

**Jensen Hughes Fire Testing Pty Ltd (formerly Warringtonfire Australia Pty Ltd<sup>1</sup>)**  
**ABN 81 050 241 524**

Project no: FSE240156

29 April 2025

Callan Salter  
Investa  
Level 30, 420 George Street  
Sydney NSW 2000

Dear Callan

**105 Miller Street, North Sydney NSW – Education Scheme**

**Preliminary fire safety engineering review**

The design of the proposed development at 105 Miller Street, North Sydney NSW will incorporate performance solutions complying with the performance requirements of NCC 2022<sup>2</sup>. Jensen Hughes has undertaken a preliminary fire safety engineering review of the proposed design for the development application submission at the request of Investa. The review was based on the drawings and information listed in Appendix A.

The intent of the review was to determine whether we believe the design can be demonstrated to achieve compliance with the performance requirements of the NCC.

The performance solutions identified to date are listed in Table 1.

*Table 1 Preliminary list of performance solutions*

| Item | Description of performance solution                                                                                                                                                                                                                         | DTS provision                 | Performance requirement | Comment                                                                              |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------|--------------------------------------------------------------------------------------|
| 1.   | Lower ground floor to level 4 are interconnected which creates a fire compartment that exceeds the maximum permitted volume for Type A construction and escalators connect more than three levels permitted within a sprinkler protected Class 9b building. | Clauses C3D3 and D2D17        | C1P2 and D1P2           | The assessment will be based on the use of fire curtains around the escalator voids. |
| 2.   | The maximum fire rating for the class 7b bike parking is to be reduced from 4 hours to 2 hours.                                                                                                                                                             | Clauses C3D8, C3D9 and spec 5 | C1P1 and C1P2           | The assessment will be based on a fire load survey.                                  |

<sup>1</sup> Warringtonfire Australia Pty Ltd was acquired by Jensen Hughes in December 2023. Jensen Hughes Fire Testing Pty Ltd is not affiliated, associated, authorised, or endorsed by Warringtonfire Australia Pty Ltd, Warringtonfire Testing and Certification Limited or its "Warringtonfire" or "Certifire" brands.

<sup>2</sup> National Construction Code Volume One - Building Code of Australia 2022, Australian Building Codes Board, Australia

| Item | Description of performance solution                                                                                                                                                                                                                                                                                   | DTS provision                 | Performance requirement | Comment                                                                                                                                                                                                                                                                                                                               |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3.   | The maximum fire rating for the class 6 retail tenancies is to be reduced from 3 hours to 2 hours.                                                                                                                                                                                                                    | Clauses C3D8, C3D9 and spec 5 | C1P1 and C1P2           | The assessment will be based on a fire severity analysis of the subject tenancies.                                                                                                                                                                                                                                                    |
| 4.   | Openings in the external wall located within 3 m of the northern boundary fronting Brett Whitely Place will not be protected in accordance with clause C4D3 of the NCC.                                                                                                                                               | Clauses C4D3 and C4D5         | C1P2                    | The performance solution will be based on the provision of sprinklers throughout the building and consideration of the adjacent public easement.                                                                                                                                                                                      |
| 5.   | The external walls and associated openings in different fire compartments are located perpendicular to and within 4 m of the internal corners on the ground floor and not protected in accordance with clause C4D5 of the NCC.                                                                                        | Clauses C4D4 and C4D5         | C1P2                    | The performance solution will be based on the external fire rated wall within one of the compartments not having any openings.                                                                                                                                                                                                        |
| 6.   | Level 1 (northern plant) and level 22 (upper plant) are only provided with access to a single fire-isolated exit.                                                                                                                                                                                                     | Clause D2D3                   | D1P4                    | The performance solution will have regard to: <ul style="list-style-type: none"> <li>+ Level 1 being a low-rise portion of the building.</li> <li>+ Level 22 being an external area which can be expected to vent smoke. External emergency warning sounders will be required.</li> <li>+ Re-entry provisions on level 21.</li> </ul> |
| 7.   | The substation in the basement level is only provided with access to a single exit and the travel distance to the single exit is 26 m instead of 20 m.                                                                                                                                                                | Clauses D2D3 and D2D5         | D1P4                    | The performance solution will have regard to the use of an access hatch and ladder as an exit.                                                                                                                                                                                                                                        |
| 8.   | The basement level includes travel distances of: <ul style="list-style-type: none"> <li>+ Up to 30 m to a point of choice from the DAS room instead of 20 m.</li> <li>+ Up to 49 m to the closest exit from the DAS room instead of 40 m.</li> <li>+ Up to 80 m between alternative exits instead of 60 m.</li> </ul> | Clauses D2D5 and D2D6         | D1P4 and E2P2           | The performance solution will have regard to fire separation of the back of house corridor and the provision of a smoke detection system.                                                                                                                                                                                             |
| 9.   | The lower ground level includes a travel distance of up to 30 m to a point of choice from the squash court instead of 20 m.                                                                                                                                                                                           | Clause D2D5                   | D1P4 and E2P2           | The performance solution will have regard to the low fire load within the end of trip corridor and the provision of a smoke detection system.                                                                                                                                                                                         |

| Item | Description of performance solution                                                                                                                                                                                                                                             | DTS provision         | Performance requirement | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10.  | <p>The lower ground floor car park includes travel distances of:</p> <ul style="list-style-type: none"> <li>+ Up to 56 m to the closest exit from the double-length parking spaces instead of 40 m.</li> <li>+ Up to 85 m between alternative exits instead of 60 m.</li> </ul> | Clauses D2D5 and D2D6 | D1P4 and E2P2           | The performance solution will have regard to the straight open paths of travel, good visual access towards exits and the provision of sprinklers within the carpark.                                                                                                                                                                                                                                                                                                                                  |
| 11.  | The ground level includes a travel distance of up to 28 m to a point of choice instead of 20 m.                                                                                                                                                                                 | Clause D2D5           | D1P4 and E2P2           | The performance solution will have regard to the provision of a smoke detection system.                                                                                                                                                                                                                                                                                                                                                                                                               |
| 12.  | Level 1 includes a travel distance of up to 28 m to a single exit from the lift corridor instead of 20 m.                                                                                                                                                                       | Clause D2D5           | D1P4 and E2P2           | The performance solution will have regard to the low fire load within the corridor and the provision of a smoke detection system.                                                                                                                                                                                                                                                                                                                                                                     |
| 13.  | Level 2 includes a travel distance of up to 29 m to a point of choice from the plant room instead of 20 m.                                                                                                                                                                      | Clause D2D5           | D1P4 and E2P2           | The performance solution will have regard to the provision of a smoke detection system and sprinkler system.                                                                                                                                                                                                                                                                                                                                                                                          |
| 14.  | Level 13 includes a travel distance of up to 27 m to a point of choice from the terrace instead of 20 m.                                                                                                                                                                        | Clause D2D5           | D1P4 and E2P2           | The performance solution will have regard to the terrace being an external area and direct access to the fire-isolated stairs being available from the external area.                                                                                                                                                                                                                                                                                                                                 |
| 15.  | Level 22 includes a travel distance of up to 36 m to a single exit from the roof plant area instead of 20 m.                                                                                                                                                                    | Clause D2D5           | D1P4 and E2P2           | The performance solution will have regard to level 22 being an external area which can be expected to vent smoke. External emergency warning sounders will be required.                                                                                                                                                                                                                                                                                                                               |
| 16.  | There are numerous instances throughout the building where doors open directly onto plant rooms (or the like) and are not provided with airlocks.                                                                                                                               | Clause D2D12          | D1P4 and D1P5           | The performance solution will have regard to the expected population using the exit, pressurisation and fire separation.                                                                                                                                                                                                                                                                                                                                                                              |
| 17.  | Each of the fire isolated stairs serving the upper levels of the building incorporate rising and descending flights at the level of discharge. No formal smoke separation is proposed.                                                                                          | D3D5                  | D1P4                    | <p>The performance solution will require:</p> <ul style="list-style-type: none"> <li>+ Illuminated exit signs, directional exit signs and additional 'EXIT AT THIS LEVEL' signage will be provided at the level of discharge.</li> <li>+ Signage also to be provided to the underside of the first stair flight below level of discharge alerting occupants to return to the level above.</li> <li>+ Medium temperature smoke seals provided to the stair entry doors on the lower levels.</li> </ul> |

| Item | Description of performance solution                                                                                                                                                                                          | DTS provision                     | Performance requirement | Comment                                                                                       |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------------------|-----------------------------------------------------------------------------------------------|
| 18.  | The fire hydrant booster assembly is located remote from the façade of the building and more than 20 m from the main pedestrian entry on the Miller Street frontage.                                                         | Clause E1D2                       | E1P3                    | Performance solution subject to discussion with FRNSW to suit their operational requirements  |
| 19.  | The fire control room in the design is proposed to be provided with access off Miller Street, which is not the front entrance to the building. A second means of egress is provided from an internal fire-isolated corridor. | Clause E1D15 and specification 19 | E1P6                    | Performance solution subject to discussion with FRNSW to suit their operational requirements. |

It is Jensen Hughes' professional opinion that it is possible to develop performance solutions for the issues identified to demonstrate compliance with the relevant performance requirements of the NCC without major changes to the proposed design.

The details of the proposed performance solutions are subject to the outcome of the performance-based design brief and analysis which will be carried out in accordance with the Australian Fire Engineering Guidelines (AFEG)<sup>3</sup>.

The performance solutions for the building will be developed as part of the ongoing design and development process and documented in a format suitable for submission to the relevant approval authorities. It is noted that additional performance solutions may be identified during the ongoing design development process in consultation with the design team.

Please contact me on +61 2 9411 5360 if you have any questions.

Yours sincerely



Andrew Stevens  
Senior fire safety consultant  
**Jensen Hughes**

<sup>3</sup> Australian Fire Engineering Guidelines, 2021, version 1.0, Australian Building Codes Board, Australia.

## Appendix A Drawings and information

| Drawing title                          | Dwg no | Date       | Drawn     |
|----------------------------------------|--------|------------|-----------|
| GA Plans Basement                      | 20B1   | 1 Apr 2025 | fjcstudio |
| GA Plans Lower Ground - Denison Street | 20LG   |            |           |
| GA Plans Upper Ground - Miller Street  | 20UG   |            |           |
| GA Plans Level 01                      | 2001   |            |           |
| GA Plans Level 02                      | 2002   |            |           |
| GA Plans Level 03-04                   | 2003   |            |           |
| GA Plans Level 05-07                   | 2005   |            |           |
| GA Plans Level 08                      | 2008   |            |           |
| GA Plans Level 09-12 Typical Lowrise   | 2009   |            |           |
| GA Plans Level 13 Roof Terrace         | 2013   |            |           |
| GA Plans Level 14 Transfer             | 2014   |            |           |
| GA Plans Level 15-20 Typical Highrise  | 2015   |            |           |
| GA Plans Level 21 Plant                | 2021   |            |           |
| GA Plans Level 22 Plant                | 2022   |            |           |
| GA Plans Level 23 Roof                 | 2023   |            |           |

| Other information                           | Ref no | Date        | Prepared by |
|---------------------------------------------|--------|-------------|-------------|
| BCA capability statement (education scheme) | 240167 | 16 Apr 2025 | BM+G        |