

Appendix K

Fire engineering advice

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Dear Sir/Madam

33 Bligh St
Fire Engineering - Project Application

This letter is provided to accompany a project application under Part 3A of the Environmental Planning and Assessment Act, 1979 for the Stage 2A(ii) development of the City East Zone Substation and Integrated Commercial Development at 33 Bligh St. Whilst acknowledging there is no specific Director General Requirement (DGR) regarding fire safety this letter is intended to provide reassurance to the planning approval authorities that appropriate consideration of fire safety is being applied to this development..

The fire safety strategy for commercial office tower, substation and carpark will be developed to meet the Performance Requirements of the Building Code of Australia (BCA). This will be achieved either through meeting the Deemed to Satisfy Provisions noted in the BCA or, where the design of the building falls outside of the prescriptive nature of the codes; through performance based fire engineering design.

Due to the large and complex nature of the building it is proposed that Fire and Rescue NSW (FRNSW), the Building Certifier and any other stakeholders are consulted early in the design process so that they are satisfied with the intent of the fire safety strategy. For the substation part of the building development, the fire engineering consultants AE&D have liaised with FRNSW to agree in principle the proposed BCA Alternative Solutions and fire engineering methodologies therein.

The sustainable intent for the building design is also to be integrated into the fire safety strategy. The focus will be on providing a fire strategy that complements the building services strategy and functionality of the building, minimising additional provisions solely for fire safety.

The commercial tower design aims to provide a high level of flexibility for future tenants as well as meeting significant sustainability targets. It needs to be cost effective and meet the architectural vision for an attractive space to facilitate future leasing opportunities.

The performance based fire engineering strategy for the commercial tower will address features such as:

- Naturally ventilated external fire stairs

- Efficient core and stair configuration resulting in extended travel distances
- Glazed lift shafts to increase natural light
- Building on the boundary line, with a fire strategy for fire separation of adjacent property and Heritage buildings
- Timber elements in the facade design
- Discharge of fire stairs under the overhang of the lobby
- Potential rationalising of structural fire protection requirements to minimise material use (particularly bracing)
- Enabling the potential for open village design across multiple-floors.
- Fire brigade access and provisions.

The performance based fire engineering strategy for the substation and carpark will address features such as:

- Reduced sprinkler coverage and lower grade of water supply (due to the electrical hazards in the substation)
- Deletion of hose reels (due to the electrical hazards in the substation)
- Omission of zone smoke control provisions
- Refined egress provisions including single exits and no re-entry from the fire stairs.
- Omitting spandrels in areas with no sprinkler protection
- Revised FRNSW operational provisions including the location of the Fire Control Room, hydrant boosters and required signage/lighting.

It is our undertaking that the fire safety engineering and evacuation strategy design will be appropriate to the building, and fully implemented prior to occupancy. The design as drawn is able to meet the fire safety performance requirements of the BCA and as such there is no fire safety impediment to issue of Project Approval.

Yours faithfully



Ted Moyle
Fire Engineer



Marianne Foley
Principal