



10 February 2025

Brendan Coyne  
Dee Why RSL Club Pty Ltd c/o Farrell Coyne Projects  
brendan@farrellcoyne.com.au

Dear Brendan,

**Re: Fire Engineering Support for DA Application – Dee Why RSL Stage 7**

The purpose of this letter is to provide preliminary advice on the proposed Dee Why RSL Stage 7 Club Extension design at 932 Pittwater Road, Dee Why.

A preliminary assessment has been undertaken based on the review of BCA Assessment Report, project number 230423, Revision R1, prepared by BM+G, dated 09 December 2024 and the Stage 7 – Northwest Alterations and Additions drawing set prepared by Altis Architecture, dated 07 February 2025.

We trust this letter is sufficient to provide fire engineering DA support. If you require any further information at this stage, please do not hesitate to contact me.

Yours sincerely

**Penny Yang**

Associate

Performance Based Consulting

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## 1.0 Background

Performance Based Consulting has been appointed by Dee Why RSL Club Pty Ltd c/o Farrell Coyne Projects to investigate the Fire Safety issues of this project and suggest Fire Engineering Performance Solutions where the design deviates from BCA DfS provisions. This is to demonstrate the building meets the Performance Requirements in the BCA.

The site plan is shown below in Figure 1. The extent of proposed work is highlighted in yellow.

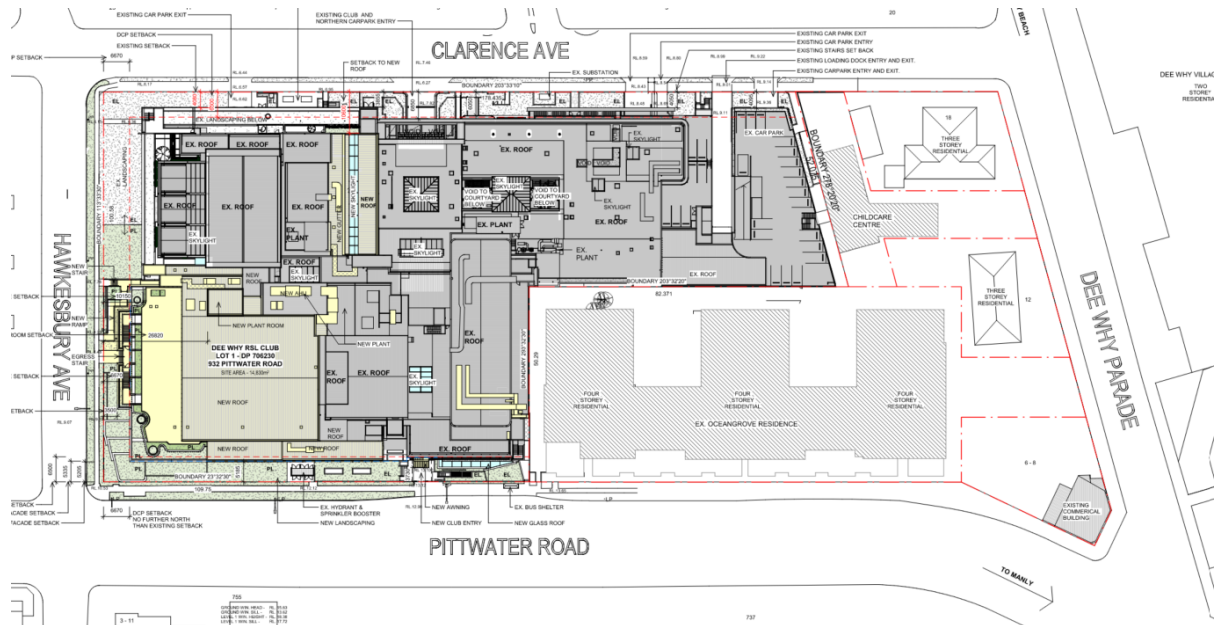


Figure 1: Site plan

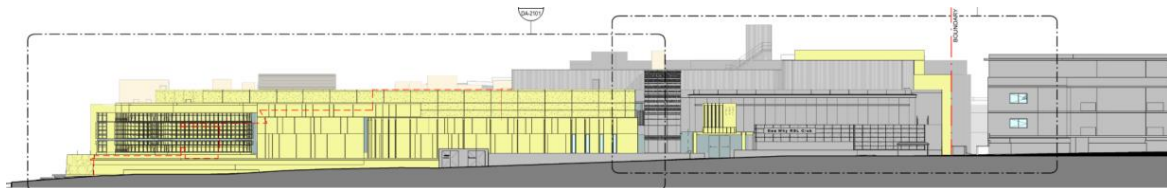


Figure 2: West elevation

## 2.0 Document Referenced

As part of our assessment, we have reviewed the following information:

1. BCA Assessment Report, project number 230423, Revision R1, prepared by BM+G, dated 09 December 2024.
2. Drawings produced by Altis Architecture identified in Table 1.

**Table 1: Drawings produced by Altis Architecture**

Drawing Number	Title	Revision	Date
DA-0001	Site Plan	A	01.03.2024
DA-1001	Existing and Demolition – L1	A	07.02.2025
DA-1002	Existing and Demolition – L1A	A	07.02.2025
DA-1003	Existing and Demolition – L2	A	07.02.2025
DA-1004	Existing and Demolition – L3	A	07.02.2025
DA-1005	Existing and Demolition – Roof Plan	A	07.02.2025
DA-1101	Overall GA Plan – L1	A	07.02.2025
DA-1102	Overall GA Plan – L1A	A	07.02.2025
DA-1103	Overall GA Plan – L2	A	07.02.2025
DA-1104	Overall GA Plan – L3	A	07.02.2025
DA-1105	Overall GA Plan – L4 and Admin	A	07.02.2025
DA-1106	Overall GA Plan – Roof	A	07.02.2025
DA-2000	Elevation – Existing and Demolition	A	07.02.2025
DA-2100	Proposed East and North Elevation	A	07.02.2025
DA-2101	Proposed West Elevations	A	07.02.2025
DA-3000	Sections - Demolition	A	07.02.2025
DA-3100	Sections	A	07.02.2025
DA-3101	Sections	A	07.02.2025
DA-4001	Area Plans - Proposed	A	07.02.2025

## 3.0 Site Characteristics

### 3.1 BCA DfS Reference Criteria

The BCA DfS reference criteria for the building is summarised below:

**Table 2: BCA DfS Reference Criteria**

Building Information	Description of Requirements
BCA Edition	BCA 2022
Classification	5 (Office), 6 (Restaurant), 7a (Carpark), 7b/8 (Storage/Loading Dock), 9b (Club & Function areas)
Construction Type	Type A
Rise in Storeys	4
Number of Storeys Contained	9, including existing basement carpark
Effective Height	14.39 m

## 4.0 Fire Engineering Solutions

The following non-compliances outlined below have been identified by BM+G and will be supported by Performance Solutions.

**Table 3 Proposed Performance Solutions**

Item (BCA report ref)	BCA D+S Provision	Description	Proposed Assessment
1	C2D2, S5C11	The FRL of the Class 6 portion on L2 is proposed to achieve an FRL of 2 hours in lieu of 3 hours.	Fire severity calculation is proposed to be undertaken to assess if the proposed FRL is sufficient.
3	C3D3	The size of the fire compartments under the proposed work exceeds the requirement outlined in Table C3D3. The exact sizes of the fire compartments are to be confirmed by the architect.	<ul style="list-style-type: none"> <li>– The assessment will consider the used of the space and the potential fuel load and occupant characteristics.</li> <li>– Fire safety systems enhancement such as installing fast response sprinkler heads will be considered.</li> <li>– FDS modelling will be used to assess the compartment size.</li> <li>– Smoke baffles may be introduced if required to assist with the overall smoke hazard management / compartmentation strategy.</li> </ul>
4	C3D7(1)	The existing Bowling Centre on Level 1 is not provided with sprinklers, therefore the spandrel between Level 1 and Level 2 on the northern and western elevation is to be addressed. Note that this is an existing Performance Solution. This will be reassessed based on the proposed L2 design.	<ul style="list-style-type: none"> <li>– The external wall of the northern elevation is partially underground, the risk of fire spread is therefore reduced.</li> <li>– Level 2 is fully sprinkler protected. Fire spread via the external openings can therefore be controlled.</li> </ul>
5	D2D5/D2D6	Extended travel distances present with the building are as follow: <ul style="list-style-type: none"> <li>- 45 m in lieu of 40 m to an exit from the internal gaming area on L2.</li> <li>- 85 m in lieu of 60 m between exit on Level 2 through the western side of the internal gaming area.</li> </ul>	<ul style="list-style-type: none"> <li>- The extended travel distances will be assessed using FDS modelling along with smoke hazard management and compartmentation.</li> <li>- Fast response sprinklers are to be used to offset the travel distance.</li> </ul>
-	D2D8(1)(a)	The egress width within the Asian Kitchen is down in 750 mm in lieu of 1 m.	<ul style="list-style-type: none"> <li>– The occupants within the kitchen are staff that are familiar with the egress condition.</li> </ul>

			<ul style="list-style-type: none"> <li>– Anthropometric data of the general population will be assessed to ensure the egress width is sufficient.</li> </ul>
6	D2D8(3)	<p>The aggregate egress width available on Level 2 is 18.5 m in lieu of 19.5 m for a population of 2,304.</p> <p>Note that this is an existing Performance Solution. This will be reassessed based on the proposed L2 design.</p>	<ul style="list-style-type: none"> <li>– The distribution of exits and occupants will be considered in the assessment.</li> <li>– FDS and egress modelling will be used to assess occupant egress from L2.</li> </ul>
7	D2D12(2)	Fire Stair 07 serving Level 4 discharges internally to the carpark on Level 1.	<ul style="list-style-type: none"> <li>– The potential tenability conditions of the discharge point will be assessed based on the use and the openness of the area.</li> <li>– An additional signage is to be provided to direct occupants to the final exit.</li> </ul>
8, 9	E1D2, AS 2419.1:2021, E1D4, AS 2118.1:2017	The location of the hydrant and sprinkler booster assemblies are not within 20 m from the principal pedestrian entrance.	<ul style="list-style-type: none"> <li>– A visual alarm device (VAD) is to be installed at the booster assembly to direct responding fire brigade personnel.</li> <li>– A block plan must be provided at the FIP to identify the location of the booster assembly.</li> </ul>
10	NSW E2D20	The smoke exhaust system on Level 2 is performance based in lieu of providing the exhaust rate required in the BCA.	FDS and egress modelling will be used to undertake an ASET/RSET assessment to support the performance-based smoke hazard management.

## 5.0 Conclusion

Based on our preliminary review of the design, the proposed Performance Solutions identified in this letter can be supported by performance-based fire safety engineering solutions.