

Landscape Referral Response

Application Number:	DA2021/1673
Date:	19/10/2021
Responsible Officer:	Phil Lane
Land to be developed (Address):	Lot 1 DP 392257 , 8 Bungan Head 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 alterations and additions to an existing residential dwelling. Alterations include the minor demolition is site structures in order to facilitate additions which are inclusive of a deck extension on both the upper and lower floors, as well as a new entertainment room, outdoor bar, spa and swimming pool.

Councils Landscape Referral section has considered the application against the Pittwater Local Environmental Plan, and the following Pittwater 21 DCP controls:

- B4.22 Preservation of Trees and Bushland Vegetation
- C1.1 Landscaping
- D10.13 Landscaped Area Environmentally Sensitive Land

Original Comments - 27/09/2021

The Statement of Environmental Effects provided with the application notes that no trees are to be removed as a result of proposed works. This statement is largely supported by the Architectural Plans provided as it is evident that no trees are proposed to be removed. It is however noted that proposed works are within close proximity to existing trees, and for this reason an Arboricultural Impact Assessment has been provided.

This Arboricultural Impact Assessment has identified a total of two trees, both located towards the rear of the existing residential dwelling. Concern is raised regarding the potential impacts of proposed works on Tree No. 1, a native canopy tree of high significance. Proposed works are expected to encroach into the Tree Protection Zone (TPZ) as well as Structural Root Zone (SRZ) of Tree No. 1, occupying a total of 40.9% of the TPZ area. This level of encroachment is considered significant, with potential detrimental impacts to the health and vitality of this tree, both in the short and long-term. Although proposed works have sought to mitigate this high level of encroachment through the use of suspended structures, total soil coverage still remains high. This is likely to result in the decline of soil biology, in turn causing environmental stress and possible decline in tree vigour and eventual tree failure. The Arboricultural Impact Assessment has noted that a tree root investigation is required to take place in



excavation areas that are located within Tree No. 1's SRZ, ensuring that no significant roots are impacted as a result of proposed works. In addition, it has also been recommended that a pier footing plan be developed for structures within the TPZ with cantilevering located towards the tree, a cut and fill plan to detail areas that are suspended and allowing air movement, as well as decking be used to allow for water drainage through to the ground level. Despite these recommendations, the Arboricultural Impact Assessment has still noted that overall construction impacts are likely to be high, indicating that tree vitality would likely be difficult to maintain or improve given the extent of works proposed. For this reason, it is recommended that an alternative design arrangement be sought to ensure proposed works are clear of the SRZ of this tree, with minimal impacts on the TPZ. It should be noted that any encroachment into the TPZ by 10% or greater, or any encroachment into the SRZ at all, requires a tree root investigation in accordance with AS4970-2009, specifically *Clause 3.3.3 Major Encroachment*.

The retention of Tree No. 1 and 2, as well as others located within the site, is vital to satisfy control B4.22, as key objectives of this control include "to effectively manage the risks that come with an established urban forest through the professional management of trees", "to protect, enhance bushland that provides habitat for locally native plant and animal species, threatened species populations and endangered ecological communities", as well as "to protect and enhance the scenic value and character that trees and/or bushland vegetation provide".

Slight concern is also raised regarding the visual impacts of proposed works on residents of the adjoining properties. Due to the scale of proposed works, screen planting is required to effectively soften the bulk and scale of the built form, whilst also enhancing the privacy of the site not only for the applicant, but also the immediate neighbours. This screen planting is necessary to satisfy controls C1.1 and D10.13, as key objectives of these controls seek to ensure "landscaping enhances habitat and amenity value", "landscaping reflects the scale and form of development" as well as that the built form is "softened and complemented by landscaping". The required screen planting can be addressed through conditions of consent, rather than the need or a Landscape Plan to be submitted with the application.

The landscape component of the proposal is therefore not currently supported due to the significant impacts of proposed works on high value native canopy trees that are required to be retained. It is recommended that an alternative design be sought, ensuring proposed works are located well clear of existing trees SRZ's, with minimal encroachments into the total TPZ area. Tree No. 1 is a high value native canopy tree, and efforts shall be made to ensure its retention. It should be noted that any encroachment into the TPZ by 10% or more, or any encroachment into the SRZ at all, requires a tree root investigation in accordance with AS4970-2009, specifically *Clause 3.3.3 Major Encroachment*.

Upon the receipt of the required information, further assessment can be made.

Updated Comments - 19/10/2021

Following concerns raised regarding the impacts of proposed works on Tree No. 1 and discussions with the applicant, amended Architectural Plans have been provided. These amended plans demonstrate an alternative layout that is clear of the SRZ of Tree No. 1. This outcome is seen as a positive as it appears Tree No. 1 is in a far greater position to be successfully retained with reduced impacts when compared to the original layout. That being said, it is noted that total TPZ encroachment still remains fairly large, and for this reason tree protection conditions are to be implemented to ensure potential impacts towards this tree is minimised as much as possible.

It is noted that adjoining property to the west is located flush with the boundary line, hence the implementation of screen plating may not be suitable due to the implications this will have on solar access, airflow as well as general amenity for both properties. For this reason, the previous recommendation for screen planting is longer needed.

The landscape component of the proposal is therefore supported subject to the protection of existing



trees and vegetation.

The proposal is therefore supported.

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

Recommended Landscape Conditions:

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE

Tree Root Investigation and Tree Root Map

Prior to the issue of a Construction Certificate, a tree root mapping investigation (insert location and tree ID) shall be undertaken on the outside edge of proposed pool barriers/walling adjacent to Tree No. 1, and a Tree Root Map shall be documented that will be the basis for determining construction methodology near existing tree, identified as Tree No. 1.

An Arborist with minimum AQF Level 5 in arboriculture shall supervise the works to verify tree root locations. A non-destructive root investigation shall be conducted complying with clause 3.3.4 of AS 4970-2009 Protection of Trees on Development Sites.

The root investigation shall map existing roots of significance that must not be impacted by construction works. The tree root investigation shall be conducted to confirm the following data to be used for the location/alignment of any new proposed works:

i) confirmation of the location of any tree roots at or >25mm (\emptyset) diameter to areas that require excavation for proposed works. Alternative alignment of proposed works shall be provided as necessary to avoid major roots, and

ii) mapping of the suitable location/alignment of proposed works.

The Tree Root Map shall be issued to a qualified Structural Engineer as a basis for structural design, and for determining the final location/alignment and construction methodology of proposed works within the tree protection zone (TPZ).

Prior to the issue of a Construction Certificate, the Arborist shall provide certification to the Certifying Authority that the tree root investigation and clear distance recommendations have been adequately addressed in the Construction Certificate plans.

Reason: To ensure protection of vegetation proposed for retention or adjacent to the site.

Pier Footing Design Near Trees to be Retained

Pier footing structural layout plans for the external works including proposed decking shall be developed in co-ordination with an Arborist with AQF minimum Level 5 qualifications in arboriculture, and a qualified Structural Engineer. The Arborist shall review, comment, recommend design revision as required and approve the pier footing layout, to ensure the locations of piers will be manageable in terms of tree protection measures.

The Arborist shall submit certification to the Certifying Authority, that the locations of the pier footings are accepted. The agreed pier footing structural layout plans shall be submitted to the Certifying Authority for approval prior to the issue of a Construction Certificate.

Reason: Tree protection.



CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

Project Arborist

A Project Arborist with minimum AQF Level 5 in arboriculture shall be engaged to provide tree protection measures in accordance with Australian Standard 4970-2009 Protection of Trees on Development Sites. The Project Arborist is to specify and oversee all tree protection measures such as tree protection fencing, trunk and branch protection, and ground protection.

The Project Arborist is to supervise all demolition, excavation and construction works near all trees to be retained, including construction methods near the existing trees to protect tree roots, trunks, branches and canopy. Where required, manual excavation is to occur ensuring no tree root at or >25mm (Ø) is damaged by works, unless approved by the Project Arborist.

Existing ground levels shall be maintained within the tree protection zone of trees to be retained, unless authorised by the Project Arborist.

The Project Arborist shall be in attendance and supervise all works as nominated in the Arboricultural Impact Assessment, including:

i) all demolition, excavation and construction works within the TPZ's and SRZ's of trees to be retained,

All tree protection measures specified must:

- a) be in place before work commences on the site, and
- b) be maintained in good condition during the construction period, and
- c) remain in place for the duration of the construction works.

The Project Arborist shall provide certification to the Certifying Authority that all recommendations listed for the protection of the existing tree(s) have been carried out satisfactorily to ensure no impact to the health of the tree(s). Photographic documentation of the condition of all trees to be retained shall be recorded, including at commencement, during the works and at completion.

Note:

i) A separate permit or development consent may be required if the branches or roots of a protected tree on the site or on an adjoining site are required to be pruned or removed.

ii) Any potential impact to trees as assessed by the Project Arborist will require redesign of any approved component to ensure existing trees upon the subject site and adjoining properties are preserved and shall be the subject of a modification application where applicable.

Reason: Tree protection.

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Tree and Vegetation Protection

a) Existing trees and vegetation shall be retained and protected, including:

i) all trees and vegetation within the site not approved for removal, excluding exempt trees and vegetation under the relevant planning instruments of legislation,

ii) all trees and vegetation located on adjoining properties,

iii) all road reserve trees and vegetation.

b) Tree protection shall be undertaken as follows:

i) tree protection shall be in accordance with Australian Standard 4970-2009 Protection of Trees on Development Sites, including the provision of temporary fencing to protect existing trees within 5 metres of development,

ii) existing ground levels shall be maintained within the tree protection zone of trees to be retained,

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unless authorised by an Arborist with minimum AQF Level 5 in arboriculture,

iii) removal of existing tree roots at or >25mm (\emptyset) diameter is not permitted without consultation with an Arborist with minimum AQF Level 5 in arboriculture,

iv) no excavated material, building material storage, site facilities, nor landscape materials are to be placed within the canopy dripline of trees and other vegetation required to be retained,

v) structures are to bridge tree roots at or >25mm (\emptyset) diameter unless directed by an Arborist with minimum AQF Level 5 in arboriculture on site,

vi) excavation for stormwater lines and all other utility services is not permitted within the tree protection zone, without consultation with an Arborist with minimum AQF Level 5 in arboriculture including advice on root protection measures,

vii) should either or all of v), vi) and vii) occur during site establishment and construction works, an Arborist with minimum AQF Level 5 in arboriculture shall provide recommendations for tree protection measures. Details including photographic evidence of works undertaken shall be submitted by the Arborist to the Certifying Authority,

viii) any temporary access to, or location of scaffolding within the tree protection zone of a protected tree or any other tree to be retained during the construction works is to be undertaken using the protection measures specified in sections 4.5.3 and 4.5.6 of Australian Standard 4970-2009 Protection of Trees on Development Sites,

ix) the activities listed in section 4.2 of Australian Standard 4970-2009 Protection of Trees on Development Sites shall not occur within the tree protection zone of any tree on the lot or any tree on an adjoining site,

x) tree pruning from within the site to enable approved works shall not exceed 10% of any tree canopy, and shall be in accordance with Australian Standard 4373-2007 Pruning of Amenity Trees,

xi) the tree protection measures specified in this clause must: i) be in place before work commences on the site, and ii) be maintained in good condition during the construction period, and iii) remain in place for the duration of the construction works.

c) Tree protection shall specifically be undertaken in accordance with the recommendations in the Arboricultural Impact Assessment, as listed in the following sections:i) Section 2 - Conclusions & Recommendations.

The Certifying Authority must ensure that:

d) The arboricultural works listed in c) are undertaken and certified by an Arborist as compliant to the recommendations of the Arboricultural Impact Assessment.

e) The activities listed in section 4.2 of Australian Standard 4970-2009 Protection of Trees on Development Sites, do not occur within the tree protection zone of any tree, and any temporary access to, or location of scaffolding within the tree protection zone of a protected tree, or any other tree to be retained on the site during the construction, is undertaken using the protection measures specified in sections 4.5.3 and 4.5.6 of that standard.

Note: All street trees within the road verge and trees within private property are protected under Northern Beaches Council development control plans, except where Council's written consent for removal has been obtained. The felling, lopping, topping, ringbarking, or removal of any tree(s) is prohibited.

Reason: Tree and vegetation protection.

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Condition of Retained Vegetation - Project Arborist

Prior to the issue of an Occupation Certificate, a report prepared by the project arborist shall be submitted to the Certifying Authority, assessing the health and impact on all existing trees required to



be retained, including the following information:

a) compliance to any Arborist recommendations for tree protection generally and during excavation works,

b) extent of damage sustained by vegetation as a result of the construction works,

c) any subsequent remedial works required to ensure the long term retention of the vegetation.

Reason: Tree protection.