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5 July 2024

Rachel Storey

Skermanic Pty Ltd
c/- Morrison Design Partnership
Suite 2.02 146 Arthur Street,
North Sydney NSW 2060

Re: Fire Engineering DA Statement of Support
Project: Pathways Cremorne

Dear Rachel

The purpose of this Development Application (DA) Fire Engineering Statement is to provide confidence to the Consent Authority that the documentation submitted for issuance of the planning permit for the aforementioned site is capable of achieving compliance with the Building Code of Australia (BCA) with regards to fire safety.

This statement and assessment have been conducted by a registered Professional Engineer (Fire Safety), as required by the *NSW Design and Building Practitioners Act 2020*.

1. Introduction and Understanding

1.1 Project Background

We understand that the development will be comprised of two types of aged care accommodation including a residential aged care facility (RACF) and independent living units (ILUs). The accommodation and staff/back of house areas will be made up of 4 main buildings, with existing cottages to be retained and refurbished.

The buildings are to be built over a uniting, 2 level basement, accessible to all 4 new buildings, comprising carparking and also amenities such as a gym, pool, storage and other ancillary spaces.

1.2 GHD Involvement

GHD has been involved in the early design coordination and discussion for the redevelopment work of the subject site. The ongoing involvement encompasses:

- Attendance at stakeholder coordination and design meetings.
- High-level advice at the early design stage to ensure that non-compliances arising from the reconfiguration of the residential buildings can be rectified by performance solution.
- Ongoing discussions with the project and design team, with involvement in design amendments.

2. Fire Engineering Statement

The following list of Building Code of Australia Performance Solutions have been identified by the BCA Consultant, Building Code Professionals and are detailed in the BCA report dated 5 July 2024, (Ref: 74-22 Rev 4).

It is noted that these are subject to change as the detailed design progresses and some may form Deemed-to-Satisfy Solutions, and other Performance Solutions may arise.

Solution	DtS Clause	Description of DtS Variations	Performance Requirements
1.	C3D6	<p>In Class 9c buildings, each fire compartment is to be divided into areas not more than 500 m² by smoke-proof walls complying with Specification 11 of the BCA.</p> <p>Assessment of the drawings has revealed that all levels of the Class 9c residential aged care building (RAC) are not currently divided into smoke zones not exceeding 500 m² as required by Clause C3D6(3)(a) of the BCA.</p>	C1P3, E2P2
2.	C3D9	<p>The Lower Ground Floor Level Class 7a Carpark is to be separated from the adjoining Class 9b building ILU facilities by a fire wall capable of achieving an FRL not less than 120/120/120.</p> <p>A glazed sliding door is incorporated into the design between the Class 7a and 9b areas on the lower ground level.</p>	C1P2, C1P8

Solution	DtS Clause	Description of DtS Variations	Performance Requirements
3.	C4D3	<p>Openings in an external wall (i.e. a wall that is required to have a fire resistance level) must if situated less from a fire-source feature to which it is exposed than 3.0 m from a side or rear boundary of the allotment (both parallel and perpendicular) must be protected in accordance with Clause C4D5 of the BCA.</p> <p>Multiple windows of Building 1 have been identified as being non-compliant to the above distance and protection requirements of the BCA. Fire engineering assessment will be completed to assess protection requirements.</p>	C1P2, C1P8
4.	C4D4	<p>Adequate protection is required for the external walls of the residential units that are:</p> <ul style="list-style-type: none"> – Closer than 4 m and perpendicular to the external walls or windows of the adjoining corridors – Closer than 6 m and parallel to the external walls or windows of the adjoining corridors 	C1P2, C1P8
5.	S5C11 – S5C20	<p>Given the BCA Construction Type A allocation, all buildings must comply with the requirements of BCA Specification S5C11 – S5C20.</p> <p>A Performance Solution may be required for any / all parts of the roof structure of 88 Parraween Street that oversail the external walls of the building that stand closer than 3.0 metres to the side property boundary.</p> <p>Additionally, any part of the building which projects above the roof unless that part has the FRL required of a fire wall and any openings in that part of the wall for 6.0 metres vertically above the roof light or the like are protected in accordance with C4D5 of the BCA.</p>	C1P2, C1P8
6.	D2D5	<p>Maximum travel distance to the closest exit on the lower ground floor is 22.8 m in lieu of 20 m.</p>	D1P4, D1P5, E2P2
7.	D2D6	<p>An extended travel distance of 73.2 m between alternative exits (when measured through a point of choice) on the basement floor is proposed in lieu of 60 m.</p>	D1P4, D1P5, E2P2

Solution	DtS Clause	Description of DtS Variations	Performance Requirements
8.	D2D12	<p>Where a path of travel from the point of discharge of a fire-isolated exit necessitates passing within 6.0 metres of any part of an external wall of the same building, measured horizontally at right angles to the path of travel, that part of the wall must have an FRL of not less than 60/60/60 or be protected in accordance with C4D5 as required by the BCA.</p> <p>Paths of travel from the discharge points of the buildings fire-isolated exits pass within 6.0 metres of the external walls of the building. These external walls are required to be protected (internally) in accordance with Clause D2D12(3) of the BCA or addressed by Performance Solution.</p>	C1P2, C1P8, D1P5, E1P3
9.	E1D4	The sprinkler valve room/fire pump room does not have direct access to a road or open space.	E1P4
10.	E1D17, E2D21	<p>Electrical Vehicle (EV) charging facilities are provided within the basement level and lower ground floor level car parking areas.</p> <p>The inclusion of EV charging facilities is considered a special hazard.</p>	C1P1, C1P2, E1P3, E1P4, E2P2.

We can confirm that an assessment can be undertaken by a suitably qualified Fire Safety Engineer, holding the following necessary qualifications in NSW:

- Certifier (Fire Safety)
- Design Practitioner (Fire Safety Engineering)
- Professional Engineer (Fire Safety)

The assessment would be in consultation with project stakeholders including FRNSW and the Registered Building Surveyor / Principal Certifying Authority, to demonstrate that the building will comply with the Performance Requirements of the BCA. This may be via either or a combination of the following:

- Become DtS by way of design development
- Comparison to the BCA DtS Provisions
- Compliance with the BCA Performance Requirements (absolute assessment)

It is considered that the preparation of the Performance Solution and corresponding fire safety measures that are likely to be documented therein will not result in any material changes to the building design presented in the architectural drawings reviewed for the planning permit.

Prepared by:



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Reviewed and approved by:



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