

20 February 2025

Re: DA Engineering Referral Response (DA2024/1625)

6 February 2025

*44 Kooloora Avenue, Freshwater
Job N° 2407112*

Northern Beaches Consulting Engineers Pty Ltd have been instructed by Emma Macindoe interior design to provide a brief response to the Engineering Referral Response dated 6 February 2025.

The response below refers to the document prepared by Northern Beaches Consulting Engineers:

- **Flood Risk Management Report (Issue A)**

The Engineering Referral Response was as follows:

The proposal includes enclosing the existing carport with 50% open screens. The Flood Risk Management Report by NB Consulting Engineers dated 10/10/2024 classifies it as a carport. However, in accordance with Control D3, Clause E11 of Warringah DCP carports are to be 100% open on 2 sides otherwise, it is considered a garage. To comply with the DCP control D5 FFL of a garage must be above 1% AEP.

Based on the 1% AEP of 5.05m AHD provided in the flood report a FFL of 4.37m AHD for the proposed garage does not comply with the DCP controls and is not supported.

NBCE comment:

NBCE believes the privacy screening that has been proposed for the carport is in general accordance with the intent of Clause E11 Flood Prone Land of the Warringah DCP. The main control of concern for council is:

“Control D3: Carports must be of open design, with at least 2 sides completely open such that flow is not obstructed up to the 1% AEP flood level. Otherwise, it will be considered to be enclosed.”

The intent of this control is to ensure that flow is not obstructed up to the 1% AEP flood level (5.05m AHD).

The requirement of having 2 sides completely open is equivalent to the carport being 50% open. The generally accepted control (which is applied to fencing & subfloors) in Northern Beaches Council has been that flood waters are considered to be unobstructed when structures are of a minimum 50% open design, refer control F1 & C3 of the Warringah DCP.

The screening was proposed for 3 sides of the carport. The proposed width of the screening slats (40mm) was to be half that of the gap (80mm) between each slat. This full height opening width is larger than the stipulated minimum fence opening of 75mm x 75mm (Refer control F1). The screening has been designed to be greater than 66% open design and as such the flow of flood waters would not be obstructed and no loss of flood storage would occur. Consequently, the structure should be considered a carport and not a garage as the screening is not expected to have any adverse impacts on flood conveyance, surrounding properties or flood hazard.

Additionally, the privacy screening has a secondary function in that it will act as a vehicle flood barrier/restraint during flood events up to the 1% AEP.

Please contact the undersigned with any questions relating to the contents of this letter.

Yours sincerely

NORTHERN BEACHES CONSULTING ENGINEERS P/L



Michael Wachjo

Director | BE(Civil), MIEAust.

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