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MBAS-A-996

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Northern Beaches Council
PO Box 82
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Our Ref: R-mbas-a-230331

31 March 2023

Dear Sir,

77-79 Bassett Street, Mona Vale, Unit A; Proposed Alterations and Additions
Flood Report

1 INTRODUCTION

This flood report has been prepared based on information contained in a "Flood Information Report - Comprehensive" issued by Council on 21 December 2022 and which relates to the entire area of the property, Lot 1 DP 88028 & Lot 4 DP 707291. This flood report also takes into account the provisions of Pittwater LEP (2014) section 7.4 and Pittwater LEP (2014) sections B3.11 and B3.12.

The site is shown in the attached Drawing MBAS-AF-DA.

Unit A, mainly used as a warehouse with an attached office building, is located at the front of the Western Building of 77-79 Bassett Street and has a total ground floor area of 786.5 sq m. The office building has an existing mezzanine floor above with internal staircase access. It is proposed to construct a new mezzanine floor within the warehouse with an area of 514.0 sq m which will be connected by a short staircase to the existing mezzanine floor which has an area of 135.2 sq m.

The existing openings to the Unit are through a sliding door to allow vehicular access from the forecourt on the northern end and a pedestrian access to the office annex. It is intended to replace the sliding door with a roller shutter door and provide another pedestrian access to the warehouse to access the new mezzanine floor.

Access from Bassett Street is shared with all the other units on the property.

2 FLOOD ANALYSIS

The findings of the Flood Information Report (in bold) and commentary are as follows:

2.1 Flood Risk Precinct - Map A; Identified as a Medium Risk Flood Precinct.

Examination of Map A indicates that the southern end of the property is classified as Medium Risk which explains the Council classification, however, the northern end of the property adjoining Bassett Street, including Unit A and access from the street is shown as a Low Risk Precinct.

Therefore for the purposes of this DA the proposed development site is located in a LOW RISK PRECINCT.

2.2 Flood Planning Area - Map A ; RL 3.14m

The existing ground floor level of Unit A is RL 2.94 and the forecourt/parking area varies from RL 2.92 to RL 2.70, all below the Flood Planning Level (FPL). However the proposed new mezzanine floor level is RL 6.42, ie, more than 3 metres above the FPL.

2.3 1% AEP Flood - Map B; Maximum water level = RL 2.64
1% AEP Hydraulic Categorisation - Map D;

Both of the above indicate that the forecourt/parking area is flood-free for the 1% AEP as is the ground floor of Unit A.

2.4 Probable Maximum Flood (PMF) - Map C
PMF Maximum Flood Level RL 3.56
PMF Hydraulic Categorisation - Map E

The forecourt/parking area is classified as a Flood Storage Area and the PMF would inundate the ground floor of Unit A

2.5 Flooding with Climate Change - Map F
1% AEP Maximum Water Level RL 2.81

The Unit will still not flood in the 1% AEP event after allowing for climate change although there will be a maximum flood depth of 110mm in the forecourt but only the part nearest the street will be flooded.

2.6 Flood Life Hazard Category - Map G

In that part of the forecourt closest to the Unit, the Hazard Category is H2 (unsafe for small vehicles) increasing to H3 (unsafe for vehicles, children and the elderly) towards the property boundary and the Street. As these categories are incompatible with the flood levels identified above and the ground levels found by survey no commentary can be made.

3 CONCLUSIONS

By reference to the drawing it can be seen that the 1% AEP flood under current conditions is largely confined to the street whilst Unit A and the forecourt remains flood-free. For future climate change the flooded area within 77-79 is increased significantly. However the Unit and immediate area of forecourt remains flood-free although parts of the forecourt will be inundated with floodwaters with a maximum depth of approximately 110mm. The water depth at the entry from the street will be approximately 150mm.

More extreme flood events will cause flooding within Unit A and the PMF level of RL 3.56 will cause flooding up a depth of 620mm. However, the mezzanine floor level of RL 6.42 is well above this flood level. Therefore any people, staff, customers or visitors within Unit A or its forecourt can simply ascend to safety by using either of the two staircases to the mezzanine floors. In the event of an extreme flood, no evacuation strategy would be required; rather advice would be to "Shelter-in-Place" until the rainfall has ceased and floodwater retreats from the premises, forecourt and street.

The proposed works will not increase flood risk to human life or property and will not have any impact on flood levels either locally or downstream.

Yours faithfully,
John Lawrence

Attachment: A1 size Drawing MBAS-AF-DA