

Natural Environment Referral Response - Riparian

Application Number:	Mod2024/0051
Proposed Development:	Modification of Development Consent N0440/15 for the subdivision of land and the construction of a residential development incorporating 81 dwellings and associated civil works and landscaping
Date:	13/05/2024
To:	Maxwell Duncan
Land to be developed (Address):	Lot 1 DP 5055 , 8 Forest 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

Supported.

This application was assessed in consideration of:

- Supplied plans and reports;
- Warriewood Valley Landscape Masterplan and Design Guidelines;
- Warriewood Valley Urban Land Release Water Management Specification 2001; and
- Relevant LEP and DCP clauses.

The proposal includes the introduction of drainage swales to replace piped drainage.

The amended documentation is satisfactory, the modification is supported.

superseded

This referral is supportive of the concept of replacing a piped drainage system with a drainage swale but cannot support a shotcrete swale. The swale must be rock lined for any part of the swale in the inner and outer creekline corridor (i.e., 50 metres from the creek centreline). Continuation of rock-lined channel outside of this area is strongly encouraged.

The following clarification on design features are required:

- 1) Inconsistency between plans – Stormwater System. Stormwater system plans conflict with the Landscape Plans on the location of outlets. Some key conflicts: a) The proposed swale isn't shown on the landscape plans; b) There is a stormwater pipe drawn at the bottom of the Civil drawing C6.01 that also appears on some other plans such as the bottom of C6.12; c) The Landscape plans include a stormwater outlet not included in the civil plans i.e., Page L-04 (drawing #15-826) has another outlet east of the bioretention basin outlet. Clarification and consistency between plans is required.
- 2) Inconsistency between plans – road surface. The Statement of Modification indicates the upgraded fire access road would be sealed. The Landscape plans depict the road as a gravel road. Clarification and consistency between plans is required.
- 3) Design of proposed drainage swale. Council is supportive of the concept of replacing a piped system with a swale system but cannot support shotcrete in the design. Design must be for rock-lined swale planted with native species.
- 4) Design of swale outlet. Civil drawings include reno mattress for scour protection at the end of the proposed drainage swale which cannot be supported. The design must use sandstone and be of natural appearance. Refer to Warriewood Valley Water Management Specification 2001, and DPE Guidelines for Outlets on Waterfront Land.
- 5) A Water Management Report has been provided but No MUSIC model has been provided, and the information about the parameters input into the MUSIC model is too insufficient to assess the acceptability of the proposal.
- 6) Impact on the creekline corridor. The proposal includes two notable impacts on the creekline corridor: a) That the proposed swale may require tree removal but information on what trees would need to be removed does not appear to have been provided; b) Replacement of the fire access trail with a sealed access road will increase activity/traffic and impact the creekline corridor. Clarification on the number of plants to be removed due to the swale and the number of compensatory plantings must be provided. Plantings should enhance the creekline corridor and the reinforce the natural buffer between the sealed access road and the creekline corridor. Coachwood (*Ceratopetalum apetalum*) have not been included in any of the planting plans but are one of the dominant tree species abutting the watercourse immediately upstream. This species must be included in the planting list for the inner creekline corridor.
- 7) Notes included on page L-05 incorrectly states "Creekline bank to be stabilised where required using approved methods by Council". Wording should be amended to "using methods approved by Council".

The proposal is therefore supported.

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

Recommended Natural Environment Conditions:

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

Stormwater Outlet Structure to Creek

Stormwater outlet structures to the creek must be designed in accordance with DPE Water's Guidelines for Outlet Structures on Waterfront land. Guidelines can be found on the DPE website.

No mortar is to be used on the outlet. Rocks must be placed using an interlocking system with varying rock sizes. The surface should be a textured finish to break up and dissipate sheet flows.

This design is to be submitted to the Principal Certifier prior to the release of the Construction Certificate.

Reason: To protect the surrounding creek bank from the effects of localised erosion.