

Natural Environment Referral Response - Flood

Application Number:	DA2024/1580
Proposed Development:	Alterations and additions to a dwelling house
Date:	24/01/2025
To:	Thomas Burns
Land to be developed (Address):	Lot 299 DP 16719 , 17 Narroy Road NORTH NARRABEEN NSW 2101

Reasons for referral

This application seeks consent for the following:

- All Development Applications on land below the 1 in100 year flood level;
- All Development Applications located on land below the Probable Maximum Flood levels.

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

Officer comments

This proposal is for alterations and additions to an existing dwelling, including a ground floor extension, a garage and a carport. The proposal is assessed against Section B3.11 of the Pittwater DCP and Clause 5.21 of the Pittwater LEP.

The proposal is located within the Medium Flood risk precinct. The relevant flood characteristics are as follows:

Flood Planning Level: 3.53m AHD

1% AEP Flood Level: 3.03m AHD

Probable Maximum Flood (PMF) Level: 4.90m AHD

Max PMF Life Hazard Category: H4

The proposal includes a suitable shelter-in-place refuge, and the proposed floor levels are above the relevant levels.

Subject to the following conditions, the proposal generally complies with Section B3.11 of the Pittwater DCP and Clause 5.21 of the Pittwater LEP.

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

Flood effects caused by development

There is to be no filling of the land or any other reduction of the available flood storage which results in a net loss of storage below the 1% AEP flood level of 3.03m AHD.

Details demonstrating compliance are to be submitted to the Principal Certifier for approval.

Reason: To reduce the impact of flooding and flood liability on owners and occupiers of flood-prone property and reduce public and private losses in accordance with Council and NSW Government policy.

Building components and structural soundness

B1 - All new development below the Flood Planning Level of 3.53m AHD shall be designed and constructed from flood compatible materials.

B2 - The shelter in place refuge must be designed to ensure structural integrity up to the Probable Maximum Flood level of 4.90m AHD, with the remainder of the new development designed to ensure structural integrity up to the Flood Planning Level of 3.53m AHD. The forces of floodwater, debris load, wave action, buoyancy and immersion must all be considered.

B3 - All new and existing electrical equipment, power points, wiring and connections must be located above the Flood Planning Level of 3.53m AHD, protected from flood water or have residual current devices installed to cut electricity supply during flood events.

Details demonstrating compliance are to be submitted to the Principal Certifier for approval.

Reason: To reduce the impact of flooding and flood liability on owners and occupiers of flood-prone property and reduce public and private losses in accordance with Council and NSW Government policy.

Floor levels

C1 - New floor levels within the development shall be set at or above the Flood Planning Level of 3.53m AHD.

C3 - The underfloor area of the dwelling below the 1% AEP flood level is to be designed to allow clear passage of floodwaters. At least 50% of the perimeter of the underfloor area must be of an open design from the natural ground level up to the 1% AEP flood level.

Details demonstrating compliance are to be submitted to the Principal Certifier for approval.

Reason: To reduce the impact of flooding and flood liability on owners and occupiers of flood-prone property and reduce public and private losses in accordance with Council and NSW Government policy.

Car parking

D3 - The carport is to have at least two sides completely open and be free draining.

D5 - The floor level of the proposed garage shall be set at or above the 1% AEP flood level of 3.53m

AHD.

Details demonstrating compliance are to be submitted to the Principal Certifier for approval.

Reason: To reduce the impact of flooding and flood liability on owners and occupiers of flood-prone property and reduce public and private losses in accordance with Council and NSW Government policy.

Emergency response

E1 - The shelter-in-place refuge must:

- a) Have a floor level at or above the Probable Maximum Flood level of 4.90m AHD; and
- b) Have a floor space that provides at least 2m² per person; and
- c) Be intrinsically accessible to all people on the site, plainly evident, and self-directing, with sufficient capacity of access routes for all occupants without reliance on electrical means.

Details demonstrating compliance are to be submitted to the Principal Certifier for approval.

Reason: To reduce the impact of flooding and flood liability on owners and occupiers of flood-prone property and reduce public and private losses in accordance with Council and NSW Government policy.

Fencing

New fencing (including pool fencing, boundary fencing, balcony balustrades and accessway balustrades) shall be open to allow for the unimpeded movement of flood waters. It must be designed with a minimum of 50% open area along any straight length, from the natural ground level up to the 1% AEP flood level. Openings shall be a minimum of 75mm x 75mm.

Details demonstrating compliance are to be submitted to the Principal Certifier for approval.

Reason: To reduce the impact of flooding and flood liability on owners and occupiers of flood-prone property and reduce public and private losses in accordance with Council and NSW Government policy.

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

Certification of Works as Executed

A suitably qualified engineer and/or registered surveyor is to certify that the completed works have been constructed in accordance with this consent and the approved plans with respect to the following:

1. Floor levels for ground floor, shelter in place refuge and garage are set at or above the required level
2. All access, ventilation, driveway crests and any other potential water entry points to the basement car park have been set at or above the required level
3. There has been no filling on the land other than what has been approved
4. Openings are provided under floor areas where required for the free passage of flood waters

5. Openings are provided in fencing where required for the free passage of flood waters
6. Car ports have at least two sides completely open

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Occupation Certificate.

Reason: To reduce the impact of flooding and flood liability on owners and occupiers of flood-prone property and reduce public and private losses in accordance with Council and NSW Government policy.

Building Components and Structural Soundness

B2 - A suitably qualified structural engineer is to certify the structural integrity of the shelter in place up to the Probable Maximum Flood level of 4.90m AHD, and the remainder of the new development up to the Flood Planning Level of 3.53m AHD. The depth, velocity, debris load, wave action, buoyancy and immersion must all be considered.

B3 - A suitably qualified electrician or contractor is to certify that all new and existing electrical equipment, power points, wiring and connections are located above the Flood Planning Level of 3.53m AHD, are protected from flood water or have residual current devices installed to cut electricity supply during flood events.

Details demonstrating compliance are to be submitted to the Principal Certifier prior to the issue of the Occupation Certificate.

Reason: To reduce the impact of flooding and flood liability on owners and occupiers of flood-prone property and reduce public and private losses in accordance with Council and NSW Government policy.