

Representation

Development Application Number: 202341633

Curtin, Section 99, Blocks 12 and 13

from the Curtin Residents Association Inc. (CRA)

Introduction

The CRA is a community organisation that serves the Curtin community by supporting projects and providing community-based advocacy. The CRA is supported by Curtin residents and is affiliated with the Woden Valley Community Council (WVCC).

This representation is based on community concerns communicated to the CRA through in-person meetings and emails. The primary area of concern is tree protection and preservation. Traffic management is also a concern.

The critical importance of tree protection and preservation

Protecting and preserving the existing trees on the site is critically important for two reasons: (1) mitigating the urban heat island effect because of its adverse impact on the health and well-being of future elderly residents and (2) meeting the ACT Government's objective of protecting and enhancing habitat in the ACT's blue-green network.

Mitigating the urban heat island effect

This site (Curtin, Section 99, Blocks 12 and 13) will be used for a village style dementia care facility. (See page 55 of the ACT Government's Indicative Land Release Program for 2023–24.) Consequently, the residents will be older people and so will be particularly vulnerable to high temperatures¹. This makes mitigating the urban heat island effect a critically important issue for the re-development of this site.

Establishing and maintaining high levels of 'green space' and tree canopy cover will be essential for mitigating the urban heat island effect. Land surface temperatures in suburban areas in Canberra with little tree canopy cover can be up to 10°C hotter than suburban areas with good tree canopy cover², for example.

Tree canopy cover needs to be at least 40% to provide cooling during the hottest part of the day when the elderly residents are most vulnerable to the adverse health impact of urban heat islands³. This means that protecting and preserving the existing trees on the site is essential. A high level of tree canopy cover will also provide an environment that is calming and conducive to good mental health.

¹ (a) *Heatwaves and Health in Australia*, Doctors for the Environment Australia, <http://dea.org.au/> and (b) ACT Urban Forest Strategy 2021-2045

² J Meyers, D Devereux, T Van Niel and G Barnett, Mapping surface urban heat in Canberra. CSIRO, Australia (2017)

³ Alonzo et. al., Spatial configuration and time of day impact the magnitude of urban tree canopy cooling, *Environ. Res. Lett.* 2021 <https://doi.org/10.1088/1748-9326/ac12f2>

Maintaining and enhancing the ACT blue-green network

This site is adjacent to a secondary connection in the ACT's blue-green network (see Figure 32: Woden – Blue-green network, page 101, Draft Woden District Strategy). The ACT's Government's planning objectives for such a connection include *Protect and enhance habitat for threatened species and their [ecological] connectivity with green corridors*. Meeting this objective requires protection and preservation of existing trees on the site.

Improving proposed actions to protect and preserve trees

The proposed actions proposed in the development application to protect and preserve trees are generally good; however, some improvements are necessary to (1) increase the protection of trees from damage during the demolition process and (2) increase the number of existing trees retained.

Increasing the level of protection of some trees so that they are not damaged during the demolition process is essential. The areas of concern are (a) protecting the root zone from damage by heavy machinery and (2) protecting tree limbs from inadvertent damage by moving machinery, which has been observed on knock-down - re-build sites in Curtin.

Both areas of concern can be addressed by increasing protective fencing around vulnerable trees. The fencing must be erected at the drip line of the tree canopy.

According to the Tree Management Plan (TREE-202341633-01.pdf)

Trees are to be protected by the use of Tree Protection Zones (TPZ) and Structural Root Zones (SRZ). The Tree Protection Zones adopt AS 4970 - 2009, or the area that coincides with the dripline of the tree canopy under mandatory TCCS requirements, whichever is the greater.

In addition to the TPZ, AS 4970-2009 uses a second protection zone called the Structural Root Zone (SRZ) which identifies the point at which works are likely to impact on the structural integrity of a tree if the roots are damaged. The TPZ is an area that should be isolated from construction disturbance so that the tree remains viable. The SRZ applies in this case due to major encroachment into a TPZ by proposed works. The radius of the protection zones are measured in metres from the center of the stem at ground level.

Calculated TPZ's and SRZ's for individual trees are presented on plan.

However, protective fencing shown in this Plan is often inside the Tree Protection Zone (TPZ) and/or the Structural Root Zone (SRZ) of a tree. So, **the extent of protective fencing must be increased so that the enclosed area encompasses the whole of the Tree Protection Zone (TPZ) and/or the Structural Root Zone (SRZ) of a tree.**

The following trees, as labelled in the Tree Management Plan are particularly at risk:
1, 3, 6, 14, 15, 16, 18, 40 to 49 inclusive, 58A, 59, 61, 87, A, A2, B and C.

Tree 19 (*Eucalyptus melliodora*) is outside, but adjacent to, the site and so could be affected by vehicles. It is a rare Yellow Box tree in an area that once was a Yellow Box-Red Gum woodland for which there are now only scattered remnants. It is an important tree in this ecosystem for birds and is part of the local habitat of the Gang Gang Cockatoo, an endangered species. **Protective fencing should be erected to enclose the TPZ and SRZ of tree 19.**

Tree B3: *Eucalyptus polyanthemos* – Red Box. This species is part of what was the original Yellow Box-Red Gum woodland ecosystem. Retaining this tree and, as proposed, the handful of other large eucalypts around the site, as well as protecting Tree 19 would go some way to providing important original habitat. **Consequently tree B3 should be retained and protected.**

Traffic management

Effective and safe traffic management for streets adjacent to the site will be crucial.

The site is bordered by Caruthers, Storey, Jenkins and Prendergast Streets. While Carruthers St is a secondary route with a wide carriageway, Storey, Jenkins and Prendergast Streets are narrow. They do not have footpaths. Storey Street is a cul de sac. Consequently, they are not suitable for large or heavy vehicles. The corner of Storey and Prendergast Streets has limited visual access for vehicles leaving the rear of the site and adjacent cul de sac. Consequently, all large or heavy vehicles should enter and leave the site by using the access point on Caruthers Street. The document PLAN-202341633-TRAFFIC_GUIDANCE-01.pdf appears to show that this is what is proposed.