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16 May 2013

The General Manager  
Warringah Council  
Civic Centre  
725 Pittwater Road  
Dee Why NSW 2099

Dear Sir / Madam,

## **RE: BCA Design Review – Section 96 (2) variations to Proposed New Showroom and Office Building at 762 Pittwater Road Brookvale – Lot 101 of DP 1007178**

Further to receipt of updated Project drawings for the Proposed New Showroom and Office Building at 762 Pittwater Road Brookvale, Numbered 2006.75 and dated 10-05-2013, we have undertaken a review of the drawings. The drawings reviewed are:

- Drawing DA3 – S96(2) – 1: Basement & Ground Floor Plans,
- Drawing DA4 – S96(2) – 1: First & Second Floor Plans
- Drawing DA5 – S96(2) – 1: Roof Plan
- Drawing DA6 – S96(2) – 1: Elevations
- Drawing DA7 – S96(2) – 1: Sections A-A, B-B, C-C and D-D,

We provide the following checking comments. It is to be noted that these comments relate to issues considered to be significant at this stage of the design development.

Note our comments are limited by the variations to the previous design as shown in the drawings provided. Only new issues arising from the variations to the previous designs are the subject of this memo.

**The proposed Section 96(2) variations will comply with the Deemed-to-Satisfy Provisions of the National Construction Code 2013 Building Code of Australia Volume One (BCA 2013) subject to full compliance at the Construction Certificate stage. Where required, “Alternative Solutions” will be employed in accordance with the Part A0 of BCA 2013.**

BCA Compliance will be achieved by providing full details at the Construction Certificate stage and will include the following matters:

### **BCA Part A3 – Classification**

- 1) The proposed building still has a rise in storeys of three above ground level, inclusive of the ground floor storey and the second floor office level.

The BCA provides a concession for a single topmost plant room storey from being counted in the rise in storeys. The basement level is not included in the rise in storeys as it is generally below ground level.

The classification of the building remains as follows:

Level	Use	Classification
Basement	Carparking	7a
Ground Floor Level	Showroom, sanitary facilities.	6
First Floor	Showroom, sanitary facilities.	6
Second Floor	Offices, sanitary facilities.	5
Roof Top	Rooftop Plant room & LMR	6 Ancillary

### **BCA Section C – Fire Resistance**

- 2) Having a rise in storeys of 3, the building must be of Type A construction throughout, resulting in the following general fire resistance levels (FRL), dependent upon use, in accordance with Table 3 of Specification C1.1 of the BCA:
  - a. Class 5 Offices and Class 7a carpark – ‘2 hour’ 120/120/120 FRL generally, and
  - b. Class 6 retail showrooms – ‘3 hour’ 180/180/180 FRL generally.
- 3) Roof Concession – the roof covering is to be non-combustible and given that the building has a rise in storeys of 3, the roof need not comply with the FRL requirements of Table 3.
- 4) General Floor Area Limitations: The size of any fire compartment must not exceed the relevant floor area and volume limitations as set out in Table C2.2 for Type A Construction. With a total floor space over the four levels of approximately 3,500 m<sup>2</sup> and a volume of approximately 13,500 m<sup>3</sup>, the proposal readily complies.
- 5) The Ground Floor Plan indicates that the eastern part of the northern wall will be less than 6m from the existing building on the allotment. This has implications in terms of Clause C3.2 where the windows are within 6 metres of the adjacent building they will require external wall-wetting sprinklers in accordance with C3.4.
- 6) Stair 01 connects all four storeys of the building. Stair 01 that serves the basement level is required to be separated from the ground floor level by wall construction with a 180/180/180 FRL. Any doorway opening through this wall is to be a self-closing -/180/30 FRL fire rated doorset. The separation is also required to provide a protected path of travel from the stairway at ground floor level to an exit door opening to the outside of the building.

### **BCA Section D – Access and Egress**

- 7) A review of the base building open floor plans has been undertaken in terms of egress compliance, however consideration of likely ‘paths of travel’ and ‘points of choice of direction’ cannot be undertaken given that preliminary fitout plans have not been received. Travel distances will require further detailing at CC stage
- 8) An exit discharges to the balcony of the building from the second floor office. The balcony slab must have an FRL of not less than 120/120/120 in accordance with D2.12. Details to be provided at CC stage.
- 9) Access for people with a disability is to be provided in accordance with Part D3. Further details to be provided at CC stage.
- 10) Primary egress routes for the amended proposal include the provision of an external stairway at the south eastern corner of the building and connection of the ground, first and second floor levels with

an internal stairway. These stairways replace the two original egress stairways at the eastern side of the building. Exits as detailed and modified as per the recommendations contained herein comply.

### **BCA Section E – Services and Equipment**

- 11) The proposal will require the following active fire safety measures:
- A fire hydrant in accordance with E1.5.
  - A fire hose reel system, in accordance with E1.5. A hose reel is to be provided to the second floor level.
  - Portable fire extinguishers in accordance with E1.6.
  - A sprinkler system in accordance with E1.5 and Specification E1.5 or other smoke hazard management system in accordance with Table E2.2a.
  - Mechanical to the basement carpark in accordance with F4.11 and AS 1668.2 must comply with Clause 5.5 of AS/NZS 1668.1 as per Table E2.2a. Details to be provided at CC stage.
  - Emergency lighting in accordance with E4.2 to E4.4.
  - Exit signs in accordance with E4.5 to E4.8.

### **BCA Section F – Health and Amenity**

- 12) Lighting is to comply with Part F4. Details to be provided at CC stage.
- 13) Ventilation is to be provided in accordance with F4.5 to F4.9 within the ground, first and second floors. Details to be provided at CC stage.
- 14) A mechanical ventilation system is to be provided to the basement level carpark. Details to be provided at CC stage.

### **BCA Section J – Energy Efficiency**

- 15) It is necessary for each discipline to clearly document how each of the relevant requirements of Section J are satisfied. Details of compliance to either the Deemed-to-Satisfy Provisions of the BCA or the Performance Requirements to be provided at CC stage.

### **Summary**

**The Development Application design as detailed in the plans provided will comply with the BCA 2013 subject to full compliance details being provided at Construction Certificate stage.**

Kind regards,



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**ERIC SHILSON-JOSLING**

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For **EAGLE CONSULTING GROUP Pty Limited**

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