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St Aloysius' College: Wyalla – Senior School Campus, Fire Engineering

This letter considers the fire safety design of the major refurbishment of St Aloysius' College Wyalla – Senior School Campus located at 1-5 Jeffreys Street, Kirribilli and specifically those aspects of the fire safety design that impact upon planning and hence SSDA issues for the building.

The Building

The building is a senior school consisting of 5 storeys. The school comprises primarily teaching spaces and associated office spaces, as shown on the architectural drawings provided by PMDL. It has an effective height of less than 25m.

The fire safety design of the building will generally satisfy the Performance Requirements of the Building Code of Australia (BCA) by complying with the Deemed-to-Satisfy (DtS) Provisions. However, there are some aspects of the design that are to be developed using performance based fire engineering to achieve compliance with the Performance Requirements of the BCA. The most significant items that affect the building layout, and hence the SSDA, are highlighted below.

Performance Based Design

The fire safety strategy for the building relies on adequate and safe egress for occupants with multiple options for their evacuation. Targeted smoke compartmentation is included to help limit smoke spread throughout the building and to give occupants additional safe egress paths. The building has multiple street access levels which not only assists occupants with their evacuation but also assists in firefighting operations.

The fire strategy has been developed taking into consideration the existing heritage constraints of the building and considers egress, firefighting and smoke and fire spread throughout. This approach has allowed for the rationalisation of the following items listed below which are non-compliances with the DtS Provisions as a result of the proposed

development. The following items are proposed to be addressed via fire engineering Performance Solutions:

- Openings within 3m of a boundary; and
- Interconnection of > 2 storeys.

Additional minor non-compliances may arise as the design develops, however none that are foreseen to impact on the SSDA submission.

Based on our preliminary review of the architectural drawings issued by PMDL dated January 2018, it is considered that Performance Solutions addressing the non-compliances above will be feasible and compliance with the Performance Requirements of the BCA can be demonstrated.

Conclusion

At this stage of the design, other fire safety aspects of the building appear to comply with the deemed to satisfy provisions of the BCA. It is anticipated that there may be other non-compliances with the DtS Provisions as the design develops, however it is considered that there are no issues that would affect the building layout arising from fire safety and hence no impediments to the relevant consent authority issuing development consent.

Yours sincerely



Alan Wilson
Associate