



14 October 2022

Erilyan

Attention: Mike Ryan

Dear Sir,

RE: IMPACT ASSESSMENT OF TREES 41, 48, 49 – NORTHSIDE WEST CLINIC WENTWORTHVILLE

We wish to provide the following information regarding our assessment of the impact of the proposed development on Trees 41, 48 and 49. This information is supplementary to our previous Arboricultural Development Impact Assessment Report dated 22/06/2022.

The proposed development will encroach within the Tree Protection Zones (TPZ) of Trees 41, 48 and 49 by 18, 15 and 13% respectively. This level of encroachment is a major encroachment as defined by *AS4970-2009 Protection of Trees on Development Sites*.

When a major encroachment is considered under *AS4970-2009*, this Standard identifies within clause 3.3.4, a series of considerations that are required to be made by the **Project Arborist** in determining the viability of a tree when considering a major encroachment. These considerations include :

- (a) Location and distribution of roots, may be determined by root mapping,
- (b) Potential loss of root mass resulting from encroachment,
- (c) Tree Species and tolerance to root disturbance,
- (d) Age, vigour and size of the tree,
- (e) Lean and stability of the tree,
- (f) Soil characteristics, volume, topography and drainage,
- (g) Presence of existing or past structures (affecting root development)
- (h) Design factors

In the case of Trees 41, 48 and 49 on this site, the following considerations were made in formulating our assessment that these trees will remain viable within the proposed development:

- b) The potential loss of root mass resulting from the encroachment is 18%, 15% and 13% respectively. This percentage is slightly greater than the 10% defined as a minor encroachment within *AS4970-2009* however it is within the range of acceptable root loss without impacting viability. It is noted that there is no other proposed encroachment within the TPZ of these trees and the balance of the TPZ is to remain landscape area.
- c) The three trees are in good health and condition with minimal deadwood and no apical dieback. The three tree species have good tolerance to root disturbance.
- d) The three trees are in good health with good vigour and have a long useful life expectancy.
- e) The three trees have no significant trunk lean.

f) The soil around the existing trees is a clay loam and there is no indication of poor drainage. The trees are located on the boundary of public parkland and there is unlimited contiguous area for compensatory root development as required for a major encroachment within AS4970-2009.

g) There are no existing structures impeding root development within the TPZ of these trees.

In order to ensure the viability of these trees to be retained, we recommend the following construction methodology:

1. All excavation within the TPZ is to be carried out under the direction and supervision of the Project Arborist.
2. All excavation within the TPZ is to be carried out using nondestructive excavation methods including, manual excavation, Air Knife excavation or Vacuum truck excavation operating at less than 1000Psi.
3. All roots encountered within the excavation in the TPZ are to be hand cut by the Project Arborist.

Birds Tree Consultancy

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