



Roads and Maritime Services/Sydney Airport Corporation Limited

Sydney Gateway Road Project

Environmental Impact Statement/ Preliminary Draft Major Development Plan

Chapter 19 Land use and property



November 2019

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Chapter 19

Land use and property

This chapter provides an assessment of the potential impacts on land use and property. It describes existing land uses and properties in the project site, assesses the impacts of construction and operation, and provides mitigation measures to manage the impacts identified.

The SEARs and MDP requirements relevant to land use and property are listed below. In addition, there is a requirement under section 91(1) of the Airports Act to assess the potential environmental impacts associated with a development (section 91(1)(h)), and to specify how those impacts may be dealt with (section 91(1)(j)). Full copies of the SEARs and MDP requirements, and where they are addressed in this document, are provided in Appendices A and B respectively.

Reference	Requirement	Where addressed
Key issue SEARs		
6	Socio-economic, land use and property	
6.2	The Proponent must assess the social and economic impacts from construction and operation on potentially affected properties, infrastructure, utility services, businesses (including impacts to freight management associated with the reduction of container storage, and consequent impacts to the broader industry), recreational users and land and water users.	This chapter assesses the potential impacts on land use and property. Potential social and economic (including business) impacts are considered in Chapter 20 (Socio-economic impacts).
Major development plan requirements		
91(4)	In specifying a particular objective or proposal covered by paragraph (1)(a), (c) or (ga), a major development plan, or a draft of a major development plan, must address: <ul style="list-style-type: none">(a) the extent (if any) of consistency with planning schemes in force under a law of the State in which the airport is located; and(b) if the major development plan is not consistent with those planning schemes – the justification for the inconsistencies.	Section 19.4.4

19. Land use and property

19.1 Assessment approach

Developing a new road changes the existing use of the land on which it is located. It can also permanently affect any properties located on this land as well as adjacent land uses. Assessing potential impacts on land use and property broadly involves considering existing and potential future land uses in the study area, and determining how these land uses may change, both temporarily during construction and permanently during operation.

An overview of the approach to the land use and property assessment is provided in this section, including the legislative and policy context and assessment methodology.

19.1.1 Legislative and policy context to the assessment

The assessment has been undertaken in accordance with the SEARs and MDP requirements (provided in Appendices A and B) and with reference to the following:

- Relevant legislation, including the EP&A Act, the Airports Act and associated regulations
- *Significant impact guidelines 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies* (DSEWPC, 2013)
- *Botany Bay Local Environmental Plan 2013, Marrickville Local Environmental Plan 2011, Sydney Local Environmental Plan 2012* and the *Rockdale Local Environmental Plan 2011*
- *Sydney Airport Master Plan 2039* (SACL, 2019a)
- *Sydney Airport Environment Strategy 2019–2024* (SACL, 2019b)
- Land use strategies that apply to the study area (see sections 5.1 and 19.2.2).

19.1.2 Methodology

Study area

The study area is defined as the project site (as described in Chapter 2) and land surrounding the project site. Generally the study area consists of properties within the project site and land within about 500 metres of the project site.

Key tasks

The assessment involved:

- Confirming land use and planning controls (land use zones) in the study area, involving a review of:
 - Land use zoning maps under the relevant local environmental plan (LEP) – the *Botany Bay Local Environmental Plan 2013* (Botany Bay LEP), *Marrickville Local Environmental Plan 2011* (Marrickville LEP), *Sydney Local Environmental Plan 2012* (Sydney LEP) and the *Rockdale Local Environmental Plan 2011* (Rockdale LEP), which apply to different areas of the project site
 - Land use zoning maps and future development plans under the *Sydney Airport Master Plan 2039* (SACL, 2019a) (the Master Plan)
 - Aerial imagery
- Undertaking a site visit to confirm land uses within and around the project site

- Reviewing key strategic plans and development applications relevant to the study area to identify future priorities, including land uses and developments. This included searching development application registers, the NSW major project tracking system, and the Joint Regional Planning Panels development and planning register for the period 2105 to 2019
- Identifying properties located within the project site
- Assessing the potential impacts of construction and operation, including temporary and permanent land use changes, impacts on properties, and potential impacts on utilities
- Identifying measures to avoid, minimise and manage the potential impacts identified.

Chapter 20 (Socio-economic impacts) considers the potential social, community, economic and business impacts of the project, including those that may occur as a result of the impacts identified in this chapter.

19.1.3 Risks identified

An environmental risk assessment was undertaken as an input to the impact assessment (see Appendix G). This involved identifying potential environmental risks during construction and operation, and rating the potential risks according to likelihood, consequence and overall level of risk, in general accordance with *AS/NZS ISO 31000:2009 Risk management – Principles and guidelines*. Land use and property risks with an overall assessed risk rating of medium or above, identified by the environmental risk assessment, included:

- Temporary changes to land use, including recreation/open space uses within Tempe Lands, as a result of the establishment of construction work areas and associated ancillary facilities
- Impacts on properties as a result of the project's temporary and/or permanent land requirements
- Permanent impacts on the availability of land for recreation uses (particularly at Tempe Lands) and other uses, including the availability of industrial zoned land.

This chapter considers these potential risks.

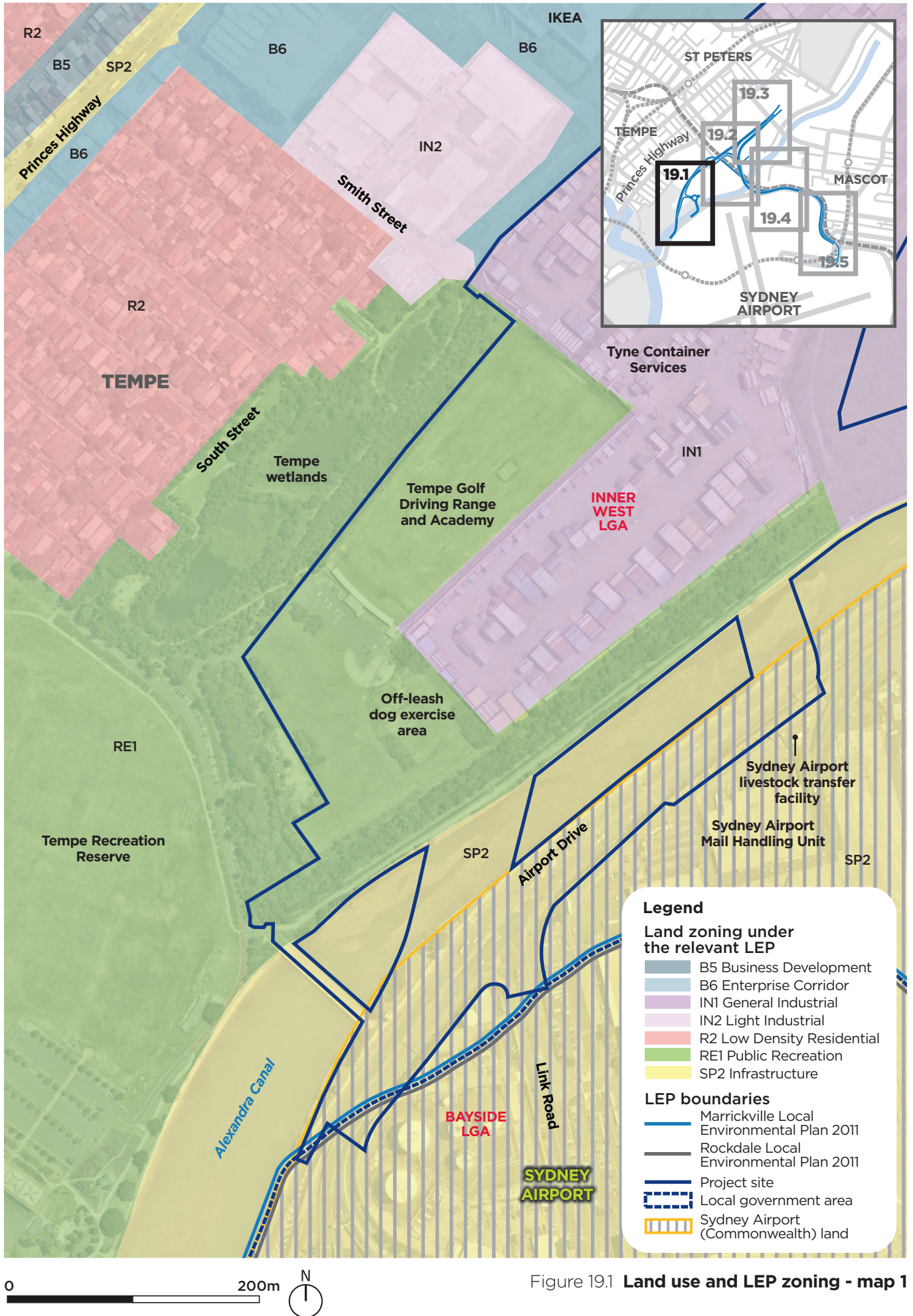
19.2 Existing environment

19.2.1 Existing land use, property and zoning

Land use and property

The study area includes a varied and relatively dense mix of land uses. Sydney Airport is by far the dominant land use. However, a range of other land uses are located within and in the vicinity of the project site. The following sections describe these uses.

Land uses within and surrounding the project site, and the land use zoning according to the relevant LEP, are shown on Figure 19.1 to Figure 19.5. Properties within the project site are shown on these figures and are listed in Table 19.2.



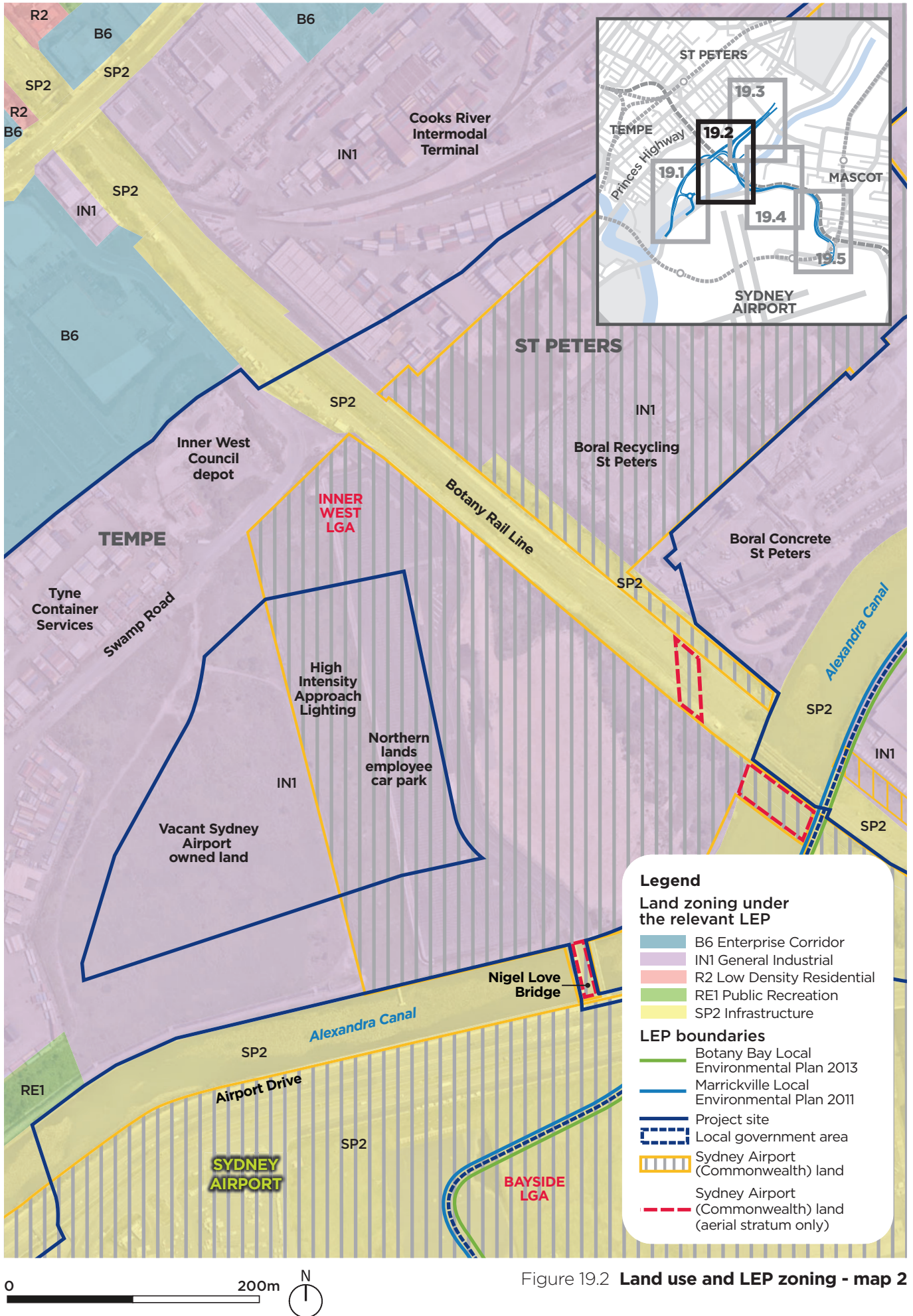


Figure 19.2 Land use and LEP zoning - map 2

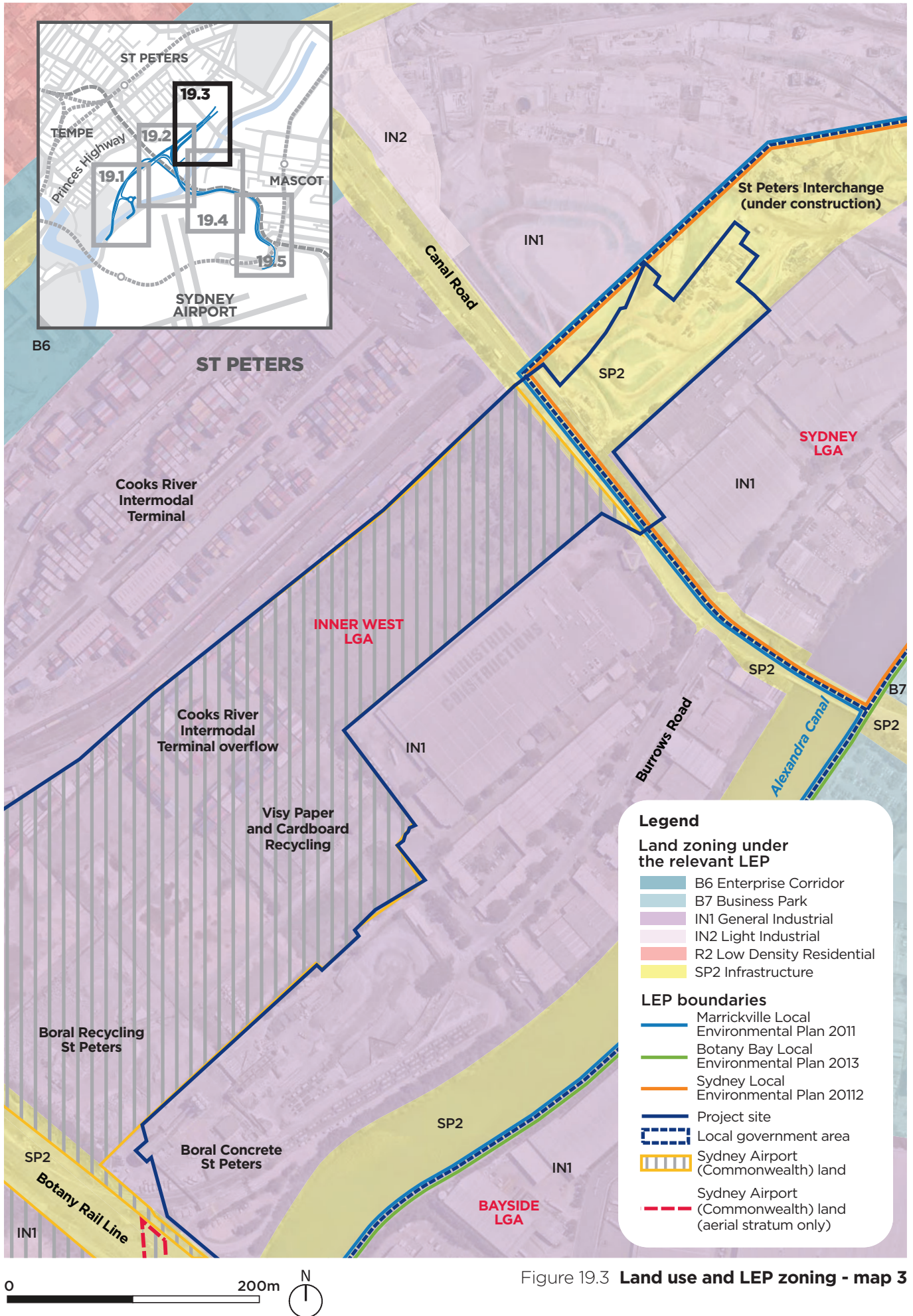
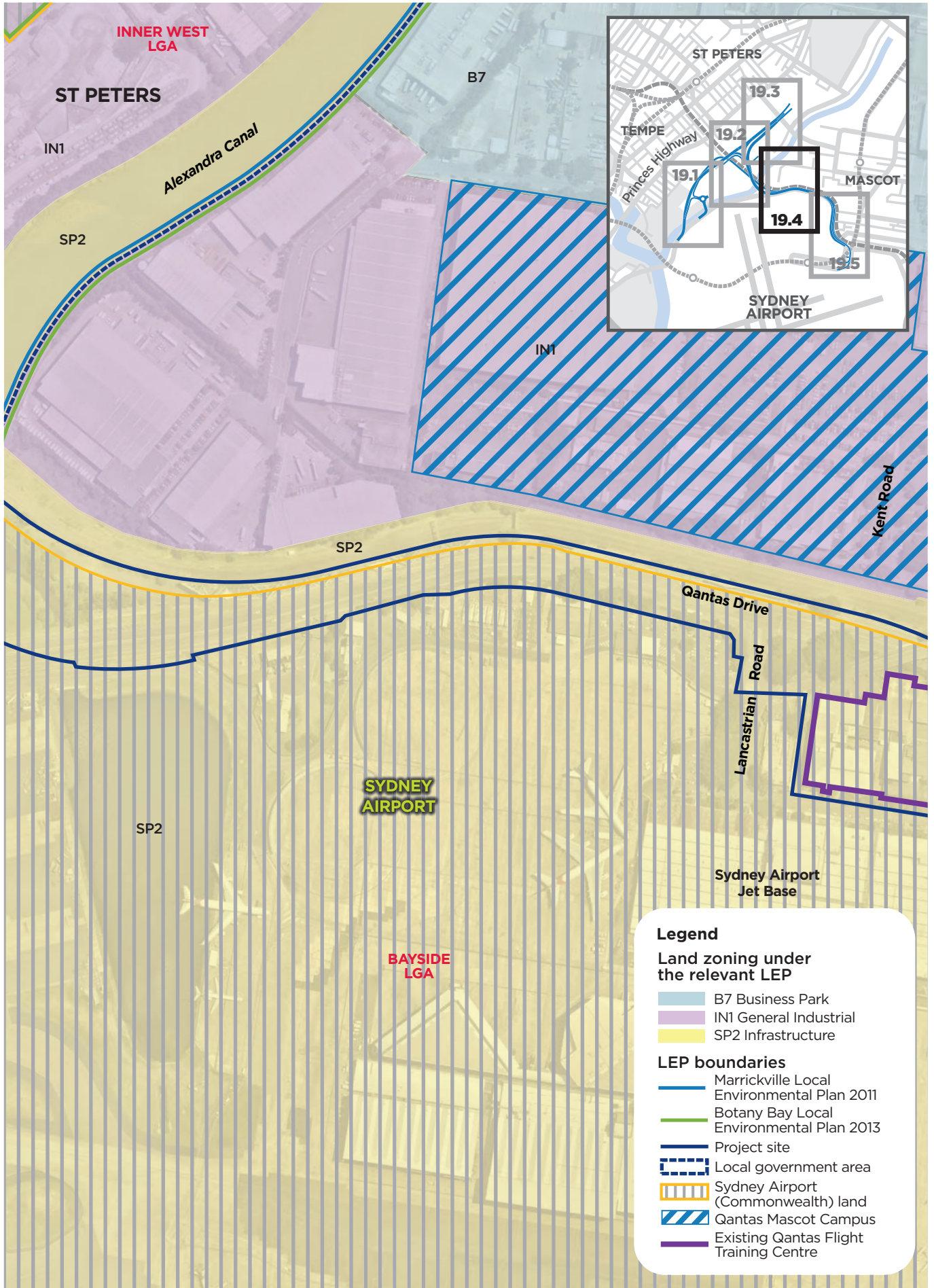


Figure 19.3 Land use and LEP zoning - map 3



Legend

Land zoning under the relevant LEP

- B7 Business Park
- IN1 General Industrial
- SP2 Infrastructure

LEP boundaries

- Marrickville Local Environmental Plan 2011
- Botany Bay Local Environmental Plan 2013
- Project site
- Local government area
- Sydney Airport (Commonwealth) land
- Qantas Mascot Campus
- Existing Qantas Flight Training Centre

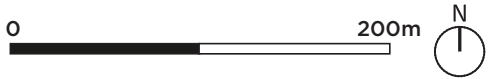


Figure 19.4 Land use and LEP zoning - map 4

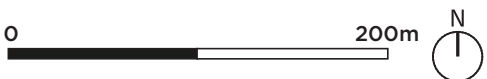
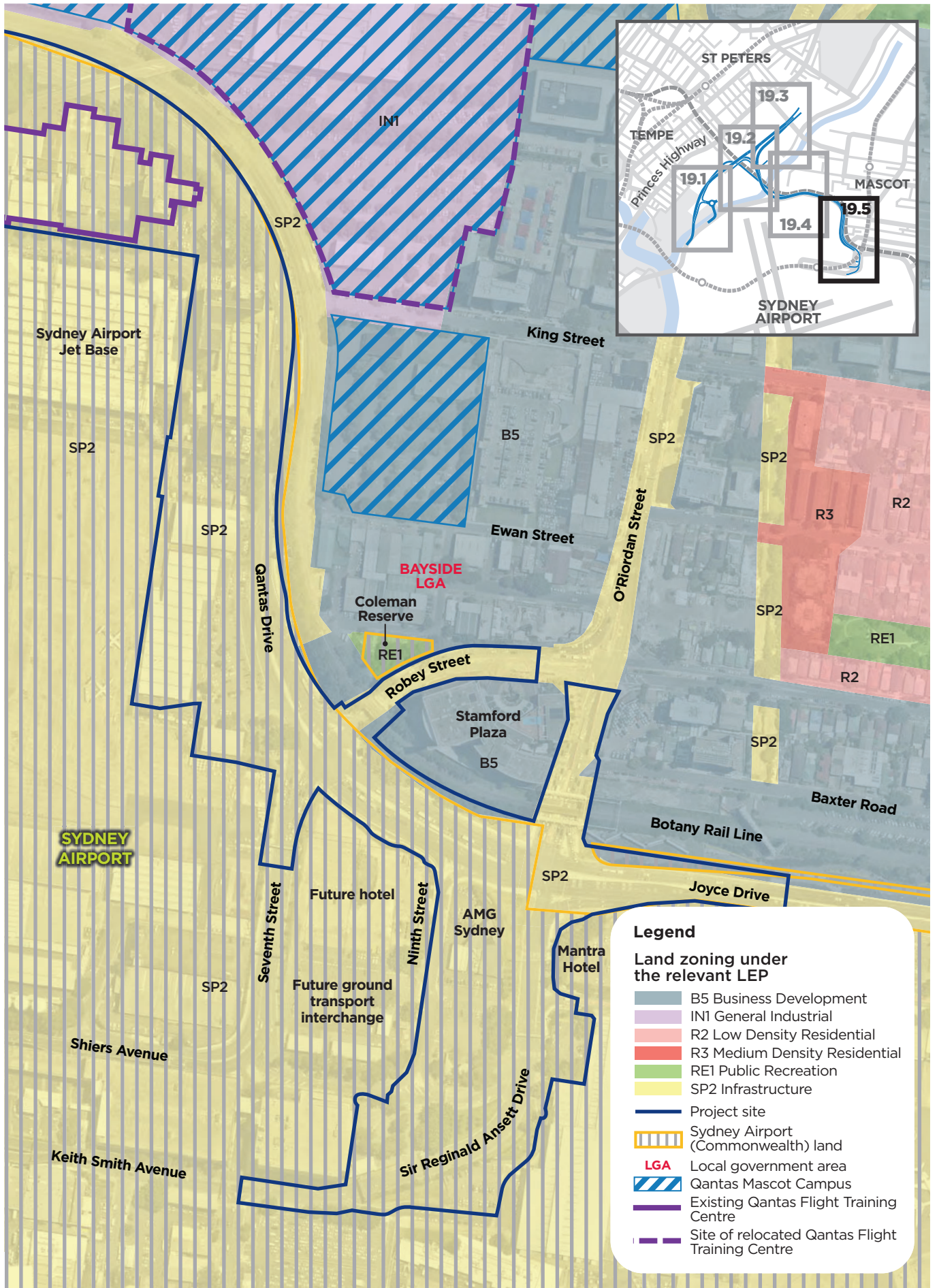


Figure 19.5 Land use and LEP zoning - map 5

Sydney Airport

Sydney Airport is the dominant land use in the study area, located on land south of Airport Drive and Qantas Drive. The majority of land within Sydney Airport is occupied by the runways, associated taxiways and terminals. Other land includes uses that support the operation of the airport. An area of Sydney Airport land, known as the northern lands, is located at the north-western end of the project site.

The Master Plan's land use plan divides Sydney Airport land not occupied by the runways into five sectors, which are shown on Figure 19.6. The project site is located within or adjacent to the North West, North East and Northern Lands sectors.

The North West Sector is mainly occupied by Terminal 1 and freight related land uses, including the freight terminal, Sydney Airport mail handling unit and livestock transfer facility (see Figure 19.1). It also includes external and internal access roads, including Airport Drive.

The southern part of the North East Sector is mainly occupied by Terminals 2/3, and the northern part (adjacent to Qantas Drive) is occupied by the Sydney Airport Jet Base (see Figure 19.7), which is currently used by Qantas under lease. The lease area includes the Qantas Flight Training Centre and Qantas Drive. The eastern part of the North East Sector also includes a number of business including AMG Sydney, numerous hotels (outlined below) and fast food outlets (eg Krispy Kreme, McDonalds and KFC).

Land uses within the Northern Lands Sector include the high intensity approach lighting for the main north-south runway, a staff car park (see Figure 19.8) and land sub-leased for industrial purposes to the north of the Botany Rail Line (described below).

Further information on Sydney Airport and its facilities is provided in Chapter 11 (Airport operations).

Transport infrastructure

In addition to Sydney Airport, key transport infrastructure in the study area includes:

- Arterial and local roads
- Botany Rail Line
- Sydney Trains T8 Airport and South Line
- Alexandra Canal cycleway.

Further information on transport infrastructure in the study area is provided in Chapters 2 (Location and setting) and 9 (Traffic, transport and access).

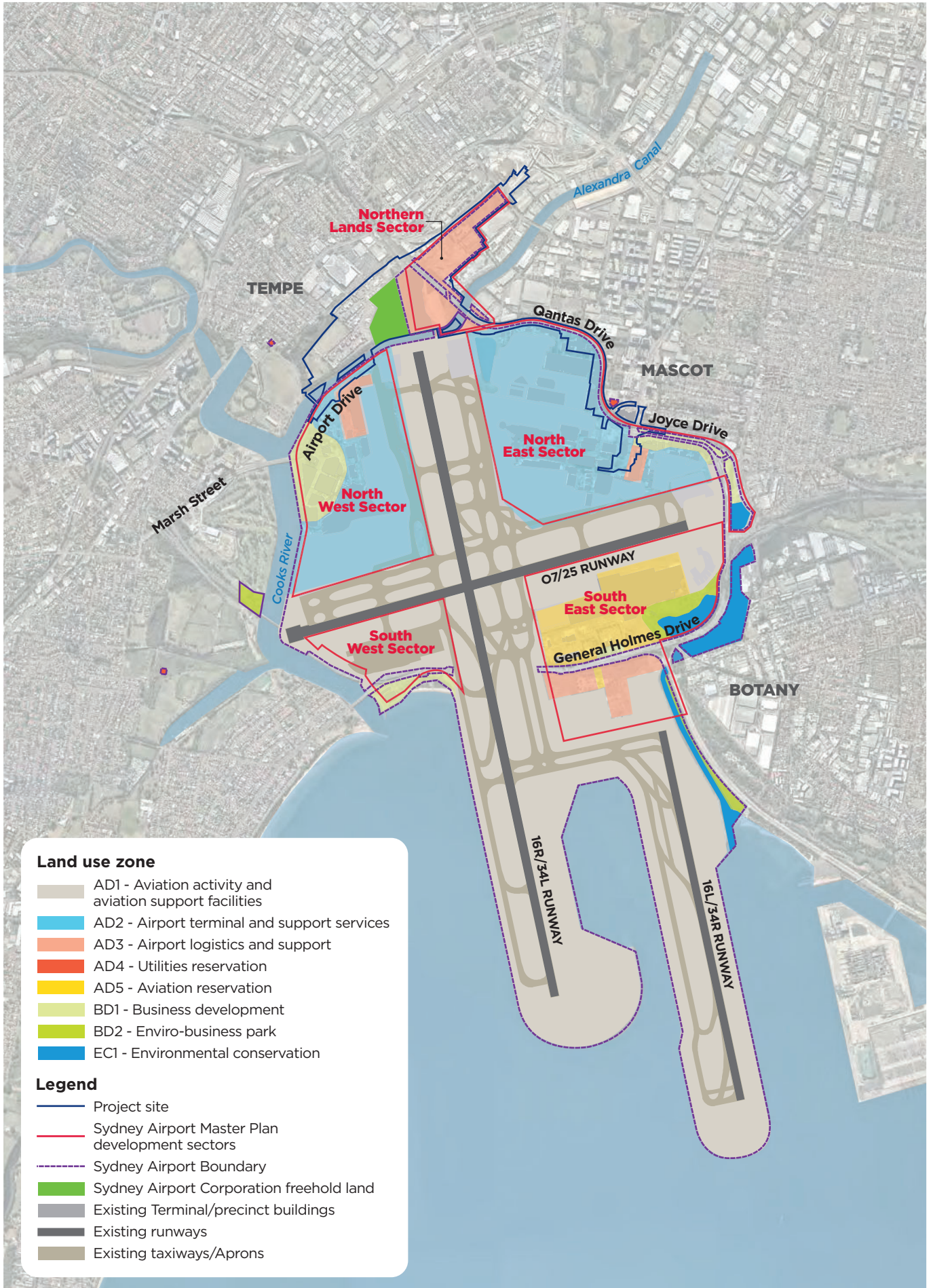
These areas are generally zoned SP2 Infrastructure.

Residential land uses

Residential land uses in the vicinity of the project site are generally located in four main areas:

- East of O'Riordan Street in Mascot – including mainly low density dwellings, with the nearest of these located about 40 metres from the project site in Baxter Road north of the Botany Rail Line
- Mascot – including medium density residential apartment buildings generally located north of Coward Street, about 700 metres north of the eastern end of the project site
- Tempe – including low density residential dwellings to the south-west of the project site, generally bounded by Station, South and Smith streets and the Princes Highway, with the nearest of these located about 75 metres north-west of the project site
- Tempe/St Peters – consisting of low and medium density residential dwellings located to the west of the Princes Highway.

These areas are generally zoned R2 Low Density Residential or R3 Medium Density Residential.



Land use zone

- AD1 - Aviation activity and aviation support facilities
- AD2 - Airport terminal and support services
- AD3 - Airport logistics and support
- AD4 - Utilities reservation
- AD5 - Aviation reservation
- BD1 - Business development
- BD2 - Enviro-business park
- EC1 - Environmental conservation

Legend

- Project site
- Sydney Airport Master Plan development sectors
- Sydney Airport Boundary
- Sydney Airport Corporation freehold land
- Existing Terminal/precinct buildings
- Existing runways
- Existing taxiways/Aprons

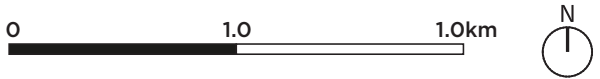


Figure 19.6 **Sydney Airport Master Plan 2039**
- land use zoning

Industrial

Industrial land uses within or near the project site are generally located in three main areas:

- Mascot – north of the project site to the west of O’Riordan Street/Bourke Street/Kent Road, including aviation support land uses and the Qantas Mascot Campus
- Tempe/St Peters – between Canal Road, the Princes Highway and Alexandra Canal, including the following main uses/properties within/close to the project site:
 - Concrete production – Boral Concrete St Peters
 - Freight container services – Cooks River Intermodal Terminal (see Figure 19.9), Tyne Container Services (located on the former Tempe landfill)
 - Council facilities – Inner West Council Depot
- Sydney Airport land – industrial land uses are currently located on land sub-leased from Sydney Airport Corporation, in the northern lands:
 - Recycling facilities – Boral Recycling and Visy Recycling
 - Freight container services – the Cooks River Intermodal Terminal overflow area (see Figure 19.9).

These areas are generally zoned IN1 General Industrial. Further information on businesses in the study area is provided in section 20.2. It is noted that Visy are currently proposing to relocate their operations from the existing site in the northern lands to a site in Alexandria.

Commercial

Commercial land uses within or near the project site include:

- Retail uses located along the Princes Highway, including Ikea
- Mascot – generally located to the north of the Botany Rail Line and within or near the Mascot town centre (on Botany Road) and Mascot Station (on Bourke Street)
- AMG Sydney (including service facility) at the intersection of Qantas Drive and Sir Reginald Ansett Drive
- Hotels:
 - Stamford Plaza, at the intersection of Qantas Drive and O’Riordan Street (see Figure 19.10)
 - Ibis Budget Sydney Airport and Mantra, at the intersection of Joyce Drive and Sir Reginald Ansett Drive
 - Citadines Connect and Quest, at the intersection of O’Riordan Street and Baxter Road
- Advertising structures – located along Joyce Drive, Qantas Drive, Airport Drive and Sir Reginald Ansett Drive (see Figure 19.11). These structures are mainly located on Sydney Airport land. Some structures are located on land owned by RailCorp adjacent to the Botany Rail Line.

These areas are generally zoned B5 Business Development and B6 Enterprise Corridor. Further information on businesses in the study area is provided in section 20.2.

Recreation/open space

Tempe Recreation Reserve is located at the south-western end of the project site. The reserve includes playing fields, a playground and the Robyn Webster Sports Centre. The project site crosses the Tempe Lands, which is an open space and recreation area located adjacent to the Tempe Recreation Reserve on part of the former Tempe landfill site. The Tempe Lands includes:

- Tempe Golf Range and Academy
- Tempe Wetlands

- Off-leash dog exercise area (see Figure 19.12)
- Area of passive open space.

Further information on the above facilities, and other community infrastructure in the study area, is provided in section 20.2.

Water infrastructure

Alexandra Canal is located within and near the project site. Further information on the canal is provided in section 14.2.

Other water infrastructure in the study area includes the desalinated water delivery pipeline and a network of potable, wastewater and stormwater infrastructure.

Further information on utilities is provided in section 8.7.



Figure 19.7 Jet Base and Qantas Flight Training Centre (viewed from Qantas Drive)



Figure 19.8 High intensity approach lighting



Figure 19.9 Cooks River Intermodal Terminal



Figure 19.10 Stamford Plaza hotel (viewed from Qantas Drive at Ninth Street)



Figure 19.11 Advertising structures adjacent to Qantas Drive near Lancastrian Road



Figure 19.12 Recreation land uses at Tempe Lands (off-leash dog exercise area)



Land use zoning

Land use zoning under the relevant LEP is shown on Figure 19.1 to Figure 19.5.

The project site is mainly located on land subject to the Marrickville LEP (generally west of Alexandra Canal and south of Canal Road) and the Botany Bay LEP (generally east of Alexandra Canal). Small areas of the project site are located on land subject to the Sydney LEP (north of Canal Road) and the Rockdale LEP (at the western extent of the project near Terminal 1) (see Figure 19.1 to Figure 19.5).

Land within the project site is zoned under the relevant LEP as follows:

- The majority of the project site is zoned IN1 General Industrial or SP2 Infrastructure (with various nominated infrastructure types)
- A small area of land north of Qantas Drive at the Robey and O’Riordan street intersection is zoned B5 Business Development
- Sydney Airport is zoned SP2 Infrastructure
- Tempe Lands and the Tempe Recreation Reserve are zoned RE1 Public Recreation.

The Master Plan includes a land use plan to guide development at Sydney Airport. The land use plan divides the Sydney Airport site into eight zones, and provides objectives and permissible land uses for each zone. Land within the project site is zoned by the Master Plan as follows:

- AD2 (Airport Terminal and Support Services)
- AD3 (Airport Logistics and Support)
- BD1 (Business Development).

Land use zoning under the Master Plan is shown on Figure 19.6.

19.2.2 Future land uses and development

Strategic planning

The main strategies and plans that are directly relevant to future land use and development in the study area are considered in Table 19.1, with a summary of the key directions and policies that may influence future development. Most of these apply to the Mascot area.

Further information on the strategic context for the project as a whole, including those strategies and policies relevant to the need for the project, is provided in Chapter 5 (Strategic context and project need).

Table 19.1 Strategic planning in the study area

Strategy/plan	Key directions relevant to changes in land use in the study area
A Metropolis of Three Cities – the Greater Sydney Region Plan (Greater Sydney Commission, 2018a)	<ul style="list-style-type: none"> ■ Green Square–Mascot is identified as a strategic centre and commercial office precinct, and as part of Sydney’s eastern economic corridor
Eastern City District Plan (Greater Sydney Commission, 2018b)	<ul style="list-style-type: none"> ■ Green Square–Mascot is identified as a significant centre for the Eastern City District and a supporting centre for the nearby Harbour CBD, Port Botany and Sydney Airport. The plan recognises that the area is undergoing major urban renewal from a predominantly industrial area to one with increased residential use ■ The plan provides a target for an additional 20,000 jobs in Green Square–Mascot, with supporting key actions including strengthening the economic role of the centre and planning for the provision of social infrastructure
Botany Bay Planning Strategy 2031 (City of Botany Bay, 2009)	<ul style="list-style-type: none"> ■ A target of an additional 710 dwellings in the vicinity of Mascot Station ■ Supporting the development of new off-site employment locations near Sydney Airport to accommodate the growth in demand for airport related activity ■ Developing the Mascot Station precinct as a major retail and commercial centre ■ Developing the O’Riordan Street precinct as a major city/airport gateway
Mascot Station Town Centre Precinct Masterplan (City of Botany Bay Council, 2012)	<ul style="list-style-type: none"> ■ Provides a guide to planning in the vicinity of Mascot Station, including residential/mixed use development in previous industrial zoned areas
Sydney Airport Master Plan 2039 (SACL, 2019a)	<ul style="list-style-type: none"> ■ Establishes the strategic direction for development at Sydney Airport and provides for the development of additional uses at the airport site ■ Further information is provided in section 19.2.3

Future developments surrounding the project site

Sydney Airport

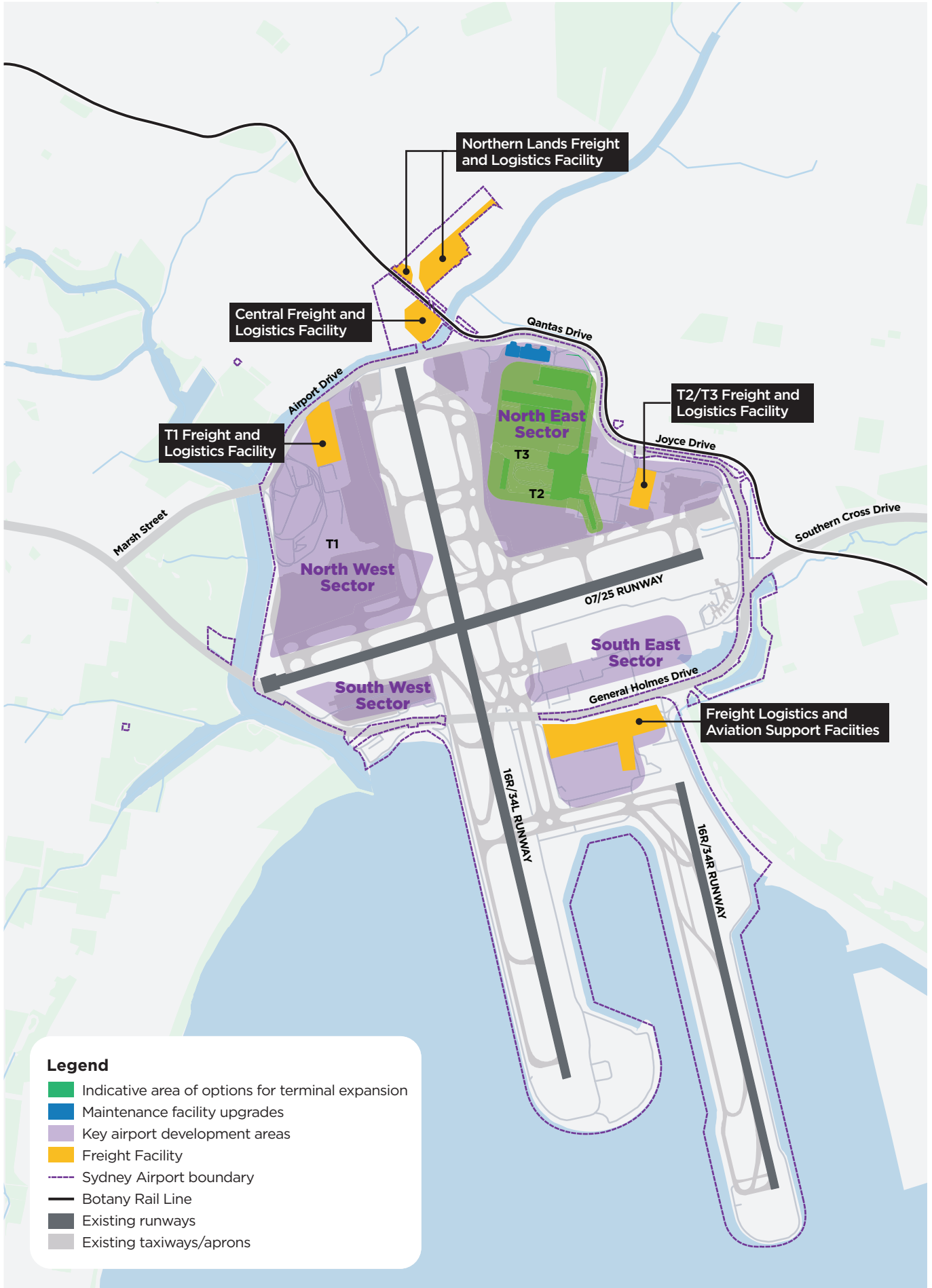
The Master Plan’s Airport Development Plan describes future developments proposed by Sydney Airport Corporation within or close to the project site. The locations of these are shown on Figure 19.13.

Within the Northern Lands Sector, land within and adjacent to the project site is identified for future freight and logistics land uses. The following future land uses have been identified:

- New freight facilities located north and south of the Botany Rail Line (see Figure 19.13)

- Potential for flight catering facilities should there be a demand for such facilities (location not identified)
- Potential for airside aviation support services, including freight, catering, ground support equipment storage and maintenance, truck staging and vehicle storage (location not identified).

Within the North West Sector, land adjacent to the project site is identified for future freight and logistics uses, with consolidation of the Terminal 1 freight facilities in the location of the existing freight terminal, as shown on Figure 19.13.



0 0.5 1.0 1.5km



Figure 19.13 Airport Development Plan 2039

Within the North East Sector, land within and adjacent to the project site is identified for the following uses:

- Expansion of Terminals 2/3 to the north of Terminal 3 (see Figure 19.13 for indicative expansion area)
- Consolidation of Terminals 2/3 freight and logistics facility (see Figure 19.13)
- Aviation support facilities (including maintenance facilities) south of Qantas Drive (see Figure 19.13)
- Commercial development.

The timing of these potential developments is currently not known.

In addition, the *Sydney Airport T2/T3 Ground Access Solutions and Hotel MDP* (SACL, 2015), which was approved in March 2015, provides for a number of developments within the Terminals 2/3 precinct at the eastern end of the project site, including:

- Ground access and road works
- A ground transport interchange, including a ground level bus facility and new multi-storey parking for about 4,000 vehicles
- Expansion of the P3 car park and redevelopment of the P1 East car park to provide additional parking for 1,500 vehicles and facilitate development of a pedestrian corridor
- A new hotel on Qantas Drive between Seventh and Ninth streets.

The ground access works are largely completed, with other developments yet to commence.

Other areas

Other major developments with the potential to affect land use in the study area include:

- A new Qantas Flight Training Centre at 297 King Street in Mascot (located about 35 metres east of the project site on the northern side of the rail corridor), to provide for relocation of the facilities currently located at the Jet Base on Qantas Drive, with construction estimated to commence in late 2019 and be completed in about 23 months
- A mixed use commercial development consisting of retail and office space at 1–5 Chalmers Crescent in Mascot, about 130 metres north of the project site
- A commercial development consisting of four commercial towers at 7–21 Chalmers Street in Mascot, about 130 metres north of the project site
- A hotel at 2–8 Sarah Street in Mascot adjacent to the project site in Robey Street (under construction)
- A hotel at 5–11 Ewan Street in Mascot, about 160 metres north of the project site.

19.2.3 Summary of the land use and property environment on Sydney Airport (Commonwealth) land

Existing land uses, properties and zoning

Existing land uses, properties and zoning (under the Master Plan) within/close to the project site include:

- North West Sector:
 - Terminal 1
 - Freight related land uses, including the freight terminal, mail handling unit and livestock transfer facility
 - Roadways, including Airport Drive
 - Zoned mainly AD2 Airport Terminal and Support Services, with smaller areas zoned BD1 Business Development and AD3 Airport logistics and support

- North East Sector:
 - Terminals 2/3
 - Sydney Airport Jet Base (currently occupied by Qantas)
 - Roadways, including Qantas Drive
 - Commercial uses (AMG) and hotels located on Sydney Airport land
 - Zoned mainly AD2 Airport Terminal and Support Services, with smaller areas zoned AD3 Airport Logistics and Support and BD1 Business Development
- Northern Lands Sector:
 - High intensity approach lighting for the main north–south runway
 - Staff car park
 - Industrial activities (Boral Recycling, Visy Recycling and the Cooks River Intermodal Terminal overflow) located on Sydney Airport land
 - Zoned AD3 Airport Logistics and Support.

The land uses are shown on Figure 19.1 to Figure 19.5. Zoning under the Master Plan is shown on Figure 19.6. Further information is provided in section 19.2.1.

Future development planning

The Airport Development Plan forms part of the Sydney Airport Master Plan. It provides the plan to accommodate growth at Sydney Airport, including plans for improvements to Sydney Airport's airfield, aviation facilities, terminals and infrastructure to support the forecast increase in passenger numbers and aircraft movements to 2039.

The Airport Development Plan also outlines the commercial property opportunities that exist in the landside (non-operational) areas of the airport, to complement aviation operations and provide opportunities for the local economy. The plan provides for future developments within or close to the project site as described in section 19.2.2 and shown on Figure 19.13.

19.3 Assessment of construction impacts

19.3.1 Land requirements

The project would require the use of land both temporarily and permanently. While the permanent land requirements would be long-term and related to the operation, these impacts would commence during construction and are discussed below.

Permanent land requirements

The project's operational footprint consists of the land that would be permanently required for the project's functional and operational infrastructure (described in Chapter 7 (Project description)). The operational footprint is shown on Figure 7.3 to Figure 7.7. The anticipated land requirements within this footprint are listed in Table 19.2 and shown on Figure 19.14.

In total, it is anticipated that around 36.2 hectares of land would be permanently required. The permanent land requirements are anticipated to include:

- 20.6 hectares of Commonwealth-owned land
- 14.1 hectares of land owned by the NSW or local government (Inner West Council)
- 1.5 hectares of privately owned land.

No residential land would be required.

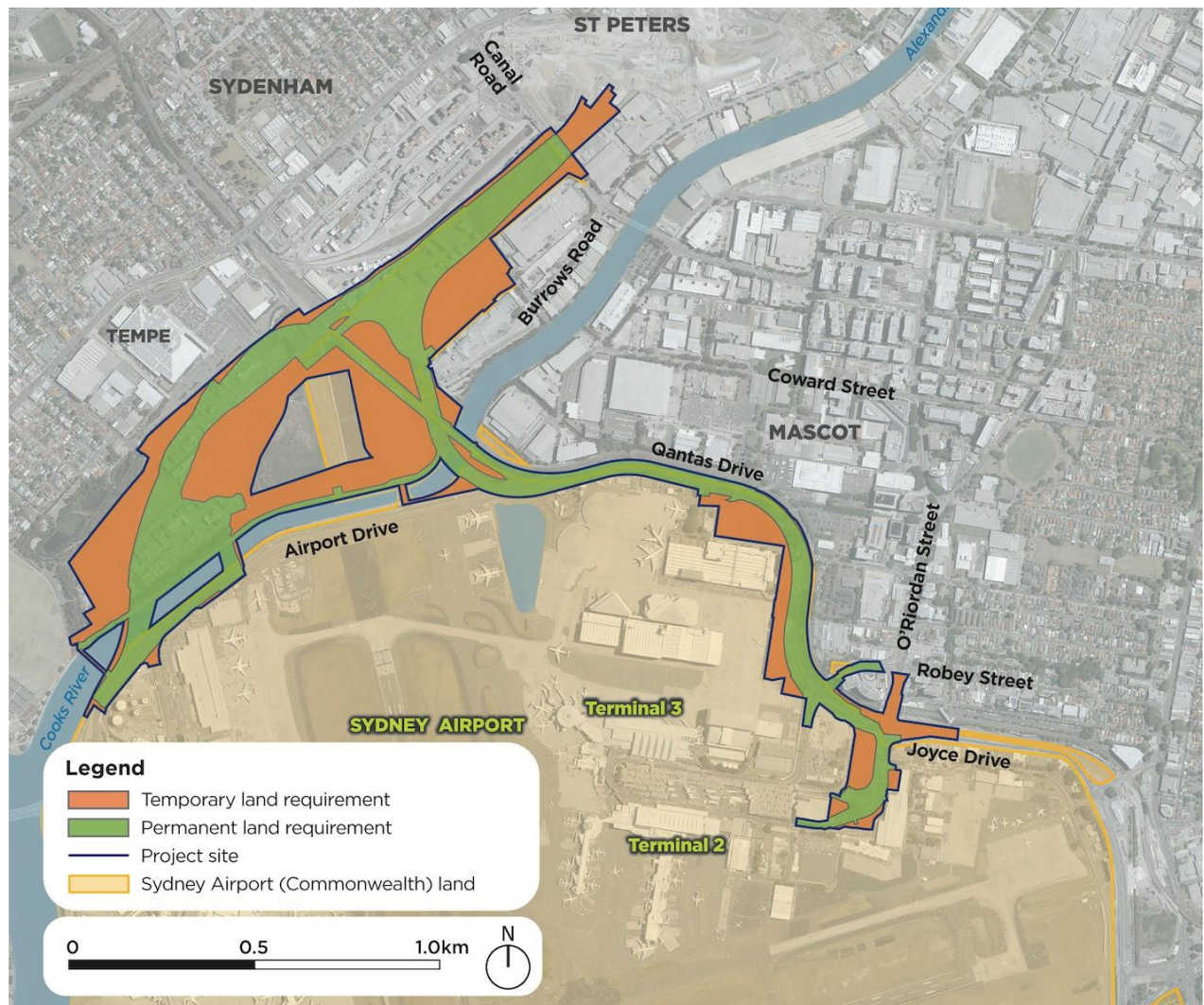


Figure 19.14 Project land requirements

Acquisition or lease arrangements

Roads and Maritime has commenced discussions with affected private property owners concerning the purchase, lease or license of land that would be required as part of the permanent operational footprint. Roads and Maritime has also commenced discussions in regard to land owned by other NSW government agencies and Inner West Council about acquisition or lease arrangements. Easements would also potentially be required, particularly for elevated sections of the project above the Botany Rail Line and Alexandra Canal.

Acquisitions and leases on privately-owned land, or land owned by the NSW or local government, would be carried out in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991 (NSW)*, the *Land Acquisition Information Guide* (NSW Government, 2014), and the land acquisition reforms announced by the NSW Government in 2016, which can be viewed online at <https://www.finance.nsw.gov.au/land-property/land-acquisition-reform-2016>.

Commonwealth-owned land required for the project would be leased by the NSW Government under a long-term lease agreement, subject to complying with any requirements of relevant Australian Government agencies. For Sydney Airport land, Sydney Airport Corporation, as leaseholder, would notify tenants that their sub-lease agreements would be concluded. The conclusion of leases would be undertaken in accordance with the contract terms with Sydney Airport Corporation and the tenant, and Sydney Airport Corporation would provide support to manage the return of lands and handover to Roads and Maritime.

Table 19.2 Anticipated land requirements

Location	Land use	Main properties affected	Ownership	Estimate of area required (% of total property comprising identified lot/DPs) ^{1,3}		
				Temporary ²	Permanent	Total
Private land						
25 Burrows Road, St Peters	Industrial	Boral Concrete	Private	<0.1 hectares (0.9 per cent)	0.1 hectares (2.3 per cent)	0.1 hectares (3.2 per cent)
Swamp Road, Tempe	Vacant	None	Sydney Airport Corporation	3.6 hectares (50.4 per cent)	0.5 hectares (6.2 per cent)	4.1 hectares (56.6 per cent)
Robey Street, Mascot	Transport	Botany Rail Line	Private	<0.1 hectares (1.6 per cent)	-	<0.1 hectares (1.6 per cent)
241 and 241A O'Riordan Street, Mascot	Commercial	Stamford Hotel	Private	0.1 hectares (1.2 per cent)	-	0.1 hectares (1.2 per cent)
Talbot Street and 20 Canal Road, St Peters	Industrial	Cooks River Intermodal Terminal	Private	0.5 hectares (2.5 per cent)	0.9 hectares (6.5 per cent)	1.4 hectares (7.2 per cent)
Private land total				4.2 hectares	1.5 hectares	5.7 hectares
Commonwealth-owned land						
Sydney Airport, Mascot	Transport Water infrastructure	Jet Base Qantas Drive and Sir Reginald Ansett Drive Northern ponds Advertising structures Mail handling unit and livestock transfer facilities Parking areas (including those used by DHL)	Commonwealth of Australia	5.8 hectares (0.9 per cent)	11 hectares (1.7 per cent)	16.8 hectares (2.6 per cent)
30 Canal Road, St Peters	Vacant	None	Commonwealth of Australia	0.9 hectares (28.2 per cent)	2.3 hectares (71.8 per cent)	3.2 hectares (100 per cent)

Location	Land use	Main properties affected	Ownership	Estimate of area required (% of total property comprising identified lot/DPs) ^{1,3}		
				Temporary ²	Permanent	Total
6-10 Burrows Road, St Peters	Industrial	Boral Recycling Visy Recycling Cooks River Intermodal Terminal overflow	Commonwealth of Australia	3.9 hectares (44.2 per cent)	4.9 hectares (55.7 per cent)	8.8 hectares (100 per cent)
Swamp Road, St Peters	Transport	Sydney Airport – northern lands car park and vacant land	Commonwealth of Australia	5 hectares (61.8 per cent)	1.8 hectares (22.4 per cent)	6.8 hectares (84.2 per cent)
Swamp Road, St Peters	Transport	Sydney Airport - high intensity approach lighting	Commonwealth of Australia	0.4 hectares (42.6 per cent)	0.3 hectares (27.3 per cent)	0.7 hectares (69.9 per cent)
Swamp Road, St Peters Bellevue Street, St Peters	Transport	Botany Rail Line	Commonwealth of Australia	0.5 hectares (54.2 per cent)	0.3 hectares (22.4 per cent)	0.8 hectares (76.7 per cent)
1008C Botany Road, Mascot	Transport	Joyce Drive	Commonwealth of Australia	0.2 hectares (2 per cent)	-	0.2 hectares (2 per cent)
Commonwealth-owned (Sydney Airport land) total				16.7 hectares	20.6 hectares	37.3 hectares
<i>Land owned by the NSW or local government</i>						
1–3 Swamp Road, Tempe	Industrial	Council depot	Inner West Council	0.2 hectares (16.8 per cent)	0.8 hectares (83.2 per cent)	1 hectare (100 per cent)
2 Swamp Road, Tempe 5–15 Swamp Road, Tempe	Industrial	Tyne Container Services	Inner West Council	4 hectares (36.7 per cent)	6.9 hectares (63.3 per cent)	10.9 hectares (100 per cent)
South Street, Tempe	Public recreation	Tempe Lands – off-leash dog exercise area and surrounding open space	Inner West Council	2.6 hectares (31.7 per cent)	1.9 hectares (22.9 per cent)	4.5 hectares (54.6 per cent)
	Public recreation	Tempe Golf Range and Academy	Inner West Council	1.9 hectares (67.8 per cent)	0.9 hectares (32.2 per cent)	2.8 hectares (100 per cent)
Holbeach Avenue, Tempe	Public recreation	Tempe Recreation Reserve	NSW Government	<0.1 hectares (0.3 per cent)	<0.1 hectares (0.3 per cent)	<0.1 hectares (0.6 per cent)
Alexandra Canal, Mascot/St Peters/Tempe	Watercourse	Alexandra Canal	Sydney Water ⁴	0.4 hectares (1 per cent)	2.1 hectares (8.9 per cent)	2.6 hectares (10.9 per cent)

Location	Land use	Main properties affected	Ownership	Estimate of area required (% of total property comprising identified lot/DPs) ^{1,3}		
				Temporary ²	Permanent	Total
5 and 5A Canal Road, St Peters	Transport	St Peters interchange (under construction)	Roads and Maritime	0.7 hectares (6.7 per cent)	<0.1 hectares (<0.1 per cent)	0.7 hectares (6.7 per cent)
9 Canal Road, St Peters	Transport	St Peters interchange (under construction)	Roads and Maritime	0.6 hectares (0.4 per cent)	-	0.6 hectares (0.4 per cent)
Various	Transport	Botany Rail Line Qantas Drive Advertising structures	RailCorp ⁵	1.5 hectares (19.7 per cent)	1.5 hectares (21 per cent)	3 hectares (43.9 per cent)
Other publicly owned land total				11.9 hectares	14.1 hectares	26.1 hectares

- Notes:
1. Lot and DP number of land at each location are outlined in Tables 7.2 and 8.5
 2. Temporary land requirements are only required during construction and would be in addition to the permanent land requirements
 3. The estimate of land required is based on a concept design that is subject to refinement during detailed design, and the final area required may vary from that shown
 4. Sydney Airport Corporation also has aerial rights above lots 11 and 12 of DP 1050464
 5. Sydney Airport Corporation also has aerial rights above lot 1 of DP 1054373

Temporary land requirements

In addition to the indicative permanent land requirements (for land required as part of the operational footprint), some land would be required during construction only. These areas, which are listed in Table 19.2 and shown on Figure 19.14, would be required for construction compounds, to provide access to construction work areas, and to facilitate the manoeuvring of construction plant and machinery.

In total, around 69.1 hectares of land would be required for construction, of which around 32.8 hectares would only be required temporarily. The temporary land requirements are anticipated to include:

- 16.7 hectares of Commonwealth-owned land
- 11.9 hectares of land owned by the NSW or local government (Inner West Council)
- 4.2 hectares of privately owned land.

No residential land would be required for construction.

Sydney Airport land required for construction only would be leased by Roads and Maritime for the duration of construction. Sydney Airport land not required beyond construction would be available for future development in accordance with the Master Plan (see section 19.2.3).

Other land required during construction only would be via a lease or a memorandum of understanding with the relevant government agency or private landholder. Land that is subject to a temporary lease would be restored to at least its former condition (or as agreed with landowners) following completion of construction.

19.3.2 Land use impacts

Direct impacts on land use during construction would result from the permanent and temporary land requirements described in section 19.3.1 and the short-term presence of construction equipment, plant, vehicles, compounds and work sites within the construction footprint. During construction, the use of this land would change from those uses described in section 19.2.1 to a construction site. Public access to this land (where it is currently available) would be restricted.

19.3.3 Property impacts

Property impacts associated with the project's land requirements

The main property impacts would be associated with the project's temporary and permanent land requirements, which has the potential to:

- Partially affect a property where part of a site is required, requiring adjustments to or relocation of facilities to other parts of the site
- Fully affect a property if the entire site on which a property is located is required.

The properties that would be directly impacted during construction are summarised in Table 19.3. The socio-economic (including business) impacts of these changes are considered in Chapter 20 (Socio-economic impacts).

Table 19.3 Property impacts – construction

Property	Level of potential affect	Estimate of area affected ¹ (hectares)	Impacts
Boral Concrete St Peters	Partial	0.1	A small portion of Boral's site is required to construct the project. This area is located at the north-western corner of the site and comprises less than 3.2 per cent of the overall site. The area is currently occupied by vehicle wash facilities. The loss of this small area on the edge of the site is unlikely to affect the overall operation of this property. The need to relocate any facilities from the impacted area would be discussed with the landowner.
Boral Recycling Visy Recycling Cooks River Intermodal Terminal overflow area	Full	8.8	<p>The two recycling facilities, located off Burrows Road in St Peters, operate on land leased from Sydney Airport Corporation that is required to construct the project. Cessation of these leases would be undertaken by Sydney Airport Corporation as the Airport Lessee Company. The properties would need to cease operations at this site and all facilities/structures would need to be removed.</p> <p>It is noted that Visy are proposing to relocate their operations from this site to a site in Alexandria. The project is given as the justification for the need to relocate their operations, which is the subject of a current development application.</p> <p>The operators of the Cooks River Intermodal Terminal lease an area of land from Sydney Airport Corporation that is required for the project, located adjacent to the terminal site. This land is located along the southern boundary of the terminal site and is used as an additional container storage area. To make the land available for the project, this lease has not been renewed.</p>
Cooks River Intermodal Terminal	Partial	1.4	<p>A small portion (about 7.2 per cent) of the Cooks River Intermodal Terminal site is currently required to construct the project. However, the design is currently being refined with the aim of minimising the potential impacts on this property.</p> <p>The area is currently occupied by containers and storage buildings. The relocation of structures in this area would be discussed with the landowner and operator.</p>
Tyne Container Services	Full	10.9	This property operates on land leased from Inner West Council that is required to construct the project. The cessation of the lease over this land would be required and would be undertaken by Inner West Council as the landowner. The property would need to cease operations at this site and all facilities/structures would need to be removed.
Inner West Council depot	Full	1	This property is located on land owned by Inner West Council that is required to construct the project. The depot is mainly used to store equipment and materials. The depot would need to cease operations at this site and the structures located on this site would need to be removed.
Tempe Lands (including Tempe Golf Range and Academy and the off-leash dog exercise area)	Partial	7.3	<p>An area of about 7.3 hectares within the Tempe Lands (owned by Inner West Council and located on the former Tempe landfill) would be required to construct the project. Of this area, about five hectares is used for recreation purposes (including the Tempe Golf Range and Academy and the off-leash dog exercise area).</p> <p>The Tempe Golf Range and Academy currently operates under a commercial lease with Inner West Council. Cessation of this lease would be required. The business would need to cease operations at this site and all facilities/structures would need to be removed.</p> <p>The existing off-leash dog exercise area and surrounding areas of open space would also be affected. Impacts on opportunities for off-leash dog exercise during construction would be minimised by providing a temporary area as close as possible to the existing facility (see section 8.4.2).</p>

Property	Level of potential affect	Estimate of area affected ¹ (hectares)	Impacts
Tempe Recreation Reserve	Partial	<0.1	The project would impact a small area (about 0.5 per cent) of the reserve due to the requirement to connect the active transport link to existing paths within the reserve. As the area affected is located on the edge of the reserve, the overall use of the reserve would not be impacted.
Sydney Airport Corporation northern lands car park and adjacent vacant land	Partial	6.8	An area at the northern end of the existing car park (located on Sydney Airport land) would be required for construction compound C2. Part of this area would also be required to construct the northern lands access. This would result in a small reduction in the number of car spaces available. Further information on potential impacts on parking is provided in Chapter 9 (Traffic, transport and access). The use of the car park would be able to continue throughout construction, albeit at a reduced capacity.
Sydney Airport Corporation car park south of AMG	Full	0.3	The existing car park would be required for construction compound C5. This would result in a loss of parking at this location. Further information on potential impacts on parking is provided in Chapter 9 (Traffic, transport and access).
Sydney Airport Corporation car parks leased to DHL	Full	0.2	Construction would temporarily affect two parking areas near Terminals 2/3 that are accessed off Ross Smith Avenue and Sir Reginald Ansett Drive respectively. These parking areas, which have a combined capacity of 80 spaces, are used by the adjacent DHL business. This would affect the number of parking spaces used by DHL employees/customers. Further information on potential parking impacts is provided in Chapter 9 (Traffic, transport and access).
High intensity approach lighting for the main north-south runway	Partial	0.7	An area of land currently occupied by the high intensity approach lights would be required to construct the project. Sydney Airport Corporation would adjust these lights prior to the project commencing.
Vacant Sydney Airport owned land	Partial	4.1	This area of land, located to the south of Swamp Road, is owned by Sydney Airport Corporation. During construction, the use of some of this land would change from vacant land to a construction site.
Sydney Airport mail handling unit	Partial	0.07	An area of about 0.07 hectares within this facility would be required during construction. This area is currently used for parking associated with the facility. Use of this area would affect about 40 parking spaces. Potential impacts on parking are considered in Chapter 9 (Traffic, transport and access).
Sydney Airport livestock transfer facility	Partial	0.05	An area of about 0.05 hectares within this facility would be required during construction. This area forms part of a larger area used to manoeuvre, park, load and unload trucks associated with the facility's operation. In addition, an entry gate at the north-eastern end of the facility would be affected. This would require vehicles to use an alternate gate or reverse out of the facility.
Alexandra Canal cycleway	Full	n/a	To minimise potential safety impacts during construction and as a result of the proposed closure of Airport Drive, the existing cycleway along Airport Drive would be closed before construction. A temporary active transport link would be provided on the western side of Alexandra Canal to maintain connectivity for pedestrians and cyclists while the permanent link is being constructed (see section 8.6.4). The potential impacts of these changes are considered in Chapter 9 (Traffic, transport and access).

Property	Level of potential affect	Estimate of area affected ¹ (hectares)	Impacts
Sydney Airport Jet Base (currently occupied by Qantas including the Qantas Flight Training Centre)	Partial	4.5	<p>Widening Qantas Drive to the south (between Ninth Street and Lancastrian Road, Mascot) would affect land currently occupied by the Jet Base. East of Lancastrian Road, this land is occupied by the Qantas Flight Training Centre (see Figure 19.4 and Figure 19.5). South of the flight training centre, the land is occupied by a number of the Jet Base's support buildings and structures (including workshops, substation, fuel facilities and chemical storage). These facilities and structures (described in Table 8.1) would be removed during construction. The majority of these buildings (excluding the training facility) are currently vacant.</p> <p>With respect to the flight training centre, the project would directly affect the northern edge of the site, including two of the three buildings. While small in relative area, important facilities that cannot be relocated within the existing site would be affected. As a result, Qantas is proposing to relocate the training centre to a new site located within Qantas' 'Mascot Campus' on the northern side of the Botany Rail Line (see section 19.2.2). This relocation, which is being managed by Qantas, is subject to a separate approval process. The project includes removing the flight training centre's structures and buildings once the centre has relocated.</p> <p>Impacts on other facilities at the Jet Base would vary. Some buildings/structures would be completely impacted, while others would be partially impacted. All uses within these support buildings/structures would need to relocate to other areas, either within the broader Jet Base site or to other locations on Sydney Airport land. The relocation of these facilities would be undertaken by Qantas and/or Sydney Airport Corporation subject to a separate approval process.</p> <p>These facilities could relocate to areas designated for aviation support uses by the Master Plan. These areas are shown as a new maintenance area in the North East Sector or aviation support facilities within the South East Sector (see Figure 19.13).</p> <p>During construction, the size of the Jet Base would reduce from the existing 30 hectares to about 25.5 hectares. The project would not affect any key maintenance facilities within the Jet Base. The reduction in size is not expected to impact operation of the Jet Base, particularly considering the majority of the buildings that would be removed are currently vacant.</p> <p>The proposed relocation of aviation support services within the Jet Base is consistent with the Master Plan. Removing these structures would allow future development in these areas in accordance with the Master Plan (see Table 19.5).</p>
Commercial properties on O'Riordan Street	Partial	0.1	<p>Widening Qantas Drive west of the O'Riordan Street intersection would impact a small area across two lots that form part of the Stamford Hotel property. These areas are currently vacant and are separate to the main property (ie the hotel), which is located on the northern side of the rail corridor. As a result, there would be minimal impacts on the overall property and the operation of the hotel.</p>

Property	Level of potential affect	Estimate of area affected ¹ (hectares)	Impacts
Advertising structures	Structures located within the project site would be fully affected		<p>A total of 27 advertising structures are located along Airport Drive, Qantas Drive and Sir Reginald Ansett Drive on land leased from RailCorp and Sydney Airport Corporation. The majority of these structures are located on land required for the Qantas Drive upgrade and widening, the Terminals 2/3 access, and the Terminal 1 connection. Six structures would be removed as they are located on the section of Airport Drive that would be closed as part of the project. Of these structures, 18 are located on Sydney Airport land and nine are located on land subject to the EP&A Act.</p> <p>The location of the affected structures is shown on Figure 19.15.</p> <p>The approach to mitigating the impacts on these structures would be confirmed during detailed design. This would include minimising the need to remove structures where possible. Acquisition of structures not located on Sydney Airport land would be in accordance with the <i>Land Acquisition (Just Terms Compensation) Act 1991</i> (NSW).</p>
Botany Rail Line	Partial	3.9	The project would include constructing three bridges/overpasses over the Botany Rail Line. Impacts on the rail corridor would generally be limited to airspace above the corridor, with the exception of a few locations for proposed bridge piers. Impacts on the operation of the Botany Rail Line would be minimal, with works undertaken during rail closedown periods when trains are not operating along the corridor.
Alexandra Canal	Partial	3	Impacts on this property would generally be limited to the airspace above the canal as a result of the construction of the four proposed bridges over the canal. The only physical works proposed within the canal are drainage outlets. The project is not expected to impact use of the canal.

Note: 1. The estimated area of impact includes the estimated total land requirements (both temporary and permanent land requirements, which overlap in most instances) as these impacts would occur during construction.

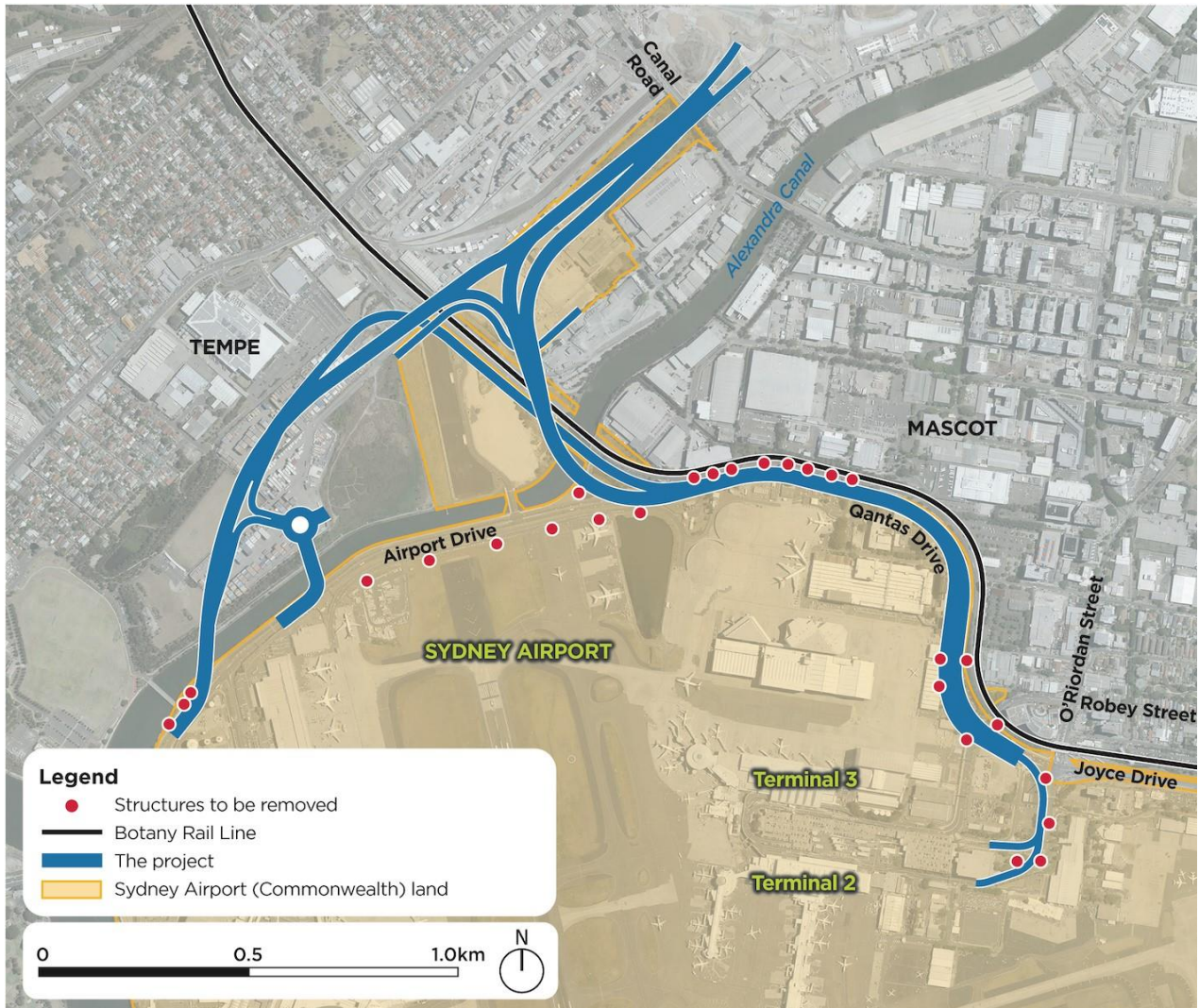


Figure 19.15 Impacts on advertising structures

Utility impacts

Utilities, such as water supply, stormwater drainage, wastewater, electricity, gas, fuel and telecommunications, are located across the project site. These and other utilities would need to be protected, adjusted or augmented where they conflict with the final design and in accordance with the requirements of the relevant asset owner.

Section 8.7 provides an overview of the key utilities that have been identified to date and the proposed treatment during construction. These utilities are owned and operated by a range of public and private organisations. As outlined in section 8.7, impacts on utilities are generally contained to three areas where a high density of utilities are located (see Figure 8.21):

- Airport Drive and Qantas Drive
- Sir Reginald Ansett Drive and Shiers Avenue
- Canal Road.

Utilities along Airport Drive, Qantas Drive, Sir Reginald Ansett Drive and Shiers Avenue also include utilities servicing Sydney Airport.

The adjustments required would be confirmed during detailed design in consultation with utility owners. Adjustments are generally expected to be contained within existing or new road corridors. There is the

possibility that adjustments could extend beyond the project footprint. The location of some underground utilities within the road reserve may potentially restrict the amount of roadside planting in some locations.

Interruptions to utilities would be minimised as far as possible. Where interruptions are required, consultation with affected landowners and utility owners would be undertaken, and advance notice provided, to minimise any unavoidable impacts.

Any utility adjustments on Sydney Airport land would be undertaken in consultation with Sydney Airport Corporation and in accordance with the Utilities Development Plan contained within the Master Plan.

19.3.4 Summary of impacts on Sydney Airport (Commonwealth) land

Land requirements

The project's permanent land requirements are estimated to include about 20.6 hectares of Commonwealth-owned (Sydney Airport) land. In addition, about 16.7 hectares of Sydney Airport land (excluding freehold land owned by Sydney Airport Corporation) would be required during construction only.

The proposed acquisition/lease arrangements are described in section 19.3.1.

Sydney Airport land required for construction would be leased by Roads and Maritime for the duration of construction. Following construction, this land would be available for future development in accordance with the Master Plan (see section 19.2.3).

Land use impacts

During construction, the use of Sydney Airport land within the project site would change from the uses described in section 19.2.1 to a construction site. Public access to this land would be restricted; however, the majority of this land is currently not accessible to the public. Land use impacts on Sydney Airport land are not considered to be significant, with impacts generally affecting uses not directly associated with the operation of the airport.

Property impacts

The main property impacts would be where land is required as part of the project's land requirements (described in section 19.3.1). The project would affect the following properties located on Sydney Airport land during construction:

- Sydney Airport Jet Base
- Livestock transfer facility
- Mail handling unit
- Northern lands car park
- High intensity approach lighting
- The area leased by Boral Recycling, Visy Recycling and for the Cooks River Intermodal Terminal overflow area.

Three car parking areas located near Terminals 2/3 would also be affected during construction. A number of advertising structures located on Sydney Airport land would be affected.

The potential impacts on these properties are described in section 19.3.3.

During construction, access to Sydney Airport land would be maintained at all times as far as possible. Where access has the potential to be affected, consultation would be undertaken with the owners/operators of the property to confirm alternative access arrangements or specific requirements (such as periods when access must be maintained). Further information on potential access impacts is provided in section 9.3.

The project would result in some impacts on utilities located on Sydney Airport land. Any utility adjustments on Sydney Airport land would be undertaken in consultation with Sydney Airport Corporation and in accordance with the Utilities Development Plan contained within the Master Plan.

19.4 Assessment of operation impacts

19.4.1 Land use impacts

Impacts on existing land uses

Much of the project site is already used for transport (road) infrastructure, including Qantas Drive, Airport Drive and Sir Reginald Ansett Drive, and internal access roads at Terminals 1 and 2/3. In these areas, the overall transport land use would remain with the infrastructure upgraded.

In other areas, the project would result in a change in land use from the existing uses described in section 19.2.1 to road infrastructure. Much of the project site would involve the continued use of land that is currently used for transport infrastructure purposes as a road, or the use of Sydney Airport land that is currently vacant. The main land use impacts would be on land that is currently used for industrial and recreation/open space purposes.

Table 19.4 outlines the potential impacts of the project on the availability of land zoned for particular uses under the relevant LEP and the Master Plan. Once the project is operational, about 18.5 hectares of land that is currently zoned for industrial purposes would be used for transport (road), of which about 10 hectares is Sydney Airport land. This land is zoned as AD3 (Airport Logistics and Support) by the Master Plan and is therefore not expected to be used for industrial purposes in the long-term (excluding potential airport related uses which could be considered industrial). In addition, once the project is operational, about 2.7 hectares of land currently used for recreation/open space purposes would be used for transport (road).

Subject to future planning, the project's residual land (see section 19.4.3) would provide opportunities to offset impacts on existing land uses.

Further information about changes to land use at the individual property level is provided in section 19.4.2. Potential amenity impacts are considered in Chapter 20 (Socio-economic impacts).

Table 19.4 Impacts on availability of land zoned for particular uses

Zone	Impacts on availability of land zoned for the particular use
Local environmental plans	
IN1 General Industrial	<p>The project would affect about 18.5 hectares of land zoned IN1 by the relevant local environmental plan, with a permanent change in land use from industrial to transport infrastructure.</p> <p>Of this land, about 10 hectares is located on Sydney Airport land and is subject to the Master Plan and the Airports Act (not a local environmental plan/the EP&A Act). Under the Master Plan, this land is zoned for airport related land uses. The Master Plan allows industrial land uses to occur in this zone.</p> <p>The project would affect about 8.5 hectares of industrial zoned land that is not subject to the Master Plan. The loss of this land for industrial purposes would reduce the overall availability of industrial land in the study area. Due to the inner city location of the study area the availability of land zoned for industrial land uses is limited.</p>

Zone	Impacts on availability of land zoned for the particular use
SP2 Infrastructure <i>(with the nominated infrastructure type including Airport, Air Transport Facilities, Stormwater Management Systems, Railway and Classified Road)</i>	The project would not affect the amount of SP2 zoned land in the study area. The project would potentially result in an increase in land zoned SP2, should parts of the project located on other zones (eg IN1) be rezoned to SP2 to match the use of the land for the purpose of a road. Any rezoning would be undertaken as part of a separate process.
RE1 Public Recreation	The project would affect about 2.7 hectares of land zoned RE1, with a permanent change in land use to transport infrastructure.
B5 Business Development	The project would affect about 0.05 hectares of land zoned B5, with a permanent change in land use to transport infrastructure.
Sydney Airport Master Plan 2039	
AD2 - Airport Terminal and Support Services	The project would affect about 10 hectares of land zoned AD2. This land is currently mainly used for road transport purposes as it is occupied by Airport Drive, Qantas Drive and Sir Reginald Ansett Drive. This land use would continue with the project. The project would result about two hectares of land zoned AD2 which is not used for road transport along the southern side of Qantas Drive (currently Sydney Airport Jet Base). This area is located on the edge of the zones adjacent to the existing roadway. The realignment of Airport Drive would allow land currently occupied by Airport Drive to be returned to Sydney Airport for uses permitted within this zone, effectively increasing the amount of land in this zone available for development. This area is about 2.8 hectares in space, therefore effectively resulting in an overall increase AD2 land available for development (ie not used for roadway).
AD3 - Airport Logistics and Support	The project would affect about 11 hectares of land zoned AD3. This would occur mainly within the Northern Lands Sector. The impacts on the AD3 zone would potentially reduce the amount of land available for the development of airport logistics and support facilities. However, the Master Plan notes that the project would potentially affect land zoned AD3 in this area and would improve access to these areas.
BD1 - Business Development	The project would affect a small area (about 0.02 hectares) of land zoned BD1 along Airport Drive. This would be a minor impact, as the land is already used as a roadway.
AD1 - Aviation Activity and Aviation Support Facilities	The project would not directly affect land uses in this zone. The realignment of Airport Drive would allow land currently occupied by Airport Drive to be returned to Sydney Airport for uses permitted within this zone, effectively increasing the amount of land in this zone available for development.

Impacts on future land uses

The Airport Development Plan, which forms part of the Master Plan, provides for the future development of Sydney Airport land. The Airport Development Plan and the proposed future uses under the plan of land within the project site are described in section 19.2.2. The consistency of the project's operational features with the proposed future uses is considered in Table 19.5. The locations of the future land uses (where known) are shown on Figure 19.13.

Table 19.5 Impacts on future land uses proposed by the Airport Development Plan

Location	Potential future use of Sydney Airport land within the project site (under the Airport Development Plan)	Potential impacts
Northern Lands Sector – north of Botany Rail Line	Freight uses, including a freight and logistics facility Flight catering facilities (no specific location) Airsides aviation support services, including freight, catering, ground support equipment storage and maintenance, truck staging and vehicle storage	As noted in Table 19.4, the project would reduce the amount of land available for these uses in this area. However, this impact is recognised by the Master Plan, which notes that the project would improve access to this area. The Airport Development Plan identifies an area for new freight facilities (shown on Figure 19.13) that would be impacted by the project. The majority of this area consists of land that would be available following its proposed use for construction compound C1. The land shown between the main area of the future facility and Canal Road would be largely unaffected. However, the project would affect the western area proposed for part of this freight facility. Overall, the amount of land remaining is expected to be sufficient for the future proposed use.
Northern Lands Sector – south of Botany Rail Line	Freight uses including Central Freight and Logistic Facility	The project would affect an area identified for future freight uses, including a central freight and logistic facility (see Figure 19.13). The project would result in a slight reduction in the land available for these uses by about 1.5 hectares. This is not considered to affect the ability of this land to be used for these purposes.
North West Sector – Airport Drive near Terminal 1	Not applicable	Works in this area would mainly affect Airport Drive. Where the project encroaches on adjacent Sydney Airport land (ie the mail handling unit), this encroachment is minimal and there would be no impacts on existing or future land uses under the Master Plan.
North West Sector – along Qantas Drive	Future terminal expansion north of Terminals 2/3 within the Sydney Airport Jet Base site Commercial developments within the North East Sector (no specific location) Aviation support facilities (including maintenance facilities) south of Qantas Drive Hotel development Terminals 2/3 access viaduct between Seventh and Ninth streets, Mascot (within Terminals 2/3 precinct)	The Master Plan includes reference to the future relocation of aviation support services (including the Jet Base) that are currently located along Qantas Drive. The proposed removal of buildings in this area (as part of the project) would allow future development in these areas in accordance with the Master Plan, including future terminal expansion. However, the presence of a section of the new roadway would reduce the amount of land available for future development. The impacted area would consist of a narrow area located adjacent to Qantas Drive.
North West Sector – south of Qantas Drive/Joyce Drive (Terminals 2/3 area)	Ground transport interchange located between Seventh and Ninth streets, Mascot (within Terminals 2/3 precinct)	The project would provide direct access to the interchange, which would be consistent with the Master Plan.

19.4.2 Property impacts

During operation, property impacts would be associated with the permanent land requirements of the project. This has the potential to:

- Reduce the amount of land available at a particular property
- Affect the development potential of the site.

Properties with the potential to be permanently impacted by the project are listed in Table 19.6, together with a summary of the potential permanent impacts. Potential business impacts are considered in Chapter 20 (Socio-economic impacts).

Table 19.6 Property impacts – operation

Property	Permanent impacts
Boral Concrete St Peters	Following construction, about 0.1 hectares (2.3 per cent) of the property would continue to be required as part of the project's operational footprint. This may include some areas where only airspace is required. This is unlikely to affect the overall use and development potential of the site.
Sydney Airport land at Burrows Road, St Peters (currently leased to Boral Recycling, Visy Recycling and for the Cooks River Intermodal Terminal overflow area)	Following construction, about 4.9 hectares (55.7 per cent) of the overall site (which is Commonwealth-owned land leased to Sydney Airport) would continue to be required as part of the project's operational footprint. The remaining land (around 3.9 hectares) would be available for other uses, in accordance with the Sydney Airport Master Plan (see Table 19.5).
Cooks River Intermodal Terminal	Following construction, around 0.9 hectares (about 6.5 per cent of the property) may continue to be required as part of the project's operational footprint. Although this is unlikely to affect the overall use of the site, the reduction in land area, together with the loss of the leased overflow area (described in Table 19.3), has the potential to affect the amount of land available for empty container storage. This potential impact is considered in section 20.3.4. It is noted that the design is currently being refined with the aim of minimising the potential impacts on this property.
Site currently leased by Tyne Container Services	As described in Table 19.3, the property currently located on this site would need to cease operating at this location prior to construction. Following construction, about 6.9 hectares (63.3 per cent) of the overall site would continue to be required as part of the project's operational footprint. The remaining land (about four hectares) would be available for others uses. The future use of this land would be guided by the master plan that is being prepared by Inner West Council (see sections 7.12 and 19.4.3).
Site currently used for the Inner West Council depot	As described in Table 19.3, the property currently located on this site would need to cease operating at this location prior to construction. Following construction, the site would continue to be required as part of the project's operational footprint.
Tempe Lands	Following construction, about 2.8 hectares (25 per cent) of the overall site would continue to be required as part of the project's operational footprint. Areas used during construction that are not required for operation (about 4.5 hectares) would be available for recreation uses. The future use of this land, including provision of a new off-leash dog exercise area, would be guided by the master plan that is being prepared by Inner West Council (see sections 7.12 and 19.4.3).
Tempe Recreation Reserve	Following construction, about 0.03 hectares would continue to be required for the active transport link. This would not affect the use of reserve as a whole.
Sydney Airport northern lands car park and adjacent vacant land	Following construction, about 1.8 hectares (22.4 per cent) of the overall site (which is Commonwealth-owned land leased to Sydney Airport) would continue to be required as part of the project's operational footprint. The remaining land (around five hectares) would be available for parking and other uses in accordance with the Master Plan (see Table 19.5).

Property	Permanent impacts
Vacant land owned by Sydney Airport Corporation	<p>Following construction, about 0.5 hectares (6.2 per cent) of the overall site would continue to be required as part of the project's operational footprint. Areas used during construction that are not required for operation (about 3.6 hectares) would be available for other uses in accordance with the zoning of the land, IN1 General Industrial.</p> <p>The project would improve access to this land via the northern lands access and stub road on the freight terminal access roundabout. This would benefit any future land uses and improve the development potential for the land.</p>
Alexandra Canal cycleway	<p>As described in section 7.9 and Table 19.3, the existing cycleway along Airport Drive would be closed before construction and a new active transport link would be provided along the western side of Alexandra Canal.</p> <p>The land along Airport Drive that is currently used for the cycleway would be returned to Sydney Airport for use as airside areas in accordance with the Master Plan. The new active transport link would ensure that a cycleway would be maintained along Alexandra Canal in the long-term. The potential impacts on active transport are considered in section 9.4.7.</p>
Sydney Airport Jet Base	<p>Following construction, about 1.3 hectares of the overall site would continue to be required as part of the project's operational footprint. Areas used during construction that are not required for operation (about 3.2 hectares) would be available for other uses in accordance with the Master Plan (see Table 19.5).</p> <p>It is not expected that this reduction in site area would affect the overall operation of the Jet Base, as the majority of existing structures are currently vacant and the Qantas Flight Training Centre is relocating as described in Table 19.3. In addition, no impacts on the overall development potential or future uses of this land (as described in Table 19.5) are expected.</p>

19.4.3 Residual land

Following construction, it is expected that some of the land required to construct the project in Tempe (including land within Tempe Lands and other areas on the former Tempe landfill previously occupied by Tyne Container Services) would be made available for other uses. It is estimated that the residual land would comprise a total of about 10 hectares on part of the following lots:

- Lot 25 DP 1227132
- Lots 303, 304 and 305 of DP 1136081.

Potential future uses could include open space/recreation, or other future uses in accordance with the priorities of local and regional strategic planning and Inner West Council. The land would be treated (ie remediated) where required to ensure that it is safe to use for future use.

Council is developing a master plan to identify how this land could be used, which will consider Council's recreational needs analysis prepared in 2018. The future use of this land would be subject to a separate assessment and approval process.

Roads and Maritime is continuing to consult with Inner West Council on the draft master plan, including providing feedback from the community regarding the preferred future use of this land. Feedback received from the community has included requests for:

- A new off-leash dog area
- Recreational facilities, including floodlit futsal fields and changing rooms
- Passive open space and walking paths
- Barbeque facilities, seating and shaded areas
- Children's playground
- Car parking.

Roads and Maritime would continue to consult with Council about compensation for the purposes of offsetting the loss of public open space and recreational facilities at Tempe Lands, and to ensure consistency with the project's final urban design and landscape plan (see section 7.12).

19.4.4 Summary of impacts on Sydney Airport (Commonwealth) land

Impacts on existing land use

Where the project site is located on Sydney Airport land, it would involve the use of land that is currently used for transport infrastructure purposes as a road, or the use of Sydney Airport land that is currently vacant. The main change to land use would be to land that is currently used for industrial purposes, which would be used for transport (road) infrastructure. As outlined in Table 19.4, this would result in a reduction in industrial land zoned under the LEP. As any future development would be in accordance with the Master Plan, this development would be for airport related uses including development that could be considered industrial in nature.

Impacts on land use are considered to be consistent with the Master Plan, which guides land use on Sydney Airport land.

Consistency with local planning schemes

Section 91(4) of the Airports Act requires a major development plan to address the extent of consistency of the major airport development with the planning schemes in force under a law of the State in which the airport is located. Table 19.7 outlines the consistency of the project, where it is located on Sydney Airport land, with the relevant local environmental plan, in terms of the land use zones within which it is located.

Table 19.7 Consistency of project with local planning schemes

Zone	Objectives	Consistency with zone objectives	Consistency with permissible uses
Marrickville Local Environmental Plan 2011			
IN1 General Industrial	<ul style="list-style-type: none"> ■ To provide a wide range of industrial and warehouse land uses. ■ To encourage employment opportunities. ■ To minimise any adverse effect of industry on other land uses. ■ To support and protect industrial land for industrial uses. ■ To protect industrial land in proximity to Sydney Airport and Port Botany. ■ To enable a purpose built dwelling house to be used in certain circumstances as a dwelling house. 	The project would include providing access to areas of industrial zoned land located on Sydney Airport land. It is considered to be a complementary land use. The project would not conflict with, or prevent the efficient operation of land in this zone.	The project is a permissible use in this zone.
SP2 Infrastructure (Air Transport Facilities))	<ul style="list-style-type: none"> ■ To provide for infrastructure and related uses. ■ To prevent development that is not compatible with or that may detract from the provision of infrastructure. ■ To protect and provide for land used for community purposes. 	The project is considered to be consistent with the objectives of this zone. The project is being proposed to improve connectivity to Sydney Airport terminals and support the efficient distribution of freight to and from Sydney Airport (see Chapter 5 (Strategic context and project need)). The project would not conflict with or prevent the efficient operation of land in this zone.	The project is a permissible use in this zone.
SP2 Infrastructure (Railway) and (Stormwater	<ul style="list-style-type: none"> ■ To provide for infrastructure and related uses. ■ To prevent development that is not compatible with or that may detract from the provision of infrastructure. 	The project involves the provision of infrastructure in land zoned for infrastructure uses. It would not conflict with or prevent the efficient	The project is a permissible use in this zone.

Zone	Objectives	Consistency with zone objectives	Consistency with permissible uses
Management System)	<ul style="list-style-type: none"> To protect and provide for land used for community purposes. 	operation of land in this zone, and is considered to be consistent with the objectives of this zone.	
<i>Botany Bay Local Environmental Plan 2013 and Rockdale Local Environmental Plan 2011</i>			
SP2 Infrastructure (Airport)	<ul style="list-style-type: none"> To provide for infrastructure and related uses. To prevent development that is not compatible with or that may detract from the provision of infrastructure. 	As noted above, the project would not conflict with or prevent the efficient operation of land in this zone and is considered to be consistent with the objectives of this zone.	The project is a permissible use in this zone.

Property impacts

During operation, property impacts would be associated with the permanent land requirements of the project (see section 19.3.1). The project's permanent land requirements would affect the following properties associated with Sydney Airport's operations that are located on Sydney Airport land:

- Jet Base
- Northern lands car park and adjacent vacant land
- High intensity approach lighting
- The area currently leased by Boral Recycling, Visy Recycling and for the Cooks River Intermodal Terminal overflow area.

The project would also affect Sydney Airport land at Burrows Road, St Peters.

The potential impacts on these properties are described in section 19.4.2.

Consistency with the Sydney Airport Master Plan

Land use and future planning

On Sydney Airport land, the project would involve a change from how the land is currently used – from (generally) Sydney Airport support/related facilities to road. However, the land would still be used for transport purposes.

The Master Plan provides that roads are a permissible land use in the land use zones within which the project site is located. The Master Plan identifies Sydney Gateway as a potential project within Sydney Airport land. Table 19.8 outlines the consistency of the project against the zone objectives for impacted zones under the plan. Impacts on the availability of land zoned for particular purposes are considered in Table 19.4. Impacts on specific land uses identified in the Master Plan are considered in Table 19.5. Based on the above, the project is considered to be consistent with the land use plan in the Master Plan.

The consistency of the project with the planning objectives for Sydney Airport, as defined by the Master Plan, is considered in section 3.6.4.

Table 19.8 Consistency with zone objectives under the Sydney Airport Master Plan

Zone	Objectives	Consistency and permissibility
AD2 – Airport Terminal and Support Services	<ol style="list-style-type: none"> 1. Protect the long-term viability and operational efficiency of Sydney Airport for its primary aviation function. 2. Facilitate development of contemporary passenger terminals and related facilities for the handling, transfer and processing of passengers that are capable of meeting the standards expected by international, domestic and regional travellers, as well as supporting the needs of Sydney Airport's workforce. 3. Provide for aviation activities and support facilities. 4. Facilitate compatible and ancillary functions within the zone provided that development does not render the land permanently unfit for aviation activities. 5. Encourage employment opportunities. 6. Ensure heritage items are appropriately considered and managed. 	<p>The project is considered to be consistent with the objectives of the zone, as it would provide a direct connection between the Sydney motorway network and Sydney Airport. This would ensure the long-term viability and operational efficiency of Sydney Airport by ensuring the effective movement of passengers to and from the terminals to the surrounding road network.</p> <p>As outlined in Table 19.4 and Table 19.5, the project would not reduce the amount of land available for aviation activities and support facilities as the majority of land zoned for this purpose that would be impacted is existing roadway occupied by Airport Drive, Qantas Drive and Sir Reginald Ansett Drive.</p> <p>The project is a permissible land use within this zone.</p>
AD3 – Airport Logistics and Support	<ol style="list-style-type: none"> 1. Protect the long-term viability and operational efficiency of Sydney Airport for its primary aviation function. 2. Facilitate the development of freight services and airport logistics (and ancillary office space) 3. Facilitate compatible and ancillary functions within the zone provided that development does not render the land permanently unfit for aviation activities. 4. Ensure development is compatible, where practicable, with surrounding land uses in this area. 5. Ensure heritage items are appropriately considered and managed. 	<p>The project is considered to be consistent with the objectives of this zone as it would provide a direct connection between the Sydney motorway network and Sydney Airport. This would ensure the long-term viability and operational efficiency of the Sydney Airport by ensuring the effective movement of passengers to and from the terminals to the surrounding road network.</p> <p>As outlined in Table 19.4 and Table 19.5, the project would result in a reduction in land available for the development of freight services and airport logistics. The project is expected to improve access to any future freight and logistics areas from the Sydney motorway network.</p> <p>The project is considered to be consistent with surrounding land uses, due to the largely industrial nature of surrounding land and because the project would be undertaken either within existing transport corridors or in close proximity to future road corridors (ie St Peters interchange).</p> <p>The project is a permissible land use within this zone.</p>

Zone	Objectives	Consistency and permissibility
BD1 – Business development	<ol style="list-style-type: none"> 1. Enable a mix of business, retail and industrial uses in locations that are close to and that support the functioning of the Airport. 2. Integrate suitable and compatible land uses in accessible locations so as to maximise public transport patronage and encourage active transport. 3. Encourage employment opportunities and promote businesses along main roads. 4. Enable a limited range of other land uses that will provide facilities and services to meet the day-to-day needs of the local workforce. 5. Ensure heritage items are appropriately considered and managed. 6. Maximise, where possible, the use of existing access and egress points to the on-airport road network. 	<p>Land currently subject to this zoning within the project site is located on Airport Drive. The use of this land for development that meets these objectives is therefore currently limited.</p> <p>The project is considered to be consistent with the objectives of this zone as it would provide a direct connection between the Sydney motorway network and Sydney Airport land. It would improve access to Sydney Airport land, and is not inconsistent with the future use of the land for purposes permitted in the BD1 zone.</p> <p>The project is a permissible land use within this zone.</p>

The need for the project is recognised by the Master Plan, which was developed with reference to the project potentially being part of the external road network (subject to approval). The Master Plan notes that the five year ground transport plan (which forms part of the Master Plan) has been developed to complement the project.

The Master Plan also notes that the project would increase opportunities for freight related development in Sydney Airport's northern lands as a result of improved access to Sydney's motorway network.

The Master Plan identifies that new links to the northern lands would be required. These new connections are being provided as part of the project in the form of the freight terminal link and northern lands access.

The project is consistent with future planning for ground transport as described by the Master Plan, and meets Sydney Airport's development, growth and infrastructure needs as defined in these plans. As described in section 5.1.4, Sydney Airport Corporation has proposed and carried out a number of road and access improvements within Sydney Airport land, including planning for the proposed ground transport interchange. The project would complement and enhance the future operation and efficiency of these improvements, working together to improve access to and from Sydney Airport's terminal and freight facilities.

19.5 Cumulative impacts

Cumulative land use impacts would be associated with the loss of a particular land use as a result of the project together with that caused by other projects occurring in the study area.

Nearby projects, including the Botany Rail Duplication project, the New M5 and M4-M5 Link, are either located in existing transport corridors or consist mainly of below ground works with limited surface works. This results in limited additional potential impacts for most land use types, with the exception of open space and industrial land uses.

The New M5 project would result in temporary direct impacts on some areas at Sydney Park. However, this impact would be limited to the construction period. The New M5 would also result in the generation of new areas of open space on the former Alexandra landfill site.

The New M5 also included acquisition of some industrial properties. The associated impacts of the Sydney Gateway road project would further reduce the amount of industrial land in the study area.

Subject to future planning, the project's residual land (see section 19.4.3) would provide opportunities to offset cumulative impacts on existing land uses.

19.6 Management of impacts

19.6.1 Approach

Approach to mitigation and management

The assessment identified that land use and property impacts would be associated with the acquisition or leasing of land required for the construction and operation.

Approach to managing the key potential impacts identified

The key approaches to managing the impacts identified would involve:

- Minimising the final operational footprint as far as possible
- Managing the acquisition process in accordance with relevant legislative requirements and recent reforms
- Making residual land available for future uses.

As described in section 7.12, residual land within the Tempe Lands and adjacent industrial land, which would be used to construct the project but is not required for operational infrastructure, would be considered for future use, including open space/recreation uses. Inner West Council is developing a master plan to identify how this land would be used. Roads and Maritime is continuing to consult with Inner West Council on the draft master plan and would input to this process as appropriate. This would assist in offsetting impacts on existing land uses.

Approach to managing other impacts

Other measures to further minimise impacts on land use and property are provided in section 19.6.2. Impacts on property access would be managed in accordance with the measures provided in section 9.6.

Expected effectiveness

Roads and Maritime has extensive experience in consulting with affected landowners and managing potential impacts on property as a result of road developments of a similar scale and scope to this project. Accordingly, these measures are expected to be effective.

19.6.2 List of mitigation measures

Measures that will be implemented to address potential impacts on land use and property are listed in Table 19.9.

Table 19.9 Land use and property mitigation measures

Impact/issue	Ref	Measure	Timing
Impacts on property and land use	LU1	The design will continue to be refined to minimise land requirements and potential impacts on existing land uses and properties as far as possible. Consultation with landholders will be ongoing to identify opportunities to minimise impacts on onsite operations where practicable.	Detailed design

Impact/issue	Ref	Measure	Timing
Impacts on advertising structures	LU2	The approach to mitigating impacts on advertising structures (including adjusting, relocating or providing new structures at locations along project infrastructure) will be confirmed during detailed design.	Detailed design
Use of residual land	LU3	Roads and Maritime will continue to consult with Inner West Council regarding the future use of residual land in the Tempe Lands and adjoining area. This will include opportunities for open space and recreation uses, and provision for a new off-leash dog exercise area and council depot. Roads and Maritime will support and assist Inner West Council with the master planning process for these areas as appropriate, and will ensure that the urban design and landscape plan for the project is consistent with the outcomes of this process.	Detailed design
Impacts on utilities	LU4	The location of all utilities, services and other infrastructure will be identified prior to construction to determine requirements for access to, diversion, protection and/or support. This will include (as required), undertaking utilities investigations, including intrusive investigations, and consultation and agreement with service providers.	Detailed design
Impacts on privately-owned land or land owned by the NSW or local government	LU5	Acquisition will be undertaken in accordance with: <ul style="list-style-type: none"> ■ The <i>Land Acquisition (Just Terms Compensation) Act 1991</i> (NSW) ■ <i>Determination of compensation following the acquisition of a business</i> (NSW Government, undated). 	Pre-construction
Impacts on Commonwealth-owned land subject to a lease with Sydney Airport Corporation	LU6	Sydney Airport, as the leaseholder of the land, will notify tenants that their sub-lease agreements will be concluded. Termination of leases will be undertaken in accordance with the contract terms with Sydney Airport Corporation and the tenant. Sydney Airport will provide support to manage the return of lands and handover to Roads and Maritime.	Pre-construction
Impacts on Qantas Flight Training Centre	LU7	Consultation with Qantas will occur throughout construction planning and construction to minimise impacts on the Qantas Flight Training Centre until the relocation process is complete.	Pre-construction, construction
Future management of residual land	LU8	The ongoing management of residual land, and Roads and Maritime's role in this process, will be confirmed in consultation with Inner West Council.	Operation

19.6.3 Managing residual impacts

Residual impacts are impacts of the project that may remain after implementation of:

- Design measures to avoid and minimise impacts (see sections 6.4 and 6.5)
- Construction planning and management approaches to avoid and minimise impacts (see sections 6.4 and 6.5)
- Specific measures to mitigate and manage identified potential impacts (see section 19.6.2).

The project would impact existing recreation/open space land. It would also impact industrial zoned land. Planning for the future use of the project's residual land (as described in section 7.12) would provide opportunities to minimise this potential residual impact.