



18 July 2025

REFERRAL RESPONSE – DRAINAGE

FILE NO: Development Applications: 489/2024/1

ADDRESS: 33 Cross Street DOUBLE BAY 2028

PROPOSAL: Demolition of an existing building and construction of a new mixed-use building above an existing 2 level basement

FROM: Michael Casteleyn

TO: Mr B McIntyre

1. ISSUES

None.

2. DOCUMENTATION

I refer to the following documents received for this report:

- 24/217931 Document - Flood risk management report - DA2024/489/1 - 33 Cross Street DOUBLE BAY
- 24/217964 Plan - Combined Architectural Plans - DA2024/489/1 - 33 Cross Street DOUBLE BAY

3. ASSESSMENT

The Development Application has been identified as subject to flooding and is situated in an area that is included in the Double Bay floodplain.

The Development Application has been reviewed with regards to the flood protection objectives in DCP 2015 E2.3

- To minimise risk to people and property.
- To ensure that development does not cause flood levels to rise or exacerbate flooding on the surrounding floodplain.
- To ensure existing overland flow paths are maintained and to ensure new structures do not obstruct the free flow of floodwaters.
- To increase flood hazard awareness.
- To maintain Council's streetscape objectives in existing commercial and heritage areas.



The Development Application has been reviewed with regards to the flood protection with regards to Woollahra LEP 2014

5.21 Flood planning

- (a) *to minimise the flood risk to life and property associated with the use of land,*

The development is situated in a predominately low risk flood area with large floor areas above the probable maximum flood level, the development has been conditioned to install flood barriers and prepare a flood risk management plan, it is judged that these measures minimise flood risk.

- (b) *to allow development on land that is compatible with the flood function and behaviour on the land, taking into account projected changes as a result of climate change,*

The effects of climate change were examined in the Double Bay flood risk management plan and predicted insignificant climate related flood level rises at the development site. so, it is not anticipated that climate will not have any significant impacts on the development.

- (c) *to avoid adverse or cumulative impacts on flood behaviour and the environment,*

The development area is currently fully occupied so no change in the areas flood behaviour as a result of the development are expected.

- (d) *to enable the safe occupation and efficient evacuation of people in the event of a flood.*

Occupants will not need to evacuate as large floor areas are above the probable maximum flood level

- (2) *Development consent must not be granted to development on land the consent authority considers to be within the flood planning area unless the consent authority is satisfied the development—*

- (a) *is compatible with the flood function and behaviour on the land, and*

The land is predominantly classified as a low-risk flood area, so the proposed development is appropriate.

- (b) *will not adversely affect flood behaviour in a way that results in detrimental increases in the potential flood affectation of other development or properties, and*

The development area is currently fully occupied so no change in the areas flood behaviour as a result of the development are expected.



(c) will not adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood, and

The development doesn't affect evacuation routes.

(e) incorporates appropriate measures to manage risk to life in the event of a flood, and

The development has been conditioned to provide flood barriers and prepare a flood risk management plan.

(f) will not adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of riverbanks or watercourses.

The development is not in area subject to erosion.

(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 impact of the development on projected changes to flood behaviour as a result of climate change,

The effects of climate change were examined in the Double Bay flood risk management plan and predicted insignificant flood level rises at the development site. So, it is not anticipated that climate will not have any significant impacts on the development.

(b) the intended design and scale of buildings resulting from the development,

(c) whether the development incorporates measures to minimise the risk to life and ensure the safe evacuation of people in the event of a flood,

Occupants will not need to evacuate as large floor areas are above the probable maximum flood level

(d) the potential to modify, relocate or remove buildings resulting from development if the surrounding area is impacted by flooding or coastal erosion.

The development is not in an area subject to erosion



4. RECOMMENDATION

Council's Drainage Engineer has determined that the proposal is satisfactory, subject to the following conditions:

D	1.	Flood Protection Before the issue of any construction certificate, the construction certificate plans and specifications required under clause 7 of the Development Certification and Fire Safety Regulation, must include a Flood Risk Management Plan on the basis of the Flood Planning Level (FPL). <u>Flood Warning:</u> a) A permanent flood risk management plan shall be installed in a prominent area of the basement carpark, b) A permanent flood risk management plan shall be installed in an area frequented by the residents such as the foyer, <u>Below Ground Car parking</u> a) The driveway entry to the loading dock shall be protected by an automatic mechanical flood barrier with the threshold set to the flood planning level of 3.87m AHD, b) Permanent brass plaques shall be mounted adjacent to all automatic mechanical flood barriers explaining their purpose and operation, c) Emergency self-powered lights, indicating the safe exit to a flood free area above the probable maximum flood (PMF) shall be installed in the car parking area. <u>Floor levels</u> a) The pedestrian entry to the lobby shall be protected by a physical threshold set at the minimum flood planning level of 3.65m AHD, b) The pedestrian entry to the hotel lift access shall be protected by an automatic mechanical flood barrier with the threshold set to the flood planning level of 3.85m AHD, <u>Flood Proof Material</u> a) Flood compatible materials shall be used for all flood exposed construction. <u>Electricals</u> a) All flood exposed electrical wiring and equipment shall be waterproofed or able to be quickly isolated, <u>Certification</u> a) All flood protection measures shall be inspected and certified as fit for purpose after construction is complete by an engineer experienced in flood mitigation,
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	Flood protection is to comply with Woollahra DCP 2015, Part E General Controls for All Development, Chapter E2 –Stormwater and Flood Risk Management. Notes: • The revised driveway profile, gradients and transitions must be in accordance with Australian Standard 2890.1, Part 1: Off-street car parking. The driveway profile submitted to Council must contain all relevant details: reduced levels, proposed grades and distances. Council will not allow alteration to existing reduced levels within the road or any other public place to achieve flood protection.
	Condition Reason: To ensure the development incorporates flood inundation protection measures.

< use the following table format for special bespoke conditions. Delete if not applicable>

1.	Retail Tenancies
	• The floor level of the retail tenancies fronting Cross Street shall be graded up from the front to rear at minimum grade of 0.5%.
	Condition Reason: To ensure the development incorporates flood inundation protection measures.

Michael Casteleyn
Drainage Engineer

18 July 2025
Completion Date