport and mobility should be included in the plans, including mode share targets.
- Including a carbon neutrality target in the WSAP.
- Further consideration of sustainability in development controls is required in order to meet circular economy aspirations.
- Further clarity to be included in the Aerotropolis Plan on the role of Council staff and Councillors in the preparation or amendment of DCPs.
- Ensure alignment between the WSAP and Council's LSPS regarding future land uses in Luddenham Village.

The submission includes an attachment summarising community concerns raised during both the Rural District Forum and Rural Reference Group, including:

- Land zoned for Environment and Recreation purposes should be acquired for public open space.
- Timeframes should be provided for any land acquisition.
- Landholders in the Kemps Creek Precinct and the Dwyer Road precincts request their land to be included as initial precincts. The Dwyer Road Precinct Group, known as the Southern Gateway Precinct, has provided a submission to Council seeking Council support for its submission relating to their Precinct being a non-initial precinct and the wish for it to be an initial precinct.

Council's submission supports the first two major community recommendations (relating to acquisition), however it is not recommended that Council supports the Dwyer Road or Kemps Creek precincts being included as initial precincts. It is considered that prioritising Dwyer Road

and/or Kemps Creek could result in the deferral of other precincts in the Aerotropolis, as it would otherwise risk the opening up of too many development fronts across the Aerotropolis, leading to zoning not aligning with the provision of infrastructure in an orderly and efficient manner. Instead, it is recommended that the WSAP include indicative timeframes for the zoning of non-initial precincts in order to provide certainty to landowners.

### RECOMMENDATION

That Council endorse the submission on the Aerotropolis Planning Package and forward the submission to the Western Sydney Planning Partnership for consideration.

### REPORT

### Introduction

The NSW Government has placed on public exhibition the Aerotropolis Planning Package which is a suite of documents relating to the future development of the Western Sydney Aerotropolis. The Aerotropolis is an 11,200-hectare site that includes a large proportion of the Liverpool Local Government Area (LGA) west of Kemps Creek, surrounding the site of the new Western Sydney International (Nancy-Bird Walton) Airport (the Airport). A submission has been prepared for Council endorsement on the Package, which must be submitted to the Western Sydney Planning Partnership by 28 February 2020.

The Package comprises the draft Western Sydney Aerotropolis Plan (WSAP) (**Attachment 1**), the Western Sydney Aerotropolis Discussion Paper on the Proposed State Environmental Planning Policy (SEPP Discussion Paper) (**Attachment 2**), and the draft Western Sydney Aerotropolis Development Control Plan 2019 (Stage 1 DCP) (**Attachment 3**).

The WSAP is the overarching strategic document applying to the Aerotropolis. It provides a vision for the Aerotropolis and outlines the objectives and principles to shape the development of the Aerotropolis. The SEPP Discussion Paper outlines the NSW Government's proposed State Environmental Planning Policy for the Western Sydney Aerotropolis, which, once complete, will rezone land and include objectives and development standards that future development must comply with. The Stage 1 DCP will guide precinct planning and master planning in order to achieve the vision for the Aerotropolis.

The suite of documents has been developed by the Western Sydney Planning Partnership (Planning Partnership), a body established as part of the Western Sydney City Deal to enable local councils and the NSW Government to better collaborate on major planning projects across Western Sydney.

While Council is a member of the Planning Partnership, and has been actively involved in the development of the Aerotropolis Planning Package, it is considered necessary to provide a Council submission on the Package in order to formally state Council's position on a range of issues relating to development of the Aerotropolis, and to make clear the range of community views that have been expressed to Council through the Rural District Forum and the Rural Reference Group.

### Changes from Stage 1 LUIIP to WSAP

The draft WSAP is an update to the Stage 1 Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan (LUIIP), which was released in August 2018.

The major updates from the LUIIP to the draft WSAP relevant to the Liverpool LGA include:

- The Wianamatta-South Creek Precinct has largely been reduced from the probable maximum flood (PMF) level to the 1 in 100 chance flood level. Land no longer in this precinct has been included in the relevant adjoining precinct.
- The extent of land zoned Mixed Flexible Employment & Urban Land in the Aerotropolis Precinct has been reduced to ensure a precautionary approach to residential development in close proximity to the Western Sydney Airport, while improving access to the amenity of creek lines.
- Badgerys Creek and the Agribusiness Precinct are now initial precincts, meaning they will be rezoned sooner than initially expected – now estimated to be by mid-2020.
- The boundary of the Agribusiness zone has been amended to remove 748 hectares of land in the south to create the Dwyer Road precinct. The Dwyer Road precinct is now a non-initial precinct in the draft WSAP.
- The Kemps Creek precinct now excludes land to the east of Kemps Creek beyond the boundary of Wianamatta-South Creek to provide a clearly defined boundary for the Aerotropolis. Planning for this area will now be progressed by Council through the LEP.
- Further detail of road and rail infrastructure has been provided.
- Further elaboration of precinct considerations, strategic outcomes and implementation strategies has been provided.

### Detail of submission

Council's submission on the Planning Package comprises a summary of recommendations (Attachment 4), detailed recommendations with rationale (Attachment 5), and an attachment summarising community concerns raised during both the Rural District Forum and Rural Reference Group (Attachment 6). The Dwyer Road Precinct Group, known as the Southern Gateway Precinct, has provided a submission to Council outlining why they believe Council should support its submission including having their Precinct as an initial precinct. (Attachment 7).

The submission recommendations are divided into the following themes:

- Effectively managing airport noise impacts;
- Delivering a high-quality urban form;
- Achieving social and economic sustainability;
- Ensuring sustainable land transport;
- Achieving environmental sustainability;
- Protecting agricultural industries; and
- Appropriate delivery and governance.

The submission makes the following key recommendations:

- Further controls should be in place to reduce noise impacts for noise-sensitive land uses near, but outside of, the 20 ANEC contour.
- Further support for agriculture, namely allowing extensive agriculture and intensive plant agriculture to be permitted with consent in order to provide more flexibility for landowners during the long-term transition of the Aerotropolis.
- Community expectation that land to be rezoned to the new Environment and Recreation Zone for public purpose should be acquired by the State Government. Acquisition is necessary in order to meet the vision of the Western Parkland City, which includes accessible green spines. Clarity regarding acquisition plans for the Environment and Recreation zoned land and timeframes should be provided to landowners for certainty.
- If acquisition is not being pursued across the entire Environment and Recreation zone, the extent of the zone is recommended to be reduced to allow landowners increased utilisation of land while managing flood risk.
- Indicative timeframes for the rezoning of non-initial precincts should be included to provide certainty to landowners, namely the Dwyer Road, Kemps Creek and Rossmore precincts.
- Affordable housing targets should be set at at-least 10 per cent of residential floor area on privately owned land, and higher on government-owned land, reflecting the increase in land value from rezoning, and achieving the Western City District Plan target.
- The full extent and alignment of Council's Fifteenth Avenue Smart Transit (FAST) Corridor should be shown in the WSAP.
- Further controls related to sustainable transport and mobility should be included in the plans, including mode share targets.
- A commitment to a carbon neutrality target.
- Further consideration of sustainability in development controls is required in order to meet circular economy aspirations.
- Further clarity to be included in the Aerotropolis Plan on the role of Council staff and Councillors in the preparation or amendment of DCPs.

1071

• Ensure alignment between the WSAP and Council's LSPS regarding future land uses in Luddenham Village

The submission includes an attachment summarising community concerns raised during both the Rural District Forum and Rural Reference Group, including:

- Land zoned for Environment and Recreation purposes should be acquired for public open space.
- Timeframes should be provided for any land acquisition.
- Landholders in the Kemps Creek Precinct and the Dwyer Road precincts request their land to be included as initial precincts.

Council's submission supports the first two major community recommendations (relating to acquisition), however it is not recommended that Council supports the Dwyer Road or Kemps Creek precincts being included as initial precincts.

It is considered that prioritising Dwyer Road and/or Kemps Creek could result in the deferral of other precincts in the Aerotropolis, as it would otherwise risk the opening up of too many development fronts across the Aerotropolis, leading to zoning not aligning with the provision of infrastructure in an orderly and efficient manner. Instead, it is recommended that the WSAP include indicative timeframes for the zoning of non-initial precincts in order to provide certainty to landowners.

One of the reasons put forward in the Dwyer Road submission is that the 20-25 ANEC contours impact the precinct and therefore residents residing in this precinct will be exposed to aircraft noise. It is important to note that the ANEC contours in this location relate primarily to the second (southern) runway. The Western Sydney Airport Plan does not anticipate the second runway will be needed until at least 2050. By this time, it is likely that future iterations of the WSAP will be undertaken and decisions made on rezoning of the remaining precincts.

### Consultation

In preparation of the submission, consultation has been undertaken with internal departments of Council including Planning & Transport Strategy, City Economy, City Design & Public Domain, City Environment, Infrastructure Delivery and Technical Support.

Council has established the Rural Reference Group to hear directly from key representatives of Precincts in the Aerotropolis and has also run several rural forums specifically on the Aerotropolis. These forums have allowed Council to understand the key concerns of the community and to facilitate discussions between landowners and the Western Sydney Planning Partnership who are responsible for preparing the WSAP. The Minister for Planning and Public Spaces is ultimately responsible for decisions on the WSAP and the planning package.

### Next steps

The Western Sydney Planning Partnership will consider all submissions received. A final WSAP and planning package will then be presented to the Minister for a decision. The WSAP states that it is anticipated that the WSAP, SEPP and DCP will be finalised mid-2020.

Draft Precinct Plans will be developed for the initial precincts and the WSAP states that these plans are anticipated to be on exhibition in mid-2020 with adoption of initial precinct plans by late 2020, subject to confirmation of Metro station locations.

### Conclusion

It is recommended that Council endorse the submission to be provided to the Western Sydney Planning Partnership by 28 February 2020.

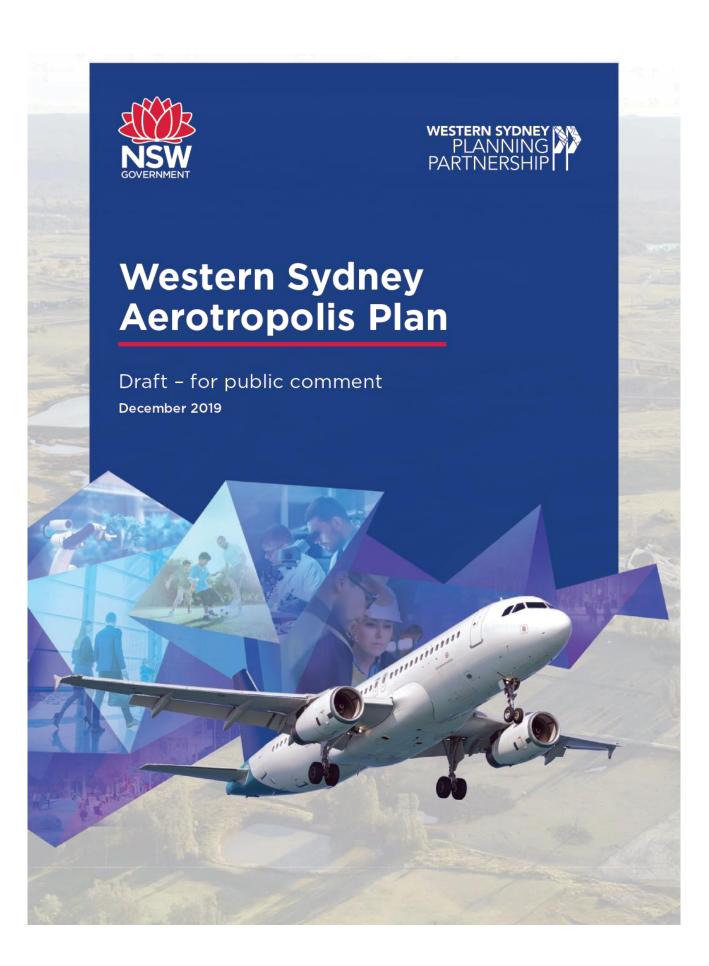
### **CONSIDERATIONS**

	Utilise the Western Sydney City Deal Agreement to create Jobs for the Future.
Economic	Utilise the Western Sydney City Deal agreement to provide opportunities for residents in the LGA to enhance skills and education.
	Facilitate economic development.
	Facilitate the development of new tourism based on local attractions.
	Utilise the Western Sydney City Deal agreement to enhance liveability and environment of the LGA.
	Utilise the Western Sydney City Deal agreement to facilitate Planning and Housing in the LGA.
	Manage air, water, noise and chemical pollution.
Environment	Retain viable opportunities for local food production while managing land use to meet urban growth.
	Enhance the environmental performance of buildings and homes.
	Protect, enhance and maintain areas of endangered ecological communities and high quality bushland as part of an attractive mix of land uses.
	Promote an integrated and user friendly public transport service.
	Support the delivery of a range of transport options.

	Utilise the Western Sydney City Deal agreement to provide connectivity across the LGA through infrastructure and social initiatives.
Social	Preserve and maintain heritage, both landscape and cultural as urban development takes place.
	Regulate for a mix of housing types that responds to different population groups such as young families and older people.
	Implementation and Governance of the Western Sydney City Deal agreement.
Civic Leadership	Undertake communication practices with the community and stakeholders across a range of media.
	Encourage the community to engage in Council initiatives and actions.
	Actively advocate for federal and state government support, funding and services.
Legislative	Environmental Planning & Assessment Act 1979

# ATTACHMENTS

- 1. Draft Western Sydney Aerotropolis Plan
- 2. Western Sydney Aerotropolis SEPP Discussion Paper
- 3. Draft Western Sydney Aerotropolis Stage 1 DCP
- 4. Council submission Summary of Recommendations
- 5. Council submission Detailed recommendations with rationale
- 6. Council submission Summary of community concerns raised at Rural District Forum and Rural Reference Group
- 7. Dwyer Road Precinct submission to Council



# 1076 EGROW 07 Endorsement of submission on Draft Western Sydney Aerotropolis Plan and Aerotropolis Planning Package Attachment 1 Draft Western Sydney Aerotropolis Plan

### Visit:

www.wscd.sydney/planning-partnership www.planning.nsw.gov.au

© Crown Copyright 2019

NSW State Government Released December 2019

#### Disclaimer

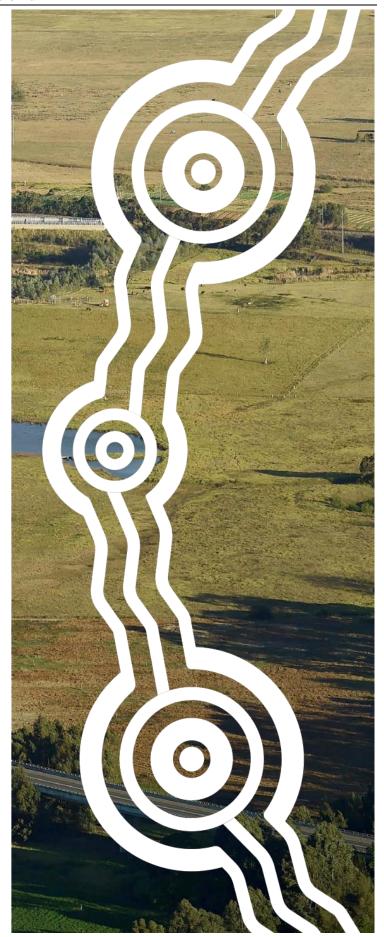
While every reasonable effort has been made to ensure that this document is correct at the time of printing, the State of New South Wales, its agents and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance or upon the whole or any part of this document.

#### **Copyright Notice**

In keeping with the Western Sydney Planning Partnership's commitment to encourage the availability of information, you are welcome to reproduce the material that appears in this Planning Report for personal, in-house or noncommercial use without formal permission or charge. All other rights are reserved. If you wish to reproduce, alter, store or transmit material appearing in this Planning Report for any other purpose, a request for formal permission should be emailed to:

#### engagement@ppo.nsw.gov.au

You are required to acknowledge that the material is provided by The Partnership or the owner of the copyright as indicated in this Planning Report and to include this copyright notice and disclaimer in any copy. You are also required to acknowledge the author (the Western Sydney Planning Partnership) of the material as indicated in this Planning Report.



# 1077 EGROW 07 Endorsement of submission on Draft Western Sydney Aerotropolis Plan and Aerotropolis Planning Package Attachment 1 Draft Western Sydney Aerotropolis Plan

# Acknowledgement

Planning for the Western Sydney Aerotropolis acknowledges more than 60,000 years of continuous Aboriginal connection to the land that makes up NSW.

This Plan recognises that, as part of the world's oldest living culture, traditional Aboriginal and Torres Strait Islander owners and custodians of the Australian continent and adjacent islands share a unique bond to Country — a bond forged through thousands of years of travelling across lands and waterways for ceremony, religion, trading and seasonal migration.

Aboriginal peoples maintain a strong belief that if we care for Country, it will care for us. The Aerotropolis area is custodially cared for by three Aboriginal groups: the Darug, Dharawal and Gundungurra. Others, such as the Eora, Darkinjung, Wiradjuri and Yuin maintain trade or other obligatory care relationships with the area. The Deerubbin, Gandangara and Tharawal Local Aboriginal Land Councils also have local land holdings and responsibilities towards Aboriginal peoples living in the area.

This significant connection to Country plays an important part in shaping this Plan.

For Traditional Owners, Country takes in everything within the physical, cultural and spiritual landscape - landforms, waters, air, trees, rocks, plants, animals, foods, medicines, minerals, stories and special places. It includes cultural practice, kinship, knowledge, songs, stories and art, as well as spiritual beings, and people: past, present and future.

# Contents

Exe	Executive summary		
1	Introduction	6	
1.1	The Aerotropolis	6	
1.2	Purpose of the Plan	8	
1.3	Strategic context	10	
2	A vision for the Aerotropolis	18	
2.1	Achieving the vision - a landscape-led approach	20	
2.2	Creating a global gateway	23	
2.3	Designing a cool, green new city	23	
2.4	Transitioning to an Aerotropolis	24	
2.5	Retaining a green, biodiverse landscape	24	
3	Implementing the vision	26	
3.1	Structure Plan	26	
3.2	Planning framework	26	
4	Infrastructure	32	
4.1	Blue-Green Grid	32	
4.2	Future transport network	35	
4.3	Digital infrastructure - smart cities	39	
4.4	Energy infrastructure	40	
4.5	Integrated water, wastewater and recycled water services	40	
4.6	Social and cultural infrastructure	41	
5	Safeguarding the 24-hour airport	44	
5.1	National Airports Safeguarding Framework	44	
5.2	Implementing the NASF	50	
6	Resilience and adaptability	52	
6.1	Circular economy	52	
6.2	Urban cooling	52	
6.3	Waterway health and management	53	
6.4	Hazard management and recovery	53	

7	Precinct planning	56
7.1	Common strategic outcomes and implementation strategies	56 58 61
7.2	Initial precincts – vision and land uses	
7.3	Expected planning outcomes - initial precincts	
7.4	Remaining precincts - vision and land uses	74
7.5	Expected planning outcomes - remaining precincts	75
8	Infrastructure funding and provision	84
8.1	Place-based Infrastructure Compact	84
8.2	Infrastructure Funding	84
8.3	Stage 1 Sydney Metro Greater West alignment	85
8.4	Utilities and services	85
9	The way forward	86
9.1	Monitoring	86
9.2	Next steps	86
9.3	More information	88
Glo	ossary	89
Ap	pendix - Planning Principles	92

# Map list

Initial Precincts	7	Initial Precinct Structure Plans:	
Wianamatta-South Creek Catchment	13	Aerotropolis Core	63
Adjoining Areas	15	Northern Gateway Precinct	65
Structure Plan	27	Wianamatta-South Creek Precinct	67
Land Zone	29	Badgerys Creek Precinct	69
Blue Green Infrastructure	34	Agribusiness Precinct	73
Proposed Transport Corridors	37	Remaining Precinct Structure Plans:	
ANEC Countours	45	Dwyer Road	77
OLS Chart	47	Kemps Creek	79
Wildlife Buffer Zones	49	North Luddenham	81
Flood Extent	55	Rossmore	83

# **Executive summary**

The Western Sydney Aerotropolis Plan sets a vision for the Western Sydney Aerotropolis as Australia's next global gateway, built around the world-class Western Sydney International (Nancy-Bird Walton) Airport.

The Aerotropolis will be a centre of employment for:



Defence and aerospace



Advanced manufacturing



Technology



Agribusiness



Education and research



Health



An aerotropolis is a metropolitan area with infrastructure, land uses and the economy centred on an airport. The Western Sydney Aerotropolis is a oncein-a-lifetime opportunity to drive transformational change in the emerging Western Parkland City, a vision for Western Sydney that will improve opportunity, amenity and sustainability for workers and residents.

In setting its vision through the *Greater Sydney Region Plan*, the NSW Government has committed to a 30-minute city, where people live within 30 minutes by public transport of their nearest strategic or metropolitan centre. The Aerotropolis is essential to this vision.

It will be an accessible, innovative and connected city. Its evolution will catalyse a jobs dense environment nurturing industry of the future. It will help to boost productivity and contribute to significant jobs growth in Western Sydney. As an employment centre for the Western Parkland City it will include jobs in defence and aerospace, advanced manufacturing, technology, agribusiness, health, education, research and tourism.

The Aerotropolis will be framed around a landscape-led approach, where Wianamatta-South Creek, large regional parks and an expansive network of green and blue corridors shape the city's structure and building. Noise sensitive uses in appropriate locations will protect the community from the 24/7 airport operations. People will live and work in vibrant urban centres with a mix of uses, walking and cycling paths, and social and cultural infrastructure.

Planning on this scale will build resilience and adaptability to the effects of a changing climate and draw on circular economy principles to better use resources and reduce waste on an Aerotropolis-wide scale. Integrated transport and digital networks will prioritise more sustainable connections and make it easier for people to navigate their way around the Aerotropolis. Essential freight connections to and from the Airport and other areas like the Agribusiness Precinct will be focused on main roads away from local areas.

Given the many elements, stakeholders and ambitions for creating this 21st century city, the Plan sets out 10 objectives to shape decision-making across the four themes of the *Greater Sydney Region Plan:* productivity, sustainability, infrastructure and collaboration, and liveability. These objectives are supported by landscape, urban design and planning principles.

Importantly, all work will be guided by a single, overarching objective to Recognise Country: Acknowledge Traditional Owners and provide opportunities to Connect with Country, Design for Country and Care for Country when planning for the Aerotropolis.

This draft Plan builds on the unprecedented collaboration across all levels of government that commenced with the Western Sydney City Deal. It was developed by the Western Sydney Planning Partnership, a key commitment of the Western Sydney City Deal and strategic, innovative approach that includes Western Sydney councils and State agencies. It builds on the *Stage 1 Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan* (LUIIP).

The Plan sets out a sequenced approach to precinct planning that will optimise planned investment in major infrastructure and create the impetus for the early activation of the Aerotropolis. It establishes 10 precincts, of which six will be planned for early. These are described in more detail on pages 6-7.

This timing represents a shift from that set out in the Stage 1 LUIIP, in response to

4 Western Sydney Aerotropolis Plan

feedback to the public exhibition, create early employment opportunities and better coordinate infrastructure planning.

Detailed precinct planning will aim to stage and sequence development within and between precincts to optimise infrastructure provision. This will be informed by the Place-based Infrastructure Compact for the Aerotropolis.

Infrastructure funding will be refined through work on an Aerotropolis Special Infrastructure Contribution, local infrastructure planning and funding mechanisms by Liverpool and Penrith City councils, and possible value capture mechanisms.

The Plan will be implemented through a statutory planning framework that includes a new Aerotropolis *State* 

Figure 1: Artist's Impression of the Aerotropolis Core centre Source: Cox

Environmental Planning Policy (SEPP) and Development Control Plan (DCP). This framework will guide more detailed precinct planning and master planning, promoting exemplary design outcomes and implementing detailed development controls to achieve the vision for the Aerotropolis.

More detailed precinct plans for the initial precincts will be on exhibition by mid-2020. Infrastructure planning, and work on major transport corridors, airport operations and environmental considerations are continuing. Traditional Owners are helping to shape the Aerotropolis and its rich cultural values, as the community, businesses, landowners and developers also participate in the development of Australia's newest global gateway.

P). This Next steps: ailed lanning, utcomes elopment





Finalisation of Western Sydney Aerotropolis Plan, Aerotropolis SEPP and Phase 1 DCP

Å

Precinct Planning - initial precincts



Draft – for public comment

5

Introduction

The Western Sydney Aerotropolis Plan sets the planning framework for the Western Sydney Aerotropolis, Australia's next global gateway focused on the Western Sydney International (Nancy-Bird Walton) Airport (the Airport).

The Aerotropolis will be a game-changer for Western Sydney, NSW and Australia. As it evolves it will become home to global industries that will provide jobs of the future within a cool, green and connected Western Parkland City.

The success of the Aerotropolis requires strategic, integrated planning across different levels of government and collaboration with business and the community. This Plan will help to drive this process.

The Western Sydney City Deal spans

**3** Levels of government:



8 local councils

NSW Government



Australian Government The Plan was developed by the Western Sydney Planning Partnership, a local government-led initiative that brings Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly councils together with key State agencies. It builds on the *Stage 1 Land Use and Infrastructure Implementation Plan* (LUIIP) for the Aerotropolis, released in 2018.

The Planning Partnership was established as part of the Western Sydney City Deal, a shared commitment of the Australian, NSW and local councils in the Western Parkland City to create a fully-realised 21st century city.

### 1.1 The Aerotropolis

The 11,200 hectare Western Sydney Aerotropolis surrounds the site of the Airport in Badgerys Creek (without including the Airport site itself). It sits within the Penrith and Liverpool local government areas (LGAs). The Aerotropolis contains 10 precincts (see page 7), six of which will be the focus of initial precinct planning. Following feedback on the Stage 1 LUIIP, the Agribusiness, Badgerys Creek and Mamre Road precincts have been brought forward as initial precincts to help create early employment opportunities and better coordinate infrastructure planning.

### Initial precincts

# Aerotropolis Core

- Agribusiness
   Badgerys Creek
- Rossmore

Remaining

North

Dwyer Road

Kemps Creek

Luddenham

precincts

- Mamre Road
- Northern Gateway
- Wianamatta– South Creek

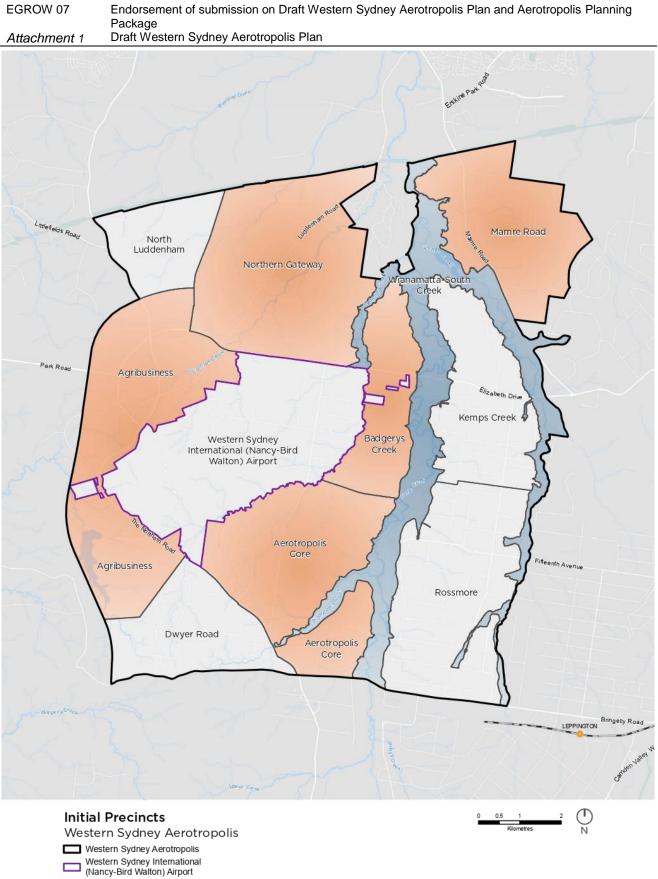
### Next steps

- Rezone initial precincts by mid-2020\*
- Exhibit precinct plans by mid-2020 and finalised by late 2020
- Commence master planning of large sites, subject to statutory requirements.
- Retain existing zoning under *Liverpool LEP 2008* or *Penrith LEP 2010* until precincts are rezoned under Aerotropolis State Environmental Planning Policy (see 3.2.1)
- Sequence precinct planning and rezoning to match infrastructure provision and the rate and nature of development in initial precincts and adjoining areas.

\* Except for Mamre Road Precinct (zoned under WSEA SEPP)

### What is an Aerotropolis?

An Aerotropolis is a metropolitan area whose infrastructure, land-use and economy are centred on the airport and includes the outlying corridors, and aviation orientated business and residential development that benefit from each other and their accessibility to the Airport.



1083

- Initial Precincts
- Wianamatta-South Creek

### 1.2 Purpose of the Plan

As the planning framework for the Aerotropolis, this Plan acknowledges the area's Traditional Owners. It recognises the rich cultural history of the land on which the Aerotropolis is located and the continuous and deep connection to Country for Aboriginal people.

This Plan embraces the transformational potential of the Aerotropolis and airport. It aspires to share the benefits of population and economic growth and create employment, develop skills and boost productivity, providing jobs closer to home and towards achieving a 30-minute city.

It balances this with an ambitious 'landscape-led' planning approach, where the structure and places of the Aerotropolis are defined by the Blue-Green Grid – a network of blue and green spaces and assets such as waterways, open spaces and the tree canopy.

The Plan begins by establishing a vision, objectives and principles to give effect to these objectives. It identifies the intended land use planning outcomes for each of the 10 precincts and a sequenced approach to precinct planning that optimises investment in major infrastructure and creates the impetus to activate the Aerotropolis early.

This plan gives effect to:



This Plan defines how the broader region's environment, waterways, strategic transport network, infrastructure and economy will combine to transform the Aerotropolis into a contemporary metropolitan city. Complementing Liverpool, Penrith and Campbelltown, the Aerotropolis will be part of the metropolitan city cluster at the heart of the Western Parkland City.

This Plan introduces statutory mechanisms to implement the vision and objectives. Alongside future precinct plans and site-specific development control plans (DCPs), it gives effect to the *Greater Sydney Region Plan: A Metropolis of Three Cities* and the *Western City District Plan.* 

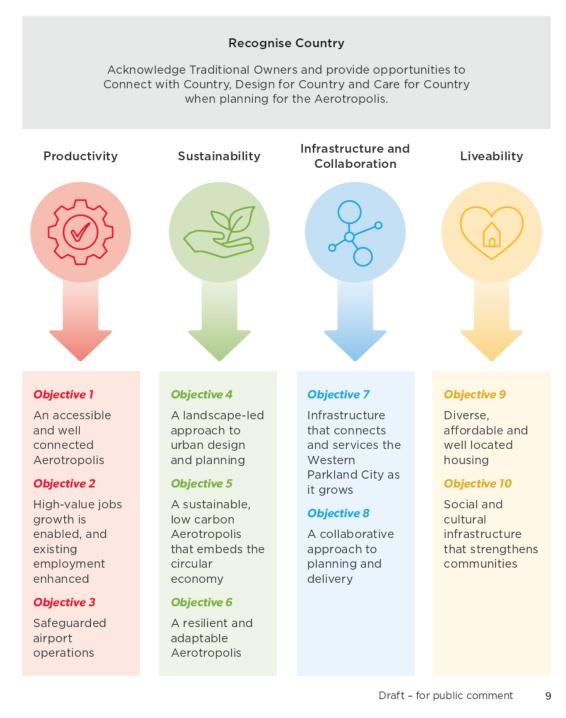
The Plan represents a collaborative approach led by the Planning Partnership and continued cooperation with the Australian Government, Western Sydney Airport, the Western City and Aerotropolis Authority (WCAA), Infrastructure NSW, Sydney Metro and other State agencies.

The Planning Partnership considered more than 600 submissions to the Stage 1 LUIIP when developing this Plan. It will continue to engage broadly during precinct planning, commencing with the initial precincts.

Planning for Aerotropolis also opens opportunities for new design approaches to landscape management and urban design. This Plan includes 47 landscape, urban design and planning principles that give effect to the objectives. These are detailed in the Appendix.

### 1.2.1 Aerotropolis-shaping objectives and principles

A single, overarching objective underpins this Plan and will be integrated into all planning:



## 1.3 Strategic context

The Region Plan sets a 40-year vision and 20-year plan for Greater Sydney. It seeks to meet the needs of a growing and changing population by transforming Greater Sydney into a metropolis of three cities - the Western Parkland City, the Central River City and the Eastern Harbour City. The Aerotropolis is at the heart of the Western Parkland City.

# 1.3.1 The Aerotropolis within the Western Parkland City

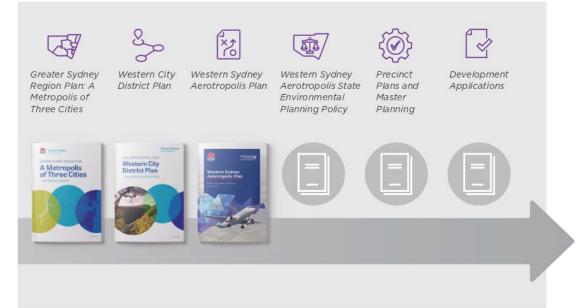
The Western Parkland City will be home to 1.1 million people by 2036 and will experience a significant increase in jobs. Planning for the Aerotropolis is integral to ambitions for the Western Parkland City in areas such as:

- early planning for the Wianamatta-South Creek green spine
- jobs and housing supported by the proposed Sydney Metro Greater West (Stage 1) rail spine

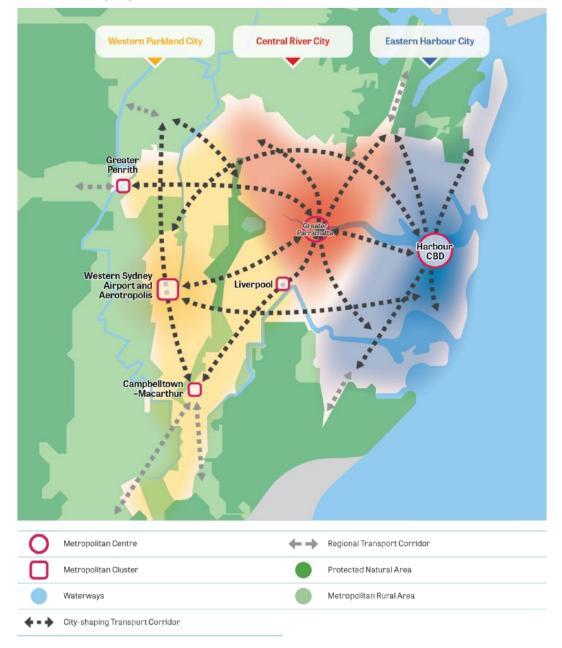
 significant investment that will help to bring a greater diversity of jobs closer to where people live across the entire Western Parkland City including Penrith, Liverpool and Campbelltown-Macarthur.

The Aerotropolis will connect to Greater Parramatta and the Harbour CBD to realise the vision for Greater Sydney as a metropolis of three cities (see Figure 3). Beyond the metropolitan area, connections to NSW regional and rural areas, Australia and the world will create opportunities in advanced manufacturing, agribusiness, aerospace and defence, as well as freight, tourism and more.

### Figure 2: Strategic planning context



#### Figure 3: Sydney as Three Cities Source: Greater Sydney Commission



### 1.3.2 The Aerotropolis and Wianamatta-South Creek catchment

Wianamatta-South Creek is the longest freshwater stream in Greater Sydney and a defining element of the Western Parkland City and the Aerotropolis. Its catchment includes most of Western Sydney's Cumberland Plain.

As the Aerotropolis transforms, the catchment will be renewed and improved using a risk-based approach to manage the cumulative effects of development on the health of catchments, as defined in Action 69 of the *Western City District Plan.* 

This approach will identify waterway targets to mitigate impacts from stormwater and wastewater discharge to the creeks in the catchment.



Water resources have important cultural, spiritual and practical values for First Peoples.

Figure 4: Wianamatta-South Creek Source: Greater Sydney Commission



12 Western Sydney Aerotropolis Plan

#### Waterway Health in the Wianamatta– South Creek Catchment

There are many waterway dependant species that are highly valued by the community living in the catchment. Not the least of these are important native fish which are valued by recreational anglers. Iconic species like the Australian Bass can only remain in the creeks and streams if the health of the ecosystem continues to support them. Both the flow and the cleanliness of the water in the creek must be considered.

# What does Wianamatta mean?

Wianamatta-South Creek holds special significance to the Traditional Owners, who know the waterway as Wianamatta, or 'the Mother Place'. The name, Wianamatta, implies a matricentric landscape as in Dharug language wiana or wiyanga relates to mother and matta refers to a place of water. Wianamatta is understood as being part of an extraordinary wider cultural landscape extending from beyond the Blue Mountains through Emu Plains and east to the coast.

Wianamatta begins its journey near Narellan flowing north until its confluence with the Hawkesbury-Nepean River system near Windsor, creating a unique hydro-networked cultural landscape.

This cultural landscape has been shaped by a filigree of water systems that form and define the Cumberland Plain. Water resources have important cultural, spiritual and practical values for Aboriginal peoples. Waterways are used for cultural practices, including knowledge transfers as part of a healthy, flowing connected system.





Western Sydney Aerotropolis

- Western Sydney Aerotropolis
  - Wianamatta-South Creek Catchment
    - Waterways

Railway

- National Parks and Nature Reserves South Creek System (Strahler)
- Environmental Conservation

1

### 1.3.3 The Aerotropolis and adjoining areas

Planning for the Aerotropolis will complement that of other focus areas in Western Sydney (see page 15).

# Western Sydney Employment Area (WSEA)

- Thousands of new jobs and synergies with the Aerotropolis in supporting economic and employment growth.
- Mamre Road Precinct in the north of Aerotropolis will be planned for under WSEA planning controls.

#### Greater Penrith to Eastern Creek Investigation Area

 Potential new growth area being planned for across government.
 Future public consultation will inform this work.

#### South West Growth Area

 New housing and jobs, with Leppington and Oran Park key destinations and access via the proposed South West Rail Link extension between Leppington and the Aerotropolis.

- Wianamatta-South Creek will allow recreational connections to the Aerotropolis.
- The proposed Fifteenth Avenue Smart Transit (FAST) Corridor will run eastwest through Austral, and connect to the Airport, Aerotropolis and Liverpool.

#### Metropolitan Rural Area

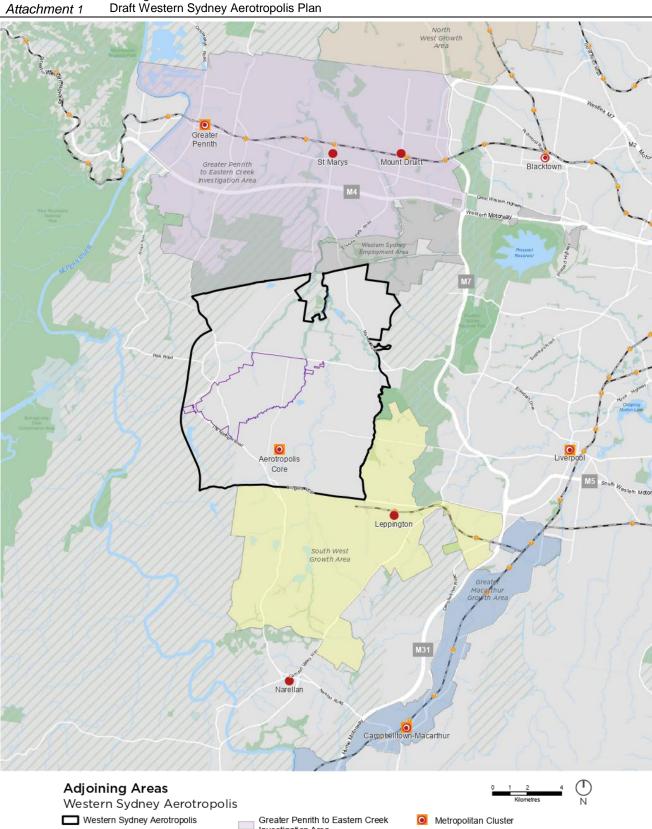
- Outside the established and planned urban area to the west of the Aerotropolis.
- Includes public land protected for conservation, peri-urban land for rural uses and rural towns and villages.
- Maintained or enhanced through place-based planning.
- Economic viability of agricultural industries supported and enhanced as the Aerotropolis evolves, including through the Agribusiness Precinct.

Figure 5: Oran Park is in the South West Growth Area Source: Department of Planning, Industry and Environment



14 Western Sydney Aerotropolis Plan





- Western Sydney International (Nancy-Bird Walton) Airport
- National Parks and Nature Reserves
- Environmental Conservation
- Western Sydney Employment Area
- Investigation Area South West Growth Area Greater Macarthur Growth Area
- North West Growth Area
- 📿 Metropolitan Rural Area
- Health and Education Precinct  $\odot$
- Strategic Centre

### 1.3.4 The Aerotropolis and local planning

The Aerotropolis is within the local government areas (LGAs) of Liverpool and Penrith. As with all Greater Sydney councils, Penrith and Liverpool councils have developed draft Local Strategic Planning Statements (LSPS) for their LGAs.

The draft documents require the councils to work with the NSW and Australian governments to implement this Plan and prepare precinct plans through the Western Sydney Planning Partnership. Planning for the Aerotropolis will align with these LSPSs.



### Liverpool

#### **Relevant priorities**

- Planning Priority 2
- A rapid smart transit link between Liverpool and Western Sydney International Airport - the FAST Corridor will connect Liverpool to the Aerotropolis and Airport.
- Planning Priority 13
   A 24-hour Western Sydney
   International Airport growing to reach its potential – through the Planning Partnership, Council will ensure the Airport's curfew-free status is protected.
- Planning Priority 16
   Rural lands are protected and enhanced – an updated Rural Lands Study and protected agricultural land will support the rural economy, ecosystem services and natural landscapes.



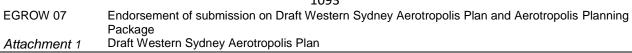
### Penrith

### **Relevant priorities**

- Planning Priority 9 Support the North South Rail Link and emerging structure plan - Council will work across government to maximise the benefits of the North South Rail Link (Sydney Metro Greater West).
- Planning Priority 11
   Support the planning of the Western Sydney Aerotropolis – Council will work to minimise impacts and maximise benefits.
- Planning Priority 12 Enhance and grow Penrith's economic triangle – the economic triangle builds on the Western Economic Corridor between the Aerotropolis, Penrith and St Marys.

16 Western Sydney Aerotropolis Plan







1094 Endorsement of submission on Draft Western Sydney Aerotropolis Plan and Aerotropolis Planning Package Draft Western Sydney Aerotropolis Plan Attachment 1

# A vision for the Aerotropolis

The Aerotropolis is Australia's newest global gateway, built around the worldclass Western Sydney International (Nancy-Bird Walton) Airport. Its evolution has driven transformational change in the Western Parkland City. Development is framed around Wianamatta-South Creek and an expansive network of parklands and green and blue corridors to realise the cool and connected Western Parkland City. Above all, it respects and connects Country. It creates opportunity, amenity and sustainability for workers and residents in Western Sydney.



The Aerotropolis accommodates high value jobs closer to where people live. It is an accessible, innovative 24-hour metropolitan centre, connected globally, nationally, locally and digitally.

> It nurtures the industry of the future. It contributes to greater productivity and a significant increase in jobs for Western Sydney in areas such as defence and aerospace, advanced manufacturing, technology, agribusiness, health, education, research and tourism.

A diversity of housing in parts of the Aerotropolis Core, Northern Gateway and Rossmore precincts provide a vibrant and living city, protected from the 24/7 operations of the Airport. Centres are easy to walk around, with quality public areas and a mix of social and cultural infrastructure.

The Aerotropolis is low carbon, featuring next-generation energy, waste and water infrastructure. Circular economy principles minimise waste and pollution, retain water in the environment, reuse energy and regenerate natural systems to increase the tree canopy and urban cooling. Sustainable food production in the Agribusiness Precinct minimises food miles and reduces food wastage.

Sustainable urban connections include efficient and accessible public transport links, walking and cycling facilities, smart technologies and an efficient road network. Efficient freight movements are mainly by rail. People and business can access key centres in the Western Parkland City and Greater Sydney.



18 Western Sydney Aerotropolis Plan

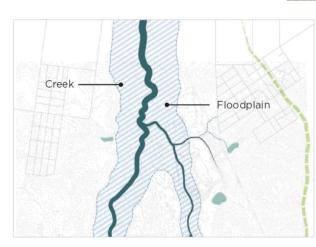


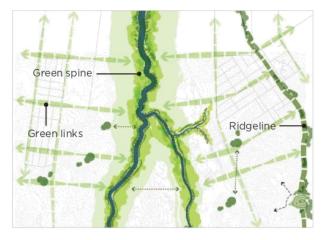
Figure 7: Artist's impression of an employment centre within the Aerotropolis Source: Urbis

# 2.1 Achieving the vision – a landscape-led approach

To achieve the vision for the Aerotropolis, an innovative landscape-led approach is proposed that interweaves urban planning, landscape and urban design. This approach brings new thinking to land use and transport patterns and focuses on the structural elements required to create a cool and green Western Parkland City. It recognises blue and green infrastructure – major waterways, parks or green spaces – as the kind of elements that should shape the future of a city, just as major roads, rail lines, universities or hospitals have done traditionally.

The landscape-led approach to planning and urban design is illustrated in the series of maps below. The process starts with recognising Country to identify and build the city's structure and places from the landform and water system.





20 Western Sydney Aerotropolis Plan

Figure 8: Artist's impression of the town centre Source: Urbis



### Retain water in the landscape

- retain water in the landscape
- manage health of the Wianamatta-South Creek Catchment
- create a functional Blue-Green city structure that contributes to flood management and human safety

# Preserve, extend and restore the green

- preserve, extend and restore the green around the Wianamatta-South Creek corridor and tributaries
- conserve biodiversity land, remnant vegetation, water features, habitat links, cultural values and view lines



# Locate transit corridors within walking distance to landscape amenity

- locate transport within a walk of attractive landscapes
- use Green Grid as basis of pedestrian connectivity and cycling network
- enhance edge of creek corridor and provide accessible local streets to encourage active transport

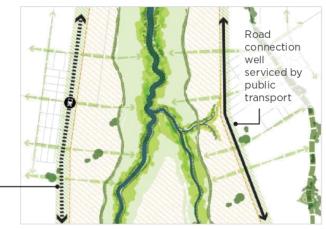
Mass transit corridor – supported with green infrastruture

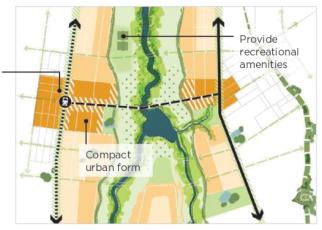
### Orientate urban development towards landscape amenity, connected to transit corridors

 create places around amenity of creek corridor and open space close to public and active transport connections

### Adopt urban typologies

 adopt urban typologies that ensure urban development retains water in the landscape with public space and private landscape spaces including streets used to provide a high level of liveability.





Draft – for public comment 21

### 2.1.1 Starting with Country

Traditional understandings of Country will shape the Aerotropolis, influencing planning, urban design and landscape management. Aboriginal peoples understand that they originated from Country; it is at the centre of their ways of knowing and being. An appreciation of Country ensures Country is cared for throughout the process of design and development.

Connecting with Country is an approach being championed by the NSW Government to give effect to the objectives of the *Environmental Planning* & Assessment Act 1979 (EP&A Act) which states that Aboriginal culture and heritage are to be sustainably managed in the built environment. Using comprehensive and respectful approaches, planning for the Aerotropolis can build capacity and pathways for knowledge sharing between Aboriginal and non-Aboriginal communities. Wianamatta-South Creek runs like a spine through the area, providing fresh water and fertile soils, with abundant ironbark and Sydney black wattle. This landscape has changed, with human modification and ecological processes, yet it remains significant as part of a system of relationships that depend on and interconnect with each other.

Country cannot be reduced to individual places disconnected from this system. Even when Country changes, the narratives of Country remain, told through storytelling, singing and language. The stories adapt to new events, technologies, information and the many people who today share Country.

Guided by Cultural Design Principals and leaders in the Aboriginal community, planning for the Aerotropolis will be informed and shaped by these narratives. Future natural, economic or cultural landscapes will preserve and embody Aboriginal values and identities.



The Country that the Aerotropolis sits within is a landscape of undulating shale plains and low hills, with open woodland and areas of denser vegetation.

Figure 9: Natural landscape Source: Greater Sydney Commission



22 Western Sydney Aerotropolis Plan



The area is to be driven by placemaking to attract the best and brightest to invest and work in the Aerotropolis.

# 2.2 Creating a global gateway

The Aerotropolis will be a regionally and nationally significant employment area for the entire Western Parkland City. It will contribute to national productivity. The landscape-led approach, coupled with collaborative place-making, will create a global gateway that attracts the best and brightest to invest and work in the Aerotropolis.

The Aerotropolis Core will be a new urban centre connected to fast and reliable transport as well as digital infrastructure. It will be a place for collaborating within and beyond the Aerotropolis. A mix of uses will support and enliven the city; employment, civic, retail, hotel, recreation, residential, education and cultural.

# 2.3 Designing a cool, green new city

The Aerotropolis will have compact urban form – a place where centres or work communities are connected by walking, cycling, interaction and collaboration. A compact urban form minimises the urban footprint and leaves more land for open spaces, waterways and recreation areas. It allows people to access a diversity of uses within walking distance of centres, open space or transport.

Urban typologies will be developed, contributing to the delivery of a cool, green, safe and sustainable Aerotropolis. They will ensure water is retained in the landscape, increase the tree canopy and reduce building reflectivity. These typologies are broader in scale than individual buildings and could include several different buildings, streets and open spaces.

Retaining water in the catchment will improve creek flow, reduce flooding risk, and irrigate open spaces and vegetation. It helps to provide a cooler, more attractive green environment for residents, workers and visitors. Development in the Aerotropolis will incorporate cost-effective, efficient and low-maintenance solutions that ensure urban form and stormwater are considered in an integrated way with other infrastructure. Performance criteria will be developed to ensure that urban development:

- provides sufficient pervious areas to retain water to optimise stormwater management, flood protection and waterway health;
- improves/optimises water cycle management;
- maximises links and access to open space;
- increases tree canopy cover and shade; and
- mitigates urban heat through landscape, water and building reflectivity.

The typologies will be subject to refinement through the precinct planning process in the context of liveability and feasibility considerations and environmental and water management outcomes. Ultimately, a series of final urban typologies will be reflected in precinct plans, master planning and development controls.



### 2.3.1 Public domain

The public domain is the shared and publicly accessible places in a city, suburb, or neighbourhood: open spaces, parks, bushland, plazas, public buildings, roads, streets and pathways.

The landscape-led approach integrates the many elements of the public domain as a landscape, connectivity and social infrastructure framework with quality public spaces. This creates:

- environmental parkland areas of diverse landscapes and vegetation where ecological and human benefits overlap
- a significant tree canopy that cools the air and, provides shade and urban cooling
- many high quality open spaces that offer different uses for residents, workers, students or visitors, and community and cultural facilities that integrate with the urban environment
- a local street and block structure that complements the topography, prioritises walking, cycling and attractive places and can be adapted over time.

### 2.4 Transitioning to an Aerotropolis

Land uses and urban forms will evolve as the Aerotropolis changes. Sequencing will ensure development takes place as infrastructure is provided to avoid dispersed development. This will require flexibility given the uncertain nature of future land uses, especially in nonresidential areas. While this transition to from rural to non-rural land uses will occur over several decades, the important agricultural lands of today can be retained. Land uses, buildings and structures may be temporal in nature in the short to medium term and transition to more intensive and higher order technology, advanced manufacturing and creative industry uses in the longer term. New enabling industries such as building materials production to facilitate construction of the Aerotropolis may be permitted subject to interface mitigation treatments and an ability for the site to transition to higher order uses compatible with airport operations over time.

Regardless, compact, walkable precincts will be planned for and developed upfront to meet the sustainability, liveability and connectivity objectives of the Region Plan. Careful planning of precincts that may initially accommodate larger building footprints within a walkable block structure will be required to allow for future land use intensification.

### 2.5 Retaining a green, biodiverse landscape

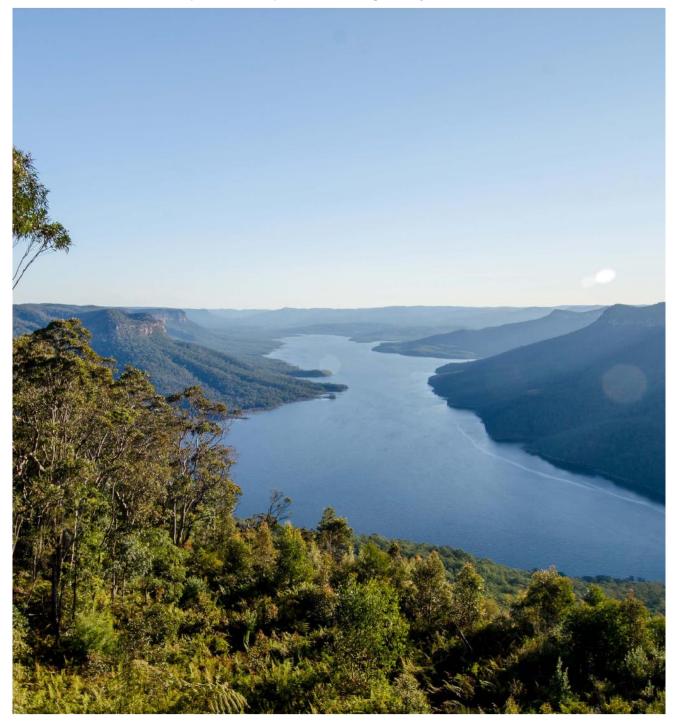
The Aerotropolis requires land for its many native plants and animals. This requires biodiversity to be assessed upfront in the planning for such largescale development to identify urban capable land and areas with biodiversity values within the Aerotropolis. Regenerating natural landscapes will reduce impacts as the Aerotropolis develops and embed a circular economy approach.



A strategic conservation planning process is occurring which will identify and protect biodiversity values and also seek strategic biodiversity certification to confirm areas suitable for urban development.



Figure 10: Lake Burragorang Warragamba Catchment is rich in biodiversity and is located to the west of the Aerotropolis. Source: Department of Planning, Industry and Environment



# Implementing the vision

### 3.1 Structure Plan

The Structure Plan is a spatial representation of high-level land uses, environmental assets and transport infrastructure within the Aerotropolis. It will be reviewed and updated alongside precinct planning and infrastructure provision.

A network of new and existing centres will emerge from the precinct planning process and as Sydney Metro Greater West stations are confirmed together with rail, bus, walking, cycling and freight connections.

### 3.2 Planning framework

A comprehensive planning framework provides clarity for more detailed planning, implementation and delivery and ensures development meets with the objectives and principles of this Plan, the Region Plan and the District Plan.

Figure 11: Planning framework

### Exhibition Late 2019 - Early 2020, Finalisation Mid 2020

### Western Sydney Aerotropolis Plan

(This Plan)

This Plan includes overarching planning principles, distribution of land uses, the phasing of precincts and identification of high-level transport framework, Blue-Green Grid and other key infrastructure.

### Western Sydney Aerotropolis State Environmental Planning Policy

A Discussion Paper outlines the intent of the proposed SEPP which will apply to the Aerotropolis. The SEPP establishes boundaries consistent with this Plan, applies zoning to the initial precincts and provides performance criteria for master plans.

### Western Sydney Aerotropolis Development Control Plan - Phase 1

The Aerotropolis DCP will guide precinct planning and master planning within the Aerotropolis, which will be delivered in two phases. Phase 1 includes precinct planning principles, some objectives and performance outcomes.

### Exhibition Mid 2020 Finalisation Late 2020

### State & Local Infrastructure Contribution Plans

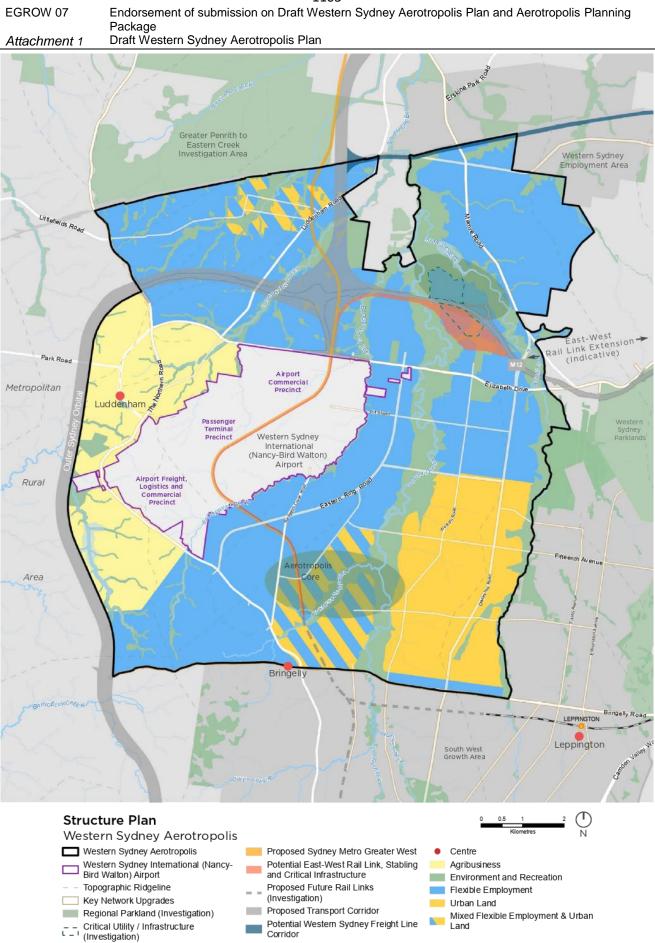
State and local contributions plans will identify necessary infrastructure and the contribution rates that will be applied to development to fund that infrastructure.

### **Individual Precinct Plans**

Individual Precinct Plans will be developed under the new Aerotropolis SEPP to provide more detailed outcomes for each precinct. These plans will also include Indicative Layout Plans.

### Western Sydney Aerotropolis Development Control Plan - Phase 2

The *Phase 2 Aerotropolis Development Control Plan* (DCP) will include additional performance outcomes, specific development controls and acceptable design solutions.



### 3.2.1 Aerotropolis State Environmental Planning Policy

A new Aerotropolis SEPP will apply to the 11,200-hectare area surrounding the Airport except for the Mamre Road Precinct, which will be zoned under *State Environmental Planning Policy* (Western Sydney Employment Area) 2009 (WSEA SEPP). The SEPP will also protect airport operations beyond the Aerotropolis.



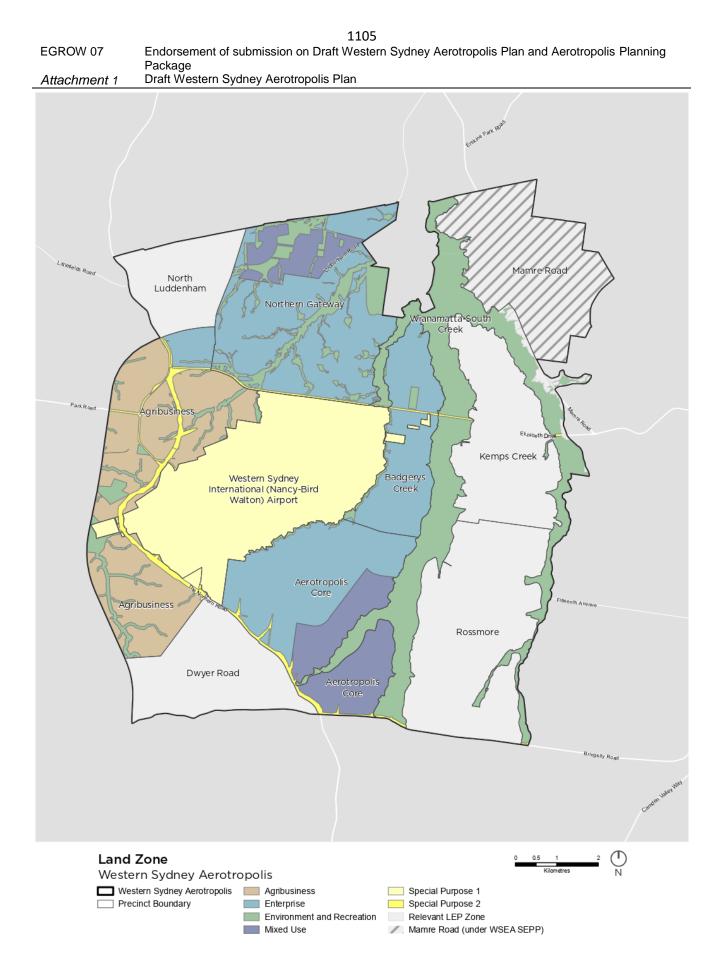
The Aerotropolis SEPP will encourage and support the orderly and economic use and development of land in the Aerotropolis.

> It will provide statutory weight to the planning and development of land around the Airport and will implement this Plan by:

- establishing boundaries for applicable land
- defining all precincts and their boundaries
- establishing strategic objectives for all precincts
- applying land use zones to the initial precincts
- implementing various clauses and maps
- protecting transport corridors and utility sites
- providing performance criteria for the master planning process
- identifying the types of development applications that are to be referred to Western Sydney Airport and/or relevant Commonwealth department
- ensuring there is no increase in noise sensitive uses within the Australian Noise Exposure Concept (ANEC)/ Australian Noise Exposure Forecast (ANEF) 20 and above contours.

A combination of new and existing zones will be applied in the SEPP to enable the unique development opportunities that the Aerotropolis provides. These have been defined for the initial precincts, with zoning for the remaining precincts to occur at precinct planning stage:

- Enterprise Zone: land where enterprise uses are supported while mitigating impacts of airport operations. Residential development and other noise sensitive uses not permitted.
- Mixed Use Zone: mixed flexible employment, residential and noise sensitive uses on land not affected by the ANEC/ANEF 20 and above contours in high amenity areas and areas well connected to public transport.
- Environment and Recreation Zone: most of the Wianamatta-South Creek Precinct and other areas identified for conservation and biodiversity.
- SP1 Special Activities Zone: the Airport and associated land in Commonwealth ownership to support airport operations and other special uses to support the Aerotropolis.
- SP2 Infrastructure Zone: new and existing road and rail corridors, transport facilities, and land required for utilities. The SEPP will need to be amended to accommodate infrastructure as it is planned and as corridor and site boundaries are further refined.
- Agribusiness Zone: to support high-tech agribusiness uses, including freight, logistics and horticulture in the Agribusiness Precinct.



# Referral of development applications to Western Sydney Airport

The Aerotropolis SEPP will identify the triggers for development applications (DAs) that are to be referred to Western Sydney Airport and/or the appropriate Commonwealth department or agency, depending on their potential impact on the safe operation of the Airport. This will include development or activities that could impact on operational airspace, development that has the potential to attract wildlife within three kilometres of the Airport and development that could result in windshear or turbulence and development or construction activities that include the use of cranes that extend into prescribed airspace.

### 3.2.2 Aerotropolis Development Control Plan

The Aerotropolis DCP will guide precinct planning and master planning and promote exemplary design:

- Phase 1 will identify precinct planning principles to achieve the vision for the Aerotropolis and set objectives and some performance outcomes for development.
- Phase 2 will identify additional performance outcomes and specific development controls to satisfy required objectives, performance outcomes and acceptable design solutions for all development permitted within the Aerotropolis.

### 3.2.3 Section 9.1 Direction

This Plan is accompanied by a proposed amendment to *Ministerial Direction 7.8 Implementation of Western Sydney Aerotropolis Interim Land Use and Infrastructure Implementation Plan* under section 9.1 of the *EP&A Act*.

This reflects the new title and status of the Plan and requires that all planning proposals seeking to amend land zoned under the Aerotropolis SEPP or the respective LEP be consistent with this Plan. **Figure 12:** Artist's impression of a transport hub in the Aerotropolis Source: Cox





Draft - for public comment 31

## Infrastructure

This Plan identifies high-level infrastructure that will shape and support the Aerotropolis including their interdependencies, while precinct planning will identify the infrastructure required for each precinct. Because of the size of the Aerotropolis and the time over which it will develop, infrastructure provision will be staged. Precinct plans will indicate the likely sequencing for infrastructure in each precinct, informed by the Place-based Infrastructure Compact and local infrastructure needs.

### 4.1 Blue-Green Grid

The Blue-Green Grid is the network of blue and green spaces including waterways, riparian areas, bushland, parks and open spaces, tree canopy (including street trees) and private gardens.

These elements of a Blue-Green Grid are strategically planned, designed and managed to support a good quality of life in an urban environment.

### 4.1.1 Wianamatta-South Creek as Blue-Green infrastructure

This Plan and the District Plan embrace the Wianamatta-South Creek Catchment's natural blue and green systems as valuable assets. The landscape-led approach will incorporate these into urban activity and form, while improving and preserving environmental, cultural and spiritual values.

### 4.1.2 Parkland elements

Four parkland elements are included as investigation areas: Wianamatta-South Creek corridor, regional parks, ridgeline parks and multi-functional linear parks. Their potential and/or location will be determined during precinct planning.

### Wianamatta-South Creek corridor

The Wianamatta-South Creek corridor is the central element of the urban design and water management of the Western Parkland City. Within the Aerotropolis it connects the potential southern and northern regional parks and provides the foundation of a city physically balanced with nature. The southern regional park will protect and improve the ecology of the northern regional park through the restoration of the creek and improved waterway health.

### **Regional parks**

Regional parks will provide the immediate and recognisable identity of the Western Parkland City and Aerotropolis, connecting with the Western Sydney Parklands. The regional park investigation areas in the north and south of the Aerotropolis sit along the Wianamatta-South Creek corridor.

- The southern regional park will connect the environmental setting of the Wianamatta-South Creek corridor to urban areas in the Aerotropolis Core.
- The northern regional park located north of the proposed M12 Motorway at the confluence of South, Badgerys and Kemps creeks is an area of high environmental and Aboriginal cultural value. It could create an iconic parkland gateway visible from the air and on the ground.

### **Ridgeline parks**

The ridges help to frame the Western Parkland City setting and can reduce the visual dominance of urban areas across a vast expanse of land with subtle elevational shifts. Existing trees will be retained, and tree planting will focus on riparian areas and ridgelines. Local parks and sporting grounds will be distributed along ridgelines and incorporate existing vegetation. Ridgetop parks will catch the breeze on hot days while also offering views to the Blue Mountains and facilities for stormwater management. Siting taller buildings in the valleys around the large





Figure 13: An example of a ridgeline park looking towards the Blue Mountains from Western Sydney Parklands Source: Tyrrellstudio Pty Ltd

park system and situating lower buildings towards the ridgelines will integrate landscape and built form to retain views and the green setting.

### Multi-functional linear parks

Multi-functional linear parks created alongside infrastructure corridors and minor creeks will offer quality local open spaces along creeks and between ridges and the floodplain. They will be places for walking and cycling connections as well as recreation. The geographic nature of the area's many creek systems means their spacing creates opportunities for green and connected walking, cycling and ecological systems. These will be the logical location of local shops and density that matches these attractive areas.

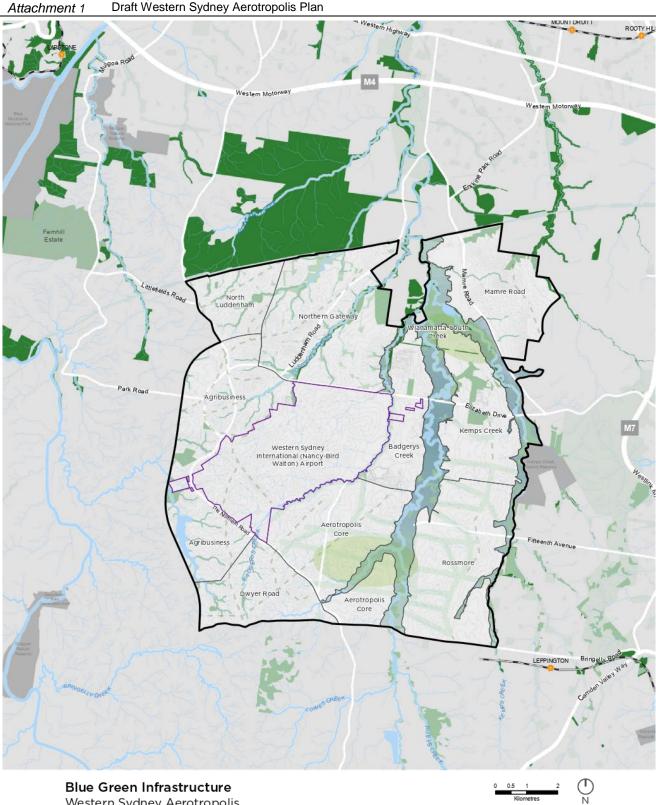
### Streets

A walkable, fine grain street layout is to be provided that meets the needs of all uses and relates to the urban landform, the creation of quality public spaces and connects with other parkland elements. Retaining and planting trees along streets provides green connecting corridors that provide shade and support amenity and urban cooling. Raingardens at the end of streets near Wianamatta-South Creek and its tributaries will support management of stormwater.



Figure 14: The Goods Line in Sydney is an example of a multi-functional linear park Source: Destination NSW





### **Blue Green Infrastructure**

- Public Recreation
- Potential for Conservation
- Environmental Conservation
- National Parks and Nature Reserves
- Wianamatta-South Creek
- Topographic Contour 5m Waterways
- - Topographic Ridgeline
- Linear Parks (Investigation)
- Regional Parkland (Investigation)

### 4.1.3 Biodiversity conservation

Strategic conservation planning for the Aerotropolis will avoid, minimise or mitigate the impact of development on biodiversity values.

Biodiversity certification under the NSW Biodiversity Conservation Act 2016 and the strategic assessment under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) apply to part of the Aerotropolis.

The Department of Planning, Industry and Environment will exhibit the *Cumberland Plain Conservation Plan* in 2020. It will aim to protect threatened plants and animals in Western Sydney while supporting the delivery of housing, infrastructure, open and green spaces. It will enable land to be certified for development and ensure areas of biodiversity value are avoided from development and conserved.

In general, areas to the east of the Airport site and south of Elizabeth Drive sit within the South West Growth Centre under *State Environmental Planning Policy* (Sydney Region Growth Centres) 2006 (Growth Centres SEPP). In December 2007 that land was conferred a biodiversity certification in accordance with Section 126G of the *Threatened Species Conservation Act 1995* (now the *Biodiversity Conservation Act 2016*).

In addition, the strategic assessment under the *Commonwealth EPBC Act* also applies to the part of the Aerotropolis that is subject to the Growth Centres SEPP. These commitments will continue to apply.

### 4.2 Future transport network

The future transport network will not only link the Aerotropolis to the world, it will help realise the aspirations of community and industry. Transport networks and services will be coordinated with investment plans and land use planning. The streets and places of the Western Parkland City will be smarter, healthier and more focused on people.

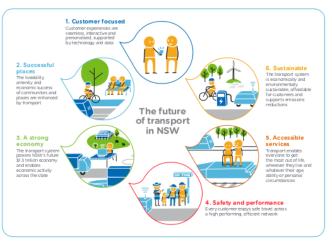


Figure 15: Future Transport's six state-wide outcomes Source: Transport for NSW

"In broadening our thinking about our roads, rail and streets beyond movement; places can better deliver social, environmental and economic improvements for the entire community.

Likewise, in broadening our thinking about movement to both mobility and access, we can promote the right mode for each trip purpose, and plan places that serve local areas and minimise the need to travel long distances"

Better Placed (Government Architect NSW, 2018)





Figure 17 (bottom): Example of a Metro station Source: Transport for NSW The Western Sydney Infrastructure Plan works include major upgrades of The Northern Road, while construction of the M12 motorway is imminent. Along with the crucial Sydney Metro Greater West, these links will tie the Aerotropolis to the opportunities and markets of Greater Sydney.

People in the Aerotropolis will be able to walk to the Metro on safe and shaded streets, enjoy frequent and direct bus services, have convenient access to schools and shops, and benefit from a comprehensive network of cycleways. To realise this vision and support the functions of the Airport and high-tech sector, a network of smart motorways and arterial roads will efficiently accommodate time sensitive freight and private vehicle trips.

New technology will make the Aerotropolis smarter and safer. For the logistics and aerospace sector, connected and autonomous vehicle (CAV) technology can reduce freight and handling costs. On large logistics and technology campuses, autonomous buses will provide connections to bus stops and transit hubs. New technologies allow more responsive transport services that will evolve as the Aerotropolis matures.

Planning for different movements will consider local networks that pass through centres and link places where people want to go, as well as freight and bypass networks to bypass centres and directly link people and goods to the wider network. Figure 16 (top): Proposed Sydney Metro Greater West will provide city-shaping services Source: Transport for NSW

### 4.2.1 Transport services

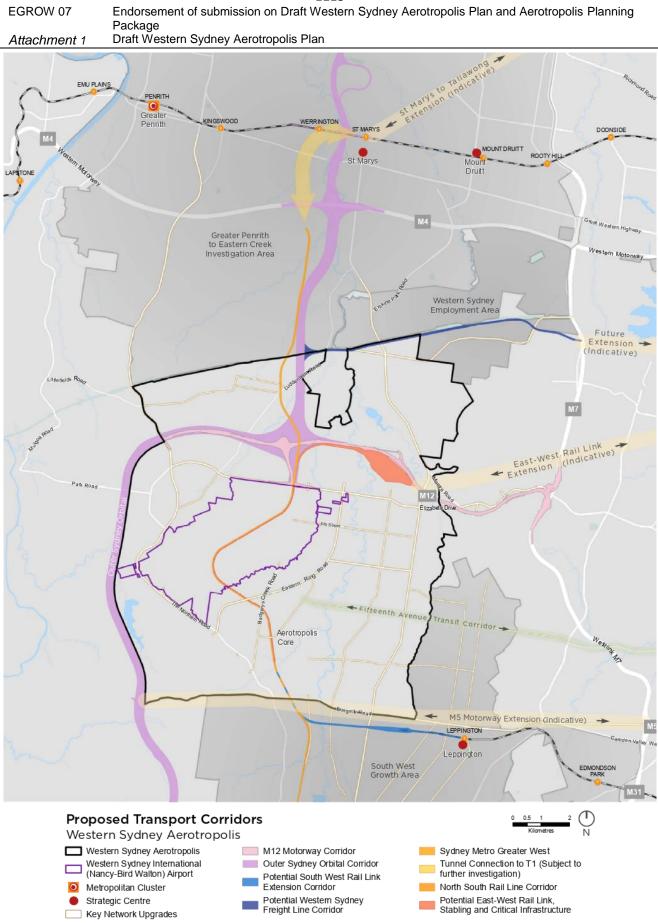
The Aerotropolis's transport network will reflect the service hierarchy adopted in *Future Transport 2056*:

- city-shaping services mass transit public transport services of higher frequency, speed and volume linkages between cities and centres that shape locational decisions of residents and businesses
- city-serving services high to medium capacity, high frequency services, with more frequent stopping patterns
- centre-serving services medium to low capacity, high frequency or on-demand services that provide customers with access to their nearest centres and transport node.

Public transport services will be staged with development. Initial services on the proposed Sydney Metro Greater West (Stage 1) and rapid bus services linking Liverpool, Penrith and Campbelltown with the Airport and Aerotropolis Core will be supported by local services delivered in line with demand.

Interconnected mass transit city-shaping services that support the evolving needs of the Aerotropolis include the proposed Sydney Metro Greater West as part of a broader North South Rail Link corridor, and other connections such as the proposed Outer Sydney Orbital.

The proposed network includes a number of major city and centre serving connections. City-serving networks such as Elizabeth Drive and The Northern Road will provide high capacity and frequency, while centre-serving networks such as Luddenham Road, Western Road and Ramsey Road offer lower capacity but more closely spaced stops connecting to centres. Local centre-serving bus services will be complemented by smaller ondemand vehicles and 'mobility as a service' offerings, such as ride sharing. Connected urban sensor networks and artificial intelligence will allow on-demand services to anticipate and respond to changes in demand. In conjunction with mass transit and a comprehensive cycle network, these 'last mile' services will enable limits to be placed on private parking supply, further reducing congestion.



### 4.2.2 Network development

Transport network planning for the Aerotropolis and broader Western Parkland City will maximise the use of the existing roads. New connections will respond to proposed urban development through precinct planning.

The proposed network includes local and transit-focused streets that will connect to key centres including the Aerotropolis Core and the Airport. The Fifteenth Avenue corridor will provide a direct connection to these centres from Liverpool. Similarly, the Pitt Street Extension Corridor will provide an eastwest connection for public transport, walking, cycling local traffic between Devonshire Road and the Airport Commercial Precinct via Pitt Street.

d	Ь
Б	Б
Η	F
ч	н

Planning for the Aerotropolis will accommodate a new freight infrastructure corridor between key freight centres and the Aerotropolis, as well as freight and logistics development in precincts identified for flexible employment and agribusiness.



The proposed transport network servicing the Aerotropolis will accommodate freight on connections that maximise effective and reliable movements while protecting local amenity.

Key freight links will serve the Airport and the Airport Commercial Precinct to support economic activities along Eastern (Airport) Ring Road. The upgrade of The Northern Road is designed to serve the Agribusiness Precinct and the Airport Freight and Logistic Precinct. The proposed M12 Motorway will be the major access route to the Airport and connect to Sydney's motorway network.

The proposed Outer Sydney Orbital Corridor will be the major north-south transport corridor between Richmond Road in the north and the Hume Motorway near Menangle in the south with a motorway interchange with the M4 Western Motorway. It will include dedicated freight rail infrastructure, providing a regional connection between Port Botany, Western Sydney and regional NSW.

The potential Western Sydney Freight Line would link the Southern Sydney Freight Line with potential intermodal terminals in the Western Parkland City. It would serve freight, logistics and related industries, and consolidate WSEA as a key freight and logistics hub. This line would also divert freight from the Main West Rail Line, unlocking passenger capacity.

Following landowner and community input, a final transport network will be determined through precinct planning, based on detailed investigations and analysis that focus on integrating land use and transport. This work will be underpinned by investigations to identify infrastructure priorities for the Aerotropolis within the broader Western Parkland City.

Figure 18: Artist's impression of the M12 linking the Aerotropolis to Greater Sydney. Source: Transport for NSW

38 Western Sydney Aerotropolis Plan

.



### 4.3 Digital infrastructure - smart cities

Smart cities use technology to improve quality of life. Whilst the scale of initiatives can vary, most solutions use embedded, connected and interoperable technology tools and platforms that take advantage of smart devices working across infrastructure assets, services and sectors. A smart city:

- embeds sensors and communications technology in infrastructure as it is built or when it is being upgraded
- captures, exchanges and uses data securely from sensors
- communicates information, insights and actions, including through the infrastructure itself.

Investing in appropriately scalable and adaptable communications and digital infrastructure is fundamental to enabling a city that can respond to the sustainability objectives of the Aerotropolis, deliver a liveable city, and enable development of industry and jobs.

To create a smart city, the Aerotropolis will incorporate the following built infrastructure:

### 4.3.1 Connectivity infrastructure

- 4G and 5G (or other future technology) radio cells integrated into buildings, public transport, smart poles or other infrastructure
- Gateway devices for low power wide area networks that collect data from sensors
- Wi-Fi nodes and mesh networks for public access and sensor connection



- Fibre optic network to buildings and homes and data transfer from gateway devices
- Fibre network for high capacity links to commercial buildings, centres and management hubs
- Vehicle to Infrastructure (V2I) to communicate between road signs, traffic lights and connected autonomous vehicles (CAVs).

### 4.3.2 Sensor infrastructure

- Water, environmental, weather, soil or energy meters
- Traffic, transport and people movement sensors in road surfaces and buildings integrated with parking and traffic management infrastructure
- CCTV for smart transport, safety and law enforcement
- Smart lighting, remote controllable and event configurable
- Road marking for connected and autonomous vehicles.

# 4.3.3 Communications infrastructure

- Digital signage and interactive smart screens in public spaces and transport
- Smart poles that combine lighting, sensors, connectivity and signage
- Smart benches with many functions such as cooling or heating, device charging, lighting, sensors, connectivity and smart screens
- Coordinated and adaptive traffic signals
- Smart road marking to facilitate traffic management.

Draft – for public comment 39

Figures 19-20: Examples of digital infrastructure

### 4.4 Energy infrastructure

The Aerotropolis will be powered through sustainable, next-generation energy infrastructure consistent with the NSW Government's 2050 Net Zero Emissions commitment. Locally produced clean energy, energy storage solutions, smart grid and real time usage optimisation technology and innovative power purchasing options will be a focus for energy providers.

The NSW Government will work with energy infrastructure providers to deliver energy infrastructure that meets the objectives for a world's best practice energy system. This will seek to combine local generation, such as small and medium scale solar, and storage, with advanced electricity network management systems.



**Figure 21:** The Aerotropolis will be powered by sustainable, next-generation energy infrastructure

The development of energy supplies will draw on Australian and international experience to combine locally generated electricity with the existing large-scale electricity network. Using circular economy principles, this includes:

- installing solar rooftops and solar gardens models for new residences
- using smart grid technologies, with onsite battery storage
- considering electric vehicle charging stations during precinct planning
- if green infrastructure such as rooftop solar cannot be built upfront, incorporating the ability for future provision.

### 4.5 Integrated water, wastewater and recycled water services

The South Creek Sector Review detailed the need for water to be managed holistically under integrated water management. The release of Sydney Water's Western Sydney Regional Master Plan in 2020 will set out an integrated water management servicing direction to 2056. The Master Plan sets direction for doing water differently, it considers the total water cycle in Western Sydney and promotes a sustainable water future delivered via integrated water services. The Master Plan's principles will be incorporated into the Aerotropolis.

Sydney Water's adaptive, flexible planning approach for Western Sydney allows for a combination of actions to be assessed and taken immediately, if required, to support growth demands while preserving flexibility to meet future commitments and initiatives.

Sydney Water is finalising the site selection, financing and delivery options of the Upper South Creek Water Factory with associated Resource Recovery Plant and corresponding network location requirements. Once development has reached an appropriate scale the plant will produce recycled water appropriate for agricultural, industrial, open space irrigation and residential dual reticulation.

### 4.5.1 Warragamba Pipeline

The Warragamba Pipeline along the northern boundary of the Aerotropolis transfers water from Warragamba Dam to the Prospect water filtration plant. The Pipeline's safety, integrity and operation is essential. Precinct planning will consider WaterNSW's *Guidelines for Development Adjacent to the Upper Canal and Warragamba Pipelines* to ensure this important infrastructure is safeguarded.

# 4.6 Social and cultural infrastructure

### 4.6.1 Community

Planning for the Aerotropolis will ensure that employment and residential development is within 10 minutes' walk of public open space as per the Premier's Priority. People working or living in mixed use residential areas or higher intensity employment areas will have access to a range of open spaces. District-scale open space such as playing fields and regional parks will be provided towards the edge of centres to maximise catchment areas. Sporting fields will be shared with educational institutions wherever possible.

High quality facilities and services that are attractive, flexible and address the needs of the general community will be provided, including community centres, multi-purpose hubs, libraries and aquatic centres.

### 4.6.2 Health and education

The Aerotropolis will support internationally competitive health education, research and innovation jobs and services at a diverse range of scales, such as:

- an internationally significant research/ innovation, science, training and education area (including tertiary and VET institutions and secondary school level) within the Aerotropolis Core
- a cluster of leading science-based businesses, tertiary institutions and research facilities at the Sydney Science Park within the Northern Gateway
- strategic centres that integrate primary and tertiary education, with health facilities and the landscape to create places of learning and wellbeing
- local centres where schools and community facilities are integrated into the parklands shared with the broader community

- nearby access to upgrades at Nepean Hospital, Liverpool Hospital and Campbelltown Hospital
- private sector healthcare, where feasible.

### 4.6.3 Arts and creativity

Cultural and creative spaces can build character and a unique sense of place, identity and belonging. Public art, public spaces such as art galleries, museums and libraries and the new cultural infrastructure will support the ambition for the Aerotropolis to be a home for science and education. Co-locating artistic and creative organisations in science and education precincts will encourage collaboration, drive enterprise and innovation, and support the development of creative industries.



Culture and creativity will drive social, environmental and educational cohesion and innovation. Jobs will be created and the Aerotropolis will be a place that offers a high amenity, high experience urban life.



Figure 22: Camden Fine Art Gallery in Sydney's south-west Source: Destination NSW

Precinct planning for the Aerotropolis will investigate cultural infrastructure to support a tourism and leisure economy and a night-time economy around the Airport that attracts locals and visitors.

### 4.6.4 Aboriginal cultural strategy

Western Sydney is rich in Aboriginal history and heritage significance and is also home to the largest Aboriginal population in Australia. The Aerotropolis will embrace opportunities to connect with Country and include cultural infrastructure for Aboriginal people to practice and share culture and for the wider community to visit to interact with and understand the Aboriginal culture, history and heritage of Western Sydney.

### **Connecting with Country**

Connecting with Country is more than just a policy or an idea. First Peoples' connection with Country is related to the origins of the landscapes within which they/we inhabit and therefore their own origins. Connecting with Country occurs through every sense, movement and stories. It is related to knowledge, actions and experiences, so happens best through corporeal activities, and being in spaces on Country. Several practices or methodologies can be engaged to build these connections. While guidance from knowledge holders is recommended, some of these methods are part of everyday life, such as walking Country, storytelling on Country, making on Country, listening to Country, dialogue with Country, singing up Country, and sensing Country.

Aboriginal people have always walked Country as both a means of knowing and caring for Country. Culture is a map across the landscape in which not only are the individual places important, but the routes between them, and the whole of the landscape is a cohesive narrative. Indigenous cultural knowledge is spatialised and placed, so in walking Country, a sort of mapping occurs that involves all the senses and does not simply rely upon sight.

### 4.6.5 Heritage

Key heritage sites and items will be preserved, and where appropriate, activated and integrated with new development. The history of the area will be embraced to contribute to a distinct identity.

Heritage forms part of the wider cultural infrastructure framework and specific heritage conservation strategies and controls will be considered in precinct planning and DCPs as part of a requirement to address the *Heritage Act 1977*. During precinct planning, detailed site investigations will occur to identify and protect Aboriginal and non-Aboriginal heritage. The outcomes of these investigations will then inform master planning and will be considered in DAs.

Planning, urban design and development will activate and integrate heritage items into new developments in a sensitive way in accordance with:

- Australia ICOMOS Charter for Places of Cultural Significance, The Burra Charter, 2013
- Better Placed: Design Guide for Heritage by Government Architect NSW
- Design in Context: Guidelines for Infill Development in the Historic Environment by NSW Heritage Office & Royal Australian Institute of Architects NSW Chapter
- New Uses for Heritage Places: Guidelines for the adaption of Historic Buildings and Sites by NSW Heritage Office & Royal Australian Institute of Architects NSW Chapter.

### Aboriginal heritage

All landscapes have Aboriginal cultural heritage values, which includes both tangible and intangible elements containing places and values relating to traditional, historical and contemporary periods. There are points of significance for Aboriginal peoples within the Aerotropolis including scarred trees, carved trees, white clay, shell middens, camp sites, stone resources and scatterings of artefacts.



Figure 23: White clay being used in Aboriginal ceremonies Source: Destination NSW

The floodplains of Ropes Creek and Wianamatta-South Creek were an important meeting place and source of nutrition for Aboriginal communities. South, Badgerys and Thompsons creeks provided food and recreation over thousands of generations. Local plant species including tea tree, paperbark trees, geebung, wattles and ferns, as well as fish and shellfish provided food for Aboriginal peoples.

### Non-Aboriginal heritage

European settlement began in the area in the early 1800s with the first land grant given to James Badgery in 1809. The next settlers established large rural estates and set up local agricultural and pastoral economies. Some large estates were subdivided from the 1850s and this attracted small-scale farmers and led to the formation of village centres, including Luddenham and Bringelly. While land continued to be subdivided and developed, the rural character and agricultural uses remained, as do some early buildings and structures.

The Aerotropolis contains 18 non-Aboriginal heritage items of local significance. Three items of State significance include Kelvin Park Homestead (Group) in the Aerotropolis Core Precinct, Church of the Holy Innocents (Group) in the Rossmore Precinct and Belfield Farm (Group) in the Rossmore Precinct. These items will be mapped in the Aerotropolis SEPP and considered at the precinct planning stage.



Figure 24: Kelvin Park Homestead in the Aerotropolis Core Precinct Source: Heritage NSW, Department of Premier & Cabinet

### Women, white clay and Wianamatta

Aboriginal women in Greater Sydney are guardians of reserves of white clay. Prior to non-Indigenous appropriation, it was traded far and wide as an important resource and dietary supplement, particularly for pregnant women. These movements of trade and custodial care occurred throughout the cultural calendar, often involving travel for many days along songlines or trade routes. White clay, as found at Wianamatta, was so valued that women carried it with them in a djuguma, or net bag, slung around her neck or head along with other essential items such as kangaroo bone chisels, shells used as spear sharpeners, balls of red ochre, lumps of resin from the Xanthorrhoea, or grass tree and fishing implements. Clay is also valued for body adornments, which when used in ceremonies distinguishes groups through the differing designs in their body painting.

## Safeguarding the 24-hour airport

The Airport represents a \$5.3 billion investment for Stage 1 alone. It will be a catalyst for economic growth and will operate without a curfew.

The Airport's 24/7 operations will be safeguarded in future precinct planning, and within the context of development (including ancillary commercial areas and business park) being subject to the planning and approval framework of the *Commonwealth Airports Act 1996.* 

Planning to safeguard the 24/7 operations includes:

- preventing the encroachment of noise-sensitive land uses into areas affected by aircraft noise and operational airspace
- locating buildings to avoid wind shear and turbulence
- managing wildlife attraction
- locating wind turbines appropriately
- ensuring lighting does not distract/ confuse pilots
- maintaining an obstacle free operational airspace
- ensuring off-airport development does not impact the communication, navigation and surveillance (CNS) equipment
- managing land uses in public safety areas.

All levels of government will work together to integrate the planning for the Aerotropolis with the planning undertaken by Western Sydney Airport for the Airport site.

### Definition of Australian Noise Exposure concept (ANEC)

Anticipated forecasts of future noise exposure patterns based on indicative flight paths around an airport that constitute the contours.

### Definition of Australian Noise Exposure Forecast (ANEF)

Approved forecasts of future noise exposure patterns around an airport that constitute the contours on which land use planning authorities base their controls.

### 5.1 National Airports Safeguarding Framework

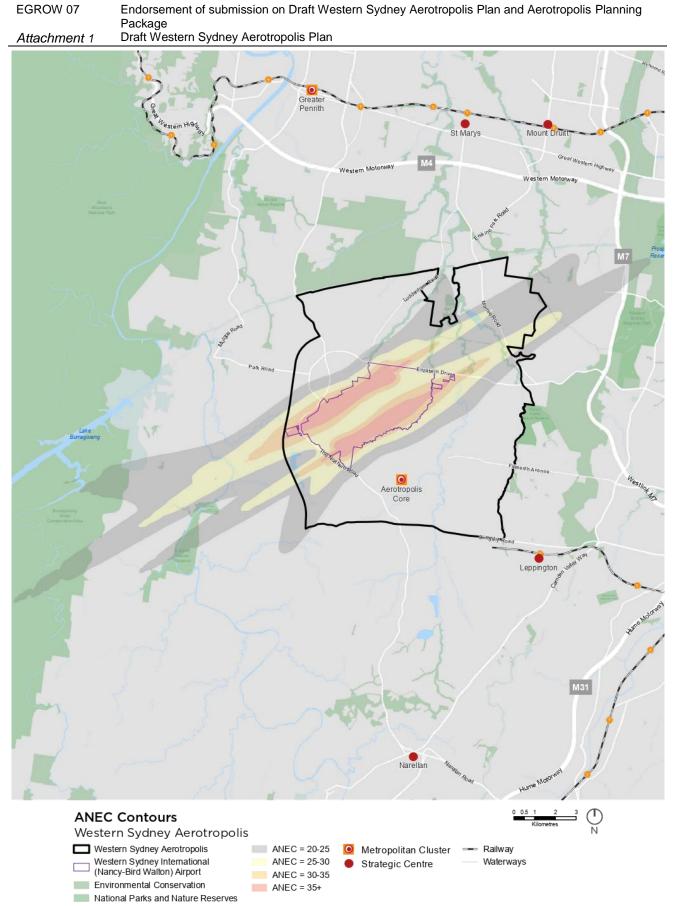
The National Airports Safeguarding Advisory Group (NASAG) developed the National Airports Safeguarding Framework (NASF) as a national land use planning framework at strategic Australian airports. The Framework requires consideration of aircraft noise, operational airspace, wildlife strike, wind shear, public safety zones, lighting, wind turbines, communication, navigation and surveillance systems and helicopter landing sites.

# 5.1.1 Aircraft noise and development

Development that will impact upon the aviation operations of the Airport will not be supported. New residential and other noise sensitive development will not be located within the ANEC/ANEF 20 and above contours (see page 45). Locating residential development in high amenity areas of Wianamatta-South Creek will create further separation from the Airport. More noise tolerant land uses (such as industry) will be located in louder areas. New residential development will also only be permitted in areas with high amenity and should not front major roads or public transport routes. Additionally, for the Aerotropolis Core, new residential development will be limited to being within walking distance of public transport (800m or 10 minutes) and the creek system to create a compact, walkable and vibrant centre whilst achieving the vision for the Western Parkland City.

Development within the ANEC/ANEF 20 and above contour will adopt appropriate design and construction standards to reduce aircraft noise impacts.

In existing residential areas or land approved for development, the ability to construct dwellings will not be removed and renovations to existing houses or minor extensions will still be allowed, subject to appropriate noise mitigation management measures.



Over time, the noise exposure contours will be reviewed and recalibrated in accordance with the requirements of the Airports Act 1996.

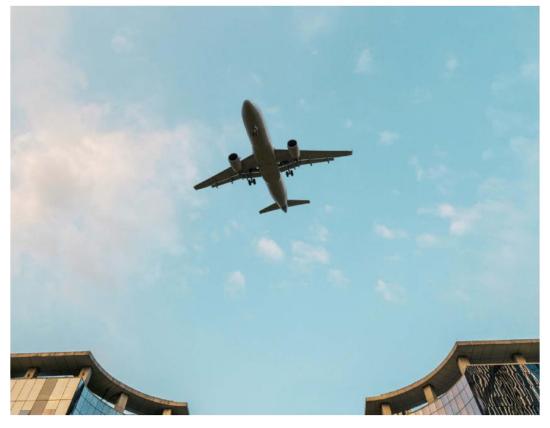
> As the contours may change in the future, or the ANEF chart developed during the airspace design process may differ from the current ANEC contours, a precautionary approach to residential development and other noise sensitive development within the 20 ANEC/ANEF and above contour will be taken.

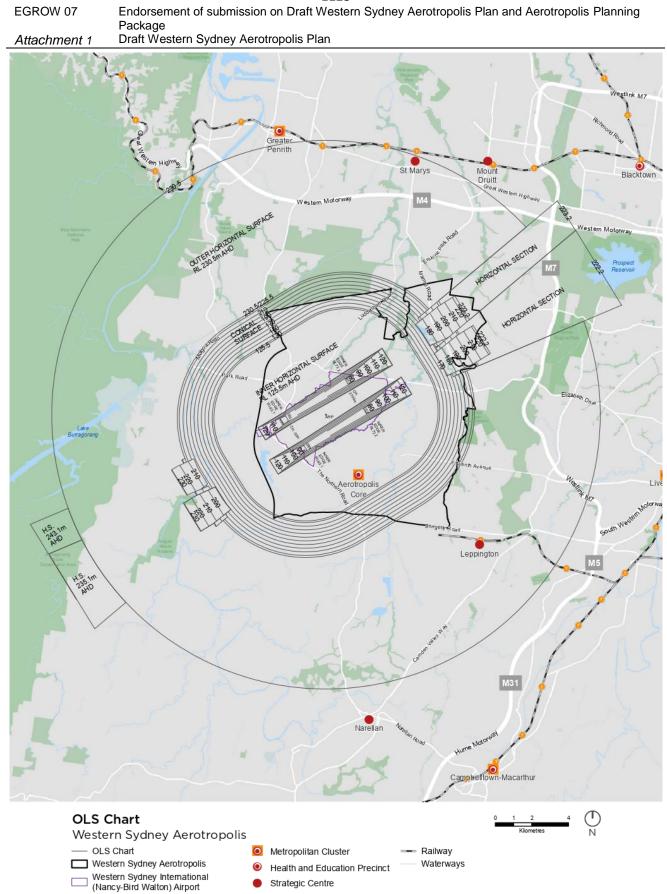
### 5.1.2 Operational airspace

An airport's operational airspace is the volume of airspace above a set of imaginary surfaces, established to protect aircraft from obstacles or activities. One of these, the Obstacle Limitation Surface (OLS), recognises that tall structures or obstructions such as cranes, plumes, lighting and glare could create air safety hazards. The Western Sydney Airport Plan identified an OLS for the Airport (see page 47). As the Airport gets closer to operations additional airspace surfaces such as Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS) will be mapped.

The Aerotropolis SEPP and Aerotropolis DCP will include controls to protect airspace. In addition, encroachments into operational airspace for the Airport may require approval under Part 12 of the *Airports Act 1996* and *Airports* (Protection of Airspace) *Regulations 1996.* 

Figure 25: Controls will ensure that airspace is protected from obstructions.





National Parks and Nature Reserves Environmental Conservation 1123

### 5.1.3 Wildlife strike

Birds and other wildlife can impact aircraft, particularly during take-off and landing. Land uses or certain plant species and/or embellishments that could attract wildlife must be considered in the context of aircraft safety. This may influence where dams, waterbodies, wastewater treatment facilities, parks or biodiversity conservation sites are located. This will be addressed in precinct planning.

### 5.1.4 Wind shear and turbulence

Building-generated windshear/turbulence becomes a critical safety issue when a building is in the path of a crosswind to an operational runway. The wind flow around and over buildings can vary crosswind speed along the runway.

Any building within the assessment trigger area that will penetrate the 1:35 surface must consider windshear and turbulence. This means that if a building exceeds 10 metres and is 350 metres from the runway, it will penetrate the 1:35 surface. Buildings fitting these criteria will be referred to Western Sydney Airport and the Commonwealth for development approval. Typically, only buildings within airport sites need to be designed to address windshear and turbulence. However, any other buildings within proximity to the airport that are located within the assessment trigger area and penetrate the 1:35 surface, will need to consider windshear and turbulence.

Precinct planning will address windshear and turbulence.

### 5.1.5 Public safety areas

The risk of aircraft incidents is highest at the ends of runways. Planning within these areas - public safety areas - will exclude land uses that attract large numbers of people or include the storage, use or manufacture of certain dangerous goods. Whilst the unmodelled trapezoidal area was applied to identify the public safety area for the airport in its EIS, *NASF Guideline I Managing the Risk in Public Safety Areas at the Ends of Runways* was subsequently released in November 2018. Guideline I provides an opportunity to apply a public safety area based on the UK Public Safety Area model, which models anticipated aviation activity at the airport. This approach will be applied to land use planning decisions around the Airport. Consultation with Western Sydney Airport in relation to that model is ongoing.

Precinct plans will address public safety areas in greater detail.

### 5.1.6 Lighting and reflectivity

Lighting will be required within six kilometres of the Airport to be installed and configured to avoid distraction or confusion for pilots who could mistake it for aeronautical ground lights that are used during inclement weather and outside of daylight hours.

Additionally, the design of buildings and structures should consider how their design could reduce distraction to pilots resulting from reflected sunlight.

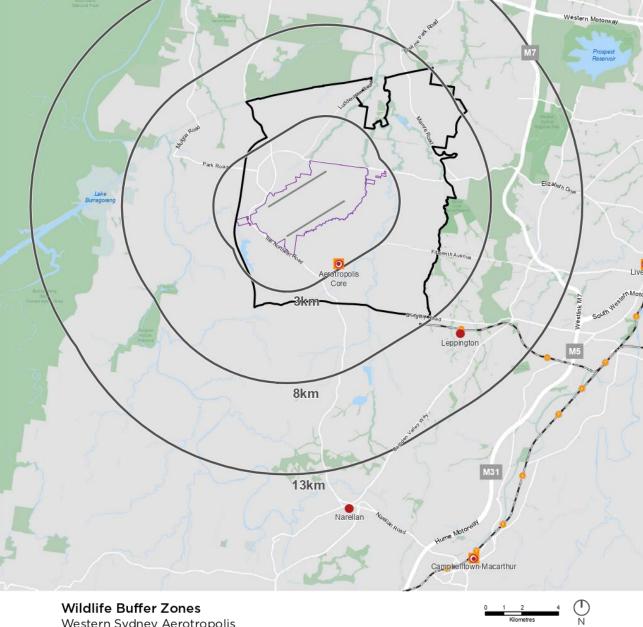
### 5.1.7 Wind turbines

Wind turbines can be hazardous to aviation as their height creates potential conflict with low flying aircraft. They can also create turbulence and affect the performance of CNS equipment. Wind turbines will be avoided in the vicinity of the Airport.

### 5.1.8 Helicopter landing sites associated with hospitals

To ensure continued operations of helicopter landing sites at hospitals, associated flight paths must be free from encroachments. Any proposed hospitals in or adjacent to the Aerotropolis must consider flight path protection.





Railway

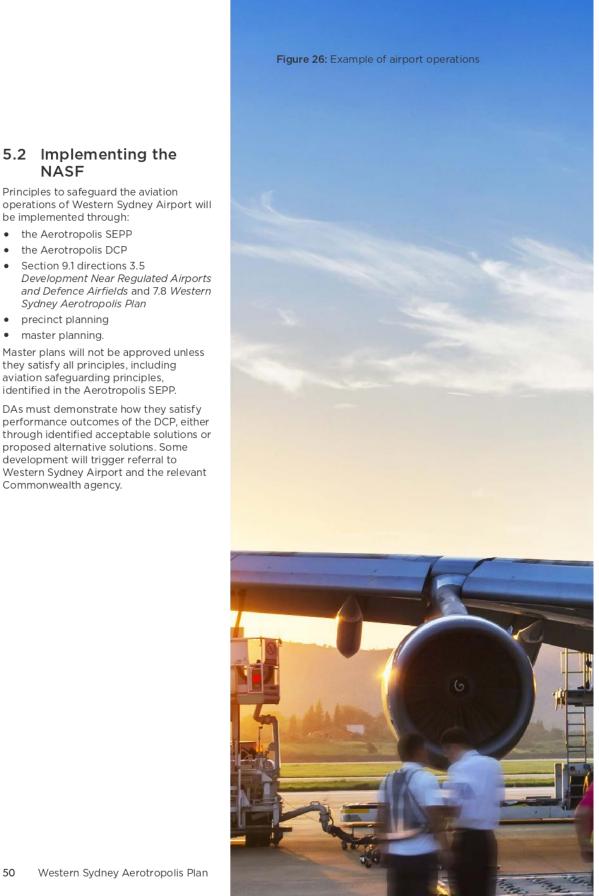
Waterways

### Wildlife Buffer Zones



- National Parks and Nature Reserves
- Environmental Conservation

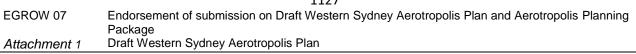
1125



.

.

.





# **Resilience and adaptability**

Planning for resilience addresses several economic and social issues. Adapting to climate change will build resilience to higher temperatures, higher evaporation, changes to intensity and distribution of rainfall, and more frequent heatwaves.

### 6.1 Circular economy

The circular economy gradually decouples economic activity from the consumption of finite resources. It is an approach that designs out waste and changes how goods are produced and sold to minimise waste and environmental impact. Circular economy is based on three key principles:

- design out waste and pollution
- keep products and materials in use
- regenerate natural systems.

The NSW Circular Economy Policy Statement and the Circular Economy Innovation Network (referred to as NSW Circular) guide NSW Government decision-making to transition to a circular economy. The Statement sets the ambition and approach for a circular economy in NSW and guides resource use and management. Decision-making and planning for the Aerotropolis will be governed by these principles.

Considering utility provision across all four domains of water, energy, waste and digital networks allows for new business models and technology solutions to be delivered in the Aerotropolis and the Western Parkland City more broadly.

st s Js J

The NSW Government, with councils, will look to innovative utilities solutions and technologies to drive a circular economy, build resilience and optimise the sustainable management of resources.

### 6.1.1 Waste and resource recovery and management

The NSW Environment Protection Authority's latest *Waste Avoidance and Resource Recovery* (WARR) *Strategy* establishes priorities for the next seven years. Drawing from this, planning for the Aerotropolis will integrate sustainable energy, waste and circular economy design principles into development and operations. Requirements will be determined at the precinct planning and master planning stages.

### 6.1.2 Low carbon precincts

The Low Carbon Precincts Program, developed by the CRC for Low Carbon Living, aims to reduce the carbon footprint of urban systems. It will develop new knowledge and tools to enable the design of, and a market for, low-carbon, precinct-scale infrastructure.

Development requirements to ensure low carbon living and to meet the NSW Government target of net zero carbon emissions by 2050 will be established for the Aerotropolis at the precinct planning and master planning stages.

### 6.2 Urban cooling

Western Sydney is hotter and drier than other parts of Greater Sydney. To cool the Aerotropolis, planning will need to consider that:

- Water retained in the landscape requires a high level of pervious surfaces and better means to absorb rain and use water efficiently to increase transpiration.
- When water and the tree canopy are combined, the benefit is higher than if each is provided in isolation.
- In growing areas like the Aerotropolis, building mass can create significant urban heat island effects. Building reflectivity may provide a higher degree of urban cooling than canopy and water alone.

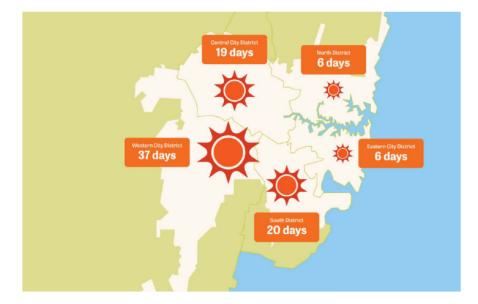


Figure 27: Hot days (over 35 degrees Celsius) in Greater Sydney in 2018-19 Source: Greater Sydney Commission

The optimum solution is to integrate tree canopy cover, water retention, permeable surfaces and high solar reflecting building materials into urban design. These requirements will be enforced at the precinct planning stage and controls included in the DCP.

# 6.3 Waterway health and management

Most of the small creeks that join Wianamatta-South Creek are characterised by ephemeral creeks with little flow between rainstorms. These pools and larger creek sections have deep pools of water year-round that water-based animals rely on.

Urban development could increase the volume and duration of flows entering waterways and increase pollution. Impacts could include erosion of creek banks and reduced aquatic and terrestrial ecosystems.

The Western City District Plan requires the application of a risk-based approach to manage the cumulative effects of development on the health of catchments. The NSW Government is using this approach to determine waterway health values for Wianamatta-South Creek in consultation with the catchment community. The values will be translated into appropriate water quality and flow targets. Further, an effective regulatory and policy framework will be developed to protect the waterway's community environmental values. This will be detailed in precinct planning.

### 6.4 Hazard management and recovery

### 6.4.1 Climate change resilience

The effects of climate change pose challenges to ecosystems, communities and economy. All three levels of government have adopted mitigation and adaptation policies that acknowledge the need to plan for climate change.

The extent and severity of impacts will vary and includes more days of extreme heat, longer bushfire seasons, more regular drought, increases to flooding depths and extent, sea level rise (inundation, storm surge and erosion) and more intense storms and cyclones. These are likely to impact biodiversity, food security, human settlements, wellbeing and economies.

Adaptation minimises vulnerability to climate and other hazards. Adaptation responses can vary depending on the type and severity of the hazard and the capacity of the community to adapt.

The Aerotropolis DCP, precinct planning, master planning and the ongoing review of these documents will guide the planning for a resilient and adaptable Aerotropolis.

### 6.4.2 Floodplain management

The NSW Government's Flood Prone Land Policy aims to reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone land. The *NSW Floodplain Development Manual* (2005) guides the process of floodplain risk management. Floodplain risk management studies and plans identify and prioritise ways to reduce risk of damage from flooding.

Flood management should be integrated with urban and water system planning to leverage efficiencies and maximise community benefit. The Blue-Green Grid provides an ideal opportunity to accommodate and manage flooding through innovative stormwater retention strategies without unnecessarily sterilising land.

Flood management infrastructure and planning should account for climate change and the reforestation of the Blue-Green Grid as part of the landscapeled approach.

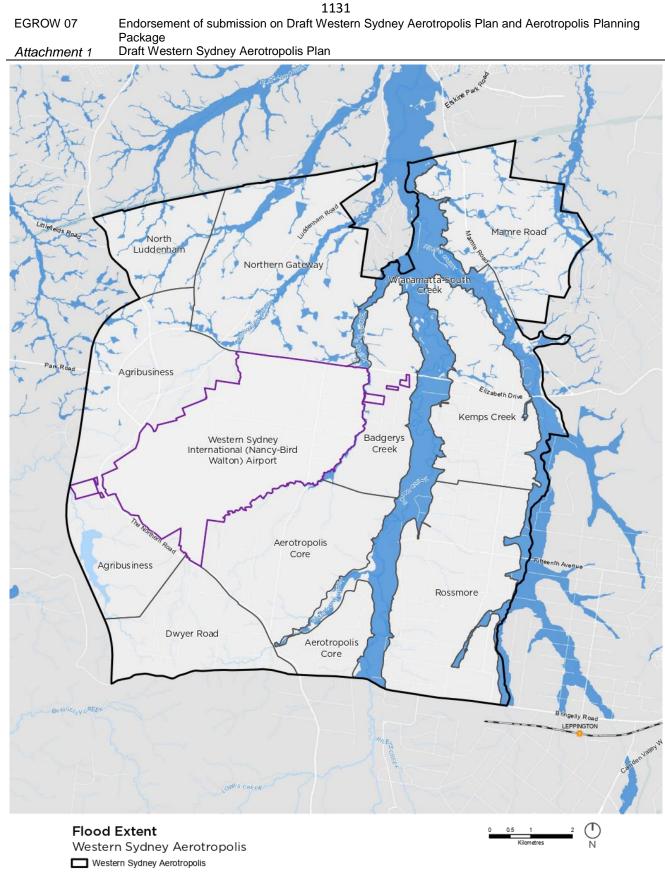
Precinct planning will need to consider floodplain risk management measures such as safe evacuation routes, cut and fill and development issues for the entire floodplain. Development controls will apply to land within the 1 in 100-year flood area in line with each Council's relevant policy.

The map on page 55 shows the flood extents for the Aerotropolis based on the 1 in 100-year flood area and are subject to future detailed precinct planning.



Figure 28: Example of naturalised creek edge Source: Sydney Water





- Western Sydney International (Nancy-Bird Walton) Airport
- Precinct Boundary
- 1 in 100 year Flood Area
- \*Flood extents are subject to detailed precinct planning

# **Precinct planning**

This Plan identifies 10 precincts based on opportunities and constraints as well as likely future character and connectivity.

### Initial precincts

- Aerotropolis Core
- Northern Gateway
- Wianamatta-South
- Creek
- Badgerys Creek
- Agribusiness
- Mamre Road

### Remaining precincts

- Dwyer Road
- Kemps Creek
- North Luddenham
- Rossmore

Submissions to the Stage 1 LUIIP, further investigations, and infrastructure timeframes have resulted in the following changes:

- Wianamatta-South Creek Precinct The precinct boundary has generally been defined using 1 in 100 chance per year flood level data from Liverpool City Council and Penrith City Council, including areas containing protected existing native vegetation. In some areas, such as Thompson's Creek, the precinct is wider than the 1 in 100 chance per year flood to ensure a functional green area. Land no longer in this precinct is now included in the relevant adjoining precinct. The precinct name reflects the official dual name of Wianamatta-South Creek
- Badgerys Creek Precinct
   This is an initial precinct as
   investigations indicate its early
   release will support efficient
   infrastructure delivery. Additionally,
   most of this precinct will be affected
   by aircraft noise once the Airport
   begins operations.
- Mamre Road Precinct
   The precinct boundary now includes
   additional land east of the former
   boundary and aligns the western
   boundary with the 1 in 100 chance per
   year flood extent. This precinct is now
   an initial precinct to help meet the
   demand for industrial land.

- Kemps Creek Precinct The precinct boundary now excludes land to the east of Kemps Creek beyond the eastern boundary of Wianamatta-South Creek. This provides a clearly defined boundary for the Aerotropolis. Planning for this area will be progressed by Liverpool City Council.
- Agribusiness Precinct
   The precinct boundary has been
   amended to remove 748 hectares of
   land in the south to create the Dwyer
   Road Precinct. It is now an initial
   precinct to reflect the opportunities
   of the Airport.
- Dwyer Road Precinct This new precinct, formerly in the Agribusiness Precinct, reflects that the entire precinct is not needed for agribusiness activity. This also provides opportunities for this area to better relate to adjoining areas.

### 7.1 Common strategic outcomes and implementation strategies

### 7.1.1 Common strategic outcomes

While the Plan identifies expected planning outcomes and infrastructure strategies for each precinct, several strategic outcomes will generally apply to all precincts.

### Productivity

- Provide well-designed employment precincts with active street frontages and a well-considered landscape and built form.
- Create buildings and landscaping of exemplary design and world-class energy efficiency.
- Plan for building heights to meet airport operation requirements.
- Adopt appropriate design and construction standards to reduce aircraft noise impacts in development up to the ANEC/ANEF 20 and above contours.

- Prohibit intensification of residential development within the ANEC/ANEF 20 and above contours.
- Embrace new and emerging technologies and support innovation in sustainable and resilient precincts.
- Support the transition of existing agricultural industries.
- Create places that support the right ecosystem for technology and innovation.
- Design that encourages engagement and collaboration.
- Appropriately stage and sequence development to align with infrastructure.

### Sustainability

- Provide an urban tree canopy along open space corridors, major roads and streets to contribute to the 5 million trees for Greater Sydney by 2030 program.
- Provide blue and green corridors of private and public open space with active and passive recreation and community facilities.
- Maximise connections to the Wianamatta-South Creek corridor, Blue-Green Grid and regional parks.
- Enable innovative approaches to resource recovery and waste management, including appropriate urban design for collection facilities.
- Protect and restore and health of the Western Parkland City's waterways.
- Integrate natural water retention processes into development.
- Leverage underlying topography and scenic values in development.
- Enhance the efficient use of energy, water and other resources, and renewable energy generate to achieve net zero emissions for the Aerotropolis.

### Connectivity

 Adopt a finer grain layout to support movement and place outcomes for public transport, cycling, walking, local traffic and freight.

- Identify and protect transport corridors and adjacent areas.
- Provide well-integrated and accessible public transport hubs, interchanges and stops.
- Meet broader transport network outcomes for the Western Parkland City (refer to 3.2).
- Investigate how to achieve a high active and public transport mode share that balances car uses with public transport and amenity for cyclists and pedestrians.
- Avoid encroachment of urban development so that future infrastructure does not limit development opportunities or incorporate upfront measures to mitigate noise and visual impacts.
- Create active transport networks wherever possible to move away from private vehicle dependence.
- Place 4G and 5G (or other future technology) radio cells on buildings, smart poles or other infrastructure, including public transport infrastructure.

### Liveability

- Create compact residential development that takes advantage of creek lines and other selected high amenity locations outside the 1 in 100 chance per year flood planning levels.
- Provide affordable housing consistent with the Region Plan.
- Integrate residential development with local services, public open and green space, retail and compatible commercial development.
- Provide safe, activated, stimulating and healthy, green landscaped and shaded streets and prioritise pedestrian, cycle and public transport movements.
- Create vibrant and liveable communities with public art and civic, community and cultural facilities that leverage high frequency public transport connections to the Airport and other centres in Greater Sydney.



The Aerotropolis Core will be a diverse, dynamic and sustainable global airport city

- Position local centres to maximise exposure to riparian lands, encouraging green public open space, human activity with passive surveillance and public safety.
- Plan for flexible employment hubs with supporting uses that create and enhance a sense of place.
- Ensure exemplary design quality and energy efficiency in all buildings, including requirements for articulation, visual interest and, where appropriate, street interaction.

# 7.1.2 Common implementation strategies

In addition to these common objectives, common implementation strategies will be undertaken.

### **Planning Partnership**

- prepare detailed precinct plans (with relevant agencies)
- prepare a DCP to guide built form and public domain treatment, servicing strategies and the Wianamatta-South Creek interface (with relevant agencies)
- collaborate with utility providers and industry on best practice circular economy possibilities including energy generation, water recycling and liquid and solid waste solutions (with WCAA and relevant agencies).
- Plan for an increase in the proportion of homes within a 10-minute walk of quality public green and open space (with Department of Planning, Industry and Environment, WCAA and relevant agencies).
- establish an appropriate interface to Wianamatta-South Creek and maintain access to promote green open space and recreation uses (with Department of Planning, Industry and Environment, WCAA, local government and relevant agencies)

# Department of Planning, Industry and Environment

- manage the 5 Million Trees program to increase urban canopy cover
- create development and conservation

areas consistent with strategic biocertification and strategic assessment and with biodiversity conservation measures and commitments in strategic biodiversity approvals

 plan for State and local infrastructure funding (with Planning Partnership, WCAA and Penrith and Liverpool councils).

### 7.2 Initial precincts – vision and land uses

### 7.2.1 Aerotropolis Core Precinct

The Aerotropolis Core will be a diverse, dynamic and sustainable global airport city with attractive places for workers, residents and visitors. It will be a place of choice to do business, a new employment-focused metropolitan centre with an industry focus on advanced manufacturing, research and development and industry led educational facilities. The Aerotropolis Core will also take advantage of its proximity to the airside and facilitate development of a cutting-edge aerospace and defence industries.

The Precinct will be centred around a new Sydney Metro station and be supported by retail, creative industries, civil and cultural facilities, and world-class public open spaces. Residential communities and other noise sensitive land uses will be located outside the ANEC/ANEF 20 and above contours, within 800 metres or a 10-minute walk of the Metro station. The Wianamatta-South Creek corridor will be a shaded, central lifestyle feature. Housing will be integrated with local services, retail and compatible commercial development that activates the ground plane.

### Desirable land uses

Advanced manufacturing, defence and aerospace, research and development activity, high technology industry and infrastructure, education (including vocational and tertiary education); professional services, business incubator hubs, creative industries including 'popup installations' and festivals/events, commercial offices, food and beverage, indoor and outdoor recreation and sports facilities, medium to high density residential near the Metro station; retail, community; civic, entertainment, cultural facilities; green open and public space on public and private lands; public and private medical services, visitor accommodation.\*

Refer to page 62 for more detail.

### 7.2.2 Northern Gateway Precinct

The Northern Gateway will be a major airport interface, serving as a key strategic centre within the Western Economic Corridor - linking the Airport with the Western Parkland City Metropolitan Cluster through high frequency public transport, freight, road and rail connections. The Northern Gateway will harness existing and emerging economic opportunities catalysed by the Airport and build on the approved Sydney Science Park development to provide a variety of employment generating uses. Residential development will be located close to public transport and outside ANEC/ANEF 20 and above contours to ensure that airport operations are safeguarded, and residents have the opportunity to live in a 30-minute city. The Precinct will complement the Aerotropolis Core and will evolve as a centre focused on high technology incorporating health, education, knowledge and research.

### **Desirable land uses**

High technology commercial enterprise/ industry, warehousing and logistics, education, offices, retail, residential, health services, entertainment, tourism facilities, cultural and creative industries, green public and private open spaces, recreation and visitor accommodation.\*

Refer to page 64 for more detail.

### 7.2.3 Wianamatta-South Creek Precinct

The Wianamatta-South Creek Precinct boundary has generally defined using 1 in 100 chance per year flood level data from Liverpool City Council and Penrith City Council which includes areas containing protected existing native vegetation. In some areas the precinct is wider than the 1 in 100 chance per year flood to ensure a functional green area. Land that was previously within this precinct outside the 1 in 100 flood extent is now included in the relevant adjoining precinct.

The Precinct is an important part of the broader Wianamatta-South Creek corridor, defined in the Region Plan vision for the corridor as the defining spatial element of the Western Parkland City. Protection of the Wianamatta-South Creek Precinct allows planning for the Aerotropolis to be structured around the landscape. The retention of water in the landscape, protection of significant remnant vegetation, and other Blue-Green Grid elements such regional parks will enable the greening of the Aerotropolis. The creation of a Blue-Green Grid will provide multiple opportunities for residents, workers and visitors to the area to benefit from improved amenity and liveability outcomes. Connectivity from Wianamatta-South Creek and its tributaries into the adjacent precincts will be landscaped to create extended green corridors, whilst noting the need to limit wildlife attraction within the vicinity of the Airport.

### **Desirable land uses**

Water management, Open space, Recreation facilities, Pedestrian and cycle connectivity, Community and cultural facilities, environment protection, water management and restaurants or cafes.\*

Refer to page 66 for more detail.

<sup>\*</sup>Desirable land uses are dependent upon noise limitations and ANEC/ANEF contours as well as other safeguarding requirements for the operation of the Airport.

### 7.2.4 Badgerys Creek Precinct

Directly adjoining the Airport to the east, the Badgerys Creek Precinct will support airport operations, the new urban centre in the Aerotropolis Core to the south and the Northern Gateway to the west. The precinct will meet demand for a range of employment generating uses that benefit from its proximity to airport operations and the new urban centre, but do not require direct access to high capacity public transport. The precinct is not suitable for noise sensitive land uses such as residential, schools and hospitals. Defence and aerospace and technologybased industry which complements and supports the Aerotropolis Core may also locate here.

This precinct may initially support the infrastructure that enables the construction of the Airport and Aerotropolis. Some land uses, buildings and structures may be temporary in the short to medium term and transition to higher order uses in the longer term. New enabling industries to facilitate construction of the Aerotropolis may be permitted subject to interface treatments and an ability for the site to transition to higher order uses. Interface treatments may be required between existing rural industries and new land uses until they either transition to other uses or are modernised to co-exist with adjoining land uses. The precinct will be in a green setting with new green linkages and active transport opportunities between Badgerys Creek to the west and Wianamatta-South Creek to the east. Development should take advantages of views to these creek lines surrounding the precinct.

### Desirable land uses

Defence and aerospace, advanced manufacturing activity, high technology industry, airport supporting development, local retail, Aerotropolis enabling industries, modernised resource recovery industries, light industrial, social infrastructure.\*

Refer to page 68 for more detail.

### 7.2.5 Mamre Road Precinct

The Mamre Road Precinct is part of the WSEA and will be connected to the potential Western Sydney Freight Line. Its proximity to the M4 Motorway and Elizabeth Drive as well as its generally flat terrain makes it suitable for large floor plate employment and logistics uses. The Mamre Road Precinct is largely affected by aircraft noise and those parts within the ANEC/ANEF 20 and above contours are not suitable for noise sensitive land uses. Therefore, the precinct will be planned as an industrial warehousing and logistics precinct. The precinct could also present potential opportunities for an intermodal terminal serviced by the potential Western Sydney Freight Line.

The Mamre Road precinct will be zoned under the WSEA SEPP and have its own Development Control Plan but will remain within the boundaries of the Aerotropolis.

### Desirable land uses

Warehousing and logistics, High technology industry, Manufacturing, Intermodal facilities, Circular economy uses.\*

Refer to page 70 for more detail.

### 7.2.6 Agribusiness Precinct

The Agribusiness Precinct will skirt the western edge of the Airport and support the long-term retention and growth of agriculture and agribusiness in the Aerotropolis. The Precinct will build on existing agricultural operations and natural landscape character, acting as a catalyst for agricultural export from the region. The Precinct will retain significant peri-urban agricultural lands for production and enabling connections to a 24/7 international airport that will service an increasing demand nationally and internationally for high-quality fresh food, value-added pre-prepared meals and flowers. This high-technology precinct will drive opportunities for education and tourism. Being located within the Sydney

\*Desirable land uses are dependent upon noise limitations and ANEC/ANEF contours as well as other safeguarding requirements for the operation of the Airport.



basin and close to an international airport will also enable visitors locally, domestically and globally to come and learn some of the cutting-edge processes occurring in the agriculture and agribusiness industry across Western Sydney. Design-led place-based planning at the precinct planning stage will help support existing rural landscapes and ensure biodiversity protection for remnant bushland vegetation. Part of the Agribusiness Precinct to the north of Elizabeth Drive and to the east of The Northern Road will provide opportunities for flexible employment uses given its proximity to the Northern Gateway Precinct.

Development within the Agribusiness Precinct will include uses that will benefit from opportunities for national and international trade. These uses may include:

- A world-leading integrated intensive production hub enabling the intensive production and value-adding of sustainable, high-quality fresh produce and pre-prepared meals.
- A fresh food hub bringing a diversified and expanded fresh food marketplace to the Aerotropolis, becoming a major distribution centre for fresh produce to domestic and export markets.
- A state-of-the-art integrated logistics hub creating land/air side linkages and a fully digital supply chain solution that will provide safe, secure and seamless connectivity for freight movements.

- A value-added food and pharma hub to enable processing and manufacturing businesses to uplift value by shifting from a commodityfocused to a value-added sector approach.
- A proposed Australian Centre of Excellence in food innovation creating an industry-led national powerhouse in food science, technology, engineering and mathematics (Food-STEM).
- Commercial and retail development ancillary to agriculture and agribusiness.

## Desirable land uses

Agribusiness, Agriculture, Intensive fresh and value-added food production, Food innovation technology and research, Food production and processing, Fresh food produce markets, Warehousing and logistics, High technology Industry, Ancillary rural residential, Complementary offices and retail, Education, Circular economy enabling infrastructure, Biosecurity enabling infrastructure, Integrated logistics hub.\*

Refer to page 71 for more detail.

# 7.3 Expected planning outcomes – initial precincts

Key considerations, strategic outcomes and implementation strategies for the initial precincts are detailed on pages 62-75. Figure 29: An example of what the agribusiness could look like.

<sup>\*</sup>Desirable land uses are dependent upon noise limitations and ANEC/ANEF contours as well as other safeguarding requirements for the operation of the Airport.

# 7.3.1 Aerotropolis Core Precinct

Liverpool LGA



Total area 1.382 hectares



50,000 to

60,000



Potential residents 20,000 24,000

### **Key considerations**

- Aircraft noise and its impact on land uses. Connections across Thompsons and
- Wianamatta-South Creek.
- Safeguarding Airport operations.
- Gradual residential development to support the vibrancy, social cohesion and night-time economy of the centre.
- Transition from initial development types to higher order commercial development.
- Infrastructure servicing and phasing to
- optimise investment and delivery.
- Early activation.
- Opportunities to protect and create urban tree canopy.
- Business attraction and ecosystems.
- Higher mode share of public and active transport.
- Innovative and adaptable housing stock.
  - Integrated land use and transport planning, as well as movement and place outcomes that activate the ground plane.

#### Strategic Outcomes

- Create a major metropolitan 24-hour, vibrant, global centre and robust local economy built around professional services, high technology advanced manufacturing, research, training, education and creative industries.
- Contribute to urban canopy and maximise connections to the Wianamatta-South Creek corridor and Blue-Green Grid.
- Weave digital technologies into all facets of the working, social and residential environment.
- Create an aerospace and defence research and development industry cluster in the fringe of the Airport
- Provide high frequency public transport and efficient movement corridors to other centres in Greater Sydney.
- Plan for a centre for excellence in STEMbased education including secondary. vocational (VET) and tertiary education facilities
- Include aviation industries supporting the Airport.
- Provide an entertainment quarter with opportunities to interface with the Wianamatta-South Creek corridor.
- Create opportunities for tourism and conference uses and facilities.
- Protect transport corridors early to minimise possible land use conflicts and allow the orderly and timely provision of infrastructure.

- Create public spaces with civic, community and cultural facilities, public art, pop-up installations and creative placemaking.
- Activate the station precincts and respond to and leverage the high frequency public transport connections (including Sydney Metro) to the Airport and other centres in Greater Sydney.

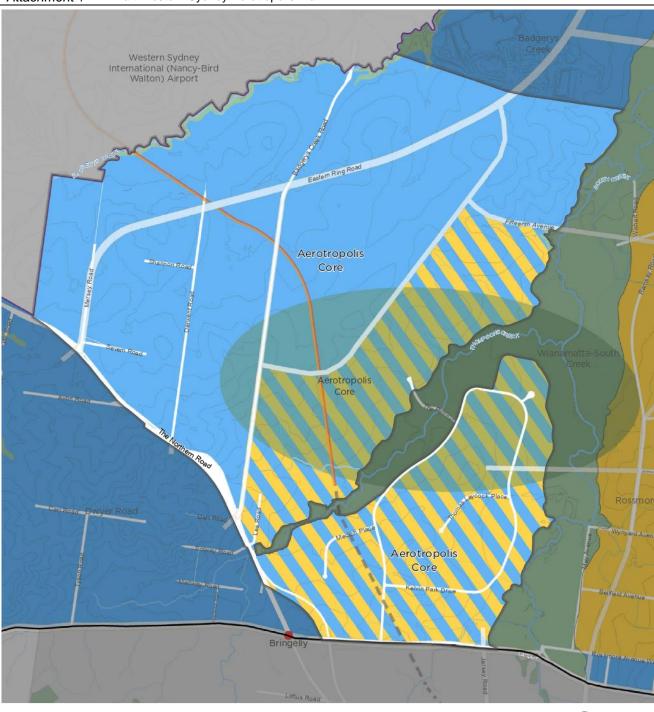
#### Implementation Strategies

- Prepare detailed city centre master plan and transport corridor protection (Planning Partnership and Western City and Aerotropolis Authority).
- Further investigation into potential station locations to service the centre (Sydney Metro, Transport for NSW).
- Completion of investigations to confirm transport networks servicing the Aerotropolis (Sydney Metro, Transport for NSW).
- Investigate transport networks servicing the Airport and Aerotropolis Core including rapid bus connections to Liverpool, Greater Penrith, Blacktown and Campbelltown-Macarthur as well as rail connections to St Marys, Parramatta, Leppington and Macarthur (Transport for NSW).
- Investigate incentives for business investment (Western City and Aerotropolis Authority and Department of Planning, Industry and Environment).
- Use flexible land use zoning to maximise diversity and attract investment (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment)
- Develop and prepare a public art strategy and public domain strategy (Western City and Aerotropolis Authority and Department of Planning, Industry and Environment).
- Coordinated infrastructure and services plan (Department of Planning, Infrastructure and Environment and Western City and Aerotropolis Authority).
- Investigate best practice housing stock suitable for innovation and commercial districts (Planning Partnership, Western City and Aerotropolis Authority and Transport for NSW).
- Develop Affordable Housing Scheme to deliver affordable housing as part of all residential development (Planning Partnership).

62 Western Sydney Aerotropolis Plan



# EGROW 07 Endorsement of submission on Draft Western Sydney Aerotropolis Plan and Aerotropolis Planning Package Attachment 1 Draft Western Sydney Aerotropolis Plan



# Structure Plan - Aerotropolis Core

# Western Sydney Aerotropolis

Western Sydney Aerotropolis Proposed Future Rail Links ..... (Investigation) Western Sydney International (Nancy-Bird Walton) Airport Proposed Transport Corridor Topographic Contour 5m Agribusiness Regional Parkland (Investigation) Environment and Recreation Key Network Upgrades Flexible Employment Proposed Sydney Metro Greater West Urban Land Potential East-West Rail Link, Stabling Mixed Flexible Employment & Urban Land 6 and Criticual Infrastructure

0.2 0.4 0.8 N



## 7.3.2 Northern Gateway Precinct Penrith LGA

题

Total area 1,616 hectares



Potential jobs 19,000 to 21,000



Potential residents 8,000 to

10,000

#### **Key considerations**

- Creation of a permeable network of connected spaces
- Early identification and protection of transport corridors
- Treatment of major infrastructure corridors to complement the landscape
- and topography
- Aircraft Noise ANEC/ANEF restrictions
- Safeguarding for Airport operations
  Flood management
- Flood management
- Interface with creeks and riparian corridors.
- Supporting Metro investment with potential station focused developments and public places.
- Address the interface with Twin Creeks.

#### Strategic Outcomes

- Plan for and develop a major airport interface with attractive entry points to reflect the gateway to the Airport, and the first presentation to those leaving the Airport's main entrance/exit point.
- Support the Western Economic Corridor linking St Marys, the Airport and Aerotropolis Core.
- A higher order centre that focusses on education research and development and high technology.
- Minimise conflict between airport operations and land use/development outcomes.
- Limit private access points from Elizabeth Drive, The Northern Road and Luddenham Road.
- Configure road layout and subdivision pattern to support Elizabeth Drive and as an east-west city-serving corridor for moving people and goods. Transport for NSW to lead and collaborate on Elizabeth Drive upgrade, function and configuration.
- Limit residential development to the centre and locate near public transport in locations outside ANEC/ANEF 20 and above contours.
- Provide for medium density housing in walking distance to public transport with appropriate amenity to support the centre and integrate with commercial and employment opportunities.
- Locate educational establishments in close proximity to public transport and having regard to noise considerations. Where possible, educational

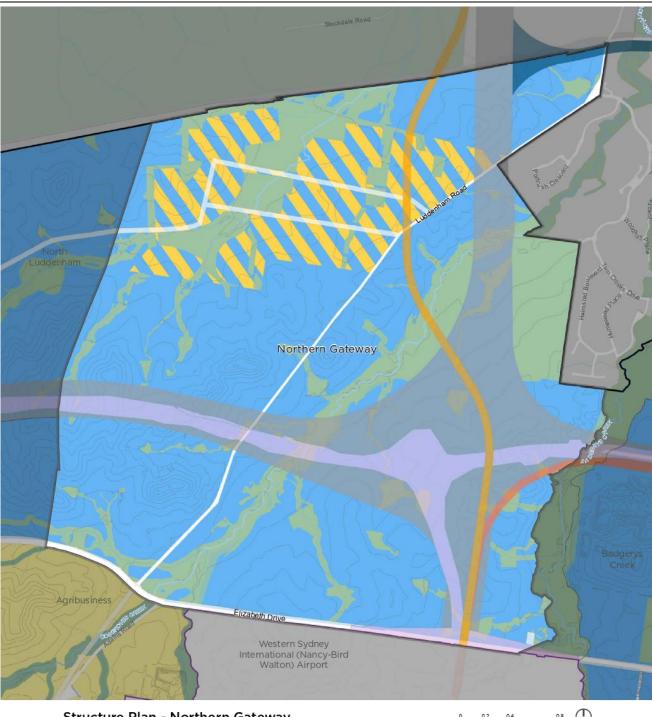
establishments should be located away from major movement corridors and arterial connections.

 Provide safe, activated, stimulating and healthy, landscaped and shaded streets and urban canopy.

#### Implementation Strategies

- Use flexible land use zoning to maximise diversity and attract investment (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).
- Protection of transport corridors and prevent possible conflict with adjoining land use, including, but not limited to, the proposed Sydney Metro Greater West Stage 1, proposed M12 Motorway, Elizabeth Drive and potential East-West rail link (Transport for NSW and Department of Planning, Industry and Environment).
- All stages of development and subprecincts are set in a grid layout to support public transport, cycling and pedestrians (Planning Partnership and Transport for NSW).
- Further investigation into potential station location/s to service the precinct (Sydney Metro, Transport for NSW)
- Develop a public domain strategy along Elizabeth Drive (Department of Planning, Industry and Environment and Transport for NSW).
- Landscaping along major transport corridors, contributing to urban tree canopy and amenity, including mature trees retained along Elizabeth Drive, subject to road safety considerations and airport safeguarding (Planning Partnership and Department of Planning, Industry and Environment).
- Access points rationalised to connect via the new local street network to service private development. Minimise direct development site access from Elizabeth Drive, The Northern Road and Luddenham Road (Planning Partnership).
- Road layout and subdivision pattern supports Elizabeth Drive as an east-west city-serving corridor for moving people and goods (Planning Partnership).
- Collaborate with Transport for NSW (lead) on the Elizabeth Drive upgrade, function and configuration (Planning Partnership).

# EGROW 07 Endorsement of submission on Draft Western Sydney Aerotropolis Plan and Aerotropolis Planning Package Attachment 1 Draft Western Sydney Aerotropolis Plan



# Structure Plan - Northern Gateway

# Western Sydney Aerotropolis

- Western Sydney Aerotropolis
- Western Sydney International (Nancy-Bird Walton) Airport
- ----- Topographic Contour 5m
- Key Network Upgrades
- Proposed Sydney Metro Greater West
- Potential East-West Rail Link, Stabling and Criticual Infrastructure
- Proposed M12 Motorway Corridor
- Proposed Transport Corridor
- Potential Western Sydney Freight Line Corridor
- Agribusiness
  Environment and Recreation
- Flexible Employment
- Mixed Flexible Employment & Urban Land
- 0 0.2 0.4 0.8 Kilometres N



## 7.3.3 Wianamatta-South Creek Precinct Liverpool and Penrith LGA



Total area

1.392

hectares

# **Key considerations**

- Aircraft noise
- Flood management
- Interface with proposed M12 Motorway, proposed Sydney Metro Greater West Stage 1, the proposed Outer Sydney Orbital and potential Western Sydney Freight Line.
- Opportunity for public acquisition to support the open space needs of the Aerotropolis.
- Providing amenity whilst in private ownership.
- Viable management regime.
- Safeguarding Airport operations.
- Infrastructure operation and maintenance access requirements.

#### Strategic Outcomes

- Establish the Wianamatta-South Creek corridor as the structuring blue and green infrastructure spine of the Aerotropolis and broader Western Parkland City.
- Establish a landscape buffer on the western boundary utilising the Badgerys Creek corridor.
- Manage the health of the waterway to gain iconic ecological outcomes as detailed by the risk-based framework.
- Protect existing mature trees and
- enhance urban tree canopy.
- Improve waterway health.
- Provide high quality public green and open space with a particular focus on Elizabeth Drive to reflect the main approach to the Airport and Fifteenth Avenue to be upgraded to an attractive landscaped boulevard.
- Reforestation of riparian lands.

## Implementation Strategies

- Address interface with and activate Wianamatta-South Creek open space corridor through precinct planning (Planning Partnership).
- Identify appropriate east-west crossings of Wianamatta-South Creek, particularly active and public transport connections (Planning Partnership and Transport for NSW).
- Prepare a public domain strategy for Elizabeth Drive (Department of Planning, Industry and Environment and Transport for NSW).
- Retain appropriate landscaping along existing streets (Transport for NSW).
- Develop stormwater management and floodplain management strategy for Blue-Green Grid that contemplates new crossings, additional trees and vegetation, climate change, water in the landscape, waterway health and biodiversity conservation and stormwater retention strategies (Planning Partnership).

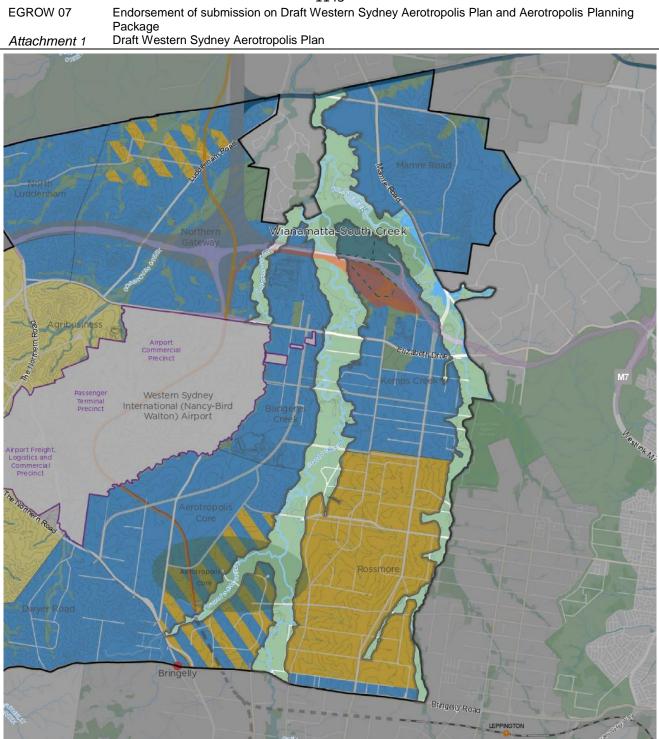
66 Western Sydney Aerotropolis Plan

渝

Potential jobs

Minimal

Potential residents No additional dwellings - lawfully commenced uses (e.g. approved dwellings) are protected under existing use rights under the *EP&A Act 1979.* 



# Structure Plan - Wianamatta-South Creek

# Western Sydney Aerotropolis

Proposed Future Rail Links (Investigation) Western Sydney Aerotropolis ..... Western Sydney International (Nancy-Bird Walton) Airport Proposed M12 Motorway Corridor Topographic Contour 5m Proposed Transport Corridor Regional Parkland (Investigation) Potential Western Sydney Freight Line Key Network Upgrades Corridor - - Critical Utility / Infrastructure Agribusiness Environment and Recreation Proposed Sydney Metro Greater West Flexible Employment Potential East-West Rail Link, Stabling Urban Land and Criticual Infrastructure Mixed Flexible Employment & Urban Land 

0.5 1 2 N



1143

# 7.3.4 Badgerys Creek Precinct

Liverpool and Penrith LGA



Total area

# Key considerations

- Aircraft noise
- Interface with Badgerys Creek and Wianamatta-South Creek.
- Aboriginal cultural significance of the convergence of the creek and tributary.
- Supporting existing rural industry during the gradual transition to other employment uses.
- Safeguarding Airport operations.
- Opportunity for heavier industries that require larger buffers and to more sensitive uses.

# Strategic Outcomes

- Provide an appropriate and activated interface with Wianamatta-South Creek.
- Airport Ring Road(s) and access to Airport Commercial Precinct.
- Consider interface treatments between existing quarrying operations and adjoining development.
- Allow enabling industries to facilitate construction of Aerotropolis to locate here with appropriate interface treatments to adjoining development.
- Provide a mix of commercial and light industrial activities to support the Airport which can adapt to higher order uses over time
- Facilitate high technology industrial development which may include defence and aerospace to support the operations in the Aerotropolis Core.
- Provide appropriate landscaping along Elizabeth Drive to reflect a major entry to the Aerotropolis, subject to Airport safeguarding requirements.
- Rationalise access points on Elizabeth Drive and connect to the local road network to service private development
- Support Elizabeth Drive as a city serving road corridor through an appropriate road layout and subdivision pattern.

# Implementation Strategies

- Deliver development and conservation areas in accordance with the approved strategic biocertification and strategic assessment consistent with the biodiversity conservation measures and commitments identified in the Strategic Biodiversity approvals (Department of Planning, Industry and Environment).
- Protect transport corridors and prevent possible conflict with adjoining land uses, including the proposed M12 Motorway and potential East-West rail link (Planning Partnership and Transport for NSW).
- Investigate economic incentives for business investment (Department of Planning, Industry and Environment and Western City and Aerotropolis Authority).
- Use flexible land use zoning to maximise diversity and attract investment (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).

subdivisio

68 Western Sydney Aerotropolis Plan

612 hectares



9,000

11,000

Potential

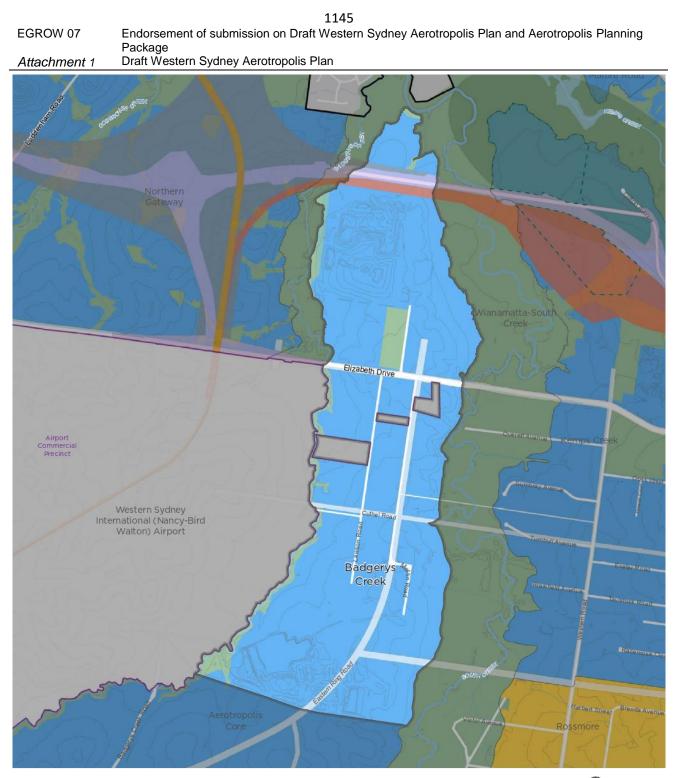
residents

dwellings

No additional

to

Potential jobs



# Structure Plan - Badgerys Creek

# Western Sydney Aerotropolis







# 7.3.5 Mamre Road Precinct

Penrith LGA



Total area

1.002

hectares

# Key considerations

- Aircraft noise
- Safeguarding for Airport operations
- Interface with sensitive land uses to
- north, east and west.
  Interface with rural residential development in Mount Vernon.
- Interface with Wianamatta-South Creek.
- Appropriate staging of development to align with infrastructure provision.
- Implementation of WSEA uses.
- Management of vehicle movements.

# Strategic Outcomes

- Opportunities for logistics and distribution, connecting Western Sydney to the broader freight network.
- Support the future operations of the Airport through enabling export freight and logistics.
- Protect the 24-hour operation of the airport by enabling industrial uses and prohibiting noise sensitive uses only to locations outside the ANEC/ANEF 20 and above contours.
- Zoning to prioritise warehousing and distribution to support freight and logistics movements.
- Investigate the potential for a new Western Sydney Intermodal Terminal, with direct connections to potential Western Sydney Freight Line and quality connections to the motorway network.
- Protect a Western Sydney Freight Line corridor to preserve freight and distribution opportunities.
- Protect the future operations of the proposed intermodal terminal from encroachment by incompatible land uses
- Promote connectivity between the WSEA and other precincts in the Aerotropolis.

## Implementation Strategies

- Minimise potential for land use conflict by restricting incompatible land uses (Department of Planning, Industry and Environment).
- Establish a buffer on eastern boundary with rural-residential development to ensure an appropriate interface (Department of Planning, Industry and Environment).
- Ensure delivery of warehouse development to support the proposed intermodal terminal through timely rezoning (Department of Planning, Industry and Environment).
- Planning for the Intermodal Terminal will provide for the operational requirements of a viable terminal site, including a minimum site area of approximately 100 hectares (measuring up to 2 km in length and at least 500 metres in width) (Department of Planning, Industry and Environment).
- Maximise flexibility in operating conditions for future development. (Department of Planning, Industry and Environment).
- Continue planning for the Southern Link Road Network (Department of Planning, Industry and Environment).

The Department of Planning, Industry and Environment is responsible for planning the Mamre Road Precinct, which will be zoned under the WSEA SEPP. A draft Structure Plan for the Precinct was placed on public exhibition in November 2019.

70 Western Sydney Aerotropolis Plan

17,000

Potential residents No additional dwellings

Potential jobs

# 7.3.6 Agribusiness Precinct

Liverpool and Penrith LGA

# Total area **1.572**

hectares



Potential jobs 8,000 to

10,000

睂

Potential residents Minimal, subject to detailed precinct planning

# Key considerations

- Aircraft noise
- Safeguarding for Airport operations
- Supporting existing rural industry to minimise land use conflicts
- Incorporating existing rural landscape, sustainability and biodiversity values
- Recognition of existing communities,
- such as Luddenham
- Wildlife attraction
- Biosecurity

## Strategic Outcomes

- Provide a world-class agriculture and agribusiness precinct that will deliver fresh and value-added Australian food production from farm gate to the global market.
- Provide an integrated intensive production hub and state of the art integrated logistics hub to deliver a multi-modal supply chain solution for agricultural products to Greater Sydney, NSW and Australia.
- Enable smart city and digital integration into research, education and logistics.
- Protect the character and history of the Luddenham Village.
- Accommodate agricultural valueadded industries and freight and logistics facilities that benefit from access to the proposed Outer Sydney Orbital and air-side access to the Airport.
- Integrate sustainable energy, waste and water as well as circular economy design principles into development and operations.
- Support and add value to the effective ongoing agricultural industry operations and viability across the Western Parkland City and beyond (across NSW).
- Provide for the movement and storage of agricultural commodities that should be connected to the commercial entrance of the Airport.

- Allow for the development of integrated food supply chain related industries particularly those that rely on the skills of and proximity to a growing population in the Western Parkland City.
- Facilitate education, research and development and high technology land uses associated with food production and processing.
- Capitalise on the increasing domestic and international demand for highquality fresh food and value-added pre-prepared meals.
- Enable a road layout and subdivision pattern that supports the movement, storage and processing of agricultural goods and produce into and out of the Western Parkland City.
- Allow for limited residential development that is ancillary to Agricultural and Agribusiness operations outside of the ANEC/ ANEF 20 and above contours.
- Address any potential for land use conflict between adjoining land uses as a result of future development, including airport operations.
- Deliver an urban tree canopy along important corridors to contribute to the amenity of the area.
- Enable innovative approaches to sustainability outcomes including water sensitive design, resource and liquid and solid waste management and adaptable and durable credentials as a key driver for the design and function of the precinct.
- Allow for the sustainable and holistic development of agritourism product and experiences within the precinct.
- Early protection of transport corridors to minimise possible land use conflict with adjacent areas and ensure the orderly and timely provision of infrastructure.



#### Figure 30: The

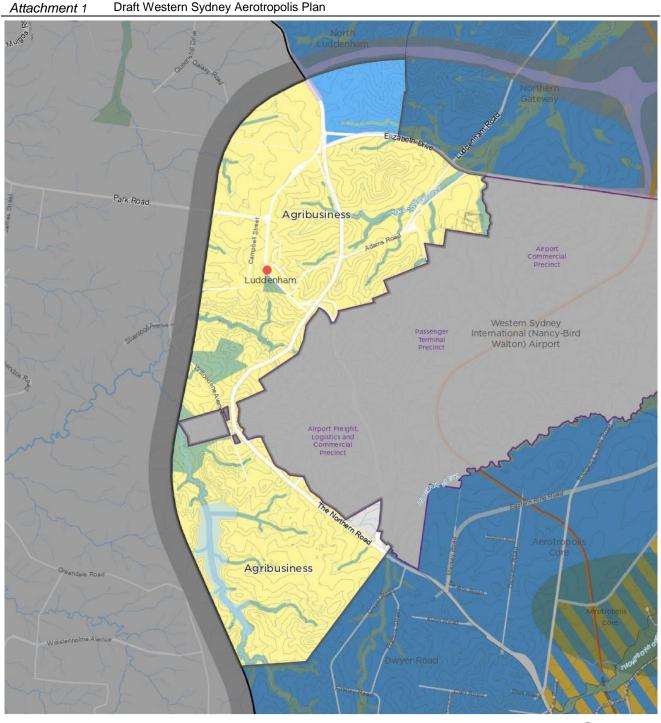
Agribusiness precinct will service an increasing demand nationally and internationally for highquality fresh food.

#### Implementation Strategies

- Collaborate with the Luddenham Village community as part of precinct planning to understand and manage expectations of village character and the rate/extent of change (Planning Partnership).
- Use flexible zoning to maximise diversity and attract investment (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).
- Encourage fresh food markets in appropriate locations with direct access to the Airport and associated tourism opportunities. (Planning Partnership and Western City and Aerotropolis Authority).
- Establish a transport network layout that facilitates the timely movement and processing of goods and produce, as well as supporting public transport, cycling and pedestrians with appropriate amenity (Planning Partnership, Western City and Aerotropolis Authority and Transport for NSW).
- Address the interface between the proposed Outer Sydney Orbital and The Northern Road through precinct planning to ensure the Agribusiness Precinct retains connection with the rural land and Biostrategic Agricultural Land to the west (Planning Partnership and Transport for NSW).

- Address the interface and relationship with the Western Sydney Airport freight services and airport logistics through precinct planning (Planning Partnership and Western City and Aerotropolis Authority).
- Enable an interconnected relationship between the Agribusiness Precinct and MRA and their planning requirements (Planning Partnership, Western City and Aerotropolis Authority and Department of Planning, Industry and Environment).
- Provide a public domain strategy for the entire precinct (Planning Partnership and Western City and Aerotropolis Authority).
- Put in place measures to prevent conflict with adjoining land uses as a result of future development, including aircraft noise and airport operations, by restricting incompatible land uses (Planning Partnership and Department of Planning, Industry and Environment).
- Investigate the development of an agritourism strategy for the precinct (Planning Partnership and Western City and Aerotropolis Authority).

# 1149 EGROW 07 Endorsement of submission on Draft Western Sydney Aerotropolis Plan and Aerotropolis Planning Package Draft Western Sydney Aerotropolis Plan



# Structure Plan - Agribusiness

# Western Sydney Aerotropolis

- Western Sydney Aerotropolis Western Sydney International (Nancy-Bird Walton) Airport
- Topographic Contour 5m
- Regional Parkland (Investigation)
- Key Network Upgrades
- Proposed Sydney Metro Greater West Potential East-West Rail Link, Stabling 6 and Criticual Infrastructure
- Proposed Future Rail Links (Investigation)
- Proposed M12 Motorway Corridor Proposed Transport Corridor
  - Agribusiness
- Environment and Recreation
- Flexible Employment
- Mixed Flexible Employment & Urban Land
- $\bigcirc_{N}$ 0.325 0.65



# 7.4 Remaining precincts - vision and land uses

Although not initial precincts, planning for the remaining precincts will continue to be informed based on a series of market and industry studies against their geographic and locational characteristics. The timing of precinct planning for the remaining precincts will be determined by the timing of infrastructure provision and the amount and nature of development in adjoining areas. Existing rural land use zones will be retained until precincts are rezoned but will remain subject to Ministerial Directions 3.5 (Development Near Regulated Airports and Defence Airfields) and 7.8 (Implementation of Western Sydney Aerotropolis Interim Land Use and Infrastructure Plan) (as amended from time to time). The vision and desirable land uses for the remaining precincts is provided below.

## 7.4.1 Dwyer Road Precinct

The Dwyer Road Precinct is located south of the Agribusiness Precinct, west of the Aerotropolis Core and north of the Bringelly local centre. It is anticipated that the Dwyer Road Precinct will be a flexible employment precinct adjacent to the major economic centre of the Aerotropolis Core and the Airport. Precinct Planning will acknowledge the existing rural village character of Bringelly and support current agricultural operations with a plan for a sustainable transition to employment uses over time. A pedestrian and cycle network will be provided to the Aerotropolis Core and upgrades to The Northern Road, Bringelly Road and the proposed Outer Sydney Orbital will provide improved vehicle access.

#### Desirable land uses

High technology Industry, Commercial offices, Small and medium enterprises, Urban services, Warehousing and logistics, Food technology and research, Food production and processing, Agribusiness and Fresh food produce markets.\*

#### Refer to page 76 for more detail.

#### 7.4.2 Kemps Creek Precinct

The Kemps Creek Precinct will create opportunities for flexible employment development connected to residential communities in the south, Aerotropolis Core, the Airport and other centres such as Liverpool CBD. It is anticipated that the precinct will be appropriate for mixed commercial development such as smaller innovative and creative industries that seek more affordable, out of centre accommodation with accessibility and amenity. The regional park investigation areas and the Wianamatta-South Creek corridor will provide opportunities for recreation and amenity and link to the broader Western Sydney Parklands.

#### **Desirable land uses**

Small and medium enterprises, Creative industries, High technology industries, Urban services.\*

#### Refer to page 78 for more detail.

#### 7.4.3 North Luddenham Precinct

The North Luddenham Precinct will leverage from its proximity to the proposed Outer Sydney Orbital the Agribusiness and Northern Gateway precincts and the Airport to be an area focused on uses such as high technology, research and development associated with food production and processing.

<sup>\*</sup>Desirable land uses are dependent upon noise limitations and ANEC/ANEF contours as well as other safeguarding requirements for the operation of the Airport.

## Desirable land uses

High technology Industry, Commercial offices, Small and medium enterprises, Urban services, Warehousing and logistics, Food technology and research, Food production and processing, Agribusiness and Fresh food produce markets.\*

Refer to page 80 for more detail.

## 7.4.4 Rossmore Precinct

The Rossmore Precinct is located close to the Aerotropolis Core and the expansive open space network of Wianamatta-South Creek. Rossmore will be home to mixed living communities, nestled within a productive peri-urban landscape, with a diversity of housing provided to meet changing needs. Housing and jobs will be provided around key compact mixed-use centres served by high-frequency public transport and open space, creating walkable and amenity-rich communities. There is significant residential development capacity in residential areas adjoining the precinct outside of the Aerotropolis meaning that development in this precinct is unlikely to occur in the short to medium term. There will be a focus on providing smart and sustainable housing with connectivity and green design at the forefront of new developments. Affordable housing will be provided to meet the needs of key workers and those on low-incomes. A generous open space and creek network will create opportunities for walkability and amenity.

#### Desirable land uses

Residential, Small and medium enterprises, Creative industries, High technology industries, Urban services, Community and cultural facilities, Market gardens, Local health and education, retail, open space, schools\*

Refer to page 82 for more detail.

# 7.5 Expected planning outcomes – remaining precincts

Key considerations, strategic outcomes and implementation strategies for the remaining precincts are detailed on pages 76-83.

Figure 31: The open space and creek network will create opportunities for walkability and amenity. Source: Sydney Water



<sup>\*</sup>Desirable land uses are dependent upon noise limitations and ANEC/ANEF contours as well as other safeguarding requirements for the operation of the Airport.

7.5.1 Dwyer Road Precinct

Liverpool LGA



hectares

**Key considerations** 

- Interface with the proposed Outer Sydney Orbital and Metropolitan Rural Area
- Fragmented land ownership
- Supporting existing agricultural operations and transition to flexible employment over time
- Aircraft noise
- Safeguarding airport operations

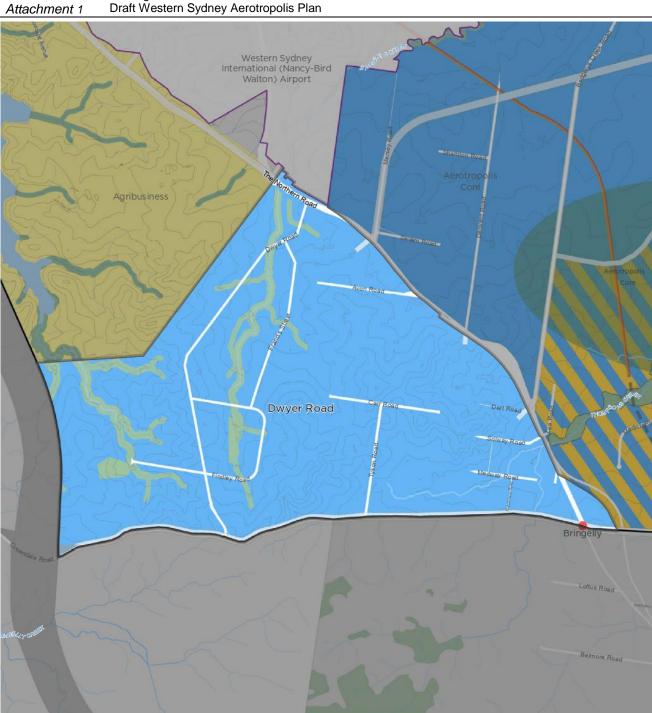
#### Strategic Outcomes

- Provide employment opportunities close to Aerotropolis Core Precinct
- Encourage Opportunities linking to Agribusiness Precinct
- Acknowledge the existing rural village character of Bringelly
- Utilise and expand the existing social and cultural infrastructure.
- Manage the interface and relationship with South West Growth Area.

### Implementation Strategies

- Use flexible zoning to maximise diversity (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).
- Put in place measures to prevent conflict with adjoining land uses as a result of future development, including aircraft noise and airport operations, by restricting incompatible land uses (Department of Planning, Industry and Environment).





# Structure Plan - Dwyer Road

# Western Sydney Aerotropolis

- Western Sydney Aerotropolis
- Western Sydney International (Nancy-Bird Walton) Airport
- Regional Parkland (Investigation)
- Key Network Upgrades
- Proposed Sydney Metro Greater West Potential East-West Rail Link, Stabling and Criticual Infrastructure
- Proposed Future Rail Links (Investigation)
- Proposed Transport Corridor
  - Agribusiness
- Environment and Recreation
- Flexible Employment
- Mixed Flexible Employment & Urban Land
- 0 0.2 0.4 0.8 N

7.5.2 Kemps Creek Precinct Liverpool and Penrith LGA



# **Key considerations**

- Aircraft noise
- Safeguarding airport operations
- Upgrade of Elizabeth Drive.
- Connection to proposed M12
- Motorway.
- Potential upgrade of Western Road and Devonshire Road.
- Potential road connection to Airport via extension of Pitt Street.
- Cycle networks to the Airport and rest of the Aerotropolis.
- Potential east-west rail link including potential stabling and maintenance facility.
- Water and wastewater infrastructure
- Resource Recovery Facility.

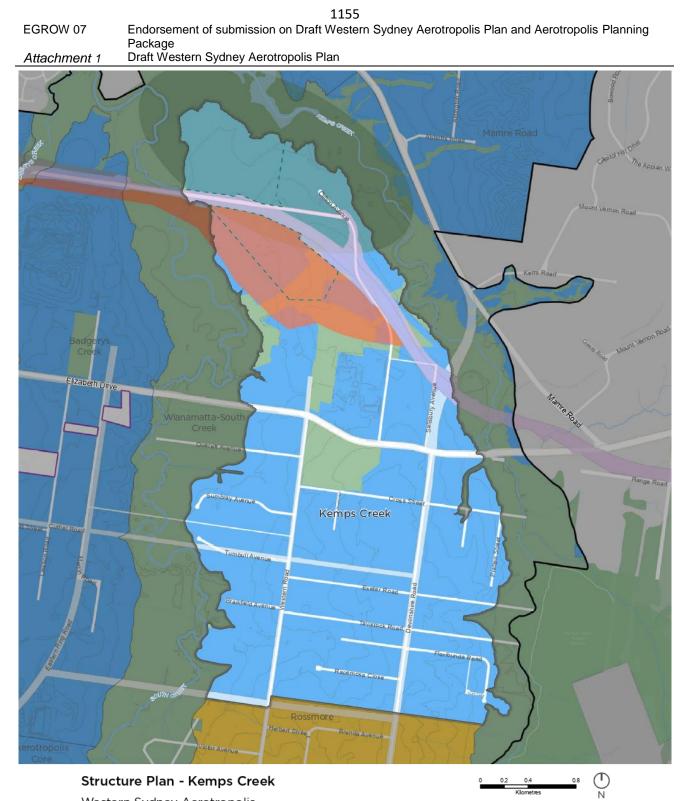
#### Strategic Outcomes

- Focus on employment generating uses.
- Connect across Wianamatta-South Creek to employment precincts further west.
- Locate noise sensitive uses in appropriate locations.
- Manage an appropriate and activated interface to Wianamatta-South Creek, Kemps Creek and Western Sydney Parklands.
- Plan for high-quality development and public domain with Elizabeth Drive appropriately set back to reflect the main approach to the Airport.
- Rationalise access points on Elizabeth Drive and connect to the local road network to service private development.
- Protect transport corridors to prevent possible conflict with adjoining land and ensure the orderly and timely provision of infrastructure.

#### Implementation Strategies

- Reserve road corridors for the Western Road and Devonshire Road upgrades. (Planning Partnership, Transport for NSW and Department of Planning, Industry and Environment).
- Protection of transport corridors and prevent possible conflict with adjoining land use, including the proposed M12 Motorway and potential East-West rail link (Planning Partnership and Department of Planning, Industry and Environment).
- Address interface with and activation of Wianamatta-South Creek and Kemps Creek. (Planning Partnership).
- Identify east-west crossings of Wianamatta-South Creek, particularly active transport connections. (Planning Partnership).
- Explore connections to Western Sydney Parklands. (Planning Partnership and Department of Planning, Industry and Environment).
- Avoid direct access to development from Elizabeth Drive. (Planning Partnership).
- Prepare a public domain strategy for Elizabeth Drive (Department of Planning, Industry and Environment and Transport for NSW).
- Use flexible zoning to maximise diversity (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).

78 Western Sydney Aerotropolis Plan



# Structure Plan - Kemps Creek

# Western Sydney Aerotropolis





7.5.3 North Luddenham Precinct Penrith LGA



hectares

# **Key considerations**

- Aircraft noise
- Safeguarding airport operations
- Interface with sensitive land uses to north and east.

#### Strategic Outcomes

- Focus on research, development and high technology with links to food production and processing.
- Access the Airport via the Agribusiness Precinct.
- Plan for a fine grain street network to support public transport, cycling and pedestrians.
- Take advantage of underlying topography and scenic values.
- Protect transport corridors to prevent possible conflict with adjoining land and ensure the orderly and timely provision of infrastructure.

### Implementation Strategies

- Encourage fresh food markets in appropriate locations. (Planning Partnership).
- Encourage permeability and connectivity to the adjoining Agribusiness Precinct, Northern Gateway Precinct and land to the north and west (Planning Partnership).
- Infrastructure funding State and Local (Planning Partnership, Department of Planning, Industry and Environment, Penrith and Liverpool Councils).
- Protection of transport corridors and prevent possible conflict with adjoining land use, including the proposed M12 Motorway (Planning Partnership, Department of Planning, Industry and Environment and Transport for NSW).
- Address interface with riparian areas. (Planning Partnership).
- Use flexible zoning to maximise diversity (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).

# EGROW 07 Endorsement of submission on Draft Western Sydney Aerotropolis Plan and Aerotropolis Planning Package Attachment 1 Draft Western Sydney Aerotropolis Plan



# Structure Plan - North Luddenham

# Western Sydney Aerotropolis



Flexible Employment Mixed Flexible Employment & Urban Land





1157

7.5.4 Rossmore Precinct Liverpool LGA



# **Key considerations**

- Aircraft noise
- Safeguarding airport operations
- Land fragmentation
- Supporting existing agricultural
- operations as interim uses
- Ensuring development density supports transport infrastructure investment.

#### Strategic Outcomes

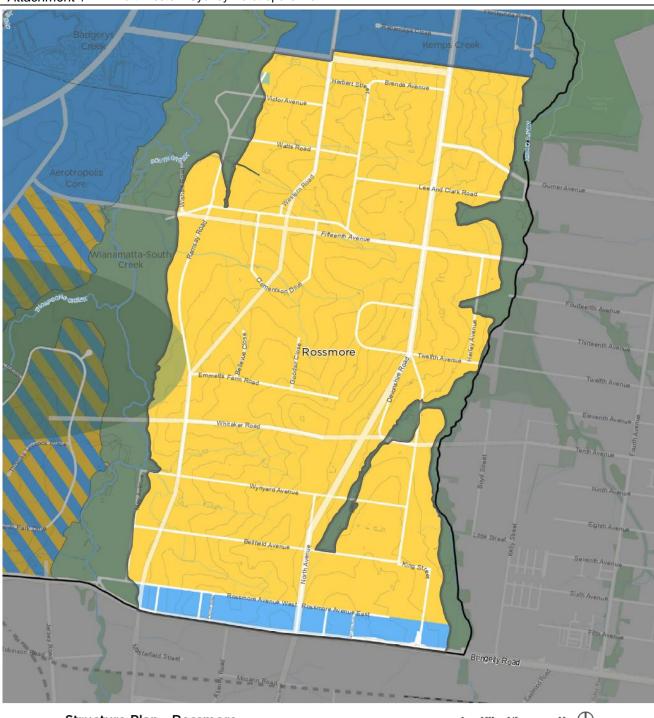
- Provide for mixed-use communities with a diversity of housing and maximising access to retail, cultural and community services.
- Connect communities via frequent public transport to the new Airport and surrounding centres including Aerotropolis Core and Liverpool.
- Maintain productive rural and periurban activities are alongside compact urban centres.
- Plan for an appropriate and activated interface to Wianamatta-South Creek, Kemps Creek and Western Sydney Parklands.
- Connect the Precinct to the Aerotropolis Core via active transport.
- Locate local employment and live/ work opportunities in local centres and along key corridors such as Fifteenth Avenue.
- Develop Fifteenth Ave as a shaded landscaped transport boulevard with public transport priority.
- Locate higher-density development along Fifteenth Avenue transport nodes, recognising its role as a centre serving corridor.

#### Implementation Strategies

- Use flexible zoning to maximise diversity (Planning Partnership, Western City and Aerotropolis Authority and the Department of Planning, Industry and Environment).
- Link staging of rezoning and development to the market viability of medium density housing types and infrastructure provision. (Planning Partnership).
- Stage the delivery of frequent public transport services along key corridors including Fifteenth Avenue (Planning Partnership).
- Deliver retail and community/cultural facilities upfront to service residential development early. (Planning Partnership, Transport for NSW and Department of Planning, Industry and Environment).
- Reserve road corridors for Ramsay Road and Devonshire Road upgrades and potential Tenth Avenue link (Planning Partnership, Transport for NSW and Department of Planning, Industry and Environment).
- Address interface with and activation of Kemps Creek and Wianamatta-South Creek (Planning Partnership).
- Investigate connections to Western Sydney Parklands (Planning Partnership and Department of Planning, Industry and Environment).
- Prepare a public domain strategy for the entire precinct (Planning Partnership and Department of Planning, Industry and Environment).
- Develop Affordable Housing Scheme to deliver affordable housing as part of all residential development (Planning Partnership).

82 Western Sydney Aerotropolis Plan

# EGROW 07 Endorsement of submission on Draft Western Sydney Aerotropolis Plan and Aerotropolis Planning Package Attachment 1 Draft Western Sydney Aerotropolis Plan



# Structure Plan - Rossmore

# Western Sydney Aerotropolis

- Western Sydney Aerotropolis Western Sydney International (Nancy-Bird Walton) Airport
- Bird Walton) Airport
   Topographic Contour 5m
- Regional Parkland (Investigation)
- Key Network Upgrades
- Proposed Sydney Metro Greater West
- Potential East-West Rail Link, Stabling and Criticual Infrastructure
- Proposed Future Rail Links (Investigation)
- Proposed Transport Corridor
- Environment and Recreation
- Flexible Employment
- Urban Land
- Mixed Flexible Employment & Urban Land
- 0 0.225 0.45 0.9 N



1160 Endorsement of submission on Draft Western Sydney Aerotropolis Plan and Aerotropolis Planning Package Draft Western Sydney Aerotropolis Plan Attachment 1

# Infrastructure funding and provision

#### 8.1 Place-based Infrastructure Compact

Beyond the infrastructure already identified in this Plan, more detailed infrastructure needs will be identified during precinct planning. This will be informed by the Western Sydney Placebased Infrastructure Compact (PIC) process led by the Greater Sydney Commission.

The process will strategically identify and estimate the cost of infrastructure and services that will be required to support growth in the Aerotropolis over time. This will increase understanding of the relative costs and benefits of development across the initial precincts to then inform how to most effectively stage and sequence development.

The process will consider funding sources for the infrastructure and services identified, including from the NSW and Australian Government, State infrastructure and local developer contributions, the customer base of utility providers and other sources.

The Place-based Infrastructure Compact process will inform precinct plans and a Special Infrastructure Contribution (SIC) for the Aerotropolis and combine with local infrastructure needs identified by Liverpool City and Penrith City Council to inform staged servicing and development in each precinct.

The NSW Government is committed to ensuring affordability and value for money when considering infrastructure investments in the Aerotropolis. Identified priority projects would be subject to NSW Government's Infrastructure Investor Assurance Framework prior to investment decisions being made.

# 8.2 Infrastructure Funding

The system of development contributions allows for the levying of contributions towards state and local infrastructure

under the EP&A Act. Broadly, the means for securing development contributions through the planning process are:

- State infrastructure contributions .
- local infrastructure contributions
- value capture

When setting development contributions, all levels of government must ensure the cumulative amount of contributions payable does not make development unfeasible.

# 8.2.1 Special Infrastructure Contributions

A SIC is a financial contribution paid by developers to help fund some key State and regional infrastructure. The Department of Planning, Industry and Environment is developing a SIC for the Aerotropolis.

A SIC considers the cost of infrastructure generated by a development and balances this with development feasibility and the need to achieve desired development outcomes.

The Department of Planning, Industry and Environment will explore whether an Aerotropolis SIC should be set as a land-based charge (for example a \$ rate per net developable hectare) and/or a unit-based charge (such as \$ rate per lot or dwelling, or a percentage of the capital investment value).

The SIC may apply to a range of development types to part-fund infrastructure such as State and regional roads, regional open space, land for schools and some public transport. The SIC will also address broader issues such as affordable housing, green infrastructure and, where applicable, biodiversity offsets.

As the Aerotropolis evolves infrastructure needs will change. The SIC and the outcomes of the Place-based Infrastructure Compact process will need to adapt and align with strategic planning. A future draft SIC and determination will provide further detail.

# 8.2.2 Local infrastructure contributions

Local infrastructure contribution plans will fund local infrastructure such as local parks, local roads and community facilities. The Planning Partnership, including Penrith and Liverpool councils, will guide each council's local infrastructure contribution plans for the Aerotropolis as precinct plans are finalised. This will likely lead to a consistent approach to the preparation of local infrastructure contributions for both councils.

## 8.2.3 Value capture

Value sharing mechanisms are being considered in the context of major investments in infrastructure by the NSW and Australian governments. This is consistent with a range of local, national and international experience in drawing on value sharing as a source of major project funding.

Value capture results from the significant land value uplift due to public investment in core infrastructure. Investments such as the Airport and proposed Sydney Metro Greater West create value for landholders by bringing forward planning and zoning changes, which means there can be higher density uses around transport. This increased land value can be utilised via additional value sharing mechanisms such as SICs and voluntary planning agreements, to help fund infrastructure that a growing population and workforce requires.

Value sharing mechanisms will be developed as part of the detailed precinct plans. Any mechanisms require a balance: capturing a fair portion of the value uplift enjoyed by the beneficiaries of development and reducing the burden on taxpayers to provide infrastructure that will benefit more people, such as quality public space.

The cumulative impact of development contributions and other levies on businesses and households will be considered against the expected and realised value uplift from major public investment. Geographic coverage and timing, as well as the appropriate instruments through which value uplift can be captured and shared, are important considerations.

# 8.3 Stage 1 Sydney Metro Greater West alignment

Sydney Metro Greater West Stage 1 alignment and station locations are likely to be confirmed in 2020. Precinct planning will appropriately reflect the alignment and the location of stations. Two stations are expected on the Airport site with other potential station locations under investigation.

# 8.4 Utilities and services

With limited trunk infrastructure in the Aerotropolis, significant planning and investment is required to unlock development and activate precincts. Investigations must consider how utilities and services will be funded, the timing and impacts of any infrastructure maintenance on road corridors, and infrastructure sequencing, optimisation and adaptability.

A flexible servicing strategy will ensure certainty of utility supply and allow for alternative servicing solutions as technologies and hybrid servicing methodologies evolve. Precinct planning and master planning will build in lowcarbon ambitions and recognise how urban design and smart infrastructure will manage energy, water and liquid and solid waste.

The Aerotropolis presents a unique opportunity to efficiently and collaboratively plan for and explore alternative and innovative servicing solutions. The NSW Government will continue to work with utility providers and consult with stakeholders such as WCAA and Western Sydney Airport to develop an innovative and sustainable servicing strategy that commits to circular economy principles such as smart and zero carbon cities and smart grid systems.

# The way forward

The following documents are on public exhibition:



These documents are available from:

www.planning.nsw.gov.au www.wscd.sydney www.penrithcity.nsw.gov.au www.liverpool.nsw.gov.au



The Western Sydney Planning Partnership welcomes feedback from the community, government agencies and other stakeholders during public exhibition. This feedback helps us better understand the opinions and concerns of the community, which will inform the final Plan.

# 9.1 Monitoring

To provide a valuable evidence based to inform service and infrastructure delivery as precincts redevelop overtime, the Department of Planning, Industry and Environment will monitor and report annually on the rate of development activity such as:

- housing approvals, construction commencements and completions
- pipeline for additional housing
- jobs created in the Aerotropolis
- contribution towards 5 million trees for Greater Sydney by 2030.

The Greater Sydney Commission has a statutory requirement to report on the implementation of the Region Plan. This will be implemented through the annual review of performance indicators drawn from the 10 Directions of the Region Plan and include the areas within the Aerotropolis.

The community will also be able to track progress on the Aerotropolis and Western Parkland City including through annual reports on Western Sydney City Deal implementation.

# 9.2 Next steps

# 9.2.1 Finalising the Plan

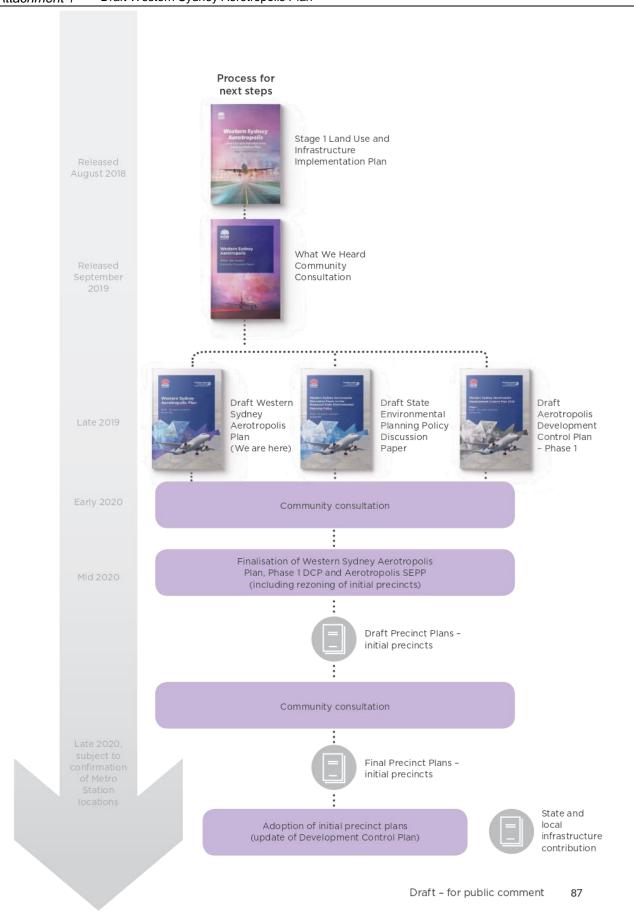
The Planning Partnership will make any required amendments from the public exhibition process prior to finalisation and prepare a Submissions Report that summarises the feedback received. The finalised Plan will be accompanied by:

- a direction under section 9.1 of the EP&A Act requiring future rezoning (planning proposals) to be consistent with this Plan
- Aerotropolis SEPP
- Phase 1 DCP.

The finalisation of the Plan is expected to occur at the same time as the rezoning of the initial precincts is published.

86 Western Sydney Aerotropolis Plan





# 9.2.2 Precinct planning in initial precincts

The Planning Partnership will undertake detailed precinct planning, including sequencing within the initial precincts, responding to the timing of infrastructure delivery, with a target of public exhibition by mid-2020 and adopted plans in late 2020. A SIC will also be prepared.

Precinct planning for the remaining precincts will follow as infrastructure and services are planned and delivered.

The Department of Planning, Industry and Environment is responsible for planning the Mamre Road Precinct. This will occur concurrently with precinct planning for the other initial precincts. Exhibition is likely in late 2019.

# 9.2.3 Development

Development will align with this Plan, the SEPP, precinct plans, master planning and the Aerotropolis DCP together with ministerial directions 3.5 Development Near Regulated Airports and Defence Airfields and 7.8 Implementation of *Western Sydney Aerotropolis Plan* as amended. The speed of development will depend on market forces and the staging of infrastructure provision.

# 9.3 More information



Contact us at engagement@ppo.nsw. gov.au

# Visit



www.wscd.sydney/ planning-partnership



If you are deaf or have a hearing speech impairment, call us through the National Relay Service:

- TTY users, call 133 677 and ask for 1300 305 695
- Speak and Listen (speech to speech relay users), call 1300 555 727 and ask for 1300 305 695.
- Internet relay users connect to the NRS (relayservice.com.au) and ask for 1300 305 695.

Please telephone 131 450 and ask for an interpreter in your language to connect you to 1300 305 695.



Follow us on social media:

- Facebook.com/ NSWDPIE
- <u>Twitter.com/NSWDPIE</u>



# Glossary

Term	Definition	Term	Definition
1 in 100-year flood	A flood that has a one per cent chance of occurring in any given year within a 100-year cycle.	Australian Noise Exposure Forecast (ANEF)	Approved forecasts of future noise exposure patterns around an airport that constitute the contours on which land use planning authorities base their
5G	Fifth-generation cellular network technology.		controls.
Aerospace	The branch of technology and industry concerned with the research, design, manufacture, operation and maintenance of aircraft, space craft, and their components and supporting services.	Biodiversity offsets	Measures that compensate elsewhere for the adverse impacts of an action, such as clearing for development. Biodiversity offsets protect and manage biodiversity values in one area in exchange for impacts on biodiversity values in another.
Aerotropolis	A metropolitan area where infrastructure, land uses and economy are centred on an airport and includes the outlying corridors, and aviation orientated business and residential development that benefit from each other and their accessibility to the Airport.	Blue-Green Grid	An interconnected network of natural and semi-natural landscape elements (sometimes referred to as blue or green infrastructure), including water bodies, urban canopy and open spaces.
Aerotropolis Core	This is the central city at the core of the Aerotropolis activity associated with the Airport. The combination of uses, activities, development and places are reliant on and complementary to the operation of a global airport.	Circular economy	A whole-of-system approach that accounts for the full cost and lifecycle of materials and retains the value of materials in the economy for as long as possible, reducing the unsustainable depletion of natural resources and impacts on the environment.
Agribusiness	Businesses associated with the production, processing, marketing and distribution of agricultural products, especially at a large and integrated scale.	Climate change	A change of climate attributed directly or indirectly to human activity that alters the composition of the global atmosphere in addition to
Airside	All parts of an airport around aircraft and buildings only accessible to authorised personnel.	Country	For Aboriginal peoples, Country relates not only to the cultural group and land to which they
Australian Noise Exposure Concept (ANEC)	Anticipated forecasts of future noise exposure patterns based on indicative flight paths around an airport that constitute the contours.		belong, it is also their place of origin in cultural, spiritual and literal terms. Country includes not only the land but also waters and skies, and incorporates the tangible and intangible, knowledges and cultural practices, identity and reciprocal relationships, belonging and wellbeing.

Draft – for public comment 89

Term	Definition	Term	Definition
Cumberland Plain Conservation Plan	Will address impacts on biodiversity from urban growth through a conservation program that includes commitments and actions designed to improve ecological resilience and function over the long-term. The CPCP will enable land to be able to be certified for development and areas avoided from development conserved. The CPCP will enhance a network of green spaces, natural and semi- natural systems in Western Sydney.	Growth Area	Identified by the NSW Government as major greenfield development or urban renewal areas.
		Local Centre	Smaller-scale places that vary from a few shops on a corner to a vibrant main street and generally serve a local population.
		Local Environmental Plan	Defined in the <i>EP&amp;A Act</i> . Guide planning decisions in local government areas through zoning and development controls.
Defence	The branch of industry concerned with the research, design, manufacture, operation and maintenance of military equipment, supplies and services.	National Airports Safeguarding Framework	National land use planning framework to improve community amenity by minimising aircraft noise- sensitive developments near airports and improve safety outcomes by ensuring aviation safety requirements are recognised in land use planning decisions on various safety related issues.
Development	<ul> <li>As per the <i>EP&amp;A Act</i>, any of the following:</li> <li>the use of land</li> <li>the subdivision of land</li> <li>the erection of a building</li> <li>the carrying out of a work</li> <li>the demolition of a building or work</li> <li>any other act, matter or thing that may be controlled by an environmental</li> </ul>		
		Obstacle Limitation Surface (OLS)	Designed to protect aircraft flying in visual conditions close to an airport by defining a volume of airspace to be protected from development, primarily modelled on the layout and configuration of proposed runways.
Development application	planning instrument. An application for consent under Part 4 of the <i>EP&amp;A Act</i> to carry out development (not including an application for complying development) such as change of use of land, subdivide land, or building, landscaping and other work.	Peri-urban lands	Land for agriculture undertaken in places on the fringes of urban areas.
		Permeable surface	A surface that permits or facilitates the infiltration or penetration of water such as grass, landscaping or porous paving.
Development Control Plan	Provides detailed planning and design guidelines to support established planning controls.	Precinct planning	Identifies the development intent and development capacity across a precinct by allocating land uses, densities, housing types, built form, infrastructure and
Floodplain	An area of land which is subject to inundation by floods.		
Greater Sydney	The local government areas within the boundary shown on the map in the Greater Sydney Region Plan and Schedule 1 of the Greater Sydney Commission Act 2015.		environmental and open space.

90 Western Sydney Aerotropolis Plan

Term	Definition	Term	Definition
Procedures for Air Navigation Services – Aircraft Operations Surfaces (PANS-OPS)	The primary surface for protecting aircraft operating under non-visual (instrument guided) conditions generally located above the OLS. Separate procedures for each runway and for the type of navigation system being used and the multiple surfaces are combined to form the PANS OPS.	Value capture	A source of funding that results from the significant land value uplift due to public investment in core infrastructure
		Western Economic Corridor	New economic agglomerations around the Airport, including the Aerotropolis
		Western Parkland City	Broadly, Penrith, Liverpool, Campbelltown, Hawkesbury, Wollondilly, Camden, Fairfield and Blue Mountains LGAs, anchored around Liverpool, Greater Penrith and Campbelltown-Macarthur, with the new Airport and Aerotropolis geographically at its centre.
Public domain	Any publicly or privately owned space that can be accessed and used by the public and/or is publicly visible		
Public space	Includes parks, green spaces, plazas, libraries, streets,		
	landscapes, museums, and public transport. The channel which comprises the bed and banks of a watercourse (to the highest bank) and the vegetated riparian zone adjoining the channel.	Western Parkland City Metropolitan Cluster	Aerotropolis, Liverpool, Greater Penrith and Campbelltown- Macarthur.
Riparian corridor			
		Western Sydney Airport	A Commonwealth business enterprise established in August 2017 to build the new Airport.
Site-specific Development Control Plan	A DCP that provides detailed planning and design guidelines for a specific site that meets the criteria in the Aerotropolis SEPP.	Western Sydney Planning Partnership	A local government-led initiative comprising of representatives of all eight Western Parkland City councils as well as Blacktown Council, and representatives from the NSW Department of Planning, Industry and Environment, Transport for NSW, Sydney Water and the Greater Sydney
State Environmental Planning Policy (SEPP)	Environmental planning instruments that address planning issues of State significance.		
Strategic centre	Characterised by a high proportion of knowledge- intensive jobs, existing or proposed major transport gateways and increased economic activity.		Commission.
Upper South Creek Water Factory	An advanced sewage treatment plant which will produce recycled water appropriate for a range of different applications, renewable energy and bioresources.		
Urban typologies	Precinct-scale snapshots of various forms of urban development incorporating built form, roads and subdivision pattern and open space.		

# **Appendix - Planning Principles**

These principles will apply to all planning for the Aerotropolis.

# Overarching objective

# **Recognise Country**

Acknowledge traditional owners and provide opportunities for Connecting with Country, Designing for Country and Caring for Country in all stages of planning for the Aerotropolis.

# Productivity

# **Objective 1**

# An accessible and well connected Aerotropolis

Ensure walking or cycling is the most convenient option for short trips around centres and local areas.
Prioritise public and active transport in centres with general through traffic and freight directed outside of these centres.
Match car parking with the level of public transport access.
Limit direct property access to classified roads and rationalise or orient to the local street network.

# **Objective 2**

# High-value jobs growth is enabled, and existing employment enhanced

- PR5 Develop vibrant centres with high quality public domain, a rich urban tree canopy, and well designed buildings and areas that attract workers and investment.
- PR6 Establish a centres hierarchy, including future centres, in line with the Region Plan (Strategy 22.2).

# **Objective 3**

## Safeguard airport operations

PR7 Appropriately design, construct and locate development to safeguard 24/7 airport operations.

- PR8Require development up to the 20<br/>ANEC/ANEF contour to adopt<br/>appropriate design and construction<br/>standards to reduce aircraft noise<br/>impacts and prohibit intensification of<br/>residential development within the<br/>ANEC/ANEF 20 and above contours.PR9Require development to accord with the
- PR9 Require development to accord with the NASF Guidelines.

# Sustainability

# **Objective 4**

# A landscape-led approach to urban design and planning

- SU1 Retain and enhance natural features such as waterways, vegetation and landform and culturally significant landscapes.
- SU2 Integrate Blue-Green Grid links and public open spaces, maximising opportunities for connections, an urban tree canopy and active use of the floodplain.
- SU3 Retain water in the landscape by maximising permeable surfaces and developing appropriate urban typologies.
- SU4 Orient urban development towards creeks and integrate into the landscape through quality open space, a high degree of solar access and tree canopy.

- SU5 Develop a connected regional parkland network linking with the Wianamatta-South Creek corridor that shapes the Aerotropolis and provides amenity and ecological value and create a high quality ridgeline and linear parks adjacent to, and integrated with, riparian corridors that retain water.
- SU6 Retain and increase the urban tree canopy and green cover across the Aerotropolis consistent with the Region Plan target of 40 per cent and the Premier's Priority for Greening our city.
- SU7 Retain, enhance and co-locate vegetation on ridgelines with active open space and use it to guide building heights.
- SU8 Identify and protect scenic and cultural landscapes and develop a street grid based on landforms, with long northsouth blocks in urban areas to attain good solar performance, and east-west streets to capture long views to the Blue Mountains.
- SU9 Meet the requirements of the biodiversity conservation program in the Cumberland Plain Conservation Plan and approved strategic biodiversity certification and strategic assessment protecting land with biodiversity value, and provide a sensitive urban interface that supports and enhances corridors and reserves.
- SU10 Avoid, minimise and mitigate impacts on threatened species and endangered ecological communities, habitat corridors, and riparian and aquatic habitats to prioritise length, connectivity and representativeness to maintain ecological function.

Protect the integrity and continuity of wildlife by:

- protecting priority habitat corridors to support migrating species, birds and arboreal mammals
- using public land for biodiversity conservation with an appropriate management regime
- expanding vegetation corridors if impacted by utility installations.
- SU11 Retain and protect wetland environments to support plant animal communities and to mitigate wildlife attraction or wildlife strike.

- SU12 Provide open space buffers and asset protection zones to conservation areas wholly within urban capable footprints.
- SU13 Plan stormwater and wastewater in the Wianamatta-South Creek Catchment to minimise potential hydrologic and hydraulic impacts on ecology, creek structure, infrastructure, water quality and the natural water cycle. Integrate water sensitive urban design and use stormwater or recycled water to irrigate streets and public open space to support public amenity and urban cooling. Co-locate industrial water users, where appropriate.

# **Objective 5**

# A sustainable, low carbon Aerotropolis that embeds the circular economy

SU14 Use low carbon, high efficiency strategies to reduce emissions and energy use in line with NSW net zero emissions target and mitigate urban heat through urban development and building design. Use innovative and integrated approaches to achieve higher standards of resource recovery, waste management, water management and renewable energy.

# Objective 6

# A resilient and adaptable Aerotropolis

- SU15 Plan for compatible land uses within the floodplain, provide safe evacuation and egress from flood events and consider climate change, culvert blockage and floodplain revegetation.
- SU16 Prohibit cut and fill to alter the 1% AEP flood extent.
- SU17 Design, build and manage flood management assets to benefit native habitat, aesthetics, public recreation and amenity.
- SU18 Protect, maintain and improve the water quality and flow to meet the NSW Government waterway health targets.
- SU19 Protect high value terrestrial and aquatic ecosystems to enhance biodiversity and protect environmental values.
- SU20 Adopt an integrated water management approach that considers urban form and streetscape, trunk drainage land and assets, waterway health and flood management.

Draft – for public comment 93

# Infrastructure and Collaboration

# Objective 7

# Infrastructure that connects and services the Western Parkland City as it grows

- IC1 Integrate passenger and freight transport with urban design at the Aerotropolis-wide, precinct and local scale to achieve quality movement and place outcomes.
- IC2 Locate and stage high quality active and public transport, utility and digital networks to align with projected land uses and secure corridors and sites early.
- IC3 Develop the Aerotropolis as a Smart City supported by fast and reliable and adaptable digital connectivity.
- IC4 Ensure the interoperability of systems align with NSW Government connected infrastructure and Internet of Things policies.
- IC5 Dimension local and town centre networks to allow tree planting, lower vehicle speeds and intuitive and safe walking and cycling infrastructure
- IC6 Plan for car parking, setbacks and intersections to allow easy crossing of streets and maintain compact, consistent built form edges.

## **Objective 8**

# A collaborative approach to planning and delivery

IC7 Adopt a collaborative approach to precinct planning and master planning with all three levels of government, the community, industry and landowners.

# Liveability

### **Objective 9**

# A collaborative approach to planning and delivery

- LV1 Create a compact urban form in areas of high accessibility with a rich urban tree canopy and along creeks so that residents live within a 10-minute walk of quality green, open and public space consistent with the Premier's Priority for Greener Public Spaces.
- LV2 Provide affordable rental housing in line with the Western City District Plan targets.
- LV3 Provide for a diverse range of housing types and price points.
- LV4 Avoid residential development on major roads, freight or public transport corridors.

## Objective 10

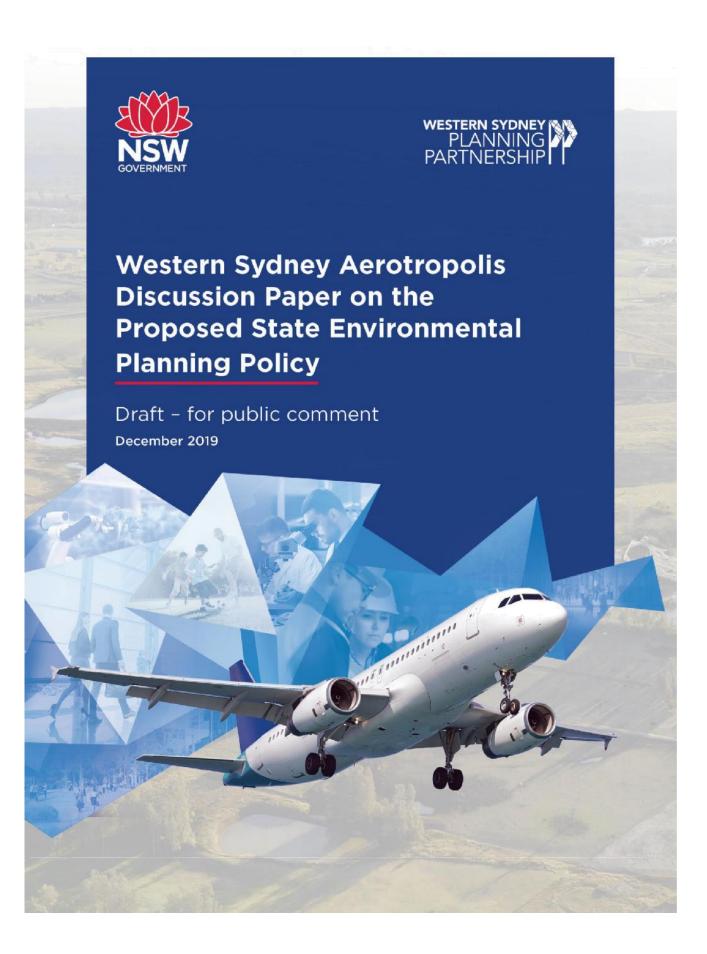
# Social and cultural infrastructure that strengthens communities

- LV5 Create valued public and private places and activate open spaces in line with Better Placed, Greener Places and the Premier's Priority for Greener Public Spaces.
- LV6 Provide multi-purpose and intergenerational community and cultural facilities and services which meet the needs of the community and bring people together.
- LV7 Integrate health and education infrastructure into local centres with supporting public transport services.
- LV8 Celebrate open space areas as places of shared importance to Aboriginal and non-Aboriginal people and maintain important landscapes and views.
- LV9 Acknowledge and celebrate Aboriginal culture, history and heritage, alongside non-Aboriginal heritage
- LV10 Locate health, education, residential and other sensitive land uses away from major road, rail and freight movement corridors.
- LV11 Design major streets as green active parkways supporting new technology



	1172
EGROW 07	Endorsement of submission on Draft Western Sydney Aerotropolis Plan and Aerotropolis Planning
	Package
Attachment 1	Draft Western Sydney Aerotropolis Plan

# dpie.nsw.gov.au



Published by NSW Department of Planning, Industry and Environment

#### dpie.nsw.gov.au

Title: Western Sydney Aerotropolis Discussion Paper on the Proposed State Environmental Planning Policy

Subtitle:

First published: December 2019

#### Acknowledgements

This publication has been prepared on behalf of the NSW Department of Planning, Industry and Environment by the Western Sydney Planning Partnership.

© State of New South Wales through Department of Planning, Industry and Environment 2019. You may copy, distribute, display, download and otherwise freely deal with this publication for any purpose, provided that you attribute the Department of Planning, Industry and Environment as the owner. However, you must obtain permission if you wish to charge others for access to the publication (other than at cost); include the publication in advertising or a product for sale; modify the publication; or republish the publication on a website. You may freely link to the publication on a departmental website.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (December 2019) and may not be accurate, current or complete. The State of New South Wales (including the NSW Department of Planning, Industry and Environment), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own inquiries and rely on their own advice when making decisions related to material contained in this publication.

## Contents

Part 1 – Introduction	1	
Part 2 - Proposed State Environmental Planning Policy	4	
2.1 Objectives of Proposed SEPP	4	
2.2 Aerotropolis boundary	4	
2.3 Zoning Approach	4	
2.4 Integrated Water Management Strategy	4	
2.5 Transport Infrastructure	4	
2.6 Affordable Rental Housing		
2.7 Protecting indigenous and non-indigenous heritage	5	
2.8 Infrastructure funding arrangements prior to development approval	6	
2.9 Airport and Aviation Matters		
2.9.1 National Airports Safeguarding Framework		
2.9.2 Australian Noise Exposure Concept / Australian Noise Exposure Forecast		
2.9.3 Protection of Airspace Near Airports		
2.9.4 Wildlife Management around Airports		
2.9.5 Airport Safeguarding		
2.10 Biodiversity and Riparian Corridors		
2.11 Essential Infrastructure Provision		
2.12 Savings and Transitional Provision		
Part 3 – Proposed land use controls		
3.1 Land Use Zones		
3.2 Enterprise Zone	12	
3.3 Mixed Use Zone		
3.4 Environment and Recreation Zone		
3.5 SP1 Special Activities		
3.6 SP2 Infrastructure Zone		
3.7 Agribusiness Zone		
3.8 Proposed Land Use Table		
3.9 Additional Permitted Uses		
3.10 Existing use rights		
Part 4 – Precinct specific controls	23	
4.1 Wianamatta-South Creek the central spine of the Blue- Green Grid		
4.2 Wianamatta-South Creek Precinct Boundary and Flood Planning Levels		
4.3 Rossmore, Kemps Creek, North Luddenham and Dwyer Road Precincts		
4.4 Mamre Road Precinct	24	
Part 5 – Proposed Maps	26	
Part 6 – Relationship of the proposed SEPP to relevant statutory provisions, environmental		
planning instruments and strategic planning documents		
6.1 SEPPs applying to the Aerotropolis		
6.2 Federal and State Biodiversity Legislation	26	
6.2.1 Biodiversity Certification Order 2007	26	

NSW Department of Planning, Industry and Environment | i

6.2.2 Cumberland Plain Conservation Plan	27
Part 7 – Amendments to other environmental planning instruments	29
7.1 Amendments to State Environmental Planning Policy (Sydney Region Growth Centres) 20	
7.2 Amendments to State Environmental Planning Policy (Western Sydney Employment Area 2009	a)
7.3 Amendments to Liverpool Local Environmental Plan (LEP) 2008	31
7.4 Amendments to Penrith Local Environmental Plan (LEP) 2010	31
Part 8 – Planning Pathways	32
8.1 Precinct planning	32
8.2 Development Pathway	32
8.3 Development applications (DAs) submitted prior to precinct planning	32
8.4 Master plans	32
8.5 Complying and exempt development	
8.6 Staging and sequencing of development	33

## Part 1 – Introduction

On 4 March 2018, the Prime Minister, Premier of NSW and mayors of Blue Mountains, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly Councils signed the Western Sydney City Deal. The City Deal sets the investment foundation for the Western Parkland City to become a global city, enriched by its heritage and connected to the world. Over the next 20 years the Western Sydney City Deal will drive the creation of the Western Parkland City.

The Western Sydney International (Nancy-Bird Walton) Airport (Airport) and Western Sydney Aerotropolis (Aerotropolis) as mapped in **Figure 1** will be drivers for a strong economy and a connected Western Parkland City. People will be connected to the Greater Sydney's metropolitan and strategic centres by an efficient public transport system, and to the rest of the country and world by the new airport.

Planning for future land uses around the Aerotropolis has required close consideration of the need to mitigate impacts associated with the operation of the Airport, and to sensibly locate compatible land uses that efficiently utilise land and capitalise on existing and proposed road and rail transport corridors. This is to enable a high-quality land use response to the emerging Western Parkland City.

In order to deliver a world-class Aerotropolis for Western Sydney, a new planning framework is proposed to facilitate the achievement of State planning objectives for the Aerotropolis. The planning framework is comprised of the Western Sydney Aerotropolis Plan (WSAP), the State Environmental Planning Policy proposed in this Discussion Paper (proposed SEPP), and a staged Development Control Plan (DCP) comprised of a Phase 1 DCP and Phase 2 DCP.

This Discussion Paper has been prepared under the *Environmental Planning and Assessment Act* 1979 (EP&A Act) to provide an explanation of the intended effect of the proposed SEPP. The proposed SEPP will provide the primary development controls for the Aerotropolis, zoning land for urban, environmental, recreational and infrastructure purposes, establishing appropriate development controls, permitting compatible land uses next to an airport, and requiring the protection of native vegetation and natural areas.

The proposed SEPP will apply to the approximately 11,200 hectare area within Western Sydney surrounding the Airport and will:

- implement the WSAP;
- set the boundary for the Aerotropolis and the area to which the proposed SEPP applies;
- define precincts within the Aerotropolis;
- apply land use zones throughout the Aerotropolis, with the Airport site remaining subject to the Airports Act 1996 (Cth);
- set strategic objectives for future planning within the area;
- outline planning controls, using mapping for some of those proposed controls;
- identify transport corridors and utility sites required to service the Aerotropolis; and
- outline approval pathways.

Planning for transport corridors required for road and rail infrastructure to support the new city, consistent with Future Transport 2056, is underway. Ongoing engagement with land owners and government agencies as the proposed SEPP is finalised will ensure that transport corridors and land required for utility infrastructure continue to be identified and protected, thereby giving certainty to landowners over time.

The Department of Planning, Industry and Environment (Department) is developing a conservation plan for Western Sydney to protect threatened plants and animals, while supporting the delivery of housing, infrastructure, open and green spaces. This conservation plan will apply to part of the Aerotropolis, in parallel with ongoing conservation programs. Avoiding and minimising impacts to biodiversity is a critical step in reducing the impacts of the proposed development and the need for commitments and actions to offset those impacts and minimise impacts to biodiversity values where possible.

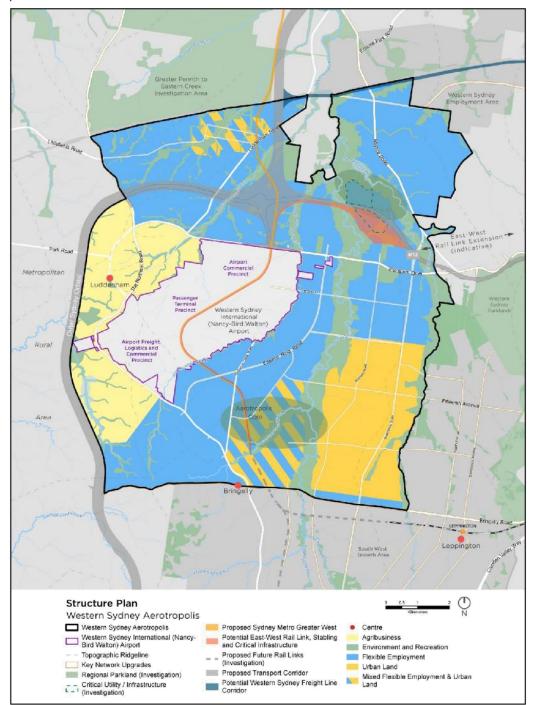
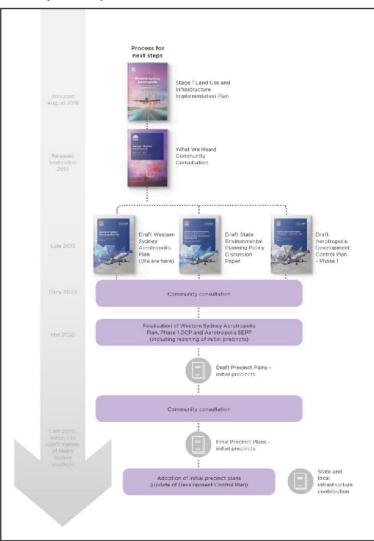


Figure 1 Western Sydney Aerotropolis Structure Plan

NSW Department of Planning, Industry and Environment | 2

The Minister for Planning and Public Spaces or the local councils will be the consent authority for development within the Aerotropolis, depending on the nature of the development. Exempt and complying development will continue to be recognised as an important planning pathway in the Aerotropolis to streamline straightforward development proposals. Investigations are underway to consider how exempt and complying development will apply and to review additional Aerotropolis-specific development that could be considered under the complying development framework. Certain development applications will also trigger referral to the Western Sydney Airport Co and/or the appropriate Commonwealth Department or Agency as part of the assessment process.

Following rezoning, precinct planning will provide greater land use guidance for development to occur within the Aerotropolis Core, Northern Gateway, Badgerys Creek and Agribusiness Precincts. Detailed master planning for specific sites within a precinct planning may be permitted to commence ahead of completion of broader precinct planning.



#### Next steps in the process

NSW Department of Planning, Industry and Environment | 3

## Part 2 - Proposed State Environmental Planning Policy

The proposed SEPP will include a range of provisions that will deliver the Aerotropolis Plan.

## 2.1 Objectives of Proposed SEPP

The proposed SEPP will contain objectives that align with the WSAP.

## 2.2 Aerotropolis boundary

The proposed SEPP will apply to the area of land shown on the draft Land Application Map.

There have been changes to the Aerotropolis boundary and precinct boundaries that were first proposed in the Stage 1 LUIIP. The changes were made in response to submissions and subsequent investigations, with the amendments covering:

- the eastern boundary of Mamre Road Precinct has been extended to include additional land; and
- the boundary of the Kemps Creek Precinct now excludes land to the east of Kemps Creek, beyond the eastern boundary of Wianamatta-South Creek, providing a clearly defined boundary for the Aerotropolis. Planning for this area will be progressed by Liverpool City Council.

## 2.3 Zoning Approach

An innovative approach to land use zoning will be applied to precincts throughout the Aerotropolis with four broad zone types which will allow for greater site design and flexibility following detailed site investigation. The four zones are:

- Enterprise Zone;
- Mixed Use Zone;
- Environment and Recreation Zone; and
- Agribusiness Zone.

In addition, the following standard instrument zones will apply:

- SP1 Special Activities (Airport) Zone;
- SP1 Special Activities (Commonwealth) Zone; and
- SP2 Infrastructure Zone.

Details of the land uses proposed to be permitted in each zone are set out in Section 3.

## 2.4 Integrated Water Management Strategy

Provisions that aim to improve water health including management of the built form, drainage and hydrologic conditions will be considered for inclusion in the proposed SEPP. Details of the proposed additional provisions for the creation and protection of a Blue-Green Grid for the Aerotropolis are set out in Section 4.

## 2.5 Transport Infrastructure

Planning for the future transport networks of the Western Parkland City comprises major, long-term strategic corridors identified in Future Transport 2056 (Transport for NSW, 2018). A more detailed transport network is also needed to support growth in population and jobs, and deliver a 30-minute

city, consistent with directions outlined in the Greater Sydney Regional Plan and Western District Plan.

Planning for road and public transport networks across the Aerotropolis is underway, with a number of key multi-modal routes having been identified to support development. Public consultation for the protection of four recommended corridors (Outer Sydney Orbital, Western Sydney Freight Line, M12 Motorway and Sydney Metro Greater West) to provide for transport infrastructure occurred in mid-2018. These corridors, along with existing roads requiring widening and an expanded transport network to support the growing population of Western Sydney and particularly the Aerotropolis, are identified on the Western Sydney Aerotropolis Structure Plan.

A Discussion Paper for a proposed State Environmental Planning Policy for the Protection of the Western Sydney Transport Corridor (the Corridors SEPP) has already been released by Government. The Corridors SEPP will prevail if it is in place before the Aerotropolis SEPP. If the Corridors SEPP is not in place, the proposed Aerotropolis SEPP will include provisions to deal with the proposed transport corridors within the Aerotropolis thorough a combination of zoning and/or corridor protection.

The proposed SEPP will require master plans, development applications and complying development applications on or adjacent to these corridors to obtain concurrence from, or be referred to, Transport for NSW prior to consent being granted. It is important to note that the actual corridors are still under investigation and, where settled following public exhibition, will be incorporated into the final SEPP and precinct planning.

## 2.6 Affordable Rental Housing

The Aerotropolis will deliver Affordable Rental Housing for very low to low income households in Western Sydney. All development applications with residential components will be required to demonstrate consistency with the policy and targets for Affordable Rental Housing Targets as outlined in the Greater Sydney Region Plan 2018, being 5 - 10%.

As the Affordable Rental Housing Target is applied to new rezoning, it will work alongside, and not impede, the operation of existing planning controls that address affordable housing including State Environmental Planning Policy 70 – Affordable Housing (Revised Schemes) or those adopted by the relevant council. The target does not preclude councils from negotiating additional affordable housing above the 10% baseline.

The Aboriginal Housing Office's (AHO) Supply and Demand Model identifies Penrith and Liverpool as being among the top councils across NSW for Aboriginal housing demand. Precinct planning will consider specific targets and measures to address affordable rental housing for the growing Aboriginal population.

The SEPP will include provisions to require development to meet targets for Affordable Rental Housing Targets as outlined in the Greater Sydney Region Plan 2018 being 5 - 10%.

## 2.7 Protecting indigenous and non-indigenous heritage

The rich history of the land on which the Aerotropolis lies warrants appropriate future management regimes that best facilitate the effective conservation of its significance for present and future generations. Recognition of Western Sydney's Aboriginal heritage will be incorporated into precinct planning with key heritage sites to be preserved and, where appropriate, activated and integrated with the new development. Specific strategies will be considered for inclusion in future precinct plans.

During precinct planning, measures to integrate Aboriginal cultural heritage into specific precinct plans will be explored through direct engagement with Aboriginal stakeholders. Furthermore,

detailed site investigations will occur to identify and protect Indigenous along with non-Indigenous heritage.

The Local and State Heritage items identified located within the Western Sydney Aerotropolis will be mapped in the proposed SEPP. Appendix 1 contains a list of the proposed items for inclusion.

Heritage items identified as being located within the Airport site have not been mapped. Details of these heritage sites are contained within the Western Sydney Airport Environmental Impact Statement 2016.

## 2.8 Infrastructure funding arrangements prior to development approval

A Place Infrastructure Compact (PIC) is being developed for the Aerotropolis by the Greater Sydney Commission. The PIC will be used to develop a special infrastructure contribution and local infrastructure contributions under the EP&A Act. The PIC will also guide the investment and staging decisions of utility providers to ensure services are available at the Aerotropolis growth area.

The proposed SEPP will ensure arrangements to deliver State infrastructure are made before development occurs. If a special infrastructure contribution has not been finalised satisfactory arrangements must be in place prior to determination of any development application.

## 2.9 Airport and Aviation Matters

Planning for development adjacent to the new Airport requires development to be placed in areas that are suitable. Strategic considerations include using the close proximity of the new Airport and its supporting infrastructure to:

- leverage economic and employment growth opportunities;
- establish agribusiness industry opportunities;
- activate an advanced manufacturing industry in aerospace and defence, including research and development opportunities;
- safeguard airport operations and the future expansion of the Airport (including the future second runway);
- minimise land use conflicts with a focus on managing the transition of land from non-residential to mixed-use urban uses;
- appropriately locate future infrastructure and transport corridors to provide access to high frequency public transport; and
- provide amenity for future residents, including creating access to open space and green corridors.

Several airport and aviation controls along with proposed development mitigation measures are proposed in the SEPP as described below.

## 2.9.1 National Airports Safeguarding Framework

The National Airports Safeguarding Framework (NASF) offers a nationally consistent approach to ensure an appropriate balance is maintained between the social, economic and environmental needs of the community and the effective use of airports. The NASF is a national land use planning framework that aims to:

improve amenity by minimising aircraft noise-sensitive developments near airports; and

 improve safety outcomes by ensuring aviation safety requirements are recognised in land use planning decisions through guidelines being adopted by jurisdictions on safety-related issues.

The NASF comprises nine guidelines which have been approved by NASAG:

- Guideline A: Measures for Managing Impacts of Aircraft Noise;
- Guideline B: Managing Risks of Building Windshear and Turbulence at Airports;
- Guideline C: Managing Risks of Wildlife Strike in the Vicinity of Airports;
- Guideline D: Managing Risks Associated with Wind Turbines;
- Guideline E: Managing Risks of Distractive Lighting in Vicinity of Airports;
- Guideline F: Managing Risks of Intrusion into Protected Airspace;
- Guideline G: Protecting Aviation Facilities Communications, Navigation and Surveillance;
- Guideline H: Protecting Strategically Important Helicopter Landing Sites; and
- Guideline I: Managing the Risks in Public Safety Areas at the ends of Runways.

Applying NSAF principles to the new Western Sydney Airport will ensure key issues such as noise, airspace protection, and obstacle limitation surfaces are incorporated into planning controls. Some provisions, such as the identification of noise contours or airspace protection surfaces apply beyond the Aerotropolis area.

The SEPP will formalise the application of airport safeguarding controls to land within the Aerotropolis boundary as well as beyond that boundary.

## 2.9.2 Australian Noise Exposure Concept / Australian Noise Exposure Forecast

Aircraft noise is a key factor in land use planning for the Aerotropolis. A precautionary approach is being applied to the land use planning of noise sensitive uses around the Airport. For the Aerotropolis, NSW Government has adopted a position that no noise sensitive land uses (including new residential development) will be permitted in Australian Noise Exposure Concept (ANEC)/Australian Noise Exposure Forecast (ANEF) contour of 20 or above. An ANEC contour refers to anticipated forecasts of future noise exposure patterns based on indicative flight paths around an airport.

Limiting new residential development to areas outside the 20 ANEC/ANEF reflects the greenfield nature of the Airport, is stricter than what is conditionally acceptable in the ANEF 25-30 contour within Australian Standard AS2021-2015 Acoustics – Aircraft Noise Intrusion Building Sitting and Construction. Confirmation of the final Airport airspace design/flight paths and ANEF contour is expected to be confirmed closer to the opening of the Airport. Notwithstanding, the land use planning will progress based on the most up-to-date information and will respond to any changes accordingly.

Updated ANEC/ANEF contour maps will be incorporated within the SEPP as required, with a focus on ensuring sensitive land uses are located in areas that will not be affected by aircraft noise. It is noted that the ANEC/ANEF contours extend beyond the Aerotropolis. As noted above airport safeguarding controls will be applied to land beyond the Aerotropolis through the SEPP.

Renovations to existing houses or minor extensions within the ANEC/ANEF 20 contour may still be allowed subject to appropriate noise mitigation management measures. The intention is to ensure that there is no further intensification of sensitive uses in those areas affected by the ANEC/ANEF 20 and above contours. The application of specific noise mitigation measures is to be included in the DCP and determined as part of the Development Assessment process.

An ANEF chart will be developed as part of the forthcoming airspace design process. This may differ from the current ANEC contours contained in the Airport Plan. Planning decisions will mitigate the impacts of aircraft noise and protect the amenity of new communities by:

- Managing the location of potential development so that more noise tolerant land uses (such as industry) are located in louder areas and uses less tolerant to noise (such as residential dwellings, schools and hospitals amongst other uses) are located in quieter areas, and
- Considering building design with respect to the expected amount of noise.

Under the WSAP, the SEPP and the DCP, development up to the 20 ANEC contour will need to adopt appropriate design and construction standards to reduce aircraft noise impacts. Over time, the noise exposure contours will be reviewed and recalibrated in accordance with the requirements of the *Airports Act 1996*. Land use planning will progress based on the most up-to-date information and will respond to any changes accordingly.

The application of this control to individual properties will be identified in Planning certificates issued under Section 10.7 of the EP&A Act with a reference to the proposed SEPP.

### 2.9.3 Protection of Airspace Near Airports

Part 12 of the *Airports Act 1996* (Cth) and the *Airports (Protection of Airspace) Regulations 1996* (Cth) establish a framework for the protection of airspace at and around airports.

The Commonwealth regulations recognise the need to restrict the height of buildings and other structures (such as cranes) and regulated land uses (such as avoidance of plume generating uses) near airports or under flight paths. This protected airspace is formally known as prescribed airspace. An airport's prescribed airspace typically includes the following surfaces:

- Obstacle Limitation Surfaces (OLS) is designed to protect aircraft flying in visual conditions close to an airport by defining a volume of airspace to be protected from development. An OLS for the Airport was included in the Western Sydney Airport Airport Plan and declared on 19 October 2017 under the provisions of the Airports Act 1996 (Cth) and Airports (Protection of Airspace Regulations 1996 (Cth);
- Procedures for Air Navigation Services Aircraft Operations (PANS-OPS) is the primary surface for protecting aircraft operating under non-visual (instrument guided) conditions. It is generally located above the OLS.; and
- Any other surfaces that are declared, for example high intensity approach lighting, are also to be protected.

The regulations require approval to carry out controlled activities in prescribed airspace from the Commonwealth or in some cases the airport lessee. Conditions can be imposed on an approval. Controlled activities include the following:

- permanent structures, such as buildings, intruding into the protected airspace;
- temporary structures such as cranes intruding into the protected airspace (with some transitional exemptions prior to commencement of operations at the Airport); and
- other activities causing intrusions into the protected airspace for example from stacks or vents.

The final airspace design is expected to be confirmed closer to the opening of the Airport. The SEPP will include current prescribed airspace (OLS) mapping and controls to restrict development within these surfaces. Updated prescribed airspace mapping (OLS, PANS-OPS and any other surfaces) will be incorporated within the SEPP as required. The Obstacle Limitation Surface Map shows the extent of protection required around the Airport.

### 2.9.4 Wildlife Management around Airports

Wildlife strikes can cause major damage to aircraft and/or compromise aircraft safety. Whilst the Civil Aviation Safety Authority has well-established safety requirements for wildlife management plans on-airport, wildlife hazards also occur outside the Airport site.

NASF Guideline C – Managing the Risk of Wildlife Strikes in the Vicinity of Airports provides advice to help protect against wildlife hazards originating off-airport.

### 2.9.5 Airport Safeguarding

To manage the risk of wildlife strikes within the Aerotropolis, the following measures are proposed:

- implementation of performance-based outcomes and acceptable solutions in the assessment of potentially incompatible land uses;
- landscape design principles which will reduce wildlife attraction within a 3km, 8km and 13km radius of the Airport as mapped on the Wildlife Map;
- building and site design guidelines which will reduce wildlife attraction within a 3km, 8km and 13km radius of the Airport;
- identifying appropriate referral triggers for development applications and planning proposals to regulatory agencies; and
- preparation of standard conditions which can be included as part of development consent.

Radial wildlife buffers of 3km, 8km and 13km are mapped on the Draft Wildlife Buffer Zones Map extending beyond the Aerotropolis boundary.

In order to ensure development or activities in the vicinity of the Airport do not negatively impact on airport operations, it will be a requirement in the proposed SEPP that master plans and relevant development applications be referred to Western Sydney Airport and the relevant Commonwealth Authority for comment. Potential impacts or development that would trigger a referral include:

- glare from artificial light or reflected sunlight;
- air plumes from stacks, vents or plumes;
- development or construction activities including the use of cranes that extend into prescribed airspace (subject to temporary exemptions operating prior to the commencement of Airport operations);
- development located in the windshear assessment area; and
- uses that incorporate lighting that could cause distraction to pilots.

Wind farms and wind turbines will be prohibited within the Aerotropolis due to the building restricted area surrounding aviation communications, navigation and surveillance facilities. Generally, a building restricted area should be kept clear of permanent or temporary:

- obstructions (e.g. buildings, other structures or trees) to the 'line of sight' between transmitting and receiving devices;
- objects (e.g. wind turbines) which act as reflectors or deflect signals used by aviation facilities;
- radio frequency interference;
- electromagnetic emissions (e.g. such as those emitted by arc welding associated with steel fabrication); and
- plume rises (as defined in the Airports (Protection of Airspace) Regulations 1996.

The SEPP will identify those development or activities that require referral to the Western Sydney Airport and the relevant Commonwealth Authority for comment and building restricted areas to protect airport operations.

## 2.10 Biodiversity and Riparian Corridors

The Aerotropolis contains natural assets that represent opportunities and constraints to future urban growth. Some of the key environmental considerations include biodiversity values and riparian lands.

#### Biodiversity

Western Sydney is home to some of the last remaining critically endangered plant communities on the Cumberland Plain and other threatened flora and fauna. This vegetation and its location within the Aerotropolis has been identified via a number of programs including:

- the Biodiversity Certification and Strategic Assessment under the Growth Centres SEPP, typically located below the 1:100 chance per year flood extent; and
- land with significant conservation values to be identified in the draft Cumberland Plain Conservation Plan (CPCP).

Future land development and infrastructure in the Aerotropolis will be required to avoid areas of high biodiversity values where possible, protect existing trees and vegetation, and implement strategies to mitigate avoidable impacts. The protection of habitat sites or potential habitat sites for key species, significant paddock trees and nesting sites, vegetation communities and endangered ecological communities, along with the intended planting of additional trees will contribute to the vision of the Western Parkland City. This will be explored in detail during precinct planning and further amendments to the proposed SEPP and DCP.

Native vegetation with biodiversity value on certain land within the Aerotropolis will be protected under the proposed SEPP by mechanisms including a new Environment and Recreation Zone, and a range of Development Control Plan controls. These controls aim to conserve and encourage rehabilitation of the remaining native vegetation communities and contribute to the potential increase of native vegetation communities within the Aerotropolis.

The proposed new Environment and Recreation Zone does permit a broader range of land uses than the Environment Conservation zone in the Growth Centres SEPP. To maintain consistency with existing biodiversity certification measures, additional planning controls in the proposed SEPP will apply to mapped areas. These controls will ensure that the native vegetation in these areas cannot be cleared despite the application of the *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017.* The controls will also prohibit certain land uses and activities that are not considered consistent with environmental conservation from being carried out.

The proposed SEPP may not initially map all the biodiversity areas as further investigations may be required before this can occur as part of the CPCP. Where required, further investigations will be undertaken during precinct planning. Once precinct planning is complete, the proposed SEPP may be amended to reflect this work and enable the relevant land use zone to be applied. Further information about biodiversity protections including the Vegetation SEPP is provided in Section 6.2.

#### Riparian corridors

Riparian corridors will be assessed through precinct planning to meet the expectations of the WSAP to protect and manage waterways. Relevant controls will be applied within the proposed SEPP and DCP to manage waterway health, revegetation and rehabilitation and integration into land use

decisions. The *Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions* will inform waterway outcomes and stormwater management strategies and responses.

## 2.11 Essential Infrastructure Provision

Existing water, sewer and electrical infrastructure can meet the demands of existing rural development but need expansion to support the proposed development envisaged for the Aerotropolis. The new and upgraded infrastructure needed to unlock future development should include high quality digital infrastructure that is adaptable and scalable to future technology. The timely and efficient provision of communications and digital infrastructure is fundamental to successfully activating precincts and supporting the greater Western Parkland City.

As work continues to investigate the accommodation of trunk infrastructure, precinct planning work will examine innovative means to fund delivery. Voluntary Planning Agreements (VPAs) can be used with the private sector to fund and manage the private delivery of infrastructure. Consideration will also be given to alternate servicing solutions and hybrid servicing technologies and methodologies.

Precinct planning processes will also incorporate planning for a fuel pipeline to the Airport. Consideration will be given in ongoing planning to appropriate setbacks to the pipeline, suitable adjacent development types and mitigation measures to ensure compatible land use development is planned for.

An integrated water solution will consider opportunities for water provision and re-use, and wastewater within developments as the servicing strategy is prepared for the precincts. The proposed SEPP will permit a sewage treatment plant, with associated resource recovery, which will produce recycled water appropriate for a range of different applications, renewable energy and bioresources to meet demand.

The proposed SEPP will require the consent authority to be satisfied, prior to development applications being approved, that public utility infrastructure will be provided, or alternate and adequate arrangements to make that infrastructure available have been made. Public utility infrastructure includes infrastructure for the supply of water, the disposal and management of sewage and the supply of electricity.

## 2.12 Savings and Transitional Provision

A savings and transitional provision is proposed to apply to any development applications made in the Aerotropolis before the proposed SEPP commences. This will ensure that pending applications continue to be assessed and determined as if the Aerotropolis SEPP had not commenced.

The proposed SEPP will include a savings and transitional clause.

NSW Department of Planning, Industry and Environment | 11

## Part 3 – Proposed land use controls

## 3.1 Land Use Zones

As a greenfield growth area, the Aerotropolis can take advantage of the urban development zone concept to provide flexibility and encourage investment. The approach enables a faster rezoning and reduces the need for subsequent amendments to zone boundaries as detailed precinct plans evolve. This approach will also enable innovative development assessment approaches that facilitate economic activity and job growth in the Western Parkland City, consistent with the Western City District Plan. The intent of each zone, the proposed permitted and prohibited land uses, and where they will apply is outlined below.

The proposed airport safeguarding mechanisms will influence the way in which some permitted land uses can be carried out. This will include identifying the suitability of land uses within the public safety area of each affected precinct. The proposed land uses within each land use zone will be reviewed once public safety areas are confirmed.

Detailed planning controls for specific development such as height of buildings, lot sizes and floor space ratio, as well as controls including setbacks, will be addressed in the precinct planning stage. Requirements for open space, riparian corridors and stormwater infrastructure may also be confirmed through precinct planning, at which point further landowner consultation will occur.

Consideration of development applications within each of the zones will need to ensure consistency with a Precinct Structure Plan that demonstrates how the planning outcomes of each precinct will be delivered. The Precinct Structure Plan will be adopted by the Minister under provisions contained in the proposed SEPP.

## 3.2 Enterprise Zone

The intent of this zone is to permit land uses complementing the functions of the city and the Airport as a 24 hour transport hub. The zone will enable uses typically associated with employment lands, supporting a range of commercial and industrial sectors that have synergies with the Airport.

The application of the zone across the precincts will broad enough to accommodate different outcomes depending on the precinct structure plan. For example:

- in the Badgerys Creek Precinct, the zoning will encourage and support industrial activities such as local distribution premises and light industry;
- in the Agribusiness Precinct, the zoning will enable a transition from Agribusiness uses to a range of commercial and industrial uses; and
- in the Aerotropolis Core, the zoning will focus on advanced manufacturing research and development, industry led educational facilities and facilitate the development of a cutting-edge aerospace and defence industries.

The Enterprise Zone may contain a mix of retail activity including shops, large format retail (with active street frontages), educational facilities, advanced manufacturing, commercial and industrial land uses. These activities will be linked to new and existing residential communities via high quality transport links including proposed Sydney Metro Greater West and connecting road network that are aligned to maximise permeability and move people around as efficiently as possible. Residential accommodation will not be permissible within this zone.

As significant portions of this land will be located inside the ANEC 20, it is necessary to protect the community from aircraft noise. This will be achieved by prohibiting sensitive land uses such as schools, hospitals, seniors housing and childcare facilities within the ANEC 20. Other specific noise and planning mitigation strategies will be determined as part of establishing precinct planning controls including the necessary assessment under Australian Standards AS2021.

NASF Guideline I (Public Safety Areas), lists uses that are incompatible within public safety areas. These uses include storage or manufacture of flammable, explosive or noxious materials. As the public safety areas will only apply to a portion of the Enterprise Zone, hazardous industries and liquid fuel depots will be permitted within that zone, subject to a merit-based assessment.

## 3.3 Mixed Use Zone

The Mixed Use Zone will apply to areas where there is a focus on the delivery of both employment and higher density residential uses. The application of the zone will include local centres that provide for social services and art and cultural facilities and are located in areas of high amenity with access to high frequency public transport, open space, parks and waterways, pedestrian and cycle linkages and public squares. These areas will be highly connected, containing a legible street network to provide direct, safe, cool and convenient pedestrian, cycle and public transport access. The land uses in the Mixed Use Zone will contain a mix of commercial uses, including retail, such as restaurants, cafes, offices, medical and social services, and places of entertainment, along with residential (as appropriate).

The Mixed Use Zone will be applied to ensure residential land uses at the Aerotropolis are located outside the ANEC 20 contour. This restriction is one of the most important factors in protecting the future Aerotropolis community from any noise-related impacts of the Airport and to secure the 24-hour operation viability of the Airport.

The proposed SEPP will contain specific provisions to recognise the existing zoning of the Sydney Science Park within the Northern Gateway Precinct (Lots 2, 3 and 4, DP1242470, and Lot 1 DP221182) until precinct planning is completed as described in Section 7.4.

Commonwealth-owned land located at Bringelly and zoned SP2 under the Liverpool Local Environmental Plan 2008, is proposed to be zoned for mixed use purposes as the Commonwealth has agreed to enable the development of this land to help build the Western Parkland City.

## 3.4 Environment and Recreation Zone

The Environment and Recreation Zone will be applied to the Wianamatta-South Creek Precinct and other areas throughout the Aerotropolis as per the draft Land Zoning Map. The corridor created by Wianamatta-South Creek throughout the Aerotropolis is a central defining feature of the Western Parkland City. The protection of key landscape features and high value areas suitable for achieving amenity, recreation and liveability outcomes is essential to achieving the NSW Government's vision for the Western Parkland City being set on a 'Blue-Green Grid'.

The Environment and Recreation Zone will apply to all land affected by the 1:100 chance per year flood planning level. The zone will include vegetation protected under the existing Biodiversity Certification program and the Strategic Assessment program and all Cumberland Plain Conservation Plan vegetation. The zone will also apply to certain lands along Thompsons Creek, within the Aerotropolis Core Precinct, to create opportunities for amenity and recreation. Land along Thompsons Creek is proposed to be publicly acquired to establish a regional park, as mapped on the draft Land Reservation Acquisition Map.

Riparian corridors will be required to be retained and rehabilitated to support the 'Blue-Green Grid'. Precinct planning will assess the status of riparian corridors in line with Water NSW's 'Guidelines for riparian corridors on waterfront land' and make recommendations for their future rehabilitation, ownership and management.

As noted in previous sections of this Discussion Paper, parts of the Environment and Recreation Zone to be zoned for environmental conservation will include additional planning controls preventing the clearing of high quality native vegetation or land uses and other activities not considered consistent with aims of the zone.

## 3.5 SP1 Special Activities

The SP1 Zone provides for special land activities, such as established public infrastructure not provided for in other zones and to minimise any adverse impacts of the development on surrounding lands.

The Airport and associated land under Commonwealth ownership are to be zoned SP1 Special Activities under the proposed SEPP. This will support the long-term protection of the land to facilitate the future and continued operation of an international airport in Western Sydney. While a zone is identified in relation to the Airport site and associated land under Commonwealth ownership, the airport site is subject to the planning regime contained in the *Airports Act 1996* (Cth).

## 3.6 SP2 Infrastructure Zone

The SP2 Infrastructure Zone identifies land required for infrastructure purposes, and to ensure compatible adjacent development.

The SP2 Infrastructure Zone will apply to existing classified State roads, as identified in the relevant Local Environmental Plan and include:

- The Northern Road;
- Bringelly Road;
- Elizabeth Drive; and
- Mamre Road.

Co-location of public infrastructure such as transport corridors and utilities will be encouraged to reduce impact on land requirements and efficiently utilise land acquired by Government.

## 3.7 Agribusiness Zone

The Agribusiness Zone will permit agribusiness activities within the Agribusiness Precinct of the Aerotropolis. The Agribusiness Precinct is located to the western edge of the Airport and supports the long-term retention of existing agricultural lands and the growth of new agriculture and agribusiness opportunities in the Aerotropolis and Western Parkland City. The development of agriculture and agribusiness so close to the Airport requires design controls to ensure land uses are compatible with Airport operations.

While this zone is proposed to apply to the Luddenham Village the village will not necessarily be limited to Agribusiness activities. The future vision, role and function of the village will be further explored during precinct planning.

Residential housing will be permitted in this zone outside of the ANEC/ANEF 20 and above contours.

## 3.8 Proposed Land Use Table

#### **Enterprise Zone**

#### 1. Objectives:

- To ensure a range of uses that enable successful aerospace and defence industries.
- To manage the transition of land from non-urban uses to employment uses
- To support the development of well-planned and serviced new urban communities in accordance with the Precinct Indicative Layout Plan.
- To safeguard land used for non-urban purposes from development that could prejudice the use of the land for future commercial land use purposes.
- To encourage a precinct built around professional services, high technology, food production and processing, health and education and creative industries.
- To ensure that land which has the potential to impact environmental conservation areas is developed appropriately and enhance biodiversity outcomes for the Precinct.
- To protect the operations of the Airport, including 24-hour operations, and provide appropriate protections for the community.
- Ensure there are no sensitive land uses (such as residential, aged care, early education and childcare, educational establishments and hospital amongst other uses) located within the ANEC 20 and above contours.
- Ensure that land uses up to the ANEC 20 contour are subject to appropriate design and construction standards to reduce any potential for airport noise impacts.
- Prevent potential conflicts between airport operations and land use/development outcomes.

#### 2. Permitted without consent:

• Nil.

#### 3. Permitted with consent:

- Animal boarding or training establishment
- Building identification sign
- Car park
- Centre-based child care facility
- Commercial premises
- Community facility
- Depot
- Educational Establishment
- Electricity generating works
- Emergency Services Facility
- Entertainment facility
- Environmental protection works
- Flood mitigation works
- Freight transport facility
- Function centre
- Funeral home
- Garden centre
- General industry
- Hardware and building supplies
- Hazardous industries

- Health services facility
- Hotel or motel accommodation
- Industrial retail outlet
- Industrial training facility
- Information and education facility
- Landscape material supplies
- Light industry
- Liquid fuel depot
- Neighbourhood shop
- Passenger transport facility
- Places of public worship
- Public administration building
- Pubs
- Recreation area
- Recreation facility (indoor)
- Recreation facility (major)
- Registered club
- Research station
- Restricted premises
- Road
- Service station
- Serviced apartment
- Sex services premises
- Signage
- Storage premises
- Telecommunications facility
- Transport depot
- Truck depot
- Vehicle body repair station
- Vehicle body repair workshop
- Vehicle sales or hire premises
- Veterinary hospital
- Warehouse or distribution centre
- Waste or resource management facility
- Water supply system
- Water treatment facility
- Wholesale supplies

#### 4. Prohibited:

• Any development not specified in item 2 or 3.

### Mixed Use Zone

#### 1. Objectives:

- To manage the transition of land from non-urban uses to a range of urban uses.
- To encourage the development of well-planned and well-serviced new urban communities in accordance with the Precinct Indicative Layout Plan.
- To ensure a range of uses are located in a way that are consistent with the strategic planning for the Western Sydney Aerotropolis.
- To safeguard land used for non-urban purposes from development that could prejudice the use of the land for future urban purposes.
- To ensure that land adjacent to environmental conservation areas is developed in a way that enhances biodiversity outcomes for the Precinct.
- To protect the operations of the Airport, including 24-hour operations, and provide appropriate protections for the community.
- To ensure there are no sensitive land uses (such as residential, aged care, early education and childcare, educational establishments and hospitals amongst other uses) located within the ANEC 20 and above contours.
- To ensure that land uses up to the ANEC 20 contour are subject to appropriate design and construction standards to reduce any potential for airport noise impacts.

#### 2. Permitted without consent:

- Home business
- Home occupation
- Home-based child care

#### 3. Permitted with consent:

- Attached dwelling
- Backpackers' accommodation
- Boarding house
- Business identification sign
- Car park
- Commercial premises
- Community facility
- Early education and care facility
- Educational Establishment
- Electricity generating works
- Emergency Services Facility
- Entertainment facility
- Environmental facility
- Environmental protection works
- Flood mitigation work
- Function centre
- General industry
- Group home
- Health services facilities
- Home industry
- Hostel
- Hotel or motel accommodation
- Industrial training facility

- Information and education facility
- Light industry
- Multi dwelling housing
- Passenger transport facility
- Places of public worship
- Public administration building
- Pubs
- Recreation areas
- Recreation facility (indoor)
- Recreation facility (major)
- Registered club
- Residential care facility
- Residential flat building
- Respite day care centre
- Road
- Semi-detached dwelling
- Service station
- Serviced apartment
- Sex services premises
- Shop top housing
- Storage premises
- Telecommunications facility
- Vehicle repair station
- Veterinary hospital

#### 4. Prohibited:

• Any development not specified in item 2 or 3

## Environment and Recreation Zone

#### 1. Objectives:

- To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- To prevent development that could destroy, damage or otherwise have an adverse effect on ecological or recreational values.
- To enable land to be used for public open space or recreational purposes.
- To provide a range of recreational settings and activities and compatible land uses.
- To ensure that development is secondary and complementary to the use of land as public open space, and enhances public use, and access to, the open space.
- To encourage, where appropriate key regional pedestrian and cycle connections.

#### 2. Permitted without consent:

- Environmental protection works
- Flood mitigation work

#### 3. Permitted with consent:

- Environmental facility
- Information and education facility
- Kiosk
- Recreation area
- Recreation facilities (outdoor)
- Water recreation structureRoad

#### 4. Prohibited:

Any other development not specified in item 2 or 3

The broad application of the Environment and Recreation Zone will permit both environmental and recreational land uses. However, land that is of high biodiversity value and intended to be preserved for environmental conservation will benefit from additional planning controls in the proposed SEPP which are intended to prevent the clearing of vegetation or broader uses and activities that are not consistent with this object. These areas will be mapped.

### Infrastructure Zone (SP1)

#### 1. Objectives:

- To provide for special land uses that are not provided for in other zones.
- To facilitate development that is in keeping with the special characteristics of the site or its existing or intended special use, and that minimises any adverse impacts on surrounding land.

#### 2. Permitted without consent:

• Nil (noting that developments on the Airport Site are subject to the Airports Act regime).

#### 3. Permitted with consent:

• The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose (noting that developments on the Airport Site are subject to the Airports Act regime).

#### 4. Prohibited:

 Any development not specified in item 2 or 3 (noting that developments on the Airport Site are subject to the Airports Act regime).

### Infrastructure Zone (SP2)

#### 1. Objectives:

- To provide for infrastructure and related uses.
- To prevent development that is not compatible with or that may detract from the provision of infrastructure.

#### 2. Permitted without consent:

• Nil

#### 3. Permitted with consent:

• The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose.

#### 4. Prohibited:

Any development not specified in item 2 or 3

### Agribusiness Zone

#### 1. Objectives:

- To encourage sustainable and high technology Agribusiness and Agricultural production with links to food production and processing.
- To encourage diversity in Agricultural and Agribusiness enterprises and systems appropriate for the area.
- To encourage the development of integrated food and supply chain related industries.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To maintain and enhance natural rural character, biodiversity and sustainability of the area;
- To allow for non-agricultural land uses that will not restrict the use of other land in the locality for agricultural purposes.
- To allow for the sustainable and holistic development of agritourism product and experiences.
- To protect the operations of the Airport, including 24-hour operations, and provide appropriate protections for the community.
- Ensure there are no sensitive land uses (such as residential, aged care, early education and childcare, educational establishments and hospitals amongst other uses) located within the ANEC 20 and above contours.
- Ensure that land uses up to the ANEC 20 contour are subject to appropriate design and construction standards to reduce any potential for airport noise impacts.

#### 2. Permitted without consent:

Home occupation

#### 3. Permitted with consent:

- Animal boarding or training establishment
- Business premises
- Car park
- Community facility
- Earthworks
- Educational establishment
- Eco-tourist facility
- Electricity generating works
- Environmental protection works
- Environmental facility
- Farm building
- Farm stay accommodation
- Flood mitigation work
- Food and drink premises
- Freight transport facility
- Function centre
- Garden centre
- Health services facility
- Industrial training facility

- Information and education facility
- Intensive plant agriculture
- Landscaping material supplies
- Light industry
- Market
- Places of public worship
- Plant nursery
- Recreation area
- Research station
- Roadside stall
- Rural industry
- Rural supplies
- Rural workers' dwelling
- Service station
- Telecommunications facility
- Warehouse or distribution centre
- Water recycling facility
- Water supply system

#### 4. Prohibited:

• Any development not specified in item 2 or 3

## 3.9 Additional Permitted Uses

Future precinct planning will enable the inclusion of additional permitted uses for particular precincts if required. The proposed SEPP will ensure additional uses can be included as they are identified through an amendment to the SEPP.

## 3.10 Existing use rights

Land uses within the Aerotropolis will gradually transition from rural to urban land uses envisaged in the new zones.

The EP&A Act includes protections for uses that have been established with appropriate approvals. These are known as 'existing use rights' and allow existing uses to continue to operate while preventing any further intensification of those same uses.

The proposed rezoning will not negatively affect farming operations, including extensive agricultural uses, if such uses have lawfully commenced prior to the commencement of the proposed SEPP.

## Part 4 – Precinct specific controls

## 4.1 Wianamatta-South Creek the central spine of the Blue-Green Grid

Wianamatta-South Creek is at the heart of the Western Parkland City. Wianamatta is the original name for South Creek and comes from the Darug language meaning a creek where mothers meet. It is a significant cultural and spiritual place for the Darug people. Rapid and sustained growth in the Western Parkland City, particularly in the Growth Areas close to Wianamatta-South Creek and tributaries such as Kemps Creek, Lowes Creek and Badgerys Creek, will see the population of the Western Parkland City grow to well over 1.5 million by 2056.

The Greater Sydney Commission's *A Metropolis of Three Cities*' vision for the Wianamatta-South Creek Corridor is to transform water management, while using the creek corridor to form the spine of the Western Parkland City. This conceptualises a green corridor that will provide sites for parks, walking and cycling trails, community, leisure and cultural facilities, and ecological services including nutrient capture, urban cooling, and local habitat. To create a cool and green Western Parkland City, the Aerotropolis needs to be structured around the landscape with Wianamatta-South Creek and its tributaries acting as the defining structural element.

Areas of higher density and high-quality public spaces will be orientated towards waterways, making the most of this green infrastructure. This is important to deliver the best amenity and lifestyle for the residents of the Parkland City, challenging the traditional transit-oriented approach to development.

An integrated approach to both green and transport related infrastructure is therefore paramount to balance growth with supporting infrastructure, ensuring the Parkland City vision is realised as the region transforms over time.

To achieve the Blue-Green Grid, the following principles for planning and development in the Aerotropolis will be identified in the proposed SEPP and accompanying precinct planning:

- 1. Planning for the Aerotropolis will start with and be guided by the principles of Country, suitably identifying, protecting, interpreting and integrating Country considerations into the future of the Aerotropolis;
- 2. Wianamatta-South Creek and its tributaries will be protected from urban runoff, by retaining the hydrologic characteristics of the catchment and providing water in the landscape for amenity, urban cooling, and high quality green space;
- 3. The provision of regional parks to support the Aerotropolis will be investigated;
- 4. Suitably sized and located farm dams will be protected to support water retention in the landscape;
- 5. South Creek's waterway health will be protected and managed to achieve the waterway health outcomes set out in *Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions;*
- 6. Remnant vegetation, tree canopy and other areas of significant vegetation will be identified and protected, enabling planning within the Aerotropolis to be built around landscape elements;
- 7. Ridges will be protected from inappropriate development to preserve view lines and enable provision of open space for active and passive recreation; and
- 8. When identifying suitable land uses, particularly those in centres, development will be oriented to access and face green spaces and water, to improve amenity and liveability.

## 4.2 Wianamatta-South Creek Precinct Boundary and Flood Planning Levels

The proposed SEPP utilises a different boundary for the Wianamatta-South Creek Precinct to the Stage 1 Land Use and Infrastructure Implementation Plan. The new boundary no longer uses the Probable Maximum Flood line to determine the precinct, instead using the 1 in 100 chance per year flood planning level.

The proposed SEPP will define the flood planning level as the level of the 1 in 100 chance per year flood (1 in 100 Annual Exceedance Probability flood), plus 0.5 metres freeboard. Urban development on flood prone land above the flood planning level will be permitted, subject to risk-based flood-related development controls, encouraging more intensive development in areas of lower flood risk. No urban land uses, including additional dwellings, will be permitted on land below the flood planning level. Areas of the South Creek floodplain located below the 1 in 100 chance per year flood level as mapped on the draft Flood Extent Map are proposed for flood-compatible land uses and activities such as recreation and public spaces.

Alterations to flood storage capacity and flood behaviour through filling and excavation or other earthworks is not desirable. Under the proposed SEPP these types of works will not be permitted below the flood planning level and will be discouraged in other areas of the floodplain. This approach is consistent with the principles set out in the Western City District Plan (Greater Sydney Commission, March 2018, p.137).

Flood data used to prepare the draft Flood Map and to inform the proposed Environment and Recreation Zone is based on current flood data sourced from Penrith and Liverpool City Councils. Precinct planning will further investigate the flood extent across the Aerotropolis and inform the water cycle management strategy that will confirm land needed for water detention and treatment.

## 4.3 Rossmore, Kemps Creek, North Luddenham and Dwyer Road Precincts

The development of the Aerotropolis is going to occur incrementally over many years. The first stage of precinct planning for the Aerotropolis will not include planning for the Rossmore, Kemps Creek, North Luddenham and Dwyer Road precincts. The existing zoning in the applicable local environmental plans (LEPs) will still apply to these areas and inform land uses that can occur until precinct planning is undertaken. One exception is Kemps Creek where certain land identified as being below the 1:100 year flood level will be rezoned to the proposed Environment and Recreation Zone along with certain properties identified as Public Recreation – Regional under the Growth Centres SEPP.

Under the proposed SEPP, master planning provisions outlined in Part 9 of this discussion paper will not apply to these precincts until the land is rezoned under the SEPP. This approach will allow existing rural activities to continue to operate, recognising the longer-term occupation and use of this land for rural-based uses, along with its economic contribution.

Extensive agriculture as a use that is permitted without consent in these precincts creates potential risks in terms of compatibility with the Airport. Airport safeguarding approaches by Western Sydney Airport will include investigations will be undertaken to determine the application of extensive agriculture as a permissible use in these precincts.

## 4.4 Mamre Road Precinct

The Mamre Road Precinct sits within the Western Sydney Employment Area (WSEA) SEPP while also being located within the proposed Western Sydney Aerotropolis Plan area.

A discussion paper and rezoning package proposing the rezoning of the Mamre Road Precinct to industrial has been released to ensure the release of more large floor plate industrial land in Western Sydney. Under the proposed SEPP planning controls for the precinct will remain within the WSEA SEPP.

Retention of the Mamre Road Precinct within the Western Sydney Aerotropolis Plan boundary will allow the Aerotropolis principles to be achieved and ensure quality outcomes for the Wianamatta-South Creek interface.

## Part 5 – Proposed Maps

Maps proposed to give effect to the land use and environmental controls within the Aerotropolis as listed in Appendix 2. Detailed development controls will be inserted into the proposed SEPP upon completion of precinct planning. These maps may include (but are not limited to) a height of buildings, floor space ratios and residential densities, and are therefore not included in the following list.

# Part 6 – Relationship of the proposed SEPP to relevant statutory provisions, environmental planning instruments and strategic planning documents

Preparation of the Aerotropolis Planning Framework has included consideration to the operation of existing SEPPs and strategic planning documents.

## 6.1 SEPPs applying to the Aerotropolis

As the proposed SEPP creates new zones that are not necessarily aligned with the Standard Local Environmental Plan, certain SEPPs, such as the Infrastructure; Educational Establishments and Child Care Facilities; and Exempt and Complying Development Codes SEPP, would not automatically apply. The proposed SEPP will contain amendments to ensure relevant considerations and planning controls in these SEPPs will apply in the Aerotropolis. A list of the potential SEPPs for consideration are listed in Appendix 3.

## 6.2 Federal and State Biodiversity Legislation

Some land within the Aerotropolis is subject to the Biodiversity Certification Order made in 2007 under the State biodiversity legislation, which confers biodiversity certification on land within the South West and North West Growth Centres. The remaining land is subject to the CPCP, which will be finalised in 2020. Following confirmation of the commitments within these programs, land found to have conservation values will be zoned Environment and Recreation.

## 6.2.1 Biodiversity Certification Order 2007

The land within the Western Sydney Aerotropolis subject to the Biodiversity Certification Order 2007 requires the ongoing protection of existing native vegetation under the Order. This scheme was given effect under the new biodiversity and land management framework, which means that the agreement and any existing obligations will continue under the *Biodiversity Conservation Act 2016*.

Biodiversity certification is an upfront assessment of an area's biodiversity values and development potential. When an area of land is biocertified, it switches off the need for a site-by-site assessment of biodiversity impacts when development applications are made under the EP&A Act, but only if they comply with any relevant biodiversity measures.

The Biodiversity Certification Order 2007 will continue to apply to affected lands in the Western Sydney Aerotropolis through the continued application of the Growth Centres SEPP. This will be achieved in the proposed SEPP through additional planning controls that will prevent the clearing of existing native vegetation. Detailed assessments will also be undertaken as part of precinct planning to confirm the presence of existing native vegetation and ensure conservation status is granted where required to satisfy commitments made to the State Government under the program.

The Commonwealth Strategic Assessment Program 2012 (under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)) is also relevant to the existing biocertified lands in the Aerotropolis. The existing provisions of the Growth Centres SEPP relating to the protection of matters of national environmental significance, including Cumberland Plain Woodland, are critical to the Commonwealth's Strategic Assessment approval under the EPBC. Application of the Growth Centres SEPP to the Western Sydney Aerotropolis will continue for the purposes of retaining the Strategic Assessment approval. To ensure State commitments under the Commonwealth program are met, detailed assessments will be undertaken as part of precinct planning to confirm the presence of Cumberland Plain Woodland and ensure its continued protection within the Aerotropolis.

### 6.2.2 Cumberland Plain Conservation Plan

A new strategic bio-certification process is being implemented for parts of the Aerotropolis, through the preparation of the *Cumberland Plain Conservation Plan* (the CPCP), which will be finalised in 2020. The CPCP is a strategic conservation plan for Western Sydney and delivers a landscape scale approach to assessing and protecting biodiversity. Critical to the CPCP approach is the identification and avoidance of areas of high value biodiversity early in the planning process. Once areas of high value are avoided, the remaining impacts to biodiversity from future development are assessed and actions/strategies identified to minimise and mitigate impacts on threatened plants and animals. The CPCP will address impacts on biodiversity from urban growth through a regional Conservation Program that includes commitments and actions designed to improve ecological resilience and function over the long-term.

It will be a requirement of precinct planning in the Aerotropolis that urban capable footprints be consistent with the areas of certified land and avoided lands as identified by the CPCP process. Development that is allowed under the proposed SEPP will need to be consistent with the biodiversity conservation measures and commitments identified in the CPCP, including requirements to mitigate threats to biodiversity and minimise impacts to adjacent conservation lands. This will be achieved through planning controls which both seek to preserve vegetation required for environmental conservation and minimise the impacts of development in areas adjacent to lands reserved for conservation purposes.

Areas identified through the CPCP program as avoided lands due to having conservation value are proposed to be zoned Environment and Recreation Zone under the proposed SEPP.

Conservation values across the Aerotropolis are mapped in Figure 2.

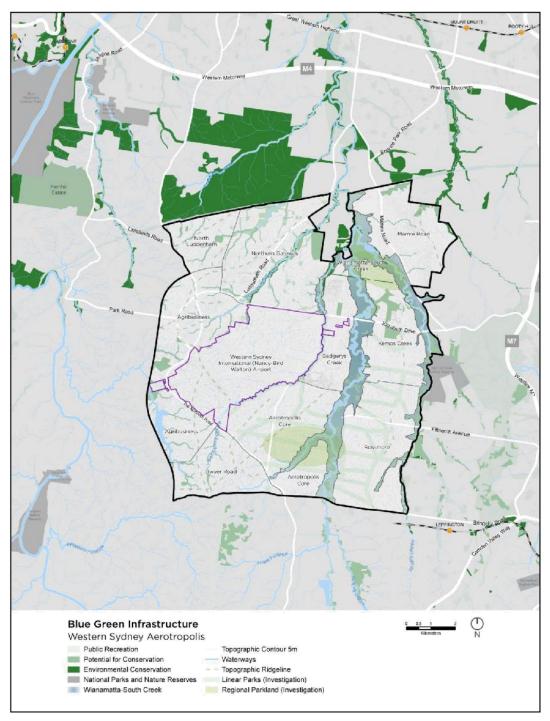


Figure 2 Green Infrastructure

NSW Department of Planning, Industry and Environment | 28

## Part 7 – Amendments to other environmental planning instruments

A range of amendments are required to the existing planning framework to enable the Western Sydney Aerotropolis SEPP to have effect.

## 7.1 Amendments to State Environmental Planning Policy (Sydney Region Growth Centres) 2006

It is proposed to amend the Growth Centres SEPP to clarify it will continue to apply to the Aerotropolis only for the purposes of retaining the Biodiversity Certification and Strategic Assessment programs. The land to which the Growth Centres SEPP applies is mapped in **Figure 3**, below.

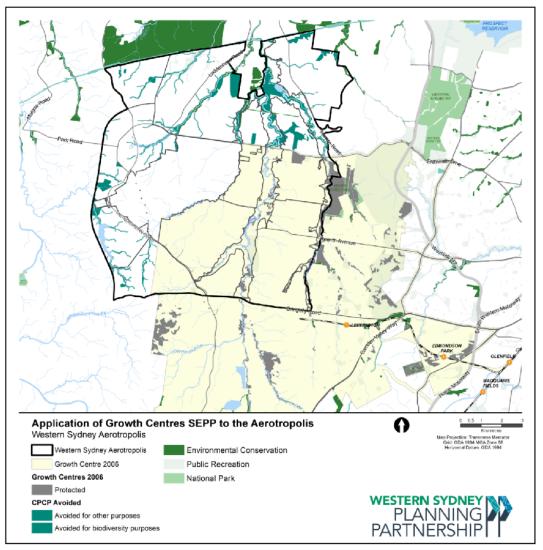


Figure 3: Area within the Western Sydney Aerotropolis to which the Growth Centres SEPP applies

NSW Department of Planning, Industry and Environment | 29

## 7.2 Amendments to State Environmental Planning Policy (Western Sydney Employment Area) 2009

Part of the Aerotropolis lies within State Environmental Planning Policy (Western Sydney Employment Area) 2009 (WSEA SEPP). With the exception of the Mamre Road Precinct, an amendment to the Land Application Map under the WSEA SEPP will occur to excise the balance from the application of that SEPP. These areas are mapped in **Figure 4**, below.

Rezoning of the Mamre Road Precinct will occur under the WSEA SEPP recognising the high level of industry demand for employment and industrial land in Western Sydney.

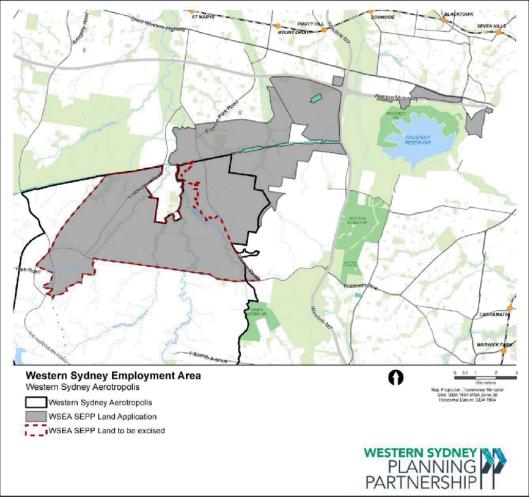


Figure 4: Map showing land to be removed from the WSEA SEPP and included in the Western Sydney Aerotropolis SEPP

## 7.3 Amendments to Liverpool Local Environmental Plan (LEP) 2008

The following changes are proposed to the Liverpool LEP 2008 to support the proposed SEPP:

- all planning controls for land within the Liverpool LGA that are within the Aerotropolis Core, Wianamatta-South Creek, Agriculture and Agribusiness and Badgerys Creek precincts are to be repealed once the precincts are rezoned; and
- existing planning controls within the Liverpool LEP will continue to apply to all land within the Rossmore and Kemps Creek precincts until these areas are rezoned.

## 7.4 Amendments to Penrith Local Environmental Plan (LEP) 2010

The following changes are proposed to the Penrith LEP 2010 to support the proposed SEPP:

- all planning controls for land within the Penrith LGA that are within the Wianamatta-South Creek, Agriculture and Agribusiness, and Badgerys Creek precincts are to be repealed once the precincts are rezoned; and
- all planning controls for land within the Penrith LGA that are within the Northern Gateway precinct are to be repealed once the precinct is rezoned, with the exception of 565-609 Luddenham Road, Luddenham (Sydney Science Park). Whilst this site is proposed to be rezoned for mixed use purposes, the existing planning controls within the *Penrith LEP 2010* and Development Control Plan will continue to apply until a precinct structure plan for the area has been prepared. Until that occurs, the underlying LEP controls will continue to apply to the Sydney Science Park.
- existing planning controls within the Penrith LEP will continue to apply to all land within the North Luddenham and Kemps Creek precincts until these areas are rezoned.

## Part 8 – Planning Pathways

## 8.1 Precinct planning

The proposed SEPP will set up a framework for the creation of precinct plans. This will include, but not be limited to, what they should contain and who will prepare them. Once finalised and published, the proposed SEPP will also require all DAs to be consistent with approved precinct plans.

Each precinct plan will include a Precinct Structure Plan that will establish spatially through a map, the planning and land use principles to be met from development in the precinct. The proposed SEPP will be specific that development cannot occur until a Precinct Structure Plan has been completed and incorporated into the proposed SEPP.

## 8.2 Development Pathway

As part of the planning for the new Aerotropolis, a planning framework may enable development applications to be submitted prior to the completion of and/or concurrently with precinct planning. To avoid ad-hoc and out of sequence development this will be controlled through a specific provision that sets out what a consent authority must consider, for example, the Western Sydney Aerotropolis Structure Plan or alternately it may encompass mechanisms like master plans. The key focus of the proposed planning pathway controls will be to ensure that development does not occur out of sequence or until precinct planning is completed and development exhibits design excellence.

## 8.3 Development applications (DAs) submitted prior to precinct planning

The proposed SEPP will require for DAs submitted after notification of the proposed SEPP but prior to precinct planning being finalised, that the consent authority cannot grant consent unless they are satisfied of certain matters have occurred to prevent ad hoc and unplanned development. These considerations will include requirements to:

- a) consider whether the proposal:
  - i. is consistent with the Western Sydney Aerotropolis Plan published by the Department on its website;
  - ii. is incompatible with land uses in any environmental planning instrument applying (or proposed to apply) to the land, or would result in fragmentation of landholdings,
  - iii. makes provision for or with respect to infrastructure services and does not hinder the orderly and coordinated provision of infrastructure across the Aerotropolis,
- b) has the concurrence of the Secretary of the Department and relevant concurrences from State Government agencies.

## 8.4 Master plans

The proposed SEPP will include a framework to establish an optional master planning process. Under limited circumstances, landowners will be able to provide granular details of land use allocation and arrangements across a site, which if approved may lead to the use of other planning pathways, for example complying development. Their key role is to build on the level of detail shown on the Western Sydney Aerotropolis Plan, or relevant Precinct Plan.

Master plans must address any specific requirements issued by the Secretary of the Department in for a site or proposal. These requirements might set minimum site area thresholds, concurrences that must be obtained and any environmental investigations required. It will also require that the proposal align with the Western Sydney Aerotropolis Plan, including that the site has necessary

services and infrastructure available to function. Governance arrangements will be included in the proposed SEPP confirming procedural functions and approval authority for master plans.

It is proposed that master planning will only be available for sites with a minimum site area of 100 hectares and could enable site investigations to be acknowledged prior to and concurrently with precinct planning. It could also be utilised following the completion of the precinct planning.

# 8.5 Complying and exempt development

Specific development types and activities only to be found in the Aerotropolis will be able to utilise complying and exempt development provisions if the development aligns with applicable land use zones, and the compatibility of potential development types with airport safeguarding operations. The proposed SEPP will contain the framework for complying and exempt development so that new types development can be added as part of the precinct planning process.

# 8.6 Staging and sequencing of development

Precinct plans will include a staging plan that proposes the staging and sequencing of infrastructure provision to inform the roll out of development. This will ensure that the delivery of infrastructure is aligned with growth. For example, a development proposal will be required to demonstrate that relevant regional roads required to facilitate development of a locality will be delivered in a logical and sequenced way and avoid ad-hoc proposals that result in highly fragmented patterns of development.

# Appendix 1 – List of State and local heritage items

ltem	Suburb	Name	Address	Property Description	Significance
11	Luddenham	Luddenham Road Alignment	Luddenham Road	NA	Local
12	Badgerys Creek	McGarvie-Smith Farm	1793-1951 Elizabeth Drive	Lot 63, DP 1087838	Local
13	Kemps Creek	The Fleurs Radio Telescope Site	885 (a) Mamre Road	Lot 21, DP 258414	Local
14	Luddenham	Brick cottage	406 Park Road	Part Lot 2, Section A, DP 1452	Local
15	Luddenham	Brick cottage	21-55 Campbell Street	Lot 1, DP 972057	Local
16	Luddenham	Showground	428-452 Park Road	Part Lot 2, Section A, DP 1452	Local
17	Luddenham	Cottage	3065-3067 The Northern Road	Lot 1, DP 930372	Local
18	Luddenham	Weatherboard cottage	3075 The Northern Road	Lot 1, DP 304800	Local
19	Luddenham	Luddenham Progress Hall	3091-3095 The Northern Road	Lot 7, DP 1655	Local
110	Luddenham	Luddenham Uniting Church and Cemetery	3097-3099 The Northern Road	Lot 8, DP 1655	Local
111	Luddenham	St James Anglican Church and Cemetery	3101-3125 The Northern Road	Lot 2, DP 529143	Local

ltem	Suburb	Name	Address	Property Description	Significance
112	Luddenham	Luddenham Public School	The Northern Road	Lot 1, DP 194409	Local
113	Luddenham	Willmington Reserve	17 Jamison Street	Lot 7004, DP 93052	Local
114	Luddenham	Lawson's Inn Site (former The Thistle site)	2215 The Northern Road	Lots 3 and 7, DP 1234822	Local
115	Bringelly	Dwelling and Rural Lot - Mount Pleasant	3 Shannon Road	Lot 44, DP 581187	Local
116	Bringelly	Kelvin Park Group, including site landscaping, homestead, kitchen wing, servant's quarters, coach house, 2 slab barns and other works and relics (former "The Retreat", cottage vale, stables and lock-up)	30 The Retreat	Lots 2711– 2714, DP 1128906	State
117	Bringelly	Bringelly Public School Group, including schoolhouse and former headmaster's residence	1205 The Northern Road	Lot 50, DP 746911	Local
118	Rossmore	Bellfield Farm Group, including homestead, slab kitchen, slab cottage and smoke house	33 Rossmore Avenue West	Lot 1, DP 580979	State
119	Rossmore	Church of the Holy Innocents Group, including church and churchyard	Church Street	Lots 1-4, DP 117688	State

# Appendix 2 - Exhibition Maps

Map Name	Purpose
Land Application Map	Identifies the land to which the proposed SEPP applies
Precinct Boundaries Map	Identifies the boundaries of all precincts
Flood Map	Identifies land affected by the 1:100-year flood extent
Land Zoning Map	Identifies land use zoning and corridor reservation requiring concurrence from Transport for NSW
Land Reservation Acquisition Map	Identifies land to be acquired for road, utility or social infrastructure purposes
Australian Noise Exposure Concept Map	Identifies areas where restrictions on development may apply
Obstacle Limitation Surface Map	Identifies areas where appropriate development controls will be required to protect airspace (noting that additional surfaces will be declared in due course)
Wildlife Map	Establishes 3km, 8km and 13km distances from airport runways to minimise wildlife airstrike incidents
Lighting	Identifies developments to be referred to Western Sydney Airport and the relevant Commonwealth Authority for comment that incorporate lighting that could cause distraction to pilots
Windshear	Identifies developments to be referred to Western Sydney Airport and the relevant Commonwealth Authority for comment that are located in the windshear assessment area
Heritage Map	Identifies existing items of local and state heritage significance

# Appendix 3 – List of potential SEPPs to be amended to create consistent planning outcomes in the Aerotropolis

- a) State Environmental Planning Policy (Affordable Rental Housing) 2009
- b) State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
- c) State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017
- d) State Environmental Planning Policy (Exempt and Complying Development Codes) 2008
- e) State Environmental Planning Policy (Concurrences) 2018
- f) State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004
- g) State Environmental Planning Policy (Infrastructure) 2007
- h) State Environmental Planning Policy (Miscellaneous Consent Provisions) 2007
- i) State Environmental Planning Policy (State and Regional Development) 2011
- j) State Environmental Planning Policy (Sydney Region Growth Centres)2006
- k) State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017
- I) State Environmental Planning Policy (Western Sydney Employment Area) 2009
- m) State Environmental Planning Policy No 1 Development Standards
- n) State Environmental Planning Policy No 19 Bushland in Urban Areas
- o) State Environmental Planning Policy No 33—Hazardous and Offensive Development
- p) State Environmental Planning Policy No 44-Koala Habitat Protection
- q) State Environmental Planning Policy No 55 Remediation of Land
- r) State Environmental Planning Policy No 64—Advertising and Signage
- s) State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development
- t) State Environmental Planning Policy No 70—Affordable Housing (Revised Schemes)



Published by NSW Department of Planning, Industry and Environment

#### dpie.nsw.gov.au

Title: Draft Western Sydney Aerotropolis Development Control Plan 2019 - Phase 1

First published: December 2019

#### More information

#### © Crown Copyright, State of NSW through its Department of Planning, Industry and Environment 2019

© State of New South Wales through Department of Planning, Industry and Environment 2019. You may copy, distribute, display, download and otherwise freely deal with this publication for any purpose, provided that you attribute the Department of Planning, Industry and Environment as the owner. However, you must obtain permission if you wish to charge others for access to the publication (other than at cost); include the publication in advertising or a product for sale; modify the publication; or republish the publication on a website. You may freely link to the publication on a departmental website.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (December 2019) and may not be accurate, current or complete. The State of New South Wales (including the NSW Department of Planning, Industry and Environment), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own inquiries and rely on their own advice when making decisions related to material contained in this publication. While every reasonable effort has been made to ensure this document is correct at time of printing, the State of NSW, its agents and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance or upon the whole or any part of this document.

In keeping with the NSW Government's commitment to encourage the availability of information, you are welcome to reproduce the material that appears in Western Sydney Aerotropolis Draft Development Control Plan 2019 – Phase 1. This material is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0). You are required to comply with the terms of CC BY 4.0 and the requirements of the Department of Planning, Industry and Environment. More information can be found at: http://www.planning.nsw.gov.au/Copyright-and-Disclaimer.

# Version Control Table

Version Number	Changes Made	Date
1.0	Document Creation	December 2019

# Contents

1	Introduc	tion and Administration6
	1.1	Name of this Development Control Plan6
	1.2	Staging of this Development Control Plan
	1.3	Aims of this Development Control Plan6
	1.4	Adoption and Commencement7
	1.5	Where this Development Control Plan Applies7
	1.6	How to Use the Development Control Plan9
	1.7	Vision for the Aerotropolis9
	1.8	Western Parkland City – Landscape Led Approach10
	1.9	Relationship to other Documents (and Instruments)10
	1.10	Site Specific Development Control Plan12
	1.11	Development Application Process13
	1.12	Precinct Planning Principles15
2	Precinct	Vision and Place Statements
	2.1	Aerotropolis Core Precinct16
	2.2	Northern Gateway Precinct
	2.3	Wianamatta-South Creek Precinct19
	2.4	Badgerys Creek Precinct21
	2.5	Agribusiness Precinct
3	Natural E	Environment
	3.1	Biodiversity
	3.2	Native Vegetation
	3.3	High Ecological Value Waterways
4	Risk Min	imisation and Management
	4.1	Aviation Safeguarding
	4.2	Flooding
	4.3	Bushfire Hazard Management
	4.4	Odour
	4.5	Noise and Vibration
	4.6	Air Quality
	4.7	Acid Sulphate Soils and Salinity
	4.8	Contaminated Land
	4.9	Land Stability
5	General	Provisions
	5.1	Character and Place
		5.1.1 Urban Design
		5.1.2 Street Design and Network Layout
		5.1.3 Building Design
		5.1.4 Role and Hierarchy of Centres
		•

		5.1.5 Night Time Economy	46
		5.1.6 Digital Technology	47
		5.1.7 Urban Ecology and Sustainability	47
	5.2	Affordable Housing and Housing Diversity	49
	5.3	Services and Utilities	50
	5.4	Access and Carparking	50
6	Heritag	ge and Cultural Conservation	52
	6.1	Heritage Items	52
	6.2	Historic Archaeology	53
	6.3	Aboriginal Culture and Heritage	53
7	Subdiv	rision Design	55
8	Potent	ial Development Types	56
Dic	tionary		57
Ма	os and Pla	ans	73
Apj	pendices.		73

# 1 Introduction and Administration

# 1.1 Name of this Development Control Plan

This Development Control Plan (DCP) is the *Draft Western Sydney Aerotropolis Development Control Plan 2019* (also referred to as the DCP). It has been prepared pursuant to the provisions of Section 3.44 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

# **1.2 Staging of this Development Control Plan**

This Phase 1 DCP identifies the precinct planning principles, objectives and performance outcomes to allow precinct planning to progress.

The Phase 2 DCP will be released once precinct planning for the initial precincts within the Western Sydney Aerotropolis (Aerotropolis) is finalised. The Phase 2 DCP will identify:

- additional performance outcomes including specific precinct outcomes;
- acceptable solutions for all performance outcomes; and
- the objectives, performance outcomes and acceptable solutions for all development and subdivision types that are envisaged within the Aerotropolis (which have not been considered under this Phase 1 DCP).

# 1.3 Aims of this Development Control Plan

This DCP provides controls which guide development to achieve connectivity, liveability, productivity, and sustainability by:

- a) giving effect to the Greater Sydney Region Plan and Western City District Plan;
- b) encouraging development that responds to its context and is compatible with the Principles set out in the *Western Sydney Aerotropolis Plan* (WSAP);
- c) recognising and reinforcing the distinctive characteristics of the Western Parkland City;
- d) adopting the principles set in the Government Architect NSW's *Better Placed* and *Greener Places*;
- e) building upon the objectives and principles under the WSAP and *State Environmental Planning Policy (Western Sydney Aerotropolis) 2019* (Aerotropolis SEPP);
- f) protecting and enhancing the green and blue assets of the area;
- g) safeguarding the airport operations of Western Sydney International (Nancy-Bird) Airport (Airport);
- h) encouraging design that maintains and enhances the character and heritage significance of Aboriginal and European heritage items and heritage conservation areas; and
- i) encouraging ecologically sustainable development and reducing the impacts of development on the environment.

# 1.4 Adoption and Commencement

### 1.4.1 Commencement of the Development Control Plan

This DCP was adopted by the Secretary of the Department of Planning, Industry and Environment/ Minister for Planning and Public Spaces [TBD] on [insert date when adopted] and came into force on [insert date of commencement].

# 1.4.2 Savings and Transitional Provisions or Arrangements

This DCP only applies to Development Applications (DA) lodged on or after [insert date] (the rezoning of land within the initial precincts of the Aerotropolis).

# 1.4.3 Council's Planning Documents

The Liverpool Local Environmental Plan 2008 and Liverpool Development Control Plan 2008 (for land in the Liverpool Local Government Area) and the Penrith Local Environmental Plan 2010 and Penrith Development Control Plan 2014 (for land in the Penrith Local Government Area) do not apply to land once a land use zone has been applied in accordance with the Aerotropolis SEPP.

For parts of the Aerotropolis which have not yet been zoned by the Aerotropolis SEPP, all applicable Council local environmental plan and development control plan provisions continue to apply.

### 1.4.4 Review of the Development Control Plan

Penrith and Liverpool City Councils are required to jointly keep the Aerotropolis SEPP and this DCP under regular and periodic review. This process is to ensure that the Plans continue to be useful and relevant planning instruments.

The review is to be completed through the establishment of a Working Group with representatives from Penrith and Liverpool City Councils, relevant State government agencies, the Commonwealth Department of Infrastructure, Transport, Cities and Regional Development and Western Sydney Airport in attendance.

The review of the Aerotropolis SEPP and DCP is to be undertaken in at least five yearly intervals to:

- assess the continued relevance and responsiveness of the DCP's provisions; and the achievement of the objectives of the DCP;
- identify the need for changes to the provisions to better achieve the objectives of the DCP and changes in circumstances; and
- ensure the availability of adequate development capacity under the DCP's provisions.

# 1.5 Where this Development Control Plan Applies

# 1.5.1 Land Application

This Phase 1 DCP applies to the initial precincts as identified in the Aerotropolis SEPP and WSAP.

**Note**: This DCP does not apply to Commonwealth owned land.

### 1.5.2 Environmental Planning Instruments or Deemed Environmental Planning Instruments that Apply to this Development Control Plan

Applicants proposing to undertake development in the Aerotropolis, and the consent authority when assessing DAs, should refer to the following Environmental Planning Instruments:

- State Environmental Planning Policy (Western Sydney Aerotropolis) 2019;
- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy No 55—Remediation of Land;
- State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017;
- State Environmental Planning Policy No 1—Development Standards;
- State Environmental Planning Policy (Western Sydney Employment Area) 2009;
- State Environmental Planning Policy No 19—Bushland in Urban Areas;
- State Environmental Planning Policy No 21—Caravan Parks;
- State Environmental Planning Policy No 33—Hazardous and Offensive Development;
- State Environmental Planning Policy No 44-Koala Habitat Protection;
- State Environmental Planning Policy No 64—Advertising and Signage;
- State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development;
- State Environmental Planning Policy No 70—Affordable Housing (Revised Schemes);
- State Environmental Planning Policy (Affordable Rental Housing) 2009;
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004;
- State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017;
- State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004;
- State Environmental Planning Policy (Miscellaneous Consent Provisions) 2007;
- State Environmental Planning Policy (State and Regional Development) 2011; and
- State Environmental Planning Policy (Sydney Region Growth Centres) 2006.

### 1.5.3 Deferred Land

None at this stage.

# **1.6** How to Use the Development Control Plan

## 1.6.1 Structure of the DCP

The Phase 1 DCP is structured into eight chapters, containing objectives and performance criteria which must be considered if a DA is lodged in advance of precinct planning on land to which this DCP applies. Two chapters – Chapters 7 and 8, are provided as placeholders for work to be completed in the Phase 2 DCP.

As precinct planning is completed for each precinct, additional performance outcomes and acceptable solutions will be included in the Phase 2 DCP.

A site specific DCP can also be prepared by a proponent where they satisfy criteria specified within the Aerotropolis SEPP. These provisions, if approved, are to be incorporated into **Appendix 1** of the DCP.

### 1.6.2 Inconsistency between Provisions

In the event of an inconsistency between a precinct specific provision contained in chapter 2 and other provisions contained throughout the DCP, the precinct specific provisions prevail, except where site specific provisions exist (Refer to **Appendix 1**).

Site specific provisions, where they exist (**Appendix 1**), prevail over all DCP provisions in the event of any inconsistency.

### 1.6.3 Variations to Development Control Plan Acceptable Solutions

Any variations to DCP acceptable solutions controls must ensure consistency with the intent of the performance outcomes. Where alternative solutions are proposed, the proponent must provide a written variation statement which justifies how the development is meeting the intent of both the objectives and performance outcomes as listed in this DCP.

# 1.7 Vision for the Aerotropolis

The vision for the Aerotropolis is set out in the WSAP. As stated in that plan, the Aerotropolis will be Greater Sydney's next global gateway, built around the exciting new Airport. It will be an accessible, innovative 24-hour city, connected locally, nationally, globally and digitally, and a prime location for investment. As part of the Western Parkland City, the Aerotropolis will contribute to a significant number of jobs in Western Sydney, including specialisations in defence industries and aerospace, technology, advanced manufacturing, agribusiness, health, education and tourism, powered by next generation, sustainable energy infrastructure within a cool, green, parkland environment.

The WSAP will safeguard the 24-hour operating status of the Airport as land in the Aerotropolis develops and evolves while also including appropriate protections for the community.

The Aerotropolis will be informed and shaped by the narratives of Country to enable future landscapes to preserve and embody Aboriginal values and identity.

# 1.8 Western Parkland City – Landscape Led Approach

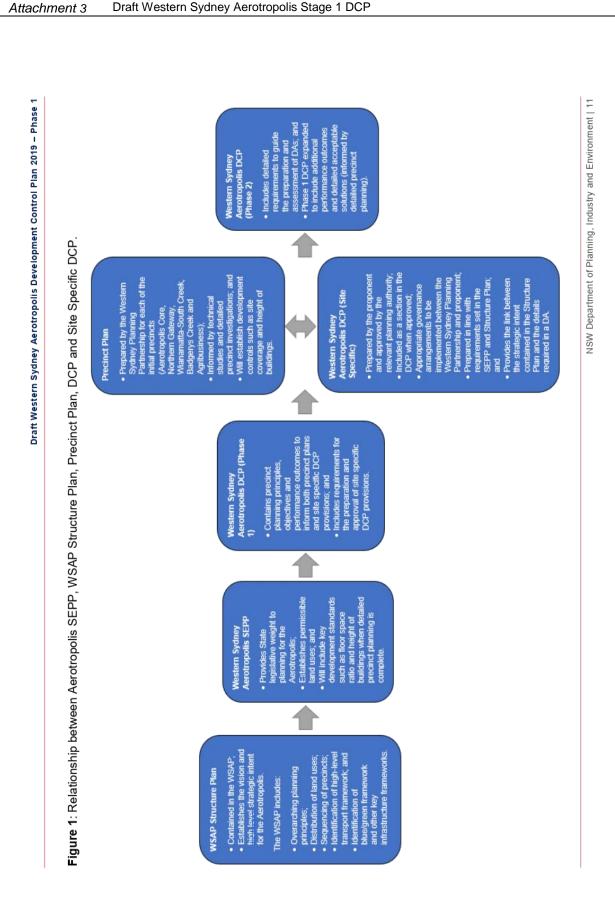
A new approach to planning and urban design is required to create a cool and green Western Parkland City that is smart, connected and engaged in the new economies to deliver the vision for the Greater Sydney Region Plan and Western City District Plan. To achieve this, a landscape-led approach will:

- Recognise regional blue and green infrastructure as a major 'city shaper' at the same level of significance as transport and social infrastructure.
- Adopt a 'landscape led' approach to planning and urban design as follows:
  - a) **start with Country** identify and build city structure and places from the landform and water system.
  - b) retain water in the landscape manage the waterway health of the Wianamatta-South Creek Catchment to enable the development of a functional blue-green structure for the Western Parkland City that contributes to flood management and human safety;
  - c) preserve, extend and restore the green develop a green infrastructure framework structured around the Wianamatta-South Creek green spine and tributaries where biodiversity land is conserved, along with remnant vegetation, water features and habitat linkages across ridges to link catchments, cultural values and view lines;
  - d) locate transit corridors within walking distance to landscape amenity align active and public transport networks within an easy walk from urban development and landscape amenity and safeguard proposed transit corridors to enable efficient delivery as growth progresses;
  - e) orientate urban development towards landscape amenity and connected to transit corridors – develop fine grain walkable neighbourhoods with creek-oriented schools, community facilities and hubs; and
  - adopt urban typologies ensure urban development retains water in the landscape using both public and private landscape spaces including streets to provide a high level of liveability.

# **1.9** Relationship to other Documents (and Instruments)

For strategic context, this DCP and subsequent amendments should be read in conjunction with the WSAP, Aerotropolis SEPP and Ministerial Directions 3.5 and 7.8.

**Figure 1** outlines the relationship between the Aerotropolis SEPP, WSAP, Precinct Plan, and DCP. It also identifies opportunities for proponents to lead the development of a site specific DCP. If approved, site specific DCPs will be incorporated into **Appendix 1** of the DCP.



# 1.10 Site Specific Development Control Plan

A proponent may prepare site specific DCP provisions where they wish to advance planning ahead of precinct planning being finalised. To seek approval to proceed to the preparation of site specific DCP provisions, criteria prescribed in the Aerotropolis SEPP must be satisfied.

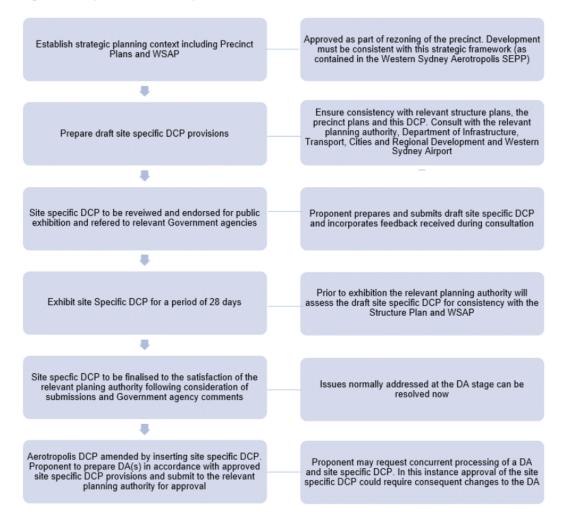
Once approved, site specific DCPs will be incorporated into **Appendix 1** of this DCP and **Figure 2** will be updated. **Figure 2** identifies the location of site specific DCPs.

Figure 2: Location of site specific DCPs.



Note: No site specific DCP(s) are currently incorporated.

#### Figure 3: Preparation of a site specific DCP



# 1.11 Development Application Process

A DA may be submitted with a draft site-specific DCP and assessed concurrently by Council. However, it is preferable that the site-specific DCP is approved prior to the preparation of the more detailed DA plans.

Each DA will be considered on its merits. Documentation required to be submitted includes, but is not limited to the following (refer to Penrith Council and Liverpool City Council website for complete list):

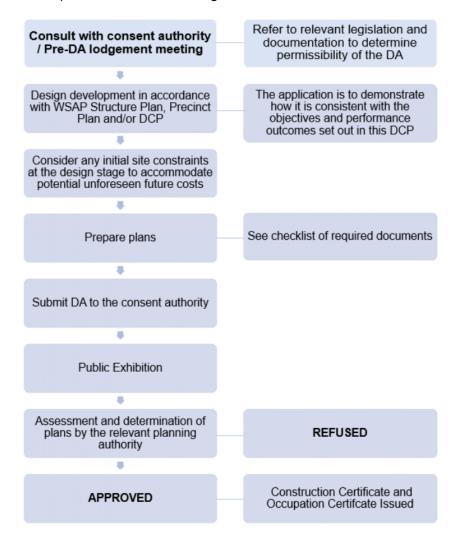
- Statement of Environmental Effects/Environmental Impact Statement;
- Architectural Plans (including Site Plan, Floor Plans, Elevation Plans and Section Plans, Schedule of Materials);
- Acoustic Report;
- Arborist Report;
- BASIX Certification/Building Sustainability Report;
- Building Code of Australia Compliance Report;
- Demolition Plan and Statement;
- Erosion/Sediment Control Plan;
- Flood Report/Flood Impact Assessment;
- Integrated Water Management Plan (incorporating internal and external water re-use);
- Integrated Land Use, Transport and Traffic Assessment Report;
- Aviation Safeguarding Assessment Report;
- Biodiversity Development Assessment Report;
- Geotechnical Assessment;
- Heritage Impact Statement/Archaeological Assessment/Connection to Country Strategy;
- Landscape Plans (Public and/or Private Domain);
- Noise Impact Assessment;
- Contamination Assessment;
- Water Quality Impact Assessment;
- Odour Assessment;
- Plan of Management/Security Management Plan;
- Reflectivity Assessment;
- Site and Soil Assessment Report;
- Shadow Diagrams;
- Social Impact Assessment;
- Stormwater Management Strategy;
- Survey Plan;
- View/Visual Impact Assessment;
- Waste Management Plan; and
- Wind Assessment.

Potential applicants should consult with the relevant planning authority before lodgement. Only by doing this can the specific information requirements for a particular type of development be confirmed. This will also ensure the relevant planning pathway applying to development can be clarified early in the process.

The relevant planning authority/consent authority may grant consent to a proposal that does not fully comply with acceptable solutions identified in the Phase 2 DCP, providing the intent of the objectives

and performance outcomes are achieved. Where a variation is sought it must be justified in writing indicating how the development is meeting the intent of the objectives and performance outcomes of the relevant DCP provisions.

The DA process is summarised in Figure 4.



# 1.12 Precinct Planning Principles

Precinct plans, DCPs, including proponent led site specific DCPs, and development within the Aerotropolis must satisfy the productivity, sustainability, infrastructure and collaboration and liveability principles contained within **Appendix 1** of the WSAP.

Precinct plans, DCPs and development will only be supported/approve if they are consistent with these principles.

# 2 **Precinct Vision and Place Statements**

**Note**: The Phase 1 DCP only includes precinct vision statements for initial precincts (Aerotropolis Core, Northern Gateway, Wianamatta-South Creek, Badgerys Creek, and Agribusiness). Detailed vision statements for non-initial precincts (North Luddenham, Kemps Creek, Rossmore, Dwyer Precinct) and associated performance outcomes and acceptable solutions will be developed during precinct planning and provided within Phase 2 of the DCP. For an overview of each precinct, please refer to the WSAP.

The Western Parkland City sits at the western edge of the Sydney Basin, defined by green edges; Metropolitan Rural Area to the west, National Parks to the west, north and south, and to the east by the Western Sydney Parklands. The Wianamatta-South Creek catchment, including Kemps and Badgerys Creeks, runs north south throughout the length of the Western Parkland City. The topography is gently undulating from low ridges, running generally north south down to the creeks. Approximately half of the area is generally greenfield, the other brownfield.

The 11,200-hectare Aerotropolis sits within the centre of the Western Parkland City, within the greenfield area. South Creek runs north south though the eastern third of the Aerotropolis, with a diagonal tributary within the Aerotropolis Core. Kemps creek defines the eastern edge, and Badgerys Creek from the north runs diagonally to the south west. The ridges rise from the largely flat creek floodplain, creating a gentle undulating topography. This form is accentuated by strong lines of canopy running along the creek edges in the order of 20 metres in height.

# 2.1 Aerotropolis Core Precinct

# 2.1.1 Vision Statement

The Aerotropolis Core Precinct will be a diverse, dynamic and sustainable global city precinct supporting a curfew free airport, delivering attractive places for workers, residents and visitors. It will greatly contribute to the Western Sydney Economic Corridor and forms part of the Metropolitan Cluster as identified in the Western City District Plan. It has the potential to deliver 50,000 – 60,000 jobs, leveraging the positive economic impact of the adjacent airport, creating Greater Sydney's next global gateway.

The precinct will be a place of choice to do business, a new high order employment-focused metropolitan centre with a focus on advanced manufacturing, research and development, professional services, creative industries and STEM-focused educational facilities. The Aerotropolis Core will also take advantage of its connection to the Airport and facilitate development of cutting-edge aerospace and defence industries. The precinct will also attract business incubator hubs and shared office workspaces.

Emerging and future technologies, such as 5G will be embraced through flexible and sustainable infrastructure delivery and network installations incorporated into the public realm. This infrastructure will be adaptable over time to accommodate future changes in technology.

The precinct will be planned around a new Sydney Metro station and be supported by commercial and retail uses, creative industries, civil and cultural facilities, and world-class public open spaces. The precinct will support a thriving, inclusive and safe day-time and night-time economy for workers, residents and visitors, both domestic and international.

Residential communities and other noise sensitive land uses within the precinct will not be located within the ANEC/ANEF 20 or above contours, will be within walking distance of the metro station or

other public transport, close to any regional park and the Wianamatta-South Creek corridor activating the riparian lands and making the creek a central lifestyle feature of the area. A diversity of housing types, including affordable housing options/schemes for student, seniors and key workers will create diverse neighbourhoods. Tourist/visitor accommodation will also be provided in the precinct.

The precinct will be walkable, transit-oriented and well-serviced by transport infrastructure, including a metro station, rapid bus services and an integrated road network. This will ensure the precinct has a high level of accessibility and connectivity to the Airport, other precincts within the Aerotropolis, and the broader transport network. Quality of street art, urban design, tree planting, landscaping, furnishings and material finishes will make streets green, healthy and attractive places for people to enjoy. Carparking will be limited with priority being given to ride and car sharing schemes.

Precinct design will include beyond compliance provisions targeting zero net carbon emissions, creating an environmentally friendly precinct with renewable and resilient energy and water systems. Biodiversity throughout the precinct will also be protected and enhanced through the development process. The precinct will connect to and build upon Country, as well as sympathetically respond to the existing topographical and natural character of the area. Aboriginal and heritage places will be conserved, enhanced and celebrated.

### 2.1.2 Objectives

- a) Develop a vibrant, connected and permeable 24-hour metropolitan city centre, centred on the metro station and a global destination for business, tourism and social experiences.
- b) To become the premier location of choice for advanced manufacturing and high technology industries in Australia.
- c) Create an aerospace and defence industries sub-precinct comparable with recognised international benchmark precincts.
- d) Create a health and education precinct comparable with recognised international benchmark precincts, incorporating a multiversity with STEM focussed education, leveraging from collaboration with the industrial sectors in neighbouring precincts and underpinned by the superior accessibility of mass transit.
- e) Create a highly distinctive city character with a public domain of outstanding urban design, architectural and landscape merit that responds to site characteristics and context.
- f) Develop street networks and links to rail stations to accommodate public transport infrastructure provision to allow for a 30-minute city and create pedestrian orientated development centred around key destinations and around transport nodes, for example metro station/s.
- g) Establish public and private domains which mitigate and adapt to urban heat and support innovative water sensitive urban design.
- h) Protect the operations of the Airport, including 24-hour operations, and provide appropriate protections for the community

**Note**: As precinct planning is completed for each precinct, performance outcomes and acceptable solutions will be provided in Phase 2 of the DCP. In the event of an inconsistency between a precinct specific provisions contained in chapter 2 and other general provisions contained throughout the DCP, the precinct specific provisions contained in chapter 2 prevail.

# 2.2 Northern Gateway Precinct

### 2.2.1 Vision Statement

The Northern Gateway will be a major airport interface, serving as a key strategic centre within the Western Economic Corridor – linking the Airport with the Western Parkland City Metropolitan Cluster. The Northern Gateway Precinct will be a key employment precinct with good accessibility and a supporting residential sub-precinct, providing skilled employment and business opportunities north of the Aerotropolis Core and Airport.

The precinct will be complementary to the development focus in the Aerotropolis Core and will evolve as a centre focused on high technology incorporating health, education, knowledge and research. It will build on the approved Sydney Science Park development. The Science Park development will include 30,000m<sup>2</sup> of retail floorspace and there is potential for retail development in other select locations in the precinct. The Science Park will have a town centre that is transit-oriented and based on the character of university towns. It will deliver commercial buildings and housing to assist with activation. This DCP will not apply to the Science Park. Instead, Council's existing DCP provisions will continue to apply.

High order employment uses will be predominant within the precinct, with desirable uses including (but not limited to) freight and logistics, warehousing, technology, commercial enterprise, offices, industry, creative industry, fresh food markets, education, civic, health, visitor accommodation, recreation and entertainment. The precinct will have synergies with the adjacent Airport Business Park.

The precinct's design and will aim for a target of zero net carbon emissions. Wianamatta-South Creek will be the central structural element to the open space network within the Aerotropolis providing key connectivity linkages and environmental conservation areas. It will provide an important interface to surrounding development. The precinct will build on this connectivity, ensuring that the existing topography and Country connections are founding elements for the design of the precinct. Landscaped connections between Wianamatta-South Creek, Badgerys Creek and Cosgroves Creek will integrate remnant and additional vegetation and green shaded pedestrian paths and cycleways.

Public transport services will provide connections to the Airport and Aerotropolis Core. Rapid bus services to Penrith will also provide additional connectivity in parts of the Northern Gateway. The precinct will have access via Luddenham Road, Elizabeth Drive and the agribusiness precinct to the Airport. New roads including the M12 will be built and will provide new links to the rest of the Aerotropolis, St Marys, Greater Penrith and Greater Sydney.

Quality urban design, landscape including large street trees, furnishing and material finishes will make streets attractive green places for pedestrians and cyclists. Landmark buildings are to be located on corner allotments to reinforce intersections as well as higher elevation points. All buildings will be of high design quality incorporating sustainability, renewable energy systems and environmentally friendly qualities. Carparking will be constructed in a way that it can be used in the short term, and converted to other uses in the longer term, as public transport, car and ride sharing and active transport options develop over time.

New residential development and other noise sensitive development will be complementary to the employment function of the precinct, not be located within ANEC/ANEF 20 or above contours and orientated close to public transport. Residential development within the precinct will be medium to high density and well-integrated into the landscape, as well as oriented to the Wianamatta-South Creek corridor, to take advantage of the creek's natural amenity values.

### 2.2.2 Objectives

- a) Facilitate an ultra-modern, high technology employment precinct which forms a key node in the context of the Aerotropolis and the Western Economic Corridor.
- b) Facilitate a wide variety of high order employment uses and limited residential development in locations that support the principles of transit-oriented development.
- c) Provide for high quality architectural and design outcomes which take advantage of site characteristics and require buildings to face and activate creek lines, contributing to the character of the precinct.
- d) Facilitate transport infrastructure provision to allow for a 30-minute city, including the alignment of centres with public transport infrastructure to create pedestrian oriented environments.
- e) Support connectivity and staging throughout the precinct, such that the precinct can support temporary uses and develop over time in a manner which minimises the potential for isolated parts of the precincts.
- f) Protect the operations of the Airport, including 24-hour operations, and provide appropriate protections for the community.

**Note**: As precinct planning is completed for each precinct, performance outcomes and acceptable solutions will be provided in Phase 2 of the DCP. In the event of an inconsistency between a precinct specific provisions contained in chapter 2 and other general provisions contained throughout the DCP, the precinct specific provisions contained in chapter 2 prevail.

# 2.3 Wianamatta-South Creek Precinct

### 2.3.1 Vision Statement

Wianamatta-South Creek represents a unique opportunity to change the way waterways and riparian corridors are planned for and managed. These natural systems provide a high level of amenity services and are embraced as valuable assets, and no longer considered as a cost impediment or constraint.

Wianamatta-South Creek will be rejuvenated into a high-quality central green spine for amenity and recreation within the Aerotropolis in the Western Parkland City. It will provide an opportunity for development within the Aerotropolis to be designed to connect to and care for Country. The precinct encompasses the full extent of Wianamatta-South Creek within the Aerotropolis boundary and strongly integrates with adjoining precincts.

The precinct and tributaries will be the central structural element to the open space network within the Aerotropolis providing key connectivity linkages, environment conservation and water management areas. It will provide an important interface to surrounding development, reducing urban heat and cleaning the air, by providing open space, amenity, biodiversity, and supporting social cohesion and well-being. The blue and green corridor will provide an interconnected corridor for parks, sport playing fields, waterways and potential permanent water bodies, walking and cycling trails, community facilities, and ecological services including flood and stormwater management,

nutrient capture, urban cooling, and local habitat for native flora and fauna. Strong access connections into the precinct builds to the structural element of the open space network.

Rehabilitation of these creeks, including replanting of appropriate vegetation to provide canopy cover will encourage residents and visitors to use and enjoy the riparian lands. These creeks will be part of an integrated water cycle management system inclusive of innovative stormwater management and utility provision all within a network of open spaces and trees in a parkland setting. Innovative utility provision will be encouraged.

This precinct will provide a transition between the creeks and the surrounding urban development, with a variety of development located in suitable locations outside of the 1 in 100-year flood planning level. The precinct will also connect to the regional road network via Elizabeth Drive, Fifteenth Avenue, Bringelly Road and Mamre Road.

#### 2.3.2 Objectives

- a) Protect Wianamatta-South Creek, its tributaries and adjacent high quality green space.
- b) Protect water retention in the landscape and achieve healthy waterways to achieve facilitate urban cooling and support flood mitigation.
- c) Stormwater infrastructure to be consistent with a landscape led approach.
- d) Identify and protect remnant vegetation, tree canopy and other areas of significant vegetation to enable planning within the Aerotropolis to be built around landscape elements.
- Protect ridges to preserve view lines and enable provision of open space for active and passive recreation.
- f) Provide suitable land uses, orienting centres in areas with access to green spaces and water, to improve amenity and liveability.
- g) Facilitate development of vibrant, accessible and exemplary green places with a strong sense of place and custodianship, and recognition and celebration of Aboriginal and European heritage spaces.
- h) Protect the operations of the Airport, including 24-hour operations, and provide appropriate protections for the community.

**Note**: As precinct planning is completed for each precinct, performance outcomes and acceptable solutions will be provided in Phase 2 of the DCP. In the event of an inconsistency between a precinct specific provisions contained in chapter 2 and other general provisions contained throughout the DCP, the precinct specific provisions contained in chapter 2 prevail.

# 2.4 Badgerys Creek Precinct

## 2.4.1 Vision Statement

Directly adjoining the Airport to the east, the Badgerys Creek Precinct will support airport operations and the new mixed-use urban centre in the Aerotropolis Core to the south as well as the Northern Gateway to the north. Land uses, buildings and structures may be temporal in nature in the short to medium term and transition to higher order technology, advanced manufacturing and industry uses in the longer term.

In the long term, land uses in the precinct will complement the adjacent Airport. Non-temporal land uses, and larger buildings will incorporate a range of new technology which will support a sustainable precinct reliant on renewable energy, and supportive of responsible water usage.

Interface treatments will be required between existing resource recovery industries and new land uses until they transition to other uses. New enabling industries to facilitate construction of the Aerotropolis may be permitted subject to interface treatments and an ability for the site to transition to higher order uses.

Affected by aircraft noise, this precinct is not suitable for noise sensitive land uses. However, it will meet demand for a range of employment generating uses that do not require or benefit from direct access to public transport but would benefit from proximity to airport operations. Defence industries and aerospace, advanced manufacturing and technology-based industry may be located within the precinct.

The precinct's design will start with and connect to Country. Wianamatta-South Creek will be the central structural element to the open space network within the Aerotropolis providing key connectivity linkages and environmental conservation areas. It will provide an important interface to surrounding development. The precinct will be in a green landscaped setting with new natural and native linkages which contribute to the provision of positive biodiversity outcomes. Active transport opportunities between Badgerys Creek to the west and Wianamatta-South Creek to the east will also feature in the precinct. Development should take advantage of views to the creek lines surrounding the precinct.

Strong connectivity to other precincts and the rest of Greater Sydney will occur. The precinct will connect to the surrounding regional road network via an upgraded Elizabeth Drive and new airport ring road(s). New link roads will provide direct connections to the Aerotropolis Core and improved access to the Northern Gateway. Staging of development is important and will be reliant on improved road access and public transport provision, including rapid bus transport along Fifteenth Avenue.

Emerging and future technologies will be embraced through flexible and sustainable infrastructure delivery and network installations incorporated into the public realm. This infrastructure will be adaptable over time to accommodate future changes in technology.

### 2.4.2 Objectives

- a) Facilitate high-quality and innovative development.
- b) Facilitate a wide variety of employment uses.
- c) Facilitate compact urban development well connected to functional, green, private open spaces.

- d) Allow for the successful implementation and integration of the blue-green grid for the Western Parkland City.
- e) Protect the operations of the Airport, including 24-hour operations, and provides appropriate protections for the community.
- f) Encourage the location of enabling land uses that will support the development and construction of the Aerotropolis and transition to permanent employment generating land uses over time.
- g) Require buildings to integrate with creek lines to improve the amenity for workers.
- h) Built form to have a high level of visual interest utilising passive elements that mitigate climatic factors including increased solar gain.
- i) Provide safe, activated, interesting and healthy streets with pedestrian, cycle and public transport movements prioritised.
- j) Innovative development embraces and promotes new and emerging technologies and utility provision.

**Note**: As precinct planning is completed for each precinct, performance outcomes and acceptable solutions will be provided in Phase 2 of the DCP. In the event of an inconsistency between a precinct specific provisions contained in chapter 2 and other general provisions contained throughout the DCP, the precinct specific provisions contained in chapter 2 prevail.

# 2.5 Agribusiness Precinct

### 2.5.1 Vision Statement

An Agribusiness Precinct comparable with international benchmark precincts will be located on the western edge of the Airport creating a fresh food and value-added food production hub where goods can be rapidly delivered from farm gate to the national and international market.

The precinct will maintain a landscape led approach to development, building on the existing topography and natural features in the design of the precinct. High quality public open spaces will be provided in the precinct, and areas of biodiversity significance will be protected and enhanced. The Agribusiness Precinct will start with and connect to Country.

The precinct will build on existing, successful agricultural operations on these lands and develop new agricultural and agribusiness opportunities whilst protecting and embracing important vegetation within the landscape. The precinct will capitalise on its excellent connections to road infrastructure – including the Northern Road alignment and Outer Sydney Orbital, and proximity to the Airport, including the land side to air side logistics and freight facilities of the Airport.

The precinct will allow for the development of integrated food and supply chain related industries particularly those that rely on the skills of the growing population in the Western Parkland City. These industries will generate employment opportunities in high technology agriculture that will support local communities in the future with customer-centric digitally enhanced systems, processes and platforms to enable rapid distribution connections to the broader freight chain in Greater Sydney.

This high technology precinct will drive opportunities for education and tourism. Being located within the Sydney basin and adjacent to an international airport will enable visitors locally, domestically and globally to come and learn some of the cutting-edge processes occurring in the agriculture and agribusiness industry in Western Sydney. Similar state-of-the-art agricultural precincts around the world have utilised tourism both to increase their ability to capture visitation, while driving educational opportunities and creating an additional source of income. Buildings will meet world standards in energy efficient design.

It is envisaged that an agriport will be established within the precinct southwest of the Airport, providing for the movement and storage of agricultural commodities through an innovative multimodal supply chain solution for Greater Sydney, NSW and Australia, adjacent to the freight and logistics precinct on Airport land.

Development within the precinct will include uses that will benefit from opportunities for national and international trade. These uses will include:

- world-leading integrated intensive production enabling the intensive production and valueadding of sustainable, high-quality fresh produce and pre-prepared meals and through circular economy principles that integrate food, energy, water and waste solutions;
- a fresh food hub which will bring a complementary, diversified and expanded fresh food marketplace to the Western Parkland City, that will provide its residents with access to healthy fresh food and becoming a major distribution centre for fresh produce to domestic and export markets;
- state-of-the-art integrated logistics creating land/air side linkages and a fully digital supply chain solution for the Airport, Aerotropolis, Sydney and the regions providing safe, secure and seamless connectivity for freight movements;
- value-added food and pharma industries to enable processing and manufacturing businesses to uplift value by shifting from a commodity focused approach to a value-added sector approach;
- a proposed Australian Centre of Excellence in food innovation will create an industry-led national powerhouse in food science, technology, engineering and mathematics (Food-STEM); and
- commercial and retail development ancillary to agriculture and agribusiness.

The intensive agribusiness hub will be designed with consideration of airport operational safeguarding and landscape considerations. Wildlife can physically impact aircraft, particularly during take-off and landing. Land uses and/or embellishments that could attract wildlife must be considered in the context of airspace safety. This could affect the location of dams and other permanent water bodies, wastewater treatment facilities, landscaping treatments and building/site design.

Access to water (including recycled water), sewerage, drainage, power, gas and telecommunications is important to the success of this precinct. The advantageous location of this precinct presents unique opportunities for a circular economy, as it will draw on the population of the Western Parkland City for employment, as well as provide a food bowl for this region, state, Australia and internationally. Subject to addressing aviation safeguarding requirements, the precinct presents possibilities of significant value, including energy generation and smart grid distribution; innovative off-grid energy solutions; recycled water use; and opportunities for renewables and waste solutions.

The benefits generated by this precinct will drive benefits for the Western Parkland City through employment and food production. Innovative utility provision will be encouraged.

Existing agricultural lands within this precinct will be retained and further developed in conjunction with the objectives of this precinct. Some general employment uses may be considered to the north of Elizabeth Drive. New residential development will only be appropriate if ancillary to agriculture and where not located within the ANEC/ANEF 20 or above contour.

The transition of land from its current land uses will gradually occur over the next 20 to 30 years. Precinct planning is to make provision to address the transition and management of agricultural land uses and ensure that adequate buffers are provided between incompatible uses in the interim to manage potential conflicts that may arise, for example the impact that noise, odour and farm chemicals and amenity. Development within the Agribusiness Precinct will need to address airport safeguarding requirements.

Luddenham Village will be integrated into the Aerotropolis by acting as a vital link between the Airport and this agribusiness precinct. The Village will provide support services to the workers and residents within the precinct.

#### 2.5.2 Objectives

- a) Provide a world class agribusiness precinct that will deliver fresh and value-added Australian food production from farm gate to the global market.
- b) Provide an integrated intensive production and state-of-the-art integrated logistics hub to deliver a multi modal supply chain solution for Greater Sydney, NSW and Australia.
- c) Accommodate agricultural value-added industries and freight and logistics facilities that benefit from access to the Outer Sydney Orbital and air-side access to the Airport.
- d) Integrate sustainable energy, waste and water as well as a circular economy into development and operations.
- e) Allow for the successful implementation of the blue-green grid for the Western Parkland City.
- f) Incorporate the values of Aboriginal people of Western Sydney into building design and landscaping.
- g) Luddenham Village will provide local services supporting the precinct.
- h) Encourage education opportunities related to agriculture and agribusiness.
- i) Embrace tourism opportunities presented by the development of the Airport.
- j) Ensure development of the precinct in a logical and staged manner.
- k) Innovative development embraces and promotes new and emerging technologies.
- I) Protect the operations of the Airport, including 24-hour operations and provide appropriate protections for the community.

**Note**: As precinct planning is completed for each precinct, performance outcomes and acceptable solutions will be provided in Phase 2 of the DCP. In the event of an inconsistency between a precinct specific provisions contained in chapter 2 and other general provisions contained throughout the DCP, the precinct specific provisions contained in chapter 2 prevail.

# 3 Natural Environment

Many different types of landforms make up Western Sydney's topography. The Sydney Basin Bioregion lies on the east coast and covers a large part of the catchments of the Hawkesbury-Nepean, Hunter and Shoalhaven river systems. It consists of a geological basin filled with near horizontal sedimentary rocks (primarily sandstones and shales) of Permian to Triassic age that overlie older basement rocks of the Lachlan Fold Belt and the New England craton. Erosion over time has created a landscape of ranging from broad plains to dissected plateaux of deep, steep-sided gorges and relatively flat ridges across which an east-west rainfall gradient and differences in soil determine the vegetation, with a coastal rain shadow valley along the Nepean River.

This landscape is dominated by eucalypt-dominated forests and woodlands and sclerophyll heaths with occasional rainforests in the more protected locations and riparian gallery forests along the main watercourses.

At a smaller scale, many interesting landscape features are present which are important for local microclimates. The drainage patterns influence the habitat for many species.

# 3.1 Biodiversity

Biodiversity or 'biological diversity' includes the variety and variability within and among living organisms, and the ecological complexes in which they occur. It encompasses multiple levels of organisation, including genes, species, populations, communities, ecosystems and the physical, chemical and ecological relationships within and between them.

### Protecting Biodiversity

Western Sydney is home to some of the last remaining critically endangered plant communities on the Cumberland Plain as well as other threatened flora and fauna. This vegetation and its location within the Aerotropolis have been identified via a number of biodiversity conservation programs including the Biodiversity Certification and Strategic Assessment programs that presently exist under *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* and land identified in the draft *Cumberland Plain Conservation Plan* (CPCP), which is anticipated to be finalised in 2020.

Biodiversity conservation plans provide a landscape scale approach to protecting biodiversity upfront in the planning system. These plans are designed to improve ecological resilience and function over the long term. When an area of land is biocertified, it switches off the need for a site-by-site assessment of biodiversity impacts when development applications are made under the EP&A Act, but only if site proposals comply with any relevant biodiversity measures.

# 3.1.1 Objectives

- a) Avoid, minimise and mitigate impacts to biodiversity from future development.
- b) Enhance landscape connectivity through conservation and restoration of native vegetation, wildlife habitat and migration corridors to enable plant and animal communities to survive in the long term, whilst not conflicting with aviation safety.
- c) Improve the biodiversity and ecological values of the area by addressing indirect and prescribed impacts across the Aerotropolis.
- d) Ensure ecological function of the landscape is maintained to provide benefits to the natural and human environment.

- e) Manage weeds and pests in strategic locations to reduce landscape threats to biodiversity.
- f) Ensure construction and operational works comply with best practice standards.

### 3.1.2 Performance Outcomes

PO1	Urban interfaces are sensitive to biodiversity and native vegetation as potential impacts associated with human-induced disturbances are managed.
PO2	Impacts to biodiversity such as vegetation disturbance are avoided or minimised on land identified for conservation, land avoided from development due to biodiversity values or on land that is part of a green infrastructure network within the Aerotropolis.
PO3	Landscape and urban design features complement biodiversity values.
PO4	Native vegetation is retained in open space networks and the wider green infrastructure system.
PO5	Wildlife corridors are protected and enhanced to facilitate the connected movement of native animals through the landscape and increase habitat connectivity.
PO6	Native vegetation is maintained and improved in wildlife corridors.
PO7	Riparian corridors and aquatic habitats are protected and enhanced to facilitate the movement of terrestrial and aquatic species.
PO9	Habitat features are protected, enhanced and retained to maintain and/or improve populations of threatened, vulnerable and endangered species.
P010	Ongoing and indirect impacts arising from development on threatened species and ecological communities are mitigated.
P011	Development responds to landscape to protect natural contours, drainage and vegetation.

# 3.2 Native Vegetation

This section provides detail on the requirement for development within the Aerotropolis to achieve and enhance native vegetation communities.

### 3.2.1 Objectives

- a) Conserve and manage the remaining native vegetation and contribute to the increase of habitat and tree canopy cover within the Aerotropolis.
- b) Retain and protect native vegetation areas and provide for the improved management of remnant native vegetation communities with a size and configuration which are able to survive and develop in the long term.
- c) Ensure that native vegetation contributes to the character and amenity of Aerotropolis.

### 3.2.2 Performance Outcomes

PO1	Native vegetation communities, significant tree habitat and canopy are protected and enhanced.
PO2	Ongoing and indirect impacts arising from development on native vegetation are mitigated.
PO3	Native vegetation and tree canopy within open space areas are maintained and enhanced.

# 3.3 High Ecological Value Waterways

#### Waterways and Riparian Areas

Freshwater waterways are important features of Western Sydney and riparian areas are the interface between land-based and waterway ecosystems. NSW Office of Water defines a riparian corridor as *"a transition zone between the land, also known as the terrestrial environment, and the river or watercourse or aquatic environment".* 

Riparian corridors provide a variety of functions within urban landscapes. They play a major role in bank stabilisation, reducing erosion scour and sedimentation problems within rivers and creeks. Vegetated areas along the creek lines function as 'buffer zones' to surrounding land and help filter nutrients, pollutants and sediments before they reach the creek itself and degrade the quality of water flowing throughout the Aerotropolis.

Riparian vegetation also provides distinct habitat resources for aquatic and terrestrial species and essential linkages that facilitate the movement of terrestrial flora and fauna between larger areas of habitat. Riparian areas generally support a higher diversity and density of flora and fauna. In the Cumberland landscape these riparian areas may represent the main vegetation community patches left in the landscape so are vital for connectivity.

The importance of riparian areas is recognised in State legislation such as the *Water Management Act 2000* (WM Act). Under the *EP&A Act*, development within 40m of a watercourse is Integrated Development and requires approval under the WM Act. Under the *Water Management (General) Regulation 2018* hydro line spatial data is a dataset of mapped watercourses and waterbodies in NSW and assessed in line with the WM Act.

The Aerotropolis contains the Wianamatta-South Creek system with many important riparian areas. These creeks and supporting riparian areas support some rare and important species listed under the *Fisheries Management Act 1994*.

#### 3.3.1 Objectives

- a) Improve the ecological condition of aquatic ecosystems over time.
- b) Retain and restore native vegetation to promote aquatic ecosystems functioning.
- c) Ensure that waterways are protected in the design and management of the stormwater and wastewater management systems.
- d) Maintain and improve the hydrological regime of wetlands and waterways.

e) Effectively manage indirect and ongoing impacts of development waterways to ensure established waterway health targets are achieved and maintained.

### 3.3.2 Performance Outcomes

PO1	Waterway values are protected and enhanced through risk-based approaches that mitigate development impacts.
PO2	Where Key Fish Habitat occurs, proposed development incorporates the current policies for fish friendly instream structures and bridges (e.g. Fish Passage Requirements for Waterway Crossings).
PO3	Proposed development demonstrates that stormwater management practices and infrastructure achieve established waterway health targets.

# 4 Risk Minimisation and Management

# 4.1 Aviation Safeguarding

# 4.1.1 Objectives

- a) Safeguard the future operations of the Airport, including 24-hour operations and provide appropriate protections for the surrounding community.
- b) Ensure compatible development that exhibits design excellence occurs on surrounding land.
- c) Development does not introduce or intensify noise sensitive uses.

# 4.1.2 Performance Outcomes

### Heights

PO1	The height of buildings, structures, landscaping and cranes do not impact on the
	operations of the Airport or create a hazard to the safe navigation of aircraft.

# Noise

PO2	The height of buildings, structures, landscaping and cranes do not impact on the operations of the Airport or create a hazard to the safe navigation of aircraft.
PO3	Development is appropriately located and designed to minimise adverse impacts from aircraft noise.
PO4	Development is constructed in accordance with Australian Standards AS2021 – Acoustics Noise Intrusion – Building Siting and Construction.
PO5	Residential development must be located in accordance with the precinct plan.
PO6	Renovations to existing houses or minor extensions within ANEC/ANEF 20 and above must be constructed in accordance with Australian Standard AS2021 – Acoustics – Aircraft Noise Intrusion – Building Siting and Construction.

### Protection of Operational Airspace

Development does not create a permanent or temporary physical or transient
obstruction in the operational airspace of the Airport and complies with the Airports
Act 1996 and Airports (Protection of Airspace) Regulations 1996.

### Lighting

PO8	Development does not impact on the operational aspects of the Airport with regard to light emission and reflective surfaces.	
	light emission and relective surfaces.	l

### Airport Public Safety Areas

PO9	Development in public safety areas does not increase the risk to life or property.	

### Emissions

	Emissions do not create air turbulence, or impact visibility or engine operation in the operational airspace of the Airport.

# Wildlife Hazards

PO11	Development does not cause wildlife to create a safety hazard in the operational
	airspace of the Airport.

### **Communications, Navigation and Surveillance Systems**

PO12	Any development in the mapped building restricted area must include an aviation impact assessment.
PO13	Development must not impact upon communication, navigation and surveillance systems.

# 4.2 Flooding

### 4.2.1 Objectives

- a) Minimise the flood risk to life and property.
- b) Ensure development does not adversely impact flood functions.
- c) Provide protection of the natural environment.
- d) Floodplains are to be used for amenity and recreation opportunities as well as flood function, where appropriate.

### 4.2.2 Performance Outcomes

PO1	Ensure the siting and layout of development responds to flooding affectation and maintains personal safety at all times. The site layout and ultimate footprint of the development should be compatible with the flood risk. This includes applying subdivision design for greater resilience to flooding.
PO2	Manage the passage of floodwaters through the floodplain.
PO3	Avoid intensification and new development on land subject to the 1 in 100-year flood event.
PO4	Fill should not reduce the capacity of the floodplain.

PO5	Fill should remain stable and not be affected by erosion and scour.	
PO6	Development must not change the flood characteristics of the area, and is to consider cumulative impacts of development, outside the site including:	
	a) loss of flood storage;	
	b) loss of or changes to flood flow paths;	
	c) acceleration or obstruction of flood flows;	
	d) increase in the depth, duration or velocity of flood waters; or	
	e) any reduction in flood warning times elsewhere on the floodplain.	
PO7	Prevent intensification of inappropriate use of land within high flood risk areas or floodways.	
PO8	Ensure development is sited to enable vehicular egress in the event of a flood.	
PO9	Ensure public safety and the environment are not adversely affected by the detrimental impacts of floodwater on hazardous materials manufactured or stored in bulk.	
PO10	Ensure essential services infrastructure within a site (including electricity, gas, water supply, wastewater and telecommunications) maintains its function during and immediately after flood events.	
PO11	Development must be designed and constructed so that it remains structurally sound for the life of the development, considering the flood events likely to impact the structure, foundations/footing system and external walls. Development must be designed to prevent flotation, collapse or permanent lateral movement (as per ASCE24-14).	
PO12	Flooding and drainage characteristics upstream or downstream of the site are not worsened by development, including any proposed works on natural creeks. The development is to also avoid significant adverse effects on the floodplain environment that would cause erosion, siltation, destruction of riparian vegetation or a reduction in the stability of the river bank/watercourse.	
PO13	Fencing must be designed and constructed so that it does not impede and/or direct the flow of floodwaters, add debris to floodwaters or increase flood affectation on surrounding land.	
PO14	Development is to be in accordance with NSW Governments Flood Prone Land Policy and Floodplain Development Manual.	

# 4.3 Bushfire Hazard Management

# 4.3.1 Objectives

- a) Protect life, property and community assets from bushfires.
- b) Minimise the impacts of development in relation to bushfires.

c) Assist government agencies, land management authorities and landholders in developing fire management practices.

## 4.3.2 Performance Outcomes

medium and high bushfire risk.         PO3       Siting of buildings, lot design and design of development provides for the safety of people and property by mitigating the bushfire risk.			
<ul> <li>medium and high bushfire risk.</li> <li>PO3 Siting of buildings, lot design and design of development provides for the safety of people and property by mitigating the bushfire risk.</li> <li>PO4 The manufacture or storage of hazardous materials in bulk must consider the impacts of bushfire on public safety and the environment.</li> <li>PO5 For development that will result in multiple buildings or lots, roads and access are designed to mitigate against bushfire hazard by ensuring adequate access for:         <ul> <li>a) firefighting and other emergency vehicles; and</li> <li>b) the evacuation of people in the event of an emergency.</li> </ul> </li> <li>PO6 For development that will result in multiple buildings or lots, fire breaks are provided that:         <ul> <li>a) adequately and effectively separate the development site from surrounding vegetation to mitigate against bushfire hazard;</li> <li>b) have sufficient width to enable continuous access for firefighting and other emergency vehicles, residents and equipment; and</li> <li>c) are in secure tenure and are maintained.</li> </ul> </li> <li>PO7 Development is to be in accordance with <i>Rural Fires Act 1997, Planning for Bushfire</i></li> </ul>	PO1		
<ul> <li>people and property by mitigating the bushfire risk.</li> <li>PO4 The manufacture or storage of hazardous materials in bulk must consider the impacts of bushfire on public safety and the environment.</li> <li>PO5 For development that will result in multiple buildings or lots, roads and access are designed to mitigate against bushfire hazard by ensuring adequate access for:         <ul> <li>a) firefighting and other emergency vehicles; and</li> <li>b) the evacuation of people in the event of an emergency.</li> </ul> </li> <li>PO6 For development that will result in multiple buildings or lots, fire breaks are provided that:         <ul> <li>a) adequately and effectively separate the development site from surrounding vegetation to mitigate against bushfire hazard;</li> <li>b) have sufficient width to enable continuous access for firefighting and other emergency vehicles, residents and equipment; and</li> <li>c) are in secure tenure and are maintained.</li> </ul> </li> <li>PO7 Development is to be in accordance with <i>Rural Fires Act 1997, Planning for Bushfire</i></li> </ul>	PO2	Development uses adequate buffers and Asset Protection Zones and avoids areas of medium and high bushfire risk.	
PO5For development that will result in multiple buildings or lots, roads and access are designed to mitigate against bushfire hazard by ensuring adequate access for: a) firefighting and other emergency vehicles; and b) the evacuation of people in the event of an emergency.PO6For development that will result in multiple buildings or lots, fire breaks are provided that: a) adequately and effectively separate the development site from surrounding vegetation to mitigate against bushfire hazard; b) have sufficient width to enable continuous access for firefighting and other emergency vehicles, residents and equipment; and c) are in secure tenure and are maintained.PO7Development is to be in accordance with Rural Fires Act 1997, Planning for Bushfire	PO3		
<ul> <li>designed to mitigate against bushfire hazard by ensuring adequate access for:         <ul> <li>a) firefighting and other emergency vehicles; and</li> <li>b) the evacuation of people in the event of an emergency.</li> </ul> </li> <li>PO6 For development that will result in multiple buildings or lots, fire breaks are provided that:         <ul> <li>a) adequately and effectively separate the development site from surrounding vegetation to mitigate against bushfire hazard;</li> <li>b) have sufficient width to enable continuous access for firefighting and other emergency vehicles, residents and equipment; and</li> <li>c) are in secure tenure and are maintained.</li> </ul> </li> <li>PO7 Development is to be in accordance with <i>Rural Fires Act 1997, Planning for Bushfire</i></li> </ul>	PO4	The manufacture or storage of hazardous materials in bulk must consider the impacts of bushfire on public safety and the environment.	
<ul> <li>b) the evacuation of people in the event of an emergency.</li> <li>PO6</li> <li>For development that will result in multiple buildings or lots, fire breaks are provided that:         <ul> <li>a) adequately and effectively separate the development site from surrounding vegetation to mitigate against bushfire hazard;</li> <li>b) have sufficient width to enable continuous access for firefighting and other emergency vehicles, residents and equipment; and</li> <li>c) are in secure tenure and are maintained.</li> </ul> </li> <li>PO7</li> <li>Development is to be in accordance with <i>Rural Fires Act 1997, Planning for Bushfire</i></li> </ul>	PO5		
PO6       For development that will result in multiple buildings or lots, fire breaks are provided that:         a) adequately and effectively separate the development site from surrounding vegetation to mitigate against bushfire hazard;         b) have sufficient width to enable continuous access for firefighting and other emergency vehicles, residents and equipment; and         c) are in secure tenure and are maintained.         PO7       Development is to be in accordance with Rural Fires Act 1997, Planning for Bushfire		a) firefighting and other emergency vehicles; and	
<ul> <li>that:</li> <li>a) adequately and effectively separate the development site from surrounding vegetation to mitigate against bushfire hazard;</li> <li>b) have sufficient width to enable continuous access for firefighting and other emergency vehicles, residents and equipment; and</li> <li>c) are in secure tenure and are maintained.</li> </ul> PO7 Development is to be in accordance with <i>Rural Fires Act 1997, Planning for Bushfire</i>		b) the evacuation of people in the event of an emergency.	
<ul> <li>vegetation to mitigate against bushfire hazard;</li> <li>b) have sufficient width to enable continuous access for firefighting and other emergency vehicles, residents and equipment; and</li> <li>c) are in secure tenure and are maintained.</li> </ul> PO7 Development is to be in accordance with <i>Rural Fires Act 1997, Planning for Bushfire</i>	PO6		
<ul> <li>emergency vehicles, residents and equipment; and</li> <li>c) are in secure tenure and are maintained.</li> <li>PO7 Development is to be in accordance with <i>Rural Fires Act 1997, Planning for Bushfire</i></li> </ul>			
PO7 Development is to be in accordance with <i>Rural Fires Act 1997, Planning for Bushfire</i>			
······································		c) are in secure tenure and are maintained.	
	PO7		

# 4.4 Odour

# 4.4.1 Objectives

a) Manage and mitigate the impacts of development in relation to odour.

# 4.4.2 Performance Outcomes

PO1	Development does not unreasonably affect the amenity and environmental quality of the locality, nearby residential premises, sensitive uses or public spaces due to odour impacts.
PO2	Residential development and other sensitive land uses do not encroach upon existing or approved uses that may impact upon the amenity of those proposed uses in terms of odour nuisance.

PO3	Putrescibles waste generated as a result of the development does not cause odour nuisance issues for adjoining land uses.
PO4	Construction work is undertaken in a manner which does not cause unacceptable impacts on surrounding areas as a result of odour.
PO5	Development is to be in accordance with <i>Technical framework: Assessment and management of odour from stationary sources in NSW</i> .

# 4.5 Noise and Vibration

# 4.5.1 Objectives

a) Manage and mitigate the impacts of development in relation to noise and vibration.

# 4.5.2 Performance Outcomes

PO1	The generation of noise and vibration from the premises does not cause environmental harm or nuisance to adjoining properties or other noise sensitive land uses.
	Development should:
	a) be located in appropriate areas;
	<ul> <li>b) propose best practice design and construction materials (in relation to noise attenuation); and</li> </ul>
	<ul> <li>propose operational practices that will minimise noise nuisance for adjoining sensitive land uses.</li> </ul>
PO2	Noise sensitive land uses are located to avoid adverse impacts from transport corridors or noise generating developments (e.g. the Airport, entertainment venues, child care centres or industrial zones).
PO3	Mechanical plant and equipment do not adversely impact on the acoustic and vibration amenity of adjoining sites.
PO4	The construction phase of the development does not cause adverse acoustic impacts on surrounding sensitive uses/receivers.
PO5	Industrial development is to be in accordance with <i>Protection of the Environment</i> Operations Act 1997 and NSW Industrial Noise Policy 2000.
	Operations Act 1997 and NSW Industrial Noise Policy 2000.

# 4.6 Air Quality

# 4.6.1 Objectives

a) Manage and mitigate the impacts of development in relation to air quality.

# 4.6.2 Performance Outcomes

PO1	Air emissions resulting from development, including the siting of vents and stacks, do not cause environmental harm or nuisance, and surrounding land uses are not exposed to concentrated levels of air contaminants.
PO2	Proposed sensitive land uses are adequately separated from existing lawful land uses that produce air emissions.
PO3	Development is to be in accordance with <i>Protection of the Environment Operations Act 1997</i> and other Environmental Protection Authority guidelines for air quality.

# 4.7 Acid Sulphate Soils and Salinity

# 4.7.1 Objectives

a) Manage and mitigate the impacts of development in relation to acid sulphate soils and salinity.

# 4.7.2 Performance Outcomes

PO1	Accurately identify the extent and location of acid sulphate and high salinity soils.
PO2	Development avoids disturbing acid sulphate and high salinity soils or is managed to prevent the release of acid and metal contaminants.
PO3	No environmental harm, or damage to physical infrastructure is caused as a result of exposure of acid sulphate soils or potential acid sulphate soils.
PO4	Development is designed to minimise the exposure of high salinity soils and to avoid the impacts of soil or groundwater salinity on building and infrastructure.
PO5	Development does not significantly disrupt natural soil, increase water infiltration to soil and subsurface groundwater systems, spread or increase existing urban salinity or result in increased salt loads in waterways, wetlands drainage lines or soils.

# 4.8 Contaminated Land

#### 4.8.1 Objectives

- a) Manage and mitigate the impacts of development in relation to contaminated land.
- b) Ensure all land is suitable for its intended use.

4.8.2	Performance	Outcomes
-------	-------------	----------

PO1	Developments or changes of land use are not adversely impacted by contaminated land.
PO2	Development is located and designed to ensure that users and nearby sensitive land uses are not exposed to unacceptable levels of contaminants.
PO3	Any landfill utilises appropriate materials that do not result in pollution or contamination of land or water.
PO4	Development is to be in accordance with <i>Contaminated Land Management Act</i> 1997 and <i>State Environmental Planning Policy</i> 55 – <i>Remediation of Land</i> .

# 4.9 Land Stability

# 4.9.1 Objectives

- a) Manage and mitigate landslide risk to maintain the safety of people, property and infrastructure.
- b) Retain scenic qualities, landscape character and natural topography.
- c) Ensure that development responds to the site conditions, excavation is minimised, and the site is properly retained.

### 4.9.2 Performance Outcomes

PO1	Development on sloping or potentially unstable sites maintains the safety of people, property and infrastructure from the risk of landslide.
PO2	Public safety and the environment are not adversely affected by the impacts of landslide on hazardous material made or stored on the subject site.
PO3	The siting, form, bulk, scale and design, of development minimises impacts on the natural landform and landscape character.
PO4	Development includes measures that ensure: a) the long-term stability of the development site; b) the need for significant earthworks is avoided; c) landslide hazards are avoided; and

	d) the risk of erosion is avoided.
PO5	Vegetation clearing is avoided and additional planting is undertaken to strengthen landslide risk areas.

# 5 General Provisions

# 5.1 Character and Place

5.1.1 Urban Design

# 5.1.1.1 Objectives

- a) Ensure development responds to the existing topography, connects to Country and implements the Western Parkland City Landscape Led Approach.
- b) Provide a high-quality connected public domain which is attractive, safe, functional, activated, accessible, sustainable, and culturally diverse.
- c) Provide for a range of integrated, functional, attractive and accessible open space and recreation areas.
- d) Locate compact development close to public transport.
- e) Ensure suitable interfaces are provided between land uses and transport corridors.

### 5.1.1.2 Performance Outcomes

#### Western Parkland City – Landscape Led Approach

PO1	Ensure the layout of the urban structure integrates, protects and appropriately responds to the land form and water systems.
PO2	Ensure that urban development retains water in the landscape using both public and private landscape spaces including streets to provide a high level of liveability.
PO3	Develop a green infrastructure framework including high-quality open space and increased tree canopy, structured around the Wianamatta-South Creek green spine and tributaries, biodiversity land to be conserved, remnant vegetation, water features, habitat linkages across ridges to link catchments, cultural values and view lines.
PO4	Align active and public transport networks within an easy walk from urban development and landscape amenity to encourage social connectivity.
PO5	Orient urban development towards landscape and transport amenity, developing fine grain walkable neighbourhoods with creek-oriented schools, community facilities and hubs.

#### Public Domain

PO6	Development contributes to the activity, vibrancy, diversity and safety of streets and the public domain through the day and night.	
PO7	Development protects sunlight to parks, streets and public domain.	

PO8	Provide public domain that prioritise pedestrians, cycling and public transit use, with public open space located within walking distance of local centres, housing and jobs consistent with the Premiers Priorities.
PO9	Development protects and shares high-quality views to significant scenic landscapes, particularly ridges, creek lines and riparian corridors.
PO10	Provide increased tree canopy consistent with Greener Places integrated with built form in the landscape and is of a scale to enhance scenic landscapes and provide sufficient shade and amenity in centres.
PO11	Provide high-quality landscaped open space that is green, integrated, connected as part of the green grid, multi-functional, accessible and of sufficient size to enable recreational and passive activities.
PO12	Implement a sustainable landscape maintenance and management plan.
PO13	Co-locate open space with other community assets to enhance the local character and retain significant items of cultural or heritage significance.
PO14	Ensure that public art is an integrated and cohesive part of new development.

## Urban Development

PO15	Provide a range of urban typologies which appropriately respond to the urban context and topography of the area including water retention and minimising urban heat island impacts.	
PO16	Provide a fine grain compact urban form including block sizes which will improve permeability, access to public transport and maximise opportunities for green space.	
PO17	Development enables an integrated water management plan for internal and external water re-use.	

## Interface with Transport and Surrounding Land Uses

PO18	Encourage vibrant, interactive, safe and accessible places in the centres surrounding the metro stations and bus linkages, with interfacing land use mix, density and development typologies maximising outcomes within station and public transport walking catchments.	
PO19	Provide suitable interfaces between industrial areas, trade gateways, intermodal facilities, transport corridors and surrounding land uses.	
PO20	Limit incompatible land uses in areas expected to have intense freight activity.	

# 5.1.2 Street Design and Network Layout

#### 5.1.2.1 Objectives

- a) Design streets which are attractive, green, sustainable, safe, functional, adaptable, and integrated, that support successful places and strong communities through the allocation of street space to achieve the local place vision and desired outcomes, prioritising pedestrian amenity.
- b) Reflect the important and varied role streets play in urban environments; as public spaces, places for social interaction, service provision, movement connections, water and flood management, biodiversity and environmental functions.
- c) Prioritise public transport infrastructure provision to deliver and support the 30-minute city and meet current and future demand.

#### 5.1.2.2 Performance Outcomes

### Street Design

PO1	Provide streets which are attractive, functional and safe for all street users at all times of the day.
PO2	Prioritise pedestrian, cycle and public transport movements.
PO3	Contribute to the amenity of the place and integrate with surrounding land use and adjoining built form.
PO4	Increase opportunities for community, social and recreational uses of street space.
PO5	All streets should be green, shaded, landscaped and provide an urban tree canopy which does not cause wildlife to create a safety hazard in the operational airspace of the Airport.
PO6	All streets must provide sufficient space for footpaths, street trees, planting, utility services, stormwater drainage and lighting/multi-purpose poles.
PO7	Carriageway widths and impervious road surfaces should be minimised.
PO8	Alternatives to high heat absorbing and reradiating materials (such as asphalt) should be used where possible.
PO9	Alternatives to high heat absorbing and reradiating materials (such as asphalt) should be used where possible.
PO10	Street design maximises stormwater retention and optimises opportunities for innovative urban water management such as passive irrigation of street trees and measures to reduce and/or slow stormwater runoff.
PO11	Provide minimum appropriate levels of on street car parking, to support the adjacent land use with parking provided prioritised towards ride and car sharing schemes with the aim to minimise private vehicle use as much as possible by designing streets that are suitable for walking and cycling and close to amenities.

PO12	Streets are designed to be resilient to natural and man-made hazards.
PO13	Street design is to consider the draft Western Sydney Street Design Guidelines.

#### Street Networks

Street networks must be safe system compliant and should be integrated, accessible, legible and permeable, and prioritise walking, cycling via separated cycleways and public transport.
Street layouts should respond to the existing landscape and topography.
Street networks should provide direct, convenient and comfortable connections through neighbourhoods and centres, and to essential attractions and services.
Street networks should maximise opportunities to interchange between transport modes and co-locate interchange points with other destinations.
Development is located on roads that are appropriate for the nature of traffic generated, having regard to the safety and efficiency of the transport network.
Streets are to be able to adapt to changing modes and innovative and new technologies.
Development does not compromise the orderly provision and staging of the transport network.
Water sensitive urban design systems should be integrated in streets to maximise retention and reuse of stormwater to reduce the load on end of pipe infrastructure and minimise downstream impacts on local waterways.
Street networks, including pedestrian and cycle networks, should reflect the function and role of streets based on the hierarchy of street types, as shown in <b>Table 1</b> below.

Table 1: Aerotropolis street types, role and modal priorities

Local Street Types	
Local Streets	Slow speed environments within residential neighbourhoods that may encourage community uses and informal sharing of street space between all street users. They provide traffic calming and maximise verge space for street tree planting.
Residential Laneway	Narrow, rear access slow speed environments that discourage vehicular thoroughfare and encourage informal sharing of street space between all street users.
Local Collector	Slow speed streets to and through neighbourhoods. Usually carrying buses and connecting to key local destinations. Generally, consideration of environment and local life predominate, and

	improved amenity is encouraged over the use of vehicles on these roads.
Mixed Use Street Types	
High Street	Predominantly applicable to commercial and mixed use centres where ground floor building uses require high quality public domain amenity and generous verge space for street activities.
Retail Laneway	Facilitate service, delivery and basement access in commercial and town centres. They also provide an opportunity to incorporate high quality, intimate public spaces that offer a unique variation in the public life of centres.
Industrial Street	Serve residential, commercial, and industrial precincts, with a mix of general traffic, buses, and heavy commercial and industrial vehicles with particular design requirements.
Sub-arterial Road	Higher-order neighbourhood streets, that typically facilitate the connection of the arterial road network to local street networks, although with a greater emphasis on placemaking outcomes, and may still include active transport and pedestrian amenity.

# 5.1.3 Building Design

#### 5.1.3.1 Objectives

- a) Provide an attractive, innovative, sustainable and functional built form that achieves the parkland vision through high-quality design and connection to Country.
- b) Provide well designed active street frontages to ensure activities within buildings can positively contribute to the public domain.
- c) Deliver high-quality architectural, urban and landscape outcomes as well as a structured process to support high-quality design.
- d) Reduce the opportunity for crime to be committed through environmental design.
- e) Encourage high-quality public art in the public and private domain.
- f) Ensure buildings are designed to be accessible, maximise solar access, protect privacy, enhance view sharing and provide functional private open space.

#### 5.1.3.2 Performance Outcomes

#### Built Form Principles

PO1	Buildings, site layout and landscaping are designed to care for and connect to Country.	
PO2	Provide a diverse range of dwelling and types and sizes to meet a range of household sizes and income needs.	

PO3	Provide appropriate heights, massing, articulation and façade treatments.
PO4	Buildings are designed to be accessible.
PO5	Building design positively integrates with the public domain, streets and open space.
PO6	Buildings are designed to minimise carbon output and resources, maximising natural ventilation and light though passive design, solar access, protect privacy and enhance view sharing.
PO7	Development is designed to encourage travel by public transport, walking and cycling providing appropriate end of trip facilities.
PO8	Car parking and access, service bays, building plant and structures located and designed to avoid dominating or detracting from pedestrian amenity or streetscape character.
PO9	Provide innovative and environmentally responsible design that achieves energy efficiency, renewable energy outcomes, retains water within the landscape and reduces the urban heat island effect.
PO10	Building massing responds to context including built environment and the public domain including significant land forms and landscape.
PO11	Implement crime prevention through environment design (CPTED) principles into built form and building design.

#### **Active Frontages**

PO12	Provide active uses on ground level frontages to streets and public open spaces in centres which foster casual, social and business interaction.
PO13	All ground floor uses are of high design quality addressing the public domain providing a high level of casual surveillance.
PO14	Provide continuity of ground floor shops along street and lanes and promote outdoor dining areas, with sufficient space for generous tree canopy and awnings.
PO15	Encourage frequent building entries that face and open towards the street and minimise large driveways and servicing on all active frontages.

# Public Art

PO16	Ensure that high quality public art is an integrated and cohesive part of new development.
PO17	Recognise former uses through interpretive public art.

# Solar access

PO18	Design, orientate and site development to maximise and prioritise solar access to the living areas of dwellings and open spaces and, all other areas of the development.
PO19	Development retains high levels of solar access to the neighbouring properties and the public domain.

## Visual and Acoustic Privacy

PO20	New development is designed so that its occupants enjoy high-quality visual and acoustic privacy, whilst not producing adverse privacy impacts for adjoining and nearby properties.
PO21	Development is designed and constructed to minimise noise intrusion from existing and planned transport corridors, including road and rail, and aircraft noise to avoid adverse impacts on amenity for users/residents.
PO22	Noise attenuation measures are compatible with the intended scale, form and character of the area.

## Private Open Space

PO23	Common and private open space is sufficient in size and configuration including with respect to context.
PO24	Common and private open space is designed and located to maximise solar access and amenity.
PO25	Common and private open space is designed to receive a high level of privacy.
PO26	Maximise green private open space include tree canopy, planting and pervious surfaces.

## Landscaping

PO27	Increase the tree canopy cover (with appropriate species) and landscaping to reduce ambient temperatures and urban heat island.
PO28	Promote connection to Country by using Indigenous plant species, where appropriate.
PO29	Maximise pervious surfaces across the site.
PO30	All hard stand surfaces associated with car parking and driveways are to be offset from boundaries and buildings to provide landscaping opportunities, soften the visual impact and provide protection from glare.
PO31	Provide treatments that foster attractive outlooks to and from the public domain, as well as to and from public and private open spaces within the site.
PO32	Implement a sustainable landscape maintenance and management plan.

#### Design Excellence Processes

PO33	Ensure all building and public domain development addresses NSW Policy objectives for good design as outlined in <i>Better Placed</i> .
PO34	Ensure building and public domain design is in accordance with the relevant design excellence guideline, including where a competitive design or other process may be required and that the process extends into detailed design including materiality and delivery.

# 5.1.4 Role and Hierarchy of Centres

## 5.1.4.1 Objectives

- a) Effectively manage Western Sydney's network of centres and interface with Sydney Metro and other public transport modes.
- b) Establish new centres metropolitan, strategic, local and rural towns/villages.
- c) All centres to prioritise pedestrian, active transport, and public transport access over private vehicles to promote healthy and active neighbourhoods.
- d) Integrate health and education precincts to support job agglomeration and community infrastructure.
- e) Develop a social and cultural framework to enliven centres and place of gathering.

# 5.1.4.2 Performance Outcomes

#### Metropolitan Centres

PO1	Provide access to a large number and range of jobs and services delivering a well-connected city $-$ a 30-minute city.
PO2	Provide a polycentric urban structure across the Aerotropolis, Liverpool, Greater Penrith, and Campbelltown-Macarthur.
PO3	Establish metropolitan centres around Metro/mass transit nodes and highly accessible areas.
PO4	Support creative and cultural uses, where appropriate.

### Strategic Centres

PO5	Provide flexibility, so that the private sector can decide where and when to invest, consistent with the sequencing of appropriate infrastructure.
PO6	Co-locate a wide mix of land uses, in particular employment including health and education, supported by limited residential development, in appropriate locations.
PO7	Provide high levels of amenity, accessibility within a walkable and cycle friendly environment.

PO8	Establish strategic centres around metro/mass transit nodes and highly accessible
	areas.

### Local Centres

PO9	Establish walkable communities by increasing the level of residential development within walking distance to day-to-day goods and services.
PO10	Provide fine grain urban form with a diversity of commercial spaces, community and public places, and co-location of services and infrastructure.
PO11	Enable connectivity to metropolitan and strategic centres through an accessible and integrated transport (i.e. buses) and road network.

#### **Rural Villages**

PO12	Provide a mix of rural industries, local services, tourism and businesses and provide the day-to-day needs of employees and visitors.
PO13	Encourage growth and intensification of business activity where they maintain or enhance local character.

## 5.1.5 Night Time Economy

#### 5.1.5.1 Objectives

- a) Support a safe, diverse, inclusive, vibrant and accessible night time economy for the Aerotropolis.
- b) Support the Aerotropolis Core as a 24-hour, global centre for workers, residents and visitors coming to and from the Airport.

### 5.1.5.2 Performance Outcomes

PO1	Provide a thriving night time economy with diverse options and broad community appeal.
PO2	Night time uses are located in appropriate areas and designed to have minimal adverse impacts on the amenity and safety of patrons, nearby residents and the broader community.
PO3	Night time uses are accessible by appropriate public transport.

# 5.1.6 Digital Technology

#### 5.1.6.1 Objectives

- a) Support the Western Parkland City as a connected open data digital city and global innovation hub to improve life of the individual citizen, future populations, businesses and communities.
- b) Innovative development embraces and promotes new and emerging technologies and utility provision.

#### 5.1.6.2 Performance Outcomes

PO1	Deliver the Western City Digital Action Plan.
PO2	Incorporate enabling infrastructure in all streets and development.
PO3	Ensure coordinated delivery of telecommunications infrastructure and sharing of pits and data exchange facilities between Government, industry and developers.
PO4	Where feasible digital technology is integrated into building design or street furniture.
PO5	Buildings and infrastructure are designed to cater for changing needs and emerging technologies.

#### 5.1.7 Urban Ecology and Sustainability

#### 5.1.7.1 Objectives

- a) Support sustainable management of water in urban areas through intelligent and integrated management of water resources for local greening and cooling.
- b) Support integrated management within urban environments to capture, treat and re-use stormwater and wastewater before it has the chance to pollute and/or degrade our creeks, rivers and riparian vegetation.
- c) Support and implement the vision of the Greater Sydney green grid, through strategically planned, designed and managed green infrastructure that supports healthy, green and sustainable communities and connects communities to the natural environment.
- d) Green infrastructure is to be comprised of a network of green and blue spaces, which include waterways, bushland, parks, open spaces and tree canopy that are strategically planned, designed and managed to support a good quality of life in an urban environment.
- e) Minimise the amount of waste generated and waste going to landfill, by designing waste out of developments and implementing circular economy principles within all developments.
- f) Protect, conserve and enhance the biodiversity values of trees and other vegetation in the Aerotropolis and conserve threatened species and ecological communities in nature.
- g) Protect and enhance trees that contribute to the landscape character and scenic qualities.

# 5.1.7.2 Performance Outcomes

#### Water Sensitive Urban Design

PO1	Achieve an integrated land use planning approach to the provision of potable and recycled water and the management of wastewater and stormwater.
PO2	Stormwater infrastructure to be designed to have dual functions of water cycle management and recreation/amenity.
PO3	Integrate water into the landscape and urban form to enhance ecological, visual, social, economic and cultural values.

#### Design for Climate, Urban Heat and Thermal Comfort

PO4	Use low-reflectivity roofing and other building materials, streets pavements that are low reflectivity and pervious.
PO5	Building materials used are to be sustainably sourced minimising the necessity for mechanical heating and air conditioning.
PO6	Integrate waterways and recycled water reuse into site design, maximise permeable surfaces, implement innovative solutions to retain water within the landscape.
PO7	Protect, enhance and extend the urban tree canopy.

# Green Infrastructure

PO8	Provide a comprehensive network of green spaces, natural systems and semi-natural systems that support sustainable communities.
PO9	Preserve high-quality vegetation on ridges to crease an interconnected web of well- located open spaces connected through the Western Parkland City.
PO10	Provide multi-functional connected high-quality active and passive open spaces adjacent to riparian corridors which connect ridges to the Wianamatta-South Creek spine.

### **Tree Preservation**

PO11	New development takes into account existing vegetation in the site planning, design, development, construction and operation of the development.
PO12	Native vegetation which supports habitat for native fauna and biodiversity is protected and enhanced.
PO13	Trees are maintained in an appropriate manner so as not to cause harm.
PO14	Removal of trees in the Aerotropolis must be in accordance with the <i>State</i> <i>Environmental Planning Policy</i> (Vegetation in Non-Rural Areas) 2017 and Biodiversity <i>Conservation Act</i> 2016.

PO15	All existing mature shade providing trees be retained.
------	--

#### **Circular Economy**

PO16	Implement circular economy principles of 'Reduce, Reuse and Recycle' throughout all lifecycle stages of the development.
PO17	Establish targets for resource recovery, re-use and recycling of waste in all stages of the development including construction and operation.
PO18	Implement innovative waste management storage and collection systems that are healthy, efficient and minimises disruption to amenity.
PO19	Utilise sustainable energy, water and waste systems to encourage a circular economy that improves efficiency and results in low-carbon developments.

# 5.2 Affordable Housing and Housing Diversity

#### 5.2.1 Objectives

- a) Integrate affordable housing as part of all developments with a residential component.
- b) Provide for affordable housing of high quality and amenity, in a size and configuration to meet a diverse range of housing needs.
- c) Establish and maintain a socially diverse residential population representative of all income groups, by providing housing for very-low, low- and medium-income earners.
- d) Attract and accommodate key workers.

### 5.2.2 Performance Outcomes

PO1	Development provides affordable housing with a residential component at a rate as per affordable rental housing targets.
PO2	Ensure affordable housing is retained for perpetuity, unless it can be offset locally.
PO3	Ensure housing diversity, to address transitional local demographics changes and needs, including the provision of smaller dwellings, seniors housing, key workers housing and student accommodation.
PO4	Allow for build to rent and innovative housing delivery models.
PO5	Integrate (by keeping the same standard of external appearance) and by providing innovative solutions of affordable housing into regular residential development.

# 5.3 Services and Utilities

#### 5.3.1 Objectives

- a) Ensure development occurs in a logical and staged manner in line with surrounding sequence of utility services/infrastructure provision.
- b) Ensure appropriate utilities and services are planned and delivered to meet future demand.
- c) Protect existing utilities infrastructure, including the Warragamba pipeline corridor.

#### 5.3.2 Performance Outcomes

PO1	Adequate provision of utility supply/services including, water, wastewater, recycled water, energy and telecommunications for future needs of the intended use.
PO2	<ul> <li>Development near utility services does not:</li> <li>a) adversely affect the function of the service;</li> <li>b) place an additional load on the service;</li> <li>c) protects the infrastructure from physical damage; and</li> <li>d) allows appeared personal personal for maintenance purposes</li> </ul>
PO3	<ul> <li>d) allows ongoing necessary access for maintenance purposes.</li> <li>Infrastructure is integrated with and efficiently extends existing networks and allows for resource recovery hubs and co-location of similar users.</li> </ul>
PO4	Infrastructure is designed and located to prevent illegal access and/or connection and not be visible from the public domain or designed and landscaped to make a positive contribution to the public domain.
PO5	Embrace and install smart innovative technologies.
PO6	Provide the necessary utilities to support community events and activities.

# 5.4 Access and Carparking

# 5.4.1 Objectives

a) Ensure development makes appropriate provision for transport, access, servicing and end of trip facilities to meet the needs of development, reduce the demand for private car parking over time and facilitate, an environmentally sustainable transport network.

### 5.4.2 Performance Outcomes

#### Access

PO1	Site design is to prioritise the safe and convenient movement of pedestrians and cyclists over vehicle movements in line with envisaged movement function, having regard to sight lines, legibility, weather protection, the needs of children, elderly and people with disabilities.
PO2	Vehicle access arrangements and queuing areas are appropriate and minimise any adverse impact on infrastructure, road networks, safety, adjoining properties, amenity and street trees.
PO3	Where required, safe and convenient set-down and pick-up areas are to be provided for passengers.

## Car Parking

PO4	To reduce the number of vehicle movements through high pedestrian and cycle precincts and streets, alternatives to onsite carparking provisions will be considered, especially in town centres. Where on-site carparking is provided, it is:
	a) to be limited;
	b) priority is to be given to ride and car sharing schemes; and
	c) is to be designed so that it can transition to alternative uses over time.
PO5	Alternatives to impermeable surfaces are to be encouraged in carparking and driveway design.
PO6	Car parking areas, pathways and other elements of transport network infrastructure are designed to enhance public safety by discouraging crime and anti-social behaviour.
PO7	Any part of the parking area designated as a vehicle cleaning or repair area is designed and constructed to avoid adverse impact on water quality or Council's wastewater or stormwater infrastructure.

## Servicing

PO8	Provision is made for the on-site loading, unloading, manoeuvring and access by service and refuse vehicles that:
	<ul> <li>a) is adequate to meet the demands generated by the development;</li> </ul>
	b) is able to accommodate the design service vehicle requirements;
	<ul> <li>c) does not unduly impede vehicular, cyclist and pedestrian safety and convenience within the site.</li> </ul>
	d) does not adversely impact amenity, and
	e) does not dominate the road frontage or detract from streetscape character.

# 6 Heritage and Cultural Conservation

Heritage planning aims to ensure that the significant elements of the past are appropriately managed and respected by new development. Heritage conservation does not preclude change but rather responds to different constraints and opportunities.

# 6.1 Heritage Items

Development in the vicinity of a heritage item can have an impact upon the heritage significance of the item. The determination of the setting of a heritage item should consider the historical property boundaries, significant vegetation and landscaping, archaeological features, and significant views to and from the property.

# 6.1.1 Objectives

- a) Ensure that development in the vicinity of heritage items is designed and sited to protect the heritage significance of the item and its setting.
- b) Ensure that the development of land or a building in the vicinity of a heritage item is undertaken in a manner that complements the heritage significance of the site or area.

# 6.1.2 Performance Outcomes

PO1	Encourage the retention of existing heritage items and their significant elements.
PO2	Ensure development is based on the understanding and conservation of the heritage significance of the item, being sympathetic and respectful to the value of heritage places.
PO3	Encourage heritage items to be used for purposes that are appropriate to their heritage significance, including adaptive reuse where appropriate.
PO4	Maintain the setting of the heritage item including the relationship between the item and its surroundings.
PO5	Encourage the removal of inappropriate alterations and additions, and the reinstatement of significant missing details and building elements.
PO6	Maintain a sufficient curtilage around an item to minimise the impact of new development.
PO7	Minimise the impact of new development adjacent to or within the vicinity of a heritage item.
PO8	Promote the protection of places which have the potential to have heritage significance but are not identified as heritage items or places.
PO9	Ensure that the subdivision of land on which a heritage building is located does not isolate the building from its setting or context, or adversely affect its amenity or privacy.

# 6.2 Historic Archaeology

The relics provisions of the *Heritage Act 1977* apply across NSW. A Heritage Act approval will generally be required to undertake excavation within an area which has the potential to feature historic relics. This approval requirement is in addition to any requirements of the EP&A Act.

Within an undeveloped area, the likelihood for historic archaeology may seem low, however evidence of original homesteads, agricultural structures and other land occupation may still remain. These relics need to be managed sustainable and ensure where possible they are retained on site to conserve their significance.

#### 6.2.1 Objectives

- a) Ensure adequate protection and appropriate management of archaeological resources.
- b) Ensure that as much archaeology of Local, State and potential National heritage significance is retained *in situ* as possible and interpreted within the new developments.

### 6.2.2 Performance Outcomes

PO1	Encourage the retention of significant relics identified on site.
PO2	Ensure development is based on the understanding and conservation of the relic.
PO3	Encourage interpretation of the relic to improve understanding within the community.
PO4	Enhance the significance of the relic through integration into future development.
PO5	Minimise the impact of new development adjacent to or within the vicinity of a relic.

# 6.3 Aboriginal Culture and Heritage

Engaging with Aboriginal culture and heritage is more than physical objects and places of significance and require a better understanding of and connection to Country, including narratives and the relationship between places.

Country, for First Peoples, relates not only to the cultural group and land to which they belong, it is also their place of origin in cultural, spiritual and literal terms. Country includes not only the land but also waters and skies, the journeys between them and incorporates the tangible and intangible, knowledges and cultural practices, identity and reciprocal relationships, belonging and wellbeing.

Aboriginal heritage consists of objects and places that are of significance to Aboriginal people because of their traditions, observances, law, customs, beliefs and history. It may comprise of physical or non-physical elements.

An initial investigation must be carried out to determine if the proposed development or activity occurs on land potentially containing an item of Aboriginal archaeology or is within an area of cultural significance to Aboriginal peoples. If any of the above features apply then the relevant Aboriginal community must be consulted, as part of the initial investigation to ensure that the potential for the land to contain Aboriginal sites, places or relics has not been overlooked by previous studies.

This section applies to assessable development to land:

- a) In which Aboriginal sites, places or relics have been previously identified.
- b) Within an identified cultural landscape.
- c) That has not been cleared.

#### 6.3.1 Objectives

- a) Preserve items and sites of Aboriginal cultural and archaeological significance located within the Aerotropolis.
- b) Ensure development is designed to care for and connect to Country.

#### 6.3.2 Performance Outcomes

PO1	Development does not result in the demolition or removal of or damage to the Aboriginal heritage place or object.	
PO2	Development retains, conserves and does not detract from the features and values of the Aboriginal heritage place or object.	
PO3	Development is compatible with the Aboriginal heritage significance of the place.	
PO4	Development is designed to care for and connect to Country.	
PO5	New development adjacent to or within the vicinity of an item or place of Aboriginal heritage significance should have no impact on that item or place.	

# 7 Subdivision Design

The Phase 2 DCP will set out the objectives, performance outcomes and acceptable solutions for all subdivision outcomes within the Aerotropolis. These will be developed during precinct planning. It is anticipated that these will be developed for the following subdivision purposes:

- agribusiness;
- commercial;
- industrial;
- mixed use;
- residential; and
- tourism.

# 8 **Potential Development Types**

The Phase 2 DCP will set out the objectives, performance outcomes and acceptable solutions for desirable development types within the Aerotropolis. These development types include:

- agribusiness;
- commercial;
- industrial;
- mixed use;
- residential; and
- tourism.

# Dictionary

Term	Definition
1 in 100 chance per year flood	a flood that has a 1% chance of occurring in any given year within a 100-year cycle.
5G	is the fifth-generation cellular network technology.
Acceptable solutions	means by which a development may achieve the intent of a planning objective or performance outcome.
Acid sulfate soils	naturally occurring sediments and soils containing iron sulfides (principally pyrite) or their precursors or oxidation products, whose exposure to oxygen leads to the generation of sulfuric acid (for example, by drainage or excavation).
Active street frontage	ground floor business or retail building street frontage that has direct and level entry and openings allowing physical and visual access that encourages interaction between the inside of the building and the adjoining external areas, including footpaths, road reserves or public spaces. Active street frontages support pedestrian safety and amenity and provide an interface between the public and private domain.
Aerospace	the branch of technology and industry concerned with the research, design, manufacture, operation and maintenance of aircraft, space craft, and their components and supporting services.
Aerotropolis	is a metropolitan area whose infrastructure, land-use and economy are centred on the Western Sydney International Airport and includes the outlying corridors, and aviation orientated business and residential development that benefit from each other and their accessibility to the Western Sydney International Airport. See <b>Western Sydney Aerotropolis</b>
Aerotropolis Core	is the central city at the core of the Aerotropolis activity associated with the Airport. The combination of uses, activities, development and places are reliant on and complementary to the operation of a global airport.

Term	Definition
Agribusiness	businesses associated with the production, processing, marketing and distribution of agricultural products, especially at a large and integrated scale.
Agriculture	is generally associated with traditional primary production. It includes the cultivation of land for the growing of crops and breeding of animals.
Agriport	a high-tech food production facility that enables industry collaboration at scale to intensively and sustainably produce fresh value-added high- quality produce and pre-prepared food.
Amalgamation	two or more lots joined to form a single development site.
Amenity	the 'liveability' of a place that makes it pleasant and agreeable for individuals and the community. Amenity includes, but is not limited to, the enjoyment of sunlight, views, privacy and quiet.
Ancillary development	development that is subordinate or subservient to the dominant purpose for which a site is used or proposed to be used.
ANEC – Australian Noise Exposure Contours	anticipated forecasts of future noise exposure patterns based on indicative flight paths around an airport that constitute the contours.
ANEF – Australian Noise Exposure Forecast	endorsed forecasts of future noise exposure patterns around an airport that constitute the contours on which land use planning authorities base their controls.
Articulation	the architectural treatment of the exterior of a building using the different building elements that make up that part of the building. It involves how the building's exterior surfaces, edges, corners and materials unite to give the building its form.
Asset protection zone	a fuel-reduced area surrounding a built asset or structure which provides a buffer zone between a bush fire hazard and an asset. The APZ includes a defendable space within which firefighting operations can be carried out. The size of the required asset protection zone varies with slope, vegetation and Fire Danger Index (FDI).
Better Placed	an integrated design policy prepared by the NSW Government Architect.

Term	Definition
Biodiversity offsets	measures that compensate elsewhere for the adverse impacts of an action, such as clearing for development. Biodiversity offsets protect and manage biodiversity values in one area in exchange for impacts on biodiversity values in another.
Biodiversity assessment method	the biodiversity assessment method established under Part 6 of the <i>Biodiversity Conservation Act 2016</i> .
Biodiversity assessment report	same meaning as in the <i>Biodiversity Conservation Act 2016</i> . a biodiversity stewardship site assessment report, a biodiversity development assessment report or a biodiversity certification assessment report prepared by an accredited person.
Biodiversity offsets scheme	a biodiversity offsets scheme within the meaning of section 6.2 of the <i>Biodiversity Conservation Act 2016</i> .
Blue-green grid	an interconnected network of natural and designed landscape components, including water bodies and green and open spaces.
Business incubator	a company that helps new and startup companies to develop by providing services such as management training or office space.
Circular economy	a whole-of-system approach that requires accounting of the full cost and life-cycle of materials, which retains the value of materials in the economy for as long as possible, reducing the unsustainable depletion of natural resources and impacts on the environment.
Climate change	a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.
Communal open space	outdoor space located within the site at ground level or on a structure that is within common ownership and for the recreational use of residents of the development. Communal open space may be accessible to residents only, or to the public.

Term	Definition
Communications, navigation and surveillance facilities	<ul> <li>are facilities that allow:</li> <li>a) pilots to navigate when en-route between airports;</li> <li>b) pilots to utilise terminal area navigation aids to conduct instrument approach procedures;</li> <li>c) dialogue between pilots and Air Traffic Control; and</li> <li>d) Air Traffic Control to monitor and confirm an aircraft location.</li> </ul>
Connect with Country	Country, for First Peoples, relates not only to the cultural group and land to which they belong, it is also their place of origin in cultural, spiritual and literal terms. Country includes not only the land but also waters and skies, and incorporates the tangible and intangible, knowledges and cultural practices, identity and reciprocal relationships, belonging and wellbeing.
Consent Authority	the same meaning as in Section 4.5 of the <i>Environmental Planning and</i> Assessment Act 1979.
Conservation (heritage)	all the processes of looking after a place so as to retain its cultural significance. This includes preservation, protection, maintenance, restoration, reconstruction and adaptation.
Conservation (vegetation management)	all the processes and actions of looking after a place so as to retain its natural significance and includes protection, maintenance and monitoring. Conservation may also include regeneration, restoration, enhancement, reinstatement, preservation or modification, or a combination of more than one of these. Conservation includes conserving natural processes of change (as opposed to artificially accelerated changes).
Contaminated land	land in, on or under which a substance is present at a concentration above that normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment.
Controlled activities	<ul><li>any activity that infringes an airport's protected airspace and requires approval before it can be carried out. Controlled activities include:</li><li>a) permanent structures, such as building</li><li>b) temporary structures, such as cranes</li></ul>

Term	Definition
	c) any activities causing intrusions into the protected airspace through glare from artificial light or reflected sunlight, air turbulence from stacks or vents, smoke, dust, steam or other gases or particulate matter.
Crime prevention through environmental design (CPTED)	<ul> <li>is a multi-disciplinary approach to deterring criminal behaviour through environmental design. Crime prevention through environmental design strategies rely upon the ability to influence offender decisions that precede criminal acts. The four principles of the approach are:</li> <li>surveillance</li> <li>access control</li> <li>territorial reinforcement; and</li> <li>space management.</li> </ul>
Cumberland Plain Conservation Plan (CPCP)	will address impacts on biodiversity from urban growth through a conservation program that includes commitments and actions designed to improve ecological resilience and function over the long-term. The CPCP will enable land to be certified for development and areas avoided from development to be conserved where suitable. The CPCP will enhance a network of green spaces, natural and semi-natural systems throughout Western Sydney.
Deep soil area	area/s of soil within a development that are unimpeded by buildings or structures above and below ground.
Defence	branch of industry concerned with the research, design, manufacture, operation and maintenance of military equipment, supplies and services.
Design excellence	the highest level of architectural, urban and landscape design. Design excellence processes can include review panels, competitive design competitions. All processes require a form of design excellence assessment
Development	as per the <i>Environmental Planning and Assessment Act</i> 1979, Development is any of the following: a) the use of land, b) the subdivision of land,

Term	Definition
	c) the erection of a building,
	d) the carrying out of a work,
	e) the demolition of a building or work,
	<li>f) any other act, matter or thing that may be controlled by an environmental planning instrument.</li>
Development application	same meaning as in the <i>Environmental Planning and Assessment Act</i> 1979.
	an application for consent under Part 4 of the <i>Environmental Planning</i> <i>and Assessment Act 1979</i> to carry out development but does not include an application for a complying development certificate.
Development control plan	a development control plan made, or taken to have been made, under Division 3.6, Part 3 of the <i>Environmental Planning and Assessment Act</i> <i>1979</i> and in force.
Ecologically sustainable development	same meaning as in Section 6 (2) of the <i>Protection of the Environment</i> Administration Act 1991.
	ecologically sustainable development requires the effective integration of social, economic and environmental considerations in decision- making processes. Ecologically sustainable development can be achieved through the implementation of the following principles and programs:
	a) the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
	In the application of the precautionary principle, public and private decisions should be guided by:
	i. careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
	<li>an assessment of the risk-weighted consequences of various options,</li>
	<li>b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,</li>

Term	Definition
	<ul> <li>conservation of biological diversity and ecological integrity— namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,</li> </ul>
	<ul> <li>d) improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:</li> </ul>
	i. polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
	<li>the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,</li>
	iii. environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.
End-of-trip facilities	are designated places that support cyclists, joggers and walkers in using alternative ways to travel to work rather than driving or taking public transport. These types of facilities also benefit people who exercise during their lunch break.
	End-of-trip facilities include:
	secure bicycle parking
	locker facilities
	change rooms
Environmental planning instrument	an environmental planning instrument (including a state environmental planning policy or local environmental plan but not including a Development Control Plan) made, or taken to have been made, under Part 3 of the <i>Environmental Planning and Assessment Act 1979</i> and in force.
Environmentally sensitive area	any of the following: a) the coastal waters of the State,
	<ul> <li>b) a coastal lake identified in Schedule 1 to State Environmental Planning Policy (Coastal Management) 2018,</li> </ul>

Term	Definition
	<ul> <li>c) land identified as "coastal wetlands" or "littoral rainforest" on the Coastal Wetlands and Littoral Rainforests Area Map (within the meaning of State Environmental Planning Policy (Coastal Management) 2018),</li> </ul>
	d) land reserved as an aquatic reserve under the <i>Fisheries</i> <i>Management Act 1994</i> or as a marine park under the <i>Marine Parks</i> <i>Act 1997</i> ,
	<ul> <li>e) land within a wetland of international significance declared under the Ramsar Convention on Wetlands or within a World heritage area declared under the World Heritage Convention,</li> </ul>
	f) land within 100m of land to which paragraph (c), (d) or (e) applies,
	g) land identified in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 or any other environmental planning instrument as being of high Aboriginal cultural significance or high biodiversity significance,
	<ul> <li>h) land reserved under the National Parks and Wildlife Act 1974 or land to which Part 11 of that Act applies,</li> </ul>
	<ul> <li>i) land reserved or dedicated under the <i>Crown Lands Act 1989</i> for the preservation of flora, fauna, geological formations or for other environmental protection purposes,</li> </ul>
	<ul> <li>j) land identified as being critical habitat under the Threatened Species Conservation Act 1995 or Part 7A of the Fisheries Management Act 1994.</li> </ul>
Floodplain	an area of land which is subject to inundation by floods up to and including the probable maximum flood event, that is, flood prone land.
Greater Sydney Region	the region comprising the local government areas within the boundary shown on the map in the <i>Greater Sydney Region Plan</i> and Schedule 1 of the <i>Greater Sydney Commission Act 2015</i> .
Green infrastructure	the network of green and blue spaces which includes waterways, bushland, parks, open spaces and tree canopy that are strategically planned, designed and managed to support a good quality of life in an urban environment.
Greener Places	an integrated design policy prepared by the NSW Government Architect to guide the design, planning and delivery of green infrastructure across NSW.

Term	Definition
Ground truthing	confirming accuracy of information collected using site survey by on site survey, observation or recording of GPS coordinates.
Growth area	identified by the NSW Government as major greenfield development areas.
Habitat	<ul> <li>includes:</li> <li>a) an area periodically or occasionally occupied by a species or ecological community, and</li> <li>b) the biotic and abiotic components of an area.</li> </ul>
Hazardous material	materials that have the potential to pose a significant risk to human health, life or property, or to the biophysical environment. These may include materials that are radioactive, flammable, explosive, corrosive, oxidising, asphyxiating, bio-hazardous, toxic, pathogenic, or allergenic. Compressed gases and liquids or hot materials that may be hazardous in specific circumstances may also be included.
Hazardous waste	any waste that because of its physical, biological or chemical properties, is capable of causing a danger to the life or health of any living thing if it is released into the environment, and/or is, or contains a hazardous material described in the Protection of the Environment Operations Act 1997, e.g. can include dangerous goods, poisons, coal tar or coal tar pitch waste, lead-acid or nickel-cadmium battery waste, lead paint waste arising from non-residential premises and other waste containing hazardous components.
Infill development	the erection of a new building or buildings on land within an existing developed area. It may involve erection of building/s on a vacant site or following the total demolition of existing building/s.
Integrated water cycle management	an approach to the management of water that considers aspects of water including rainwater, stormwater, groundwater, water supply and use, reuse and treatment.
Irrigation	the supply of water to land or crops to help growth, typically by means of channels.
Local centre	smaller-scale places that vary from a few shops on a corner to a vibrant main street and generally serve a local population.

Term	Definition
Local environmental plan	same meaning as in the <i>Environmental Planning and Assessment Act</i> 1979.
	a local environmental plan made under Division 3.4 of Part 3 of the <i>Environmental Planning and Assessment Act 1979</i> .
National Airports Safeguarding Framework	is a national land use planning framework that aims to: a) improve community amenity by minimising aircraft noise-sensitive
	developments near airports, and
	<ul> <li>b) improve safety outcomes by ensuring aviation safety requirements are recognised in land use planning decisions on various safety related issues.</li> </ul>
Neighbourhood planning	a precinct will be separated into different areas and each area will be staged in its development. The neighbourhood planning process relates to each development stage. A neighbourhood plan is required to be submitted for each stage prior to the submission of development applications for lots.
	The neighbourhood plans provide up to date spatial allocation, where the land use typologies and lots are located within a phasing plan. The objective of the neighbourhood plan process is to ensure that each neighbourhood plan per phase is responding to the successes of previous phases. This would include monitoring the development and population capacities and ensuring the typologies are responding to market forces and desires.
Obstacle Limitation Surface (OLS)	designed to protect aircraft flying in visual conditions close to an airport by defining a volume of airspace to be protected from development, primarily modelled on the layout and configuration of proposed runways.
Operational airspace	an airport's operational airspace is the volume of airspace above a set of imaginary surfaces. These surfaces are established with the aim of protecting aircraft from obstacles or activities that could be a threat to safety.
Performance outcome	a general statement of the means of achieving the intent of the applicable objectives of this development control plan.
Peri-urban farming	agriculture undertaken in places on the fringes of urban areas.

Term	Definition
Permeable surface	a surface which permits or facilitates the infiltration or penetration of water e.g. grass areas, landscaping, porous paving and the like.
Precinct planning	precinct planning identifies the development intent and development capacity across the entire precinct, through the allocation of land uses and densities. Precinct Planning includes land uses, housing choices, built form, infrastructure, and environmental and open space desires.
Principle private open space	same meaning as in <i>State Environmental Planning Policy</i> (Exempt and Complying Codes) 2008.
	an area outside a dwelling that is directly accessible from, and adjacent to, a habitable room in the dwelling, other than a bedroom.
Private open space	same meaning as in the <i>Standard Instrument - Principal Local</i> Environmental Plan.
	an area external to a building (including an area of land, terrace, balcony or deck) that is used for private outdoor purposes ancillary to the use of the building.
Probable maximum flood (PMF)	the largest flood that could conceivably occur at a particular location, usually estimated from probable maximum precipitation, and where applicable, snow melt, coupled with the worst flood producing catchment conditions.
Procedures for Air Navigation Services – Aircraft Operations surfaces (PANS OPS)	the primary surface for protecting aircraft operating under non-visual (instrument guided) conditions generally located above the OLS. Separate procedures for each runway and for the type of navigation system being used and the multiple surfaces are combined to form the PANS-OPS.
Public domain	any permanent space, whether publicly or privately owned, that can be accessed and used by the public and/or is publicly visible or any publicly owned temporary space that can be accessed and used by the public and/or is publicly visible.
Public safety area	a designated area at the end of an airport runway within which development may be restricted in order to control the number of people on the ground at risk of injury or death in the event of an aircraft accident on take-off or landing.

# Draft Western Sydney Aerotropolis Development Control Plan 2019 – Phase 1

Term	Definition
Public space	includes parks, green spaces, plazas, libraries, streets, landscapes, museums, and public transport.
Relevant planning authority	in relation to any matter, means the council of the area to which the matter relates or the Secretary. However, the council is not the relevant planning authority in relation to a SEPP and the Secretary is not the relevant planning authority in relation to a LEP for which a council is the planning proposal authority under Division 3.4 of the <i>Environmental Planning and Assessment Act</i> 1979.
Remediation	<ul> <li>means:</li> <li>a) removing, dispersing, destroying, reducing, mitigating or containing the contamination of any land, or</li> <li>b) eliminating or reducing any hazard arising from the contamination of any land (including by preventing the entry of persons or animals on the land).</li> </ul>
Ride and car sharing	an arrangement in which a passenger travels in a private vehicle driven by its owner, for free for a fee.
Riparian corridor	the channel which comprises the bed and banks of a watercourse (to the highest bank) and the vegetated riparian zone adjoining the channel.
Road reserve	<ul> <li>includes the following components:</li> <li>a) footway</li> <li>b) kerb and gutter</li> <li>c) road carriageway</li> <li>d) ancillary items to any of the above - any stormwater drainage asset, road/street furniture, edging, lighting, poles, services, signage etc.</li> </ul>
Salinity	the salt content in water or soil.
Signage	any sign, notice, device, representation or advertisement that advertises or promotes any goods, services or events and any

# Draft Western Sydney Aerotropolis Development Control Plan 2019 – Phase 1

Term	Definition
	structure or vessel that is principally designed for, or that is used for, the display of signage, and includes any of the following:
	a) an advertising structure
	b) a building identification sign
	c) a business identification sign
	but does not include a traffic sign or traffic control facilities.
Site-specific development control plan	a development control plan that provides detailed planning and design guidelines for a specific site that meets the criteria set out in the Aerotropolis SEPP.
Solar access	is the ability of a building, part of a building or open space to continue to receive direct sunlight without obstruction from other surrounding buildings or impediments, not including trees.
State environmental planning policy	a statutory plan, typically prepared by the NSW Department of Planning, Industry and Environment and endorsed by the Minister for Planning and Public Spaces that can be a spatial plan for particular land in NSW, and/or set policy that applies to particular land or all land in NSW.
State Environmental Planning Policy (Sydney Region Growth Centres) 2006	is the environmental planning instrument which sets controls for the North West and South West Growth Centres of Sydney.
State Environmental Planning Policy (Western Sydney Employment Area) 2009	the NSW Government established the Western Sydney Employment Area to provide businesses in the region with land for industry and employment, catering for transport and logistics, warehousing and office space
STEM (science, technology, engineering and mathematics)	an approach to learning and development that integrates the areas of science, technology, engineering and mathematics.
Stormwater	untreated water that originates from rainfall or snow/ice melt and soaks into the ground (infiltrate), is held on the surface and evaporates, or runs off to streams, rivers or other water bodies (surface water).

# Draft Western Sydney Aerotropolis Development Control Plan 2019 - Phase 1

Term	Definition
Strategic centre	Strategic centres, as identified in <i>A Metropolis of Three Cities</i> and the <i>Western City District Plan</i> , are characterised by a high proportion of knowledge-intensive jobs, existing or proposed major transport gateways and have a major role in supporting increased economic activity.
Streetscape	the character of a street and its close surrounds defined by the spatial arrangement and visual appearance of built and landscape features when viewed from the street.
Threatened ecological community	<ul> <li>means:</li> <li>a critically endangered ecological community, an endangered ecological community or a vulnerable ecological community listed in Schedule 2 of the <i>Biodiversity Conservation Act 2016</i>, or</li> <li>b) a listed threatened ecological community within the meaning of the <i>Environment Protection and Biodiversity Conservation Act 1999</i>.</li> </ul>
Threatened species	<ul> <li>means:</li> <li>a critically endangered species, an endangered species or a vulnerable species listed in Schedule 1 of the <i>Biodiversity Conservation Act 2016</i>, or</li> <li>b) a listed threatened species within the meaning if the <i>Environment Protection and Biodiversity Conservation Act 1999</i>.</li> </ul>
Tributary	a river or stream flowing into a larger river or lake.
Urban heat island effect	an agglomeration of hard and dark-coloured surfaces such as roads and roofs cause excessive localised warming.
Urban typologies	precinct scale snapshots of various types of urban development including residential, mixed use, employment, and centres incorporating private lots, streets, and associated open space, achieving specific permeability and building reflectivity metrics to achieve the INSW South Creek Corridor requirements.
Variation statement	a written statement accompanying a DA demonstrating how the objectives and relevant control and/or performance outcome will be achieved if an alternative to the 'acceptable solutions' is proposed.

# Draft Western Sydney Aerotropolis Development Control Plan 2019 - Phase 1

Term	Definition
Water sensitive urban design	is an approach that integrates water cycle management into urban planning and design. It is used to help mitigate and reduce the impacts of development on our local waterways and retain water in the landscape.
Waterway	means the whole or any part of a watercourse, wetland, waterbody (artificial) or waterbody (natural).
Western City Aerotropolis Authority	the Western City Aerotropolis Authority was established under the Western Sydney City Deal, which was signed by all three tiers of government in March 2018. The Authority will begin by designing and overseeing delivery of the metropolitan centre within a portion of the Aerotropolis Core precinct, to be established on 114 hectares of Australian Government land at Bringelly.
Western Economic Corridor	the new economic agglomerations around the Western Sydney International (Nancy-Bird Walton) Airport, including the Aerotropolis.
Western Parkland City	is made up on the council areas of Penrith, Liverpool, Campbelltown, Hawkesbury, Wollondilly, Camden, Fairfield and Blue Mountains, and incorporates the existing centres of Liverpool, Greater Penrith and Campbelltown-Macarthur, with the new Airport and Aerotropolis geographically at its centre.
Western Parkland City Metropolitan Cluster	comprising the Airport and Western Sydney Aerotropolis Core; Liverpool; Greater Penrith; and Campbelltown-Macarthur.
Western Sydney Aerotropolis	encompasses 11,200 hectares of land roughly bounded by the Warragamba pipeline to the north, Kemps Creek to the east, Bringelly Road to the south and the future Outer Sydney Orbital Road to the west.
Western Sydney Aerotropolis Plan	provides the vision, principles and planning framework for the Western Sydney Aerotropolis.
Western Sydney Airport	a Commonwealth business enterprise established in August 2017 to build the new Airport.
Western Sydney International (Nancy-Bird Walton) Airport	the declared airport site located on approximately 1,780 hectares of land at Badgerys Creek. The airport will be developed in stages and will ultimately comprise two parallel runways serving approximately 82

# Draft Western Sydney Aerotropolis Development Control Plan 2019 – Phase 1

Term	Definition
	million passengers annually. The Airport will operate 24/7 without a curfew.
Western Sydney Planning Partnership	the Western Sydney Planning Partnership is a local government-led initiative that brings together the councils of Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly and key NSW government agencies to achieve more efficient and higher quality outcomes for Western Sydney through innovative and collaborative planning. The Western Sydney Planning Partnership will also work in consultation with the Australian Government.
Wianamatta-South Creek	Wianamatta-South Creek runs from Narellan to Hawkesbury and forms part of the Hawkesbury-Nepean catchment.
Wianamatta-South Creek Catchment	includes most of the Cumberland Plain of Western Sydney and is a defining central element of the Western Parkland City and the Aerotropolis.
Wianamatta-South Creek Precinct	is located within the Western Sydney Aerotropolis. The Precinct boundary has been defined using 1 in 100 chance per year flood level data from Liverpool City Council and Penrith City Council, conservation areas, and regional parks. The Precinct is an important part of the broader Wianamatta-South Creek Corridor, defined in the Region Plan vision for the Corridor as the defining spatial element of the Western Parkland City, transforming its water management, while using the creek to form the spine of the Western Parkland City.
Windshear	a change in wind speed and/or direction in space, including updrafts and downdrafts.

Draft Western Sydney Aerotropolis Development Control Plan 2019 – Phase 1

# **Maps and Plans**

# Appendices

Appendix 1: Site specific DCPs

# Part 1 - Summary of Council's recommendations on the Planning Package

Г

	NG AIRPORT NOISE IMPACTS
Recommendation 1	Retain land use boundaries (buffer) now shown on page 63 of the Aerotropolis Plan, insofar as they help ensure safeguarding of the airport's curfew free operations
Recommendation 2	Include further development controls in the SEPP regarding noise- sensitive development outside the 20 ANEC
Recommendation 3	Include a clause in the SEPP to address interface between Aerotropolis and surrounding land
DELIVERING A HIGH-C	QUALITY URBAN FORM
Recommendation 4	Aerotropolis SEPP be amended to include a mechanism to ensure an innovative approach to deliver a Smart City
Recommendation 5	Provide dwelling density bands for all areas to be developed for the purpose of residential or mixed use development
Recommendation 6	Provide clarity in the Aerotropolis Plan on principles of Landscape Orientated Development and how this applies to the acquisition of open space
Recommendation 7	NSW Government to undertake a feasibility study of land acquisition under s.7.11 contributions and/or a SIC.
Recommendation 8	Revise objectives and controls to better address big box retail within Aerotropolis precincts
ACHIEVING SOCIAL AN	ND ECONOMIC SUSTAINABILITY
Recommendation 9	Aerotropolis, with at least 10% affordable housing on privately owned
	Aerotropolis, with at least 10% affordable housing on privately owned land and a higher proportion on government-owned land. Commit to undertaking an economic development strategy (including
Recommendation 10	Aerotropolis, with at least 10% affordable housing on privately owned land and a higher proportion on government-owned land. Commit to undertaking an economic development strategy (including consideration of how agglomeration will be achieved)
Recommendation 9 Recommendation 10 Recommendation 11 ENSURING SUSTAINA	land and a higher proportion on government-owned land. Commit to undertaking an economic development strategy (including consideration of how agglomeration will be achieved) Amend DCP and Aerotropolis Plan to encourage agglomeration economies
Recommendation 10 Recommendation 11 ENSURING SUSTAINA	Aerotropolis, with at least 10% affordable housing on privately owned land and a higher proportion on government-owned land. Commit to undertaking an economic development strategy (including consideration of how agglomeration will be achieved) Amend DCP and Aerotropolis Plan to encourage agglomeration economies by identifying distinct/unique sectors for particular locations BLE LAND TRANSPORT Aerotropolis Plan be amended to include an objective to adopt an
Recommendation 10 Recommendation 11 ENSURING SUSTAINAI Recommendation 12	Aerotropolis, with at least 10% affordable housing on privately owned land and a higher proportion on government-owned land. Commit to undertaking an economic development strategy (including consideration of how agglomeration will be achieved) Amend DCP and Aerotropolis Plan to encourage agglomeration economies by identifying distinct/unique sectors for particular locations BLE LAND TRANSPORT Aerotropolis Plan be amended to include an objective to adopt an innovative approach for sustainable transport DCP be amended to include mode share targets for active transport and
Recommendation 10 Recommendation 11 ENSURING SUSTAINAI Recommendation 12 Recommendation 13	Aerotropolis, with at least 10% affordable housing on privately owned land and a higher proportion on government-owned land. Commit to undertaking an economic development strategy (including consideration of how agglomeration will be achieved) Amend DCP and Aerotropolis Plan to encourage agglomeration economies by identifying distinct/unique sectors for particular locations BLE LAND TRANSPORT Aerotropolis Plan be amended to include an objective to adopt an innovative approach for sustainable transport DCP be amended to include mode share targets for active transport and public transport Aerotropolis Plan and DCP include a requirement that a Sustainable Urban Mobility Plan be prepared, detailing measures to be put in place to enable
Recommendation 10 Recommendation 11	Aerotropolis, with at least 10% affordable housing on privately owned land and a higher proportion on government-owned land. Commit to undertaking an economic development strategy (including consideration of how agglomeration will be achieved) Amend DCP and Aerotropolis Plan to encourage agglomeration economies by identifying distinct/unique sectors for particular locations BLE LAND TRANSPORT Aerotropolis Plan be amended to include an objective to adopt an innovative approach for sustainable transport DCP be amended to include mode share targets for active transport and

	the importance of early provision of these services to avoid excessive
	reliance on private motor vehicle movements"
Recommendation 17	Add new objective for the 'Aerotropolis Core Precinct' (ie. Section 2.1.2):
Recommendation 17	"Significantly reduce reliance on single occupancy private motor vehicles
	for trips, enabling the majority of trips in Precinct to be undertaken using
	sustainable forms of transport such as public transport, walking and
	cycling
Recommendation 18	Amend Aerotropolis Plan maps to show full extent of Fifteenth Avenue
Recommendation 10	Smart Transit corridor connecting to Airport and Aerotropolis
Basa mm an dation 10	Include additional text in Section 4.2.1 of the Aerotropolis Plan on the
Recommendation 19	
	FAST Corridor project, and the approach being taken to this project's
D	investigation Amend the Vision Statement for the Wianamatta-South Creek Precinct in
Recommendation 20	
	Section 2.3.1 as follows: "The precinct will also connect to the regional
	transport road network via Elizabeth Drive, Fifteenth Avenue, Bringelly
	Road and Mamre Road"
ACHIEVING ENVIRONI	MENTAL SUSTAINABILITY
Recommendation 21	Adopt a carbon neutrality target for all new development associated with
	the Aerotropolis
Recommendation 22	Amend Objective 5 of the Aerotropolis Plan to read "A sustainable, <del>low</del>
	zero carbon Aerotropolis that embeds the circular economy"
Recommendation 23	Amend 2.1.1 of Draft DCP to read: "Precinct design will include beyond
	compliance provisions targeting zero net carbon emissions"
Recommendation 24	Add new Objective for each of the initial precincts in DCP (ie. Section
	2.1.2, 2.2.2, 2.3.2, 2.4.2 and 2.5.2) that reads: "Ensure that design
	minimises energy and water design and supports achievement of net zero
	emissions across the entire Aerotropolis"
Recommendation 25	Include in SEPP minimum energy and water efficiency standards for
	development in Aerotropolis
Recommendation 26	Delete reference to State Environmental Planning Policy (Building
20	Sustainability Index: BASIX) 2004 in section 1.5.2 of the draft DCP
Recommendation 27	NSW Government to develop a Utility Servicing Strategy which
	incorporates circular economy principles, and considers technologies such
	as micro-grids and water recycling
Recommendation 28	Amend the DCP to require an end-of-life plan for temporary development
	and infrastructure
Recommendation 29	Ensure Aerotropolis Plan and Cumberland Plain Conservation Plan align
Recommendation 30	Aerotropolis Plan to require development of an implementation plan for
Recommendation 30	achieving sustainability aspirations
Recommendation 31	
Recommendation 31	Precinct plans to consider implementation plan for sustainability
Desemble design 22	aspirations
Recommendation 32	Confirm operational responsibility for regional parkland areas
Recommendation 33	Amend the SEPP to change the activity status of wind turbines to
	'Permitted with Consent'
PROTECTING AGRICUI	TURAL INDUSTRIES
Recommendation 34	Include agri-business strategy in overall Economic Development Strategy
Recommendation 34	include agri-business strategy in overall Economic Development Strategy

Recommendation 35	Aerotropolis Plan and DCP should be amended to enable a broader range
	of non-urban land uses in areas of open space and recreation
Recommendation 36	Increase permissible agricultural activities across the Aerotropolis, namely
	by including extensive agriculture and intensive plant agriculture in the
	SEPP as permitted uses across all Aerotropolis zones
Recommendation 37	Add new Strategic Outcome for Agribusiness Precinct in Aerotropolis Plan
	"Allow the development and operation of appropriate tourist facilities and
	visitor accommodation in Luddenham Village that are sympathetic to the
	character and history of the village and reflect the rural nature of the
	area" and ensure alignment between the WSAP and Council's LSPS
	regarding future land uses in Luddenham Village.
Recommendation 38	Add 'Bed and breakfast accommodation' to activities permitted with
	consent in agribusiness zone
	RY AND GOVERNANCE
Recommendation 39	Aerotropolis SEPP be amended to clarify when development consent will be granted
Recommendation 40	Aerotropolis SEPP be amended to specify when referrals are required
Recommendation 41	Aerotropolis SEPP be amended to include an objective requiring
	sustainable funding for delivery and ongoing operation of local
	infrastructure
Recommendation 42	If place-based infrastructure compact approach adopted, ensure that
	includes local infrastructure needs identified by councils
Recommendation 43	Amend section 1.4.4 of the DCP to clarify the administrative arrangements
	for the DCP including the process (and responsibility) for undertaking
	minor amendments to the document
Recommendation 44	Amend section 3.2.2 of the Aerotropolis Plan to identify a single primary
	'custodian' for the DCP during the implementation phase
Recommendation 45	Provide further clarity in the Aerotropolis Plan on the role of Council staff
Recommendation 45	Provide further clarity in the Aerotropolis Plan on the role of Council staff and Councillors on the preparation or amendment of DCPs
	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any)
Recommendation 46	and Councillors on the preparation or amendment of DCPs
Recommendation 45 Recommendation 46 Recommendation 47	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any) Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply
Recommendation 46 Recommendation 47	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any) Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply Delete reference to all SEPPs listed in section 1.5.2 of the draft DCP except
Recommendation 46 Recommendation 47	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any) Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply
Recommendation 46 Recommendation 47	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any) Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply Delete reference to all SEPPs listed in section 1.5.2 of the draft DCP except the State Environmental Planning Policy (Western Sydney Aerotropolis) 2019
Recommendation 46 Recommendation 47 Recommendation 48	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any) Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply Delete reference to all SEPPs listed in section 1.5.2 of the draft DCP except the State Environmental Planning Policy (Western Sydney Aerotropolis)
Recommendation 46 Recommendation 47 Recommendation 48	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any) Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply Delete reference to all SEPPs listed in section 1.5.2 of the draft DCP except the State Environmental Planning Policy (Western Sydney Aerotropolis) 2019
Recommendation 46 Recommendation 47 Recommendation 48 Recommendation 49	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any) Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply Delete reference to all SEPPs listed in section 1.5.2 of the draft DCP except the State Environmental Planning Policy (Western Sydney Aerotropolis) 2019 Note detailed comments by Council planning assessment officers on DCP
Recommendation 46 Recommendation 47 Recommendation 48 Recommendation 49	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any) Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply Delete reference to all SEPPs listed in section 1.5.2 of the draft DCP except the State Environmental Planning Policy (Western Sydney Aerotropolis) 2019 Note detailed comments by Council planning assessment officers on DCP drafting Note preliminary comments by Council planning assessment officers on SEPP drafting
Recommendation 46 Recommendation 47 Recommendation 48 Recommendation 49 Recommendation 50	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any) Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply Delete reference to all SEPPs listed in section 1.5.2 of the draft DCP except the State Environmental Planning Policy (Western Sydney Aerotropolis) 2019 Note detailed comments by Council planning assessment officers on DCP drafting Note preliminary comments by Council planning assessment officers on SEPP drafting
Recommendation 46	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any) Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply Delete reference to all SEPPs listed in section 1.5.2 of the draft DCP except the State Environmental Planning Policy (Western Sydney Aerotropolis) 2019 Note detailed comments by Council planning assessment officers on DCP drafting Note preliminary comments by Council planning assessment officers on SEPP drafting
Recommendation 46 Recommendation 47 Recommendation 48 Recommendation 49 Recommendation 50 Recommendation 51	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any) Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply Delete reference to all SEPPs listed in section 1.5.2 of the draft DCP except the State Environmental Planning Policy (Western Sydney Aerotropolis) 2019 Note detailed comments by Council planning assessment officers on DCP drafting Note preliminary comments by Council planning assessment officers on SEPP drafting Provide clarity regarding acquisition plans for Environment and Recreation
Recommendation 46 Recommendation 47 Recommendation 48 Recommendation 49 Recommendation 50 Recommendation 51	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any) Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply Delete reference to all SEPPs listed in section 1.5.2 of the draft DCP except the State Environmental Planning Policy (Western Sydney Aerotropolis) 2019 Note detailed comments by Council planning assessment officers on DCP drafting Note preliminary comments by Council planning assessment officers on SEPP drafting Provide clarity regarding acquisition plans for Environment and Recreation zoned land, including timeframes and responsible acquisition authority
Recommendation 46 Recommendation 47 Recommendation 48 Recommendation 49 Recommendation 50	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any) Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply Delete reference to all SEPPs listed in section 1.5.2 of the draft DCP except the State Environmental Planning Policy (Western Sydney Aerotropolis) 2019 Note detailed comments by Council planning assessment officers on DCP drafting Note preliminary comments by Council planning assessment officers on SEPP drafting Provide clarity regarding acquisition plans for Environment and Recreation zoned land, including timeframes and responsible acquisition authority Provide confirmation in the Aerotropolis Plan of longer-term governance
Recommendation 46 Recommendation 47 Recommendation 48 Recommendation 49 Recommendation 50 Recommendation 51 Recommendation 52	and Councillors on the preparation or amendment of DCPs Seek to limit number of other SEPPs applying (if any) Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply Delete reference to all SEPPs listed in section 1.5.2 of the draft DCP except the State Environmental Planning Policy (Western Sydney Aerotropolis) 2019 Note detailed comments by Council planning assessment officers on DCP drafting Note preliminary comments by Council planning assessment officers on SEPP drafting Provide clarity regarding acquisition plans for Environment and Recreation zoned land, including timeframes and responsible acquisition authority Provide confirmation in the Aerotropolis Plan of longer-term governance arrangements and timeframes for review of Aerotropolis Plan and SEPP

### PART 2 - LIVERPOOL CITY COUNCIL'S SUBMISSIONS ON THE AEROTROPOLIS PLANNING PACKAGE

#### Effectively Managing Airport Noise Impacts

Recommendation 1 - Retain land use boundaries (buffer) now shown on page 63 of the Aerotropolis Plan, insofar as they help ensure safeguarding of the airport's curfew free operations

Recommendation 2 – Include further development controls in the SEPP regarding noise-sensitive development outside the 20 ANEC

A critical component of the success of the new Western Sydney International (Nancy-Bird Walton) Airport (the Airport) will be ensuring its curfew free operation. This will allow the airport to compete in a number of aviation markets that were previously not available in the Sydney basin. In order to best ensure the curfew free operation of the airport is protected, it is appropriate to limit noisesensitive new development in close proximity to the airport boundary.

Liverpool City Council (Council) supports the location of the Mixed Flexible Employment & Urban Land Zone in the Aerotropolis Core precinct, as detailed in the WSAP, and considers this to be a sensible precautionary approach to the location of residential development. This is a considerable improvement from the LUIIP Stage 1. Council recommends that consideration be given to how noisesensitive development outside the 20 ANEC contour can be further protected from airport noise. The SEPP Discussion Paper states under part 2.9.2 that "development up to the 20 ANEC contour will need to adopt appropriate design and construction standards to reduce aircraft noise impacts". It is recommended that consideration of appropriate design and construction standards is also given to land that falls outside of the 20 ANEC contour, given the 24-hour nature of the Airport and the difficulty in establishing accurate 20 ANEF contours.

It is known that most complaints related to aircraft noise comes from residents that live outside of 20 ANEF contours.<sup>1</sup> As noted in the National Airports Safeguarding Framework Principles and Guidelines:<sup>2</sup>

"At the 20 ANEF level, it is estimated that approximately 11 per cent of people will be seriously affected by aircraft noise and approximately 45 per cent of people moderately affected by aircraft noise... at the 15 ANEF level, approximately 8 per cent of people will be seriously affected by aircraft noise and approximately 34 per cent of people moderately affected."

Further consideration of appropriate design and construction standards outside the 20 ANEC contour should therefore be considered if the WSAP is truly to take a precautionary approach.

Acoustic attenuation guidelines for conditionally acceptable development in the 20-25 ANEF as described in Australian Standard *AS2021:2015 Acoustics – Airport noise intrusion – Building siting and construction* should be applied to development close to but outside the current 20 ANEC in the Aerotropolis. As the Standard notes,<sup>3</sup> the actual location of 20 ANEF contours is difficult to define accurately, therefore it states Clause 2.3.2 (which deems a project 'conditionally acceptable' provided stipulated design and construction standards are met) may be applied to building sites outside but near the 20 ANEF contour. Council recommends that the Western Sydney Aerotropolis State Environmental Planning Policy (SEPP) and the

<sup>&</sup>lt;sup>1</sup> National Airports Safeguarding Framework Principles and Guidelines: Guideline A: Measures for Managing Impacts of Aircraft Noise, Supplementary Aircraft Noise Metrics, <u>https://www.infrastructure.gov.au/aviation/environmental/airport\_safeguarding/nasf/nasf\_principles\_guidelines.aspx</u>

 <sup>&</sup>lt;sup>3</sup> Australian Standard AS2021:2015 Acoustics – Airport noise intrusion – Building siting and construction, p12

Western Sydney Aerotropolis Development Control Plan – Stage 1 (DCP) be updated to reflect this, and suggests it is prudent to ensure the process for 'conditionally acceptable' development is ensured across an appropriate buffer from the 20 ANEC, in order to protect amenity for any noise-sensitive development sited near the 20 ANEC contour. The Stage 1 DCP should include noise attenuation criteria, and the Stage 2 DCP should include preferred methods of managing noise (e.g. a preference for dwelling/building orientation and double glazing as opposed to sealed windows which increases reliance on mechanical ventilation).

# Recommendation 3 - Include a clause in the SEPP to address interface between Aerotropolis and surrounding land

Council recommends a clause be inserted into the SEPP to clarify treatment of development sites outside the boundary of the Aerotropolis to ensure a consistent transition between the Aerotropolis and land zoned through Liverpool City, Penrith City, and Camden councils. This could be similar to the Standard Instrument LEP "development near zone boundaries" clause. This may allow some transitional development beyond the Aerotropolis and reduce the occurrence of conflicting land uses being maintained or established on its peripheries.

Consideration also needs to be given to councils' strategic planning vision of land outside of the Aerotropolis area. For example, Camden Council's LSPS defines an employment investigation area around the realigned Northern Road south of Bringelly Road. Staging and sequencing of precincts should consider wider planning work outside the Aerotropolis, in consultation with councils, to ensure district-wide cohesion.

### Delivering a High-Quality Urban Form

Recommendation 4 - Aerotropolis SEPP be amended to include a mechanism to ensure an innovative approach to deliver a Smart City

As the Aerotropolis will be a complete new city, there is an opportunity to create a "Smart City -Centre of Excellence" and set an example of a smart city, not only by implementation of smart technology but also by undertaking ongoing research and innovation in this space to deliver world's best practice in 21st Century city performance. In particular smart city technologies might be used to provide real-time monitoring and management of transport and other infrastructure, and might provide innovative opportunities for effective community engagement and communication.

It is Councils recommendation that the SEPP includes provisions to ensure the delivery of a Smart City as per Section 4.3 of the WSAP. This should include a clear definition of what a Smart City is, how Smart City principles will be delivered, and what success looks like. This will help ensure that the aspirations set out in the WSAP to improve quality of life through technology are, in fact, delivered in practice.

Recommendation 5 - Provide dwelling density bands for all areas to be developed for the purpose of residential or mixed use development

Dwelling density bands allow Council to require a developer to amend their development when they provide too little or too much housing, relative to the infrastructure and services which have been planned.

In the past, a minimum dwelling density requirement was required to ensure that adequate housing density was produced to make services such as public transport feasible, and to ensure the efficient use of public utilities and services. More recently Liverpool City Council has been responding to the opposite problem, where development is taking place at far higher dwelling densities than were planned, which may result in a lack of infrastructure to cater to new populations. Whilst FSR, lot size and building height controls can provide for the number of lots, or size of multi-unit developments, density bands provide greater certainty to both Council and developers.

Recommendation 6 - Provide clarity in the Aerotropolis Plan on principles of Landscape Orientated Development and how this applies to the acquisition of open space

Recommendation 7 – NSW Government to undertake a feasibility study of land acquisition under s.7.11 contributions and/or a SIC.

Much of the planning of the Aerotropolis and its sub-precincts is based on principles of combining Transit-Oriented-Development (TOD) with Landscape-Oriented-Development (LOD) in a bid to improve connectivity, support mode shift, and also to improve amenity and re-connect people with nature. Whilst this approach is lauded, it does present some challenges. Areas zoned for open space in greenfield areas are typically under private ownership requiring a government agency to first acquire land before it can be used for a public purpose. If there are any disputes between the acquiring authority and the land-owner, the Valuer General is often involved in determining the value of the land based on its 'underlying zone'. The underlying zone is what the land would have been zoned had it not been zoned for a public purpose. Unfortunately, this means that acquisition of such open space may be prohibitively expensive, due to the fact that the highest densities (hence highest values) will be zoned adjacent to open space.

It is recommended that the Valuer General's office is consulted on the principles of LOD and what impacts this may have on land-acquisition feasibility. A MOU should be developed in which the Valuer General recognises that the increase in density around open space would not result had the open space not been zoned. Further, an economic feasibility study should be carried out to determine the viability of acquiring such land under typical S.7.11 contribution plans, or a State Infrastructure Contribution and how this will impact upon development feasibility and the provision of affordable housing.

# Recommendation 8 – Revise objectives and controls to better address big box retail within Aerotropolis precincts

Council recommends the SEPP and DCP consider options to address big box retail (specialised retail premises) in order to realise the vision of fine-grain urban form, permeability, and compact urban development.

Currently the SEPP allows the group term 'Commercial premises', which includes specialised retail premises. Council is concerned that early commercial activity in the Aerotropolis may tend towards a proliferation of big box retail, which could have significant impacts on visual amenity, permeability and traffic, and make it difficult to realise a vision for a fine-grain, compact urban form once other forms of commercial activity become viable. Restriction of specialised retail premises, or provision for transition to more fine grain form, should therefore be considered, particularly within mixed use zones. Zone objectives in the SEPP, precinct objectives in the DCP and performance outcomes in the

DCP should better reflect a desire to see fine-grain, permeable and compact urban forms, and specifically address specialised retail premises.

#### Achieving Social and Economic Sustainability

Recommendation 9 – Set mandatory affordable housing targets for new development within the Aerotropolis, with at least 10% affordable housing on privately owned land and a higher proportion on government-owned land.

Council recommends that the NSW Government increase affordable housing targets within the Aerotropolis area.

The WSAP notes that affordable housing will be provided consistent with the Greater Sydney Region Plan (GSRP) and WCDP, i.e. at 5-10%. With a non-business as usual approach being taken in the Aerotropolis, with a new landscape-led approach aiming for high levels of amenity, there is an opportunity to also aim to exceed current BAU approaches to affordable housing, particularly on government-owned land.

It is recommended that a minimum 10% baseline be applied for residential development on private land, with a higher target applied to State-owned land. This should be made explicit within the WSAP at Objective 9 Planning Principle LV2 and in the SEPP. An affordable housing contributions scheme should be developed, outlining the necessary percentages of affordable housing or monetary contributions that would be provided to an appropriate Community Housing Provider.

Recommendation 10 – Commit to undertaking an economic development strategy (including consideration of how agglomeration will be achieved)

Council requests a commitment in the WSAP to development of an economic development strategy, reflected in the precinct implementation strategy sections of the WSAP.

The Aerotropolis is expected to be a nationally significant employment area, contributing towards 200,000 jobs for the Western Parkland City. Further consideration of how employment is to be attracted to the Aerotropolis' precincts is required. While the WSAP lists an agritourism strategy as an implementation strategy, an overarching economic development strategy is also needed.

This should also extend to attraction of creative enterprise to the Aerotropolis. The LUIIP Stage 1 indicated that the second stage of the LUIIP would provide greater detail on strategies to support creative industries in the Aerotropolis. An economic development strategy should address strategies to allow creative business to thrive within the Aerotropolis.

This strategy should also inform the size, location, timing/delivery and viability of strategic centres (including the viability of retail and commercial) in the Aerotropolis area and surrounds. It may need to investigate special economic zones, and/or other incentives for industries to establish and concentrate in key employment nodes.

Recommendation 11 - Amend DCP and Aerotropolis Plan to encourage agglomeration economies by identifying distinct/unique sectors for particular locations

It is noted that the Planning Package envisages that in the Aerotropolis there will be a range of employment uses "that do not require or benefit from direct access to public transport but would benefit from proximity to airport operations". These industries include "Defence industries and

aerospace, advanced manufacturing and technology-based industry may be located within the precinct".

It is noted, however, that many of these industries are also provided for elsewhere in the Aerotropolis and the broader local government area, in locations with the potential for higher job density. The emphasis of planning for the Western Parkland City should focus on providing distinct sectors for agglomeration economies to form based on an evidence-based economic development strategy (see above).

Providing planning controls which advocate for the same, or similar, industries throughout all subprecincts will provide poor market differentiation and less certainty. This may undermine the goals of attracting high-job density, resulting in sprawling low-quality development.

### Ensuring Sustainable Land Transport

Recommendation 12 - Aerotropolis Plan be amended to include an objective to adopt an innovative approach for sustainable transport

Recommendation 13 - DCP be amended to include mode share targets for active transport and public transport

Council welcomes the focus in the WSAP on delivering a sustainable land transport network in the Aerotropolis. Development of the Aerotropolis provides a unique opportunity to transform Western Sydney's transport network to improve access to public transport and active transport through design and infrastructure decisions made now. Western Sydney, particularly west of Liverpool currently has much poorer access to public transport than other parts of the Sydney basin and, resultantly, has significantly lower mode share for both public transport and active transport.

Low mode share for public transport and active transport has significant health, social and economic impacts. This includes increasing reliance on private motor vehicle ownership, increased congestion on our road network, higher levels of localised pollution and decreased access (particularly for the young, elderly and most vulnerable) to education, healthcare and other social services. Development of the Aerotropolis provides an opportunity to 're-imagine' transport in Western Sydney. Buildings and communities can be designed to make public and active transport more appealing and easier to deliver. Also, jobs and social services can be located in places that are more accessible by means other than private car ownership.

It is acknowledged that there are a number of current and future projects proposed to shift mode share away from the current reliance on private motor vehicle use. Nonetheless, a clearer articulation of the NSW Government's aspiration for how the land transport network will operate in this area in the future is required. This will provide certainty for industry, government and – most critically – our community. A failure to deliver a more sustainable land transport network in the Aerotropolis risks significant adverse impacts for our current and future community (including, particularly, from increased congestion caused by the thousands of new residents and employees expected to locate in the area.

Council recommend that for the new growth areas of the Aerotropolis a mode share target of 50% active and public transport for the AM and PM peak be adopted. As a sustainable community, it is a reasonable aspiration that the majority of trips in the Aerotropolis should be able to be achieved using a sustainable mode of transport. If a majority of trips are undertaken by private motor vehicle

this is not only unsustainable, but will also have significant adverse impact on the surrounding road network that our existing residents and businesses rely upon.

Traditionally, DCPs will often discuss improving public and active transport mode-share, but they do not provide any tangible targets, nor provide specific actions to get there. The DCP must recognise commitments by Future Transport 2056, and planned metro stations and provide parameters around the location of jobs and dwellings to ensure that public transport access is available from day one.

It is recommended that this mode share target be included in the WSAP and operationalised through the Aerotropolis DCP and SEPP. Release of land for development will be subject to the ongoing monitoring and achievement of the mode share target set. Council notes precedent in other jurisdictions for the inclusion of this type of mechanism for major development areas (see, for example, mode share target / traffic generation obligations contained in Auckland Council's statutory planning rules for the 'Wynyard Quarter' precinct in Auckland City.<sup>4</sup>

Recommendation 14 - Aerotropolis Plan and DCP include a requirement that a Sustainable Urban Mobility Plan be prepared, detailing measures to be put in place to enable access to public transport and active transport opportunities

Recommendation 15- Aerotropolis Plan and SEPP be amended to make development conditional on certain transport infrastructure (as prescribed by the Sustainable Urban Mobility Plan) being in place

Recommendation 16 - Clarify on p36 of the Aerotropolis Plan that while local bus services will be delivered "in line with demand" this should be done "while recognising the importance of early provision of these services to avoid excessive reliance on private motor vehicle movements"

Recommendation 17 - Add new objective for the 'Aerotropolis Core Precinct' (ie. Section 2.1.2): "Significantly reduce reliance on single occupancy private motor vehicles for trips, enabling the majority of trips in Precinct to be undertaken using sustainable forms of transport such as public transport, walking and cycling

Council considers that the success of the Aerotropolis is contingent on the timely delivery of transport infrastructure in the Aerotropolis area. In particular it is critical that public transport access is available from day one of occupation in the Aerotropolis. Council considers that, where possible, transport infrastructure should be provided in advance of communities being established.

As an example in the local region, Council note that while the South West Rail Link extension was provided in advance of the development of communities at Edmondson Park, limitations in surrounding bus, walking and cycling infrastructure has forced a dependence on private motor vehicles for the community to connect to rail services on this line. The Aerotropolis provides an opportunity to avoid this type of transport challenge being repeated. Ensuring sufficient station spacing, last-mile transport-services, and active transport connections are provided for up-front will be critical in avoiding the commuter parking troubles associated with recent rail projects.

<sup>&</sup>lt;sup>4</sup> Under the Auckland Unitary Plan Wynyard Quarter (35ha) sets trip generation targets with the aspiration of a 30/70 modal split achieved by 2030 (no more than 30% of trips to be single occupancy vehicles). The Unitary Plan also contains a number of other rules relating to monitoring, the establishment of a Transport Plan and landholder transport organisation to enable implementation of this sustainable transportation target.

Council recommends that the WSAP and DCP include a requirement for a Sustainable Urban Mobility Plan to be prepared that will plan in more detail how the community and business will sustainably move in these new growth areas. This can include a scheduling of infrastructure delivery including projects such as the FAST Corridor, and the Greater West Metro Stage 1, as well as the design and delivery of the connecting local bus, micro-mobility, and active transport networks. This planning should be done in consultation with local businesses and community members (as was recently successfully undertaken in relation to the North West Metro with the development of Station Access Plans).

The Sustainable Urban Mobility Plan is a recognised transport planning tool, used successfully in a number of jurisdictions overseas (including particularly the United Kingdom), and the Aerotropolis provides a unique opportunity to adopt a similar approach in Australia.

Amongst other things, the Sustainable Urban Mobility Plan should provide a corridor network that provides a network hierarchy with the recognition of different uses of different corridors. In particular the Plan should seek to maximise pedestrian permeability and priority, as well as providing unobstructed public transport routes, whist facilitating the movement of private vehicles via a clear hierarchy. Whilst principles of new urbanism, adopted in Sydney's Growth Centre strategy, have returned grid-based networks which improve pedestrian permeability, they do not provide a clear hierarchy for vehicular users, and do not provide a distinct advantage for active or public transport. Aerotropolis precincts should adopt fused-grid concepts, in which private vehicle routes are oriented onto high order roads, whist facilitating direct and convenient active and public transport networks.

The Sustainable Urban Mobility Plan should also be developed in association with green/blue corridor plans. Creeks, as relatively gentle and landscaped corridors are ideal for active transport, and sufficient land should be made publically owned to ensure that quality active transport infrastructure can be provided.

To assist in the delivery of such a Sustainable Urban Mobility Plan it is recommended that rules be included in the WSAP and SEPP to ensure that development of the Aerotropolis will be sequenced so that growth (particularly residential) cannot occur until relevant transport infrastructure is in place. It also recommended that key design decisions in the Sustainable Urban Mobility Plan (eg. the discussion of fused grids above) be included in the Aerotropolis DCP.

Recommendation 18 - Amend Aerotropolis Plan maps to show full extent of Fifteenth Avenue Smart Transit corridor connecting to Airport and Aerotropolis

Recommendation 19 - Include additional text in Section 4.2.1 of the Aerotropolis Plan on the FAST Corridor project, and the approach being taken to this project's investigation

Recommendation 20 - Amend the Vision Statement for the Wianamatta-South Creek Precinct in Section 2.3.1 as follows: "The precinct will also connect to the regional <u>transport</u> <del>road</del> network via Elizabeth Drive, Fifteenth Avenue, Bringelly Road and Mamre Road"

Council welcomes the further recognition in the WSAP of the Fifteenth Avenue Smart Transit (FAST) Corridor, including showing the partial extent of the corridor in the 'proposed transport corridors' map on p37 of the WSAP. Fifteenth Avenue and the FAST Corridor will be critical in providing a high quality public transport and active transport connection between Liverpool city centre (and existing residential areas) and this new area. This project is critical to ensuring that there is a high quality, accessible public transport connection between the Airport, Aerotropolis and Liverpool.

As part of Council's ongoing strategic concept design investigations for the FAST Corridor an indicative alignment has been prepared for connecting the corridor through to the Airport and Aerotropolis. This alignment is shown in **Appendix 2** to this submission. Council seeks the inclusion of this alignment (as an indicative alignment, subject to further investigation and discussions with relevant stakeholders including Western City & Aerotropolis Authority and the Airport company) in the final version of the WSAP (in particular the maps on pages 37, 63, 67 and 83). Inclusion of this alignment would provide further certainty and clarity to the community, industry and other stakeholders on the purpose of this important corridor.

Council also recommends inclusion of additional text in the WSAP detailing works now underway by Council to progress the FAST Corridor in time for opening. Council recommends inclusion of the following text on p36 in section 4.2.1:

Liverpool City Council is also currently designing the Fifteenth Avenue Smart Transit (FAST) Corridor project, linking the Liverpool CBD, established and emerging suburbs, the Aerotropolis, and Western Sydney International Airport using high quality public transport, walking and cycling infrastructure. These investigations are assessing how the upgrade of Fifteenth Avenue and the City Deal commitment to a rapid bus connection in time for the airport's opening in 2026 can be delivered, and options to unlock opportunities for compact medium/high-density development in appropriate locations along the corridor. Council aspires for the FAST Corridor to be a key gateway to Sydney for visitors to Australia, showcasing the unique natural environment of South West Sydney. The corridor will be inviting and vegetated with transport infrastructure responding sympathetically to the landscape. The FAST Corridor will help reduce sprawl, improve public transport, and preserve the unique character of the region.

the primary function of Fifteenth Avenue, as a city-shaping corridor, will be public and active transport, whereas the primary function of other roads in the area (eg. Elizabeth Drive, Bringelly Road and Mamre Road) will be private motor vehicle movements and freight transport. It is therefore more appropriate to collectively refer to these corridors as the 'transport' network.

#### Achieving Environmental Sustainability

Recommendation 21 - Adopt a carbon neutrality target for the Aerotropolis

Recommendation 22 - Amend Objective 5 of the Aerotropolis Plan to read "A sustainable, low zero carbon Aerotropolis that embeds the circular economy"

Recommendation 23 - Amend 2.1.1 of Draft DCP to read: "Precinct design will include <del>beyond</del> <del>compliance</del>-provisions targeting zero net carbon emissions"

Recommendation 24 - Add new Objective for each of the initial precincts in DCP (ie. Section 2.1.2, 2.2.2, 2.3.2, 2.4.2 and 2.5.2) that reads: "Ensure that design minimises energy and water design and supports achievement of net zero emissions across the entire Aerotropolis"

Recommendation 25 - Include in SEPP minimum energy and water efficiency standards for development in Aerotropolis

Recommendation 26 - Delete reference to State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 in section 1.5.2 of the draft DCP Council recommends that the NSW Government adopt a carbon neutrality target for the Aerotropolis.

As already noted, Council supports the NSW Government's sustainability aspirations for the Aerotropolis. A target would assist in achieving the Government's sustainability aspirations and would be consistent with the approach taken by the NSW Government for other significant precinct developments in the Greater Sydney area.

For example, in the Eastern City Transport for NSW's recently released Central Precinct - Draft Strategic Vision establishes a planning priority of "striving to achieve net zero carbon emissions, contributing to the NSW Government's net zero emission target".<sup>5</sup> Council encourages the NSW Government to include a similar target in the WSAP too.

To operationalise this target it is recommended that the SEPP set bespoke minimum energy, water and thermal comfort (BASIX) standards for development in the Aerotropolis. In order to achieve carbon neutrality, and meet the aspirations outlined at Sections 4.3, 4.4 and 4.5 of the WSAP, it is expected that higher BASIX standards will be required than those that normally would apply in the Sydney basin. It is noted that the SEPP will need to be drafted in a way that responds to the primacy that, otherwise, the State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 is required to be accorded.

Recommendation 27 - NSW Government to develop a Utility Servicing Strategy which incorporates circular economy principles, and considers technologies such as micro-grids and water recycling

A Utility Servicing Strategy will be crucial in determining what infrastructure government must provide, as opposed to what a developer must construct. The strategy should be developed in association with utility providers, with a focus on self-sufficiency and renewable technology.

A Utility Servicing Strategy should investigate technologies such as micro-grids and water recycling, including the costs and feasibility of providing these technologies in a greenfield area with limited existing utility infrastructure. Such a strategy will need to be developed with utility authorities to ensure infrastructure designed to connect development to the grid can be scaled accordingly to what is able to be self-sufficiently generated. It is understood that some utility authorities are able to impose harsh fees on developments which do not connect to the grid, or provide less than full capacity.

# Recommendation 28 - Amend the DCP to require an end-of-life plan for temporary development and infrastructure

The end-of-life arrangements for transitional use/structures in the WSA precincts must be addressed by the WSA DCP to account for embodied energy in temporary structures. As NSW heads towards net-zero carbon emissions, the impacts of re-using or dismantling and recycling temporary structures and infrastructure must be considered at the development application stage. This will

<sup>&</sup>lt;sup>5</sup> See: <u>https://shared-drupal-s3fs.s3-ap-southeast-2.amazonaws.com/master-test/fapub\_pdf/A+A+western+gateway/Appendix+C+-</u>

<sup>+</sup>Central+Precinct\_Draft+Strategic+Vision\_Print+View.pdf

ensure that such structures/infrastructure is able to be adaptively re-used, or that construction materials and assembly allows for dismantling and re-using/recycling.

#### Recommendation 29 - Ensure Aerotropolis Plan and Cumberland Plain Conservation Plan align

DPIE are currently preparing a Cumberland Plain Conservation Plan (CPCP). Council appreciate the close engagement of DPIE with Council and the Planning Partnership on this important piece of work. The CPCP will have an important interface with the WSAP, and this provides a strong opportunity for comprehensive and efficient planning.

DPIE have indicated that the CPCP will include pertinent aspects such as land use planning and development controls, application of environmental zones, conservation priorities, important corridors, and future conservation areas.

Recommendation 30 - Aerotropolis Plan to require development of an implementation plan for achieving sustainability aspirations

Recommendation 31 – Precinct plans to consider implementation plan for sustainability aspirations

Council strongly supports the sustainability aspirations set out in the WSAP. Development of the Aerotropolis provides a unique opportunity to implement international best practice in sustainability design for this new urban area. Not only will this protect the natural environment values that underpin the Western Parkland city, but it will also provide new economic and social opportunities.

Sustainability and the circular economy provide strong opportunities for business innovation and will be a potential economic point of difference for South West Sydney. Implementation of a sustainability approach also responds to increasingly extreme climate conditions in Western Sydney including, particularly, flooding and record high summer temperatures.

Council consider, however, that in order to deliver on the WSAP's objective of a "sustainable, low carbon Aerotropolis that embeds the circular economy", this will require a significant shift from 'business as usual' planning and development (in addition to the higher BASIX standards already proposed above). To achieve this, Council recommend that the NSW Government develop a Sustainability and Circular Economy implementation plan. This plan can identify more specific targets and objectives, as well as the suite of regulatory, incentive and strategic tools available to deliver on the Aerotropolis sustainability aspiration. There are relatively few implementation strategies set out in the WSAP for sustainability matters, compared to other considerations (such as investment, affordable housing and transport).

It is recommended that this implementation plan be prepared prior to the exhibition of State and Local Infrastructure Contribution Plans, Individual Precinct Plans or the DCP – Phase 2. This will provide the best possible opportunity for government to use these future plans to the best advantage to achieve the high-level sustainability aspirations set out in the WSAP. For example, any large/hard infrastructure (such as micro-grids) will need to have land allocated, and a utility strategy prepared detailing how developments can tap into such infrastructure .The development of this implementation plan will enable a targeted investigation of tangible measures to deliver the aspirations that have now been clearly expressed. Council would, of course, welcome the opportunity to be involved in this process of developing this implementation plan.

#### Recommendation 32 - Confirm operational responsibility for regional parkland areas

The map on page 63 of the WSAP indicates that a significant area of regional parkland is under investigation in the Aerotropolis Core area. While the creation of a connected network of regional parkland is referenced as one of the planning principles underpinning development of the Aerotropolis, there is little information contained in the Plan on the investigation process for identifying this parkland, or the long-term responsibility for this parkland.

While Council supports the principle of protecting appropriate green space in the Aerotropolis, a careful process will be needed to ensure that the green space acquisition process is fair and equitable and underpins a broader strategy. Furthermore, clarity will be required on the authority that this parkland area will vest in ultimately. Appropriate capital and recurrent funding will be required to support the Government agency ultimately responsible for this parkland area to ensure that it is developed and maintained to an acceptable high quality (as expected, appropriately, by our community).

Recommendation 33 - Amend the SEPP to change the activity status of wind turbines to 'Permitted with Consent'

The SEPP Discussion Paper indicates that the SEPP will prohibit wind turbines from being constructed within the Aerotropolis on the grounds that they present a navigation (radar) hazard for aircraft operations.

While Council is similarly committed to the safe operation of the new Airport, Council understands that the potential impact (if any) of wind turbines will vary on a case-by-case basis and in some instances wind turbines can operate without any safety impact on airport operations.<sup>6</sup> Given the centrality of reduced carbon emissions, and the potential for embedded energy network technologies in the Aerotropolis, Council consider that an outright prohibition on wind turbines in the area is inappropriate.

A more appropriate approach may be to require any wind turbine project to undertake a full planning assessment including obtaining consent from the airport company. It is noted that the Standard Secretary's Assessment Requirements for Wind Energy<sup>7</sup> require aviation safety impacts to be assessed and require application of the National Airports Safeguarding Framework Guideline D; Managing Wind Turbine Risk to Aircraft.

### Protecting Agricultural Industries

Recommendation 34 - Include agri-business strategy in overall Economic Development Strategy

Recommendation 35 - Aerotropolis Plan and DCP should be amended to enable a broader range of non-urban land uses in areas of open space and recreation

An Agri-business precinct is supported and will assist in maintaining the viability of agricultural activities within the Western Sydney basin. Agricultural activities are important in providing jobs for

<sup>&</sup>lt;sup>6</sup> See, for example, <u>http://www.airport-business.com/2019/02/glasgow-airport-radar-project-clears-major-</u> <u>wind-farm-development/</u>

<sup>&</sup>lt;sup>7</sup> https://www.planning.nsw.gov.au/Policy-and-Legislation/Renewable-Energy/Wind-Energy-Framework

low-skilled workers, providing for a broad economy, allowing people to work and live on the same land, and for providing privately owned green spaces.

An agri-business precinct could be made more economically feasible should market garden, intensive and extensive agricultural production in surrounding areas be supported. Soil profiles in the Western Sydney basin are generally fair (which is reasonable to provide for fodder and some crop production) and with an increasing amount of urban development in the vicinity of the airport, there is massive potential for urban water harvesting to feed extensive and intensive agriculture.

The latest drought has particularly highlighted the need to reconsider traditional farming practices, including the crops and areas which are suited to agricultural activity. Western Sydney is in a unique position in which soil profiles are appropriate for agricultural activity, and the water run-off from urban areas (which is typically wasted and discharged) can instead be put to use for domestic food production or value-added export.

Whilst the industries and aspirations of this precinct are supported, an economic development strategy and feasibility study needs to be undertaken to ensure that agricultural activity can remain viable considering the prospects of land-speculators land-banking for industrial or other uses. The DCP and land-use zoning should also look to provide for a broader range of non-urban land-uses and appropriate agri-business to be permitted in areas of open space and recreation. Areas within the Western Sydney parklands have been used for grazing and small scale food production to provide for some utility of land prior to it being embellished. If government owned, such uses may allow the grazing of animals, reducing the costs of vegetation control and hazard management.

Recommendation 36 – Increase permissible agricultural activities across the Aerotropolis, namely by including extensive agriculture and intensive plant agriculture in the SEPP as permitted uses across all Aerotropolis zones

Council recommends that further support be provided to existing agricultural industries by allowing extensive agriculture and intensive plant agriculture to be uses permitted with consent across all Aerotropolis zones.

While Council is generally supportive of the proposed land uses, Council is concerned that the SEPP Discussion Paper as drafted would prohibit extensive agriculture across the entire 11,200 hectares of the Aerotropolis, and prohibit intensive plant agriculture in all zones except Agribusiness. Council understands that this largely has to do with risk management related to wildlife strike, as well as ensuring uses are consistent with long-term zone aspirations.

Council's concern is that, due to the vast amounts of land that the Aerotropolis encompasses, and that the realisation of the Aerotropolis will occur over a period of more than 40 years, that the prohibition of these agriculture activities in the short-term will lead to the sterilisation of land, and reduce opportunities for landowners to pursue the economic, social and environmental opportunities provided by peri-urban agricultural activities.

Council's current LEP lists extensive agriculture as permitted without consent in its RU1 and RU4 rural zones due to its low impact nature and agriculture (which include intensive plant agriculture) as permitted with consent. Council's draft Rural Lands Study 2020 shows there is agricultural activity currently occurring in initial precincts, such as Badgerys Creek and Wianamatta-South Creek, where an Enterprise zone and Environment and Recreation zone will apply, respectively. This is mostly in the form of extensive agriculture and low-tunnel horticulture.

The SEPP should support the continuation of these agricultural activities, recognising the need to balance the risks of wildlife strike and land-use conflict with the social, environmental and economic benefits we can gain from supporting peri-urban agriculture in the short to medium term. Council recommends consideration of a clause that would allow the above agricultural uses to be permissible for a period of time until there is demand to transition away from agricultural uses, rather than solely relying upon existing use rights. This would provide certainty and allow for intensification as appropriate. This approach is appropriate considering the large extent of land that will be rezoned this year as initial precincts, and the time it will take to service this land.

Rural activities can be compatible with airport operations with measures in place to minimise wildlife strike risk. There are numerous examples of airports that have successfully managed wildlife strike risks within environments that include agricultural activities. Council recommends that consideration be given to Guideline C: Managing the Risk of Wildlife Strikes in the Vicinity of Airports of the National Airports Safeguarding Framework, including Attachment 1: Wildlife Attraction Risk and Actions by Land Use. This notes that varying forms of extensive agriculture and intensive plant agriculture have different risk profiles and can be suitably managed and mitigated, even within a 3km radius of an airport.

For this reason, Council believes it would be prudent to have extensive and intensive plant agriculture as permitted with consent for a period of time. This would allow for low-risk agricultural activities to occur while allowing for the consent authority to prohibit uses with higher risk profiles. It would also allow the intensification of existing agricultural uses, which may be necessary for viability.

While Council acknowledges that existing use rights may protect existing activities, the proposed zoning will limit the long-term potential of agriculture as a contributor to the Liverpool economy. Furthermore extensive agriculture may, in appropriate circumstances, be an appropriate and appealing activity to locate in proximity to landscape-orientated development.

Prohibiting extensive agriculture and intensive plant agriculture risks losing important peri-urban agricultural jobs and landscapes that could be an asset to the Aerotropolis; and will hinder the realisation of the Western Parkland City vision. It is also inconsistent with Section 2.4 of the WSAP, which indicates that "the important agricultural lands of today can be retained".

Recommendation 37 - Add new Strategic Outcome for Agribusiness Precinct in Aerotropolis Plan "Allow the development and operation of appropriate tourist facilities and visitor accommodation in Luddenham Village that are sympathetic to the character and history of the village and reflect the rural nature of the area" and ensure alignment between the WSAP and Council's LSPS regarding future land uses in Luddenham Village.

Recommendation 38 - Add 'Bed and breakfast accommodation' to activities permitted with consent in agribusiness zone

Council notes that the Luddenham Village has the potential to offer a unique proposition in the tourism economy by providing appropriate tourist facilities in close proximity to the new airport but in a landscape that will continue to have an appealing rural/agricultural atmosphere.

The WSAP already contains a Strategic Objective to protect the character and history of the Luddenham Village. While Council supports this Strategic Objective, Council consider there may also be the opportunity for appropriate tourist facilities and visitor accommodation to be established in Luddenham Village. There may also be additional opportunities for innovative/experimental agritourism businesses and operations (e.g. boutique farming, sustainable production).

In order to enable this opportunity it is recommended that the WSAP be amended to refer to this opportunity through a new Strategic Objective for the Agribusiness Precinct in the WSAP and through minor amendment to the activities permitted with consent in the agribusiness zone. While farm stay accommodation and eco-tourist facilities are already permitted with consent in this zone, the inclusion of bed and breakfast accommodation will provide more flexible for the type of activities that might occur.

These changes would make it easier during the implementation phase of the WSAP to consider facilitation of appropriate tourist activities in the Agribusiness Precinct, including particularly during the proposed precinct planning of Luddenham Village. These changes would also provide further flexibility during the proposed implementation strategy of investigating the development of an agritourism strategy for the precinct and would be consistent with the related implementation strategy of using flexible zoning to maximise diversity and attract investment.

The WSAP identifies Luddenham village within the Agribusiness precinct. The SEPP discussion document identifies this area to be zoned "Agribusiness". It is noted that the WSAP states that while the zone is proposed to apply to the Luddenham Village, the village will not necessarily be limited to Agribusiness activities. The WSAP states that the future vision, role and function of the village will be further explored during precinct planning. It is Council's expectation that the future of Luddenham Village is carefully considered and involves the community to ensure the ongoing viability of the village.

#### Appropriate Delivery and Governance

Recommendation 39 - Aerotropolis SEPP be amended to clarify when development consent will be granted

The Aerotropolis SEPP should include provisions that clearly detail when the consent authority can grant consent. This is to reduce instances where a development has technically complied with all provisions of the SEPP, but major enabling infrastructure, such as water or sewage, is not yet available. This is also to provide a legal connection between the SEPP and supportive plans, such as the precinct plans, and WSAP, which can otherwise be ignored when assessing individual developments. This is to ensure orderly development across the Aerotropolis, and to ensure that high order aspirations for the precinct can be considered for each individual development.

Council recommends that development consent should not be granted unless the consent authority is satisfied that:

- the proposed development is consistent with the precinct plan, or site specific masterplan; and,
- 2. public utility infrastructure (including water, sewer, electricity, digital) is available.

#### Recommendation 40 - Aerotropolis SEPP be amended to specify when referrals are required

Council recommends that the Aerotropolis SEPP be updated to include detail on when concurrence and separate approvals to certain State and Federal Government departments, or the Western Sydney Airport, are required.

The development approval pathway should clearly identify when the consent authority should be receiving input from other agencies (e.g. Department of Infrastructure, Transport, Cities and Regional Development). This is not only to ensure clarity for the consent authority and developers, but to also limit unnecessary delays from referrals which are not required.

Recommendation 41 - Aerotropolis SEPP be amended to include an objective requiring sustainable funding for delivery and ongoing operation of local infrastructure

Recommendation 42 - If place-based infrastructure compact approach adopted, ensure that includes local infrastructure needs identified by councils

Council recommends that the Aerotropolis SEPP include an objective to identify and establish a sustainable funding mechanism for infrastructure creation as well as ongoing operation and maintenance of local infrastructure.

Provision within the WSAP should also be made to plan for the impacts of development on existing local infrastructure and propose a clear mechanism for sustainable funding for ongoing operation and maintenance of local infrastructure. Additionally, it is suggested that the WSAP establish a link and the relationship between the local infrastructure needs for the Western Sydney Airport and proposed Aerotropolis. Impact assessment for local infrastructure is suggested to address the infrastructure impacts by the Airport and Aerotropolis separately to distinguish and establish sustainable funding mechanism.

It is noted that the WSAP refers to the development of a place-based infrastructure compact that will inform staged servicing and development planning for each precinct. If this approach is adopted in the final WSAP it is critical that local infrastructure needs identified by Council are included in this planning process. The current drafting of the WSAP indicates that Council infrastructure would be included in scenario testing and infrastructure planning and Council would support this approach being retained in the event that a place-based infrastructure compact is delivered.

Recommendation 43 - Amend section 1.4.4 of the DCP to clarify the administrative arrangements for the DCP including the process (and responsibility) for undertaking minor amendments to the document

Recommendation 44 - Amend section 3.2.2 of the Aerotropolis Plan to identify a single primary 'custodian' for the DCP during the implementation phase

A number of government bodies will have significant interest in the preparation, amendment and approval of DCPs in the Aerotropolis area. In particular the Western City & Aerotropolis Authority, Penrith City Council, Liverpool City Council, the Department of Planning, Industry and Environment and the Western Sydney Planning Partnership are likely to be formally involved in the DCP process in the future.

While section 1.4.4 of the draft DCP contains some information on formal review of the DCP, there remains uncertainty about the practical administration of the DCP (including housekeeping amendments). Council recommend that further clarity be included in the WSAP on the administration of the DCP moving forward. In particular:

- Which authority will be the digital custodian of the document?
- Which authority is the owner of the document? (e.g. will owners/developers go to Council's offices/website to view the DCP?)
- Which authority will be responsible for carrying out the word processing of the digital document?
- How will minor/administrative amendments be carried out? Will these minor amendments require approval of the panel?
- Which authority will lead community engagement on any DCP amendments

Clarity on these matters will also be necessary for document control, and to provide certainty that the nominated entity is the entity for which to lodge DCP amendments. It is recommended that a single authority is responsible for all of the above, to improve transparency, efficiency and reduce confusion.

Recommendation 45 - Provide further clarity in the Aerotropolis Plan on the role of Council staff and Councillors on the preparation or amendment of DCPs

Greater clarity is required on the governance structure of the DCP, specifically the role of Council (elected members), the Working Group and Council Staff in the preparation and review of the DCP.

Whilst it is acknowledged that Council staff are directly involved in the Western Sydney Planning Partnership, Council does not appear to have a direct role in the formulation of proponent led, or site specific DCPs. This is not typical, as DCPs are normally under the care and control of local government only. Details as to how elected members and members of the community will be involved in the preparation of DCPs or DCP amendments will need to be provided.

Recommendation 46 - Seek to limit number of other SEPPs applying (if any)

Recommendation 47 - Clarify that the Aerotropolis SEPP will prevail over any other SEPPs that apply

Recommendation 48 - Delete reference to all SEPPs listed in section 1.5.2 of the draft DCP except the State Environmental Planning Policy (Western Sydney Aerotropolis) 2019

Council notes the comment in section 6.1 of the SEPP discussion paper that, due to alignment issues, it is expected that certain SEPPs will not apply to the Aerotropolis. To simplify planning in the Aerotropolis area, it is recommended that (if possible) all other SEPPs should be 'turned off' for the Aerotropolis. This will enable the Aerotropolis SEPP to become the single 'source of truth' for the statutory planning regime in the Aerotropolis area. To the extent that the provisions of other SEPPs (eg. Corridors SEPP) apply to the Aerotropolis area, these should be either transferred or replicated in the Aerotropolis SEPP.

This approach of streamlining and centralising the state planning policy applying to a particular location, while innovative in a NSW context, is reflective of international best practice. For example in the United Kingdom in 2012 the Government was able to consolidate over two dozen previously

issued Planning Policy Statements (similar to SEPPs) into a single National Planning Policy Framework. The Aerotropolis provides an opportunity to explore similar beneficial reform in NSW, albeit at a more discrete geographic scale.

In the event, however, that other SEPPs do continue to apply to the Aerotropolis area, it is recommended that the Aerotropolis SEPP include a provision confirming – in the event of a conflict

# Recommendation 49 - Note detailed comments by Council planning assessment officers on DCP drafting

between SEPPs – that the Aerotropolis SEPP will prevail. This will reduce the risk of unintended consequences and will ensure that the important objectives and vision contained in the Aerotropolis SEPP can be delivered in this area.

In preparing this submission, Council's planning assessment officers were asked to conduct an implementation review for the draft DCP. This review entailed officers considering the likely practical impact of the DCP and how, in future, the DCP might be capable of implementation. Details of the finding of this review, including extensive recommendations for amendments to the DCP, are set out in **Appendix 1** to this submission.

Council appreciate that the SEPP discussion paper precedes detailed drafting and exhibition of the Aerotropolis SEPP. Nonetheless, in preparing this submission Council's statutory planning officers had a number of preliminary drafting comments. Council recommend that these are considered in the preparation of the SEPP:

Recommendation 50 - Note preliminary comments by Council planning assessment officers on SEPP drafting

- Consideration should be given to replicating the "development near zone boundaries" clause in the standard instrument for development occurring just outside the Aerotropolis boundary. This will help enable transitional development beyond the Aerotropolis and may also reduce the occurrence of conflicting land uses occurring on the Aerotropolis periphery.
- 2. Include a clause in the SEPP that development consent cannot be granted unless the consent authority is satisfied that precinct plans are complied with OR development is consistent with precinct plans (or site specific DCP's in the interim before precinct plans are finalised). A development consent can only be formally assessed against Environmental Planning Instruments. Thus, unless the SEPP refers to the precinct plan, or the precinct plan becomes a Development Control Plan, no statutory weight can be given to it.
- Support the approach outlined in Section 8.6 of the SEPP Discussion Paper whereby development proposals will be required to demonstrate that necessary infrastructure (water/ sewer/electricity/digital/transport/green grid) is either in place, or will be in place, prior to development approval being issued.
- 4. Incorporate into the SEPP a stream-lined but robust process for obtaining the concurrence or separate approval of relevant state or federal departments (eg. Department of Infrastructure, Transport, Cities and Regional Development concurrence in relation to activities that may have an impact on aviation policy matters)

Recommendation 51 – Provide clarity regarding acquisition plans for Environment and Recreation zoned land, including timeframes and responsible acquisition authority

Council recommends that clarity is provided regarding any acquisition plans for land to be zoned Environment and Recreation within the WSAP and SEPP.

There is community expectation that land to be rezoned Environment and Recreation for public purpose should be acquired by the State Government, with timeframes for acquisition provided in a

Recommendation 52 – Provide confirmation in the Aerotropolis Plan of longer-term governance arrangements and timeframes for review of Aerotropolis Plan and SEPP

timely manner. Provision should be made in the SEPP for acquisition of the Wianamatta-South Creek Precinct. If acquisition is not being pursued across the Wianamatta-South Creek Precinct, options for reducing zone boundaries should be pursued to better balance landowner rights and flood risk.

Council recommends the WSAP provides detail of the long-term governance arrangements regarding future planning in the Aerotropolis.

As the Aerotropolis will be realised over decades, consideration must be given to appropriate longterm governance arrangements. Council believes that a Planning Partnership of relevant local and state government stakeholders represents the best long-term governance arrangement of Aerotropolis planning going forward.

This should also include a timeline for review and updating of the suite of documents currently being prepared for the Aerotropolis. The Aerotropolis DCP states that it will be subject to review every five years, but there is no equivalent date in the WSAP or the SEPP. Providing this timeline provides certainty to the community and industry that the documents will remain living documents and can be updated to reflect changing priorities, opportunities and technologies.

Under current NSW legislation, Local Environment Plans are required to be reviewed every ten years, and Local Strategic Planning Statements will be required to be reviewed at least every seven years. The Greater Sydney Commission's District Plans are required to be reviewed every five years with the next review therefore expected to occur in 2023. To ensure consistency with these plans, and the DCP review schedule, it is recommended that the WSAP and SEPP also be reviewed every five years using an agreed process.

### Recommendation 53 - Set out process to align rezoning with planning for costed infrastructure

Council's submission on the LUIIP Stage 1 called for a fully costed schedule of proposed infrastructure and a priority roll-out plan, linked to staged development, in order to align development with infrastructure delivery.

The WSAP, however, is still vague on commitment and roll-out of servicing infrastructure. This risks an outcome similar to that observed in release areas such as Austral and Leppington, where no staging plan was produced and it was left to market forces to decide which areas would develop. Given a lack of co-ordinated infrastructure delivery, and fragmented land-holdings, there has been no orderly development patterns. The result has been poor quality, disjointed development, where essential infrastructure and services will not be provided for several years after new residents move in. New employment centres, such as Leppington, have also failed to develop.

A stronger emphasis must be placed on providing and sequencing infrastructure and ensuring development is staged to match infrastructure provision. The size of the growth area is large and there are other growth areas adjoining. There is a significant risk that, without a prioritised and fully costed infrastructure schedule in place, development will occur on too many fronts and

infrastructure providers will not be able to keep up (including, particularly, Councils who often have more limited resources than state and utility authorities).

Recommendation 54 - Note ongoing discussion between Liverpool City Council and the Planning Partnership Office about DCP urban design section

Liverpool City Council has, in recent months, had an ongoing dialogue with the Planning Partnership Office about the DCP urban design section structure and content.

These conversations are ongoing and are focused on the opportunity to further clarify, through the DCP urban design section, appropriate urban design outcomes and solutions for achieving the Governments urban design objectives.

Although this submission provides feedback on the DCP as exhibited (including the urban design section), Council also looks forward to continuing to work with the Planning Partnership Office

# Appendix 1 – Detailed comments from Council planning assessment officers on DCP drafting

- 1.4.3: There are some instances in which it may be desirable for Council DCPs to still apply, e.g. procedures relating to land contamination. The Aerotropolis DCP should be amended to the effect that the LDCP does not apply to areas rezoned, unless otherwise specified.
- 1.4.4:
  - Minor language issue: A DCP is a planning guideline, and not a planning instrument.
  - This section requires a review of the DCP to be undertaken "in at least five yearly intervals". This should be clarified to say "at least once in a five year period", as it could be misinterpreted as five times a year.
- Section 1.5.1 would benefit from a land-application map.
- 1.6.1: This section discusses proponent instigated site specific DCPs. It should be clarified as to whether the proponent instigated DCPs are also subject to the scrutiny of the committee mentioned in 1.4.4.
- 1.6.3: This section could also benefit from relating to the metropolitan plan, district plan, WSAP, and WSA SEPP. After all, the DCP is a guideline which provides developers with a set of controls which guide the built form to be consistent with the broader strategic planning framework.
- 1.8: This section should recognise the contribution that existing market garden, grazing and other agricultural activities have on diversifying the domestic economy and for providing landscape amenity.
- 1.9 Figure 1 of Section 1.9, includes an outline as to how a proponent led DCP will be
  prepared. Whilst this process will involve Council staff, given that Council staff make up
  members of the Western Sydney Planning Partnership, this process only provides Council's
  elected members the opportunity to comment; they will have no power to make decisions
  regarding the DCP. Additional opportunities for Councillors to provide input may be
  warranted, such as briefing sessions.
- 1.10/1.11:
  - It would be helpful to include some instances/circumstances when it may be appropriate for a site-specific DA to be approved prior to a DA being prepared.
  - This section should clarify whether Councils can consider a site specific DCP after a precinct plan has been prepared which applies to the site.
  - o 1.11 Should include an Aboriginal heritage due diligence report.
- 2: The description of the Western Parkland City describes the Western Sydney Parklands forming the eastern boundary. The Western Sydney Parklands is a key north-south spine throughout the centre of the parkland city, with the Georges River more likely as the eastern boundary.
- 2.1.1: Vision statement could be more direct in retaining existing native vegetation where possible, and hinting at precinct canopy cover targets. It is suggested that reference is made to a new section in Section 3 regarding canopy cover targets and Blue-Green Grid.
- 2.2.1: The Vision Statement for the Northern Gateway Precinct discusses public transport connections to Penrith and the Aerotropolis core. Given that much of the public transport is shaping up to be oriented north-south, this provides for poor access to established residential areas in the Fairfield and Liverpool LGAs. The Liverpool and Fairfield LGAs will likely be within commuting range of the science park, and students/workers would benefit from quality public transport access.

- 2.2.2: As with 2.1.1, this statement could be more direct in addressing the Blue-Green Grid, retention of existing native vegetation and relation to the canopy cover targets.
- 2.3.1:
  - The vision statement for the Wianamatta-South Creek Precinct could be more inclusive of market garden uses.
  - It is suggested that the last sentence referring to Fifteenth Avenue as a 'road network' should be changed to a 'transport network'. It is Council's vision that Fifteenth Avenue becomes a high quality public transport corridor, which does not provide private vehicle access to the aerotropolis core.
- 2.3.2:
  - Objective b of the Wianamatta-South Creek Precinct is awkwardly written and should be expanded to encompass water quality measures.
  - Objective c should be expanded to encourage stormwater infrastructure to be of dual use (e.g. dry basins suitable for active recreation).
  - Objective e is supported, but should perhaps be locate in section 2.1.2, as this precinct doesn't apply to any prominent ridgelines.
- 2.4.1: The vision statement for the Badgerys Precinct advocates for temporal structures with the longer-term vision of higher order opportunities in the future. Whilst sensible, this requires two additional pieces of work to be done, including:
  - With an emphasis on net-zero carbon, minimisation of waste and the circular economy, how will temporary uses and structures be adapted for re-use, or dismantled and redeployed in other areas? The DCP must stipulate that an end-oflife plan shall be provided, up-front, for any temporary uses, and provide details as to how the temporary uses/structures can be re-used.
  - With the inclusion of temporary uses and structures, there will be an expectation of lower cost and more timely construction of development in this area. Given that the long-term plan is for "a sustainable precinct reliant on renewable energy, and supportive of responsible water usage" how will the temporary uses allow for the provision of this infrastructure in the long-term? There essentially needs to be two implementation plans prepared for this area, one for the interim uses, and one for the long-term, detailing how and when transition will occur, as well as what longterm infrastructure is needed in the short-term.
  - The transport mode for Fifteenth Avenue should remain undisclosed in the DCP.
     Council remains mode agnostic for the Fifteenth Avenue Corridor and maintains that it should be designed to provide for a number of modes (such as buses, light-rail, trackless tram technology, with autonomous, or semi-autonomous technologies).
- 2.4.2:
  - As discussed above, the objectives of the Badgerys Creek Precinct need to focus more specifically on certain industries, rather than catering for a wide variety of employment uses. Whilst this may maximise land-value, it will not be supportive of agglomeration based industries, and could lead to a dilution of job density.
  - The objectives should provide evidence based targets for renewable energy production, and water-reuse.
- 2.5.2:
  - The objectives of the agri-business precinct are generally supported, however there should also be support for extensive agriculture, particularly given its minimal

impact on the landscape. Controls around intensive agriculture (e.g. feedlots) will also need to be explored to ensure amenity is maintained.

- The DCP needs to expand upon which commercial and retail uses are ancillary to agriculture uses, to prevent non-associated development.
- It is suggested that Sections 3.1 and 3.2 are more clearly defined as to their intent. It seems
  that section 3.2 is more aligned to urban canopy cover, rather than biodiversity, and could
  be renamed as such.
- It is recommended that section 3 of the DCP is reviewed to improve its clarity and minimise duplication. Suggestions are included below to assist with this matter, and to offer input on other specific biodiversity related issues.
- Section 3 would also benefit from more clarity on the Blue-Green Grid, including details as to how corridors of native vegetation and waterways might co-exist with active transport and recreation in contextually relevant areas. This should also consider zoning ridges and transport corridors as recreation/environment zones
- 3.1.1:
  - Objective a: It is recommended that this objective is reworded to emphasise that avoiding impacts should be considered first and foremost, followed by minimising impacts, then mitigation. Mitigation measures are often provided as the default. However, avoidance should be the first preference, then minimise impacts as much as possible, then mitigate residual impacts. This hierarchy is embedded in pertinent material such as the biodiversity assessment method (linked to the new Biodiversity Conservation Act 2016). Suggested rewording is "Avoid and minimise impacts to biodiversity from development, and mitigate residual impacts that can't be avoided or minimised".
  - Objective c: Prescribed impacts need to be defined, as per the Biodiversity Conservation Regulation 2017
  - Objective e: Consider removing the word 'landscape' as this word appears to be superfluous.
  - Objective f from section 5.1.7.1 (Urban Ecology and Sustainability objectives) includes reference to the conservation of threatened species and communities. It is suggested that the consideration of threatened entities would be best placed within section 3.1.
- 3.1.2:
  - PO1: Recommend rewording to clarify the intended outcome. A suggested alternative is "<u>Human-induced disturbances-to biodiversity at urban interfaces are</u> <u>minimised</u>". Acceptable solutions could cover the range of impacts that commonly occur at urban interfaces (eg Asset Protection Zones, stormwater, hydrology changes, weeds, vehicle strikes, lighting, noise, shade from structures). Edge configuration and use of buffer areas may also be considered.
  - PO2: Clarify whether 'land avoided from development due to biodiversity values' would encompass all 'land identified for conservation'. It is recommended that the wording is simplified accordingly if possible. Acceptable solutions should reflect the hierarchy noted above for objective a (avoid impacts, then minimise those that can't be avoided).
  - PO3: Focus is on landscaping/urban design, so it would be best placed in a more relevant section (e.g. section 5.1.7 urban ecology and sustainability). Acceptable

solutions may include preference for indigenous plant species, incorporation of habitat features and avoidance of weeds.

- o PO4: This may be more pertinent to include as an acceptable solution under PO2.
- PO5: Consider collating with PO6, and cover broader connectivity themes under one PO (e.g. 'protect and enhance vegetation and wildlife habitat corridors'). The CPCP is anticipated to identify corridors and consider their management. Acceptable solutions could cover the retention of native vegetation and habitat features within corridors, avoidance of other impacts within these areas, and enhancement measures.
- PO7: Move to section 3.3 (high ecological value waterways).
- PO9: Recommend simplifying to "habitat features are protected and enhanced to support populations of threatened species". Perhaps it could be widened to 'populations of threatened species are protected and enhanced' to allow considerations of issues beyond habitat features. Acceptable solutions may encompass the retention of habitat features such as hollow bearing trees, ground debris, waterbodies etc. If the PO is broadened beyond habitat features it can also include acceptable solutions related to the protection of individuals within the population.
- PO10: Recommend minimisation of these impacts, then mitigate residual.
   Acceptable solutions will probably greatly overlap with those noted for PO1 (relating to urban interface).
- PO11: Extends well beyond biodiversity issues, and does not appear to offer a biodiversity outcome that would be beyond what the other POs could achieve. Consider moving to a more pertinent section.
- Consider including a PO regarding the enhancement of native vegetation and habitat in strategic locations, which will presumably be identified in the CPCP. Alternatively, this may be included via rewording an existing PO (eg PO2). Acceptable solutions may include the improvement of ecological values in priority conservation areas.
- 3.2 Native Vegetation: An evidence based urban canopy target should be provided, with direction given to this target in this section. This section should describe the tree canopy targets in the public and private domains, and how these work together to achieve the vision.
- 3.2 The relationship between this section and the Codes SEPP/Greenfield Housing Code also needs to be clarified (if the SEPP/Housing Code apply), particularly with respect to building clearance zones. At the moment, the controls seek to advocate protecting all remnant vegetation; this isn't realistic and doesn't give DA officers any direction as to what should be retained, versus what can be lost. This will result in all vegetation being cleared.
- Section 3.2 also needs to relate to the Vegetation SEPP, particularly clause 9, if applicable (or alternatively relevant clauses in the Aerotropolis SEPP).
- 3.2.1: Consider moving objectives a and b into section 3.1.1, and simplify b to 'protect native vegetation areas and provide for areas with a size and configuration that will allow for the survival and improvement of the native vegetation communities in the long term' (or similar). Objective c would be best placed in the general provisions section given its amenity focus.

# • 3.3:

- Consider collating this section with other waterway related sections. Acceptable solutions can be based on adherence to Natural Resources Access Regulator and DPI Fisheries guidelines/requirements.
- Liverpool City Council will not allow alterations to the flood storage capacity and flood behaviour through filling and excavation below the Flood Planning Level. It is also noted that a further investigation will need to be undertaken regarding flood extent across the aerotropolis which will inform the water cycle management strategy any lands needed for water detention and treatment.
- The performance outcomes in section 3.3.2 should include maximum waterway nutrient loads, including nutrient reduction targets. This should be done at the point-source, rather than end-of-catchment treatment devices, via rain-gardens, swales and other semi-naturalised elements.
- 4.1.2:
  - PO2 of section 4.1.2 appears to be a copy of PO1.
  - PO10 of section 4.1.2 should also equally apply to the generation of dust, as well as other particulate emissions.
  - The scope of PO11 must be refined. It is assumed that only flying wildlife are an apparent hazard. Several habitats that support flying wildlife also support other native, and endangered, wildlife such as amphibians, insects and marsupials in riparian areas. Guidance as to how to how to minimise the impacts of flying wildlife, without simply suggesting their complete removal, should be discussed and preferred over solutions which remove habitat.
  - Will there be any performance criteria relating to airport security? It is understood that aerial drones are an emerging airspace security concern, and that radiocommunication jamming (broad-spectrum, or targeted) is once such method of identifying and/or disabling drones. Performance criteria with regards to interference from fixed radio-transmission antenna should be considered in the immediate vicinity of the airport site.
- 4.2.1: Flood infrastructure, including basins, should be designed in a contextually sensitive
  manner. In urbanised area, with greater demands for open space, dry-basins which have a
  dual-purpose as sporting fields should be a preferred design; whilst in less urban areas,
  basins and infrastructure should be designed to mimic natural water bodies, such as
  wetlands, where possible. This will require slight wording alterations to objective d.
- 4.2.2:
  - PO3, Council's standard practice is to not permit any fill in areas affected by the 1/100 flood. The current text may mislead applicants into filling this land to minimise risk.
  - PO4 is to be amended to state that "Fill should must not reduce the capacity of the floodplain below pre-development levels"
  - PO5 should also include guidance as to maximum batter/slope angles, maximum batter height and the suitability of retaining walls. Retaining walls require maintenance, can be subject to graffiti / present poorly, and can limit opportunities for development to interface with blue/green corridors; they should be avoided.
     "Should" needs to be changed to "must".
  - PO7: Floodways are not defined, refer instead to floodplain.

- PO8 must also incorporate evacuation on foot. The development, street network, and street grades should be designed in a manner in which rising waters will cause those who flee homes / workplaces to be 'pushed' by floodwaters to higher safe grounds or evacuation routes.
- PO10 should advocate that infrastructure should maintain its integrity and not present a public hazard in addition to remaining functional.
- PO12 should mention that overland flow paths are to be documented and accommodated on all-sites assuming a full-development scenario.
- 4.3.2 Should include a performance outcome ensuring that more than one evacuation route is provided for any lots affected by bushfire risk. The two (or more) access paths should not converge at any point, and would ideally head in opposite directions so as to minimise the likelihood that both are severed during a fire.
- 4.4.2: Given the need to minimise attracting flying wildlife, PO3 should be amended to discourage putrescible waste facilities, particularly those that handle green or domestic waste in an open-air setting.
- PO5 of 4.4.2 should be informed by a precinct study, inclusive of uses within 500m of the Aerotropolis.
- 4.5.2: Minor amendment to PO1 to change reference of premises to development, as noise generation in yards and other outdoor areas (such as quarries) can also be of concern. This will also require changing 'construction materials' to 'noise attenuation measures'
- It must be clarified if the Infrastructure SEPP will apply as this has controls for road and rail corridors
- 4.6: Should be reference to the generation of dust from unsealed roads, carparks, yards and dust generating activities (e.g. landscape materials suppliers).
- 4.7: The performance outcomes should advocate for minimal cut and fill, which is a primary agitator of acid sulphate and saline soils.
- 4.8.2: PO1 to be clarified that this applies to development in general, not developments.
- 4.8.2: PO3 should also specifically include pollution to the water table.
- 4.9: there needs to be a definition or well-understood example of what sloping or unstable sites are. A performance outcome should also be that large floorplate / warehouse style developments are not provided on sites where the cross-fall is greater than 3m (human scale height for cut, fill or retaining wall), or that the development conforms with local topography.
- 5.1.1.1:
  - 'Compact development' is not defined, consider changing to 'medium and high density development'.
- 5.1.1.2: Western Parkland City Landscape Led Approach.
  - All of the Performance Outcomes are supported, but there could be greater detail provided. What is the canopy target? What is high-quality open space? What are important view lines, and how are they protected?
  - PO4 could be modified to ensure that active and public transport routes provide the most direct routes to centres, retail areas and open space. An easy walk should also be defined (e.g. 800m) and it should also be noted that this alignment will also encourage higher take-up of public transport.
- 5.1.1.2: Western Parkland City Public Domain.

- PO7, whist the principle is supported, this will ultimately be determined by building heights and setbacks, unless otherwise specified.
- Public domain should include a public art strategy, commissioned as part of the rezoning.
- 5.1.1.2: Western Parkland City Urban Development.
  - PO15 requires development to conform to the urban context, but given that many
    of these areas will be in Greenfield locations with no / inappropriate established
    character, this principle cannot be achieved. The DCP should instead be providing for
    the character of what is desired (e.g. rhythm of features, architectural styles, façade
    lengths, building separation vs street wall etc.).
  - A principle should be provided which advocates for vertical development, rather than horizontal development for single-lot dwelling typologies. This allows for smaller lot sizes, incorporates more permeable space, provides better ventilation and provides better solar access. Providing a low base FSR and awarding FSR bonuses for extra storeys should be investigated to encourage additional floorspace to be provided on the vertical axis if desired by home-owners.
  - PO16: Fine-grain development needs to be defined or further described.
- 5.1.1.2: Interface with Transport and Surrounding Land Uses
  - PO18 should apply to areas around other public transport nodes, not just metrostations. 'Maximising outcomes' needs to be more carefully worded so as to not encourage excessive, or out-of-scale densities which over-burdens infrastructure.
  - It is suggested that utilising a generous FSR control in addition to a more restrictive dwelling density controls in high-density mixed use areas could promote nonresidential floorspace or larger unit sizes for developers who seek to maximise FSR provisions.
  - Include new PO that while high density is encouraged around public transport nodes, high (residential and employment) density is discouraged in poorly connected areas where reliance on single occupancy private motor vehicles is likely.
  - Include new PO that significant commuter or retail parking structures should be located 500-1,000m away from metro, rapid transit and retail centres to promote active transport and to encourage mode-shift whilst still providing adequate access; exceptions should be made for bicycle, micro-mobility, and mobility impaired parking.
  - PO19: Suitable interfaces to a trade gateway need to be discussed/outlined.
  - PO20: This would be better addressed by the SEPP in providing zones which separate incompatible land-uses. Alternatively a list of incompatible land-uses should be provided, including distance or other mitigation criteria between such land-uses.
- 5.1.2.1: Objective a is supported, but could be more refined or split into separate objectives
  to increase clarity, such as: Streets should be people and pedestrian oriented, not designed
  purely on vehicular movement requirements; Streets are to allocate space and furniture so
  as to best retain or enhance place identity; Streets designs are to clearly articulate priority
  in the order of: pedestrians, other active transport, public transport, private vehicles and
  freight, (with the exception of motorways).
  - Another objective of section 5.1.2.1 should focus on improving safety and community health outcomes by designing streets in a manner which encourages mode shift, and provides for a cooler, sheltered urban environment.

# • 5.1.2.2:

- PO2 could be further re-enforced by stipulating what kind of streets pedestrians etc. are to be prioritised. E.g. "Prioritise pedestrian, cycle and public transport movements on all local, collector and sub-arterial streets".
- PO7: Consider re-wording to: "carriageway widths, intersections widths and driveways widths are to reflect the minimum pavement configurations. The design widths and geometry should be based on the largest vehicle that will frequently use the road. Infrequent users, such as service vehicles on local streets, shall be used as a check vehicle, and not the design vehicle."
- o PO8 and PO9 are duplicates.
- PO 10 should advocate for point-source water quality management, and provide for drainage swales/rain-gardens in lieu of end-of-catchment bioretention basins.
   Swales and raingardens can treat pollutants closer to where contaminants enter the system, and being located in road reserves, they typically do not require additional land acquisition costs. A preferred planting species list will need to be provided to ensure plant survival and minimal maintenance.
- PO11 is supported but is confusingly worded. Further, on-street parking areas should be provided as indented bays, rather than as an extra traffic lane which can be conveyed visually as a wider carriageway, increasing vehicle speeds.
- PO12 needs further detail as to how streets are to be designed to be resilient to natural and man-made hazards.
- PO13 needs to be amended to require streets to be designed in accordance with the principles of the WSSDG, and adopting standard cross-sections where appropriate.
- PO13 needs to identify what guidelines the street network must comply with. Most Council engineering teams will assume this is Austroads, with guidelines like the WSSDG being ignored. Separate cycleways should not be provided for most local streets, as the streets should be designed in a manner in which private vehicles are travelling slowly enough so as to permit sharing of the carriageway. Collector roads, and local streets adjacent to town centres and schools are perhaps exceptions.
- PO15 should add the existing road network and cadastral pattern as matters to consider in designing the road network.
- PO16 needs to be amended to ensure that direct connections are provided for active and public transport modes only. This PO could imply that arterial roads should be built through the centre of town centres. Provision should also be made for private vehicular transport to coincide with public transport modes at the periphery, to encourage a transport mode shift to pedestrian and active transport within town centres.PO18 should reference "improving health outcomes" rather than safety, so that matters such as active transport and urban heat are also considered.
- There needs to be a priority around block widths and depths to relate street pattern with development typology and to ensure pedestrian permeability. Blocks of 65x150m are suggested for residential areas.
- Bus routes need to be considered in the context of slow-streets to ensure that they can still operate efficiently.
- There needs to be a PO on providing pedestrian and cyclist legibility. That is, consistent treatment of pedestrian and cyclist facilities on a route, or safe, well designed transitions between different treatment types. Legible signage pointing out POIs and key cycling routes should also be provided. All pedestrian and cycle paths,

whether beside a road or through other public space should be well-lit and incorporate passive surveillance.

- A PO should advocate for a fused grid or a filtered permeable layout in areas where new streets are to be provided. A fused grid layout provides high pedestrian permeability via long, regular routes, whilst providing vehicular transport with much fewer options via localised road closures. Woolloomooloo has retro-fitted a fusedgrid street layout, but reflects best-practice by keeping street blocks and passageway widths regular.
- o A control should specify soil volume required for broad-canopy trees.
- All POs should require that the road network 'must' do something, rather than 'should' do something.
- Table 1:
  - Local streets should discourage thoroughfare, and should not provide vehicle priority for lengths of greater than 300m (to slow vehicle speeds and orient vehicles to the collector road network). Schools and activity centres should not be bound by local streets.
  - Sub-arterial roads must maintain active transport as a high priority, particularly cyclists, as these will be key priority maintained routes.
  - High-streets should consider continuous awnings where appropriate.
- 5.1.3.2:
  - How does a planner assess whether a development achieves PO1? These measures need to be objective and repeatable. Two planners should be able to make the same determination as to whether the same development complies with a provision.
  - PO2 should be related to demographic analysis of the planned precincts, which can be used to derive the target dwelling typology breakdown. This can then be mapped to provide for better market certainty and to ensure that dwellings being constructed respond to household needs, not just what is profitable to deliver.
  - PO3: Appropriate heights should be determined by the SEPP.
  - $\circ~$  PO4 should reference national standards, and set benchmarks.
  - While supported, PO5 is written in subjective language and consistent interpretation cannot be guaranteed. PO should be redrafted.
  - The active frontages section should include a new PO encouraging shop fronts to be at the same grade as the street level. A significant change in grade will disrupt legibility and could result in poor surveillance.
  - PO15: Need to clarify whether a laneway is an active frontage.
  - o PO19 will not be achievable in high-density development sites.
  - PO21 as it is written could advocate for buildings to be designed in a manner which is contrary to principles of minimising energy consumption and promoting sustainability (such as forcing sealed windows and reliance on mechanical ventilation). This PO should advocate for re-orienting the layout/design of the structure to mitigate noise, then consider mitigation strategies which provide for high amenity whilst minimising energy consumption.
  - Include new PO requiring Private Open Space to be provided behind the building line, and size linked to dwelling typology.
  - Minimum landscaping requirements need to be derived from urban canopy targets as well as stormwater run-off coefficient assumptions.

- A plant species list that responds to different contexts within the precincts (e.g. doesn't attract significant birdlife, frangibility, salt tolerance, WSUD) should be developed and part of a public domain master plan.
- An outcome should ensure that hydrants, substations and other plant is integrated into the design of the building.
- 5.1.4: A greater emphasis on what makes place should be provided (e.g. referencing Government Architects' documents). The 30 minute city should also be detailed here (e.g. from any dwelling it should take no longer than 30 minutes to travel to a regional centre via public or active transport).
- 5.1.4.1: Prioritising pedestrians within centres is supported, however, an objective is needed to ensure that new centres are sufficiently spaced and provide sufficient services so as to enable walkable communities.
  - All new residents should be within 800m of: their nearest centre, a government primary school, and high quality mass transit stop (metro, heavy rail, or other rapid transit stop).
  - All dwellings should be within 400m of public open space, or 200m for RFB development.
  - The nearest multi-purpose community facility, and government high school from all residents should be no more than 20 minutes away via public transport (assuming up to an additional 10 minute walk to a bus stop).
- New objective: Minimise negative impacts on the viability and vitality of existing and planned centres, and curtail out-of-centre development.
- 5.1.4.2:
  - PO2: A polycentric urban structure is jargon that many non-planners will not understand. Replace "Provide a polycentric urban structure across" with "Support the growth and ongoing viability of".
  - PO3 needs to be singular. There is a risk that objectives c and d are undermined as a result of each development site claiming to be the metropolitan centre. This would result in each site competing with one-another, likely resulting in lower densities lack of efficient public transport servicing and further sprawl. Suggest rewording to: Establish a single metropolitan centre, strategic centres, and new local centres around Metro/mass transit nodes and highly accessible areas.
  - As with the metropolitan centres heading, the strategic centres heading needs to recognise other strategic centres at the periphery of the aerotropolis, such as Leppington, and Narellan. An economic development, and retail viability strategy should be prepared to inform the size, location, timing/delivery and viability of strategic centres in the WSA area and surrounds.
  - Whilst there is a need to provide a limited amount of flexibility to ensure that development is able to take place and respond to emerging trends, the open ended wording of PO5 will almost certainly result in unorderly development (similar to Austral and Leppington).
    - PO5 is contrary to the efficient use of infrastructure servicing and delivery, and will likely undermine objectives a, c, d, and e.
    - The market will go to where there is maximum opportunity to create a financial return. This is not the objective of the aerotropolis, nor will it likely result in the best outcome for new communities and high-quality jobcreation.

- Please provide detailed, contextually similar case-studies as to when this model has delivered a new city which had similar aspirations to the aerotropolis. Liverpool's experience with similarly market-led solutions has only produced very poor outcomes, where fundamental planning objectives have been undermined.
- Replace with new PO5: "Balance the desire for the private sector to have flexibility in where and when they invest, with recognition of the importance (and the value to the private sector and community) of having certainty about the sequencing of growth and infrastructure provision. It is important that new communities are delivered in a sequenced, predictable and commercially feasible way"
- A further PO should be included for all centre types that "Walking and cycling are the easiest and most convenient modes to access areas within centres, with the majority of trips within the centre being easily undertaken using sustainable modes of transport". It is well-documented, that people's habits to walk/cycle for everyday trips such as commuting to work, or visiting their nearest shops/services will increase the likelihood that they will utilise active transport for other trips.
- Further POs are required regarding the timing of delivery of local centres. In several
  of Liverpool's growth areas, commercial development lags behind residential
  development by several years. This results in car-dependent communities and
  further reinforces habits of driving to destinations.
- 5.1.5.1: Consideration should be given as to how much of the public transport network can operate 24/7 by amending Objective b to read "...coming to and from the Airport <u>using high guality public and active transport</u>".
- 5.1.6.2: Council will need to develop conditions of consent relating to the WSDAP. The controls will need to send a signal to developers as to what is expected. Also, it would be appropriate to refer to the importance of data security and privacy in this section.
- 5.1.7.2:
  - PO2 advocating for the dual use of water cycle management and recreation/amenity is supported. This outcome could be strengthened by describing both passive and active recreation areas and noting the importance of ensuring sufficient space is allocated for associated infrastructure.
  - In order for PO4 to include building material controls to encourage sustainability (which Council supports) the Aerotropolis SEPP will need to over-ride the restrictions that the BASIX SEPP otherwise places on this type of control. This will also be necessary in order to achieve aspects of PO16 to PO19.
  - PO5 confuses sustainably sourced materials with general building sustainability; the two are not always mutually inclusive. Designing to minimise heat/cooling loads for buildings in Western Sydney requires the careful use and placement of high thermal mass (such as bricks, stone and concrete), as well as areas where lightweight, insulated materials (such as timber or sheeting) should be used. Sustainable building materials, on the other hand, would always prefer light weight, natural materials, such as timber, which do not have high thermal mass, which would result in the interior temperature of buildings to be more related to exterior temperatures. It would be more appropriate for this to be two separate PO's.

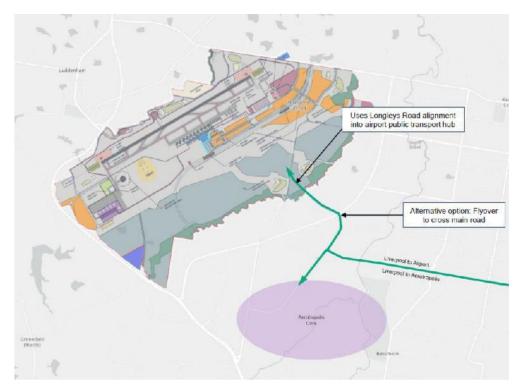
- Two additional POs are needed under the "Design for Climate, Urban Heat and Thermal Comfort":
  - "Setbacks to be derived from the perspective of providing ventilation between buildings, and providing vegetation opportunities to grow, not just providing for fire separation".
  - "New development to support the achievement of net zero emissions and best practice in managing water demand, and the use of innovative construction techniques such as Passivhaus encouraged"
- Whilst PO8-PO10 provide for the preservation of green infrastructure on ridges and near creeks, these predominately run in a north-south direction. There will be little to no connectivity in an east-west direction. Further detail is needed to identify eastwest green links.
- Whilst most existing shade trees should be retained, as per PO15, there will be scenarios where a site is heavily vegetated, but not protected from clearing.
   Allowing for additional height, or floorspace as an offset to dedicating such land to Council for public use may incentivise the retention of such spaces, and could be a means of providing open space as development occurs, as well as providing canopy cover on private lands with less market resistance.
- $\circ~$  A list of species to be retained will assist the Tree Preservation section.
- PO16 PO19 should be updated to reflect and refer to the core principles of Circular Economy thinking (as set out in the WSAP), namely: (1) design out waste and pollution; (2) keep products and materials in use; (3) regenerate natural systems.
- 5.2.1: Include a new PO
- Low and Very low income needs to be defined/referenced.
- 5.2.2:
  - PO3 should enable a typology responding to housing needs as identified in Housing Study to be prepared for Aerotropolis to ensure delivery of affordable, sustainable and context-appropriate housing stock. Based on Council's recent housing study this is likely to preference smaller low density dwellings (more 2 and 3 bedroom dwellings/terraces), coupled with larger apartment sizes (more 3 and 4 bedroom units).
  - o Minimum sizes for rooms need to be provided for different dwelling typologies.
  - Council staff are supportive of a build-to-rent model, if it provides appropriate accommodation, especially for key workers. However, checks and balances will need to be put in place to ensure that this will not be an avenue to providing sub-par residential development.
  - PO5 should be further expanded to require affordable housing (units in multi-unit development) to be intermixed with private housing. Controls should be put in place to prevent certain blocks, floors, wings or unit types of a building being for affordable housing only.
- 5.3.1:
  - Include reference to proposed SEPP provision (see main submission) that the consent authority cannot consent to a development until it is satisfied that adequate utilities and accessibility (e.g. public transport) are available or are to be made available to service the development. It is critical to ensure that an infrastructure and delivery and staging plan is in place prior to development taking place. Objective

could be worded "<u>Ensure that new communities have early access to the necessary</u> <u>utilities, social infrastructure and accessibility (e.g. public and active transport)".</u>

- This part should also integrate with objectives relating to self-sufficient water and energy, as well as principles of the circular economy.
- 5.3.2:
  - PO1 should also include gas, and, where appropriate ducts and other infrastructure to support innovative technology (eg. co-generation of heated and chilled water).
  - A performance outcome should be to consolidate utility corridors and minimise the sterilisation of land. Western Sydney is characterised by several high-tension power line corridors, gas corridors and other utilities which can be a blight on urban amenity and otherwise sterilises capable land. Utilities should be consolidated into single corridors, utilising configurations which minimise land consumption, whilst still providing utility owners with access to maintain such infrastructure. The utility infrastructure should provide for and adapt to the best capabilities of the land.
  - $\circ$   $\;$  Utilities must be provided prior to development occurring.
  - PO2 cannot be realised at the site design stage, as each development site will place a load/burden on utilities, even if the precinct is self-sufficient.
  - New PO to be included: "<u>Development only occurs in locations where adequate</u> <u>utilities, social infrastructure and accessibility (e.g. public and active transport) are</u> <u>available or committed to service that location</u>"</u>
- 5.4.2:
  - Often areas for vehicle queuing areas are designed longer, and corners wider than what is absolutely necessary to support vehicles moving at speed. PO2 could be further reinforced by minimising the amount of area dedicated to vehicle movement to that that is needed for vehicles to manoeuvre at very low speeds. Vehicle related areas should also be designed in a manner as to visually reinforce pedestrian and cyclist priority.
  - Safe and convenient set-down areas for passengers, as per PO3 should be provided from the street, so as to minimise the number of vehicles using driveways/crossing footpaths.
  - The section titled 'Car Parking' should be renamed 'Parking', and make reference to bicycles, motor-cycles and micro-mobility parking, as well as safe and secure bicycle lockers and end-of-trip facilities.
  - As per PO4, private vehicular parking should be prioritised on-street so as to minimise the amount of off-street parking required. This could include providing 90 degree parking on-street, which would provide additional traffic calming. Careful consideration will need to be given to ensure this is only used in commercial/retail areas or as visitor parking to avoid the need for residential permit schemes.
  - PO8 is supported, although reference to the service vehicle as the 'design' vehicle should be changed to the 'check' vehicle. That is, the road-related area should be designed for a smaller vehicle, such as a car, checking that a larger vehicle, such as a garbage truck is able to manoeuvre; this is rather than designing for the service vehicle which will increase corner radii, and promote higher vehicle speeds.
- A new part in section 5 should deal with temporary development, and include topics such as: length of consent, how to deal with complaints/issues, conditions for contentious development, and requirements for an end-of-life plan (including carbon cycle assessment and how structures can be re-used or dismantled).

- The themes of Sections 7 and 8 are supported, though given that these sections will contain the primary controls for public domain/development design, it should be a requirement that these sections are completed prior to any development consent or subdivision approval being sought in the Aerotropolis. Whilst the higher order objectives and outcomes provided in the DCP are suited to precinct planning, they do not provide the level of detail necessary to assessing an individual DA.
- Dictionary:
  - Remove any definition that typically appears in an EPI, and place it in the SEPP, including:
    - Acid Sulfate Soils,
    - Agriculture,
    - Asset Protection Zone (defined in Planning for Bushfire Protection 2019),
    - High Density
    - Signage, and
    - Waterway

# Appendix 2 – Indicative FAST Alignment to Airport or Aerotropolis



# PART 3 - SUMMARY OF FEEDBACK RECEIVED FROM LIVERPOOL COMMUNITY REGARDING THE PLANNING PACKAGE

Through regular engagement with the Liverpool community (including Council's ongoing 'Rural Forum' program), Council has received feedback on the Planning Package. This feedback is provided to the Planning Partnership for consideration. The community have also been encouraged to lodge their own submissions directly with the Planning Partnership on the Planning Package.

## Issue 1 – Land acquisition

Significant community concerns have been raised with Council regarding land acquisition processes associated with planning for the Aerotropolis.

In particular community members have raised the following concerns with Council:

- The need for timing regarding when acquisition of properties for infrastructure or open space might occur. This is important for residents to be able to be able to plan for their futures;
- Responsibility for acquisition of land proposed to be re-zoned as Recreational/Environmental or RE1. This re-zoning limits resident's future use of this land.

Council has advised residents that Council's position is that, where requested by the relevant landholder, land zoned as Recreational/Environmental or RE1 under the Aerotropolis planning processes should be acquired by the NSW Government.

## Issue 2 – 1:100 flood line

Community members have expressed concern to Council regarding the 1:100 flood line being used in Aerotropolis planning work.

Council has advised the community that the flood lines are based on a flood study undertaken in accordance with the NSW Floodplain Development Manual. The issue of aligning a zone boundary to a flood line is the key issue, particularly as the WSAP does not propose acquisition of land zoned Environment and Recreation. Council recommends that the area zoned Environment and Recreation should also been identified on the land acquisition map in the SEPP.

### Issue 3 - Kemps Creek Precinct

Landholders in the Kemps Creek Precinct have advised Council that they want their precinct to be fast-tracked. Furthermore, landholders have sought a timeframe on re-zoning and precinct planning. Landholders have indicated that the current lack of certainty on timeframes is resulting in anxiety within the community. Council have advised the community that prioritising this Precinct would potentially require the deferral of other Precincts in the Aerotropolis. There are financial risks of developing and maintaining effective infrastructure in multiple precincts. Unless new commitments are carefully balanced against Councils existing commitments (growth areas such Austral and Edmondson Park) there is a risk of poor execution of projects.

### Issue 4 - Dwyer Road Precinct / Southern Gateway Precinct

Landholders in the Dwyer Road Precinct / Southern Gateway Precinct have advised Council that they consider that this precinct should be brought forward as an initial precinct. Landholders contend that the existing residential zoning of this area and its proximity to the airport (and potential noise impacts) means the Dwyer Road Precinct should be prioritised.

Council are advised that a landholder group survey found that over 90% of residents do not wish to live near an operational airport. Landholders note research referred to in Council's Stage 1 LUIIP submission about the potential adverse effects on resident's physical and mental health when living within 5kms of an Airport. The Landholder group suggest that this needs to also be considered in managing the amenity and liveability for current residents in this Precinct, not just future residential developments.

The Landholder group also contend that the area could provide greater 30 minute job access for people living to the south of the Aerotropolis boundary (predominantly in Camden Local Government Area).

The landholder group is therefore seeking to fast track the rezoning of the Dwyer Road Precinct and be considered as a Priority. The landholder group contend that this rezoning should occur before the Airport is operational. The landholders also seek more certainty on the timing of outcomes for rezoning, master planning and delivery of infrastructure (including pathways to allow flexibility in the activation of lands in the Dwyer Road precinct where alternative arrangements for infrastructure delivery are funded and guaranteed and where business/investment attraction is successfully demonstrated).

Council have advised the community that prioritising the Dwyer Road Precinct would potentially require the deferral of other Precincts in the Aerotropolis. There are financial risks of developing and maintaining effective infrastructure in multiple precincts. Unless new commitments are carefully balanced against Councils existing commitments (growth areas such Austral and Edmondson Park) there is a risk of poor execution of projects.

Members were encouraged to submit their rationale and recommendations regarding Dwyer Road Precinct directly through submission to the NSW Government. Council also undertook to include landholders concerns in this document.

## To: David Smith, Director Planning Liverpool City Council

Cc Kiersten Fishburn, CEO Liverpool Council

Julie Scott, Director City Economy & Growth

## Regarding: Dwyer Road Precinct (Southern Gateway Precinct)

### Context:

- The Precinct is one of the largest landowner groups ever assembled in Greater Sydney. It
  incorporates the majority of lands within the Dwyer Road Precinct to the south of the Western
  Sydney (Nancy Bird-Walton) Airport (WSA), including over 250 properties and over 1000
  residents and landowners. Collectively, the Precinct represents approximately 750 hectares of
  lands currently zoned R5 Large Lot Residential and RU4 Rural Small Holdings and borders on the
  southern end of the Airport.
- The Precinct borders on the southern end of the Airport and is within 3kms of the Airport with ANEC 20-25 noise contour through approximately 1/3-1/2 of the lands.
- Whilst the Plan describes the lands as comprising mainly of 'rural holdings' and observed
  agricultural industries, the reality is that the majority of properties contain one two residential
  properties that are occupied by families and residents, many of whom have lived in the area for
  decades. Some small-scale/hobby based rural activities and home-based businesses occur in
  parts of the Precinct; however, these are mainly secondary to the predominant residential use.
- The community responded collectively as "Southern Gateway Precinct" to Stage 1 of the LUIPP and will again be responding as a community group to Stage 2.
- The Plan, with respect to Dwyer Road Precinct does not provide enough certainty around timing
  of outcomes to rezoning, master planning and delivery of infrastructure. The indicative land use
  is "Flexible Employment". Formal advice from the Planning Partnership is that any consideration
  of rezoning the Precinct will not happen till <u>after the 24/7 Western Sydney Airport is operational.</u>

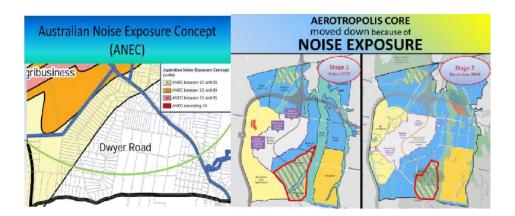
## What the community is seeking:

- 1. To fast track the rezoning of the Dwyer Road Precinct and be considered as a Priority
- 2. The timeframe the community is seeking is to be rezoned before the Airport is operational.

## **Rationale and Justification**

- 1. Impacts of residential living next to a 24/7 operational Airport
- The ANEC 20-25 Noise Contour runs through at least 1/3 of the properties within this Precinct (see Fig1)
- The Planning Partnership have publicly acknowledged that the proposed boundary of the Mixed Use Aerotropolis Core has been moved south due to further consideration of potential noise impacts and future /possible noise contour changes. (Fig 2)

- In addition, it was stated in the Western City & Aerotropolis Authority Landowner Forum Tuesday, 17th December 2019 that current modelling is suggesting that during the evening only one pathway will be used. The flight path to be used will be the south/west pathway for arrival and departure, to limit the impact on residential communities directly to the north and east of the Airport. This however has hugh impacts for the 1000 residents in this precinct. Aircrafts will be flying over the western section of our precinct heading south west over Burragorang/Nattai. We are being "sacrificed" at the expense of residents to the north of us.
- This in effect means that the <u>majority of the Dwyer Road Precinct is noise affected and would</u> not be used for any future residential development, yet existing residents are being asked to <u>endure an indefinite timeframe</u> before any consideration is given to redevelopment of lands.
- Existing residents are likely to be significantly impacted by airport noise over many years where we have previously enjoyed a semi-rural lifestyle.
- Liverpool Council in its submission to Stage 1 LUIPP, provided a summary of evidence-based
  research highlighting the adverse effects on resident's physical and mental health when living
  within 5kms of an Airport. This needs to also be considered in managing the amenity and
  liveability for current residents in this Precinct, not just future residential developments. The
  Aerotropolis Plan does not detail any measures for the interim protection of amenity for existing
  residents. The focus is on safeguarding the operations of the future airport from development in
  the Southern Gateway, but no consideration is given to the residents.



### Interface with the South West Growth Area – Greendale Road interface

- The forthcoming large residential release area to the south in South Creek West home to 30,000 new residents, borders on the Dwyer Road Precinct. This is to be fast tracked and planning is underway.
- There is recognition that the Camden LGA is the fastest growing LGA in NSW with a projected doubling of population between 2016 and 2026.
- Camden Draft Local Strategic Planning Statement (Local Priority P 4) acknowledged the need for future employment lands to support the population growth and have earmarked lands

adjacent to the Dwyer Road Precinct, on the eastern side of Northern Road( just past the Northern Rd/Greendale road intersection) for investigation in the short term (ref page 53).

- The Stage 2 LUIPP states the sequencing of precinct planning and rezoning for Dwyer Road will be determined by the rate and nature of development in the initial precincts" This is very <u>"Aerotropolis centric</u>".
- The Dwyer Road Precincts capacity to address the employment land needs as identified by Camden LGA in their own LSPS should be the priority. Supporting the accelerated precinct planning for Dwyer Rd Precinct, to provide the needed solution for employment lands to the south, should be the concern of Liverpool Council who is a member of the Planning Partnership. This helps to resolve landowner concerns about noise and impacts of surrounding developments, and therefore actively addresses one of the key considerations for this Precinct which is to safeguard airport operations.
- Dwyer Road precinct runs the risk of "being left behind", rather than being viewed as a strategic southern interface between the Airport and the South West Growth Area <u>providing the closest</u> <u>employment lands for those to the south of the Aerotropolis boundary.</u>
- The Precinct\_can in fact be the 30min solution for employment for the South West Growth Area.
   It is inconceivable how the new Mamre Road Precinct or even Badgerys Creek Precincts could
   provide employment within 30mins. Both these designated employment land precincts service
   predominantly communities to the North and East of the Airport and Western Parklands City.
- The encroaching future residential lands to the south and south east could have the impact of sterilizing the land within the Precinct for industrial uses. The future zoning, interface treatments and form of Greendale Road is very ambiguous, and this is a key border for the Aerotropolis. Government need to start thinking about this now.

## 3. Operating as a large landowner group

- We understand fragmentation of landowners is a significant impediment to effecting rezoning, and co-ordinated infrastructure and development outcomes.
- On polling our community, <u>close to 90% DO NOT WANT TO BE LIVING next to a 24/7 operational</u> <u>Airport and their desire is to fast track rezoning.</u>
- Our community sees the advantages of operating as a large landowner group and at this stage approximately 80% of the total land in the Precinct has been identified for development and a MoU is being finalised with those landowners. We hope to even expand this percentage as our committee and community process gains momentum.
- Whilst in principle we understand the challenges confronting the early activation and precinct
  planning for Dwyer Road precinct, we will be asking Government to allow flexibility in the
  activation of lands in the Dwyer Road precinct where alternative arrangements for
  infrastructure delivery are funded and guaranteed and where business/investment attraction is
  successfully demonstrated. If we can demonstrate an ability to achieve the objectives and the
  underlying intent of the LUIPP, why should we be left to last. We seek that Council can see the
  economic benefits and support us in our endeavours.
- In moving forward as a large landowner group, we see ourselves not simply as "Dwyer Rd Precinct". We have many more roads and streets that make up our geographical area.

- We want our area defined not by a road but by what <u>we potentially offer as an outcome for the</u> <u>Airport, Aerotropolis and the South West Growth Area.</u>
- We are the Southern Gateway for all the strategic reasons outlined above. It implies productivity, infrastructure and collaboration. Its positive and outcome focused, and we are requesting Government to also consider this in the renaming of the Precinct.

In summary, our Community is seeking a review of the timeframe for activation of precinct planning and believe we have valid reasons for Council to use in supporting our position. We are also cognisant of the need to work strategically as a large landowner group, to help both Government and Council find the solutions to enable this and accelerate the process.

Southern Gateway Precinct (Dwyer Road Precinct)

**Committee of Landowners**