

Natural Environment Referral Response - Riparian

Application Number:	DA2023/1128
Proposed Development:	Demolition works and construction of a Residential Flat Building
Date:	19/10/2023
To:	Gareth David
Land to be developed (Address):	Lot 73 DP 7413 , 27 Redman Road DEE WHY NSW 2099

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 application was assessed in consideration of:

- Supplied plans and reports;
- Protection of Waterways and Riparian Land Policy;
- Northern Beaches Water Management for Development Policy (WM Policy), and;
- Relevant LEP and DCP clauses;

The development application seeks consent for construction of a multi-residential building.

The proposed development is recommended for refusal on the basis that the development does not satisfy Council's planning controls, in particular:

Protection of Waterway and Riparian Lands Policy

Section 3.1 – Protection of Waterway and Riparian Land

a) Natural ecological processes of waterways and riparian land shall be maintained and enhanced to the greatest extent possible by:

- supporting natural flow regimes
- minimising bank erosion and promoting naturalistic bank protection works when stabilisation is necessary (i.e. soft engineering outcomes);
- preventing alteration of watercourses (includes piping, channelling, relocation or removal);
- improving plant communities through natural area restoration;

c) Piped or channelised watercourses shall be reinstated to more natural forms where possible.

Section 3.2 – Protection of Life and Property

- a) Appropriate riparian setback distances shall be incorporated into new development to avoid damage to public and private property.
- b) Development shall be sited and designed to maintain the stability of watercourse bed and banks.
- c) Risks to life and property shall be minimised by observing floodplain development controls.

Section 3.3 - Development

- d) Development within waterways and riparian land should be avoided.

Where a waterway has not yet been identified on Council's Waterways and Riparian Land Map, the riparian land widths are to be applied from relevant State guidelines. These can be found in Attachment 1.

A Waterway Impact Statement is to demonstrate to Council the development will either enhance, or as a minimum, will not adversely affect ecological function or limit opportunities to reinstate the area in the future to the greatest possible extent.

Warringah Development Control Plan 2011

Clause E8 - Waterways and Riparian Lands

Objectives

- Protect, maintain and enhance the ecology and biodiversity of waterways and riparian land.
- Encourage development to be located outside waterways and riparian land.
- Avoid impacts that will result in an adverse change in watercourse or riparian land condition.
- Minimise risk to life and property from stream bank erosion and flooding by incorporating appropriate controls and mitigation measures.
- Maintain and improve access, amenity and scenic quality of waterways and riparian lands.
- Development on waterways and riparian lands shall aim to return Group B and Group C creeks to a Group A standard (as described in Warringah Creek Management Study, 2004) through appropriate siting and development of development.

Clause E6 - Retaining unique environmental features on site

Objectives

To conserve those parts of land which distinguish it from its surroundings.

Requirements

1. Development is to be designed to address any distinctive environmental features of the site and on adjoining nearby land.
2. Development should respond to these features through location of structures, outlook, design and materials.

Warringah Local Environmental Plan 2011

clause 5.21 - Flood Planning

- (e) will not adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.

Detailed Response

Creek stability

The proposed development is carrying a risk of creek bed and bank erosion in relation to:

-Pile Locations

The proposed piles in the main flood channel are respectively near the toe of the chute in the western corner, and in the centre of flow path.

The proposed two piles will impact the bed with a degree of erosion and associated scour holes. Debris are likely to accumulate on the piles with increased risk of obstruction, flow redirection and additional scouring at piles foundation.

-Engineered creek design

The geotechnical report provided indicates that the structures footings will be under high hydraulic

loading with consequently the need to engineer the creek channel.
No creek design has been provided for assessment.

Retaining unique environmental features on site

The site features comprise the waterfall (bedrock steps) and natural pool (including the sediment deposit), which are considered unique environmental features within the Dee Why Lagoon Catchment. The following elements are impacting the general distinctive features of the site:

- proposed building is covering a large part of the existing creek pool and channel;
- piles are placed in the channel.

The constructability and associated impact on the rock chute feature has not been adequately Assessed, including an access ramp to the Northern side that is likely required.

A large section of the creek will be completely covered by the building. No solar access will be possible and no vegetation will be able to establish.

Clause E6 of the WDCP2011 requires design solutions to be explored, including (relevant to the proposed development):

- Choosing parts of the site to develop where features are not present;
- Minimising on-site disturbance;
- Locating buildings to take advantage of environmental features;
- Utilising construction methods that limit impact on sloping/ difficult sites eg. pole construction;
- Implementing a soil and water management plan to limit impact.

It is considered that the proposed development has not adequately considered these design solutions to conserve and enhance the unique environmental feature.

Protection of Life and Property

The pedestrian bridge is located in a high vulnerability area with high flood levels, high velocities and high turbulences zone.

Uncertainty remains on the flow impacts to the pedestrian crossing due to minimum clearance between the rock shelf and the crossing.

Access for maintenance of the area under the building will extremely difficult with an increase risk of blockage and impacts on flow in a critical area.

NECC Riparian Land and Creeks is not supporting the application for the following reasons:

- Intensive engineered creek design will not be supported
- Construction over the creek riparian corridor and instream features (creek energy dissipation pool) is not supported.
- Proposed building A overhang and supporting piles are not supported.

The proposal is therefore unsupported.

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

Recommended Natural Environment Conditions:

Nil.