Arborist's Report

Arboricultural Impact Assessment



UNSW Health Translation Hub Wallace Wurth Building Botany Street Randwick

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Summary

This report supports a State Significant Development Application (SSDA) for the proposed UNSW Health Translation Hub (UNSW HTH) at the Randwick Hospitals Campus (RHC).

The impacts of proposed building work will require pruning of a street tree on the Botany Street frontage of the Wallace Wurth building.

In the event engineering requirements for the bridge design, or scaffolding requirements for public safety, require greater area than current proposals suggest, then the tree may require removal to facilitate construction access.

In either case, the removal or pruning of the tree will not significantly impact on the long term street scape or arboricultural amenity of the site.

1. Introduction

This report has been commissioned by UNSW. It provides assessments and advice relating to arboricultural components of a proposed SSDA development at the UNSW Health Translation Hub.

Remote assessment is based on architectural drawings and current Google Streetview maps (photograph) as illustrated on the front cover of this report.

2. Scope of the Report

This report is an Arboricultural Impact Assessment as per the guidelines of AS 4970 -2009, the Australian Standard for Protection of Trees on Development Sites.

Relevant plans reviewed for this assessment include;

- DA5700 Bridge Connection Floor Plan Project 190551.00 dated 2/02/2021 by Architectus
- DA2002 South Elevation Project 190551.00 dated 24/02/2021 by Architectus

Two trees located on the Botany Street frontage of the Wallace Wurth Building have the potential to be impacted by proposed works and the advice in this report relates to those trees only.

3. Method of Assessment

Advice contained in this report is based on observations relating to standard development site assessment criteria applied by TLC Tree Solutions, including a combination of the following:

3.1 Current tree health

Assessments of health are based on qualities such as; foliage cover, extension growth, flower quality and abundance, fruiting bodies, leaf colour, presence of epicormic shoots, observed pests, and diseases. Health encompasses an assessment of tree vigour, but makes allowance for both seasonal factors and growth stage.

3.2 Tree structure and likely future condition

Observations of tree condition relate to mechanical qualities and a visual assessment of factors influencing wood strength. These include previous pruning/injury, physical form, and external indications of likely internal structure such as wood fractures, cavities, or decay pockets. Extensive, large, or abnormal deadwood may adversely affect a tree's assessed condition rating.

Observations of tree form (habit) such as lean, past windthrow, twist, or bow, may influence an assessment of tree structure where they predispose a tree to future failure or will require ongoing intervention to safely maintain the canopy.

3.3 Tolerance to development impacts

Trees have been assessed in respect of likely tolerance to potential development impacts. Assessments are based on on-site observations of prevailing soil conditions and the physical characteristics of each tree. Soil conditions may include; general soil properties, existing or past structures, site topography, impacts of likely root competition, and location of likely water sources. Allowance has also been made for apparent root morphology, tree age, tree species, opportunity for ongoing canopy management, and the species' anticipated tolerance to root loss.

3.4 Possible future hazard potential

Hazard potential is based on a determination of the likelihood of failure, the nature of current and possible future targets, and any associated risk of injury to either people or property.

3.5 General amenity value

Assessments of amenity may incorporate aspects of each tree's observed features such as; canopy size, site screening, provision of shade, contribution to streetscape, habitat, or influence as a windbreak. Comments are provided where the arborist believes they will be of assistance in the planning / decision-making process.

In this case, assessments are based on a photographic data relevant to the specific trees.

TLC Tree Solutions' assessment methodology incorporates all pertinent principles of AS 4970 -2009 the Australian Standard for Protection of Trees on Development Sites.

4. Observations

The two trees are identified as trees number 267 and 268 from the university Tree Inventory data provided by UNSW. Both are semi-mature *Corymbia maculata* (Spotted Gum) with DBH's of 450mm and 350mm respectively. Each has been assigned a low risk rating in the inventory.

The form of the trees is co-dominant, that is to say they have restricted canopy growth due to competition with each other.

The larger (southern) tree (267) has a secondary leader at approx. 2m in height which branches to the South parallel to the face of the building.

5. Construction Impact

5.1 Pruning

The illustration on the front cover of this report indicates the approximate location of a proposed pedestrian bridge.

As indicated by the red square this structure will require removal of the lower limb from tree 267. It may also be desirable to minimise future branch conflict by pruning the higher limb seen in the photograph. Two pruning cuts will be made, each to the branch collar in accordance with the guidelines of AS4373 - pruning of amenity trees.

Such pruning will comprise approximately 15% of the current canopy and is within the tree's anticipated tolerance, particularly if soil conditions area maintained in a favourable condition through supplementary irrigation. Future grow of new foliage will be managed in accordance with existing tree management practices.

5.2 Tree Removal

An alternative arboricultural impact has been considered in the case that sections of bridge need to be positioned by crane and additional working space is required to facilitate construction access.

In this case it is not recommended that additional pruning be carried out, but rather that tree 267 be removed entirely.

Such work would be carried out ensuring no damage to the adjacent tree (268) which would be retained and would benefit from reduced canopy competition

6. Recommendations

It is recommended that construction works as described be approved.

Planting of any replacement trees should be carried out in accordance with existing UNSW landscaping and environmental amenity policies.

Standard tree protection measures should be applied for the benefit of the trees as a condition of development consent.

If these conditions are not provided by Randwick Council (the owner of the trees) then the preparation of a Tree Management Plan is recommended to detail tree protection measures including: TPZ, required fencing, branch protection, pruning specification, compliance inspections and final arboricultural certification.

If any part of this report is not clear to the reader, or if further information is required, please contact the arborist by email or phone at the office of TLC Tree Solutions.

Yours faithfully,

Tony Lydon BSc (Hons)

Consulting Arborist Life Member International Society of Arboriculture Founding and Life Member Arboriculture Australia