

## Natural Environment Referral Response - Flood

<b>Application Number:</b>	DA2023/1708
<b>Proposed Development:</b>	Demolition works and construction of a Recreation Facility (indoor) with signage
<b>Date:</b>	21/12/2023
<b>To:</b>	Gareth David
<b>Land to be developed (Address):</b>	Lot 2743 DP 752038 , 431 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 proposal is for the demolition of the existing Bowling Club clubhouse and the construction of a new gymnastics facility and associated car park.

The development covers 1.023ha and is predominantly within the identified Medium Risk Flood Planning Precinct. The eastern, southern and western boundaries of the site are slightly within the High Risk Flood Planning Precinct. The site has the following flood planning characteristics:

- 1% AEP Flood Level: 3.2m AHD
- 1% AEP Hydraulic Category: Fringe, Storage & Floodway
- Flood Planning Level: 3.71m AHD
- Probable Maximum Flood (PMF) Level: 5.7m AHD
- PMF Life Hazard Category: H5

Subject to the following conditions, council is generally satisfied that the proposal is compliant with Section 5.4.3 Flood Prone Land from the Manly DCP 2013 and Clause 5.21(2)(a-e) of the Manly LEP 2013, with consideration of Clause 5.21(3)(a-d) of the Manly LEP 2013.

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 3.71m 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 3.71m AHD shall be designed and constructed from flood compatible materials.

B2 - All new development must be designed to ensure structural integrity up to the Probable Maximum Flood level 5.7m AHD, taking into account the forces of floodwater, debris load, wave action, buoyancy and immersion.

B3 - All new and existing electrical equipment, power points, wiring and connections must be located above the Flood Planning Level of 3.71m 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 3.71m 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**

D1 - Open carpark areas and carports shall not be located within a floodway.

D2- The lowest floor level of open carparks shall be constructed no lower than the natural ground levels.

D4 - Vehicle barriers or restraints such as bollards or railing are to be installed so as to prevent vehicle movement from the car parking area. Protection must be provided for all events up to the 1% AEP flood event.

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 5.7m AHD; and
- b) Have a floor space that provides at least 1m<sup>2</sup> / 2m<sup>2</sup> (delete one) 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.

E2 - The shelter-in-place refuge must contain emergency power and a practical means of medical evacuation.

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.

### **Storage of Goods**

Storage areas for hazardous or potentially polluting materials shall not be located below the Flood Planning Level of 3.71m AHD unless adequately protected from floodwaters in accordance with industry standards.

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. There has been no filling on the land other than what has been approved
3. Openings are provided under floor areas where required for the free passage of flood waters
4. Openings are provided in fencing where required for the free passage of flood waters
5. Vehicle barriers or restraints have been installed.

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 new development up to the Probable Maximum Flood level of 5.7m 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 3.71m 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.

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

### Flood Management

#### Flood Emergency Response (E1)

Appropriate access to the shelter in place refuge is to be maintained at all times from all areas within the development and it must contain as a minimum: sufficient clean water for all occupants; portable radio with spare batteries; torch with spare batteries; and a first aid kit.

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.