## BUILDING CODE OF AUSTRALIA CONSULTANTS

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March 4, 2019

Mr. R. Webb Nasus Pty Ltd 64 The Corso MANLY N.S.W. 2095

Email: robert@nasus.com.au

Dear Sir,

# Re: Proposed alterations and additions to 70 The Corso Manly. BCA appraisal for development application.

#### Introduction

As requested, I have assessed the proposed development shown on the plans referenced at 1.5 below against the Deemed to Satisfy fire safety and health and amenity provisions of Sections C, D, E and F of the Building Code of Australia (BCA). This report does not address the matter of structural adequacy or Part B1 of the BCA, nor does it purport to provide a comprehensive BCA clause by clause audit of the proposed development or the overall building.

## Building Code of Australia appraisal of proposed development:

#### 1.0 BCA OVERVIEW

#### 1.1

The subject building comprises a retail shop at ground floor level with ancillary storage use at first floor level. It is proposed to demolish and re-construct internal walling at first floor level and extend both floor levels of the building toward the Rialto Lane alignment at the rear of the property. The existing internal stair serving first floor level is to be replaced by a new stairway that will discharge direct to Rialto Lane.

1.2

The extended building will accommodate a new retail space/loading dock at ground floor level fronting Rialto Lane, also connecting to The Corso. The first-floor level is proposed to be utilised for office purposes.

1.3

The building has a rise of two storeys and the following BCA assessments have been made relative to BCA Type C construction requirements for a building that does not exceed 25m effective height.

1.4 The relevant BCA Classifications are:

Existing building:	Ground floor shop - Class 6 First floor storage - Class 7b
Proposal:	Ground floor shop - Class 6 First floor offices – Class 5

#### 1.5 <u>Referenced documents</u>

- A. Copies of floor plans, sections and elevations, drawing nos. A001 to A011 Dated 28.2.19, prepared by Urbane Architecture
- B. BCA 2016, Volume 1 including Amendment 1.

## 1.6

Appraisal against the relevant BCA Deemed to Satisfy provisions has revealed that there are some issues that need to be addressed and these are discussed below.

<u>Note</u>: Where the symbol (B) appears immediately after a paragraph number, this signifies that action is required or has been recommended relative to that specific item.

#### 2.0 FIRE RESISTANCE:

#### 2.1

The building comprises brick walls, timber floors and framed construction internally. The fire resistance level (FRL) of existing building elements was not able to be ascertained from visual inspection. Flooring between ground and first floor level is not required to be fire resistant.

## 2.2®

New building elements are required to conform with fire resisting standards expressed in Section C and Type C construction requirements in BCA Volume 1.

## 2.3 ®

The fire hazard properties of any new material or assembly will need to comply with BCA C1.10 and BCA Specification C1.10. This requirement applies to floor linings and floor coverings; wall linings and ceiling linings; air handling ductwork; sarking type material, attachments to floors, ceilings, internal walls and the internal linings of external walls; other materials including insulation materials other than sarking type materials. Documentary evidence of compliance may be required prior to obtaining an occupation certificate.

## 2.4®

Any ancillary element fixed, installed or attached to an external wall required to be non-combustible is required to conform to BCA C1.14 and clause 2.4 of BCA Specification C1.1.

## 2.5®

Proposed windows in side external walling at first floor level will need to be protected against the spread of fire from adjoining properties in accordance with BCA C3.2 and C3.4. This matter is the subject of a separate <u>performance solution</u> prepared by an accredited fire engineer.

## 3.0 ACCESS AND EGRESS:

#### 3.1 <u>Travel distance to exits</u> $\mathbb{R}$

#### 3.1.1 – Ground floor level

Alternate exits which satisfy BCA travel distance requirements are proposed.

#### 3.1.2 – First floor level $\mathbb{R}$

Travel distance from the furthest point in office 1 to the nearest riser of the new stairs is approximately 34m, which exceeds the 20m maximum permitted by BCA D1.4. This matter is the subject of a separate <u>performance solution</u> prepared by an accredited fire engineer.

## 3.2®

Paths of travel leading to exits, including stairways, need to be at least 1.0m wide, clear of obstructions, in accordance with BCA D1.6.

## 3.3®

The Rialto Lane discharge door from the stairwell is required by BCA D2.20 to open in the direction of egress from the building. This matter is the subject of a separate <u>performance solution</u> prepared by an accredited fire engineer.

## 3.4 Access and Facilities for People with a Disability®

Part D3 of the BCA requires the provision of access and facilities for people with a disability to all parts of the building. BCA D3.3(f) provides an exemption from having to provide a ramp or lift in order to access first floor level, provided the floor area of that storey does not exceed 200m<sup>2</sup>. However, calculations made indicate that the floor area at first floor level would be approximately 237m<sup>2</sup> and accordingly, the exemption does not apply. It is <u>recommended</u> that this matter be the subject of a BCA <u>performance solution</u> assessment by an access consultant.

## 4.0 SERVICES AND EQUIPMENT

#### 4.1

Calculations indicate that the total floor area does not exceed 500m<sup>2</sup> and accordingly, fire hydrants and fire hose reels are not required by the BCA.

## 4.2®

Portable fire extinguishers will need to be provided in accordance with BCA E1.6.

## 4.4 ®

Emergency lighting is required to be provided within the stairwell in accordance with BCA E4.2 (d).

4.5 ®

Illuminated or Photoluminescent exit exit signs are required to be installed within the subject storeys in accordance with BCA E4.5.

#### 5.0 HEALTH & AMENITY

#### 5.1 Sanitary and other facilities

Sanitary facilities shown on the referenced drawings would, in accordance with BCA F2, cater for the following numbers of employees (i.e., persons without a disability), assuming that the WC's which are located adjacent to the kitchen are intended for females: -

<u>Ground floor</u> Maximum of 10 persons

First floor level 15 Females and 20 Males

5.2 ®

At first floor level, WC pans are shown to be less than 1.2m from doorways and accordingly, the doors will need to conform to BCA F2.5(b). 5.3 R

Ventilation and lighting will need to be provided to the standards expressed in BCA Part F4 or BCA NSW F4.5(b).

#### 5.4 ®

New work, plant and equipment will need to conform to energy efficiency requirements of BCA Section J as varied by BCA NSW Subsection J(B).

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Yours faithfully,

*R. J. Killorw* maibs Accredited Building Surveyor Fire Technologist (Hons)