

Rob Miller
C/O Sean Gartner – Gartner Trovato Architects
PO Box 1122
MONA VALE NSW 2103



29 July 2023

ABN 14 631 973 638

Dear Rob,

SITE ADDRESS: 18 & 20 The Serpentine, Bilgola Beach.

PROJECT- Revision 3 - Addendum to Arboricultural Impact Assessment (AIA) in relation to Development Application No. DA2023/0374 - Construction of a studio and car parking structure.

I refer to my site inspection 28th June 2023 at 18 and 20 The Serpentine, Bilgola Beach (the 'subject site'), and additional correspondence from Ricky Kwok – Traffic Engineer of Northern Beaches Council, in regard to a request for further information, in relation to sight line distances from the proposed new driveway for the car parking structure.

Documents/information reviewed in relation to this report include:

- Letter, request for further information, authored by Dean Pattalis, Planner – Northern Beaches Council (NBC), dated 19 June 2023.
- Arboricultural Impact Assessment (AIA) for 20 The Serpentine, Bilgola Beach, authored by Treeism, dated January 2023.
- (Amended) Site Plan and Site Analysis Plan, Project no. 2236, dwg no. A.01, Revision B, dated 28/7/2023, authored by Gartner and Trovato Architects.
- Email chain between Dean Pattalis, Planner – NBC, subject site owners (Rob and Cheryl Miller), Ricky Kwok – Traffic Engineer – NBC, Amy Sutherland – Planner – Sutherland Planning, and Sean Gartner – Architect - Gartner and Trovato.
- AS4970-2009 Protection of trees on development sites, Standards Australia (AS4970).
- AS4373-2007 Pruning of amenity trees, Standards Australia (AS4373).

Also attached is the following:

- Appendix A— Photographs.
- Appendix B— Marked up Survey Plan with additional trees identified.

The relevant discussion within the Request for Further Information states;

Sight Distance:

Concerns regarding traffic safety were originally raised at the Pre-Lodgement meeting due to the proximity of the driveway to the road bend. A sightline analysis was requested and included as part of the traffic and parking statement.

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Consulting Arboriculturist	Church Point NSW 2105	Mobile: 0403 935 419
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Drawing No.S 001 - Car Platform Driveway Sight Distance Analysis, shows the line of sight to achieve the minimum 35m Stopping Sight Distance, east of the driver's position. However, to achieve the unobstructed sightlines, Tree 8 and 9 will need to be removed as well as canopy pruning for Tree 11.

The recommendation of the Arboriculture Impact Assessment (AIA) only appears to consider the impacts the location of the driveway and structures have on the existing trees and not any consideration of their effects on sight distance. The AIA recommends tree protection fencing a minimum 1.5m from the stem of Tree 8. It also advises that no canopy pruning is necessary for Trees 9 and 11, with only 10% pruning of the total live canopy and a maximum of 80mm branch diameter at the branch/stem junction.

The Transport Network continues to have concerns regarding visibility exiting the driveway and restricted sight distance due to the existing trees and vegetation. It is noted that the Landscape referral response accepts the recommendations of the AIA, and therefore provision of a traffic calming device to reduce approach speeds, located mid-way between the curve and proposed access driveway, could be considered as an acceptable alternative to the additional tree removal and pruning.

The proposal is not acceptable in its current form due to access and sightline issues. The additional swept path analysis for access to the driveway using a B99 vehicle is required as well as consideration to provide a traffic calming device on the northern approach to the driveway in lieu of further tree removal and pruning to achieve the minimum Stopping Sight Distance requirements.

The client and Architect have opted for an amendment to the AIA to meet the requests of the Transport Network. As such my recent inspection considered view lines and the relevant vegetation restricting vision as per detailed within the Council letter.

DISCUSSION

Several suckering¹ *Casuarina glauca* (Swamp she-oak) are located within the road reserve. Not all these suckers were discussed within the original AIA as they were outside the zone of impact for the proposal, and they had not been plotted within the Survey Plan. Tree 8 was marked up manually within the Survey Plan by Treeism for the original AIA. An additional four (4) suckers impacting the view line have been identified in the recent inspection (Tree 15, 16, 17 and 18, see Appendix B).

Tree 8 has the bulk of its canopy within the viewline, the pruning could not be carried out in compliance with AS4373, the required pruning would render the tree not viable for retention. Removal of Tree 8 is now recommended.

Tree 9 has no canopy/stem within the view line, as such, this tree is to be retained and protected.

¹NOTE: Sucker definition (as per Dictionary of Botany -www.botanydictionary.org) – An adventitious shoot that develops from the root, often coming up some distance from the parent plant.

Whilst Tree 11 has no canopy within the view line, the Site Plan and Site Analysis Plan, (dwg no. A.01, Rev B, dated 28/7/2023) notes the tree stem will fall within the sightline and as such (following information from NBC Traffic Engineer) this tree is proposed for removal.

Previously recommended removal of Tree 10 will aid in providing additional clearances for sight lines.

Tree 16 is located very close to the roadway edge and has a at base diameter of approximately 60mm, the canopy obscures vision and as such removal is recommended.

Minor crown-raise pruning of Tree 12, 15, 17 and 18 is recommended to allow clear vision. A maximum branch diameter of 30mm at the branch junction and 10% of total live canopy is all that is required to facilitate clear vision.

RECOMMENDATIONS

Cut to ground level Tree 8, Tree 10, Tree 11 and Tree 16. Given the suckering nature of the discussed trees DO NOT poison the stumps (as this can affect the parent trees).

Tree 9 is to be retained and protected, no pruning is deemed necessary.

Pruning of Tree 12, Tree 15, Tree 17 and Tree 18 is to be in accordance with AS4373-2007 Pruning of amenity trees, a maximum 10% of total live and canopy and branch diameter of 30mm is to be removed.

All tree removal work/pruning is subject to Council authority permit and shall be accordance with the Safe Work Guide to Managing Risks of Tree Trimming and Removal Work 2016, Work Health and Safety Act 2011, Work Health and Safety (WHS) Regulations 2011 and the Code of Practice for the Amenity Tree Industry 1998.

Please contact the undersigned via email chantalle@treeism.com.au or phone 0403 935 419 to discuss further if required.

Yours sincerely




Chantalle Brackenridge Hughes

Consulting arboriculturist and horticulturist.

Tree Surgery Certificate

Advanced Certificate Urban Horticulture

Diploma of Horticulture (Arboriculture) *Credit*

ISA Tree Risk Assessment Qualification (TRAQ) 2016, updated 2022

Accredited Member of the Institute of Australian Consulting Arborists (IACA)

Member of the International Society of Arboriculture (ISA)

Affiliate Member of the Local Government Tree Resources of Australia (LGTRA)



Plate 1 – Arrow notes Tree 15. Crown raise pruning will facilitate sight lines.



Plate 2– Tree 12 - Arrows note small diameter branches that once pruned will facilitate clear sight lines.



Plate 3— Tree 8 – Arrow notes Tree 8, requires removal for sight lines.



Plate 4– Tree 16 – Arrow notes Tree 16, requires removal for sight lines.



Plate 5– Tree 17 and 18 – Arrow notes Tree 17 and 18, require minor pruning for sight lines.

APPENDIX B – MARKED UP SURVEY PLAN WITH ADDITIONAL TREES

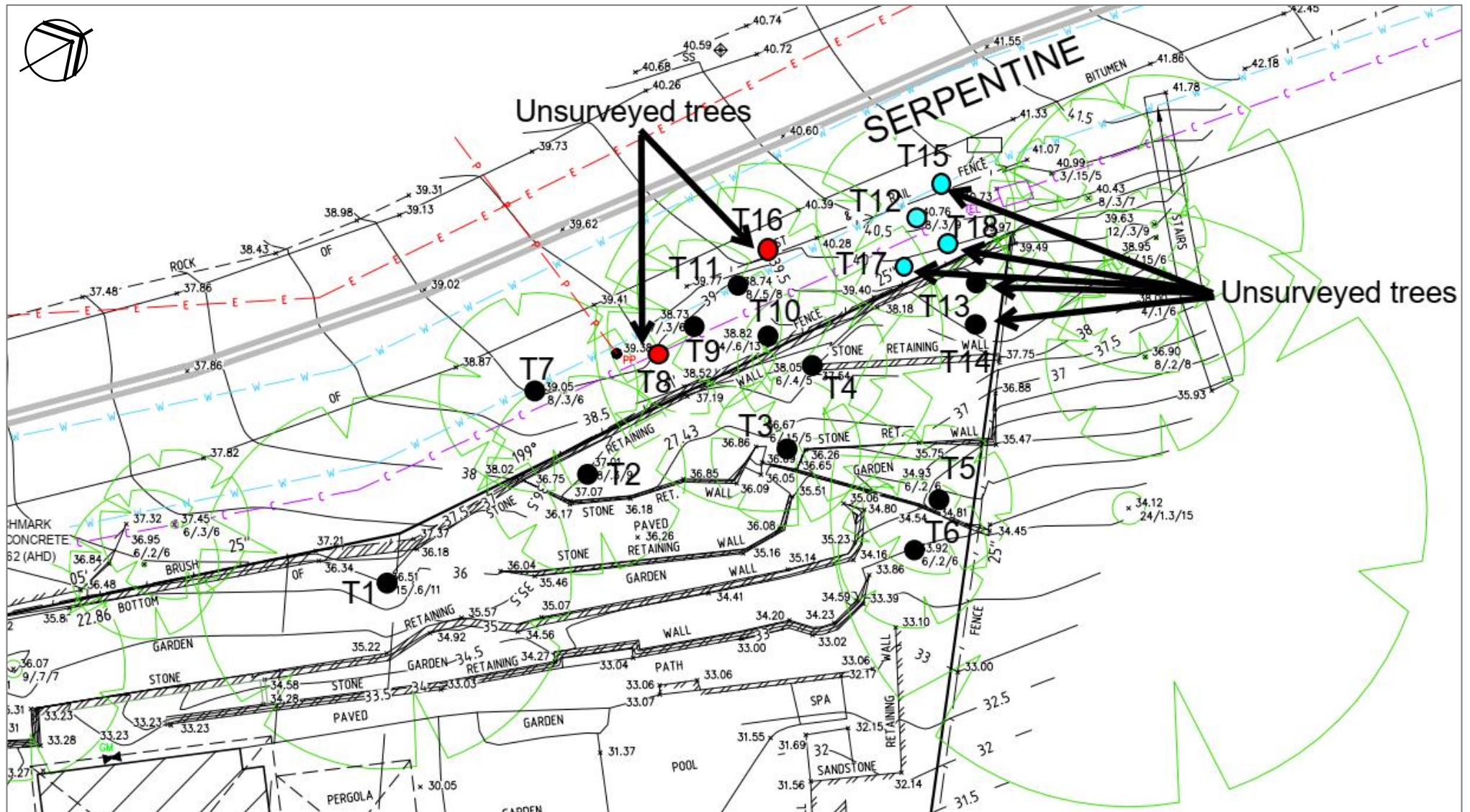


Figure 1 – Excerpt of Survey Plan, Reference no. 22044 005DT, dated 3 November 2020, authored by LTS Surveying. Red dotted trees additional removals required for sight lines, blue dots additional pruning required for sight lines. Rest of removals/pruning discussed within Treeism AIA dated January 2023. Marked up by C Hughes (NOT TO SCALE).