Mr Sean Gartner Gartner Trovato Architects 47/90 Mona Vale Road MONA VALE NSW 2103

5 March 2019

Dear Mr Gartner

ARBORICULTURAL IMPACT ASSESSMENT Proposed dwelling Lot 3—7 Trentwood Park, Avalon.



I write regarding the current proposal to construct a two-level single dwelling on Lot 3 at 7 Trentwood Park Avalon (the site).

In assessing the arboricultural impacts of the proposed dwelling on Lot 3, I have reviewed the following documentation:

- Conditions of Consent (the Consent) relating to Development Application No. N0530/15, being the approved subdivision of one lot into three, demolition of an existing detached garage, and a new access road to provide access to new lots at the site);
  - Court approved amended Subdivision Site Plan, Project 1711-A01(F), dated October 2017, by Garner Trovato Architects;
  - DA approved Arboricultural Impact Assessment by Tree Wise Men Australia (TWM) dated July 2017;
  - DA approved Subdivision Site Plan, Project 1711-A01(C), dated June 2017, by Garner Trovato Architects;
- Architectural plans for a proposed dwelling on Lot 3, Project No.1711 Lot 3, DA-02, DA-03 & DA-04(J) dated 04/03/2019, by Garner Trovato Architects.

This Arboricultural Impact Assessment (AIA) is intended to be read in conjunction with the approved AIA by Tree Wise Men (TWM) July 2017. It addresses building design changes that may have altered the initial impact assessment by TWM.

NOTES:

- the letter in parentheses immediately following the tree number is the Tree Retention Index value given by TWM in their report, where 'A' = a tree that should be given greater priority for retention than trees with Retention Value 'B' or 'C':
- CoT = measurements taken from the survey plotted Centre of Trunk.

## **IMPACT ASSESSMENT**

### Tree Removal

To recap the subdivision approved tree removals, trees within Lot 3 that are approved for removal under the Consent, are as follows

- T2(B) Jacaranda mimosifolia (Jacaranda)
- T80(C)—Angophora costata (Smooth-barked Apple) /Sydney/Red Gum)
- T105A(B)—Syncarpia glomulifera (Turpentine)

No additional trees are proposed to be removed with this current application.

### Proposed Dwelling Lot 3

The proposed built footprint differs from the approved building outline, in that:

- The ground floor bath/studio area footprint is approximately 400mm closer to Cabbage-tree Palm 131(B) and now is an offset approximately 4m from the CoT this is more than ample distance from the palm to avoid impacts upon its health and viability.
- The ground floor bath/studio area footprint is approximately 150mm further away from Sydney Red Gum Tree 130(A). Excavation would occur approximately 4m south of the tree (includes provision for pier diameter), would be outside the Structural Root Zone (SRZ) and impact upon approximately 17m<sup>2</sup>, or 10.4% of the 163m<sup>2</sup> Tree Protection Zone (TPZ) area. This is a low-moderate encroachment and within an acceptable impact range.

## SPECIFIC RECOMMENDATION

Hand digging where any works are proposed within a 3.0m CoT offset from the tree to minimise damage or disturbance to tree roots.

• The northern end of the first floor is moved north approximately 600mm closer to Turpentine Trees 120(B), 121(B), 123(B) and 124(A). This floor is elevated just above existing ground level although isolated piers are required to support the floor.

### SPECIFIC RECOMMENDATION

Hand digging within a 2.5m CoT offset from each tree must be undertaken to locate suitable post/pier hole positions that will not damage or disturb structural roots greater than 50mm diameter.

- The proposed retaining wall extending north of the OSD excavation would be approximately 4m east of Turpentine Tree 110(B). This would be outside the tree's SRZ and TPZ.
- The proposed deck RL71.700 is shown at approximately 2.1m from the CoT. The deck level will be
  above existing ground level by about 460mm at its closest point to the tree, which will accommodate
  decking components (posts, bearer, joist and decking material) without the need for anything but
  isolated post holes just outside the 2.1m SRZ offset. The total area of isolated post holes would be less
  than 2m, which is less than 4% encroachment. This is acceptable.

## SPECIFIC RECOMMENDATION

Hand digging where any works are proposed within a 2.1m CoT offset from the tree to minimise damage or disturbance to tree roots.

 The OSD would be approximately 1.25m from Cabbage-tree Palm 106(B). There would be a notional TPZ encroachment in the vicinity of 19% however this species is quite tolerant of disturbance and is not expected to suffer any setback in its health of viability.

#### SPECIFIC RECOMMENDATION Hand digging where any works are proposed within a 2.5m CoT offset from the tree to minimise damage or disturbance to tree roots.

• The driveway will be fully elevated adjacent to Sydney Red Gums Trees 103(A) and 104(A) and well clear of their trunks so there will be no conflict between the built structure and the trees.

## SPECIFIC RECOMMENDATION

 Tree guards to be provided to at least 2m from ground level (see Fig. 4 – Appendix C of TWM report).. The area for a minimum 3m radius is to be mulched with at least 75mm depth and covered with wide timber sheeting to prevent foot traffic from damage surface roots or compacting the soil.

# CONCLUSIONS

My detailed review of the plans and TWN report concludes this current development proposal for a dwelling on Lot 3 will not change the number of trees approved for removal with the subdivision and creation of Lot 3.

Identified encroachments are in an acceptable range to prevent tree decline and loss, provided appropriate protection devices are in place before and during construction.

## RECOMMENDATIONS

The specific tree protection and pruning recommendations at Part 5.3 and Appendix C of the TMW Report remain valid for any site development works involving works near trees to be retained and shall be adopted for this proposal.

Please contact the undersigned via email <u>cat@urbanforestryaustralia.com.au</u> or phone 0414 997 417 to discuss further if required.

Catriona Mackenzie

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Catriona Mackenzie Consulting arboriculturist, horticulturist and landscape designer. Tree Risk Assessment Qualified 2014 (TRAQ) Cert. Hort. [Honours] Dip Hort. (Arboriculture) [Distinction] Assoc. Dip. Appl. Science. (Landscape) [ Distinction] Member of the International Society of Arboriculture (ISA) Founding Member of the Institute of Australian Consulting Arboriculturists (IACA) ACM0052003