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MEMORANDUM

То	Tomoki Takei	From	Ashley Chen
Сору		Reference	20314 - M01 – FA - 3
Date	3 February 2025	Pages	5
Subject	Retail 02, 63-67 The Corso Manly– Flood Assessment		

Dear Tomoki,

WMS has been engaged by Liteco Studio for the site at Retail 02, 63-67 The Corso, Manly (referred to as 'the site'). This memo details the process undertake and the outcome.

1 PROJECT BACKGROUND

The site is located approximately 11 km north-east of Sydney, within Northern Beaches Council Local Government Area (LGA) in New South Wales. The site is mapped as being located on land within a medium flood risk precinct based on Northern Beaches Council Flood Hazard Map Portal.

The proposed ground floor plan is illustrated in **Figure 1-1**, provided by Liteco Studio on 31st of January 2025. 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.

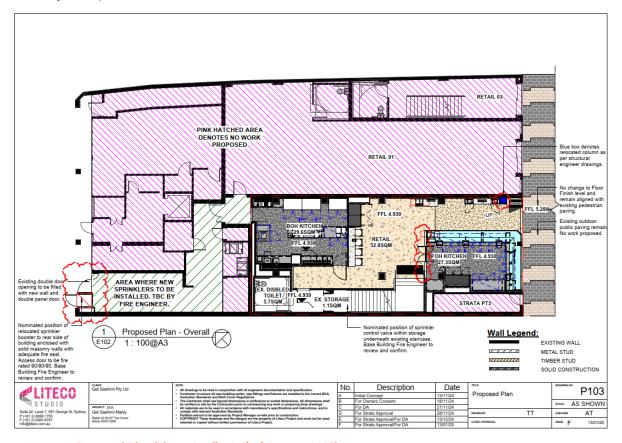


Figure 1-1 Proposed Plan (Liteco Studio, 31st of January 2025)



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 at the site slopes north-east to north-west with a high point of 5.2 mAHD at the front in The Corso, and a low point of 4.8 mAHD at the rear of the property within Market Place. The site is located on land identified as flood affected and is subject to flood risk according to the Northern Beaches Council Flood Hazard Map Portal. 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 planning level.	flood The existing floor level of the ground floor is 4.93 mAHD. No decrease to the existing floor levels is proposed as part of the development. The entry levels remain at 5.28 mAHD.	Satisfied		
(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 hazard of the land, and	the flood The subject site is located on land within a medium flood risk precinct. However, no decrease in existing finished floor levels and also no cut and fill are proposed as a part of the development. As such, the proposed development is compatible with the flood hazard of the land.	Satisfied		
(b) the development is not likely to signit adversely affect flood behaviour resu detrimental increases in the potentia affectation of other development or p	Iting in development. I flood The proposed development does not adversely affect	Satisfied		
(c) the development incorporates appro- measures to manage risk to life from		Satisfied		
(d) the development is not likely to signification adversely affect the environment or avoidable erosion, siltation, destructivegetation or a reduction in the stabilitation or watercourses, and	cause existing site and will not encroach on riparian corridors or on of riparian water courses.	Satisfied		
(e) the development is not likely to result unsustainable social and economic community as a consequence of floor	costs to the existing site and will not result in any unsustainable social	Satisfied		



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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.	As per Table 3-1 and Table 3-2.	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.	No importation of fill is proposed as a part of the development.	No action
Draina	age 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.	No flood mitigation works, or stormwater devices are proposed as a part of the development.	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 type of flood mitigation works with a requirement for their retention and maintenance		
Buildir	ng 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).		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.	Not applicable – no decrease to existing finished floor levels.	
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		
Storaç	ge 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	Not applicable – no decrease to existing finished floor levels.	No action



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ID	Planning Requirements	Comment	Status		
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	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.				
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	Not considered required given that no decrease to existing finished floor levels.	No action		
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 Pa	arking (G1 - G10) - Not applicable				
Fencir	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.	This proposed development does not involve fencing.	No action		

4 CONCLUSION

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

Yours sincerely,

Abhley Clan

Ashley Chen

Project Engineer