

# Natural Environment Referral Response - Flood

| Application Number:             | DA2021/0233   |
|---------------------------------|---|
|                                 |   |
| Date:                           | 26/04/2021  |
| То:                             | Adam Croft  |
| Land to be developed (Address): | Lot 7 DP 1448 , 353 Pittwater Road NORTH MANLY NSW 2100 |

#### 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

The proposed works comprise demolition of the existing dwelling with a car port and construction of a larger two-storey dwelling with a garage. The site is affected by the High Flood Risk Precinct, with a 1% AEP flood level of 3.15m AHD, Flood Planning Level (FPL) of 3.65m AHD and Probable Maximum Flood (PMF) level of 5.65m AHD.

The proposed development generally complies with Council's flood related development controls.

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

# **Flooding**

In order to protect property and occupants from flood risk the following is required:

# Building Components and Structural Soundness - B1

All new development below the Flood Planning Level of 3.65m AHD shall be designed and constructed as flood compatible buildings in accordance with Reducing Vulnerability of Buildings to Flood Damage: Guidance on Building in Flood Prone Areas, Hawkesbury-Nepean Floodplain Management Steering Committee (2006).

# Building Components and Structural Soundness - B2

All new development must be designed to ensure structural integrity up to the Probable Maximum Flood

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level of 5.65m AHD, taking into account the forces of floodwater, wave action, flowing water with debris, buoyancy and immersion.

# Building Components and Structural Soundness – B3

All new electrical equipment, power points, wiring, fuel lines, sewerage systems or any other service pipes and connections must be waterproofed and/or located above the Flood Planning Level of 3.65m AHD

### Floor Levels – C1

New floor levels within the development shall be set at or above the Flood Planning Level of 3.65m AHD.

#### Floor Levels – C3

The underfloor area of the dwelling below the 1% AEP flood level of 3.15m AHD 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.

# Car parking - D5

The floor level of the proposed garage shall be set at or above the 1% AEP flood level of 3.15m AHD.

# Fencing – F1

Any 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 from the natural ground level up to the 1% AEP flood level. Openings should be a minimum of 75mm x 75mm.

### Storage of Goods – G1

Storage areas for hazardous or potentially polluting materials shall not be located below the Flood Planning Level of 3.65m AHD unless adequately protected from floodwaters in accordance with industry standards.

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

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

# Certification of the Structural Stability of the Building (B2)

A suitably qualified structural engineer is to certify the structural stability of the new development considering lateral flood flow, buoyancy, suction effects, wave action and debris load impact of the Probable Maximum Flood (PMF) design flood depths and velocities.

Details demonstrating compliance are to be submitted to the Certifying Authority 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.

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# **Certification of Services (B3)**

A suitably qualified electrical engineer or contractor is to certify that all new electrical equipment, power points, wiring, fuel lines, sewerage systems or any other service pipes and connections are located above the Flood Planning Level of 3.65m AHD or have residual current devices installed to cut electricity supply during flood events.

Details demonstrating compliance are to be submitted to the Certifying Authority 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.

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

# **Flood Management**

Storage of Goods (G1)

Hazardous or potentially polluting materials shall not be stored below the Flood Planning Level of 3.65m AHD unless adequately protected from floodwaters in accordance with industry standards.

# Flood Effects Caused by Development (A2)

There shall be no filling of the land below the 1% AEP flood level of 3.15m AHD, or obstruction of flow paths through the property. This includes the blocking of areas required by DA consent to be left open.

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.

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