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Site: 242 – 258 Young Street Waterloo Planning Proposal

This letter has been written in response to the City of Sydney Tree Officer comments provided to Ethos Urban on the 20th December 2023.

- *The AIA does not appear to have considered the extent of impact on the tree's canopies. Following my inspection, I can see that many branches would have to be reduced even further due to the lack of growing point on branches to cut back to. I also believe that additional branches are impacted and would require pruning since this proposal is up to 6 levels.*

The extent of canopy pruning was analysed with the use of 3D modelling which considers the bult form shown in Pink (for each level) and also indicates the location of the proposed scaffold (for the upper levels). In addition to the 3D modelling, a site visit was performed in Nov 2023 where setbacks were measured and the extend of proposed canopy pruning was analysed and photographed. Images have been provided in the AIA that have branches proposed for pruning highlighted in red. Furthermore, the data table in the appendix of the AIA detailed the number of branches proposed for pruning, their diameters the estimated canopy percentage to the pruned. Numerous pruning points are available on the subject trees as the required pruning is closer to the branch ends rather than the trunks, only a few whole branches are nominated for pruning to the trunk. In all cases, the proposed pruning will not impact the viability of the subject trees.

- *The proposed six metre setback on Young street is only for the ground level. The remaining building setback for level 1 and up is only 4.8 metres. Adding the additional construction impacts from scaffolding and hoisting, the impact on the high valued trees will be much greater than anticipated in the AIA. For a development as proposed, a scaffolding will most likely have greater dimensions than one metres in width, resulting in even further impact on the trees canopies.*

The proposed 4.8m setback has been considered in the 3D Modelling and the proposed pruning specifications. The design team has proposed the use of 1m wide scaffolding. As indicated in the AIA, the scaffold in the TPZ will be placed on ground protection matts as per AS4970:2007 section 4.5.6, therefore it will not impact the roots and figure 5 of the same document. The use of scaffold on ground is not considered a TPZ encroachment for impact analysis.

- *The AIA has not provided adequate DBH and DAB. I did measure a few of the trees and they do appear to have a greater TPZ than outlined in the report. I suggest for the arborist to re-measure all trees and provide adequate TPZ to make sure the impact to the trees is sufficient.*

The trees were originally measured in June 2022, allowing best practice consideration of tree retention through from the beginning of the design process. The trees were re-measured in Jan 2024 and it was found that the trees have seen some growth since last measured with decent rainfall and good growing seasons (between 1 – 6cm in DBH). Strictly speaking, this would necessitate the TPZ sizes increasing by 12 – 84cm. The increased size will not make a notable difference in the impact to the trees, and would result in a significant setback in the design program. Considering the preliminary nature of this application, and that a detailed development application will be required in the future (at which stage the trees will have undergone further growth) it is not considered necessary or desirable to update the TPZs in line with the measurements at this stage. Instead I propose that a more appropriate time to remeasure the trees is in advance of development application plans being prepared

- *I can see that the basement has been modified to provide space for the high valued trees. However, they do need consider the battering for the basement and there is potential additional excavation required for the basement. The AIA need to take this into consideration when assessing the impact on the trees.*

The basement plans have been modified to anticipate a 50cm wide batter. The basement has been shrunk to have the edge of the batter placed on the same line as the original basement wall edge. The TPZ encroachments now include the batter and are the same as the original AIA analysis due to the reduced basement size.

- *Many of the high valued street trees will have roots growing under the existing dwelling. Lifting of pavers and foundation was noted at the time of inspection. For this reason, the basement must be setback so it doesn't result in major encroachment of the trees (greater than 10%), or further root investigation must be provided to assess the actual impact on the trees.*

I noted pavement damage only during the inspection but saw no evidence of building damage for any tree. This was confirmed in the Jan 2024 inspection. It actually appears that the majority of the roots are growing under the council verge and footpaths. The existing building is significant in size and appeared to be on a concrete slab with footings. Roots appeared to be deflected away from the building edge. To manage the potential for roots under the existing building, The AIA report describes the need for Arborist supervision of sensitive methods used for demolition and excavation in the TPZ's. The proposed design has a considerably smaller footprint than the existing building and is outside the SRZ for each tree. Sometimes some slabs or features should remain post demolition if they are adding structural support to the tree. It is not possible to provide root mapping unless the existing building is demolished. This application is for a planning proposal and will be followed by a DA for the build in a few years time. Demolition the existing building now for root mapping is not a reasonable option as there are existing tenants and the site would be left vacant until the DA for the build is approved. There is no benefit in root mapping along the existing building edge as the proposed building foot print is much smaller than the existing.

All trees have a proposed <10 % minor TPZ encroachment except for Tree 4 with 18.2%, and Tree 9 with 10.7%.

- *Comment on page 34. Ground level- Two trees have a TPZ encroachment higher than 10%, however, in each case, the existing built form had an even greater TPZ encroachment. Due to my comment above, any existing building footprint encroachment to the TPZ is not relevant.*

The existing building would be impacting tree root spread due to the footing size. AS 4970 is a guidance document and suggests that the presence of existing structures should be considered when determining TPZ's in Section 3.3.4 (g). Therefore, the presence of the existing building is relevant and should be considered when determine the possible impact of the planning proposal. The removal of the existing building and the proposed increased deep soil set back will improve growing conditions for the subject trees.

Complete detail as to the impacts of this planning proposal are provided in the AIA.

Basement plans have been updated to include the required batter.

Further comments in relation to this application should be specific to Tree numbers, paragraphs or plan numbers to allow for accurate consideration and responses.

For any further information relating to this letter, please don't hesitate to contact me.

Regards

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Industry Qualifications

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