

Western Parkland City Authority

Infrastructure Delivery Strategy

215 Badgerys Creek Road, Bradfield
Bradfield City Centre
Western Parkland City Authority

October 2023

Contents

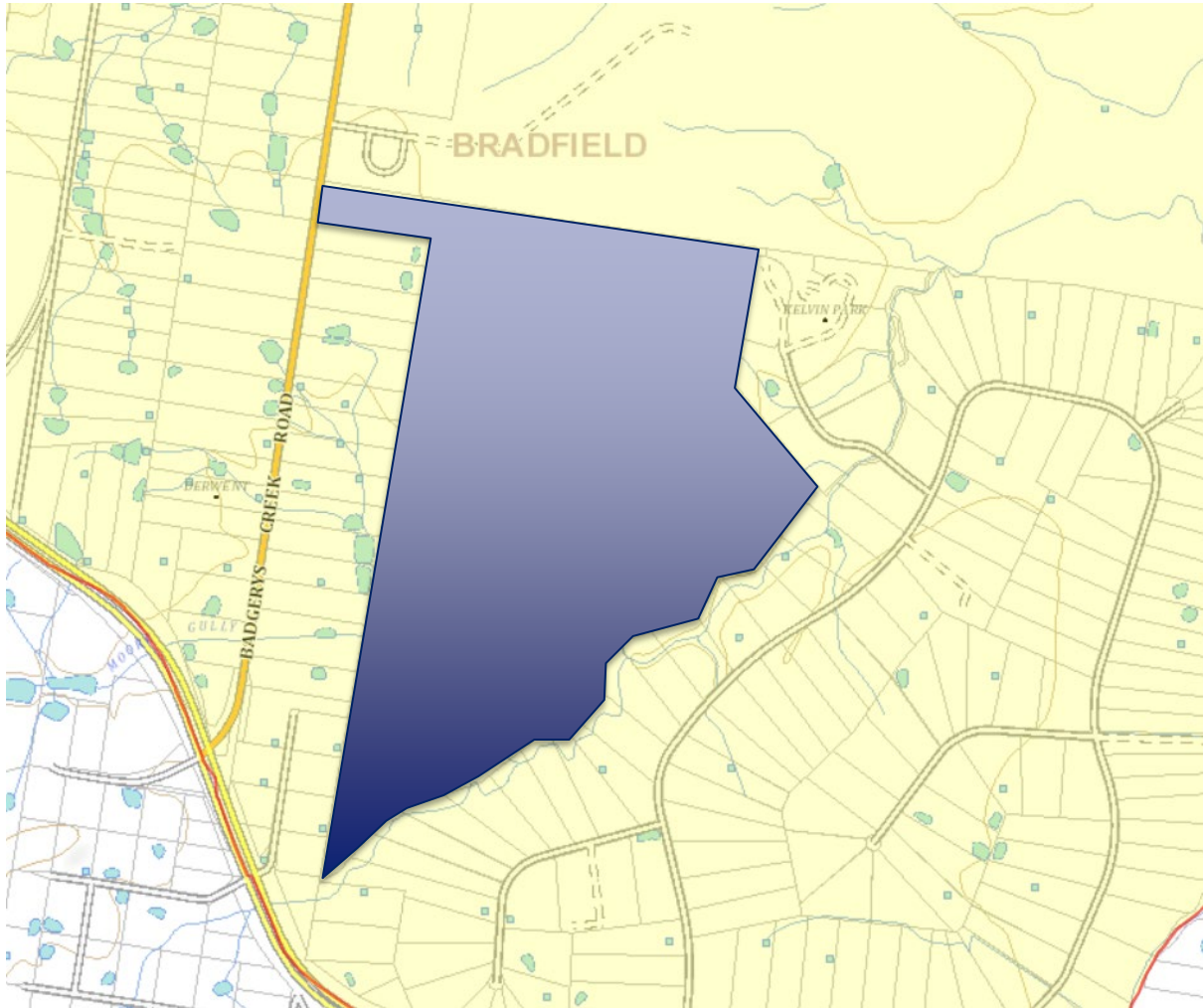
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1. Introduction

1.1 Background

The Bradfield City Centre is located at 215 Badgerys Creek Road, Bradfield, legally described as Lot 3101 DP 1282964. Figure 1 below shows the general boundary of the Bradfield City Centre site.

Figure 1 – Bradfield City Centre Boundary



Source: Six Maps

Note: The Infrastructure Delivery Strategy supports the Bradfield City Centre Master Plan.

1.2 Existing Contributions Framework

There are several development contributions that apply to land in the Aerotropolis.

a. *Special Infrastructure Contribution Western Sydney Aerotropolis*

This is a NSW State contribution which took effect on 25 March 2022. The Special Infrastructure Contribution (SIC) will help fund the delivery of infrastructure in the Western Sydney Aerotropolis.

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A SIC is paid by developers within a defined Special Contributions Area to contribute to the cost of infrastructure delivery, including state and regional roads, open space, education and health facilities for new residents and businesses.

b. *Local Infrastructure Contributions*

Local infrastructure contributions are proposed to be levied by Liverpool City Council for certain development in the Aerotropolis.

The *Draft 7.12 – Liverpool Council Aerotropolis Precincts Contributions Plan (Draft CP)* collects contributions from developers in accordance with this plan to deliver local infrastructure, including local road and intersection upgrades, upgrades to local drainage infrastructure and social infrastructure, such as open space and community facilities.

c. *Sydney Water Development Servicing Plans Charge*

Sydney Water is the trunk drainage authority for stormwater in the Western Sydney Aerotropolis. Sydney Water will be responsible for delivering, managing and maintaining the regional stormwater network along with drinking water, wastewater and the recycled water network.

A developer will be required to pay a levy to contribute towards the delivery of this infrastructure or undertake works on behalf of Sydney Water and receive an offset against the levy otherwise payable.

1.3 Existing Development Approvals and Contributions

The following table (Table 1) presents the existing development consents granted to date and the local infrastructure contribution (LIC) and state infrastructure contribution (SIC) obligations associated with these consents.

Table 1 Details of Existing Contributions Made			
Development Consent No.	Description of Approved Development	SIC Obligation & Details	LIC Obligation & Details
SSD – 25452459	AMRF “First Building”	\$264K – monetary contribution paid	VPA entered into 3 Sep 2022 between Minister and WPCA. Requires contributions at 6.5% of cost of carrying out development, or the amount in a contributions plan in force at the time the contribution is due (Schedule 4).

1.4 Purpose of the Infrastructure Delivery Strategy

The purpose of this Infrastructure Delivery Strategy (Strategy) is to clearly identify the infrastructure needed to support the delivery of the Bradfield City Centre. To this end, this document:

- Identifies the infrastructure required to be delivered under the existing Western Sydney Aerotropolis contributions framework
- Identifies mechanisms of delivery
- Identifies who is likely to deliver the infrastructure
- Identifies infrastructure priorities and staging
- Outlines any changes in amount of infrastructure from the existing contributions framework relative to that proposed (i.e. increased open space or increased road areas)
- Assists government and the community in understanding the infrastructure delivery task for the site.

2. Local Contributions

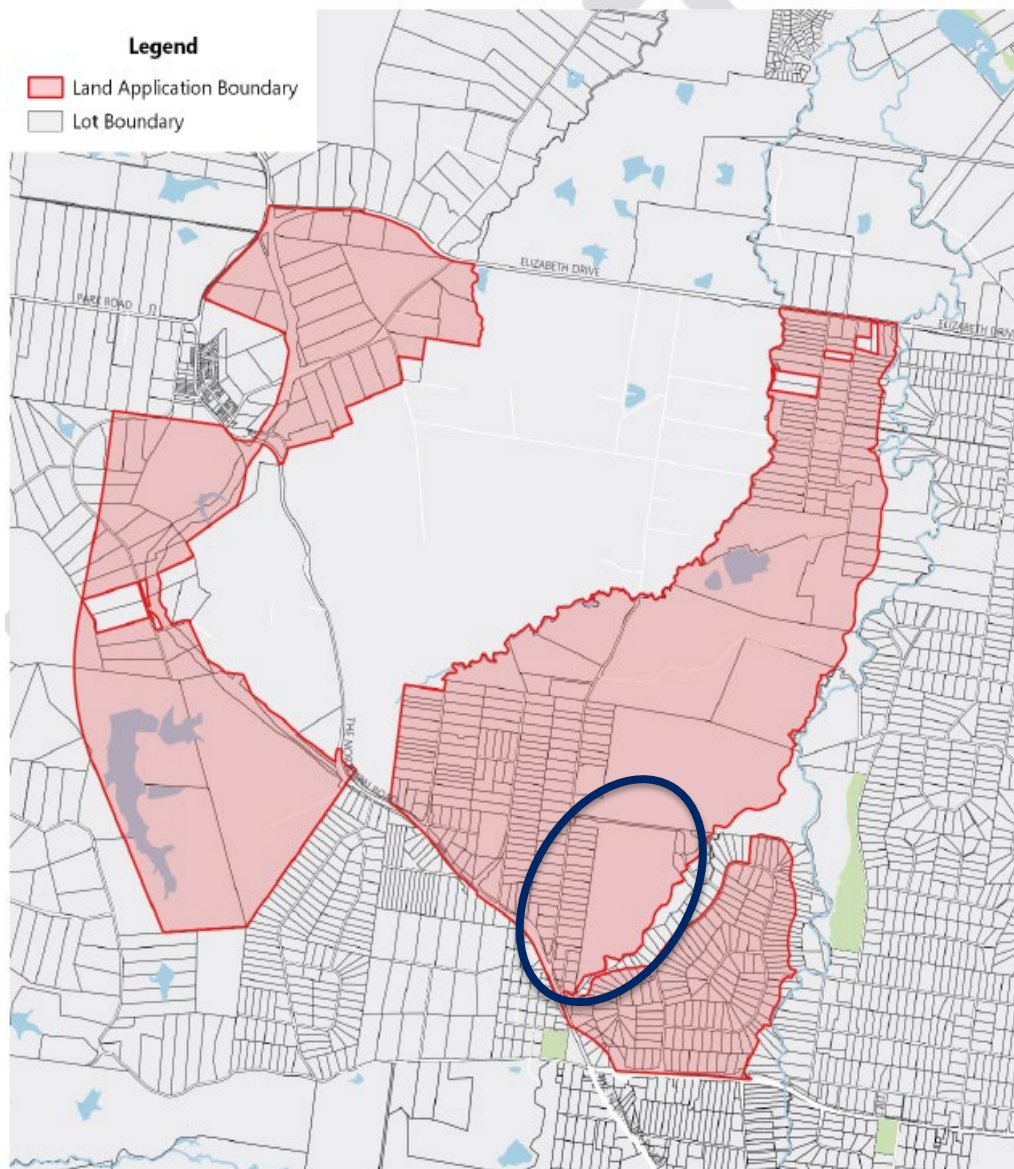
2.1 Applicable Contributions Plan

The *Draft 7.12 – Liverpool Council Aerotropolis Precincts Contributions Plan* (the Draft CP) is the applicable contributions plan. The Draft CP applies to the Initial Precincts within the Western Sydney Aerotropolis that are within the Liverpool Local Government Area (LGA), including the Aerotropolis Core and the southern parts of both the Badgerys Creek and Agribusiness Precincts. The Bradfield City Centre is within the Aerotropolis Core Precinct and is therefore subject to the Draft CP, as illustrated in Figure 2 overleaf.

At the time of writing, the Draft CP had been reported to Liverpool Council's meeting of 31 May 2023, whereby Council resolved to exhibit the contributions plan for a minimum of 28 days. Public exhibition of the Draft CP commenced on 15 June and concludes on 14 July 2023.

The Draft CP proposes a rate of 4.5% of the proposed cost of development (calculated in accordance with Clause 208 of the Environmental Planning and Assessment Regulation) and levies new development towards the cost of local road, open space and social/community infrastructure.

Figure 2 – Land Affected by the Draft CP



Source: Draft 7.12 Liverpool Council Aerotropolis Precincts Contributions Plan

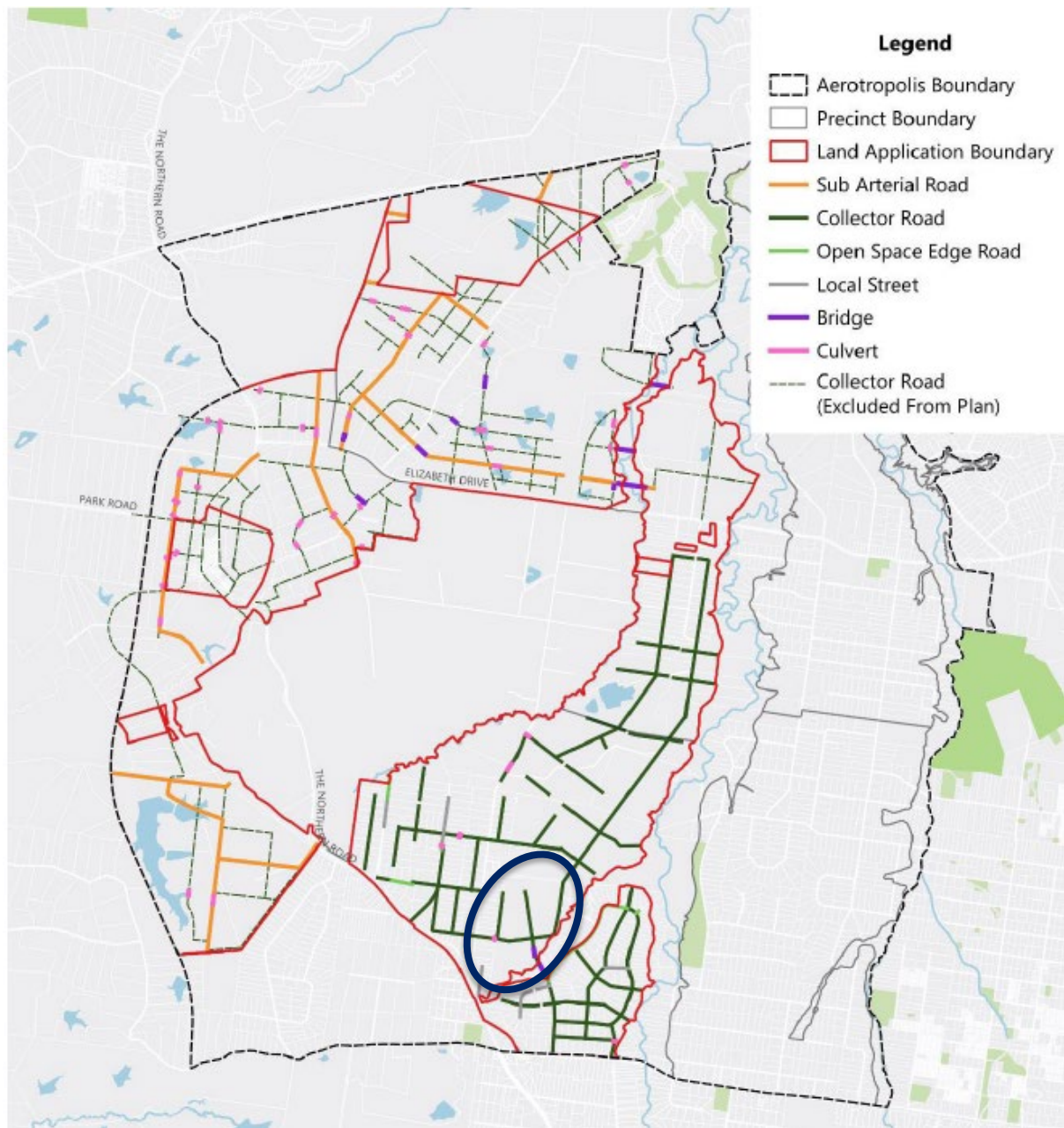
2.2 Draft CP Contribution Items

This section provides further information on the contribution items for which the Draft CP levies for, in so far as they relate to the Aerotropolis Core Precinct and the Bradfield City Centre more specifically.

2.2.1 Road Infrastructure

The Draft CP introduces levies to fund the acquisition of land for certain public roads as well as the costs of road construction. The road infrastructure items are represented in Appendix B of the Draft CP (a copy of which is reproduced overleaf as Figure 3), with Table 2 identifying the relevant quantities in both the Aerotropolis Core Precinct and the Bradfield City Centre.

Figure 3 – Road Infrastructure



Source: Draft 7.12 Liverpool Council Aerotropolis Precincts Contributions Plan

Table 2 Road Infrastructure Contribution Items			
	Aerotropolis Core	Bradfield City Centre	
Road Infrastructure	Quantity	Quantity	Land Acquisition (sqm)
Sub Arterial Road (m)	-	-	-
Collector Road (m)	32,796	2979	76,262
Open Space Edge Road (m)	2345	-	-
Local Street (m)	2393	-	-
Collector Road Bridge (m)	78	78	Part of open space acquisition

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Collector Road Culvert (item)	5	-	-
Open Space Edge Road Culvert (item)	1	-	-

The following table (Table 3) identifies the value of the works and land acquisition for those items within the Bradfield City Centre, based on the various assumptions within the draft CP.

Table 3 Road Infrastructure Contribution Items – Value				
Infrastructure Item	Quantity	Works Cost	Land Value	Total – Works and Land
Collector Road	2979m	\$21M	\$41.8M	\$62.8M
Collector Road bridge	78m	\$9.2M	-	\$9.2M
	TOTAL	\$30.3M	\$41.8M	\$72M

2.2.2 Open Space Infrastructure

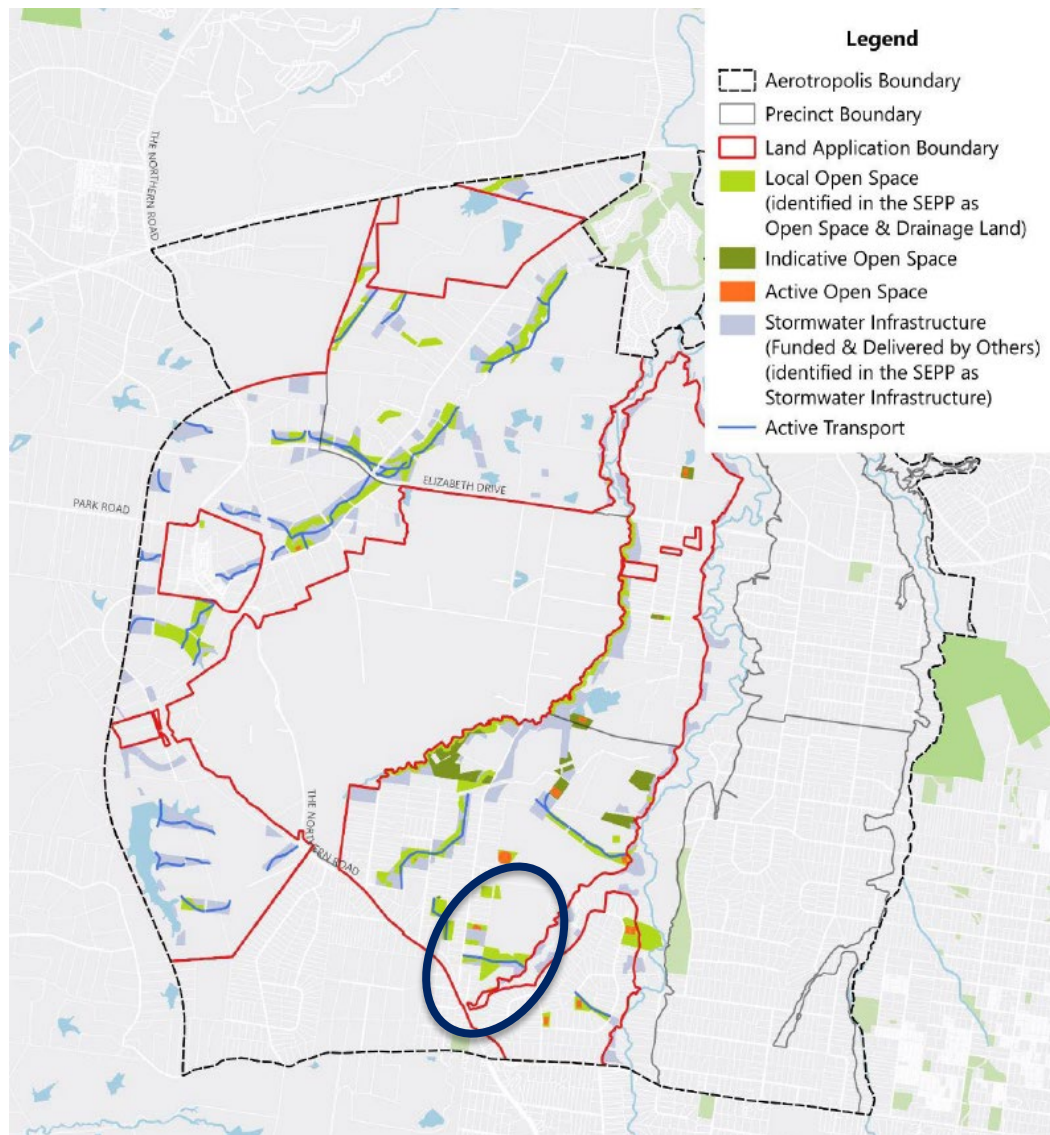
The Draft CP levies for the cost of land acquisition for open space purposes as well as the embellishment of that open space. Figure 4 overleaf is reproduced from Appendix B of the Draft CP, identifying the open space infrastructure within the Aerotropolis Core Precinct as well as the Bradfield City Centre. Table 4 identifies the respective quantities.

Table 4 Open Space Contribution Items			
	Aerotropolis Core	Bradfield City Centre	
Open Space Infrastructure	Quantity	Quantity	Land Acquisition (sqm)
Local Open Space (m2)	1,042,242	155,750	155,750
Indicative Open Space (m2)	353,365	-	-
Active Open Space (m2)	87,156	-	-
Active Transport in Open Space (m)	5,725	643	-

The following table (Table 5) identifies the value of the works and land acquisition for those items within the Bradfield City Centre, based on the various assumptions within the Draft CP.

Table 5 Open Space Infrastructure Items - Value				
Infrastructure Item	Quantity	Works Cost	Land Value	Total – Works and Land
Local Open Space	155,750sqm	\$15.6M	\$14M	\$29.6M
Active transport in open space	643m	\$0.3M	-	\$0.3M
	TOTAL	\$15.9M	\$14M	\$29.9M

Figure 4 – Open Space Infrastructure

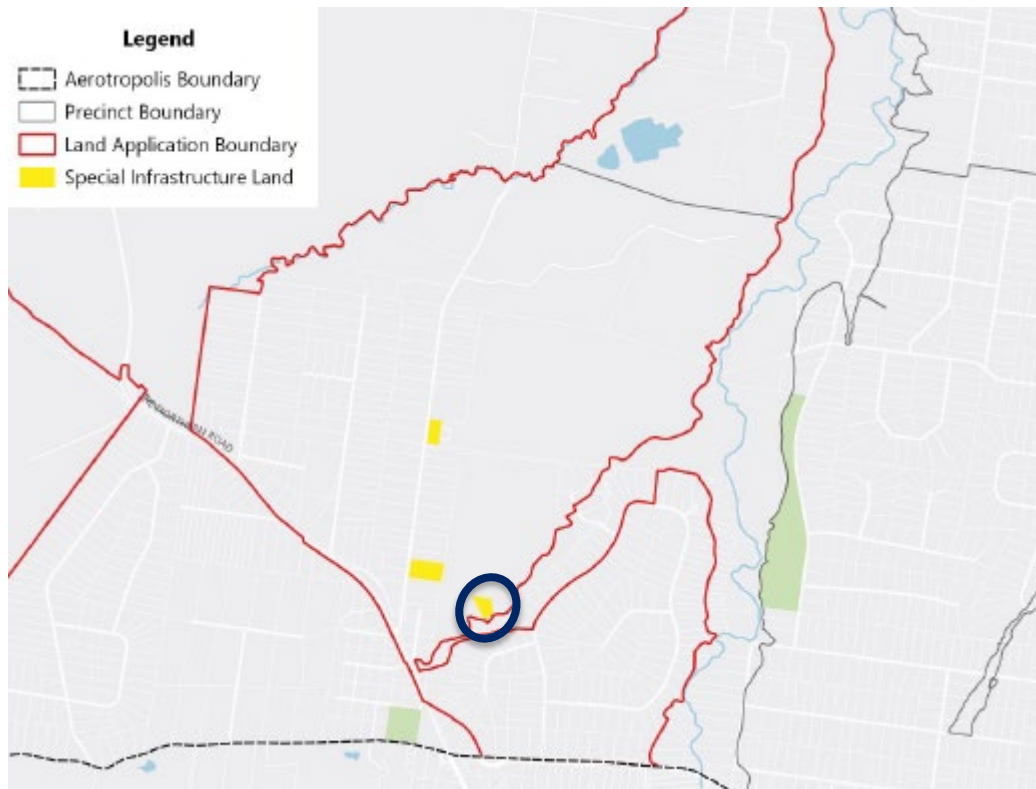


Source: Draft 7.12 Liverpool Council Aerotropolis Precincts Contributions Plan

2.2.3 Social and Community Infrastructure

The Draft CP proposes the acquisition of three (3) sites within the Aerotropolis Core Precinct to accommodate the social and community infrastructure items identified in the Draft CP. The location of these three sites is illustrated in Figure 5 overleaf. One of these sites is located within the Bradfield City Centre, as identified below, forming an area of approximately 2.3ha.

Figure 5 – Land Acquisition for Social and Community Infrastructure



Source: Western Sydney Aerotropolis Precincts Section 7.12 Development Contributions Plans Background Report

The proposed acquisition of the land within the Bradfield City Centre will be the subject of further discussions with Liverpool City Council regarding its appropriateness within the context of the proposed Master Plan.

Table 6 below identifies the proposed social and community facilities under the Draft CP within the Aerotropolis Core Precinct. It is noted that the Draft CP does not readily identify the location of these proposed facilities between the three sites proposed for acquisition. In this regard, the nature of the social/community facilities proposed under the Draft CP for the Bradfield City Centre is currently unknown and subject to further discussion with Liverpool City Council.

Table 6 Community and Social Infrastructure Contribution Items		
Infrastructure Item	Aerotropolis Core	Bradfield City Centre
Community Facilities		Distribution of facilities over the 3 sites to be acquired not specified.
High quality Council owned & managed early education and care centre	1350m ²	
District multi-purpose community hub with adjoining open space	3416m ²	
Sport and Recreation Facilities		
Play space (within a park – average 100m ²)	12 x	
Outdoor fitness stations	2 x	

Youth Precinct	0.1ha	
Water play	6 x	
Indoor Leisure Centre	4700m ²	

2.3 Preliminary WIK Agreement Delivery Items

The following table (Table 7) provides a summary of the items within the Draft CP currently intended to be delivered by WPCA as part of a future works-in-kind agreement (WIK) with Liverpool Council, along with the associated quantities, as specified in the Draft CP.

Table 7 Preliminary WIK Agreement Delivery Items	
Contribution Item	Draft CP Quantity
Collector roads (construction)	2,979m
Collector roads (land)	2,979m x 25.6m = 76,262m ²
Local open space & drainage (embellishment)	155,750m ²
Local open space & drainage (land)	155,750m ²
Active transport in open space	643m
Social infrastructure (land and facilities)	Subject to discussion with Liverpool Council.

Note: The Master Plan will change these quantities.

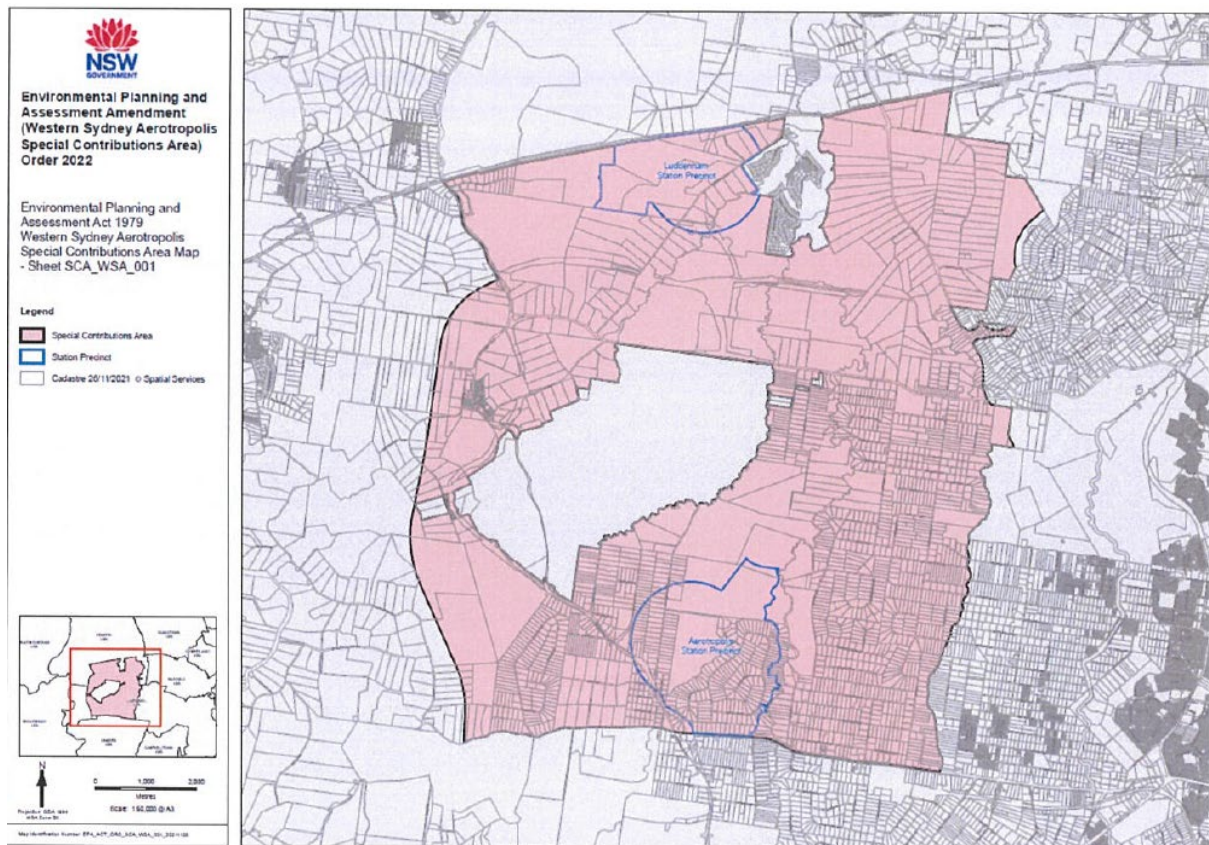
It is noted that some duplication/overlap may currently exist for some infrastructure items between the Draft CP and the SIC framework (e.g. collector roads and rapid bus corridor). It is envisaged that any inconsistencies in this regard will be resolved as part of any future WIK, through on-going liaison with DPE and Liverpool City Council.

3. State Contributions

3.1 Special Infrastructure Contribution (SIC)

The *Environmental Planning and Assessment (Special Infrastructure Contribution – Western Sydney Aerotropolis) Determination 2022* (SIC Determination) was made by the then Minister for Planning on 9 March 2022 and is the state contributions framework that applies to the Bradfield City Centre. Figure 6 overleaf provides the boundaries of the Special Contribution Area to which the SIC Determination applies.

Figure 6 – Western Sydney Aerotropolis Special Contribution Area



Source: SIC Determination

3.1.1 SIC Contribution Obligation

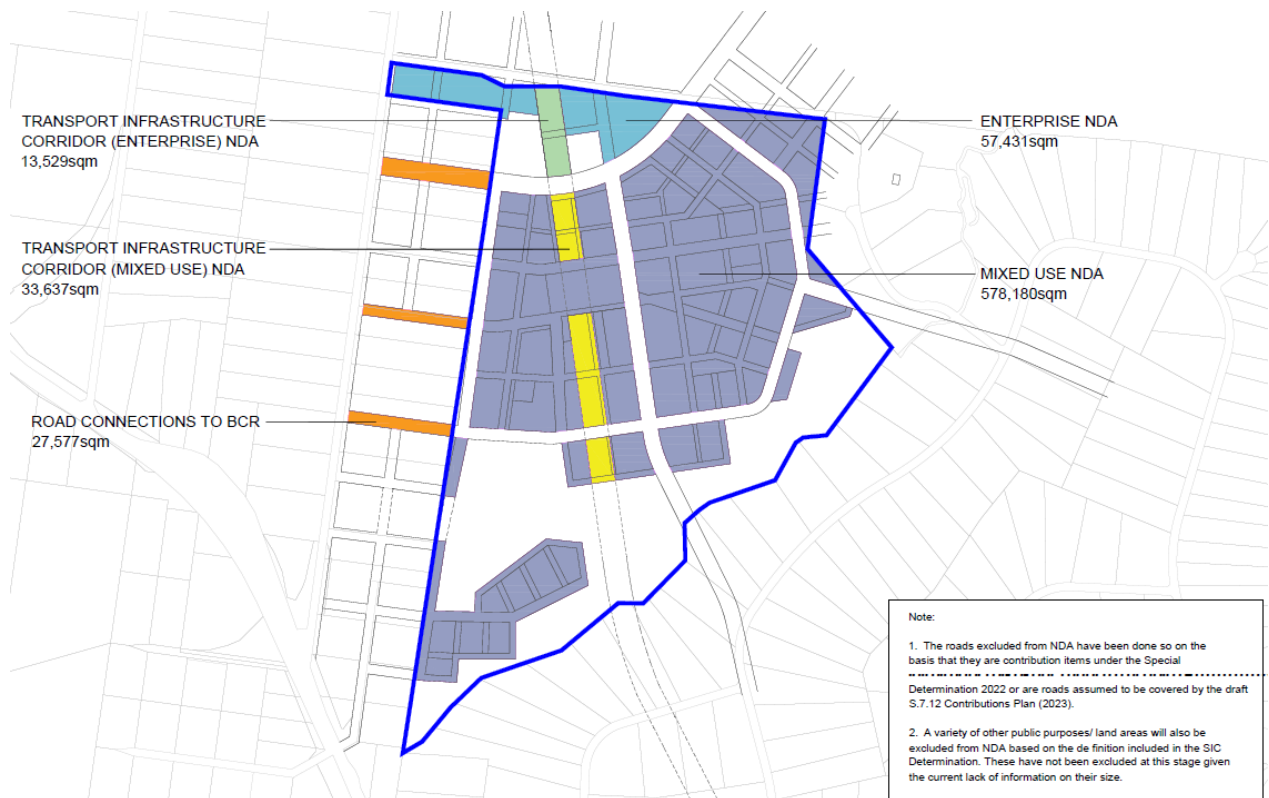
The SIC Determination establishes a contribution obligation based on a rate per hectare of net developable area (NDA), with different rates applying to the various land use zones within the Western Sydney Aerotropolis. Table 8 below provides a summary of the state contribution obligation whilst Figure 7 overleaf represents the preliminary assessment of Net Developable Area (NDA).

	NDA¹ (ha)	Base Rate² (\$/Ha of NDA)	Indexed Rate³ (\$/Ha of NDA)	Contribution Obligation
Mixed Use	57.818	\$393,175	\$444,415	\$25.7M
Enterprise	5.7431	\$93,175	\$105,318	\$0.6M
TOTAL	63.5611			\$26.3M

Notes:

1. Transport Infrastructure Corridor land has generally been excluded from NDA
2. Base rate reflects the "Overlapping" land rate as referenced in Cl 36 of the SIC Determination
3. Reflects indexation of Base Rate from March 2020 to March 2023, based on CPI (All Groups) Sydney
4. The above amounts assume contributions at the full rate in the SIC Determination (i.e. no discounts)

Figure 7 – Preliminary Net Developable Area Assessment



It is noted that Bradfield City Centre is not subject to the additional station precinct contribution outlined in Part 3 of the SIC Determination by virtue of the definition of ‘station precinct’, which excludes Lot 10 within Deposited Plan 1235662 (being the former title reference of the subject site).

3.1.2 Contributions Paid to Date

Development Application SSD 25452459 has been approved by the Department of Planning and Environment, relating to the “First Building” within the Bradfield City Centre. This DA comprised the following net developable area:

Enterprise zoned land	-	0.217ha
Mixed Use zoned land	-	0.915ha

The NDAs above generated a contribution obligation of \$0.52M, reduced to \$0.26M if paid prior to 1 July 2023. A total of \$0.26M has previously been paid by WPCA to meet this obligation.

Having regard to the contribution paid to date, the outstanding SIC monetary obligation is ~\$26M.

3.1.3 SIC Infrastructure Schedule

Schedule 3 of the SIC Determination lists the infrastructure to be partially funded from the contributions collected through the SIC. This is reproduced overleaf in Table 9, along

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with an indication of how the infrastructure item relates to the Bradfield City Centre masterplan area.

Table 9 SIC Infrastructure List			
	100% Attributable Cost (Indexed)	Cost Apportioned to Future Development (Indexed)	Application to BCC
Transport			
State and Regional Roads			
Badgerys Creek Road upgrade, including footpaths and cycleways	\$44,072,771	\$11,561,511	No - outside BCC
Littlefields Road extension including footpaths and cycleways	\$163,991,707	\$24,454,603	No - outside BCC
Luddenham Road upgrade	\$140,417,899	\$15,494,068	No - outside BCC
New Regional Road, Badgerys Creek Road to Eastern Ring Road including footpaths and cycleways	\$96,345,128	\$25,562,720	Yes – partly in BCC
New Regional Road, Devonshire Road to Eastern Ring Road, including footpaths and cycleways	\$201,914,789	\$51,103,122	No - outside BCC
Pitt Street upgrade and extension including footpaths and cycleways	\$99,419,972	\$25,454,033	No - outside BCC
Tenth Avenue upgrade including footpaths and cycleways	\$132,218,314	\$9,579,372	No - outside BCC
Western Road upgrade and realignment including footpaths and cycleways	\$92,245,335	\$22,543,037	No - outside BCC
Devonshire Road upgrade and realignment including footpaths and cycleways	\$842,507,393	\$168,758,322	No - outside BCC
Eastern Ring Road upgrade including footpaths and cycleways	\$529,898,202	\$84,303,755	No - outside BCC
Elizabeth Drive upgrade (TNR to M7) including footpaths and cycleways	\$1,256,586,453	\$273,614,740	No - outside BCC
Fifteenth Avenue upgrade including footpaths and cycleways	\$398,704,837	\$41,486,055	No - outside BCC
Mamre Road upgrade including footpaths and cycleways	\$324,908,569	\$53,574,151	No - outside BCC
Southern Link Road upgrade including footpaths and cycleways	\$303,384,657	\$17,469,020	No - outside BCC

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Bus Infrastructure			
Public Transport facilities such as bus depots	\$36,898,134	\$5,372,502	Yes – bus layover in Enterprise land
Rapid Bus Corridor	\$565,182,674	\$20,114,791	Yes – partly in BCC
Rail Infrastructure			
Luddenham Station and Aerotropolis Station	\$813,808,845	\$152,865,347	Yes – Aerotropolis station
Cycle Network			
Bicycle network within the green grid	\$293,759,215	\$49,399,509	Yes
Green Infrastructure			
Multifunctional Open Space	\$63,217,522	\$34,995,902	Yes
Regional Open Space	\$865,221,487	\$214,675,987	No
Urban Tree Canopy	\$28,699,574	\$5,298,452	Yes
Biodiversity Offset – CPCP	\$359,209,482	\$359,209,482	No
Biodiversity Offset – SW WSGA	\$84,378,009	\$63,283,507	Yes
Thompsons Creek – Regional Open Space	\$359,920,854	\$359,920,854	Yes
Health			
Ambulance Station	\$14,841,147	\$5,441,705	Not delivered by WPCA
Community Health Facility	\$48,819,093	\$315,789	Not delivered by WPCA
Education			
New and upgrades to existing primary, secondary and special purpose schools	\$652,635,745	\$216,122,826	Not delivered by WPCA
Justice			
Expand existing court houses	\$215,239,115	\$21,921,498	Not delivered by WPCA
Emergency Services			
New and upgrades to existing police facilities	\$95,320,180	\$33,839,599	Not delivered by WPCA
New and upgrades to existing fire and rescue facilities	\$27,353,304	\$14,352,295	Not delivered by WPCA
Community			
New and upgrades to existing community facilities	\$533,087,754	\$21,191,813	Not delivered by WPCA
Planning and Delivery		\$16,939,142	Yes
TOTAL		\$2,421,063,744	

3.1.4 Preliminary WIK Agreement Delivery Items

Of the items within the SIC Infrastructure List, the following table (Table 10) provides a preliminary list of items for which WPCA intend to deliver under a WIK Agreement.

Table 10 Preliminary Schedule of WPCA Delivery Items		
SIC Infrastructure Item	Description	Indicative Quantity
New Regional Road – Badgerys Creek Rd to Eastern Ring Rd	Metrolink Boulevard within BCC – land and works	560m
Public transport facilities such as bus depots	Bus layover in Enterprise land – land only	7638m ²
Rapid bus corridor	Part of Transit Street within BCC – land and works	900m
Luddenham station and Aerotropolis station	Aerotropolis station – land only	4444m ²
Bicycle network in green grid	Bicycle network throughout open space	Not known
Urban Tree Canopy	Tree planting for tree canopy targets	Not known
Thompsons Creek Regional Open Space	Thompsons Creek Regional Open space – land and embellishment	70,822m ²
Multifunctional open space	Central Park within BCC – land and embellishment	20,100m ²

It is noted that some duplication/overlap may currently exist for some infrastructure items between the SIC framework and the Draft CP (e.g. rapid bus corridor and collector roads). It is envisaged that any inconsistencies in this regard will be resolved as part of any future WIKA, through on-going liaison with DPE and Liverpool City Council.

3.1.5 Proposed Housing and Productivity Contribution

In May 2023, the proposed Housing and Productivity Contribution (HPC) was announced by the Department of Planning Environment, establishing a new regime for the provision of state-based development contributions. For simplicity and certainty, the HPC is intended to apply a broad-based charge to the whole of the local government areas in the Lower Hunter, Central Coast, Greater Sydney and Illawarra/Shoalhaven regions. The proposed contribution rates for the Greater Sydney Region, within which the Bradfield City Centre is located, are as follows:

Houses (detached, semi-detached and townhouses) dwelling/lot	\$12,000	per
All other residential accommodation dwelling/lot	\$10,000	per
Industrial	\$15/sqm of new GFA	
Commercial	\$30/sqm of new GFA	
Retail	\$30/sqm of new GFA	

We understand that DPE intend on completing a transition from the current Western Sydney Aerotropolis SIC to the new HPC by 1 July 2026. As such, the HPC does not currently apply.

3.2 Sydney Water Corporation Development Servicing Plans

Sydney Water Corporation (SWC) has commenced the process of reintroducing Development Servicing Plan (DSP) charges to cover the cost of new water, sewer and, in some cases, stormwater infrastructure, necessary to support new development. At the time of preparing this strategy, some of the proposed DSP charges applying to the Bradfield City Centre were on public exhibition, with exhibition concluding on 7 July 2023.

At this stage, SWC has prepared DSP charges for water and wastewater only. The charges are proposed to be gradually introduced from 1 July 2024 at reduced rates, with full charges levied from 1 July 2026. The following table (Table 11) presents the proposed DSP charges applicable to development within the Bradfield City Centre.

Table 11 SWC Development Servicing Plans Applicable to Bradfield City Centre				
Infrastructure Type	Name of DSP	Contribution Rate Per Equivalent Tenement		
		1 July 2024 to 30 June 2025 (25% of full charge)	1 July 2025 to 30 June 2026 (50% of full charge)	From 1 July 2026 (full charge)
Water	Greater Sydney Drinking Water	\$1,328	\$2,656	\$5,311
Wastewater	Nepean River Wastewater	\$5,319	\$10,638	\$21,276
Stormwater	Not yet released			
	TOTAL	\$6,647	\$13,294	\$26,587

For any water or waste water infrastructure delivered, WPCA will seek an off-set to future DSP levies, where that infrastructure qualifies.

SWC is also proposed to be the authority with responsibility for the delivery and ongoing management of regional stormwater infrastructure within the WSA and the Bradfield City Centre more specifically. We understand that SWC intends to prepare a DSP charge to cover the cost of necessary land acquisition and construction works for the regional stormwater infrastructure. At this stage, no specific details are available.

The planning framework for the Bradfield City Centre, including the Land Acquisition Map under State Environmental Planning Policy (Precincts – Western Parkland City) 2021 (Western Parkland City SEPP) and WPCA's proposed masterplan, make provision for regional stormwater infrastructure within the Moore Gully/Thompsons Creek area of the Bradfield City Centre.

Figure 8 overleaf reproduces the proposed Land Acquisition Map from the SEPP over the Bradfield City Centre boundaries, with "stormwater Infrastructure" identified in blue.

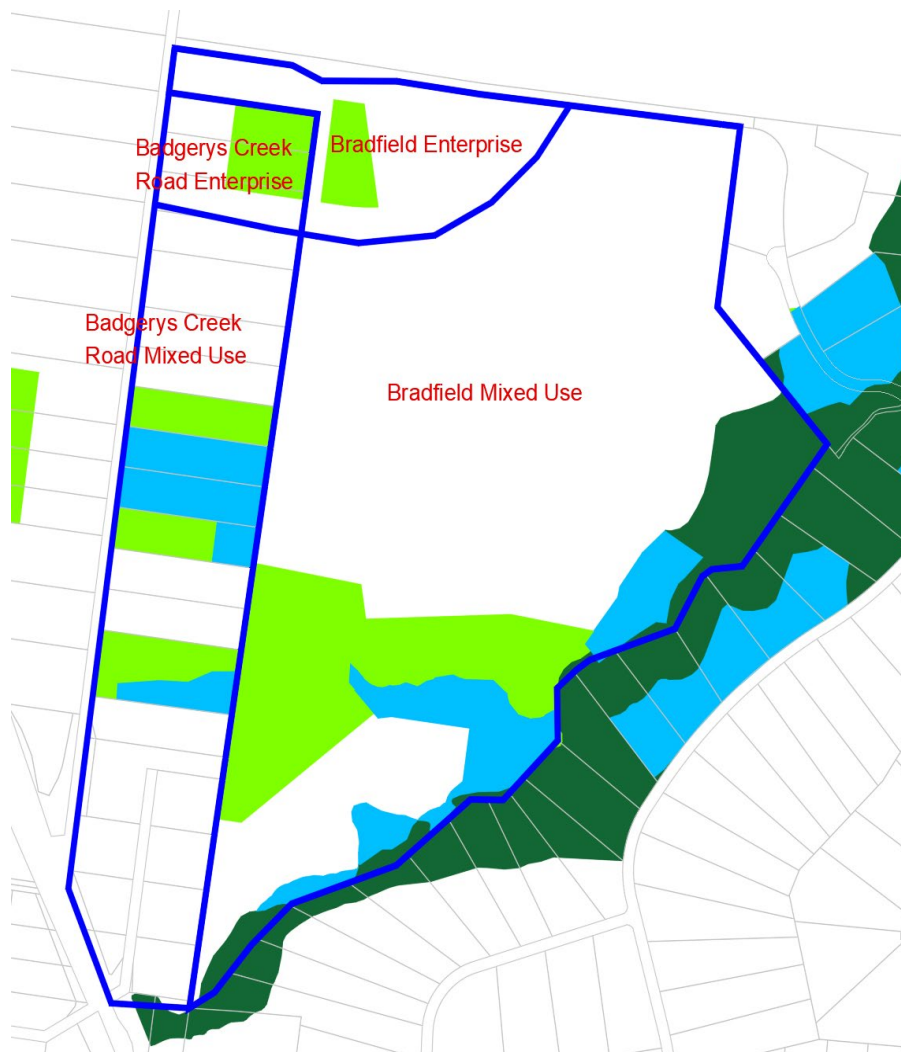
SWC is referenced as the relevant acquisition authority under the SEPP for land marked "Stormwater Infrastructure". Approximately 7.5ha is identified for acquisition for stormwater purposes around Moore Gully/Thompsons Creek, within the boundaries of the Bradfield City Centre. This acquisition area and configuration is expected to be refined in

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the future as more detailed design of the Moore Gully/Thompsons Creek area and the stormwater basins is completed.

Once determined, WPCA intends to dedicate the land necessary for regional stormwater infrastructure to SWC and receive an off-set to future stormwater DSP charges at the market rate for the land dedicated. Similarly, WPCA intends to deliver a component of the regional stormwater infrastructure necessary to support the Bradfield City Centre and seek offset of the delivery costs against DSP charges otherwise payable. The costs associated with construction of this stormwater infrastructure is not yet known.

Figure 8 - Reproduction of SEPP Land Acquisition Map for Bradfield



4. Infrastructure provision

4.1 State Contributions Plan

Of the state contribution items currently intended to be delivered by WPCA, the table below (Table 12) identifies the proposed quantities within the Bradfield City Centre (“Proposed Amount”), relative to the quantities within the SIC Determination (“Existing Amount”). It is noted that there is currently a lack of available information to ascertain the assumptions that underpin the costings within the SIC Infrastructure List. To this end, the assumed quantities under the SIC are generally unknown.

Table 12 SIC Infrastructure – Existing and Proposed		
Item	Existing Amount	Proposed Amount
New Regional Road Badgerys Ck Rd to Eastern Ring Road	Unknown	560m
Public Transport facilities such as bus depots	Unknown	7638m ²
Rapid bus corridor	Unknown	900m
Luddenham Station and Aerotropolis Station	Unknown	4444m ²
Bicycle network in the green grid	Unknown	1557m
Urban tree canopy	Unknown	Unknown
Thompsons Creek Regional Open Space	Unknown	0.701ha
Multifunctional open space	Unknown	2.1ha

4.2 Local Contributions Plan

Of the local contribution items currently intended to be delivered by WPCA, Table 13 below identifies the quantities in the Draft CP within the Bradfield City Centre (“Existing Amount”) relative to the quantities within the proposed masterplan (“Proposed Amount”), based on application of the principles within the Draft CP to the proposed masterplan.

Table 13 Draft CP Infrastructure – Existing and Proposed		
Item	Existing amount	Proposed amount
Roads Infrastructure		
Collector Road	2979m	2950m
Open Space Infrastructure		
Local Open Space		
Ridge Park	15,552m ²	17,776m ²
Moore Gully/Thompson Creek	140,198m ²	140,198
Active Transport in Open Space	643m	Unknown
Social & Community Infrastructure		
Land Acquisition	23,539m ²	For discussion with LCC
Facilities	Not known	For discussion with LCC

4.3 Western Sydney Aerotropolis Precinct Plan and State Environmental Planning Policy (Precincts – Western Parklands City) 2021

4.3.1 Western Sydney Aerotropolis Precinct Plan

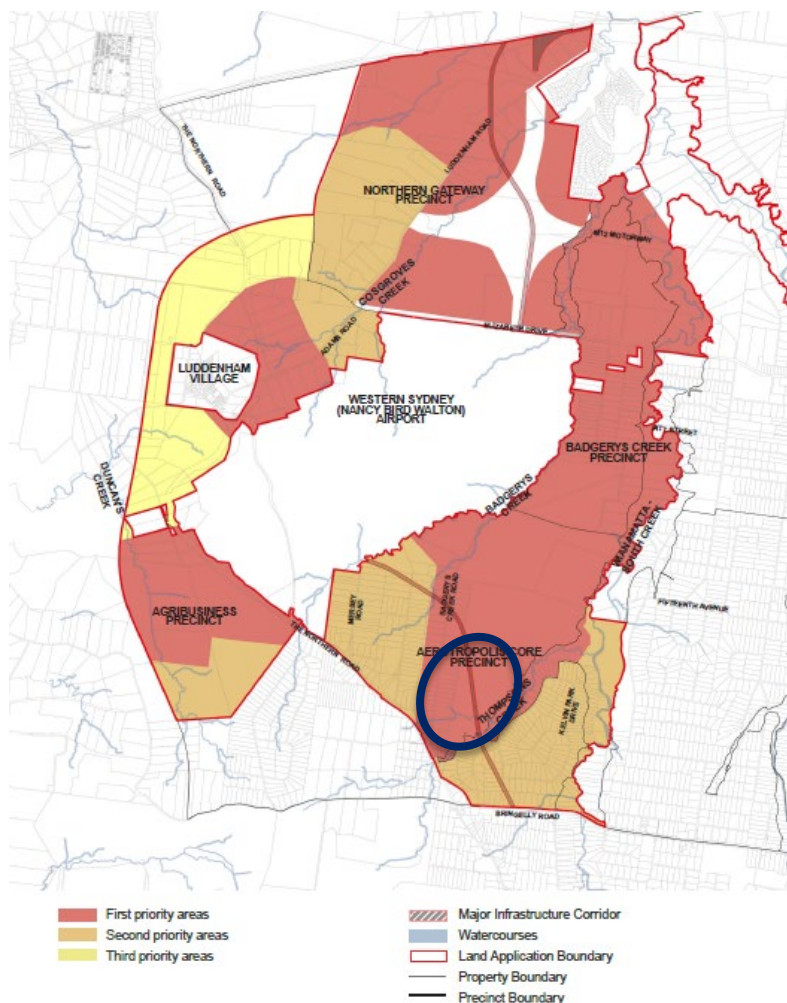
This section addresses relevant infrastructure items referenced in the Western Sydney Aerotropolis Precinct Plan (WSAPP).

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Section 3.1 of the WSAPP identifies the ‘Objectives’ and ‘Requirements’ for the provision of infrastructure delivery. These provisions generally reference more detailed design requirements and are more appropriately addressed beyond the current masterplanning stage of the planning and development process, that is, at development application stage.

Section 3.2 and Figure 2 of the WSAPP establishes the desired development sequencing within the WSA, categorised as First, Second and Third Priority areas. Figure 2 of the WSAPP is reproduced below as Figure 9.

Figure 9 - WSA Priority Areas



Source: Western Sydney Aerotropolis Precinct Plan March 2022

The development sequencing plan identifies Bradfield City Centre within the First priority area.

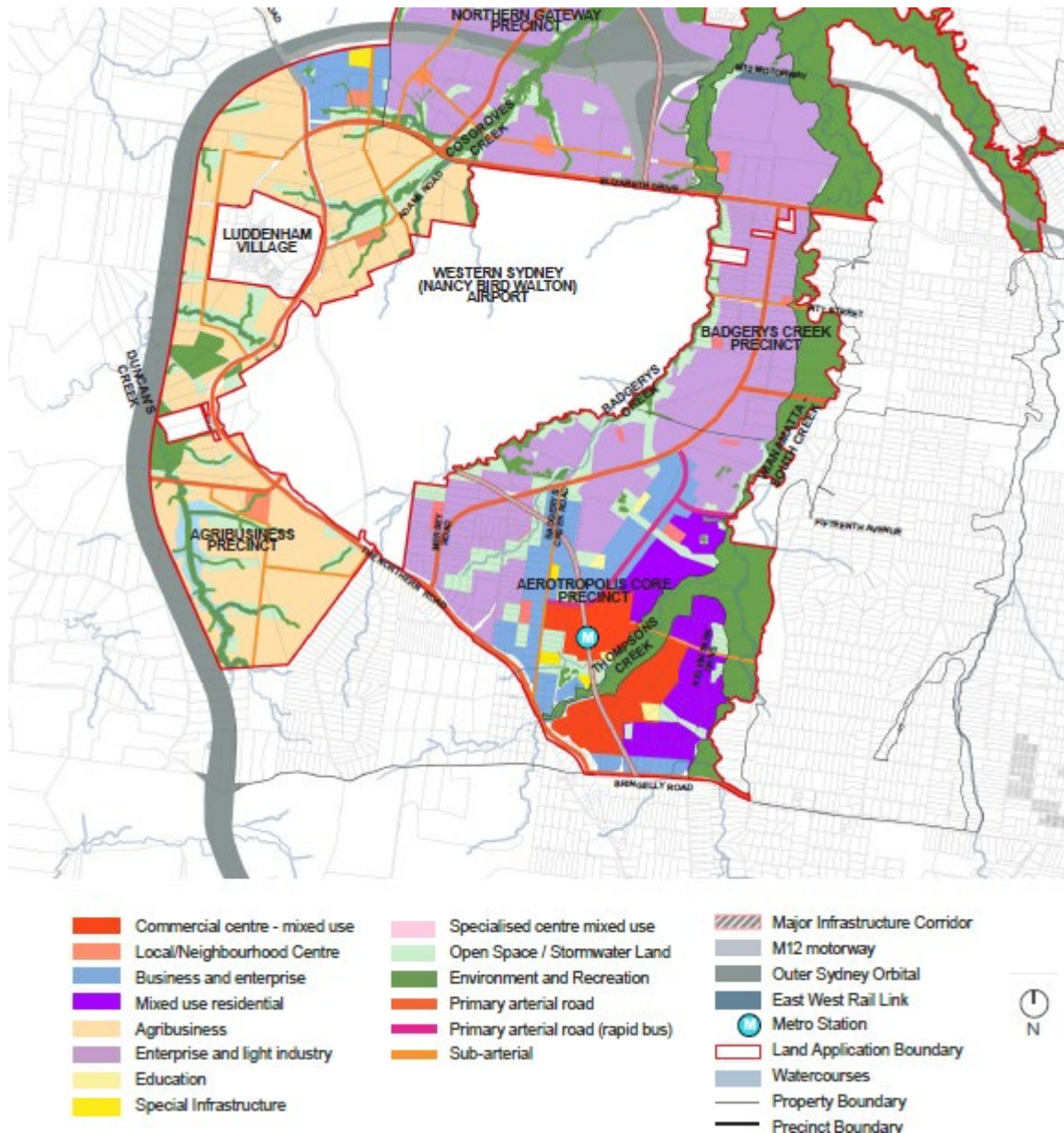
Section 3.3 – ‘Out of Sequence Development’ within the WSAPP is relevant to Priority Area 2 and Priority Area 3, or Priority Area 1 where essential infrastructure is “not yet available or planned when required to service development”. Notwithstanding the above, the provisions of Section 3.3 are matters for consideration by a consent authority to determine whether development consent can be granted. Accordingly, they are more appropriately

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addressed at subsequent stages of the planning process and not at this masterplanning phase.

Figure 3 in the WSAPP establishes the preferred Land Use and Structure Plan, a copy of which is reproduced below as Figure 10.

Figure 10 - WSAPP Land Use and Structure Plan



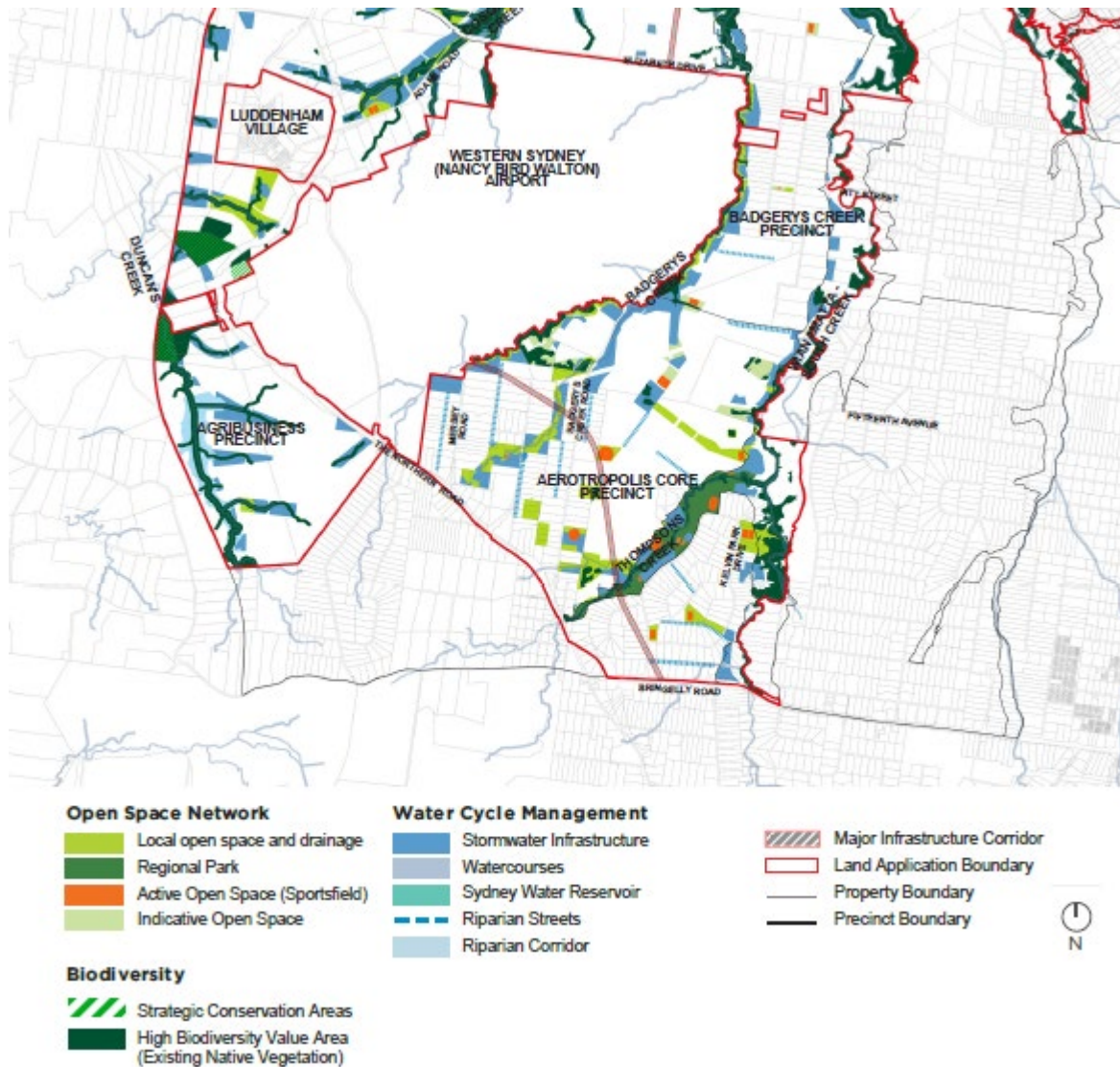
Source: Western Sydney Aerotropolis Precinct Plan March 2022

Within the Bradfield City Centre, land has been earmarked for “Special Infrastructure” at the southern end of the site in the vicinity of Thompson Creek/Moore Gully. This is the same land that is identified for acquisition by Liverpool Council in the Draft CP for community facility purposes. This item has previously been addressed in Section 2.2 of this Strategy.

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Figure 5 of the WSAPP establishes the Blue-Green Infrastructure Framework for the WSA, which is reproduced overleaf as Figure 11.

Figure 11 - WSAPP Blue-Green Infrastructure Framework



Source: Western Sydney Aerotropolis Precinct Plan March 2022

The proposed blue-green infrastructure framework under the WSAPP identifies the provision of the following pertinent items within the Bradfield City Centre:

- 1) Local Open Space and Drainage;
- 2) Regional Park;
- 3) Stormwater Infrastructure

It is noted that the blue-green infrastructure framework plan is consistent with the Land Acquisition Map under the Western Parkland City SEPP in relation to the configuration of

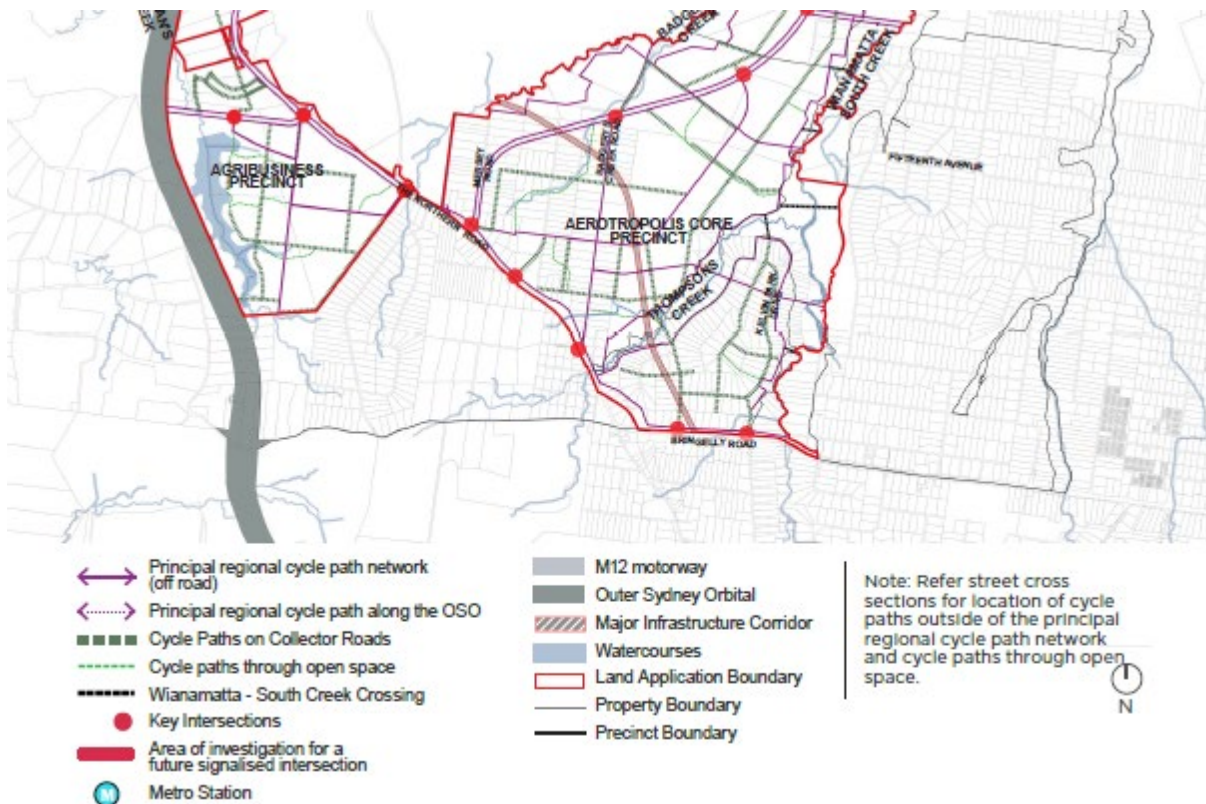
Western Parkland City Authority

the three uses identified above. Each of these items have previously been discussed under local, state and Sydney Water DSP contributions frameworks respectively.

The blue-green infrastructure framework also earmarks land within the Moore Gully/Thompsons Creek area for Active Open Space (sports field) purposes. A sports field is proposed within the Bradfield City Centre and may be in the location earmarked under the WSAPP, or a more appropriate location identified through more detailed design.

Figure 9 of the WSAPP identifies the proposed Active Transport Network and this is reproduced below as Figure 12.

Figure 12 - WSAPP Active Transport Network



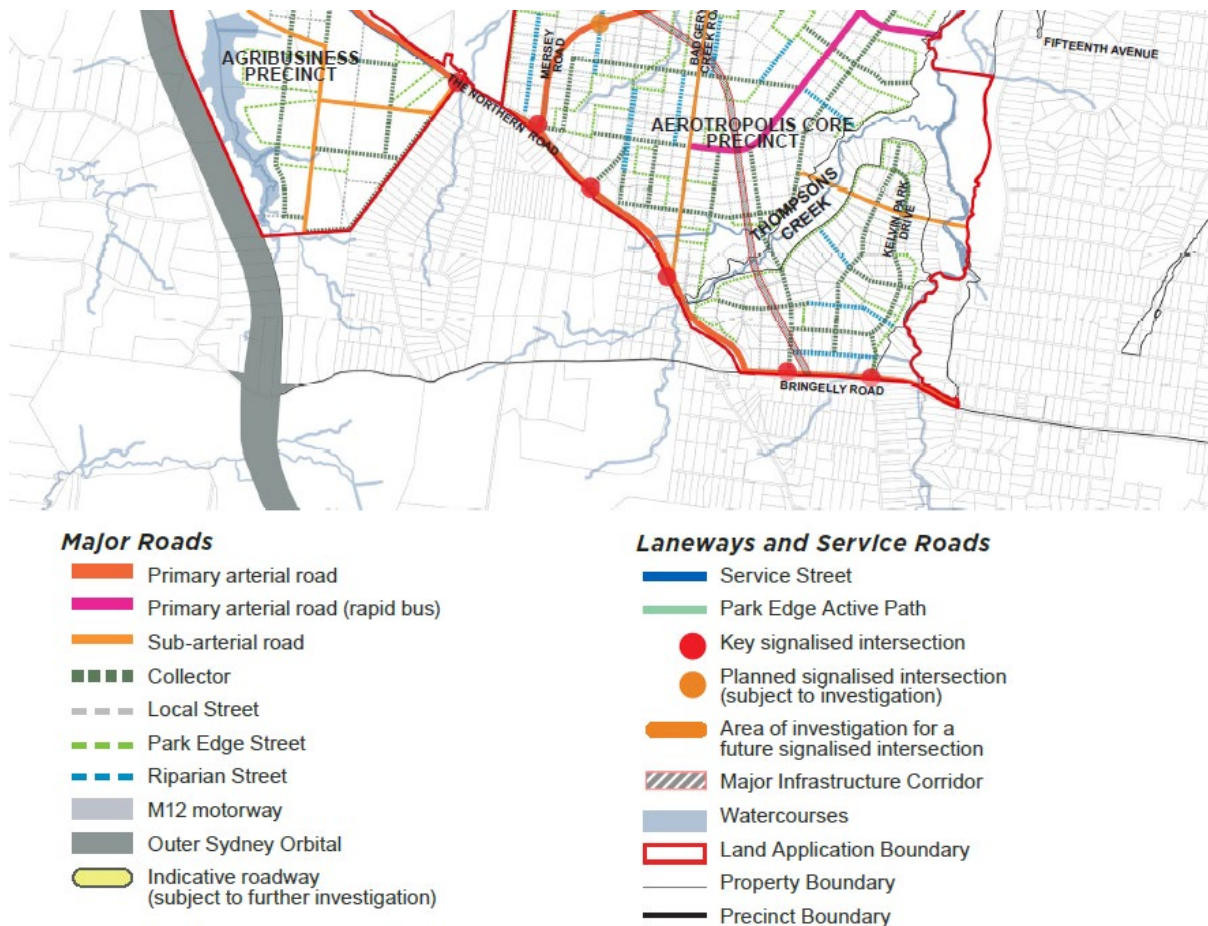
Source: Western Sydney Aerotropolis Precinct Plan March 2022

The following table (Table 14) identifies the active transport network items earmarked for the Bradfield City Centre under the WSAPP and provides a response to each.

Active Transport Item	Comment
Cycle paths through open space (u Moore Gully/Thompsons Creek)	Covered by Draft CP 2023. Addressed in Section 2.2.
Cycle paths on collector roads	Collector road cross sections include off-road cycle path. Covered by Draft CP 2023 and addressed in Section 2.2
Principal regional cycle path network (off road)	Proposed road cross sections accommodate cycle path.

Figure 10 of the WSAPP establishes the proposed street hierarchy, which is reproduced overleaf as Figure 13.

Figure 13 - WSAPP Street Hierarchy



Source: Western Sydney Aerotropolis Precinct Plan March 2022

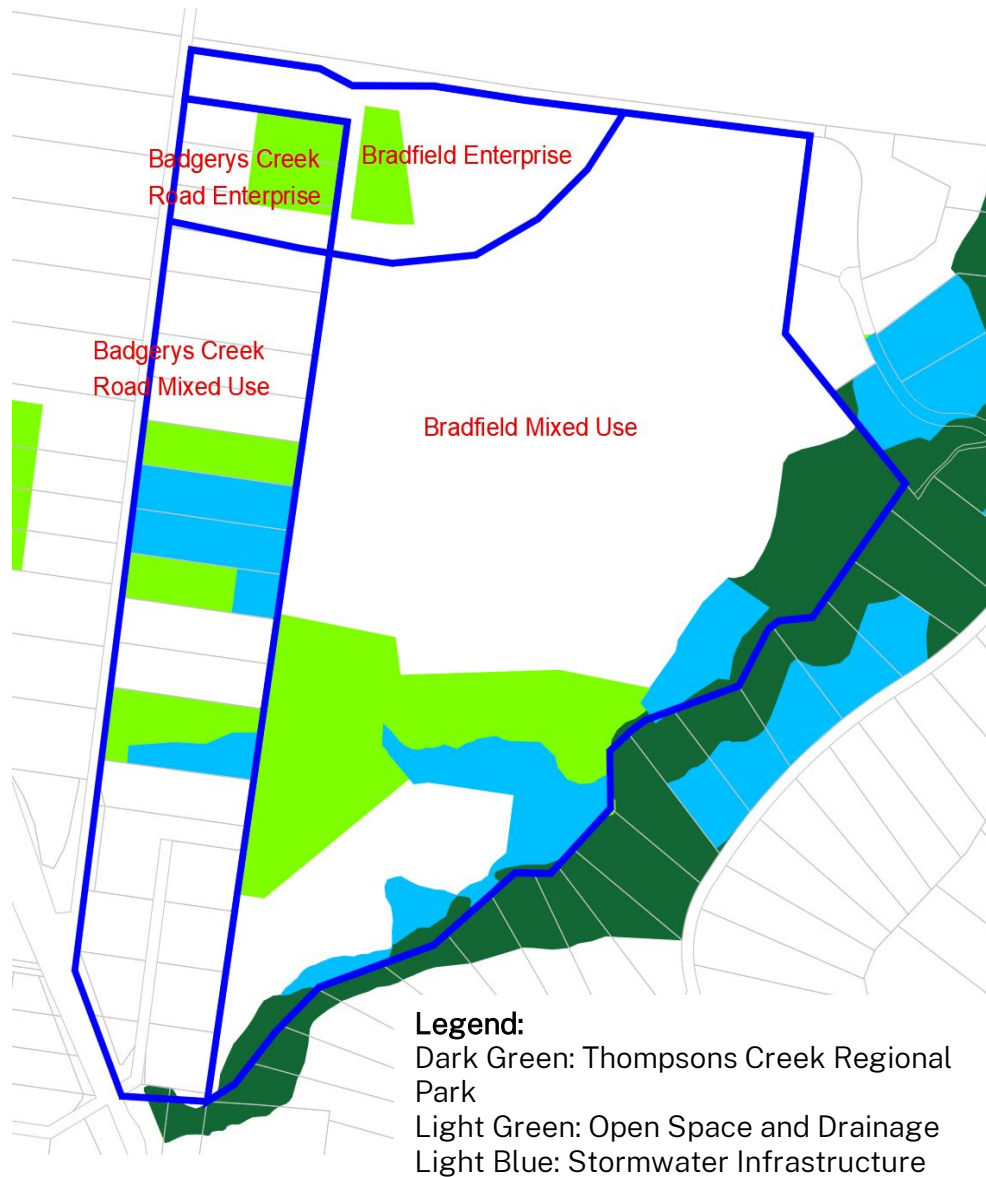
The following table identifies the items earmarked for the Bradfield City Centre under the WSAPP and provides a response to each.

Roads	Comment
Primary arterial road (rapid bus) (Metrolink Boulevard)	Covered by the SIC framework and discussed in Section 3.1
Collector Roads	Covered by the Draft CP 2023 and discussed in Section 2.2
Local streets	Not covered by a contributions framework – delivered as a development cost
Park edge streets	Not covered by a contributions framework – delivered as a development cost

4.3.2 State Environmental Planning Policy (Precincts – Western Parkland City) 2021

As discussed in Section 3.2, the Land Acquisition Map under the Western Parkland City SEPP identifies the proposed acquisition of land within the Bradfield City Centre for a variety of purposes, as represented in Figure 14 below.

Figure 14 - Reproduction of SEPP Land Acquisition Map



The following table (Table 16) provides a summary of the proposed land acquisition under the SEPP, in so far as it relates to the Bradfield City Centre boundary (identified in the above plan as “Bradfield Enterprise” and “Bradfield Mixed Use” for clarity).

Table 16 Western Parkland City SEPP Land Acquisition				
Purpose	Relevant Acquisition Authority	Area (ha)	Contributions Framework	Comment
Regional Park (Thompsons Ck Regional Park)	Planning Ministerial Corporation	7.1	SIC	Refer Section 3.1
Local Open Space & Drainage	Liverpool Council	15.5	Draft CP	Refer Section 2
Stormwater Infrastructure	Sydney Water Corporation	7.5	SWC DSPs	Refer Section 3.2

Each of the proposed land acquisition items under the Western Parkland City SEPP have previously been discussed under the relevant contributions framework identified above.

5. Development Staging

Figure 15 below provides an indication of the intended staging for the delivery of the Bradfield City Centre, comprising:

Stage 1 – Mixed use and enterprise Land on the western side of, and including, the Transit Street (main north/south link);

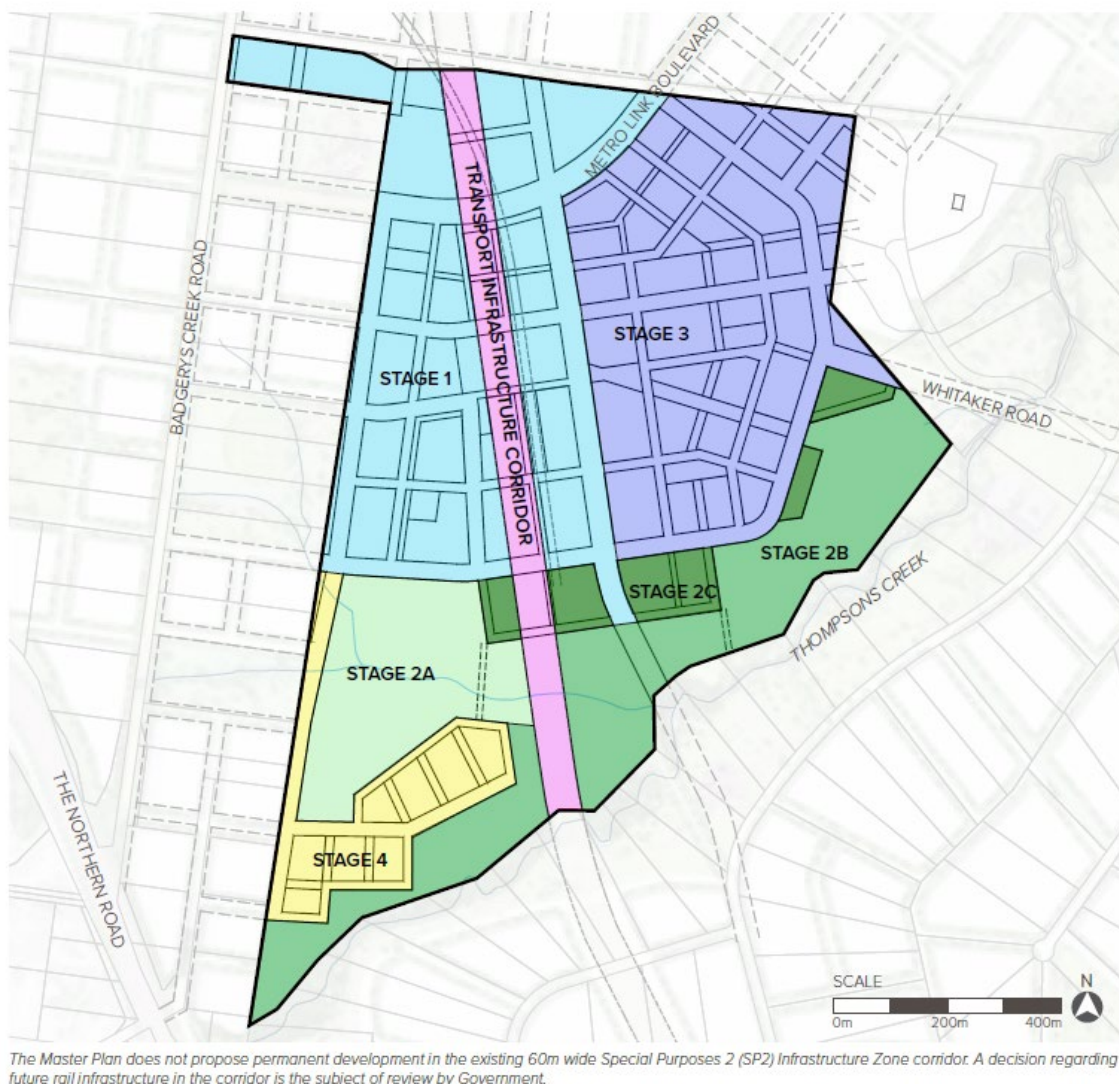
Stage 2A, 2B - Moore Gully and Thompsons Creek open space

Stage 2C – Mixed use land at the southern end of the site

Stage 3 – Mixed use land on the eastern side of the Transit Street

Stage 4 - Mixed use land at the southern boundary accommodating residential development

Figure 15 – Preliminary Staging Plan



The following table (Table 17) provides a high-level summary of the estimated employment generation and residential population over the short (2026), medium (2036) and long term (2056) planning horizons.

Phase	Indicative Timeframe	Estimated employment	Estimated residential population	Estimated Gross Floor Area (cumulative)
Immediate	2026	1,000 - 1,200 jobs	0 residents	48,500sqm
Medium-term	2036	8,000 - 8,300 jobs	3,000 - 3,100 residents	341,000sqm
Long-term	2056 +	20,000 + jobs	15,000 – 23,000 residents	1,258,000 sqm +

Note: The table above is an estimate of the population and employment forecast used for the purposes of modelling only.

The master plan has the capacity to accommodate ~ 10,000 residential dwellings up to and beyond 2056. In accordance with NSW Government policy a proportion of the residential dwellings will be affordable housing. The timing and delivery of residential dwellings will be subject to market demand and conditions.

6. Critical Infrastructure Delivery

There are a number of higher order infrastructure items that are critical to support the short to medium term development of the Bradfield City Centre. The critical infrastructure has been identified on the basis of the items that are essential for delivery/commissioning in order for early development within Bradfield to be functional. Table 18 below identifies this critical infrastructure along with key delivery details.

Table 18 Critical Infrastructure			
Name of Critical Infrastructure Item	Relevant Contribution Framework	Likely Delivery Party	Delivery Month/ Year
Road Infrastructure			
Transit St (main north/south link within BCC)	SIC & Draft CP	WPCA	Pre 2026
Metrolink Boulevard within BCC (new regional road)	SIC	WPCA	Pre 2026
Collector Roads west of Transit St	Draft CP	WPCA	Pre 2026
Trunk Infrastructure			
Trunk water main along Badgerys Creek Rd	Proposed water DSP	SWC	Feb 2024
Thompsons Ck trunk sewer carrier	Proposed waste water DSP	SWC	End 2026
Twin 11 kVA feeders from Bradfield North zone substation(~2km)	n/a	Endeavour Energy	Early 2025
Stormwater Management (within Moore Gully/Thompsons Creek)	Proposed SWC stormwater DSP	WPCA in part	Initial infrastructure early 2025
Interim Infrastructure for AMRF First Building			
Temporary OSD basin	n/a	WPCA	Mar 2024
Interim operating sewer (truck pump-out)	n/a	WPCA	Mar 2024
Part road construction from Badgerys Creek Road	n/a	WPCA	Mar 2024

7. Infrastructure Staging

Based on the preliminary staging plan identified in Section 5, this section provides a high-level understanding of the likely sequencing of, and requirement for, key infrastructure to support the intended staging program. Figure 16 below provides the location of these items, to be cross referenced with further detail available in Table 19.

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Figure 16 – Key Infrastructure Locations

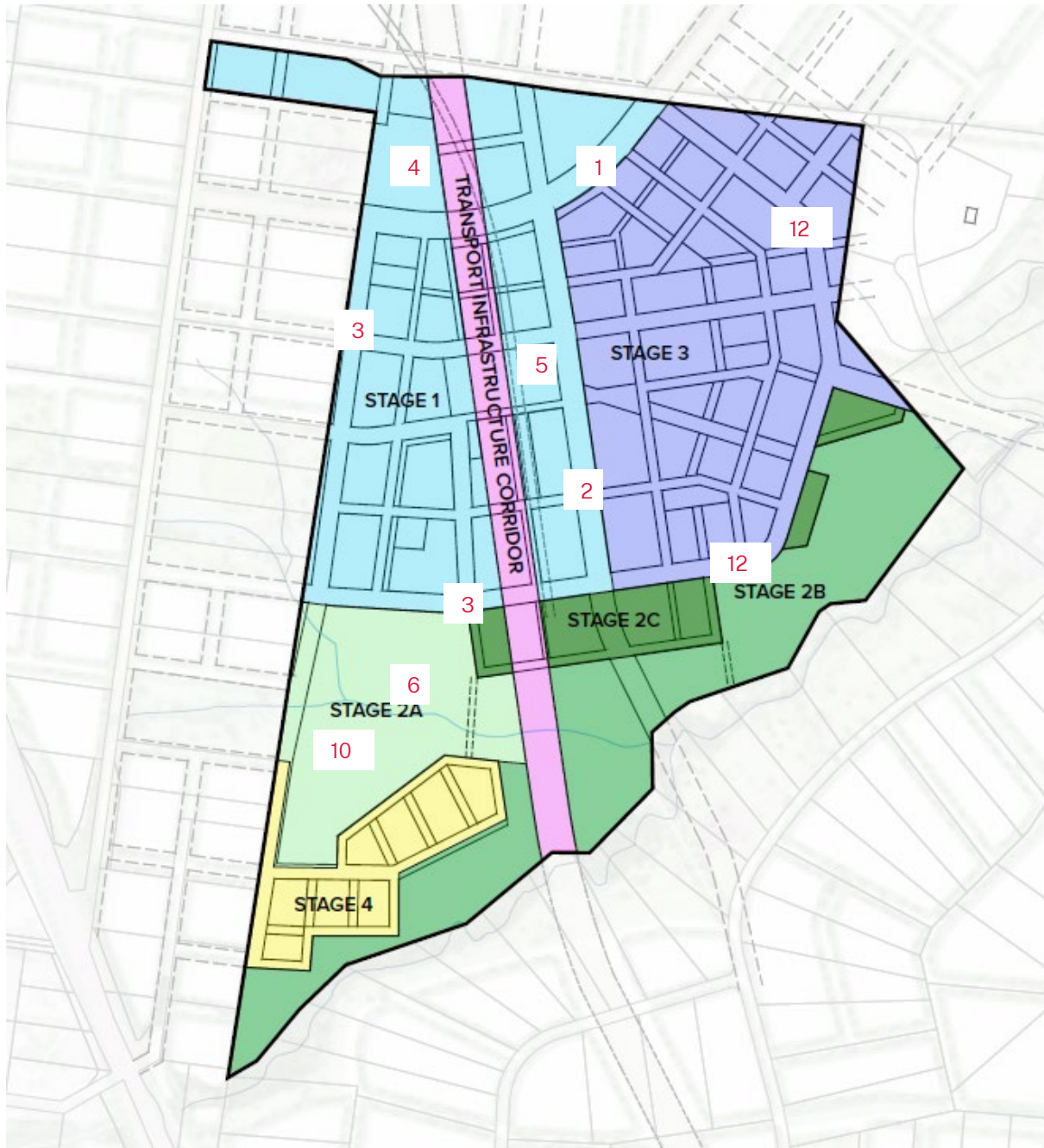


Table 19 Staging and Key Infrastructure Sequencing							
Item	Description	Likely Delivery Party			Timeframe		
		Local	State	Proponent	Short	Medium	Long
Stage 1							
Road Infrastructure							
1	Metrolink Boulevarde (within BCC)			X	Pre 2026		
2	Transit St ¹ (main north/south link)			X	Pre 2026		
3	Collector roads west of Transit St			X	Pre 2026		
Open Space							
4	Ridge Park			X	Pre 2026		
5	Central Park			X	Pre 2026		
Stormwater Management							
6	Moore Gully public stormwater works			X	Pre 2026		
Trunk Services							
7	Trunk water main – Badgerys Ck Rd	Sydney Water			Feb 2024		
8	Thompsons Ck trunk sewer carrier	Sydney Water			End 2026		
9	Twin 11kVA feeders	Endeavour Energy			2025		
Stage 2A							
10	Moore Gully open space embellishment			X	2026/27		
Stage 2B							
11	Thompsons Creek open space embellishment			X		2030	
Stage 2C							
2	Transit St ¹ (main north/south link)			X		2030	
Stage 3							
Road Infrastructure							
12	Collector roads east of Transit Street			X		+2035	

Notes:

1. Transit Boulevarde Bus Only Trigger – Transit street and bus interchange to be converted to bus-only as soon as alternative street link/s and traffic paths become available

The identified timing of the abovementioned infrastructure has been based on and/or has had regard to the following:

- 1) The outcomes of the Transport Management and Accessibility Plan (TMAP) prepared in support of the proposed masterplan;

- 2) The provision of a staged road network that achieves efficient, yet convenient, access throughout the precinct, in a manner commensurate with estimated employment and residential forecasts;
- 3) Currently available information from service authorities, in particular Sydney Water Corporation and Endeavour Energy, in relation to the likely timing of key trunk infrastructure assets; and
- 4) Identification of expected infrastructure required to be commissioned/delivered, in order to support future built form development.

8. Recommendations and Actions

This Infrastructure Delivery Strategy has undertaken a review of the state and local infrastructure requirements outlined in the Western Sydney Aerotropolis SIC and the Draft CP, prepared by the State Government and Liverpool Council respectively, to support the development of Bradfield City Centre and Western Sydney Aerotropolis more broadly. The strategy has identified the overall list of infrastructure items for which contributions are being levied for and has provided a preliminary schedule of the items for which WPCA currently intend to deliver under a WIK Agreement with the relevant authorities.

The strategy has also identified the nature of, and responsibility for, the critical infrastructure (roads and utilities) that is necessary to support the development of the Bradfield City Centre in the short to medium term and has provided a high-level infrastructure sequencing plan that aligns with the proposed staged delivery intentions of WPCA.

A number of short to medium term actions have been identified to ensure the timely provision of infrastructure for the Bradfield City Centre, including:

- 1) Discussions with Liverpool City Council in relation to the location of the land earmarked for acquisition for community purposes within the Bradfield City Centre under their Draft CP;
- 2) Continue to liaise with Sydney Water Corporation and Endeavour Energy regarding the progression of the key trunk infrastructure items to ensure their funding and delivery in a timely manner;
- 3) Continue to work with DPE, TfNSW and Liverpool City Council regarding the scope and value of the preliminary list of items currently intended to be delivered by WPCA, with a view to reaching agreement on the provisions of a works-in-kind agreement with DPE for state-based contribution items and Liverpool City Council for local contribution items;