



Determination 2021/002

Regarding the proposed refusal of an amendment to a building consent relating to an intermediate floor in a new building at 8 Cygnet Drive, Bell Block, New Plymouth

Summary

This determination considers whether a building consent authority was correct to propose to refuse an amendment to a building consent. This was due to a dispute with the owner over the maximum allowable area of an intermediate floor used for the storage of materials associated with a manufacturing, servicing and repair business. The determination considers the change in the intended use of the building during the course of the building work from a “warehouse” to a “workshop”, the means of compliance, and the area of the intermediate floor.

1. The matter to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004 (“the Act”) made under due authorisation by me, Katie Gordon, National Manager Determinations, Ministry of Business, Innovation and Employment (“the Ministry”), for and on behalf of the Chief Executive of the Ministry.¹
- 1.2 The parties to the determination are:
 - the owner of the building, DJ and ML Connell Family Trust (“the applicant”), represented by the applicant’s builder for the project (the “agent”)
 - New Plymouth District Council (“the authority”), carrying out its duties as a territorial authority or building consent authority.
- 1.3 This determination arises from the proposed decision of the authority to refuse to grant and issue an amendment to a building consent². The refusal arose because:
 - the authority is not satisfied that the size of the proposed intermediate floor³ complies with certain clauses of the Building Code⁴; in particular in regard to the floor area limitations stated in the previous⁵ Acceptable Solution C/AS5⁶

¹ The Building Act and Building Code (Schedule 1 of the Building Regulations 1992) are available at www.legislation.govt.nz. Information about the legislation, as well as past determinations, compliance documents and guidance issued by the Ministry, is available at www.building.govt.nz.

² The authority’s reference number associated with the application for an amendment to a building consent is AMN20/00642.

³ Intermediate floor is defined in Acceptable Solution C/AS5 as any upper floor within a firecell which because of its configuration provides an opening allowing smoke or fire to spread from a lower to an upper level within the firecell.

⁴ First Schedule Building Regulations 1992

⁵ The “previous” Acceptable Solution C/AS5 is referenced as this was the version used as the stated means of compliance in the applicant’s original building consent application and subsequent amendments.

(“C/AS5”) and the authority’s view that the intended use of the building is considered to be a warehouse (due to the capable height of storage).

- 1.4 The applicant is of the view that the building is to be used as a workshop or factory, for the manufacture, servicing and repair of mobile containerised plant rooms, switchboards, and panels, and as such, the previous Acceptable Solution C/AS5 allows for a larger size of intermediate floor for the storage of materials associated with that intended use.
- 1.5 The matter to be determined⁷ is therefore whether the authority was correct in its decision to propose to refuse to grant an amendment to a building consent. In deciding this matter, I must first consider the intended use of the building, secondly, the means of compliance, and thirdly, the maximum size of the allowable area of a proposed new intermediate floor for the storage of materials associated with that use.
- 1.6 This determination does not consider the compliance of the design of the proposed new intermediate floor the Building Code other than that of the maximum allowable floor area.
- 1.7 The relevant sections of the Act are contained in Appendix A. Unless otherwise stated, references in this determination to sections are to sections of the Act, and references to clauses are to clauses of the Building Code.
- 1.8 As this determination is about fire safety and fire-engineering practice, I am also required to consult with Fire and Emergency New Zealand (“FENZ”) under section 170(a) of the Act.
- 1.9 In making my decisions, I have considered:
 - The submissions from the parties and FENZ;
 - The ‘fire analysis report’ provided as part of the original building consent application;
 - The amended ‘fire analysis report’ provided as part of the building consent amendment application;
 - Other evidence in this matter.

2. The building work

- 2.1 The building is located at 8 Cygnet Drive, Bell Block, New Plymouth. It is a new industrial building with lean-to offices across the south east elevation. The part of the building that is the workshop is a single storey structure constructed using steel portal frames on a reinforced concrete slab floor. The wall and roof cladding is lightweight profiled metal supported on steel girts and purlins. The offices are constructed using timber framed walls and roof, with the ceiling and walls lined internally with plasterboard. The front (south east) elevation of the building is set back approximately 3m from the relevant boundary that marks the north side of Cygnet Drive.
- 2.2 The building as a whole is 23.5m wide and 29.5m long; this equates to a total floor area (at ground level) of 693.25m² (refer to Fig 1). The height to the apex of the roof

⁶ C/AS5 Acceptable Solution for Buildings used for Business, Commercial and Low Level Storage (Risk Group WB), Amendment 4, effective from 1 January 2017 to 31 October 2019. Acceptable Solutions and Verification Methods are produced by the Ministry and, if complied with, must be accepted by a building consent authority as establishing compliance with the Building Code (refer to section 19 of the Act).

⁷ Under sections 177(1)(b) and (2)(a) of the Act.

is 7.5m. The fire report⁸ states the ‘storage height’ is 5.0m; however, as a result of a request for further information raised by the Ministry, the agent has subsequently confirmed the storage height in the area of the workshop will be limited to 3m.

2.3 The proposed intermediate⁹ floor is approximately 23.5m long and 4.78m wide; this equates to a floor area of 112.3m² (refer to Fig 1). The intermediate floor is approximately 2.72m above the ground floor.

2.4 The fire report provided with the building consent amendment application states that the area of the intermediate floor, in relation to the total area of the firecell¹⁰, is 16.2% (calculated by: $[112.3 / 693.25] \times 100$)¹¹.

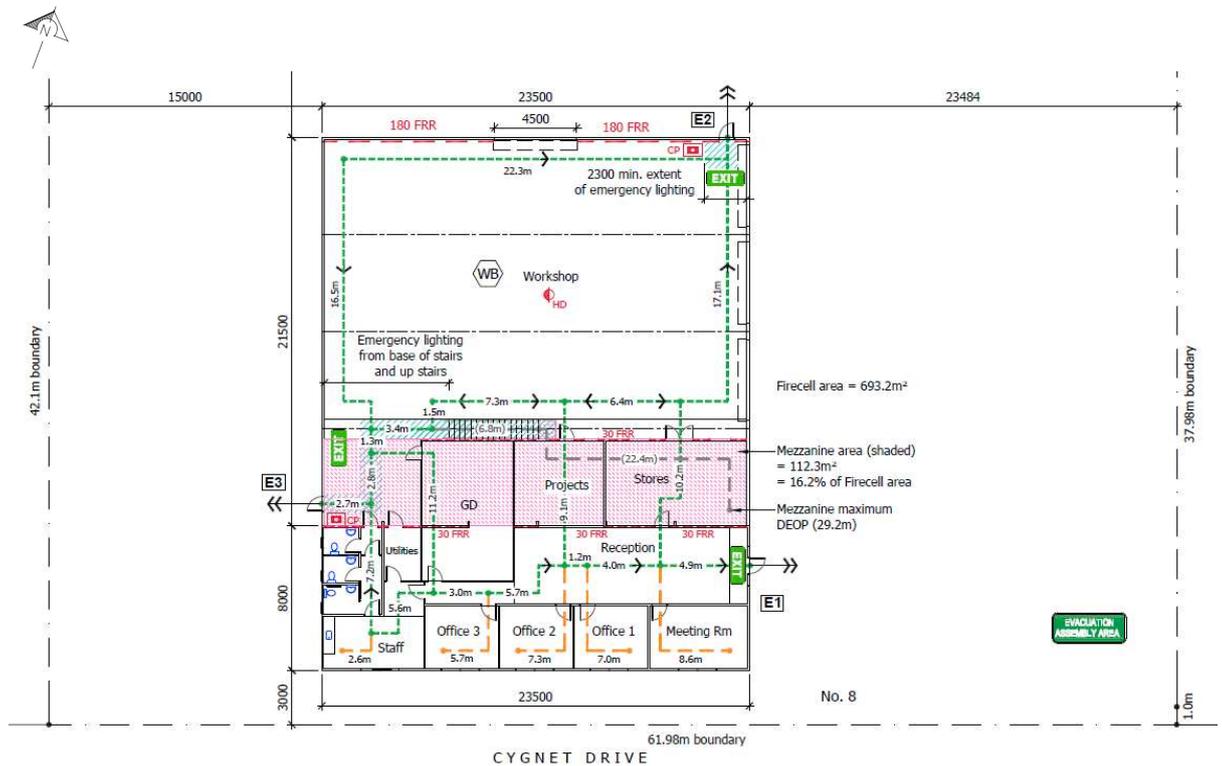


Fig 1: Copy of fire egress plan F1.01 issue 2 – shaded area indicates proposed intermediate floor (not to scale)

⁸ The ‘fire analysis report’ for the project has been prepared by a design professional: job name “WSST Industrial Premises”, job No. 3952-526, dated 7 July 2020, Rev. 2 titled “Amendment for Consent”.

⁹ Some of the documentation received by the Ministry refers to the same area of the building as either an ‘intermediate’ floor or as a ‘mezzanine’ floor. For the purposes of this determination the use of the term ‘intermediate’ floor has been used as defined in Acceptable Solution C/ASS.

¹⁰ ‘Firecell’ is defined in Acceptable Solution C/ASS as: Any space including a group of contiguous spaces on the same or different levels within a building, which is enclosed by any combination of fire separations, external walls, roofs, and floors. Floors, in this context, include ground floors and those in which the underside is exposed to the external environment (eg when cantilevered). Note that internal floors between firecells are fire separations.

¹¹ The area of the firecell, including that of the intermediate floor, has been established from the “Fire Egress Plan”, sheet F1.01 Issue 2, titled “Consent Amendment – Building – 6th July 2020” that was included in the appendices to the fire report (refer to Fig 1 above).

3. Background

- 3.1 The building consent application for the original building at 8 Cygnet Drive was first received by the authority on 1 February 2019. The authority's reference number for the building consent was BC19/124545. Following a number of 'requests for further information' raised by the authority, and associated responses received from the applicant, the building consent was granted¹² on 8 August 2019, and issued¹³ on 13 August 2019.
- 3.2 Between 12 September 2019 and 8 May 2020, four separate building consent amendment applications were received and granted by the authority. These amendments are not the subject of this determination, and have therefore not been considered further.
- 3.3 On an unspecified date after August 2019, the applicant entered into an agreement with a new tenant to occupy and use the building.
- 3.4 In a letter dated 11 September 2020, the tenant stated it is "a construction, maintenance and manufacturing business providing services to a broad cross-section of New Zealand industry with a large focus on the energy sector". For the development at 8 Cygnet Drive, the tenant confirmed:

Construction of a mezzanine floor will provide [it] with significant storage capacity for the following:

- Materials for the manufacture of electrical switchboards, control panels and mobile plant rooms.
- Materials for the manufacture of chemical dosing panels.
- Materials for the manufacture of hydraulic and pneumatic control panels.
- Spare parts for the servicing of [proprietary] gas engines.
- Spare parts for the servicing of [proprietary] compression equipment.
- Spare parts for the repair of various types of gas detection equipment.

Having a mezzanine floor in this building is absolutely critical to the functionality and suitability of the premises, [it] will not be able to conduct [its] business without the facility.

- 3.5 On 15 July 2020, a fifth building consent amendment application (reference number AMN20/00642) was received by the authority. This included details of a proposal to increase the size of the offices, and introduce a new intermediate floor for the storage of materials to meet the needs of the tenant. It is this latter building consent amendment application that is the subject of this determination.
- 3.6 During the processing of the building consent amendment application AMN20/00642, the authority raised three separate requests for further information (RFIs)¹⁴. The first RFI from the authority dated 27 July 2020 included:

The proposed mezzanine floor exceeds 35m² permitted in buildings capable of storage height above 3m. Revise design to comply with cited acceptable solution or

¹² In accordance with section 49 of the Act.

¹³ In accordance with section 51 of the Act.

¹⁴ Section 48(2) of the Act.

proposed as an alternative to be reviewed by the fire service and an external consultant.

- 3.7 I have not seen a copy of the response from the applicant to the authority's first RFI, but this did prompt a second RFI to be issued by the authority dated 3 August 2020. This repeated the text in paragraph 3.6 above, plus the following:

...nb – the proposed building designation is inconsistent with our interpretations of the acceptable solutions and the definition of storage capability.

- 3.8 I have not seen a copy of the response from the applicant to the authority's second RFI, but this did prompt a third and final RFI to be issued by the authority dated 31 August 2020. This included the following:

The justification from the fire engineer regarding the applicability of risk group is not accepted. Revise fire design to acknowledge either;

- Alternative solution based on C/AS2 risk group WB¹⁵ or
- [Specific Engineered Design]/VM2 fire design.

- 3.9 In an exchange of emails between the authority and agent on 2 September 2020, the authority stated:

I agree that the size of the intermediate floor is the only contentious point that cannot be easily resolved ... this amendment can be considered with the removal of the flooring and access to the office ceiling area. ...A further amendment or building consent application may be submitted for the fitout and access to the mezzanine floor if you still wish to proceed with this at a later date.

- 3.10 The building consent for the amended application was granted and issued by the authority on 7 September but it did not include the design for the intermediate floor.

- 3.11 In response to a 'request for further information' from the Ministry dated 18 September 2020, as to the whether the building consent amendment application AMN20/00642 had been formally refused under section 50 of the Act, or whether the exercise of that power of decision was proposed, the authority responded on 23 September 2020 and stated:

The amendment was not refused. Further information was requested on three occasions. The amendment application has now been approved with a revised design omitting the intermediate floor.

- 3.12 Building works have continued to construct the new building at 8 Cygnet Drive in line with the original building consent, and associated amendments, but these currently do not include the previously proposed intermediate floor and access stair; these have been omitted at this stage from the approved plans and specifications, presumably on the basis that this would be subject to a further building consent application (either as an amendment, or as a new building consent) at a future time.

- 3.13 The Ministry received an application for a determination on 11 September 2020.

4. The submissions

- 4.1 The parties' submissions are summarised below.

The applicant

- 4.2 The agent has confirmed that the building at 8 Cygnet Drive will not be used by the tenant as a warehouse. The building is to be used by the tenant as a workshop or

¹⁵ Risk group WB is the risk group that relates to business, commercial and low level storage building uses.

factory for the purposes of the manufacture of electrical switchboards, control panels and mobile plant rooms, as well as chemical dosing panels, and hydraulic and pneumatic control panels. The same workshop will be used for the servicing of gas engines, compressions equipment, and for the repair of gas detection equipment.

4.3 The applicant confirmed in an email dated 17 September 2020 that:

During the construction we secured a tenant. As a condition of the tenancy they required the offices to be extended and a mezzanine created above.

4.4 The applicant also confirmed on 17 September 2020 that it is the intermediate floor that it in dispute and that the tenant:

will use the building as a workshop for manufacture and repair. The [intermediate floor] will hold parts for the manufacturing process. In no way can this be described as warehousing.

4.5 Prior to the application for determination, the agent sought advice from the Ministry on the “Interpretation of warehouse v factory” in an exchange of emails dated 6 September 2020 and 7 September 2020. The agent sought a definition of a “factory v warehouse”, as these are not stated in the Act or Building Code, and hence the interpretation and application of Part 4, paragraph 4.13.7, of the previous Acceptable Solution C/AS5 (refer to Appendix B).

4.6 In the same email to the Ministry dated 6 September 2020, the agent stated that:

Under the Act, factory and warehouse and other industrial type buildings are separately listed. The Act outlines types of buildings in the industrial group to include agricultural building, agricultural processing facility, aircraft hangar, factory, power station, sewage treatment works, warehouse or utility.

Also in particular, the building we are finishing is for a manufacturing client/tenant [sic] involved only in fabrication of goods. They have provided written statements that they are fabricators and not warehouse good storage.

It is generally held that warehouses are commercial buildings prioritised for storing raw materials and manufactured goods. Factories are used for the processing and manufacture of goods.

Our fire engineer contends that clause 4.13.7 [of C/AS5] is not applicable as this is a factory and not a warehouse and therefore clause 4.13.7 [of C/AS5] does not apply.

4.7 In its response on 7 September 2020 the Ministry provided some general advice on risk groups, capable height of storage, and industrial activities.

4.8 The applicant provided copies of the original ‘fire analysis report’ dated 31 January 2019 [revision 0] for the initial building consent, plus an updated ‘fire analysis report’ dated 7 July 2020 [revision 2] in support of the building consent amendment application which included the larger offices and intermediate floor above for the new tenant. In addition, the applicant also provided some design plans, copies of correspondences with the authority and the applicant’s fire engineer, as well as product data sheets on some of the items the tenant manufactures.

4.9 The applicant is of the view that Part 4, paragraph 4.13.6, of Acceptable Solution C/AS5 (refer to Appendix B) is applicable in this case, as the building is not being used as a warehouse. The applicant considers that this means that for the proposed factory or workshop at 8 Cygnet Drive, the intermediate floor area is allowed to be greater than the 35m² limitation imposed by paragraph 4.13.7 of former Acceptable solution C/AS5.

The authority

- 4.10 The authority provided copies of the three ‘requests for further information’ that related directly to the building consent amendment application (authority reference number AMN20/00642) (refer to paragraphs 3.6, 3.7, and 3.8).
- 4.11 The authority also provided copies of correspondences it had exchanged with the agent in respect of the same building consent amendment application.
- 4.12 The authority stated in an email to the agent dated 8 August 2020, that it:
- ...does not accept signage and policy as a means of restricting storage height and considers the terms “warehouse” to be congruent with capable of storage of more than 3m.
- Any proposal inconsistent with this may be proposed as an alternative solution and subject to a more robust level of evidence and assessment.
- 4.13 The authority also provided an undated file note that included:
- Extension of office area and addition of mezzanine floor...Intermediate floor sizing inconsistent with C/AS2 4.13.7...Fire [engineer’s] response not accepted as correct interpretation of classified use and purpose group...removed mezzanine from scope.
- 4.14 The authority confirmed that in agreement with the agent, the building consent amendment application AMN20/00642 was granted and issued on 7 September 2020, but this did not include the proposed intermediate floor (which was omitted from the plans) in order that the remaining building works could continue. This was on the basis that the authority and agent could not agree on the “size of the intermediate floor” and that this “is the only contentious point that cannot be easily resolved”.

Draft determination

- 4.15 A draft determination was issued to the parties for comment on 12 November 2020.
- 4.16 The applicant responded on 13 November 2020 accepting the draft determination without comment.
- 4.17 The authority responded on 27 November 2020, advising it did not accept the draft determination. The authority clarified what it considered the matter for determination to be, and was of the view that the “What happens next?” and “The decision” parts of the draft determination were unsatisfactory and could lead to greater contention. The authority did not expand its reasons for holding this view.
- 4.18 FENZ responded on 27 November 2020, agreeing with the analysis and conclusions in the draft determination, subject to the following comments (in summary):
- the draft determination “decouples” the concept of storage height (whether actual or potential) from the building use that determines the relevant constraint on intermediate floor sizing. It follows that a potential storage height of 3m or more does not mean that a building is necessarily a “warehouse”
 - storage height in the “workshop” will be limited to a maximum of 3m, but “there is a practical question as to what sort of ‘appropriate measures’ might be feasible” to ensure this height is not exceeded given “that management of storage is not something that can be controlled...through the compliance schedule and building warrant of fitness regime”. Nor could it be made the subject of a condition placed on a building consent, nor a condition applying

on an on-going basis after the completion of building work and issue of the code compliance certificate. The parties may benefit from guidance about the measures that may be available and appropriate

- however, once the actual or potential storage height is decoupled from the assessment of building use, it is arguably an irrelevant consideration for the purposes of the issues discussed in the determination
- it would be helpful if the final determination could clarify the interpretation of paragraph 4.13.6 of the previous Acceptable Solution C/AS5.

5. Discussion

- 5.1 The matter for determination concerns whether the authority was correct to propose to refuse to grant an amendment to a building consent, as a result of a dispute between the parties over the allowable area of a proposed intermediate floor within a new building currently under construction.
- 5.2 The construction of the new building at 8 Cygnet Drive is subject to section 40¹⁶ of the Act, and a building consent and subsequent amendments that have been granted and issued by the authority under sections 49 and 51 of the Act respectively.
- 5.3 After the original building consent was granted and issued in 2019, the applicant was successful in securing a new tenant for the premises. The tenant required extended offices and a new intermediate floor for its manufacturing, servicing and repair business. This prompted the applicant to apply for another (fifth) building consent amendment, but due to a dispute between the applicant and the authority over the allowable area of the intermediate floor, the amendment application was only granted and issued with the plans updated to omit the design for the intermediate floor.
- 5.4 Although the applicant and the authority have worked collaboratively to ensure the building work continues in this regard, the applicant has sought a determination on the authority's proposed refusal of the building consent amendment if the applicant had not omitted the new intermediate floor.
- 5.5 To determine this matter, I need to turn my mind to:
- 5.5.1 the intended use of the building,
- 5.5.2 the means of compliance with the clauses of the Building Code that relate to Protection from Fire (clauses C1-C6),
- 5.5.3 the maximum size of the allowable area of a proposed new intermediate floor for the storage of materials associated with intended use of the building.
- 5.6 I have not considered whether the design of the intermediate floor itself meets the requirements of the Building Code other than considering the allowable floor area.

Intended use

- 5.7 The intended use of the building is relevant to the matter to be determined as it is used to inform the compliance requirements, in this case in relation to clauses C1-C6 of the Building Code.

¹⁶ Section 40 of the Act: Buildings not to be constructed, altered, demolished, or removed without consent.

5.8 Intended use is a defined term in section 7 of the Building Act 2004:

intended use, in relation to a building,—

(a) includes any or all of the following:

(i) any reasonably foreseeable occasional use that is not incompatible with the intended use:

(ii) normal maintenance:

(iii) activities undertaken in response to fire or any other reasonably foreseeable emergency; but

(b) does not include any other maintenance and repairs or rebuilding

5.9 Building Code clause A1 – Classified Uses – states:

1.0 Explanation

1.0.1 For the purposes of this building code *buildings* are classified according to type, under seven categories.

1.0.2 A *building* with a given classified use may have one or more *intended uses* as defined in the Act.

- 5.10 For 8 Cygnet Drive, I need to consider the intended use of the building, and thereafter its classified use, as this has a direct bearing in interpreting the appropriate risk group¹⁷.
- 5.11 The first edition of the ‘fire analysis report’ submitted as part of the plans and specifications with the original building consent in February 2019, referred to the building as a “warehouse”, with a storage height of more than 5m, and designated a risk group of WB – “Business, commercial and low level storage” – as described in the previous Acceptable Solution C/AS5.
- 5.12 I have not seen a copy of the original building consent (authority reference number BC19/124545). I have also not been presented with any evidence to suggest that the original ‘fire analysis report’ dated January 2019 was not accepted by the authority when it processed the building consent application.
- 5.13 As stated in paragraph 4.3, the applicant secured a new tenant for the premises during the construction of the building. Based on the evidence submitted by the applicant and agent, it is clear that the new tenant has no intentions of using the building as “warehouse” (as described in the original ‘fire analysis report’).
- 5.14 As described in paragraph 3.4, it is clear that the tenant intends to use the building as a “workshop” for the manufacture, servicing and repairs of some highly specialised equipment, and in order to conduct that business the tenant needs additional storage space (an intermediate floor) for the material parts.
- 5.15 The amended ‘fire analysis report’ (number 2, dated July 2020) no longer refers to the building being used as a “warehouse”, but rather as a “workshop”. The same report then goes onto describe the size and construction of the intermediate floor.
- 5.16 “Warehouse” and “workshop” (or “factory”) are not defined terms in the Act or the Building Code. I have therefore considered the natural and ordinary meaning of these terms¹⁸:

¹⁷ Former Acceptable Solution C/AS5, and current Acceptable Solution C/AS2, defines “risk group” as: “The classification of a building or firecells within a building according to the use to which it is intended to be put”.

¹⁸ From the Oxford English Dictionary at www.oed.com as at 23 December 2020

- “Warehouse”: A building or part of a building used for the storage of merchandise; the building in which a wholesale dealer keeps his stock of goods for sale...
- “Workshop”: A room, small building, etc, in which goods are manufactured or repaired.
- “Factory”: A building or range of buildings with plant for the manufacture or assembly of goods or for the processing of substances or materials.

5.17 In consideration of the foregoing items, I am of the view that the intended use of the building now is as a “workshop”, and no longer as originally intended (as a “warehouse”).

5.18 Both of the ‘fire analysis reports’ refer to the building as “industrial premises”. Since I have reached the view that the intended use of the building is now as a “workshop”, in terms of Building Code clause A1 – “Classified Uses” – I am of the view that clause 6.0 - “Industrial” - best describes the classified use of the building¹⁹. This is relevant when considering the appropriate risk group in accordance with the Acceptable Solution (in this case WB).

5.19 In light of the foregoing items, I am of the opinion that the authority did not correctly consider the change in the intended use of the building as a result of receiving the building consent amendment application AMN20/00642.

Means of compliance

5.20 Section 17 of the Act states that all building work must comply with the Building Code.

5.21 Section 19 of the Act states how compliance with the Building Code is established, and that a building consent authority must accept certain compliance pathways as meeting that requirement. For example, compliance with an Acceptable Solution or Verification Method.

5.22 From the evidence before me, some of the documentation provided by the parties refers to the previous Acceptable Solution C/AS5, as well as the current Acceptable Solution C/AS2. It is therefore unclear the stated means of compliance with the Building Code.

5.23 The previous Acceptable Solution C/AS5, amendment 4, was valid from 1 January 2017 till 31 October 2019.

5.24 The current Acceptable Solution C/AS2, first edition, was effective from 27 June 2019 (Amendment 1 from 22 October 2019).

5.25 The original building consent application for 8 Cygnet Drive was received by the authority on 1 February 2019. The associated ‘fire analysis report’ provided as part of the plans and specifications was written on basis of the previous Acceptable Solution C/AS5.

5.26 The building consent amendment application (authority reference number AMN20/00642) was received by the authority on 15 July 2020. The updated ‘fire

¹⁹ Category 6.0 Industrial, 6.0.1, applies to a building or use where people use material and physical efforts to (a) extract or convert natural resources; (b) produce goods or energy from natural or converted resources; (c) repair goods, or (d) store goods (ensuing from the industrial process)

analysis report’ (amendment number 2, dated 7 July 2020) was also written on the basis of the previous Acceptable Solution C/AS5. The ‘fire analysis report’ stated:

This revision relates to an extension to the offices area plus the addition of a limited area intermediate floor representing 16.2% of the firecell area. The revisions to this Fire Report are based on Acceptable Solution C/AS5 for Risk Group WB per the original Fire Report, as agreed [sic] to by the New Plymouth District Council.

- 5.27 It is clear that the building consent amendment application (AMN20/00642) was received by the authority after the previous Acceptable Solution C/AS5 was superseded by the current Acceptable Solution C/AS2. For this reason, compliance with C/AS5 was no longer required to be accepted by the authority as establishing compliance with the Building Code.
- 5.28 The legal test however is that the authority needs to establish whether it is satisfied on reasonable grounds that the provisions of the Building Code would be met if the proposed (amended) building works were completed in accordance with the plans and specifications that accompanied the application²⁰. Compliance with an Acceptable Solution is one way, but not the only way, to demonstrate compliance with the Building Code.
- 5.29 In my view, the authority in this case would need to assess the difference between the previous Acceptable Solution C/AS5, and the current C/AS2, and consider factors such as the scope of the amended building work being proposed, the time elapsed since the original building consent was issued, any subsequent changes to the Building Code requirements, any changes to the Ministry’s Acceptable Solutions that may have been used to demonstrate compliance (particularly if the new Acceptable Solution introduced more onerous requirements), and consideration of the amendment as an alternative solution against the requirements of the Building Code.
- 5.30 I also draw the attention of the parties to guidance that the Ministry has provided on its website²¹ regarding alternative solutions, including “Alternative solutions for compliance with the Building Code” and “Alternative solutions for Building Code clause C Protection from Fire”.
- 5.31 The amended ‘fire analysis report’ dated July 2020 states that using the previous Acceptable Solution C/AS5 was agreed to by the authority. I have received no evidence to dispute that statement. I have therefore taken the view that the authority should have considered the issues described in paragraph 5.29 when it agreed to accept the amended ‘fire analysis report’ based on the previous Acceptable Solution C/AS5. I will therefore leave it for the applicant and authority to consider the factors described in paragraph 5.29 when assessing any future building consent amendment application that may include an intermediate floor (if the applicant, in this case, still intends to demonstrate compliance with the Building Code based on an alternative solution pathway using the previous acceptable solution).
- 5.32 Regardless, from the evidence before me, the applicant did not adequately make clear and convey to the authority what was the stated means of compliance, or how compliance was to be achieved. This was evidenced by the incomplete information contained in the amended fire report, bearing in mind the applicant had chosen a compliance pathway using an Acceptable Solution that was no longer current.

²⁰ Section 49(1) of the Act.

²¹ www.building.govt.nz/building-code-compliance

Intermediate floor area

- 5.33 As described in paragraph 5.22, there has been conflicting information received from the parties on the applicability of either the previous Acceptable Solution C/AS5, or the current Acceptable Solution C/AS2, in respect of demonstrating compliance with the Building Code in terms of maximum floor area allowances for the intermediate floor.
- 5.34 Based on the evidence before me, the original building consent was granted on the basis of compliance with the previous Acceptable Solution C/AS5 – risk group WB – for buildings used for business, commercial and low level storage.
- 5.35 Table 1.1 of Acceptable Solution C/AS5 states that risk group WB applies to:
Offices (including professional services such as law and accountancy practices), laboratories, workshops, manufacturing (excluding *foamed plastics*), factories, processing, temperature controlled storage (capable of <3.0 m storage height other than some limited areas in processing areas) and other storage *buildings* capable of <5.0 m storage height (except some limited areas <8.0 m to the apex), light aircraft hangars.
- 5.36 The original ‘fire analysis report’ dated January 2019 states the risk group is WB, and the capable height of storage is 5m. The report refers to the building as a “warehouse”.
- 5.37 The amended ‘fire analysis report’ dated July 2020 also states the risk group is WB, and the capable height of storage is 5m. However, the amended report refers to the building as a “workshop”, and specifically states the building is no longer to be used as a “warehouse”. As described in paragraph 5.17, I have already reached the view that the intended use of the building has changed to that of a “workshop”, and not a “warehouse”.
- 5.38 However, in an email to the Ministry dated 21 September 2020 the agent confirmed the capable height of storage in the “workshop” will be limited to 3m.
- 5.39 I note that under the current Acceptable Solution C/AS2, Table 1.1 – Risk groups: scope and limitations, that for risk group WB this applies to “Industrial activities such as: Factories, processing and manufacturing plants (excluding foamed plastics) with a capable height of storage of less than 3.0m”. The same applies to “Professional activities” such as “workshops”. However, this 3.0m limitation on capable height of storage did not apply for “workshops” or “factories” associated with risk group WB in accordance with the previous Acceptable Solution C/AS5.
- 5.40 The agent has noted the intention to limit the capable height of storage to 3m. It is for the applicant to propose, and the authority to consider, how this will be achieved.
- 5.41 FENZ, in its response to the draft determination (refer to paragraph 4.18), suggested the Ministry provide guidance on how the capable height of storage could be achieved, and how this could be controlled and applied on an on-going basis, after the completion of the building work.
- 5.42 However, it is not for the Ministry, through the determinations process, to prescribe specifically how compliance with the Building Code could be achieved (bearing in mind the Building Code is performance based).
- 5.43 Regardless, the parties should be aware that one potential consequence of the maximum capable height of storage being exceeded is this may affect, for instance, some specified systems from operating effectively or as intended (eg warning systems such as smoke detectors, emergency lighting, and signage essential for

persons to escape in the event of a fire etc), and potentially increase the fire load within the building.

- 5.44 In consideration of the preceding paragraphs, I am of the view that risk group WB is the appropriate designation for the “workshop” at 8 Cygnet Drive.
- 5.45 I have noted that some of the information provided by the parties also refers to risk group WS, based on the capable height of storage of greater than 3m (as indicated in the ‘fire analysis reports’ which states 5m). The current Acceptable Solution C/AS2, describes risk group WS as “high level storage or potential for fast fire growth”; it goes onto confirm that WS “applies to”:
- Storage activities such as:** Warehouses with a capable height of storage of over 5.0 m or over 8.0 m to the apex and total floor area greater than 4200 m².
Temperature controlled storage outside of the scope of *risk group WB*.
- Service activities such as:** Trading and bulk retail wholesalers with a storage height greater than 3.0 m. Supermarkets with shelving over 3.0 m in height.
Exhibition, retail areas and trade fair space with a storage height greater than 3.0 m
- 5.46 I have already reached the conclusion that the intended use of the building is no longer as a “warehouse”, but as a “workshop”. Risk group WS is limited to “high level storage or potential for fast fire growth”, and does not include professional or industrial activities associated with risk group WB (albeit this has a limitation of a capable height of storage of less than 3m) (refer to paragraph 5.39).
- 5.47 In terms of the intermediate floor, the authority contends that since the capable height of storage in the building is greater than 3m, then the building is considered to be a “warehouse” due to the capable height of storage limitation imposed by risk group WB. The authority then refers to paragraph 4.13.7 of current Acceptable Solution C/AS2 which states:
- 4.13.7 In warehouse *firecells* that contain storage at a height of more than 3.0 m, *intermediate floors* shall be limited to a total area of 35 m².
- 5.48 By comparison, paragraph 4.13.7 of the previous Acceptable Solution C/AS5 states:
- 4.13.7 Intermediate floors** in warehouses capable of storage at a height of more than 3.0 m shall be limited to an area of 35 m².
- 5.49 FENZ, in its response to the draft determination, stated that a potential storage height of 3m or more does not mean that a building is necessarily a “warehouse” (refer to paragraph 4.18). I agree with FENZ. Just because a building may have a capable height of storage of greater than 3m, does not of itself preclude the possibility that the intended use of that building could be for other purposes (in this case, as a “workshop”).
- 5.50 I also note that FENZ, in its response to the draft determination, queried how to interpret paragraph 4.13.6 of the Acceptable Solution C/AS5. FENZ put forward two possible options. As written, paragraph 4.13.6 states: “For occupancies other than warehouses with storage height of 3.0m...”. The Acceptable Solution then describes three options for calculating the area of an intermediate floor. However, I agree with FENZ, the opening line to paragraph 4.13.6 could be interpreted in two different ways, namely: a) “For occupancies, other than warehouses with storage height over 3.0m, the total combined area...”, or b) For occupancies, other than warehouses, with storage height over 3.0m, the total combined area...”. The subtle difference is where the commas are placed. I agree with FENZ, and in my view option a) is the correct interpretation, and aligns with paragraph 4.13.7 of Acceptable Solution C/AS5.

- 5.51 As stated in paragraph 5.17, I have already reached the view that the intended use of the building is as “workshop”, and not as a “warehouse”, and it has a classified use of “industrial”. Since paragraph 4.13.7 of both the previous Acceptable Solution C/AS5, and the current Acceptable Solution C/AS2, imposes limitations on the area of an intermediate floor just for “warehouses” (with a capable storage height of more than 3m), I am of the view this does not apply to the “workshop” intended at 8 Cygnet Drive. Regardless, the agent has confirmed the intention that the capable height of storage is to be limited to 3m. How that is to be achieved is for the applicant to consider and present to the authority for its consideration.
- 5.52 Paragraph 4.13.6 of the previous Acceptable Solution C/AS5 outlines one way to determine the allowable area of an intermediate floor (refer to paragraph 4.9). By comparison, there is a similar means of compliance described in paragraph 4.13.4 of the current Acceptable Solution C/AS2 which states:
- 4.13.4 The maximum combined area of *intermediate floors* within a *firecell* shall be the lowest of:
- a) 20% of the area of the *firecell* floor not including the area of the *intermediate floors* if the *intermediate floors* are enclosed or partitioned, or 40% of the area of the *firecell* floor, not including the area of the *intermediate floors* if the *intermediate floors*:
- i) are completely open, or
- ii) the *building* has a Type 4 or 7 system, or
- b) A total floor area that accommodates no more than 100 occupants based upon the *occupant load* of the space (refer to Paragraph 1.4).
- 5.53 The amended ‘fire analysis report’ dated July 2020 details the calculated area of the intermediate floor. This is summarised in paragraphs 2.2, 2.3 and 2.4 above. Based on the information provided in the amended ‘fire analysis report’, the area of the intermediate floor is less than 20% of the area of the firecell, and would therefore comply with the requirements of the previous Acceptable Solution C/AS5 paragraph 4.13.6 and, by comparison, the current Acceptable Solution C/AS2, paragraph 4.13.4.
- 5.54 Notwithstanding the apparent discrepancies in the amended fire report (for example, the stated capable height of storage, no proposals for restricting the capable height of storage, the compliance with gazette notice issue number 49²²), the applicant chose to adopt a previous Acceptable Solution as a means of compliance, and as such, this should have been submitted to the authority as an alternative solution.
- 5.55 Further, in conjunction with paragraph 5.29, I note for the benefit of the parties that the means of calculating the intermediate floor area for the “workshop” is similar whether they adopt paragraph 4.13.6 from the previous Acceptable Solution C/AS5 as an alternative solution, or paragraph 4.13.4 from the current C/AS2. The means of compliance is therefore not more onerous in this regard, and the Building Code requirements are unchanged from the time the original building consent was applied for up to the date of the application for determination.
- 5.56 However, the authority was incorrect to propose to refuse the building consent amendment on the basis that the building with an intermediate floor area did not

²² Notice that copies of certain applications for building consent must be provided to the New Zealand Fire Service Commission (changed to Fire and Emergency New Zealand by section 197 of the Fire and Emergency New Zealand Act 2017 (No. 17)), dated 3 May 2012, page number 1406, notice number 2012-go2694

comply with the Building Code and Acceptable Solution due to its capable height of storage, without considering the change in the intended use.

- 5.57 Finally, I also draw the attention of the parties to the statutory requirements of the Act if the building undergoes a “change of use”²³ at any time in the future. I have taken the view that since the building is new, and is currently under construction without a Code Compliance Certificate having been issued, Section 115 of the Act does not apply in this case. This is similar to the approach taken in the previous determination 2011/053²⁴. I note that for 8 Cygnet Drive, the original intended use was as a “warehouse”, but during the construction phase, this was changed to a “workshop” as a result of the applicant securing a new tenant for the premises. However, it’s clear from the evidence before me, that the building could easily have other intended uses, including reverting back to being used as a “warehouse” at some point in the future. It is at this point the applicant needs to be aware of the statutory obligations of giving notice to the authority of a “change of use” under section 114 of the Act, and thereafter, give effect to section 115 of the Act.

6. Conclusion

- 6.1 The proposed intended use of the building is that of a “workshop”, and not as a “warehouse” as described in the original building consent.
- 6.2 The applicant did not adequately make clear and convey to the authority the stated means of compliance with the Building Code, when it chose a pathway that relied on an Acceptable Solution that was no longer current.
- 6.3 The maximum size of the intermediate floor area in this case can be calculated on the basis the building is intended to be used a “workshop” and not as a “warehouse”.
- 6.4 Based on the incomplete information before it at the time (i.e. the discrepancies with the fire report), the authority was correct to propose to refuse the building consent amendment application.

²³ Sections 114 and 115 of the Act, plus Regulations 5 and 6, and Schedule 2 of the Building (Specified Systems, Change of Use, and Earthquake-prone Buildings) Regulations 2005.

²⁴ Determination 2011/053 related to a authority’s refusal to accept a building consent application for the fit out of the ground floor for a new building at 72 Webb Street, Wellington.

7. The decision

7.1 In accordance with section 188 of the Building Act 2004, I hereby determine that:

- the authority did not correctly consider the change of the intended use of the building at the time the building consent amendment application was received by the authority;
- the authority was correct to propose to refuse the building consent amendment application for a new intermediate floor, based on the incomplete information it had before it when the decision was made, and I confirm that decision.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 26 February 2021.

Katie Gordon
National Manager, Determinations

Appendix A

The relevant sections of the Act are:

40 Buildings not to be constructed, altered, demolished, or removed without consent

- (1) A person must not carry out any building work except in accordance with a building consent.
- (2) A person commits an offence if the person fails to comply with this section.
- (3) A person who commits an offence under this section is liable on conviction to a fine not exceeding \$200,000 and, in the case of a continuing offence, to a further fine not exceeding \$10,000 for every day or part of a day during which the offence has continued.

48 Processing application for building consent

- (1) After receiving an application for a building consent that complies with [section 45](#), a building consent authority must, within the time limit specified in subsection (1A),—
 - (a) grant the application; or
 - (b) refuse the application.
- (1A) The time limit is—
 - (a) if the application includes plans and specifications in relation to which a national multiple-use approval has been issued, within 10 working days after receipt by the building consent authority of the application; and
 - (b) in all other cases, within 20 working days after receipt by the building consent authority of the application.
- (2) A building consent authority may, within the period specified in subsection (1A), require further reasonable information in respect of the application, and, if it does so, the period is suspended until it receives that information.
- (3) In deciding whether to grant or refuse an application for a building consent, the building consent authority must have regard to—
 - (a) a memorandum provided by Fire and Emergency New Zealand under [section 47](#) (if any); and
 - (b) whether a building method or product to which a current warning or ban under [section 26\(2\)](#) relates will, or may, be used or applied in the building work to which the building consent relates.
- (4) Subsection (3) does not limit [section 49\(1\)](#).

49 Grant of building consent

- (1) A building consent authority must grant a building consent if it is satisfied on reasonable grounds that the provisions of the [building code](#) would be met if the building work were properly completed in accordance with the plans and specifications that accompanied the application.

51 Issue of building consent

- (1) A building consent must—
 - (a) be issued in the prescribed form; _____
- (2) The issue of a building consent does not, of itself,—

- (a) relieve the owner of the building or proposed building to which the building consent relates of any duty or responsibility under any other Act relating to or affecting the building or proposed building; or
- (b) permit the construction, alteration, demolition, or removal of the building or proposed building if that construction, alteration, demolition, or removal would be in breach of any other Act.

114 Owner must give notice of change of use, extension of life, or subdivision of buildings

(1) In this section and section 115, change the use, in relation to a building, means to change the use of the building in a manner described in the regulations.

(2) An owner of a building must give written notice to the territorial authority if the owner proposes—

- (a) to change the use of a building; or
- (b) to extend the life of a building that has a specified intended life; or
- (c) to subdivide land in a manner that affects a building.

(3) A person commits an offence if the person fails to comply with subsection (2).

(4) A person who commits an offence under this section is liable on conviction to a fine not exceeding \$5,000

115 Code compliance requirements: change of use

An owner of a building must not change the use of the building,—

(a) in a case where the change involves the incorporation in the building of 1 or more household units where household units did not exist before, unless the territorial authority gives the owner written notice that the territorial authority is satisfied, on reasonable grounds, that the building, in its new use, will comply, as nearly as is reasonably practicable, with the [building code](#) in all respects; and

(b) in any other case, unless the territorial authority gives the owner written notice that the territorial authority is satisfied, on reasonable grounds, that the building, in its new use,—

(i) will comply, as nearly as is reasonably practicable, with every provision of the [building code](#) that relates to the following:

(A) means of escape from fire, protection of other property, sanitary facilities, structural performance, and fire-rating performance:

(B) access and facilities for people with disabilities (if this is a requirement under [section 118](#)); and

(ii) will,—

(A) if it complied with the other provisions of the [building code](#) immediately before the change of use, continue to comply with those provisions; or

(B) if it did not comply with the other provisions of the [building code](#) immediately before the change of use, continue to comply at least to the same extent as it did then comply.

Appendix B

The relevant sections of the Acceptable Solutions are:

C/AS5: Acceptable Solution for Buildings used for Business, Commercial and Low Level Storage (Risk Group WB) – For New Zealand Building Code Clauses C1-C6 Protection from Fire, Amendment 4, effective from 1 January 2017 until 31 October 2019:

Definitions: Intermediate floor Any upper floor within a *firecell* which because of its configuration provides an opening allowing smoke of *fire* to spread from a lower to an upper level within the *firecell*.

Comment:

1. Upper floors within *household units* need not meet the specific *fire* safety requirements which apply to *intermediate floors* in all other situations.
2. An *intermediate floor* may be open to the *firecell* or enclosed with non-*fire* rated construction. If enclosed with *fire* rated walls another *firecell* is created.
3. *Household units* occur only in *risk groups* SM and SH. Life safety provisions are governed by the limitations in permitted *open path* lengths.
4. *Risk groups* SM, SI, CA, WB, WS and VP allow limited area *intermediate floors* of 20% or 40% of the floor area depending on other *fire* safety requirements. In other situations C/VM2 is to be used.

Paragraph 4.13.6: For occupancies other than warehouses with storage height over 3.0 m, the total combined area of the *intermediate floors* within the *firecell* shall be the lowest of:

- a) 20% of the area of the *firecell* floor, not including the area of the *intermediate floors* if the *intermediate floors* are enclosed or partitioned or
- b) 40% of the area of the *firecell* floor, not including the area of the *intermediate floors* if the *intermediate floors*:
 - i) are completely open, or
 - ii) if enclosed or partitioned, a Type 4 system is installed, or

Comment: If the provision of the smoke detection system is solely to comply with this requirement, Fire Service connection is required.

- c) The area that allows up to 100 occupants on the *intermediate floors* based upon the occupant density of the space in accordance with Paragraph 1.4.

Comment: The smaller (20%) floor area is a concession for spaces used essentially for storage with a low *occupant density*.

Firecells containing *intermediate floors* require the same *fire* safety precautions as single level *firecells* having the same total *occupant load* and *escape height*. Examples of *buildings* having *intermediate floors* which could meet these requirements are:

- Factories and warehouses.
- Offices.

As 100 occupants is the maximum *occupant load* of an *intermediate floor* (depending on the activity on that floor), the area of that floor cannot exceed that necessary to accommodate 100 persons.

Paragraph 4.13.7: “Intermediate floors in warehouses capable of storage at a height of more than 3.0m shall be limited to an area of 35m².”

C/AS2: Acceptable Solution for Buildings other than Risk Group SH - For New Zealand Building Code Clauses C1-C6 Protection from Fire, First edition 27 June 2019, Amendment 1 dated 22 October 2019

Intermediate floor Any upper floor within a *firecell* which because of its configuration provides an opening allowing smoke or *fire* to spread from a lower to an upper level within the *firecell*.

4.13.4 The maximum combined area of *intermediate floors* within a *firecell* shall be the lowest of:

- a) 20% of the area of the *firecell* floor not including the area of the *intermediate floors* if the *intermediate floors* are enclosed or partitioned, or 40% of the area of the *firecell* floor, not including the area of the *intermediate floors* if the *intermediate floors*:
 - i) are completely open, or
 - ii) the *building* has a Type 4 or 7 system, or
- b) A total floor area that accommodates no more than 100 occupants based upon the *occupant load* of the space (refer to Paragraph 1.4).

4.13.7 In warehouse *firecells* that contain storage at a height of more than 3.0 m, *intermediate floors* shall be limited to a total area of 35 m².