

Natural Environment Referral Response - Flood

Application Number:	DA2020/1039
Date:	28/09/2020
To:	Maxwell Duncan
Land to be developed (Address):	Lot 202 DP 1019363 , 15 Jubilee Avenue WARRIEWOOD NSW 2102

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 western portion of the property is flood affected, with an open creek channel along the western boundary.

The 1% AEP flood level ranges from 17.86 mAHD at the north western corner of the site to 17.90m AHD at the south western corner. The Flood Planning Level is 18.4m AHD and the Probable Maximum Flood level is 18.7m AHD.

The proposal is for the construction of a hardstand pavement bus depot where there will be the storage, cleaning and refuelling of 48 buses. The proposal also involves the construction of office and staff amenities, and staff carparking.

All proposed buildings are located on the eastern side of the property, outside of the PMF extent. Part of the bus parking area is below the 1% AEP flood level.

The survey provided with the application shows some depression between the sewer easement and the eastern bank of the open channel. Comparison of the pavement levels on Drawing D2/NGA-S2002-DWG-DA11 and the survey provided with the application shows a pavement grade of 2%, with the final pavement slightly higher than the existing ground level in the vicinity of the depression, but slightly lower than the existing ground level on the western edge of the paving. Overall flood storage is not reduced.

According to the Flood Management Report by Lindsay Dynan, It is considered unlikely that the buses would float when any inundation occurs as they are not considered to be watertight. The report also states that the velocity during a 1% AEP event is significantly low and would be unlikely to move buses. However vehicle barriers would still be required in case the buses do actually float.

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 – C2

All new development must be designed and constructed to ensure structural integrity up to the Flood Planning Level of 18.4m AHD, taking into account the forces of floodwater, wave action, flowing water with debris, buoyancy and immersion. Structural certification shall be provided confirming the above.

Storage of Goods – D1

Hazardous or potentially polluting materials shall not be stored below the Flood Planning Level of 18.4m AHD unless adequately protected from floodwaters in accordance with industry standards.

Car parking – G4

Vehicle barriers or restraints must be installed up to the Flood Planning Level of 18.4m AHD such that they would prevent floating vehicles from leaving the site during a 1% AEP flood event.

Fencing – H1

Any new fencing within the 1% AEP flood extent shall be open for passage of flood waters, with a minimum of 50% open area from the natural ground level up to the 1% flood level.

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.