

Your ref Sydney Opera House
Our ref 243928-12
File ref

ARUP

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Dear Chris,

Sydney Opera House – Temporary Experiential Accommodation Fire Engineering Design – Experiential Development Application Supporting Letter

This letter considers the fire safety design of the proposed use of temporary experiential accommodation for certain areas within the Sydney Opera House, and specifically those aspects of the fire safety design that impact upon planning and hence DA issues for the building.

We understand the approval will be issued under Crown Building Work Certificate in accordance with Clause 98 of the EP&A Regulations and Section 109R of the Environmental Planning and Assessment Act 1979.

Our understanding of the proposed temporary use is based on the following:

- DRAFT State Significant Development Application – SSD 7549, Environmental Impact Statement for Sydney Opera House Temporary Experiential Accommodation by JBA, dated July 2016.
- DRAFT Building Code of Australia Capability Statement – Rev A for Sydney Opera House – Temporary Experimental Accommodation by Group DLA, dated 21 July 2016.

Proposal

It is our understanding that the proposed temporary use will involve a change of use to Building Code of Australia (BCA) Class 3 occupancy within the subject areas identified in the JBA Report, due to overnight stay with sleeping occupants. It is our understanding that the proposed use will involve installation of temporary furnishing and fittings that will be removed immediately following an event.

The proposed development will not involve any external works nor change to the building envelope.

The proposal will facilitate two types of events as detailed in Section 3 of the EIS by JBA being:

- Event A – Located in Boardroom and Utzon Room
 - 5 times per year
 - 5 occupants
 - 2 nights
- Event B – Located in JST foyer and Concert Hall foyer
 - 1 time per year
 - 100 occupants
 - 2 nights

Refer to Figure 3-8 in the EIS by JBA for location of the rooms and Figure 9-11 for examples of furnishing for respective event.

Fire safety design

The fire safety design of the proposed works will meet the BCA Performance Requirements through a combination of compliance with the Deemed-to-Satisfy (DtS) provisions and Performance Solutions making use of the existing fire safety attributes of the building design where possible and providing additional measures if necessary.

The building is subject to existing fire engineering Performance Solutions. The proposed fire strategy for the works described in this letter will therefore aim to maintain or not adversely impact the existing fire strategy.

Areas of non-compliance with the DTS Provisions that are proposed to be addressed via fire engineering Performance Solutions including, but not limited to:

- Fire rated bounding construction
- Fire separation of SOU's
- Appropriate smoke detection system
- Appropriate fire sprinkler system

The approach for the fire engineering Performance Solutions will be developed in conjunction with the House and may consider the following:

- No impact on the buildings existing fire safety or evacuation strategy.
- Rely on existing fire measures where possible.
- Introduce additional active systems such as detection to support the proposal where considered necessary.
- Provide trained, awake staff to mitigate the expected increased pre-movement and response times for sleeping occupants such that current evacuation strategy for the building will not be adversely impacted.
- The proposed design enables direct egress to outside from many parts, hence, the majority of occupants are not expected to have to travel through the building to evacuate.
- Typical fire risks associated with Class 3 areas are expected to be lower in the proposed design compared to a typical Class 3 occupancy, such as the provision of trained alert staff and no cooking facilities within the sleeping parts.

It is anticipated that there will be other non-compliances with the DtS Provisions of the BCA identified as the design develops, however it is considered that there are no issues that would affect the building layout or form arising from fire safety and hence no impediments to the approval of the Crown Development Application.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'A. Morrison', with a stylized flourish at the end.

Alistair Morrison
Associate | Fire Engineering

cc