Landscape Referral Response

Application Number:	DA2020/1172
Date:	23/03/2021
Responsible Officer:	Thomas Prosser
Land to be developed (Address):	Lot 42 DP 4689 , 54 Bardo Road NEWPORT NSW 2106

Reasons for referral

This application seeks consent for the following:

- Construction / development works within 5 metres of a tree or
- New residential works with three or more dwellings. (RFB's, townhouses, seniors living, guesthouses, etc). or
- Mixed use developments containing three or more residential dwellings.
- New Dwellings or

Officer comments

This application is for the demolition of an existing residential dwelling, and the construction of a seniors housing development comprising of six total units.

Amended Proposal:

Amended plans and reports have been issued including architectural and landscape plans and a root investigation report.

The amended application proposes the retention of existing trees numbered 4 (Grey Gum), 7 (Turpentine), and 8 (Turpentine) within the front setback.

The amended application also proposes the retention of existing trees numbered 12 (Swamp Mahogany) and 13 (Turpentine) within the central-rear courtyard area. The previously proposed retention of existing tree numbered 11 (Turpentine) is reported to be unfeasible based on a suppressed canopy from existing trees numbered 12 and 13. Additionally, based on the extent of basement excavation in proximity to tree 11 and the impact to future growth of existing trees 12 and 13, the recommendation for removal of remove tree 11 is accepted, should be the application be approved in its current form.

Landscape Officer comments:

General comments

Following review of the amended plans and reports, Council is of the opinion that three (3) existing native trees can be preserved for the long term to achieve root, trunk and canopy growth typical of the species. The site contains eight (8) existing native trees reported with high retention value in the arboricultural impact assessment by Tree Survey.

The loss of five (5) existing trees of high retention value can't be replaced by this proposal due to insufficient deep soil zones and landscape area remaining capable of allowing tree replacement.

The available Landscaped Area within the site retains three (3) existing trees and otherwise landscaped areas are limited to the following landscape treatments:
• rear setback: small trees capable of attaining 5 to 10 metres in height and this treatment is acceptable,
• side boundaries: tall shrub planting to 3 metres in height at maturity along the full extent of the side boundaries and small tree planting adjoining 56 Bardo Rd to the frontage portion of the site is proposed,
• should a 2 metre wide side setback be acceptable based on planning merit, the side boundaries shall contain no encroachments upon the 2 metre wide Landscaped Area where at-ground structures / pavements are proposed such that the area is solely utilised for planting and maintenance access over natural ground, to allow for appropriate soil area for the nominated planting to achieve the heights of the selected species to provide privacy. To this extent all paving slabs within the 2 metre zone are to be deleted, and the basement walling adjacent to the property at 56 Bardo Rd is to be redesigned,
• the elevated walkway along the side setback zone to the northern boundary adjacent property 52 Bardo Rd does not impact natural ground landscape area width and is supported.

A review of the stormwater design for impact to existing trees provides no issues for resolution, subject to the supervision of all excavation works near existing trees to be supervised by a qualified arborist.

Existing tree numbered 4

The retention of existing tree 4 (Grey Gum) is acceptable based on the amended plans and subject to the following requirements:
• existing ground levels must be retained,
• front lawn to be deleted to reduce compaction impacts from use, and replaced with mass planted garden bed,
• front fence shall be installed on isolate pier footings located by a qualified arborist,
• walkway and letterbox to be an elevated structure with isolated pier footings located by a qualified arborist, and
• G01 apartment terrace to be a suspended slab above natural ground, with isolated pier footings located by a qualified arborist.

Existing tree numbered 7

The reported capability to retain existing tree 7 (Turpentine) is assessed as a concern regarding the viable retention in the long term. It is acknowledged there is an existing concrete driveway beside this tree, however the new alignment closer to tree 7 will require excavation within the structural root zone.

In the vicinity of tree 7, the architectural plans show the proposed driveway at a RL 14.39 with a 1:8 transition toward the street for 2000mm, equating to a finished RL 14.14. The existing levels as shown on the survey in close proximity to tree 7 are existing 14.37 and existing 14.77, thus the proposed driveway is lower and therefore requiring excavation for construction of the concrete slab.

This reduced level is expected to result in the excavation below the current driveway where existing roots are anticipated to be close to the underside of the driveway surface, searching for moisture. Therefore, the total surface area exposed to excavation with the structural root zone and tree protection zone is a significant area. No information is provided on impacts to tree stability from this excavation below existing ground levels required to form and construct the proposed driveway.

Such impact to the existing roots system does not provide any surety that existing tree 7 is able to be retained in the long term within such encroachment into the structural root zone and tree protection zone, and it is envisaged that tree 7 will decline eventually and require removal.

Removal of tree 7 can’t be compensated elsewhere on site as no sufficient natural ground is provided

to support a canopy tree such as this.

Council do not accept that existing tree 7 can be preserved, typical of the species form and health for the long term.

Existing tree numbered 8

Existing tree 8 (Turpentine) currently shows good vitality with an elevated canopy form. A root investigation (trench 1) was located approximately 2 metres from the trunk towards the basement alignment, but not along the basement alignment as suggested to be undertaken. The basement alignment is 4.2 metres from the tree 8 trunk.

Eight (8) existing major tree stability roots belonging to tree 8 with diameter 50mm and over have been reported as follows: Root No 3 (60mm), No 5 (50mm), No 6 (120mm), No 7 (80mm), No 8 (120mm), No 9 (120mm), No 13 (80mm), and No 18 (70mm). It is expected that at the basement alignment these diameters may be reduced but will not vary greatly.

It is considered that this amount of existing tree roots to be severed within the SRZ is excessive and will most likely impact the tree's health. The impact to these roots is not discussed in the report under the title Discussion on Root Mapping should these roots be severed, but rather the discussion is that the roots at this distance would have tapered to less than 10mm. There is no evidence of this and this suggestion is not accepted, and the true extent of impact is not determined.

The amended architectural plans with elevated walkway and the suspended terrace for apartment G01 above natural ground will assist with future root expansion, based on the selection of isolated pier footing by a qualified arborist, and based on appropriate air gap dimension between natural ground and the underside of the terrace slab, however this information is not provided.

Of concern with this proposal is the distance separation to a dwelling that, regardless of any conditions of consent to retain a tree, will result in resident demands for pruning and or removal due to damage to property and persons. Should such a request be approved there is no opportunity for replacement tree planting elsewhere on site as no adequate natural ground area is provided to support a canopy tree such as this.

Council do not accept that existing tree 8 can be preserved, typical of the species form and health for the long term.

Existing trees numbered 12 and 13

Existing trees 11, 13 and 15 (Turpentine) and existing tree 12 (Swamp Mahogany) are a clump of trees behind the existing building.

Tree 11, 14 and 15 have suppressed form as a consequence of suppression by the dominant trees 12 and 13, and the recommendations for removal is accepted.

It is noted that the proposed distance between the basement alignment and the structural root zone is between 4200mm and 5930mm and clear of the structural root zone, even when over excavation for waterproofing and drainage provision are considered.

Additionally, based on the extent of basement excavation in proximity to tree 11 and the impact to future growth of existing trees 12 and 13, the recommendation for removal of remove tree 11 is accepted, should be the application be approved in its current form.

A root investigation (trench 2) was located on the east side of Trees 11, 13, 14, and 15 at a distance of 1.8m centre line of Tree 13, without obviously determining which tree the roots belong to.

Ten (10) existing major tree stability roots belonging to tree 8 with diameter 50mm and over have been reported as follows: Root No 2 (70mm), No 8 (110mm), No 10 (50mm), No 11 (60mm), No 14 (50mm), No 15 (40mm), No 19 (160mm), No 20 (150mm), No 21 (160mm), and No 23 (150mm). It is expected that at the basement alignment these diameters may be reduced but will not vary greatly.

Across the existing trees the subject of the root investigations, the quantity of tree stability roots to be severed per tree is minimal, and given the amount of natural ground to be retained for tree root regrowth, the findings of the tree root investigation that the pruning of these roots will not have a long term impact on the tree's stability and longevity is accepted, subject to the following requirements:
• existing ground levels must be retained,
• walkway to units are to be elevated above the natural ground level and shall be installed on isolated pier footings located by a qualified arborist, and
• automatic irrigation is installed and managed by a qualified arborist for a period as advised.

Landscape Referral are unable to support the application at this stage based on the above discussions and concerns.
End.

Previous Officer comments:

Councils Landscape Referral section has considered the application against the State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004, the Pittwater Local Environment Plan, and the following Pittwater 21 DCP controls:

- B4.22 Preservation of Trees and Bushland Vegetation
- C1.1 Landscaping
- C1.21 Seniors Housing
- D10.12 Landscaped Area - General

A Landscape Plan has been provided and proposed works include in ground planting of trees, shrubs, grasses and groundcovers, as well as on-slab planting of shrubs, grasses and groundcovers.

The Statement of Environmental Effects and Arboricultural Impact Assessment provided with the application note that a total of seventeen trees are identified on site. It is noted that two of those seventeen trees are located on an adjoining property, and shall not be impacted under any circumstances.

The Arboricultural Impact Assessment notes that a total of eight trees are to be removed due to the proposed works. Of these eight trees to be removed, two trees are exotic, with the remaining six trees being native. Majority of the tree removal will occur at the front of the property, with a total of five trees being removed as a result of existing trees being within the footprint of proposed works. The remaining three trees are located towards the rear of the property and also are located within the footprint of proposed works and have subsequently been allocated for removal.

Four trees, specifically Trees No. 1, 6, 14 and 15 are all deemed to have low tree significance and low priority for retention, as stated in the Arboricultural Impact Assessment. The remaining four trees to be removed, specifically Trees No. 5, 7, 8, and 9 are all native and significant canopy trees, with both a high tree significance and a high priority for removal. At minimum, four large canopy trees shall be proposed to compensate the loss of these significant trees.

The Arboricultural Impact Assessment also indicates that of the seven trees to be retained (not including those on adjoining properties), three trees have no encroachment on the Tree Protection Zone (TPZ). These trees include Trees No. 2, 3 and 10. Of the remaining four trees to be retained, all have a major encroachment on the TPZ, ranging from 22% to 48% encroachment.

Tree No. 4 is located at the front of the property, with proposed work encroaching on the TPZ by 22%. With appropriate mitigation measures as stated in the Arboricultural Impact Assessment, it is likely this tree shall survive and the proposed works are seen to have a negligible impact on TPZ and Structural Root Zones (SRZ). Trees No. 11, 12 and 13 are located centrally to the site, and are proposed to form part of a communal lawn area, each with a 48%, 22% and 45% TPZ encroachment respectively. With appropriate mitigation measures as stated in the Arboricultural Impact Assessment, as well as further design modifications such as greater basement floor setback, suspended slabs where the ground floor extends into the TPZ of effected trees, as well as tree-sensitive pathways, it is still likely these trees may fail as a result of the scale of works. A tree root investigation and tree root map is needed in order to fully comprehend the extent of works and to make a sound judgement, in accordance with AS4970-2009 Clause 3.3.3 - Major Encroachment.

Due to the scale of tree loss, and the possible further loss of trees during construction, control B4.22 cannot be satisfied as the scenic value and character that the trees provide is not retained and protected.

In its current design, the front setback to Bardo Road is inadequate to support the planting of trees to soften the built form. This is partly due to the presence of the bin storage, entry paving and walkways, walling and services, but also due to the loss of trees resulting from the proposed driveway positioning. A key component of controls C1.1, C1.21 and D10.12 is that landscape shall help mitigate and reduce the bulk and scale of the built form. Clause 33 (c-i) of the SEPP also indicates that sufficient building setbacks shall be provided to reduce the bulk and overshadowing of the built form. As a result of this tree removal and lack of adequate space to plant new canopy trees, these controls and clauses cannot be satisfied.

In summary, the application documents do not provide sufficient satisfaction of development controls and clauses outlined in the Pittwater DCP and Housing for Seniors SEPP. The proposed development intends to remove, and potentially damage a large number of significant canopy trees with high retention values, with limited compensation planting to replace those lost. The built from has also not been reduced satisfactorily due to tree removal in the front setback, but also the presence of structures in within the front setback which has reduced the ability for canopy tree planting. For this reason, the landscape component of this proposal is not accepted.

The proposal is therefore unsupported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Landscape Conditions:

Nil.