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Our ref: 12563899
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5 October 2021

Bernardo Reiter

Toga
Level 5, 45 Jones Street,
Ultimo, NSW 2007

Re: CAN01: Fire Engineering DA Statement of Support
Project: 634-652 High St & 87-91 Union Rd, Penrith

Dear Bernardo

The purpose of this Consultant Advice Note (CAN) 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.

Background

The proposed development is for a mixed-use development comprising of two towers; 35 and 13 storeys located above a podium. The development provides 357 residential dwellings with ground level commercial tenancies, 3 levels of basement car parking, a new public road and associated site works on the land at 634-638 High Street and 87-93 Union Road, Penrith NSW.

Fire Engineering Statement

The subject design has been observed to exhibit a number of non-conformances with the prescriptive provisions of the BCA. These non-conformances have been identified to us in the BCA Report prepared by McKenzie Group, Revision D, dated 1 October 2021 (Ref# 078282-02BCA).

Subsequently, it will be necessary for the method of compliance with the building regulations to incorporate a Performance Based approach as supported by Clause A2.2 of the BCA. GHD have reviewed the Stage 1 Development Application drawings (as referenced on Drawing Number AR-1-0001, Cover Page & Contents Page, Revision 86, dated 30.09.2021) and consider that the following items are able to be addressed via Performance Solution to achieve compliance with the BCA.

Solution No.	DtS Clause	Description	Performance Requirements
1.	C1.1, Spec C1.1	Gaps are present between the façade and fire rated slabs/fire rated walls.	CP1, CP2
2.	C1.1, C2.8, C2.9	The FRL to the following areas are proposed to be rationalised; • Separation between ground floor retail tenancy and loading dock from 180 minutes to 120 minutes.	CP2, CP4
3.	C1.9, C1.14	Green walls which are not considered as non-combustible are attached to the external walls. *Note: Applicability of Performance Solution will be subject to location, dimension and characteristics of the green wall proposed. Additional robust fire safety measures to be implemented as part of the solution.*	CP2, CP4
4.	D1.2	The following areas are not provided with access to two (2) exits. • Water metering room • Retail metering/supply fan room • Commercial tenancy spaces (where split into subtenancy) • Standalone toilets on ground floor.	DP4
5.	D1.4, D1.5	Extended travel distances occur in the following basement carparking areas: **Basement 01:** • Travel distance to a point of choice is greater than 20 m from the storage cages • Travel distance to a point of choice is greater than 20 m within the carpark • **Basement 02**: • Travel distance to a point of choice is greater than 20 m from the top of the vehicle ramp to the south • Travel distance to the nearest exit is greater than 40 m from the top of the vehicle ramp to the south **Basement 03:**	DP4

Solution No.	DtS Clause	Description	Performance Requirements
		• Travel distance to a point of choice is greater than 20 m from under the vehicle ramp to the south Travel distance to the nearest exit is greater than 40 m from under the vehicle ramp to the south	
6.	D1.4, D1.5	Extended travel distances occur in the following podium areas: **Ground:** • Travel distance greater than 60 m between alternative exits on ground floor for the egress corridor above the residential bin store. **Level 01:** • 12 m to a point of choice instead of 6 m from North apartments (B105 most disadvantaged) **Level 02 & Level 03**: • 12 m to a point of choice instead of 6 m from North apartments (B205 and B305 most disadvantaged) • 68 m between exits instead of 60 m. **Level 04:** • 23 m to a point of choice instead of 20 m from the pool area. • 12 m to a point of choice instead of 6 m from SOUs (Worst case from B406) • 62 m between exits instead of 60 m.	DP4
7.	D1.4, D1.5	Extended travel distances occur in the following residential areas: **Level 05 – Level 34** • 12 m to a point of choice from residential SOUs instead of 6 m	DP4
8	C2.14	The aggregate length of public corridors on Levels 4- 12 is 45 m instead of 40 m and is not provided with smoke separation.	CP2, CP4
9.	D1.7	Fire-isolated scissor stairs serving the buildings provide discharge within 6 m of its building without protection.	DP4, DP5

Solution No.	DtS Clause	Description	Performance Requirements
10.	D1.10	The fire-isolated scissor stairs discharge adjacent to each other.	DP4
11.	D2.4	Rising and descending flights from above ground to basement is not provided with non-combustible smoke separation.	DP4, DP5
12.	E1.3, E1.5	The ring mains within the scissor stairs are not contained within their own shaft therefore they pass between each fire stair at every storey. This contravenes the requirements of AS 2118.6 which requires the ring main to be located within a single shaft.	EP1.3, EP1.4
13.	E1.8	The transition from outside to inside of the Fire control Room exceeds 300 mm.	EP1.6

We can confirm that an assessment can be undertaken by an Accredited Fire Engineer in consultation with project stakeholders (including the Authority Having Jurisdiction), 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.

Should you require any additional information relating to the above please contact the under signed.

Regards,

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Technical Director – Fire Engineering

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