

MEMORANDUM

To	Mitchelle Bejeck	From	Ashley Chen
Copy		Reference	20152-M01-FIA_0
Date	8 September 2023	Pages	5
Subject	19 Sydney Road Manly – Flood Impact Assessment		

Dear Mitchell,

WMS has been engaged by Fluency Hub for the site at 19 Sydney Road, Manly (referred to as 'the site'). This memo details the process undertaken and the outcome.

1 PROJECT BACKGROUND

The site is located approximately 10 km northeast of Sydney, within Northern Beaches Council Local Government Area (LGA) in New South Wales. The proposed works are to change the use of college with fit-out. The proposed ground floor plan is illustrated in **Figure 1-1**, provided by Fluency Hub on 7th of September 2023. The site is mapped as being located on land within a medium flood risk precinct. This is based on Flood Information Report provided by Northern Beaches Council, as shown in **Figure 1-2**.

To address associated flooding issues and obtain development approval from Northern Beaches Council, the development must demonstrate compliance with the Manly Development Control Plan 2013 and Local Environmental Plan 2013.

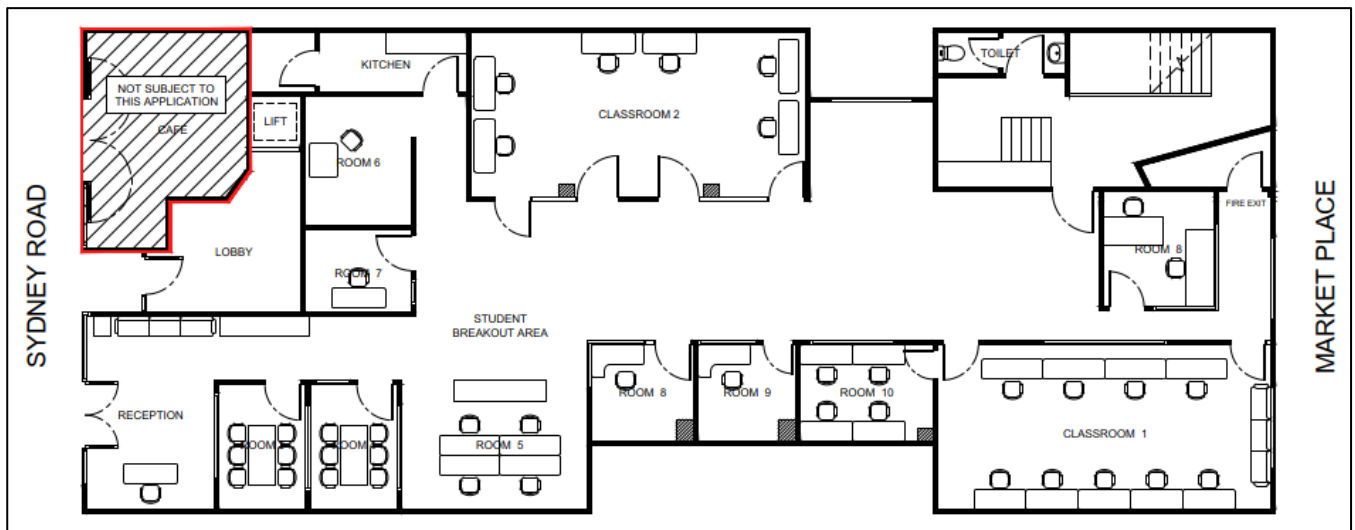


Figure 1-1 Proposed Ground Floor Plan (ARCHISPECTRUM, 1st of August 2023)

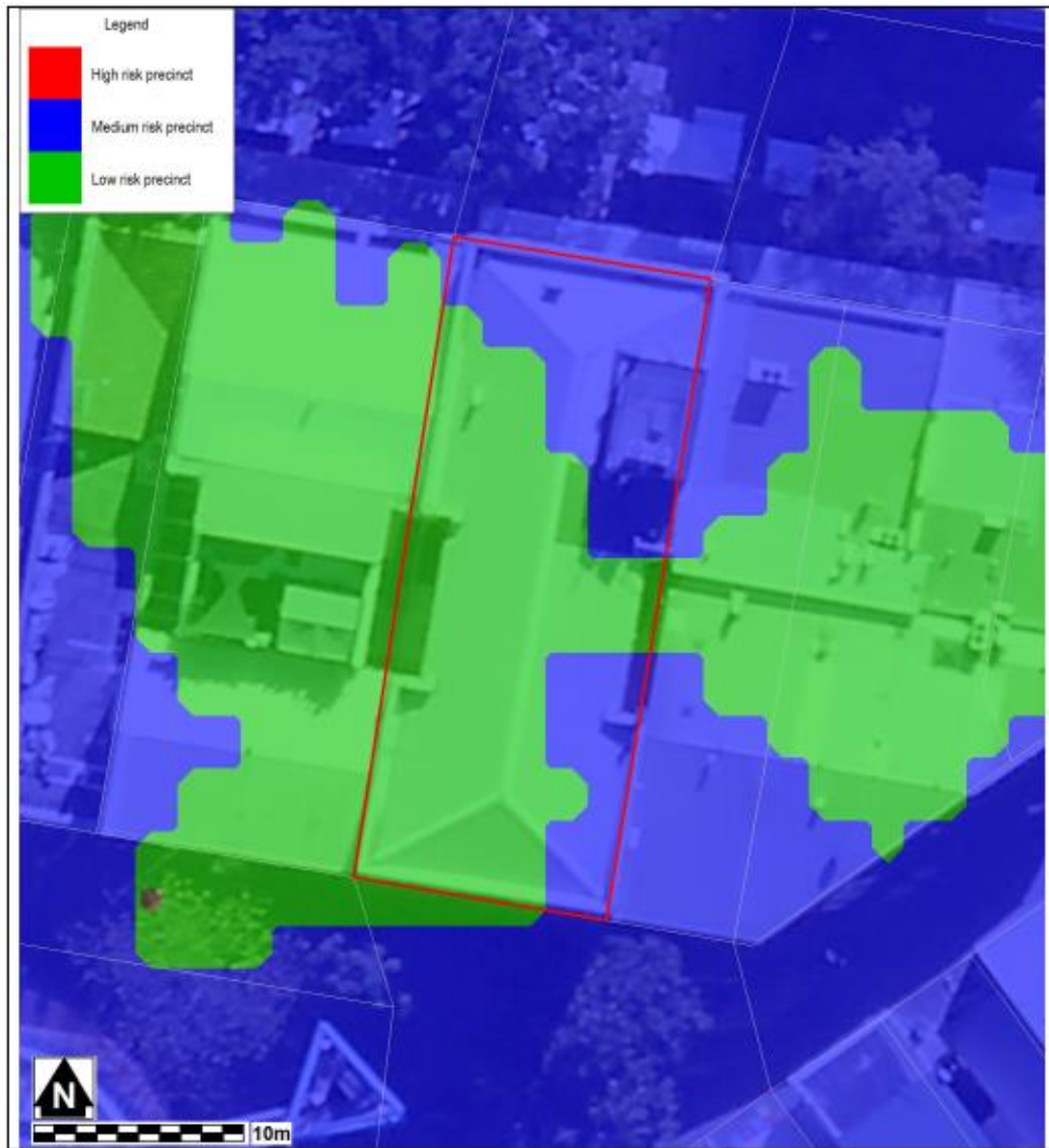


Figure 1-2 Flood Risk Precinct (Flood Information Report, Northern Beach Council)

2 LOCAL TOPOGRAPHY

After conducting a review of the available topographic data (1 m resolution LiDAR – NSW Gov, 2020), it has been determined that the site is situated within the Manly Beach catchment and located approximately 180 m upstream of the outfall into the ocean. The topography of the site is generally flat, with a minor slope from south to north-east. There is a low point of 5.06 mAHD at the front of the property at Sydney Road. The site location and study area topography are illustrated in **Figure 2-1**.



Figure 2-1 Study Location and Topography

3 DEVELOPMENT COMPLIANCE

WMS has reviewed the planning requirements set out in the Manly Local Environmental Plan 2013 and the Manly Development Control Plan 2013 to assess the compliance of the proposed development with applicable flood related development controls.

3.1 MANLY LOCAL ENVIRONMENTAL PLAN (LEP) 2013, CLAUSE 6.3: FLOOD PLANNING

The objectives of Clause 6.3 – Flood Planning are as follows:

- a) To minimise the flood risk to life and property associated with the use of land;
- b) To allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change;
- c) To avoid significant adverse impacts on flood behaviour and the environment.

The objectives of the LEP are supported by the Manly Development Control Plan (DCP) 2013, which set out specific requirements to ensure proposed developments meet the above outcomes. The planning requirements set out in the LEP are detailed and addressed regarding the proposed development in **Table 3-1**.

Table 3-1 Many LEP, Clause 6.3, Flood Planning – Requirements

Planning Requirements	Comment	Status
(1) Objectives, see list above.	n/a	n/a
(2) This clause applies to land at or below the flood planning level.	No change to the existing floor level.	Satisfied

Planning Requirements	Comment	Status
(3) In deciding whether to grant development consent on land to which this clause applies, the consent authority must consider the following matters		
(a) the development is compatible with the flood hazard of the land, and	<i>The subject site is located on land within a medium flood risk precinct. However, no change to the existing finished floor levels is proposed, nor is any cut or fill proposed as a part of the works. As such, the proposed development is compatible with the flood hazard of the land.</i>	Satisfied
(b) the development is not likely to significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties, and	<i>There is no change in building footprint of the proposed development. The proposed development does not adversely affect flood behaviour on other developments.</i>	Satisfied
(c) the development incorporates appropriate measures to manage risk to life from flood, and	<i>No change to the existing floor levels is proposed as part of the development.</i>	Satisfied
(d) the development is not likely to significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and	<i>The proposed works is wholly contained within the existing building footprint and will not encroach on riparian corridors or water courses.</i>	Satisfied
(e) the development is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding.	<i>The proposed works is wholly contained within the existing building footprint and will not result in any unsustainable social and economic costs to the community as a consequence of flooding.</i>	Satisfied

3.2 MANYLY DEVELOPMENT CONTROL PLAN (DCP), SECTION 5.4.3, FLOOD PLANNING – REQUIREMENTS

The Manly DCP, Part 5.4.3 contains controls relating to flood planning. Proposed development is classified as Business & Industrial Use. Therefore, WMS has reviewed the proposed plans in relation to Council's requirements and provided an assessment of the development's compliance with each control in **Table 3-2**.

Table 3-2 Manly DCP 2013, Section 5.4.3, Flood Planning – Requirements

ID	Planning Requirements	Comment	Status
Flood effects caused by development			
A1.	Development (including earthworks and subdivision) shall not be approved unless it can be demonstrated in a Flood Management Report that it complies with the Flood Prone Land Design Standard found on Council's webpage.	<i>As per Table 3-1 and Table 3-2.</i>	Satisfied
A3.	The applicant shall include in their submission, calculations to illustrate that any fill or other structures that reduce the total flood storage are replaced by Compensatory Works.	<i>No fill is proposed as a part of the development.</i>	No action
Drainage infrastructure and creek works			
B1.	Flood mitigation works or stormwater devices that modify a major drainage system, stormwater system, natural water course, floodway, or flood behaviour within or outside the development site may be permitted subject to demonstration through a Flood Management Report that they comply with the Flood Prone Land Design Standard found on Council's webpage.	<i>No flood mitigation works, or stormwater devices are proposed as a part of the development.</i>	No action
B2.	A Section 88B notation under the Conveyancing Act 1919 may be required to be placed on the title describing the location and		

ID	Planning Requirements	Comment	Status
	type of flood mitigation works with a requirement for their retention and maintenance		
Building components and structural			
C1.	All buildings 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).	<i>Not applicable – no change to existing finished floor levels.</i>	No action
C2.	All structures must be designed and constructed to ensure structural integrity up to the Flood Planning Level, taking into account the forces of floodwater, wave action, flowing water with debris, buoyancy and immersion. Structural certification shall be provided confirming the above. Where shelter-in-place refuge is to be provided the structural integrity is to be to the Probable Maximum Flood level.		
C3.	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. All existing electrical equipment and power points located below the Flood Planning Level must have residual current devices installed that turn off all electricity supply to the property when flood waters are detected		
Storage of goods			
D1.	Hazardous or potentially polluting materials shall not be stored below the Flood Planning Level unless adequately protected from floodwaters in accordance with industry standards	<i>Not applicable – no change to existing finished floor levels.</i>	No action
D2.	Goods, materials or other products which may be highly susceptible to water damage are to be located/stored above the Flood Planning Level.		
Flood emergency response			
E1.	Development shall comply with Council's Flood Emergency Response Planning for Development in Pittwater Policy and the outcomes of any Flood Risk Emergency Assessment Report where it applies to the land.	<i>Not considered required given that no change to existing finished floor levels.</i>	No action
E2.	New development must provide an appropriately sized area to safely shelter in place above the Probable Maximum Flood level and appropriate access to this area should be available from all areas within the development		
E3.	Adequate Warning Systems, Signage and Exits shall be installed to allow safe and orderly evacuation without reliance upon the SES or other authorised emergency services personnel		
Floor levels (F1 - F11) - Not applicable			
Car Parking (G1 - G10) - Not applicable			
Fencing			
H1.	Fencing, including pool fencing, shall be designed so as not to impede the flow of flood waters and not to increase flood affectation on surrounding land. Appropriate fencing must comply with the Flood Prone Land Design Standard in addition to other regulatory requirements of pool fencing.	<i>The proposed development does not involve fencing.</i>	No action



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4 CONCLUSION

4.Flood Risk Assessment Report

The development is located on land within a medium flood risk precinct or the development is vulnerable and is located in low flood risk precincts as identified on Council's Flood Hazard Maps. A Flood Risk Assessment is therefore required which addresses the flooding provisions contained in the Manly LEP and DCP.

Response

Based on a desktop review of available data and proposed development plan in this region, WMS has determined that the proposed development will have a net neutral effect on flood behaviour and is in compliance with the Manly LEP and DCP. No hydrologic/hydraulic modelling is considered necessary for the site under existing or developed conditions.

Yours sincerely,

A handwritten signature in black ink that reads 'Ashley Chen'.

Ashley Chen
Project Engineer