

Landscape Referral Response

Application Number:	DA2019/0263
Date:	04/06/2019
Responsible Officer:	Rebecca Englund
Land to be developed (Address):	Lot 3 DP 1115877 , 53 B Warriewood Road WARRIEWOOD NSW 2102 Lot 3 DP 942319 , 53 Warriewood Road WARRIEWOOD NSW 2102

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

The subdivision proposal, including demolition, drainage, earthworks, creek rehabilitation works, and a new road, in terms of landscape outcome, is acceptable subject to satisfactory updated documentation and certification at Construction Certificate stage to ensure the protection of the existing trees located within the riparian creekline, and the completion of landscaping.

Council's Landscape section has assessed the proposal against the following Masterplans and Pittwater21 DCPC Controls:

Warriewood Valley Landscape Masterplan and Design Guidelines (Public Domain), August 2018

Warriewood Valley Roads Masterplan, August 2018

B4.22 Preservation of Trees and Bushland Vegetation

C6.1 Integrated Water Cycle Management

C6.2 Natural Environment and Landscaping Principles

C6.4 The Road System and Pedestrian and Cyclist Network

Landscape Plans are provided generally satisfying C6.1 and C6.2, subject to updated plans and subject to conditions. Co-ordinated Landscape Plans and Civil Plans satisfy C6.4.

An Arboricultural Impact Assessment report is provided to justify proposed vegetation removal. Conditions apply on the retention of existing Swamp Mahogany trees within the riparian corridor. An updated Arboricultural Impact Assessment report is required at Construction Certificate stage to correctly identify the numbering ID used for the existing trees to be retained.

Updated Landscape Plans are required at Construction Certificate stage, to co-ordinate the Landscape Plan with the Vegetation Management Plan for the riparian corridor, in terms of vegetation species composition, plant sources, and details of planting program.

Referral Body Recommendation

Recommended for approval, subject to conditions

Refusal comments

Recommended Landscape Conditions:

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

Public domain landscape works

The Landscape Plan shall be updated to include street tree planting along Warriewood Road in accordance with specification guidelines and materials schedule contained in S-1 of the Warriewood Valley Landscape Masterplan and Design Guidelines (Public Domain), including:

- all street trees to be *Lophostemon confertus*, minimum 400 litre stock for S-1 (large canopy trees), and subject to final approval by Council,
- all street trees shall be subject to pre-order of plant material to ensure delivery at the required size,
- all street trees shall be 4m overall height, with a 1.8m clear trunk, and minimum 60mm trunk caliper, and subject to final approval by Council,
- all trees to be grown by recognised nursery under Natspec growing guidelines,
- alternative street tree container sizes and specifications may be considered only when existing or installed services or road infrastructure limit the available soil volume where a large rootball will not be possible, subject to Council approval,
- garden bed planting under the street tree shall be installed in accordance with S-1 guidelines.

The 2.1m shared path to Warriewood Rd shall be in accordance with the Civil Plan 076-18C-DA-0101 issue A.

Street tree planting along Lorikeet Grove shall be in accordance with specification guidelines and materials schedule contained in S-3 of the Warriewood Valley Landscape Masterplan and Design Guidelines (Public Domain), including:

- all street trees to be *Tristaniopsis laurina*, minimum 400 litre stock for S-3 (medium canopy trees), and subject to final approval by Council,
- all street trees shall be subject to pre-order of plant material to ensure delivery at the required size,
- all street trees shall be 4m overall height, with a 1.8m clear trunk, and minimum 60mm trunk caliper, and subject to final approval by Council,
- all trees to be grown by recognised nursery under Natspec growing guidelines,
- alternative street tree container sizes and specifications may be considered only when existing or installed services or road infrastructure limit the available soil volume where a large rootball will not be possible, subject to Council approval,
- garden bed planting under the street tree to one side only shall be installed in accordance with S-3 guidelines.

The 1.5m shared path to Lorikeet Grove shall be in accordance with the Civil Plan 076-18C-DA-0102
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issue A, located to align with adjoining built paths.

The 2.5m shared path to the riparian corridor shall align with adjoining properties as per Civil Plan 076-18C-DA-0102 issue A.

Amended Plans shall be issued to the Certifying Authority including certification that the amended plans for Construction Certificate meet the conditions of consent.

All work is subject to a Section 138 approval from Council.

Reason: to enable the long term establishment of the desired streetscape character.

Co-ordinated Plans with the Vegetation Management Plan

Updated Plans shall be issued at Construction Certificate stage that are co-ordinated with the Vegetation Management Plan for landscape works within the riparian corridor in accordance with the Guidelines for Vegetation Management Plans (Department of Primary Industries - Office of Water), to co-ordinate and document vegetation species composition, plant sources, details of planting programs etc.

All Landscape Plans and Civil Plans shall be updated to include batter slope stabilisation techniques such jute mesh to 1:4 batter or steeper embankments within riparian corridor.

All Landscape Plans and Civil Plans shall include the retention of the existing Swamp Mahogany trees located within the riparian corridor as recommended in the Arboricultural Impact Assessment, as illustrated on the Survey and as identified as either Tree No.s 40-43 on plan or Tree No's 40, 41 and 44 in the report of the Arboricultural Impact Assessment, subject to clarification of the correct ID numbers. Works within the riparian corridor shall include retention of existing ground levels to the tree protection zone of the existing trees.

Amended Plans shall be issued to the Certifying Authority including certification that the amended plans for Construction Certificate meet the conditions of consent.

Updated Arboricultural Impact Assessment

An updated Arboricultural Impact Assessment shall be issued at Construction Certificate to clarify the correct tree number ID for the 3 x Swamp Mahogany (*Eucalyptus robusta*) to be retained and protected.

The Arboricultural Impact Assessment references the 3 x Swamp Mahogany trees as Tree No.s 40-43 on plan (page 44) and Tree No's 40, 41 and 43 in the report (pages 3, 19-21, and 42), Tree No'2 41, 42 and 44 in the report (pages 4 and 12).

Irrespective of the numbering, the 3 x Swamp Mahogany (*Eucalyptus robusta*) shall be retained and protected, and the existing Coral Tree referenced as both Tree 43 and Tree 44 shall be removed.

An amended Arboricultural Impact Assessment report shall be issued to the Certifying Authority including certification that the amended report for Construction Certificate meets the conditions of consent.

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

Tree protection measures

A Project Arborist with AQZ Level 5 qualification in arboriculture/horticulture is to be appointed to supervise and certify tree protection measures for the 3 x Swamp Mahogany (*Eucalyptus robusta*) nominated for retention and protection in the Arboricultural Assessment Impact report prepared by

About Trees dated 21/01/19.

The Project Arborist shall attend site during excavation and construction works within the tree protection zone (TPZ) of existing trees. 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.

The Certifying Authority or Project Arborist must ensure that:

- i) the activities listed in section 4.2 of AS4970- 2009 Protection of Trees on Development Sites, do not occur within the tree protection zone of any tree on the lot or any tree on an adjoining site, and
- ii) 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.

The Project Arborist shall submit certification during all stages of the works and prior to Occupation Certificate to the Certifying Authority that all tree protection measures as listed above have been completed prior to the commencement of excavation and construction works, and have been appropriately maintained during the works.

Reason: to ensure tree protection is provided and maintained.

Tree removal

In consideration of the assessment of development impact, the following existing trees/vegetation are granted approval for removal, based on the recommendations of the Arboricultural Impact Assessment report prepared by About Trees:

- Trees 1, 2, 3, 9, 16A and 16B - Palms (exempt)
- Trees 4, 5, 8, and 17 - Fig Trees (exempt)
- Tree 6 - Fruit Tree (exempt)
- Trees 7A to 7E, and 15 A to 15C, - Hibiscus
- Trees 10 to 14, 19, and 20 - Willow Bottlebrush
- Tree 18 - Leighton Green (exempt)
- Trees 21 to 23 - Mexican Mock Orange (exempt)
- Trees 26 to 39 - Swamp She-oak
- Tree 43 (also referenced as Tree 44) - Coral Tree (exempt)

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Tree and vegetation protection

A) Existing trees and vegetation shall be retained and protected as follows:

- i) all trees and vegetation identified for retention on the plans and in the Arboricultural Impact Assessment, excluding exempt trees and palms under the relevant planning instruments of legislation,
- ii) all other trees and vegetation located on adjoining properties,
- iii) all road reserve trees and vegetation,

B) Tree protection shall be generally undertaken as follows:

- i) all tree protection shall be in accordance with AS4970- 2009 Protection of Trees on Development Sites,
- ii) removal of existing tree roots greater than 25mm is not permitted without consultation with a AQF Level 5 Arborist,
- iii) existing ground levels shall remain under the tree protection zone of trees to be retained, unless

authorised by AQF Level 5 Arborist,

- iv) any tree roots exposed during excavation with a diameter greater than 25mm within the tree protection zone must be assessed by an AQF Level 5 Arborist. Details including photographic evidence of works undertaken shall be submitted to the Certifying Authority,
- v) to minimise the impact on trees and vegetation to be retained and protected, 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,
- vi) no tree roots greater than 25mm diameter are to be cut from protected trees unless authorised by a AQF Level 5 Project Arborist on site,
- vii) all structures are to bridge tree roots greater than 25mm diameter unless directed by a AQF Level 5 Arborist on site,
- viii) excavation for stormwater lines and all other utility services is not permitted within the tree protection zone, without consultation with a AQF Level 5 Arborist, including advice on root protection measures,
- ix) should either or all of vi), vii) and viii) occur during site establishment and construction works, a AQF Level 5 Arborist shall provide recommendations for tree protection measures. Details including photographic evidence of works undertaken shall be submitted by the Arborist to the Certifying Authority,
- x) 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 AS 4970-2009,
- xi) tree pruning to enable construction shall not exceed 10% of any tree canopy, and shall be in accordance with AS4373-2009 Pruning of Amenity Trees.

Reason: to retain and protect significant planting on development and adjoining sites.

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

Landscape works

Landscape works are to be implemented in accordance with the approved Construction Certificate landscape plans, inclusive of the following requirements:

- i) all street tree planting shall be in accordance with the Warriewood Valley Landscape Masterplan and Design Guidelines (Public Domain) S-1 and S-3, including soil preparation, planting, soilmix and mulch, and tree guards,
- ii) all road verge turf shall be Wintergreen Couch, and shall be in accordance with the Warriewood Valley Landscape Masterplan and Design Guidelines (Public Domain) S-1 and S-3, including soil preparation,
- iii) all tree planting within the riparian corridor shall be a minimum 45 litre container size, to include stakes for support, and mulch mounding for water retention,

Prior to the issue of an Occupation Certificate, a landscape report prepared by a landscape architect or landscape designer shall be submitted to the Certifying Authority, certifying that the landscape works have been completed in accordance with any conditions of consent.

Reason: to ensure that the landscape treatments are installed to provide landscape amenity.

Condition of retained vegetation

Prior to the issue of an Occupation Certificate, a report prepared by an AQF Level 5 Arborist (or equivalent), shall be submitted to the Certifying Authority, assessing the health and impact of trees and vegetation required to be retained as a result of the proposed development, including the following information:

- i) compliance to Arborist recommendations for tree protection and excavation works.

- ii) extent of damage sustained by vegetation as a result of the construction works.
- iii) any subsequent remedial works required to ensure the long term retention of the vegetation.

Reason: to retain and protect significant planting on development sites.

ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

Landscape maintenance

A 12 month establishment period shall apply for all new landscaping. If any landscape materials/components or planting under this consent fails, they are to be replaced with similar materials/components.

Reason: to maintain local environmental amenity.

Environmental and priority weed control

All weeds are to be removed and controlled in accordance with the NSW Biosecurity Act 2015.

Reason: preservation of environmental amenity.