

# DCI Canberra Data Centre Project Scoping Report

October 2021





Prepared for:



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*striving for balance between economic, social and environmental ideals...*

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## DISCLAIMER

This document was prepared for the sole use of DCI Data Centers (DCI) and the regulatory agencies that are directly involved in this project, the only intended beneficiaries of our work. No other party should rely on the information contained herein without the prior written consent of PJEP Environmental Planning and DCI.



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# 1 INTRODUCTION

## 1.1 Overview

NineZero DC Sub TC I Pty Ltd (trading as DCI Data Centers, or DCI) is proposing to develop a new state-of-the-art data centre in the Poplars Innovation Precinct at Jerrabomberra, in the Queanbeyan-Palerang local government area (LGA) (see **Figures 1 to 3**).

This report has been prepared by PJEP Environmental Planning Pty Ltd (PJEP) on behalf of DCI to assist the Department of Planning, Industry & Environment's (the Department's) initial consideration of the development as State Significant Development under the *Environmental Planning and Assessment Act 1979* (EP&A Act).

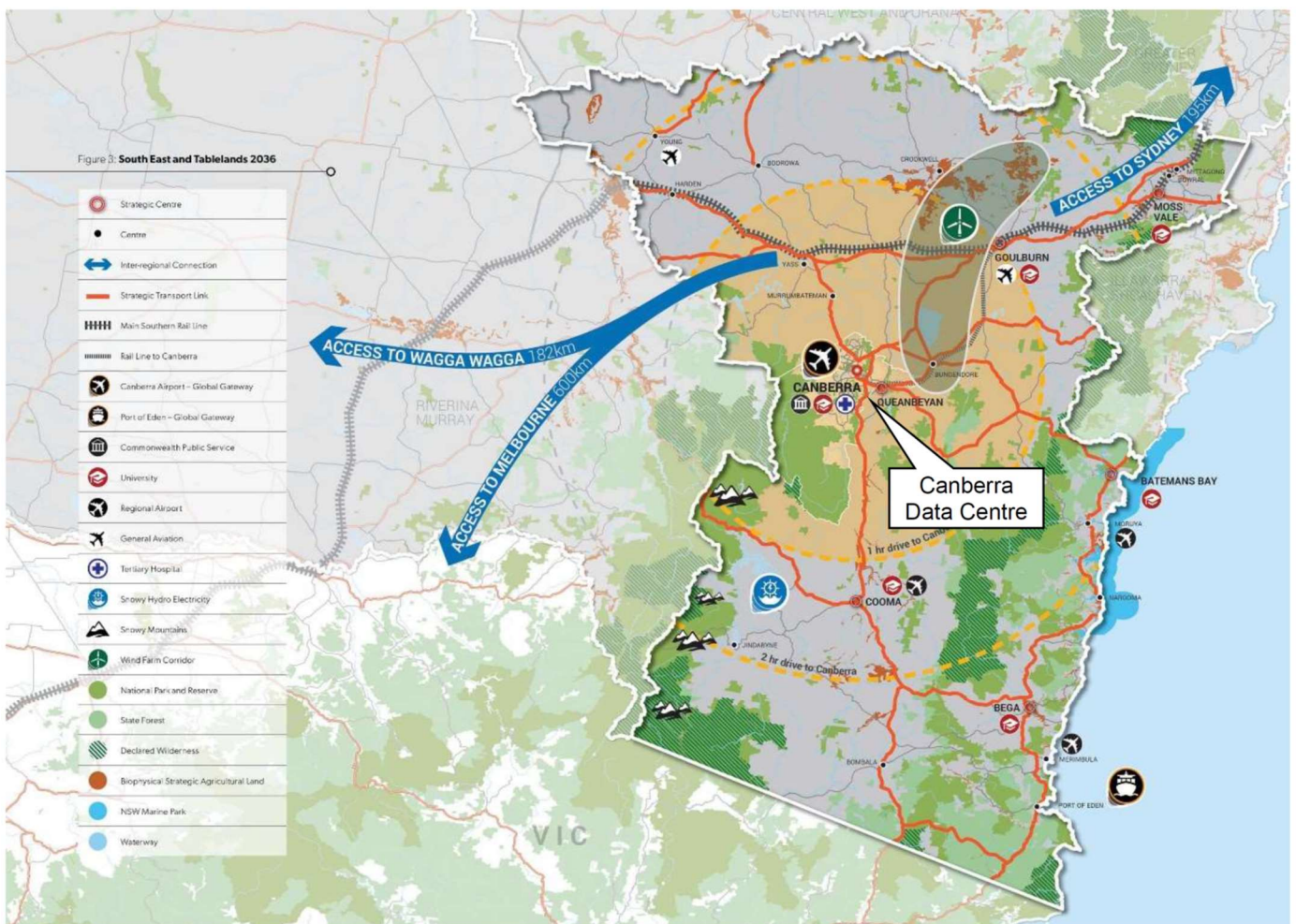


Figure 1: Regional Context (Source: Department)

## 1.2 DCI Data Centers

DCI is a leading wholesale data centre provider, providing customers with wholesale data storage, fully serviced co-location, connectivity, and business continuity solutions across Asia Pacific. DCI serves a range of cloud service providers, managed service providers, enterprise, and government agencies from its secure, reliable, and certified data centre facilities.



Led by a highly experienced management team, DCI's mission is to become the preferred partner in the Asia Pacific region for the delivery of highly secure data centre solutions located from the hyperscale core to the connected regional edge.

DCI is a subsidiary of Brookfield Asset Management and its investment partners. Known for their work in critical infrastructure around the world, Brookfield has invested in growth platforms like DCI to help build better connected digital economies.

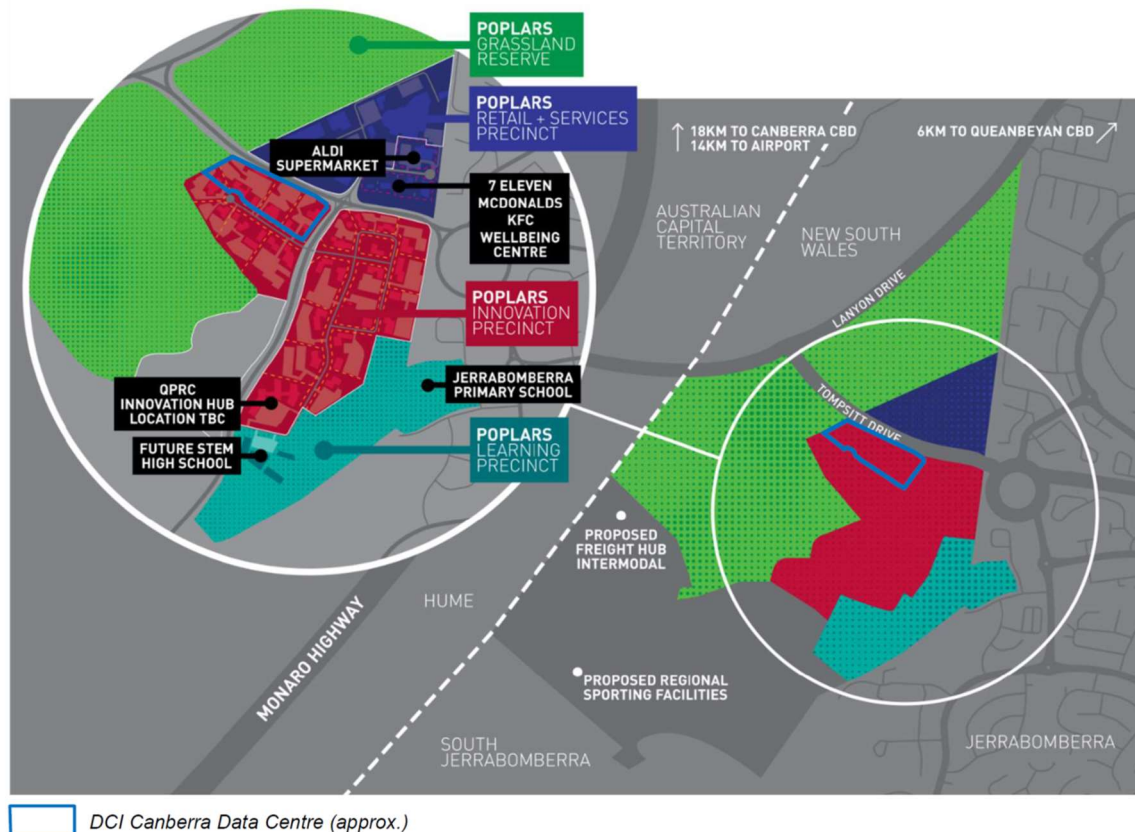
DCI's management team has experience in the design and management of over 500,000 square metres of data centre and technology real estate across the world. The company currently operates two data centres in Australia, with one in Western Sydney and the other in Adelaide.

## 2 THE SITE

### 2.1 Poplars Innovation Precinct

The Poplars Innovation Precinct is a new business park which forms part of the broader development of the South Jerrabomberra locality in the Queanbeyan-Palerang LGA. The precinct is being developed by the estate owner, Poplars Developments Pty Ltd (Poplars).

The Precinct is located approximately 5 kilometres south-west of Queanbeyan and 10 kilometres south-east of Canberra near the NSW/ACT border (see **Figures 2 and 3**). It is conveniently located close to major transport and infrastructure links, including the Monaro Highway located about 2 kilometres to the west (via Lanyon Drive), and high voltage transmission lines located on the ACT/NSW border.



**Figure 2: Poplars Precinct Master Plan (Source: Poplars)**



 DCI Canberra Data Centre (approx.)

**Figure 3: Poplars Innovation Precinct Stage 1 Master Plan (Source: Poplars)**



The Precinct has been earmarked for employment and related urban purposes for some time, with the Innovation Precinct rezoned from rural to business purposes by Queanbeyan-Palerang Regional Council (Council) in 2013, in accordance with a Structure Plan for the wider South Jerrabomberra area.

The Poplars Retail and Service Precinct (Stage 1), located to the north of Tomsitt Drive, has been under development since 2017. This has involved development of key precinct infrastructure (including a new intersection with Tomsitt Drive), as well as the development of a number of retail and service businesses.

The Poplars Innovation Precinct covers some 35 hectares to the south of Tomsitt Drive, and is proposed to be developed for a range of business and employment purposes, with a focus on technology sectors including:

- Space and Defence Sectors;
- Information and Communication Technologies; and
- Scientific Research Services.

The proposed DCI Data Centre site forms part of Stage 1 of the Innovation Precinct (also known as Polars Innovation Precinct – West).

In July 2021, Council approved a development application (DA 2020.1427) from Poplars for the estate works required for the Innovation Precinct Stage 1, including:

- estate subdivision;
- vegetation clearing across the estate;
- bulk earthworks across a portion of the estate; and
- infrastructure development, including construction of an estate road from Environa Drive.

The approved subdivision plan is shown on **Figure 4**, and the full set of approved plans is attached in **Appendix A**. Estate works and infrastructure development are currently underway.

The estate approvals and development mean that some of the environmental issues associated with the proposed development of the DCI Data Centre – such as biodiversity and cultural heritage – have already been addressed as part of the wider estate development.

## 2.2 DCI Data Centre Site

The proposed DCI Canberra Data Centre is located at 300 Lanyon Drive, Jerrabomberra NSW 2619 (the site). The current real property description of the site is Part Lot 1 in DP 1263364, although Lot 1 is being subdivided by Poplars as part of the estate works. The site is nominally identified as Lot 6 on the approved subdivision plan (see **Figure 4**).

The site has a total area of approximately 4.1 hectares. It is currently owned by Poplars, although DCI is in the process of acquiring the site.

## 2.3 Land Use

The site is currently vacant, with estate works currently underway to enable the site to be used for business/employment purposes.

Prior to the commencement of estate development for the Poplars Innovation Precinct, the site had been used for broad acre agricultural (grazing) purposes (see **Figures 5 and 6**).

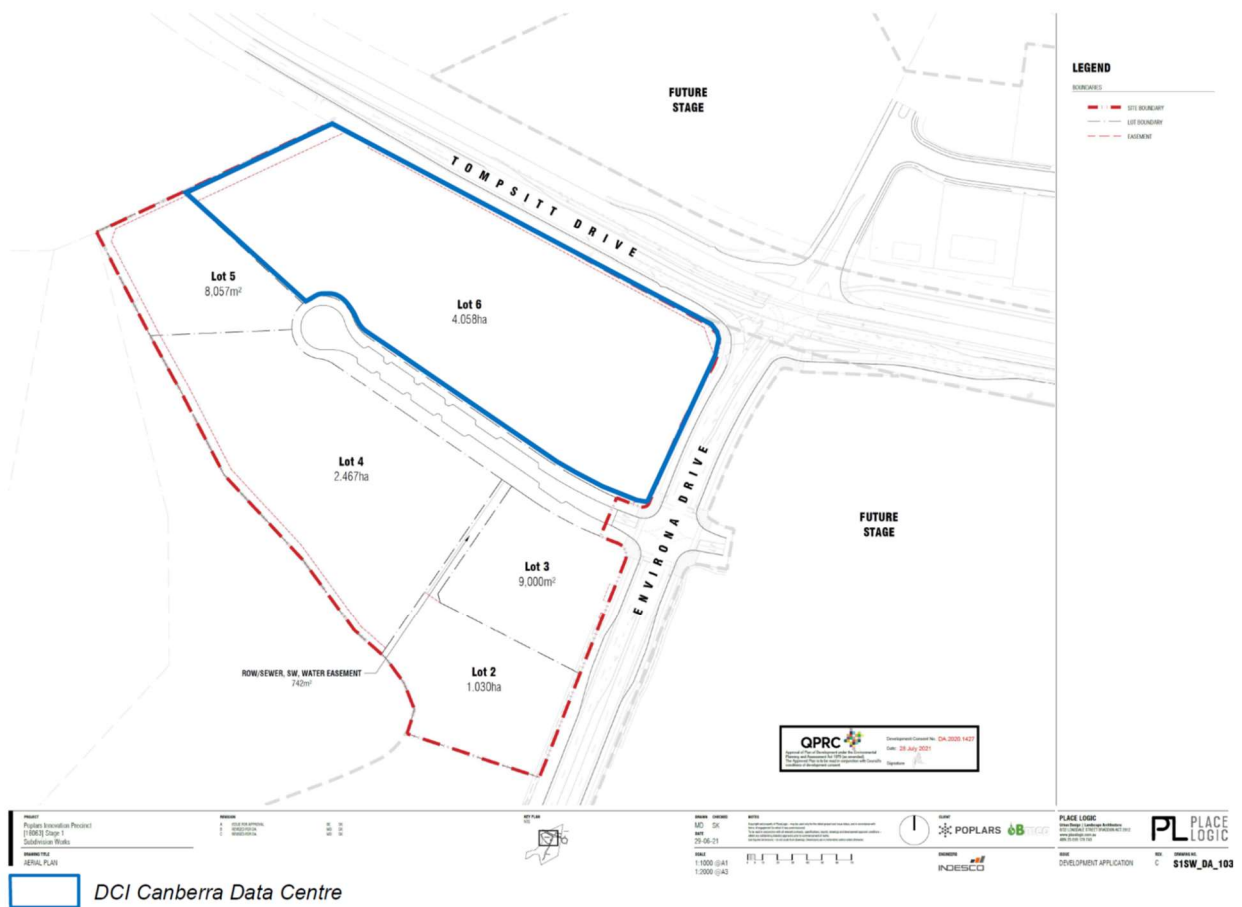



Figure 4: Approved Estate Subdivision Plan (Source: Poplars)



Figure 5: Aerial Photo – Locality (Source: Sixmaps)



 DCI Canberra Data Centre

**Figure 6:** Aerial Photo – Site (Source: Sixmaps)

Land use surrounding the site is currently undergoing transformation from the historical rural land uses to more urban land uses as part of the development of the Poplars Precinct. Land use immediately surrounding the site includes:

- North – Tomsitt Drive and future Innovation Precinct land, beyond which is the Poplars Grassland Reserve environmental conservation area;
- East – Envirova Drive and future Innovation Precinct land, beyond which is the existing South Jerrabomberra residential area, as well as Jerrabomberra Public School and commercial area;
- South – Poplars estate road (under construction) and additional Innovation Precinct Stage 1 land, beyond which is additional future Innovation Precinct land and the Poplars Grassland Reserve; and
- West – Poplars Grassland Reserve, beyond which is the Goulburn-Bombala Railway Line, Lanyon Drive and the Monaro Highway. Hume Industrial Estate is located to the south-west, adjacent to the Monaro Highway.

The nearest sensitive receivers are the residents of Jerrabomberra to the east of the site, the closest of which are approximately 380 metres from the site. Additional residential areas are located approximately 500 metres to the south-east and 750 metres to the south.

## 2.4 Existing Environment

The site slopes gently from south to north towards Tomsitt Drive, with an elevation ranging from 622 mAHD in the south-western area of the site, to 616 mAHD in the north-eastern area.

The site is predominantly cleared, with only a small number of isolated paddock trees scattered around the site.

There are no creeks or defined drainage lines on or in proximity to the site, although until recently there was a small farm dam located in the eastern part of the site. The nearest significant waterbody is Jerrabomberra Creek, located approximately 650 metres to the south of the site.

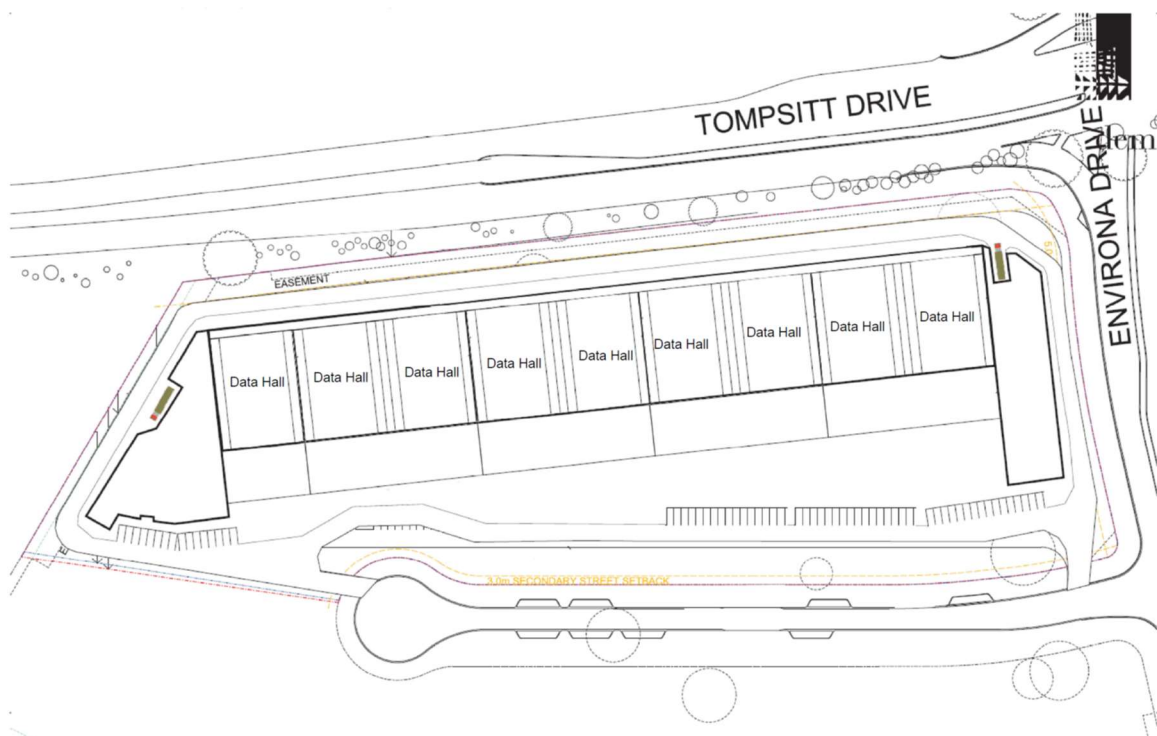


As outlined in Section 2.1, the estate approvals provide for clearing and bulk earthworks across a portion of the estate (including the site) to facilitate the development of the estate (see **Appendix A**). Vegetation clearing (across the whole site) and filling of the farm dam is being undertaken by Poplars under these approvals.

### 3 PROPOSED DEVELOPMENT

DCI is proposing to develop a state-of-the-art data centre on the site. A preliminary concept site plan is shown on **Figure 7**, and is attached in **Appendix B**. It is noted that the plan is in preliminary form only, prepared for test fitting purposes. It is likely that the layout of the facility will change as design progresses.

The main components of the proposed development are outlined in **Table 1**.



**Figure 7:** Preliminary Conceptual Site Plan (Source: DEM)

**Table 1:** DCI Canberra Data Centre Development Summary<sup>1</sup>

<b>Development Summary</b>	<b>Construction and operation of the DCI Canberra Data Centre, including:</b> <ul style="list-style-type: none"> <li>• <b>bulk and detailed earthworks;</b></li> <li>• <b>construction and operation of the data centre facility; and</b></li> <li>• <b>ancillary development including car parking, infrastructure provision and landscaping</b></li> </ul>
<b>Proposed Use</b>	Data storage, with ancillary office and services
<b>Demolition, Clearing and Earthworks</b>	Demolition of minor structures (such as fencing and existing services). Clearing and earthworks are being undertaken as part of the estate works. Additional bulk and detailed earthworks would be undertaken across the site to facilitate the development
<b>Facility Development</b>	Construction and operation of the data centre, including: <ul style="list-style-type: none"> <li>• a new one or two level data centre building with a nominal floor area of approximately 15,000m<sup>2</sup>; and</li> <li>• ancillary offices, plant and services</li> </ul>
<b>Power Consumption</b>	Nominal total power capacity of 18-20 MW



<i>Landscaping</i>	Implementation of site landscaping consistent with estate landscaping
<i>Signage</i>	No significant signage proposed, other than directional signage
<i>Staging</i>	The new facility may be constructed over a number of stages
<i>Hours of Operation</i>	24 hours a day, 7 days a week
<i>Capital Investment Value</i>	\$>50 million (exc. GST)
<i>Employment<sup>1</sup></i>	Construction: 150 Operation: 12
<i>Infrastructure and Services</i>	
<i>Access and Roads</i>	Access would be provided via the internal estate road (cul-de-sac). No external roadworks are required
<i>Stormwater</i>	On-site stormwater collection and treatment, with connection to the existing estate infrastructure and/or Tomsitt Drive
<i>Electricity</i>	Connection to the proposed new zone substation which will be located directly to the south-west of the site (being constructed by Essential Energy under separate approval)
<i>Back-up Diesel Generators</i>	Yet to be determined, but preliminary planning indicates that 10 x 2 MW diesel generators may be required, with approximately 30,000 L of diesel storage
<i>Potable Water, Sewer and Telecoms</i>	Extension and connection to existing mains in the estate and/or Tomsitt Drive, and reticulation through the site

<sup>1</sup> Based on preliminary concept planning only

## 4 PLANNING CONTEXT

### 4.1 State Significant Development

The proposal classifies as State Significant Development under Part 4, Division 4.7 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), as it involves development for the purpose of data storage with a total power consumption of more than 10 MW, and therefore triggers the criteria in Clause 25 of Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011*.

Consequently, the Minister for Planning and Public Spaces<sup>1</sup> is the consent authority for the proposed development.

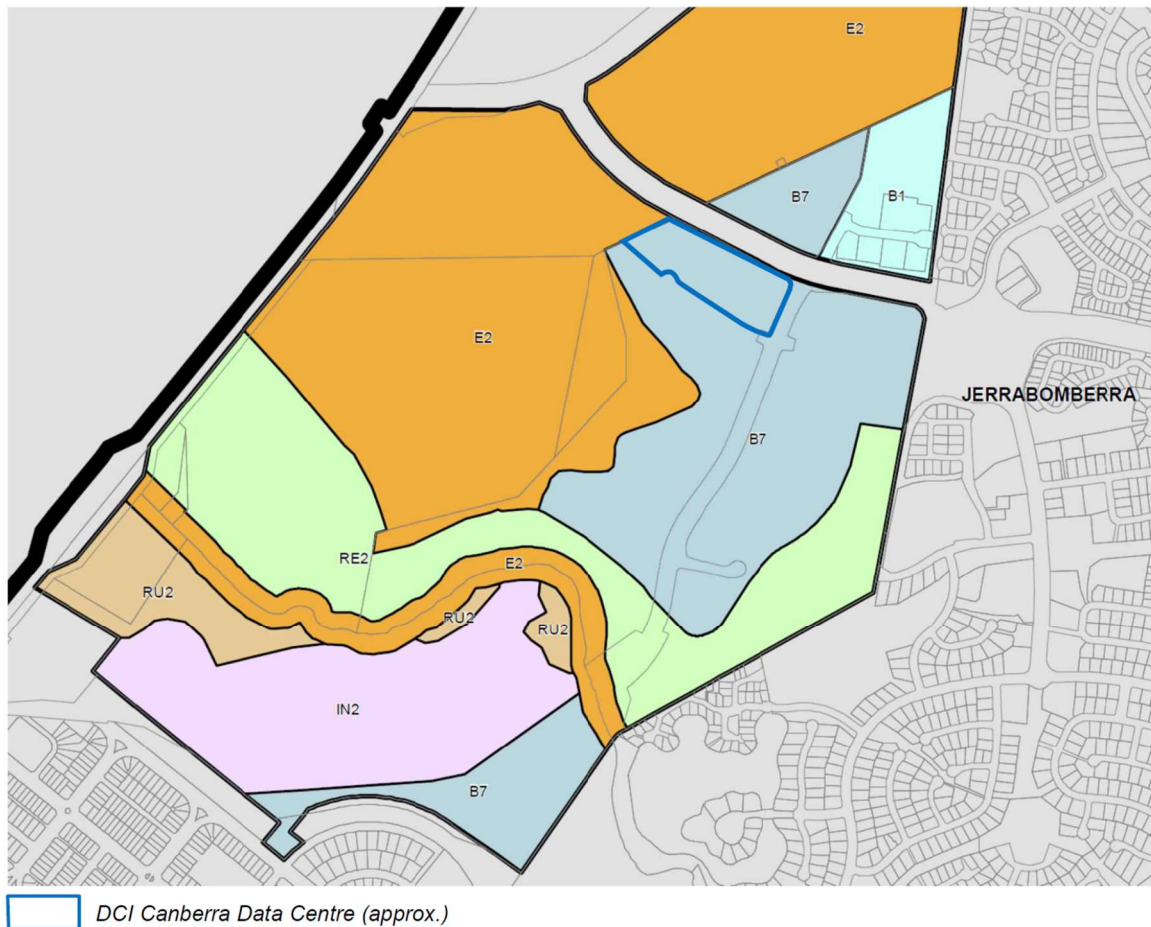
### 4.2 Permissibility

The site is zoned B7 Business Park under the *Queanbeyan Local Environmental Plan (West Jerrabomberra) 2013* (the LEP) (see **Figure 8**).

Data centres are nominally prohibited in the B7 zone under the LEP, as an innominate use. However, it is noted that data centres are not a defined use under the LEP, and it is also noted that warehouse and distribution centres (and light industries) are permissible with consent in the B7 zone, which are similar forms of development.

Notwithstanding the permissibility under the LEP, data storage facilities are permissible with consent in any B7 zone under clause 27 of the *State Environmental Planning Policy (Infrastructure) 2007* (the Infrastructure SEPP), which prevails over the LEP.

<sup>1</sup> Or the Independent Planning Commission if the proposal subsequently meets certain thresholds.



**Figure 8:** Zoning Plan (Source: NSW Planning Portal)

### 4.3 Environmental Planning Instruments

Environmental planning instruments of relevance to the proposed development include:

- *State Environmental Planning Policy (State and Regional Development) 2011* (State and Regional Development SEPP);
- *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP);
- *State Environmental Planning Policy (Koala Habitat Protection) 2021* (Koala Habitat SEPP);
- *State Environmental Planning Policy No 33 – Hazardous and Offensive Development* (SEPP 33);
- *State Environmental Planning Policy No 55 – Remediation of Land* (SEPP 55);
- *State Environmental Planning Policy No 64 – Advertising and Signage* (Advertising and Signage SEPP); and
- *Queanbeyan Local Environmental Plan (West Jerrabomberra) 2013*.

In addition to these instruments, the following Development Control Plans (DCPs) are also of relevance to the proposal:

- *South Jerrabomberra Development Control Plan 2015*; and
- *Queanbeyan Development Control Plan 2012*.

Preliminary review indicates that the proposed development can be undertaken in a manner that is generally consistent with the aims, objectives, development standards and controls in these instruments.

The Environmental Impact Statement (EIS) will provide detailed consideration of these and any other environmental planning instruments.



## 5 ENGAGEMENT

Preliminary consultation has been undertaken with the Department to introduce the proposed development and seek confirmation of the planning process for the proposal.

DCI has also consulted with the electricity services provider, Essential Energy, in relation to electrical servicing requirements for the proposed data centre.

A detailed engagement strategy will be implemented during preparation of the EIS for the proposal, including consultation with applicable State government authorities, Council, the Local Aboriginal Land Council, and surrounding landowners. The consultation strategy and outcomes will be outlined in the EIS.

## 6 ENVIRONMENTAL ISSUES

A screening analysis of the environmental issues applicable to the proposal is presented in the following table. This risk-based analysis has been used to identify the key environmental issues for further assessment, and to assist the preparation of the Secretary's environmental assessment requirements (SEARs) for the proposed development.

The analysis is based on preliminary environmental assessment of the site only. The EIS for the proposal will fully address these and other environmental issues relevant to the proposal.

**Table 2: Screening Analysis of Environmental Issues**

<b>Issue</b>	<b>Analysis / Comment</b>
<i>Soil and Water</i>	<p>The site slopes moderately to the north towards Tomsitt Drive, and is unlikely to present significant erosion and sedimentation risks. Notwithstanding, an Erosion and Sediment Control Plan will be developed for the proposal.</p> <p>Previous site contamination assessments of the estate indicate that the site does not contain significant or widespread contamination risk. Additional preliminary site contamination undertaken by DCI further found that the site is suitable for the proposed use. These contamination assessments will be detailed in the EIS.</p> <p>There are no creeks or defined drainage lines on or in proximity to the site. The nearest significant waterbody is Jerrabomberra Creek, located approximately 650 metres to the south of the site. The proposal is not expected to result in any significant impact to this creek or other waterbodies in the area. The site is not identified as flood prone land, and preliminary flood assessment undertaken by DCI indicates that there are no significant flood-related constraints to development of the site.</p> <p>Stormwater management for the Poplars Innovation Precinct is being partly addressed through estate infrastructure, although stormwater management for individual lots will be required including on-site detention and stormwater quality management. A Stormwater Management Plan will be prepared for the proposed facility. The plan will include stormwater quantity and quality modelling, as well as measures to ensure water use efficiency (through rainwater collection and use).</p>
<i>Noise</i>	<p>The data centre is proposed to operate up to 24 hours a day, 7 days a week.</p> <p>There are no sensitive receivers in the immediate vicinity of the site, with the nearest residential area located approximately 380 metres to the east. Notwithstanding, given the proposed 24 hour operations a noise assessment will be undertaken for the proposal.</p>
<i>Air Quality and Greenhouse Gases</i>	<p>The proposal is not expected to generate significant air or greenhouse gas emissions during day-to-day use, subject to implementation of standard best practice dust management controls during construction works, and energy efficiency measures during operations. Energy efficiency measures will be detailed for the proposal.</p>



<i>Issue</i>	<i>Analysis / Comment</i>
	<p>The back-up diesel generators do have the potential for short term emissions when in use during power outages. Consistent with contemporary data centre proposals, an air quality assessment will be undertaken for the proposal to assess these potential impacts.</p>
<i>Biodiversity</i>	<p>Biodiversity assessment and management, including biodiversity offsetting, has been addressed by Poplars as part of the estate development. In this regard, the estate development involves clearing of all vegetation across the estate including the site, and included a comprehensive Biodiversity Development Assessment Report (BDAR) to assess these impacts.</p> <p>The BDAR identified some areas of Box Gum Woodland<sup>2</sup> endangered ecological community (EEC) within the estate, as well as the threatened Golden Sun Moth, both of which are critically endangered under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) and the NSW <i>Biodiversity Conservation Act 2016</i> (BC Act).</p> <p>To offset the residual impacts of the development of the Poplars Innovation Precinct (including the site) on these threatened species/communities, the estate approval requires Poplars to retire ecosystem and species credits under the BC Act (see <b>Appendix C</b>). Poplars also obtained Commonwealth approval under the EPBC Act for the residual impacts on Matters of National Environmental Significance (Approval No. EPBC 2020/8801 – see <b>Appendix C</b>).</p> <p>As biodiversity assessment, management and offsetting has been addressed at the estate level, no further biodiversity assessment is considered to be required at the site level for the proposed data centre, and a BDAR waiver request is attached as <b>Appendix C</b>. The EIS will include a summary of the biodiversity assessments undertaken for the estate.</p>
<i>Heritage</i>	<p>Detailed cultural heritage assessments have been undertaken for the Poplars Innovation Precinct, most notably a comprehensive assessment undertaken in 2003, which has guided the rezoning and estate development.</p> <p>The research indicates that no known Aboriginal cultural heritage sites are located on the site. 101 Aboriginal sites are located within 3 km of the site. There are no listed historical heritage items on the site, or in the vicinity of the site.</p> <p>Given these assessments, and that the site is being disturbed as part of the estate works, it is considered unlikely that the project would have any significant impact on heritage values. Notwithstanding, the EIS will include consideration of the potential impacts on Aboriginal and non-Aboriginal cultural heritage.</p>
<i>Traffic and Parking</i>	<p>The data centre would only generate moderate traffic volumes. Unlike typical warehouse and industrial facilities, data centres comprise large areas of static data servers and equipment, and do not generate significant truck/delivery demand, and have relatively low staff densities compared to total floor area. As such, data centres generate lower parking demand compared to typical warehouses and industrial facilities.</p> <p>Notwithstanding, a traffic and parking assessment for the proposal will be prepared for the proposal. The assessment will include consideration of parking supply on a merit basis.</p>
<i>Visual Amenity</i>	<p>As outlined above, there are no sensitive receivers in the immediate vicinity of the site, with the nearest residential area located 380 metres to the east. Business-zoned land is located between the residential areas and the site, and as such the site is unlikely to be visible from these receivers upon development of the Poplars Innovation Precinct.</p> <p>The data centre would be visible from Tomsitt Drive and the Poplars Grassland Reserve to the north and west of the site, as well as the internal estate road to the south. Design of the</p>

<sup>2</sup> White Box-Yellow Box-Blakely's Red Gum Woodland under the EPBC Act, and Yellow Box grassy woodland of the northern Monaro and Upper Shoalhaven area, South Eastern Highlands Bioregion (PCT 1334) under the BC Act.



<i>Issue</i>	<i>Analysis / Comment</i>
	facility will pay particular regard to these frontages, and a Landscape Plan will be prepared for the proposal, which will seek to minimise visual impacts on the local area.
<i>Hazards and Wastes</i>	<p>The site is identified as bushfire prone land, and a bushfire assessment will be prepared for the proposal in accordance with the RFS's <i>Planning for Bushfire Protection</i> guidelines.</p> <p>The data centre is not expected to store significant quantities of dangerous goods, however the EIS will include consideration of dangerous goods storage against the requirements of SEPP 33. If the SEPP 33 thresholds are exceeded, a Preliminary Hazard Analysis will be undertaken for the proposal, in accordance with the requirements of SEPP 33.</p> <p>The proposal is not expected to generate significant quantities of waste. Nonetheless, a Waste Management Plan will be prepared for the proposal.</p>

## 7 CONCLUSION

PJEP trusts that the information contained in this report provides the Department sufficient information to enable its initial consideration of the proposal as State Significant Development under the EP&A Act.

It is respectfully requested that the Department, having due regard to the information in this report, provides the Secretary's Environmental Assessment Requirements for the proposed DCI Canberra Data Centre project.



## APPENDIX A



## APPENDIX B



## APPENDIX C