

DEVELOPMENT APPLICATION

To:	Northern Beaches Council	Project:	136215
Date:	2 December 2019	Version:	C
Subject:	28 Lockwood Avenue, Belrose, NSW		

To whom it may concern,

This letter is to advise that Holmes Fire has been engaged by Platinum Property Group to provide fire engineering services for the proposed mixed-use development, to be located at 28 Lockwood Avenue, Belrose, NSW.

1 INTRODUCTION

The project relates to the proposed mixed-use development to be located at 28 Lockwood Avenue, Belrose, NSW. The building contains Class 7a basement carparking, Class 7b storage, Class 6 retail, and Class 2 residential use. The residential blocks are divided into Building A and Building B, with Building B being on the north side and Building A being on the south side. The building is under 25 m in effective height, greater than 6,000 m² in area, and required to be sprinkler protected.

A Building Code of Australia, 2019 (BCA)¹ assessment has been undertaken by BCA Vision, dated 11 November 2019. This report identified a number of non-compliances with the Deemed-to-Satisfy Provisions of the BCA that will be addressed by Holmes Fire.

2 PROPOSED ALTERNATIVE SOLUTIONS

Holmes Fire will address the identified non-compliances using performance-based fire engineering solutions. The performance-based solutions will comply with the relevant Performance Requirements of the BCA. The design approach will be in line with the International Fire Engineering Guidelines² and other acceptable guideline documents.

The Performance Solution designs will be developed in line with BCA Clause A2.2, as applicable; i.e. complying with the relevant Performance Requirements or by equivalence comparison with the Deemed-to-Satisfy Provisions.

¹ Australian Building Codes Board, National Construction Code Series 2019, Volume 1, Building Code of Australia, Class 2 to Class 9 Buildings. Australian Building Codes Board, CAN, Australia, 2019.

² National Research Council of Canada; International Code Council, United States of America; Department of Building and Housing, New Zealand; and Australian Building Codes Board, International Fire Engineering Guidelines, Edition 2005, Australian Building Codes Board, 2005.

The identified non-compliances and proposed approach of the Performance Solution for each issue is listed below. Holmes Fire understands that all other aspects of the building will comply with the Deemed-to-Satisfy Provisions of the BCA.

- BCA Clause D1.2 requires basements to have not less than two exits. The retail areas on Lower Ground Floor are more than 1.5 m below ground and thus require two exits. It is proposed to only provide one exit from the retail areas. A Performance Solution using a comparative approach will be provided to address Performance Requirement DP4.
- BCA Clause D1.4(a)(i)(A) and Specification E1.5a permit the maximum travel distance from the entry door of a residential Sole Occupancy Unit (SOU) to an exit in a sprinklered building to be up to 12 m. The travel distance in Building B is up to 14 m to an exit and the travel distance in Building A is up to 16 m to an exit. Additionally, D1.4(a)(ii) permits the maximum travel distance from a residential area not within an SOU is to be up to 20 m to an exit or point of choice of exits. The travel distance from the Basement 2 garbage/loading area is up to 25 m to an exit and 30 m to a point of choice from the Level 2 communal open space. A Performance Solution using a comparative approach will be provided to address Performance Requirements DP4 and EP2.2.
- BCA Clause D1.7(b) requires that a fire-isolated exit must provide egress directly to open space or to a compliant covered area that is open for 67 % of the perimeter. The southern fire-isolated stairs serving Building A and the carpark are proposed to discharge into a space covered by the Lower Ground Floor slab and only open for 28% of its perimeter. The northern fire-isolated stairs serving Building B and the carpark are proposed to discharge into a space covered by the Lower Ground Floor slab and only open for 32% of its perimeter. The north western fire-isolated stair serving Building B is proposed to discharge into a space covered by the Lower Ground Floor slab and only open for 43% of its perimeter. A Performance Solution using a comparative approach will be provided to address Performance Requirements DP5 and EP2.2.

3 SUMMARY

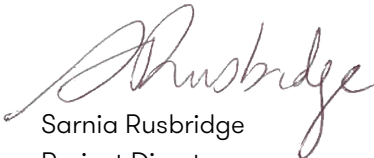
Based on Holmes Fire's review of the project documentation, it is considered that performance-based fire engineering can be utilised to demonstrate compliance with the Performance Requirements of the BCA without major changes to the current design. Additional non-compliances may be identified as the design is further developed, however it is considered that there are no significant issues that would affect the building layout.

The information contained within this letter is based on the architectural drawings prepared by DKO Architecture, as listed below.

Dwg no.	Title	Date	Issue
DA200	Basement 4	29 November 2019	A
DA201	Basement 3	29 November 2019	A
DA202	Basement 2	29 November 2019	A
DA203	Lower Ground Floor	29 November 2019	A
DA204	Ground Floor	29 November 2019	A
DA205	Level 1	29 November 2019	A
DA206	Level 2	29 November 2019	A

Please do not hesitate to contact Holmes Fire, should there be any queries about the above.

Regards,



Sarnia Rusbridge
Project Director

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