

FLOOD RISK MANAGEMENT REPORT

**FOR PROPOSED SWIMMING POOL AT
71 GEORGE STREET, AVALON BEACH NSW
2107**



**August 2021
(Photo: Google Maps)**

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1. Introduction

This report is prepared to support the proposed development at 71 George Street, Avalon Beach. It has been proposed by the owner of the property to construct a new swimming pool near the eastern boundary of the above-mentioned property.

According to Northern Beaches Council's Flood Information Request dated 6 December 2018, that is attached in the Flood Impact & Risk Management Report by Nasserri Associates, the site is affected by flooding. Therefore, a new Flood Risk Management Report must be prepared and submitted for Council's review, as a new development at the property has been proposed.

The Flood Information Request issued by the Council has shown that 1% AEP Flood Level is at RL 4.88 m AHD. The Probable Maximum Flood (PMF) level in this area is RL 5.159 m AHD. The Flood Planning Level indicated in the request shows a level of 5.38 m AHD.

This paper will report our flood risk emergency assessment for the proposed development, particularly in relation to the evacuation strategies and flood risk to life. The assessment has been carried out in accordance with requirements of Pittwater 21 Development Control Plan (**Appendix 15**) and the NSW Government Floodplain Management Manual (Jan 2005).

We refer to the following documents:

1. Floodplain Development Manual 2005 by NSW State Government;
2. Pittwater 21 Development Control;
3. Architectural Plans by Jamie King Landscape Architect, Project No. 21080, Issue C, dated 16 August 2021;
4. Avalon to Palm Beach Floodplain Risk Management Study and Plan by Manly Hydraulics Laboratory (2017); and
5. Flood Impact & Risk Management Report by Nasserri Associates dated 3 September 2019.

2. Flood Risk Identification and Assessment

Site investigation has found the site to be located within the proximity of Pittwater and Careel Creek. In major storm events, flooding may be caused by upstream runoffs. According to the Pittwater Land Zoning Map, the subject property is located in a Low Density Residential area.

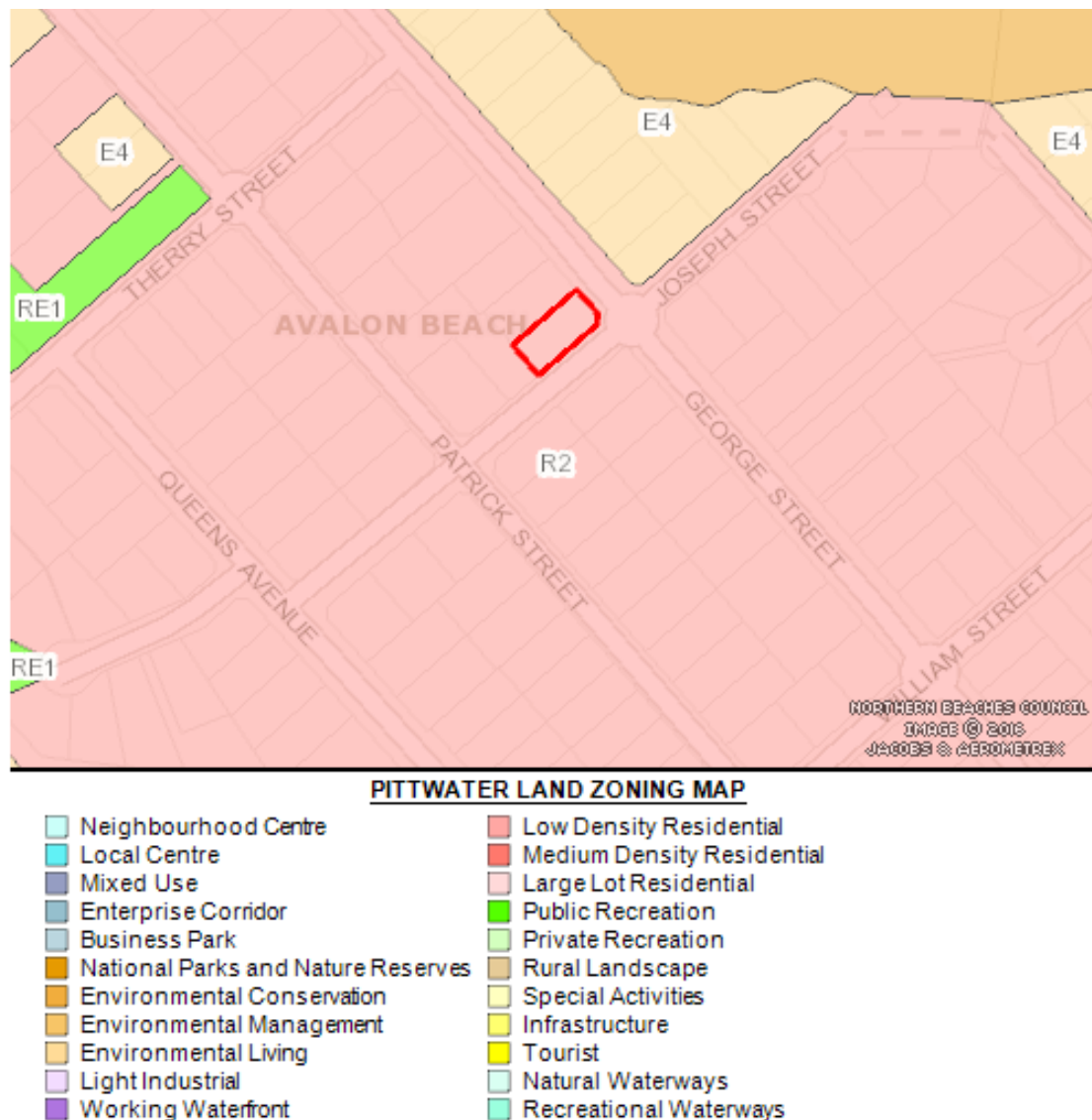


Figure 1: The locality of 71 George Street, Avalon Beach.

Based on the Flood Risk Precinct Map (Figure 2), the proposed development falls under the category of a Low to Medium Risk Precinct.

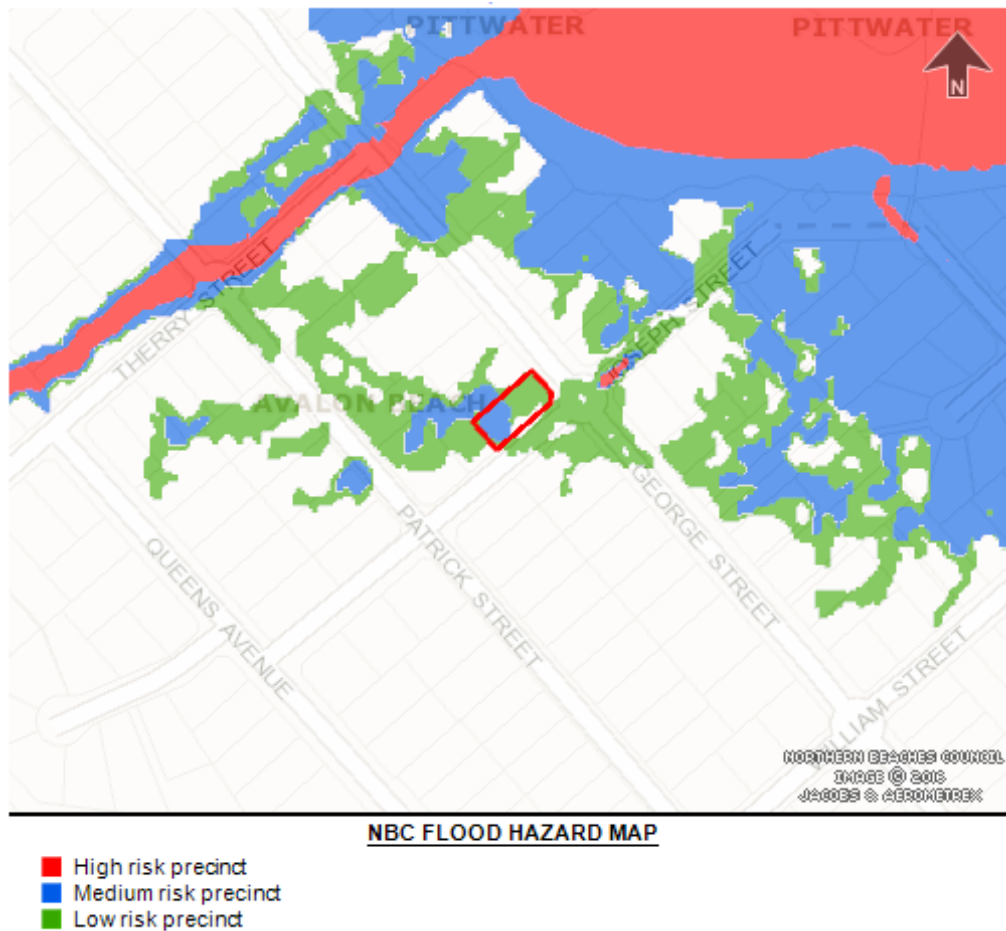


Figure 2: Flood Risk Precinct Map.

3. Prescription Controls

Using the matrix indicated in B3.11 Flood Prone Land of Pittwater 21 Development Control Plan, the subject property being in a Residential Use and Low to Medium Risk Precinct Area, the following prescriptive controls that follow may be applied to the proposed development.

3.1 Flood Effects Caused by Development (A1 and A2)

This is not applicable to the proposed development.

3.2 Building Components and Structural (B1, B2 and B3)

This is not applicable to the proposed development.

3.3 Floor Levels (C1, C3, C4, C6 and C7)

This is not applicable to the proposed development.

3.4 Car Parking (D1, D2, D3, D4, D5 and D6)

This is not applicable to the proposed development.

3.5 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. Existing dwelling at the property will act as the "Shelter In Place".

3.6 Fencing (F1)

Pool fencing, being an open metal style pool fence, complies with the Flood Prone Land Design Standard in addition to other regulatory requirements of pool fencing. It is designed not to cause impediment to the flow of flood waters and not to increase flood affectation on surrounding land.

3.7 Storage of Goods (G1)

This is not applicable to the proposed development.

3.8 Pools (H1)

Proposed swimming pool is in-ground, with pool coping flush with natural ground level (RL 4.0 m AHD) and will not cause net loss of flood storage and not impact the flood conveyance on or from the site. Electrical equipment is waterproofed and chemicals associated with the pool are stored above the flood planning level.

4. Conclusions and Recommendations

The proposed development at 71 George Street, Avalon Beach has been found to be located within the 1% AEP flood zone.

Site investigation has found the site to be located within the proximity of Pittwater and Careel Creek. In major storm events, upstream runoffs may cause flooding in the property.

The proposed development falls under the Low to Medium Flood Risk Precinct based on Flood Risk Precinct Map. Proposed development was found to be compliant with the controls outlined in B3.11 Flood Prone Land of the Pittwater 21 DCP.



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