

Natural Environment Referral Response - Coastal

Application Number:	DA2020/1732
Date:	01/03/2021
Responsible Officer	Rebecca Englund
Land to be developed (Address):	Lot D DP 313630 , 1127 Barrenjoey Road PALM BEACH NSW 2108

Reasons for referral

This application seeks consent for land located within the Coastal Zone.

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

Officer comments

The application has been assessed in consideration of the Coastal Management Act 2016, State Environmental Planning Policy (Coastal Management) 2018 and has also been assessed against requirements of the Pittwater LEP 2014 and Pittwater 21 DCP.

Coastal Management Act 2016

The subject site has been identified as being within the coastal zone and therefore *Coastal Management Act 2016* is applicable to the proposed development. The proposed development is in line with the objects, as set out under Clause 3 of the *Coastal Management Act 2016*.

Further, the applicant has proposed construction of a seawall. Hence the proposed development has been assessed also against the requirements of the Section 27 of the *Coastal Management Act 2016*. As required, the impact & risk associated with the construction of the seawall has been assessed in an Estuarine Risk Management Report & Coastal Engineering Report prepared by Horton Coastal Engineering Pty. Ltd dated 18 December 2020. According to this report, seawall would have an adequately low risk of failure if the recommendations within the Section 7 of this report are followed and the risks of damage to the proposed seawall would be suitably mitigated. Though the report presented justifications of no maintenance clause, yet considering the impact and risk identified in the report, Council applies maintenance condition as per Section 27(b)(ii) in approving this DA

State Environmental Planning Policy (Coastal Management) 2018

The subject land has been included on the 'Coastal Environment Area' and 'Coastal Use Area' maps under the State Environmental Planning Policy (Coastal Management) 2018 (CM SEPP). Hence, Clauses 13, 14 and 15 of the CM SEPP apply for this DA.

Comment:

On internal assessment and as assessed in the submitted Statement of Environmental Effects (SEE) report prepared by Boston Blyth Fleming Pty. Ltd. dated December 2020 and also as assessed in the submitted Estuarine Risk Management Report & Coastal Engineering Report prepared by Horton Coastal Engineering Pty. Ltd dated 18 December 2020, the DA satisfies requirements under clauses 13, 14 and 15 of the CM SEPP.

As such, it is considered that the application does comply with the requirements of the State Environmental Planning Policy (Coastal Management) 2018.

Pittwater LEP 2014 and Pittwater 21 DCP

Estuarine Risk Management

The subject property has also been identified as affected by estuarine wave action and tidal inundation on Council's Estuarine Hazard Mapping. As such, the Estuarine Risk Management Policy for Development in Pittwater (Appendix 7, Pittwater 21 DCP) and the relevant B3.7 Estuarine Hazard Controls will apply to any proposed development of the site.

In accordance with the the submitted Estuarine Risk Management Report & Coastal Engineering Report prepared by Horton Coastal Engineering Pty. Ltd dated 18 December 2020 , an estuarine planning level (EPL) of RL 2.45m AHD would apply at the subject site.

On internal assessment and as assessed in the submitted Estuarine Risk Management Report & Coastal Engineering Report prepared by Horton Coastal Engineering Pty. Ltd dated 18 December 2020, the ground floor level for the proposed development is above the applicable EPL for the site.

The proposed development is therefore able to satisfy the relevant estuarine risk management requirements of P21 DCP.

Development on Foreshore Area

A section of the subject property is within the foreshore building line. Part 7, Clause 7.8 –Limited development on foreshore area of the Pittwater LEP 2014 applies for any development within the foreshore area.

The DA proposes sea retaining walls works. All these proposed works are consistent with Clause 7.8(2) (b).

On internal assessment and as assessed in the submitted Statement of Environmental Effects (SEE) report prepared by Boston Blyth Fleming Pty. Ltd. dated December 2020, the DA satisfies the objectives and requirements of Part 7, Clause 7.8 of the Pittwater LEP 2014.

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

Estuarine Hazard Design Requirements

The following applies to all development:

All development or activities must be designed and constructed such that they will not increase the level of risk from estuarine processes for any people, assets or infrastructure in surrounding properties; they will not adversely affect estuarine processes; they will not be adversely affected by estuarine processes.

To ensure Council's recommended flood evacuation strategy of 'shelter-in-place', it will need to be demonstrated that there is safe pedestrian access to a 'safe haven' above the Estuarine Planning Level.

Reason: To minimise potential hazards associated with development in an estuarine habitat.

Estuarine Planning Level Requirements

An Estuarine Planning Level (EPL) of 2.45m AHD with the seawall in place has been recommended in an Estuarine Risk Management Report & Coastal Engineering Report prepared by Horton Coastal Engineering Pty. Ltd dated 18 December 2020 and has been adopted by Council for the subject site. These shall be applied to all development proposed below this level as follows:

- All structural elements below 2.45m AHD shall be of flood compatible materials;
- All potential entry points for estuarine inundation into the dwelling should be located at or above 2.45m AHD;
- All electrical equipment, wiring, power supplies (including electrical fittings, outlets and switches), fuel lines or any other service pipes and connections adjacent to and external to the dwelling must be located either at or above 2.45m AHD or waterproofed to this level; and
- All electrical equipment, wiring, power supplies (including electrical fittings, outlets and switches), fuel lines or any other service pipes and connections to the west of the dwelling should be located above a level advised by a coastal engineer or waterproofed, to avoid the likelihood of contact with splashing waves and spray; and
- The storage of toxic or potentially polluting goods, chemicals or materials, which may be hazardous or pollute the waterway, is not permitted below 2.45m AHD external to the dwelling.

Reason: To ensure aspect of the development are built at the appropriate level

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Compliance with Estuarine Risk Management Report

The development is to comply with all recommendations of the approved Estuarine Risk Management Report & Coastal Engineering Report prepared by Horton Coastal Engineering Pty. Ltd dated 18 December 2020 and these recommendations are to be incorporated into construction plans.

Reason: To minimise potential hazards associated with development in an estuarine habitat.

Structural Engineering for Estuarine Risk

Structural engineering design for the development shall be prepared, with input as necessary from a chartered professional engineer with coastal engineering as a core competency, to ensure that for its design life (taken to be 60years as justified and accepted by Council) the development is able to withstand the wave impact forces and loadings identified in the approved Estuarine Risk Management Report & Coastal Engineering Report prepared by Horton Coastal Engineering Pty. Ltd dated 18 December 2020

Note: The potential for component fatigue (wear and tear) should be recognised for the less severe, but more frequent, wave impact loadings.

Reason: To ensure structural engineering is prepared by an appropriately qualified professional

Engineers Certification of Plans

The structural design shall be prepared by and each plan/sheet signed by, a registered professional civil or structural engineer with chartered professional status (CP Eng) who has an appropriate level of professional indemnity insurance and shall be submitted to the Principal Certifying Authority prior to the release of the Construction Certificate.

Reason: To ensure structural engineering is prepared by an appropriately qualified professional

Risk Mitigation works to minimise risks to the proposed seawall

The risks of damage to the proposed seawall would be suitably mitigated when the recommendations within the Section 7 of the submitted Estuarine Risk Management Report & Coastal Engineering Report prepared by Horton Coastal Engineering Pty. Ltd dated 18 December 2020 are followed, Details demonstrating compliance with this requirement are to be prepared by a suitably qualified coastal engineer and submitted to the certifying authority for approval prior to issue of this Construction certificate.,

Reason: Risks are reasonably mitigated

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, particularly after periods of rain, and shall remain in proper operation until all development activities have been completed and the site is sufficiently stabilised with vegetation.

Reason: To protect the surrounding environment from the effects of sedimentation and erosion from the

site

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

Compliance with Estuarine Risk Management Report

The development is to comply with all recommendations of the approved Estuarine Risk Management Report & Coastal Engineering Report prepared by Horton Coastal Engineering Pty. Ltd dated 18 December 2020 and these recommendations are to be maintained over the life of the development.

Reason: To ensure preservation of the development and the estuarine environment; and to apply a maintenance condition as per Section 27(b)(ii) of the Coastal Management Act 2016.