

Natural Environment Referral Response - Riparian

Application Number:	DA2019/0263
To:	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:

- All Development Applications on land, and located within 40 metres of land, containing a watercourse, or
- All Development Applications on land containing a wetland, or located within 100m of land containing a wetland,
- All Development Applications on land that is mapped as "DCP Map Waterways and Riparian Land".

And as such, Council's Natural Environment Unit officers are required to consider the likely impacts on drainage regimes.

Officer comments

This referral relates to Narrabeen Creek and the 25m creekline corridor to be dedicated to Council ONLY.

The application has been assessed under:

Pittwater LEP 2014 6.1 Warriewood Valley Release Area

(Protection and rehabilitation of creekline corridors and riparian areas, including water quality and flows, and bank stability)

Pittwater 21 DCP C6.1 Integrated Water Cycle Management

(Use and rehabilitation of creekline corridors and riparian land)

Pittwater 21 DCP C6.2 Natural Environment and Landscaping Principles

(Integration and landscaping of the creekline corridor)

Warriewood Valley Water Management Specification (2001)

(Detailed guidance on the restoration of creekline corridors in Warriewood) SEPP (Coastal Management) 2018 - Coastal Wetlands (Protecting the hydrological integrity of the adjacent coastal wetland and no impact to quantity and quality of surface AND groundwater flows)

General terms of approval and a controlled activity permit are required from the Natural Resources Access Regulator prior to any works in Narrabeen Creek and the creekline corridor.

The following comments prepared on 19/07/2019 relates to the applicants response to the referral

made on 17/05/2019:

1. No action required

2. The sediment and erosion control plan has been satisfactorily amended.

The silt curtain must be installed downstream of the boundary prior to any work on Warriewood Road, the drainage line or the creekline corridor and maintained until groundcover in these areas has been re-established (as the road drains directly to the creek). Note that the site will be monitored to ensure that sediment and erosion controls have been maintained and are not at risk of being overwhelmed. This has been conditioned.

3. The revisions to the engineering plans in regard to the dissipation of flows from stormwater outlets to the creek are satisfactory.

4. The inconsistencies have been resolved.

Please refer to the referral and conditions from Biodiversity for additional conditions relating to vegetation in the creekline corridor and implementation of the Vegetation Management Plan.

Other:

It is noted that the conditions used for pre and post Manning's roughness on the creekline corridor are not clear. The creekline corridor is currently a grassed area with a small number of canopy trees and post-development will be heavily vegetated, which could have implications for flood storage, however potentially not significant given the narrow frontage of the property to the creek.

Comments made 17/05/2019

A number of small alterations are required to the design and reports for the creekline corridor.

1. Creek design

The proposed low-flow channel for the creek looks very promising and we're interested to see how it performs once built.

2. Sediment controls

Narrabeen Creek experiences significant flash flooding that will mean the proposed sediment control of straw bales for in-stream works will be insufficient. Please add that a sediment curtain will be put in place for the duration of the in-stream work in the creek just downstream of the eastern property boundary.

3. Outlet from Council's 1050 (also where low-flow channel enters creek)

The drawings generally show a small area for dissipation of flows from Council's 1050. Please revise the drawings to show the dissipation area at the south-eastern corner increased and blended into the neighbouring property at 53C (creekline corridor owned by Council), to prevent any future erosion of the creek banks as a result of discharges from Council's 1050 and to reduce the visual impact of bank stabilisation works on 53B through improved integration with the unimproved bank of the neighbouring property.

4. Trees in the creekline corridor (Arborist report by *About Trees*)

There are significant inconsistencies in regards to trees 40-43 within the Arborist report and between the Arborist report and the engineering plans. The Arborist Report identifies 3 x *Eucalyptus Robusta* and 1 x Coral Tree but confuses the numbering of these trees throughout, at one point recommending that #43 be removed (a Robusta) and retain #42 (Coral). The discrepancies are in sections 4.6, 5.1, 6.1 and 6.2.

The Engineering plans show all the trees will be removed. Under section 4.3.8 of the SEE it states that

the three Robusta in the creekline corridor will be retained.

Please show the Coral Tree as being removed, and clarify whether the three *Eucalyptus Robusta* located in the creekline corridor will be retained. If they are being retained, the engineering drawings must be updated to show this. If they are not to be retained, a justification for their removal must be provided. Council prefers that these significant trees are retained.

Referral Body Recommendation

Recommended for approval, subject to conditions

Recommended Natural Environment Conditions:

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

Narrabeen Creek rehabilitation works detailed design

Detailed plans for the Narrabeen Creek rehabilitation works are to be prepared and certified by a suitably qualified water/environmental/civil engineer who has membership of Engineers Australia and the National Engineering Register (NER), and in accordance with the plans (076-18C-DA-1001, 076-18C-DA-1003, 076-18C-DA-1101, 076-18C-DA-1201, 076-18C-DA-1301) (REV B), prepared by Craig & Rhodes and dated 26 June 2019.

Details demonstrating compliance must be submitted to the Certifying Authority prior to issue of the Construction Certificate.

Reason: To ensure creek works are completed in accordance with the consent approval (DACNECPCC1)

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

Installation and Maintenance of Sediment and Erosion Control

Sediment and erosion controls must be installed in accordance with Landcom's 'Managing Urban Stormwater: Soils and Construction' (2004).

Techniques used for erosion and sediment control on site are to be adequately maintained and monitored at all times and cleaned regularly to remove any collected sediment and prevent controls being overwhelmed, particularly after periods of rain. The controls shall remain in proper operation until all development activities have been completed and the site is sufficiently stabilised with vegetation.

A silt curtain is to be installed downstream of the boundary in Narrabeen Creek prior to any disturbance of soil near Warriewood Road, along the drainage pipeline draining Warriewood Road, or in the creekline corridor (as these areas may either enter the pipeline or drain directly to the creek). The silt curtain can be removed once work on the Warriewood Road drainage line and in the creekline corridor has been completed and groundcover re-established (or appropriate matting installed that secures the ground surface).

Reason: To protect the surrounding environment from the effects of sedimentation and erosion from the site (DACNED06)

CONDITIONS THAT MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF ANY STRATA SUBDIVISION OR SUBDIVISION CERTIFICATE

Natural Watercourse

Natural watercourses are to be accurately shown on all copies of the subdivision plan by the surveyor as “natural watercourses of variable widths”, for lodgement with the Department of Lands.

Details demonstrating compliance are to be submitted to the Principal Certifying Authority prior to the issue of the Subdivision Certificate.

Reason: To determine the location of natural drainage systems.(DACENH20)

Narrabeen Creek rehabilitation works

The applicant must submit certification from a suitably qualified water/environmental/civil engineer who has membership of Engineers Australia and the National Engineering Register (NER) that the Narrabeen Creek rehabilitation works have been constructed in accordance with this consent and the detailed design plans submitted to satisfy the requirements of the Construction Certificate.

Details demonstrating compliance must be submitted to the Principal Certifying Authority prior to issue of the Subdivision Certificate.

Reason: To ensure creek works are completed in accordance with the consent approval (DACNEHPS1)

Works as Executed Drawings - Narrabeen Creek

Works as Executed Drawings for the Narrabeen Creek rehabilitation works must be prepared in accordance with Council’s Guideline for Preparing Works as Executed Data for Council Stormwater Assets.

The drawings shall be submitted to the Principal Certifying Authority prior to the release of the Subdivision Certificate.

Reason: Protection of the receiving environment (DACNEHPS2)