29 August 2025

Bryan Easton
s7(2)(a) [redacted]

Tēnā koe Bryan,

Request for Information – Local Government Official Information and Meetings Act (LGOIMA) 1987

We refer to your official information request dated 5 August 2025, for information about building consent BC210296 and any assessment carried out under section 115 of the Building Act 2004. Specifically, you requested:

> *In November 2021 the Council issued building consent BC210296. The building consent related to the conversion of an existing commercial building into residential and retail units at the above address.*
>
> *Could you please advise whether the Council carried out an assessment of the compliance of the building under s115 of the Building Act. If so, can you please provide copies of any documents which record that assessment, and any correspondence issued under either s115(a) or s115(b) of the Building Act 2004.*

Answer:

In response to your request, we can confirm that building consent BC210296 was processed with consideration to section 115 of the Building Act 2004, as it involved a change of use.

Appendix 1 below sets out the documents identified as being within scope of your request, along with Council's decision on their release. These documents are provided as attachments to this response.

You may be able to find additional information about the property by searching the Property ID 576500 in Council's **Property and Building Search** online.

You have the right to seek an investigation and review by the Ombudsman of this response. Information about how to make a complaint is available at: **How to make a complaint | Ombudsman New Zealand**, or freephone 0800 802 602.

Please note that this response to your information request may be published on Hutt City Council's website: **Proactive releases | Hutt City Council**.

Ngā mihi nui

Rebekah van der Splinter
Senior Advisor, Official Information and Privacy

Appendix 1: Documents for release

Number	Date	Document Type	Title/Subject Line	Redaction Grounds
1	6 July 2020	Document	Processing Checklist	Released to you in full
2	15 March 2021	Letter	Further Items Required - Building Consent Application Bc210296 At 221 High Street Hutt Central 5010	Some information withheld under section 7(2)(a)
3	Not dated	Document	RFI Response-RFI2 response Cover letter	Some information withheld under section 7(2)(a)
4	22 March 2021	Document	Response to vetting RFI	Some information withheld under section 7(2)(a)
5	23 March 2021	Letter	Further Items Required - Building Consent Application Bc210296 At 221 High Street Hutt Central 5010	Some information withheld under section 7(2)(a)
6	21 April 2021	Email	RE: BC210296 221 High Street	Some information withheld under section 7(2)(a)
7	1 May 2021	Letter	Request for more information about your Building Consent application at 221 High Street Hutt Central 5010	Some information withheld under section 7(2)(a)
8	28 July 2021	Letter	RFI Response-cover letter	Some information withheld under section 7(2)(a)

Number	Date	Document Type	Title/Subject Line	Redaction Grounds
9	31 July 2021	Letter	2nd Request for more information about your Building Consent application at 221 High Street Hutt Central 5010	Some information withheld under section 7(2)(a)
10	30 September 2021	Email and attachments	Re: BC210296	Some information withheld under section 7(2)(a)
11	30 September 2021	Email	Re: BC210296	Some information withheld under section 7(2)(a)
12	19 November 2021	Document	Building Consent (BC210296)	Some information withheld under section 7(2)(a)

PROCESSES AND OUTCOMES BUILDING CONSENTS

COMMERCIAL

BC No: BC210296 **BLD Officer: Lyall Huizer** **Category: R3**
P & D Officer: Lyall Huizer **Category: R3**

Property Address: 221 High Street – Hutt Central

Complexity of Building where building work is happening:

Building Category: C1 Processing within Category: ☐ Confirmed ☒ Review required
Plumbing Category: C1 Processing within Category: ☐ Confirmed ☒ Review required
Restricted Building Work: ☐ Applicable ☒ Not Applicable
Certificate(s) of design ☐ Checked and acceptable ☒ Not Applicable

WIND ZONES: ☐ Low ☒ Medium ☐ High ☐ Very High ☐ Extra High ☐ Specific Design

CORROSION ZONES: ☐ Zone B (2) ☒ Zone C (1) ☐ Zone D (Seaspray)

(Cross ☒ indicates assessed being part of processing activity
***A** = Applicable to process **N/A** = Not applicable to process. Outcome attached to process)*

	A	N/A
PROJECT DESCRIPTION: Alter 2 story commercial building to include 6 new apartments and retain 2 GF retail units.		
CLASSIFIED USE: HOUSING - Multi unit Dwelling	**A**	**N/A**
CERTIFICATE OF TITLE CHECKED: (and acceptable)	☒	☐
FIRE REPORT SUBMITTED: (and acceptable)	☒	☐
ACCESSIBILITY REPORT SUBMITTED: (and acceptable)	☒	☐
EARTHQUAKE PRONE BUILDING REGISTAR CHECKED	☐	☒
HISTORIC PLACES REGISTER	☐	☒
KNOWN HAZARDS: Section 72	☐	☒
☐ Slippage ☐ Inundation ☐ Earthquake study fault line		
☐ Contaminated site ☐ Subsidence		
BUILDING OVER 2 OR MORE ALLOTMENTS: Section 75	☒	☒
(ECB-FORM-297 and ECB-FORM-113 to accompany consent application)	☐	
FILL ON SITE:	☐	☒
Engineer Certified Bearing indicated Penetrometer test report attached ..... kPa.	☐	
BRACING CALCULATIONS:	☒	☐
☐ Subfloor Walls ☐ Design by Engineer ☐ Complies NZS 3604:2011		
PRODUCER STATEMENT CHECK	☐	☐
☒ Structural ☐ Truss ☐ Garage		
☒ (Entered in register refer ECB-FORM-014)		

CHANGE OF USE	☒	☐
Identified outcomes using Section 115 work sheet attached	☒	
ALTERATIONS TO EXISTING BUILDINGS	☒	☐
Identified outcomes using Section 112(2) work sheet attached	☒	
CABLE CARS	☐	☒
SPECIFIED SYSTEMS	☒	☐
Compliance Schedule requirements	☐ New	☒ Amended

COMMUNICATIONS RECORD: - Cross ☒ - indicates part of procedure

Dialogue Record (Communications attached)	☒ Yes	☐ N/A

Proclaim: - Cross ☒ - indicates action in PROCLAIM procedure

☒ Copy of the energy work certificates	☒ "As –Built" drainage plan	☐ Certificate from Sprinkler Installer	☒ Membrane Applicator Certificates	**Plumbing Inspections**	4
☒ PS4 Structural Review	☒ Certificate from Fire Alarm Installer	☐ Mechanical Certificate and Manual	☐ Texture Coating Certificates	**New connections**	☐
				Water	☐
☐ Copy of Lift Certificate	☐ Ventilation System Certificate	☐ Monolithic wall cladding statement	☐ Memoranda from Trade LBP's	**Sewer**	☐
☒ Application CCC	☐ Emergency Lighting Certificate	☐ Back Flow Preventer	☒ Electrical Certificate for emergency lighting	**Stormwater**	☐

INSPECTIONS: - Cross ☒ - indicates action in PROCLAIM procedure

Building Inspections

☐ Siting	☐ Piles	☐ Foundations	
☒ Pre-slab building	☒ Pre-slab plumbing	☐ Sub floor	☐ Block fill
☒ Pre-wrap	☒ Pre-clad	☐ Half height brick	☒ Fire walls
☐ Weather tightness	☒ Pre-line building	☒ Pre-line plumbing	☐ Membrane & wet floor
☒ Post-line	☒ Drainage		

Retaining Walls

☐ Siting	☐ Foundations	☐ Wall:(concrete or block)	☐ Wall: Timber
☐ Pre Backfill			

Energy

☐ Solar Heating	☐ Freestanding	☐ In-built	☐ Wet back

Final

☒ Code Compliance Certificate

Building consent conditions/notes

☐ **RBW**

☐ **Membrane**

☒ **SED Engineers inspections**

David Lai of Focus Engineering Consultants Ltd 04 382 8678

1. **Steel Frame Inspection of steel moment frames. (Estimated 2 inspections)**
2. **Concrete Walls Inspection of steel reinforcements before spraying concrete (Estimated 2 inspections)**
3. **Roof braces Inspection of steel cross braces and struts**

1	Steel Frame	inspection of steel moment frames
2	Concrete Walls	inspection of steel reinforcements before spraying concrete
3	Roof Braces	inspection of steel cross braces and struts

☐ **Standard plumbing**

☐ **Standard drainage**

☐ **Standard Gas**

☐ **Dev cons quoted in BC see below:**

Dev. Con. Calc. **Current Price Index:** 1294.53 **GST rate:** 15.00% RESET

		Residential Fee per lot	Residential Total fee
Number of additional lots	5.5		
Roading & Traffic	☑	69.50	382.28
Water Supply	☑	57.24	314.83
Wastewater	☑	3,828.12	21,054.68
Stormwater	☑	217.82	1,197.99
Total		**4,172.69**	**22,949.77**
Total fee			$22,949.77
GST			$3,442.47
Total contribution payable			**$26,392.24**

Catchment: ○ Western Hills ◉ Valley Floor ○ Stokes Valley ○ Wainuiomata ○ Eastbourne ○ Rural

		Commercial Fee per 100m²	Commercial Total fee	Industrial Fee per 100m²	Industrial Total fee	Retail Fee per 100m²	Retail Total fee
Gross floor area (m²)	512						
New impervious surface area (m²)	0						
Roading & Traffic	☑	139.01	711.73	231.68	1,186.21	695.05	3,558.64
Water Supply	☑	25.44	130.26	25.44	130.26	25.44	130.26
Wastewater	☑	1,701.39	8,711.11	1,701.39	8,711.11	1,701.39	8,711.11
Stormwater	☑	108.91	0.00	108.91	0.00	108.91	0.00
Total		**1,974.75**	**9,553.09**	**2,067.42**	**10,027.58**	**2,530.78**	**12,400.00**
Total fee			$9,553.09		$10,027.58		$12,400.00
GST			$1,432.96		$1,504.14		$1,860.00
Total contribution payable			**$10,986.05**		**$11,531.71**		**$14,260.00**

Dev con calculations.

Based on the current retail useage of the building a development contribution credit is given for the 512 m2 of retail space being converted to residential. $14,250.00

6 dwellings are proposed.
5 are over 65m² (5 EHU's) and 1 is less than 65 m² (½ EHU) 5.5 new lots attract a development

contributions charge of $26,392.24

$26,392.24 (charge on 5.5 EHU's)
-$14,260.00 (credit on 512m²)
$12,132.00 (Total development contribution to be charged)

☐ **Vehicle crossing**

Design Memoranda:
General information
Building Classification: Not restricted building work - Non habitable
Designer: Tadworks Andrew Tong
Engineer: David Lai

BC No: 210296
Auditable Means of Compliance and Outcome process
ACCEPTABLE – *meets the mandatory provisions for building work contained in the New Zealand Building Code (NZBC) which is the First Schedule to the Building Regulations 1992. These Provisions are: - Objective, Functional Requirement and Performance Criteria. Follow process, procedure to identify outcome of process and show reasonable grounds decision.*
☒ – Identified New Zealand Building Code Clause and /or Standard referenced by the applicant within their submitted documentation that you have fully assessed for compliance.

☒ **Specific Design (SED)**

☐ AS/NZS 1170 ☐ Alternative Solution ☒ B1/VM1

- Engineer CPEng
- If site or design elements are exposed or in sea spray zone is B2/NZBC covered in PS1 Statement (This must be considered and satisfied)
- Check IPENZ CPEng register for producer statements(Engineer deemed to be working within category of skill)
- PS2 deemed to be required n/a
- PS1 specific to address/property yes
- PS1 within a year old yes
- PS1 have Professional Indemnity Insurance to be no less than $500,000 yes
- PS1 or specification note required inspections for monitor yes

Conditions

Scope of PS1 Design

Monitoring required

☐ N/A ☒ ACCEPTABLE

☒ **B1 Structure**

☒ B1/VM1 ☐ B1/VM2 ☐ B1/VM3 ☐ B1/VM4
☐ B1/AS1 ☐ B1/AS2 ☐ B1/AS3 ☐ B1/AS4 ☒NZS 3604 ☐NZS 4223 ☐NZS 4229 ☐Alternative Solution

Check Memorandum LBP form (design) n/a
Geotech Engineer? n/a
Extensively check Resource Consent for any floor level requirements or anything else.
If inundation in Hutt views, send to GWRC and Wellington Water for any floor height requirements. If unsure, double check with Steve Mann n/a

Earthquake strengthening works – generally steel frames bolted to existing structure with lateral bracing to boundary walls – concrete sprayed to walls as infill panels. Small areas where slab built up to the entrance area to the apartments.

Site/ location

Location to two at least boundaries shown n/a all work internal
Fire walls required for external spread of fire if within 1m to boundary or soffit within 650mm – see section C
Drains in relation to building not affecting bearing or surcharge – double check to see any foundations/footings clear n/a any service pipes by at least 1.5m (double check with wellington water if in doubt) n/a

Scope

- Checked Under 10m high yes
- Checked Number of storeys 2
- Checked Concrete footings/piles/ring foundation in relation to storeys and loads existing covered by SED engineer in assessment for seismic strengthening
- Checked Floor loads ok (upper level residential loads)
- Checked foundations on site in relationship to sloping ground in compliance with NZS3604 fig 3.1 n/a
- Datum heights clearly shown on plans n/a
- In all wind and earthquake zones, buildings with a height (measured from the underside of the bottom plate of the lowest floor to the top of the roof) exceeding 1.7 times the width shall be attached to a continuous foundation wall around the entire perimeter. Refer to NZS3604 5.5.3.2n/a
- That this building is outside the scope of NZS3604 and therefore a NZS3604 pile subfloor can't be used, refer to the flow chart fig 1.1 and Fig 1.2n/a

Piles/Footings/Foundation Walls

- ~~Pile cross section size in compliance with NZS3604 cl 6.4.2~~
- ~~Pile height above FGL no less than 150 mm in compliance with NZS3604 cl 6.4.1.1~~
- ~~Pile height above CGL no more than 600mm for ordinary, 1.2m for cantilevered, 600mm to highest connection for anchor, 3m for timber ordinary and braced in compliance with NZS3604 cl 6.4.1.1 (b)~~
- ~~Pile footing sizes in compliance with NZS3604 cl 6.4.5.5~~
- ~~Pile connections have the correct kN capacity – 12kN for anchor and braced~~
- ~~Subfloor ventilation complies with NZS3604 cl 6.14~~
- ~~Foundation walls are reinforced in compliance with NZS3604 fig. 6.13, 6.14 and 6.15~~
- ~~Foundation wall laps for single storey in compliance with NZS3604 fig. 6.14~~
- ~~Foundation wall heights within scope of NZS3604 fig 6.14, 6.15~~
- ~~Subfloor ventilation (foundation wall vents) in place and located and sized in compliance with NZS3604 cl 6.14~~
- ~~Bottom plate fixings for external walls all ok as per NZS 3604 cl 7.5.12 / 6.11.9.1~~

- ~~Concrete strength correct for zone~~

Block Work n/a

Retaining Wall n/a

Slab – small section of additional slab to entrance to the apartments. The slab poured over existing slab to create a flat floor - part has nib wall designed by SED engineer

- Check how existing to new slab / foundations are tied together – reinforcing bars? specified by the SED engineer.
- ~~Slab DPM detailed~~
- ~~Slab thickness as per NZS 3604 cl 7.5.8.2~~
- ~~Granular fill 600 or less as per NZS3604 cl 7.5.3.1~~
- Slab thickenings footings to NZS3604 and or meet Engineers requirements
- ~~Block work & thickenings/footings to NZS3604 or 4229 and or meet Engineer requirements~~
- ~~>300mm of fill on site certification required~~
- Steel reinforcing detailed and compliant (supplementary bars, sizes, laps, centres) specified by the SED engineer.
- ~~Construction cuts required and correctly located (shrinkage control)~~
- ~~Slab Less than 24m between free joints~~
- Finished floor levels as per NZS cl 7.5.2 same as existing – check as becoming dwelling. (Question below)
- Please show the FGL adjacent the lower level apartments (Margaret street service lane) and demonstrate how compliance with E1 clause2.0.1 is met. (Floor level above crown of road or above lowest point of site as per E1 2.0.1 a), b))
- If the required difference in level cannot be achieved please demonstrate how surface water is prevented from entering apartment 1 and 2.
- Concrete strength correct for zone 25MPA on SED specs
- Internal load bearing supports in place – no changes to the structural aspect of the building n/a
- bottom plate fixings for external walls all ok as per NZS 3604 cl 7.5.12 / 6.11.9.1 – check sighted M12 bolts and spacings
- ~~Cast in anchors for external walls:~~
  ~~Cast in anchors for external walls where the slab edge is formed with masonry header blocks, anchors shall be set not less than 120 mm into the concrete, maintaining a minimum edge distance of 50 mm to the outside face of the blocks.~~

Bearers n/a

Joists n/a

Flooring – no additional flooring

Walls – only non - loadbearing walls are proposed.

- Bottom and Top plate fixings provided per NZS 3604 cl 7.5.12 ok
- Walls designed to NZS3604 requirements and or Engineers design – lower walls non load bearing stud height is approx. 3.9m SG8 studs 140x45@600 CRS – upper level stud height 3.0m 90x45 SG8 studs @ 400 crs. checked in NZ3604 - OK
- Stud sizes, spacing's, treatments specified to both load bearing and non-load bearing walls are as per within the requirements of NZS3604
- Proposed lintel sizes, treatments specified to walls with loads designed and covered by covered by NZS 3604 Table 8.10 for two storey 8.7 for one storey n/a no new openings apart from non loadbearing walls with internal doors.
- Sighted all structural connections required for up lift in place to top plates, purlin to truss, truss to top plates, top plates to studs. n/a
- Engineered lintel systems i.e. flitch beams and the like. Full details provided, span tables and manufacturers connection details n/a
- Stud to top plate fixings covered under eco ply wind barrier (RAB) See page 20 of their spec n/a

- Trimmer stud details per NZS3604 fig 8.5 n/a
- Sill and head trimmer sizes are all OK as per opening in compliance with NZS3604 table 8.15 n/a

Bracing – bracing of the building dealt with by SED engineer in earthquake strengthening calcs ps1 and plans supplied

- Distribution of bracing as per NZS3604 and or Engineers site specific calculations
- ~~If there is subfloor bracing, check to see if bracing calculations have been supplied (cantilever, anchor, braced piles etc)~~
- ~~EZY Brace/Quick brace/Specific bracing parameters for proprietary systems met~~
- ~~BU Demand Confirmed~~
- ~~Bracing lines are spaced no more than 6m apart~~
- ~~Check Linings for BU's behind shower and or bath~~
- ~~Ceiling diaphragm~~

Roof – additional skylights proposed to the existing roof structure. The SED engineer has provided details for strengthening of the existing roof structure.

~~Details within the plans of the supporting base and its exact location so compliance with NZS3604 13.4.1 can be seen~~

- ~~If pitched/framed roof check to comply with NZS3604 limitations~~
- ~~Rafter sizes, grade and spacing's comply with NZS3604 table 10.1~~
- ~~Purlin spaces provided and compliant for roof cladding system~~
- ~~Truss statement PS1 provided wind zoning is correct, connection details and layout provided~~
- ~~Roof span max 10 metres if not engineered~~
- ~~Check for any additional superimposed loads to roof structure i.e. mechanical plant. Engineering may be required to support additional loading~~
- ~~Sighted required roof plane braces in place for a roof area 50sqm and less as per NZS3604 table 10.16~~
- ~~Purlin forming gable verge can't be assessed as compliant~~
- ~~Sighted durability /treatment requirements of soffit outriggers as ok as within sheltered areas~~
- ~~Sighted outrigger fixing details to wall framing in compliance with NZS3604 table 10.10 or 10.11~~
- Please amend the cross sections and or floor plans to show the extent of any proposed ceilings.
- ~~details within the plans of the supporting base for HWC / tank etc in roof space and its exact location so compliance with NZS3604 13.4.1 can be seen~~
- ~~The plans show complete construction details of the proposed Skillion roof area in compliance with NZS3604~~
- ~~Have supplied the manufacturer's proprietary partitioning systems specifications, literature and construction details.~~
- ~~Have supplied the dropped ceilings manufacturer's specifications and details as well as the construction details of the proposed drop ceiling~~
- ~~Has the SED seismic restraining of the drop ceilings been considered and show compliant with B1.3.3 (f).~~
- ~~Has the SED design of the mechanical ventilation seismic restraining for extract, air supply, and other services been supplied showing compliant with B1.3.3 (f).~~

Post

- ~~Please supply the post to veranda beam connection details so any uplift requirements can be clearly seen as achieved in compliance with NZS3604~~
- ~~Please supply the proposed post to pile connection details so any uplift requirements can be clearly seen as achieved in compliance with B1 (calculations etc)~~
- ~~Post heights, sizes~~
- ~~Post/footing connections in compliance with NZS3604 fig 9.2~~

☐ N/A ☒ ACCEPTABLE

☒ **B2, Durability**

☐ B2/VM1 ☒ B2/AS1 ☐ B2/AS2 ☐ B2/AS3 ☐ NZS 3101 ☐ NZS 3602 ☐ NZS 3604 ☐Alternative Solution

- Sighted all timber treatments proposed as compliant with (B2) Timber Treatment complies with NZS3602, B2/NZBC
- ~~Durability Requirements of Building Elements in compliance with B2/AS1 table 1~~
- ~~Sighted ground to floor heights as ok~~
- ~~Sighted pile top to ground height as ok~~
- ~~Sighted subfloor ventilation as being stated as 3500sqmm per sq. as required~~
- Sighted structural concrete exposed/not exposed as required by NZS 3604
- ~~Sighted all structural connections within 600mm of the ground being Stainless steel~~
- ~~Sighted all structural connections with zone D exposed and sheltered as being stainless steel as per NZS3604 table 4.1~~
- NZS3604 table 4.1 and table 4.3 supply fixing requirements to meet durability in certain areas
- ~~Sighted roof cladding as meeting durability requirements for zone building located in~~
- ~~All tanalised ply cladding or roofing (membrane roof substrates) need stainless steel fixings~~
- ~~Fixings to CCA treated timber need to be stainless steel (H3 or H3.2)~~
- ~~All H3.1 ply claddings need protective coating (stain, paint finish etc)~~

☐ N/A ☒ ACCEPTABLE

☒ **C1-6, Fire**

☐ C/AS1 ☒ C/AS2 ☐ C/AS3 ☐ C/AS4 ☐ C/AS5 ☐ C/AS6 ☐ C/AS7 ☐ Alternative Solution

☐ C/VM1 ☐ C/VM2 ☒ NZFS FEU comments

Commercial

NZFS FEU comments 2 comments from FENZ report as below.

Please provide evidence that Fire and Emergency have approved the proposed location for Multi Zone fire alarm panel as per NZS 4512:2010 Paragraph 403.1

1. FIREFIGHTING NEEDS

1.1 Fire rated windows- Design Coordination

Section 1.3.5 of the fire report indicates that the windows in external walls are required to achieve a FRR of -/60/30 or -/120/30 and being fixed closed.

Fire and Emergency observes from the architectural plans that some of exterior glazing are identified as "FW". However, Fire and Emergency cannot verify that those glazing are fire rated as indicated in the fire report and observes that no details regarding the fire rated glazing is provided.

Fire and Emergency notes that the fire rated glazing requirements indicated in the fire report should be reflected in the architectural plans and specifications.

Fire and Emergency advises that the BCA requires the applicant to revise the design to address the issues identified above (as well as any others identified during design co-ordination) in order to satisfy the requirements of the fire design.

1.2 Fire Alarm Panel

The fire report indicates that a new fire alarm system (Type 4 & 5) is proposed to be installed under this consent.

Fire and Emergency notes that NZS 4512:2010, Paragraph 403.1 requires the location of multi-zone fire alarms to be approved by NZFS and, consequently, under s8(4) of the Fire and Emergency New Zealand Act 2017, by Fire and Emergency New Zealand. If this approval does not accompany the consent documentation, then any location proposed cannot be considered as a final location.

Fire and Emergency advises the BCA requires the applicant to demonstrate that the proposed location has been agreed with Fire and Emergency Operations.

- Fire Report; provided. Risk groups SM both levels and CA ground floor. And occupant load correctly identified.
- Fire cells sizes within limits of table 2.1 OK
- Requirements for fire cells from table 2.2a for SM type 1 system, for CA table 2.2b type 2 required. Cross check with Table 2.3 indicates SM type 2 and CA type 4(see below) then step 6 makes SM 5 and CA 4.

Buildings containing more than one firecell

2.2.3 Where there is more than one *firecell* the following design sequence shall be used to determine the *fire safety systems* for other *firecells* in the *building* (see Figure 2.1).

Step 1 Determine the *risk groups* associated with each *firecell* within the *building* (refer Table 1.1 and Paragraphs 1.2.1 and 1.2.2).

Step 2 Determine the *escape height* in metres of each *firecell*.

Step 3 Determine the *occupant load* for each *firecell* in accordance with Paragraph 1.4.

Step 4 Taking into consideration the notes within Tables 2.2a, 2.2b, 2.2c and 2.2d and Paragraph 2.2.2 determine the *fire safety systems* required to protect each *risk group*.

Step 5 For each *risk group*, insert the *fire safety system* ascertained in Step 4 into Table 2.3 column 1 and determine the *fire safety system* for the other *risk groups* in the *building* from Table 2.3 column 2.

2.2.4 For ***risk group* VP** *firecells* that require a *fire* sprinkler system (refer to Table 2.2d), the *fire* sprinkler system does not need to be extended throughout the remainder of the *building* where the ***risk group* VP** *firecells* are *fire separated* from the adjacent *firecells*. The *fire separation* between adjacent *firecells* is required to be provided with the greater of the *property rating* of the adjacent *firecells* (refer to Table 2.4).

Step 6 Based on the *fire safety systems* ascertained in Step 5, determine the most onerous requirements from Tables 2.2a, 2.2b, 2.2c, 2.2d and 2.3.

Table 2.3 Required types of fire safety systems for other firecells within the building
Read this table in conjunction with Paragraph 2.2.3

Column 1: Primary risk group and alarm type required by Tables 2.2a, 2.2b, 2.2c and 2.2d		Column 2: Minimum type required within other firecells on the same or other floors within the building			
		SM	CA	WB	VP
SM[3]	1, 2	1, 2	4[1]	4[1]	3
	5	5	4[1]	4[1]	3
	7	7	7[1]	7[1]	6[2]
SI	7	5, 7	7	7	6
CA	2	2[3]	2	2	2
	3	3[3]	3	3	3
	4	5	4[1]	4[1]	3
	6	5, 7	6	6	6[2]
	7	5, 7	7[1]	7[1]	6[2]
WB	2	2[3]	2	2	2
	3	3[3]	3	3	3
	4	5	4[1]	4[1]	3
	6	5, 7	6	6	6[2]
	7	5, 7	7[1]	7[1]	6[2]
WS	6	5, 7	6	6	6[2]
	7	5, 7	7[1]	7[1]	6[2]
VP	2	2[3]	2	2	2
	3	3[3]	3	3	3
	6	5, 7	6	6[1]	6

Notes:

The systems derived from this table show the minimum type of systems required as dictated by other *risk groups* within the *building*. Please read this table in conjunction with Tables 2.2a, 2.2b, 2.2c and 2.2d when defining the systems required within the *building*.

1. Can be changed from a Type 4 to Type 3 system, or from a Type 7 to Type 6 system if the *firecell* is challenging for smoke detection where permitted in Tables 2.2b or 2.2c.
2. Can be changed to a Type 3 if the ***risk group* VP** *firecell* is *fire separated* from the remainder of the *building* by the *building's property rating* in accordance with Paragraph 2.3.
3. Refer to Table 2.2a for additional requirements system to be provided within ***risk group* SM**.

-
- Height to any floor less than 15m, and hose run 75m. Attendance point to front of building
- Length of run to upper apartment is less than 75m – yes – building length 30m – worse case length 40m to upper level far apartment (including stairs) OK
- Based on table 2.3 Type 4 required in CA and type 5 in SM fire cells – Fire report note this OK.

Proposed type 4 and type 5 alarm systems. Please provide a layout plan from a suitably qualified person showing all detectors by type, sounder locations, location of the manual call point/s and fire alarm panel. Please confirm the highlighted comments (see below) from the fire report are addressed in this plan. Please provide evidence that Fire and Emergency have approved the proposed location for Multi Zone fire alarm panel as per NZS 4512:2010 Paragraph 403.1

1.1. Active fire safety systems

1.1.1. Provide a new Type 5 fire alarm system with local alarm in apartments and Type 4 building wide alarm in retail and common spaces in accordance with NZS4512 arranged as follows.

Activation of a smoke detector within an apartment is to provide local alarm only within the unit of origin and include hush buttons provided as per F7/AS1 1.2.5 b. Local sounding smoke detectors are not to automatically notify the brigade.

Activation of a smoke detector in common areas such as safe path stairs or corridors and retail tenancies are to latch and provide a building wide alarm and brigade notification.

Smoke detectors are not to be installed in areas where ambient environmental conditions are likely to result in nuisance alarms such as in kitchens and bathrooms.

The system is required to be a fully analogue addressable and is to be connected to the fire alarm panel and alerting devices throughout in accordance with NZS 4512.

- Fire resistance ratings: based on table 2.4 as below fire report OK

exitways 60

Table 2.4 Life and property ratings in minutes

Risk group	Unsprinklered		Sprinklered	
	Life	Property	Life	Property
SM	60	60	30	30
SI	n/a	n/a	60	60
CA	60[1]	120	30[1]	60
WB	60[1]	120 (180[2])	30[1]	60 (90[2])
WS	n/a	n/a	60[1]	180
VP	60[1]	60	30[3]	30[3]

Notes:

1. When the *escape height* is greater than 10 m the *exitways* shall have *fire separations* with an *FRR* meeting the *property rating* (refer to Paragraph 4.9.2).
2. Where the *building* is less than 15 m to the *relevant boundary* and the storage height is greater than 3.0 m the *FRR* shall be 90 minutes where sprinklered and 180 minutes where unsprinklered.
3. The sprinkler system can be substituted for cross ventilation in accordance with Paragraph 4.1.3.

The fire report covers fire separations in sections 1.3.1 through to 1.3.10
Plan sheets A15 and A16 show the fire rated internal walls 9 using the above GIB systems.
Cross sections show 2 internal fire rated wall systems 60 min GBTLIC60 from GIB noise control systems 2017 specs provided OK and 120 minute OK spec provided for the GBTL120 OK

with. Stainless steel, decorative high pressure laminate, tiles, wallboards with painted or applied impervious coatings or films, are all suitable materials for these surfaces.

Interior Fit-out

Internal doors

All internal door leaf widths as noted on floor plan, all heights 1980mm unless otherwise noted, refer Internal Joinery Schedule

Electrical Notes

Mechanical ventilation

Extractor fans to be Manrose XF150 or similar, vent through wall or duct through roof with cowl as per manufacturer's installation instructions. Rangehood to be ducted and vent through wall and roof with cowl. Mechanical ventilation fan(s) must have a flow rate not less than below in accordance as NZBC G4: 25 L/s for showers and baths, and 50 L/s for cooktops.

Wall Legend - Underlay

JH Axon tpanel (timber grained) on Cavity on JH RAB board

Selectec JH Axon panel (timber grained) over 45x18mm H3.1 timber cavity battens spaced @ 300crs on James Hardie 6.5mm RAB board. Ensure double studs & cavity battens are installed over vertical joins of cladding. Refer to manufacturers information & details for fixing and waterproofing requirements.

Flashclad Metal Cladding On Cavity On Existing Concrete Walls

Selected Flashclad Euroline on Flashclad cavity batten @ 800crs max horizntally, refer manufactuer for fixings

Fire Rated Interior Wall (60min)

2x10mm GIB Noiseline/Braceline on each side of wall framing with 90mm R2.2 Pinkbatts insulation to wall cavities. Furring channel applied to one side of wall as per Gib board technical manual detail GBTLIC60, refer details & read in conjunction with Fire Report by Fire engineer.

Spray Concrete Wall

Spray concrete wall as Per Eng design, refer ENG drawings and PS1

Interior Wall - Ground Floor

140x45mm @ 600 mm crs H1.2 SG8 KD gauged wall framing lined with 10mm GIB standard or 13mm GIB Aqualine to wet areas.

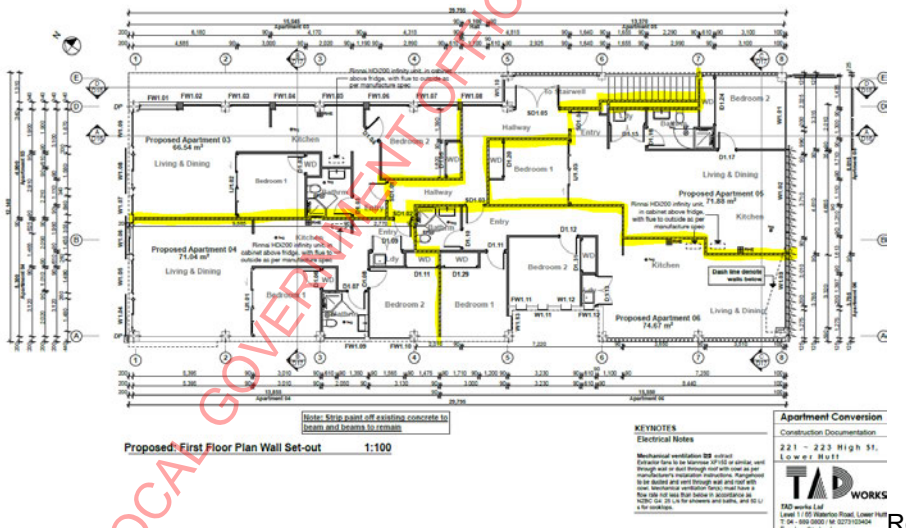
Fire Rated Interior Wall (120mins)

2x16mm GIB Fyreline on each side of wall framing with 90mm R2.2 Pinkbatts insulation to wall cavities as per Gib board technical manual detail GBTL120, refer details & read in conjunction with Fire Report by Fire engineer.

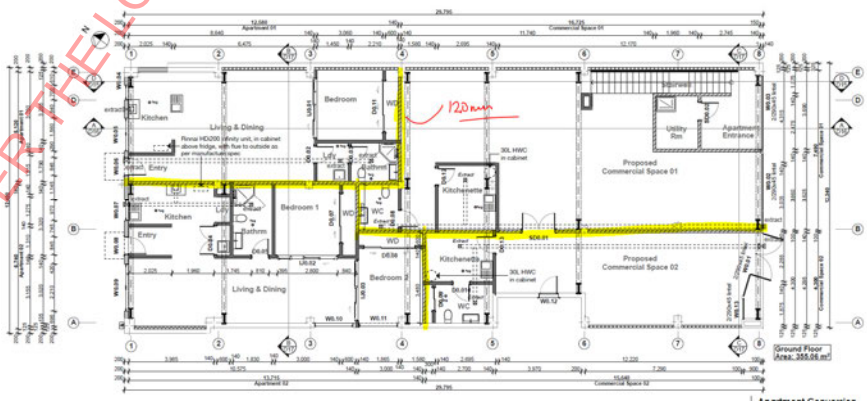
Window and Door Note

External Joinery

Powder coated aluminium joinery, use WANZ continuous support bar to suit cladding with location bracket, hardwood liners rebated for GIB, glazing to be safety toughen double glazed units to grade A safety and b suitable for stated wind pressure in accordance with NZS4223. Hardwares & Entrance door Panel style to be selected by owner NOTE: MUST read in conjunction with other drawings. Require window restrictors to window sills are less than 760mm high (except ground floor joinery)

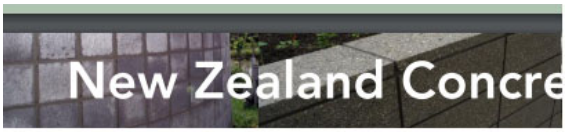


- Refer to



- ANARP The fire report indicates no fire separation between the 2 proposed commercial tenancies. However the

architectural plans do show a 120min fire wall. There are double doors between the 2 tenancies SD0.01 indicated on the plans.

- Application of fire ratings as per clause 2.3.
- 1.3.1 covers walls floor and stairs. Walls and ceilings ok stairs to be checked. Plans show the existing stairs are concrete and retained OK. The stairwell itself needs to be protected the upper level protected from apartments and shared hall by 60min separation. Lower level shown protected by 120 separation OK. Check on penetrations for risers at apartment and floor levels - Please amend the plans to specify fire collars to both the stacks, plumbing wastes and other penetrations as required. One stack shown outside the building the other within.
- I am satisfied that the existing slab is ANARP in terms of 120min fire rating OK. The addition of a 13mm GIB ceiling to ground floor retail spaces and apartments provides additional resistance especially as fire has to get through the GIB first before the concrete comes into play.
- 

Fire Resistance Rating (minutes)	Effective Thickness (mm) for Different Aggregate Types		
	Type A Aggregate	Type B Aggregate	Type C Aggregate
30	50	45	40
60	75	70	55
90	95	90	70
120	110	105	80
180	140	135	105
240	165	160	120

Note: Aggregate types:

A - quartz, greywacke, basalt and all others not listed

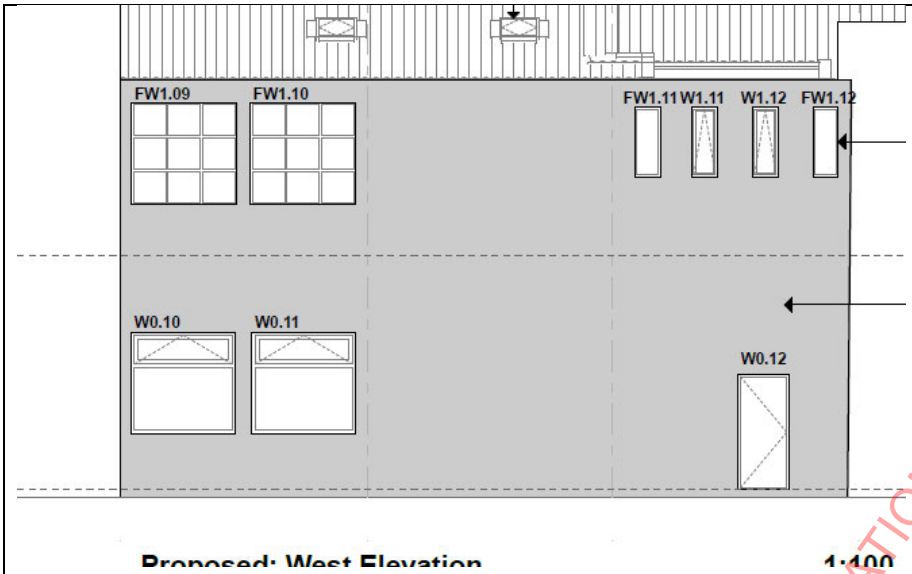
B - dacite, phonolite, andesite, rhyolite, limestone

C - pumice and selected lightweight aggregates

Source: NZS 4230:2004

- External fire separations are as below: The external walls are either existing or proposed 150 reinforced concrete. FW1.09 and FW1.10 are to be Fire Rated and as on the boundary. Can I argue ANARP that the as the existing windows are being replaced with fire rated windows the 120 min property rating is achieved. Windows to be 60 upstairs.

Spoke with David Putter for clarification and the adjacent buildings are taken as is therefore windows placed in walls on the boundary are OK and no consideration can be given to the neighbours building up to the boundary and blocking them out. Based on the plans supplied the wall in which these windows are located is offset from the boundary 1.4m – therefore this wall can have up to



Based on the plans supplied windows FW1.09, FW1.10, W0.10 and W0.11 are new replacement windows in walls within 1m of the boundary. Therefore please demonstrate how the proposed glazing is compliant with C/AS2 clause 5.2.4. Based on table 5.1 the maximum permitted size of fire resistant glazing is 1m² and figure 5.1 requires a separation distance between adjacent FR windows of at least the width of the wider window being installed.

Fire Rated windows and doors: Please provide manufacturers specifications for all external fire rated windows and doors. Please revise the window schedule to include the manufacturer of the windows, the particular model or type, and their proposed FRR ratings.

Please demonstrate how E2 compliance is to be achieved by providing FR window installation details including sill, head and jamb details.

Windows shown to apartment 6 upper level within the 1.4m offset are in a wall allowed 30% unprotected area. Area of openings less than 30% OK. For lower level 20% unprotected and max glazing size is 1m2 – this is only complied with if the door W0.12 is fire rated. Please demonstrate how the door labelled W0.12 complies with C/AS2 table 5.3 which shows a maximum single unprotected opening (within 1.4m of relevant boundary) limited to 1m2. Please revise to fire rated glazing accordingly. (Checked with David and these tables are such that 1.3m falls within 1-2m of boundary so OK.

East elevation – ground floor no openings upper floor apartments have glazing – 1.31m setback from boundary. Each fire cell assessed individually wrt the relevant boundary. Apartment 3 has 7 windows each close to 3m2. These are all shown as fire rated however compliance with C/AS2 table 5.1 cannot be seen please revise accordingly. Either reduce the glazing area to less than 12m2 or show the firecell as being sprinklered.(note a sprinklered fire cell can have unlimited glazing) (Checked with David and thios level of glazing OK) The hallway ok.

Roof of lower apartment abuts wall of upper apartments – 100% protected upper walls (due wall cladding and fire rated windows) OK

North and South elevations both sit on the boundary with the south elevation facing the high street 19m to relevant boundary (100% unprotected for both risk groups OK) Margaret service lane is adjacent the North

elevation 6m to relevant boundary.(100% unprotected for SM risk groups).

Part 5.7.1 Vertical fire spread. Other property is above other property therefore this clause relevant. Spandrels are required to all elevations, These shown on the fire report. And on the proposed elevations – they are shown as over 1500mm to be confirmed on site OK. Openings are retained or enlarged.

Do we need to see boundary/slip layers between proposed sprayed walls and existing walls. Checked with Natalie and no.

Part 3 means of escape.

Escape height 4m.

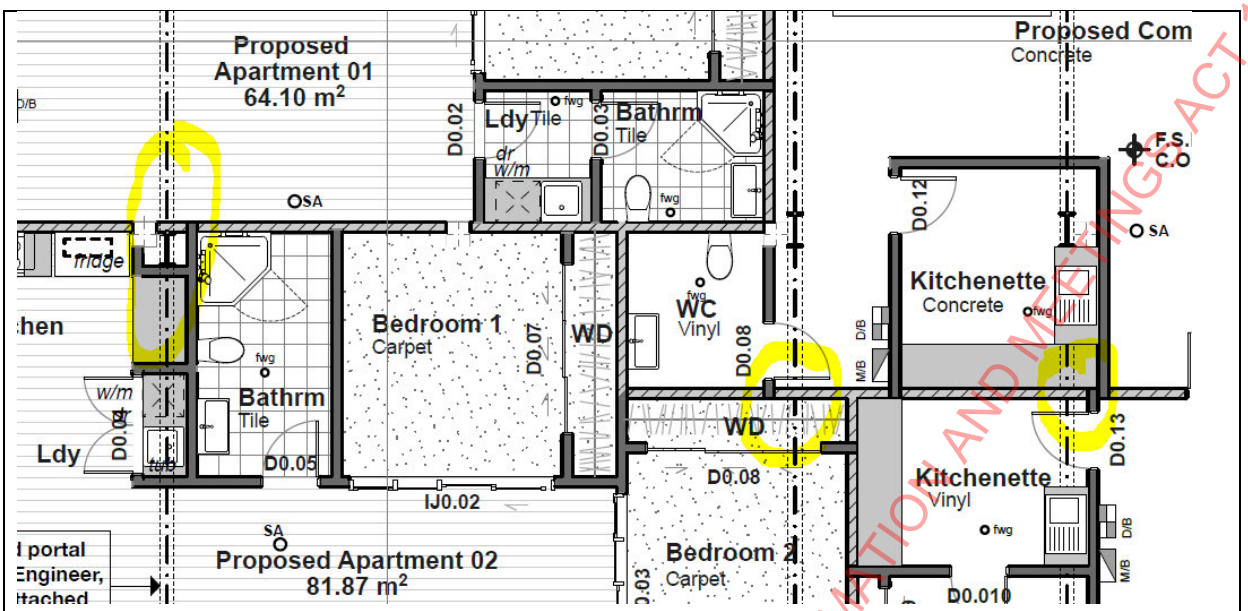
Upper level apartments have shared single escape route. Longest DEOP for apartments is 18m (table 3.2 states 30m) OK till shared escape reached(safe path) The safe path is fully protected till the exitway to outside TOP well less than limit. Other criteria for single escape path are: Occupancy less than 50 yes, escape ht less than 10m yes, no basement levels, smoke lobby top precede vertical escape path – n/a as the ground floor tenancies do not have access to the lobby at the bottom of the stairwell OK. other SM specific factors – people with disabilities less than 10 yes, the safepath must comply with 3.9.4 to 3.9.11 – check this, safe path is fire separated and less than max length of table 3.4 OK. Final exit door is a sliding door? Is this acceptable. In addition clause 3.9.9 requires a fire door between the safe path and the vertical safe path. Check

Doors SD1.01 to SD1.05: These are shown on the fire report as requiring a 60 minute fire rating. Please provide a manufacturers specification for all proposed fire doors including evidence of a -/60/60 fire rating. Please add this information to the door and window schedule. Please include manufacturers installation details for fire and smoke doors showing head and jamb details as required. Please revise the internal door schedule to include the manufacturer of the doors, the particular model or type, and their proposed FRR ratings.

Single escape path for retail and apartment tenancies OK

Please show on the plans all structural steelwork to be fire rated as per C/AS2 clause 2.3.4 . Please clearly state the particular fire rated system proposed and the FRR value this system provides. (FRR of 120 required)

Please provide details showing steelwork penetrations through fire separations (see below)



- assessment, NZBA Section 112 or NZBA Section115
- DRU comment received and considered
- Peer review received and considered
- Fire/Smoke doors detailed on plan
- Property rating -Fire Ratings as per NZBC -docs (distance from boundary/s)
- Purpose group compliant/Risk group compliant
- Occupant load compliant
- Fire safety system
- Screen shot showing hydrants.

- Fire systems required to be added to Compliance Schedule
- Egress width compliant/door widths compliant, Door swings in direction of travel Ok for apartments need to check for commercial tenancies – W01 and W02 both show sliding doors are these acceptable? Based on 3.15.1a acceptable where occupancy less than 20. So ok for the retail tenancy 02. Final Exit for commercial space 01 Please revise W0.02 to show a

hinged door of the correct width so compliance with C/AS2 3.15.1 can be seen. (sliding door acceptable where the occupancy is less than 20)

- Check all finishes comply with fire report and NZBC C documents, group numbers
- Group values for walls and ceilings:
- All 2-3 or 3 except walls and ceiling of the shared apartment exitway needs to be 1S
  Fire report contains schedule of wall and ceiling surface finishes. Wall finishes are painted GIB or exposed concrete. Resene paint systems fire ratings data sheet supplied all All gib board wall boards with various Resene painted finishes are 1-S OK
  Exposed concrete walls and ceilings fine. Tiles OK.

  Radiant flux values:
  Floor finishes are specified all 2.2 apart from exitway which is 1.2
  Exitway ground floor and upper floor shown as tiles OK
  Apartments Upper floor shown as carpet in bedrooms need to see 2.2kW/m² asked – polished concrete and tiles the remainder OK
  Apartments GF Vinyl and floor boards shown need to see 2.2kW/m². asked
  Exposed concrete to commercial GF spaces OK
  Please provide manufacturers documentation demonstrating the proposed carpet, vinyl and floor boards meet the minimum critical heat flux value of 2.2 see 2.2kW/m².

- Safe path DEOP detailed and compliant for purpose group yes
- Services penetrations – Penetrations through fire rated and acoustic rated walls/ceiling, Penetrations accessed and deemed not to compromise the integrity of overall fire rated system (being the ventilation system, phone & data cables and outlets, electrical wiring and outlets, sockets & switches, fire alarm wiring and call points, sprinkler pipes, plumbing pipes, drains and fixtures, and Down lights etc)
- Confirmation of preventing the spread of fire between cells through the ventilation system (dampers etc are there to be aircon systems with penetrations through separations. Check this Fire report 1.3.6 states penetrations in fire separations to be fire stopped – you have supplied testing reports for various Hilti products provided. Please add notes to the plans to clearly state which Hilti firestop / jacket products are to be used where on the plans. Please provide manufacturers specs for any proposed fire stops/ fire rated sealants.
- Fire systems required to be added to Compliance Schedule noted in letter supplied
- Type 18 building Hydrant required if fire hose reel within 75m Not required
- Exit signs clearly indicating all door giving access to final exits* At each point on a open path where door giving exit is not visible in normal use * clearly identify route of travel shown on fire report plans.
- Structural elements supporting the building achieve no less than 120/120/120 asked
- Evacuation scheme required under section 21(b, a,c) NZFS Act n/a

☐ N/A ☒ ACCEPTABLE

☒ D1 Access Routes

☐ D1/VM1 ☐ D1/VM2 ☐ D1/VM3 ☒ D1/AS1 ☐ NZS 4121 ☐ Alternative Solution

Building Comments:

Residential: Housing

- Sighted main entrance slip resistance as required by D1 Table 2 OK
- Sighted main access pitch, rise and tread as per D1 Fig 11 stairs are existing with a 280 tread and 190 rise OK there is a landing part way down the stairs and they are have emergency lighting. Light switches top and bottom need to see this.
- Sighted secondary access routes as being 200mm rise and less as required by D1 fig 11

- Sighted landings sized and located as per D1 cl 4.3 yes
- Sighted handrails in place as required by D1 cl 6.0 yes. New handrail proposed profiles provided.
- Sighted curved and tapered and spiralled stairways in compliance with D1 cl 4.4 n/a
- Open stairs have a space between treads less than 100mm sphere in areas frequented by children under 4 need to see closed risers walls either side no barrier required.
- Glazing within 2m of riser as per NZS4223 section 11 n/a glazing to entrance lobby checked in F2 Stair head height a minimum of 2.0 m head height from treads. Easily met

Commercial

CAR PARK

- ~~Not less than 1 accessible park is required for between 1 and 20 car parks n/a~~
- ~~Not less than 2 accessible parks are required for between 21 and 50nominal car parks~~
- ~~For every additional 50 car parks or part of car parks over 50 not less than 1~~
- ~~Signage for the car parking spaces shall be readily visible from the vehicle at the entrance to the car park, or guide signs shall be provided to indicate the Direction of the space. The space shall have ground markings of the international symbol of access and may have directional signage~~
- ~~Car parks at 90 degrees to the footpath shall not be less than 3500mm wide~~
- ~~Any angled car parks shall have an operational width of 3500mm~~
- ~~Where the car park is parallel and adjacent to a marked footpath on the same level as the parking space, the width of the common footpath may form part of the parking~~
- ~~The car parking space length shall be no less than 5000mm~~
- ~~2500mm minimum height to be maintained from the entry of the car park to the accessible park~~
- ~~Car parks to provide a stable, firm, slip resistant flat surface with a slope not exceeding 1:50~~
- ~~People with disabilities shall not have to pass behind parked cars when moving to an accessible route, or when approaching an entrance~~
- ~~Flat access shall be provided whenever possible between the car park space and adjoining footpath alternatively kerb ramps are to be provided~~

BUILDING ENTRIES

- The entry doors are preferably to include no thresholds, or are to be less than 20mm. OK
- Auto doors are to remain open for greater than 5 seconds n/a
- 1200mm wide by 1200mm long manoeuvring areas are required both sides of the entry doors ok
- The doors and entrances to the commercial spaces are new. With doors at street level and a ramp within the space 1:10 rising up to FFL of the commercial spaces. Is this acceptable?
- Please show the height of door handles to W0.01 and W0.02. Door handles to be located between 900mm and 1200mm above the floor level and be lever action with the end of the handle returned upward toward the door check this is provided.
- Please confirm the deoor opening forces of no greater than 22N for interior hinged doors and 38N for exterior hinged doors check
- Provide a clear opening of not less than 760mm when the door is opened check sighted ok
- Double doors shall provide at least one leaf of 760mm clear opening n/a
- Glazing to be marked in accordance with NZS 4223.3 need to see this sighted OK
- Please show manifestation to windows W0.01, W0.02 and W0.03 so compliance with NZS4223.3 2016 clause 6 and clauses 2.2.2 can be seen.
- A minimum clear width of 1200mm to be provided within an accessible corridor ok
- Doors shall have a clear colour contrast with respect to their surroundings glazed doors shown.

LIFTS n/a only ground floor is commercial

- ~~Shall be clearly signposted and on an accessible route~~
- ~~An accessible route shall include a lift to upper floors where:~~
  ~~(a) Buildings are four or more storeys high;~~
  ~~(b) The upper floor(s) of any building are to be used as the public~~
- ~~Reception areas of:~~
  ~~(i) Banks~~
  ~~(ii) Central government offices or government agencies~~
  ~~(iii) Regional government offices~~
  ~~(iv) Local government offices and facilities.~~
  ~~(c) The upper floor(s) are designed or intended to be used as:~~
  ~~(i) Public areas of hospitals, medical consulting rooms, dental~~
- ~~Surgeries, and other primary health care centres~~
  ~~(ii) Places of public assembly for 250 or more people~~
  ~~(iii) Public libraries.~~
- ~~Lifts shall be clearly signposted and on an accessible route~~
- ~~Lifts serving an accessible route shall have a minimum interior clear space of 1400 mm by 1400 mm as shown in figure 26. Refer NZS4121 cl 9.2.2.1~~
- ~~Lift doors shall be of a clear colour contrast with respect to their surroundings, refer to NZS4121 cl 9.2.3 (e)~~
- ~~Lift doors shall provide a minimum clear opening of 900 mm, and remain open for not less than 5 seconds before the passenger protective device becomes operative, refer to NZS4121 cl 9.2.3~~
- ~~Lift controls, whether in the lift lobby or in the lift car, shall be situated between 900 – 1350 mm above floor level, and be in braille refer NZS4121 figure 26.~~
- ~~The lift The alarm button or emergency telephone shall not be higher than 1350 mm above finished floor level refer to NZS4121 9.2.4~~

TOILET PROVISIONS (NZS 4121 section 10) 2 Unisex Accessible WCs are provided 1 per commercial tenancy. Alt to existing building so access and facilities for p0ersons with disabilities should be to code or improved anarp.

The original Ground floor tenancies had 2 and 3 WC's respectively . The proposed Ground floor commercial tenancies are less than half the floor area and each has 1 unisex bathroom.

Please provide a dimensioned floor plan and interior elevations of the proposed unisex accessible bathrooms showing the following:

- Be of sufficient size for the manoeuvring of wheelchairs to and within the cubicle
- Include an interior clear space of 1600mm by 1900mm
- Door must open out, but can open to bathroom if the bathroom big enough for the door arch not to intrude into the required 1500 turning circle (NZS4121 C10.5.5)
- Have a Handrail/ grab rail to inside of door
- Have the ability to wash hands while seated on the pan
- Have the ability to reach sanitary disposal bins while seated on the pan
- Have the ability for the wheelchair user to open the doors
- The toilet within the Accessible toilet to have a height to the top of the pan seat og 460mm refer NZS4121 10.5.6.1
- Have the ability for the wheelchair user to remain balanced on the pan whilst transferring to and from the pan
- Provided with appropriate washbasins and with lever operated mixers provided
- Toilet roll holder, and mirror located in correct position

Please amend the plans to show signage provided in sufficient locations to identify accessible routes and facilities provided for people with disabilities

Are the number of WC's appropriate. Check in G1.

- All 3 doors showing access to the Unisex wc's are 760 doors. OK

- Within the building there is required to be at least one all gender accessible Toilet facility. This is required to be located on the main entry level of the building on an accessible route

SHOWER FACILITIES Currently no showers – greatly reduced size of commercial space therefore OK check in G1 none requried.

RAMPS, FOOTPATHS, STAIRS AND LANDINGS

- Ramps, footpaths and landings shall be at least 1200mm in width
- To include a level surface 1200mm by 1200mm at the top and base of the ramp
- Have a gradient of between 1:12 and 1:20 with a maximum run of 9m between landings
- To include an upstand of at least 75mm at its edges
- To include a complying profile handrails to both sides at a height of 840mm to 900mm above the ramp floor as well as safety rails between the handrail and the upstand
- Handrails shall extend 300mm into the top landing and 300mm at the bottom landing, unless they continuously wrap around the landing
- Footpaths shall be constructed in compliance with NZS4121 cl 6.1
- Surface finishes to ground, floor, ramps and stair surfaces per NZS4121 4.6
- Hazards and obstructions per NZS4121 cl 4.5.1
- Ramps, footpaths and landings shall be at least 1200mm in width
- To include a level surface 1200mm by 1200mm at the top and base of the ramp (Landing)
- Ramps require level platforms or landings at the top and bottom, wherever there is a change in direction, wherever doors open off them and at intervals not exceeding 9000 mm (see figure 11), for ramp layout suggestions, and the landings shall have a minimum dimension of 1200 mm.
- Have a gradient of between 1:12 and 1:20 with a maximum run of 9m between landings
- To include an upstand of at least 75mm at its edges
- To include a complying profile handrails with both sides at a height of 840mm to 900mm above the ramp floor as well as safety rails between the handrail and the upstand.
- Handrails to be to both sides of ramps and stairs refer to NZS4121 cl 8.6.1
- Handrails shall extend 300mm into the top landing and 300mm at the bottom landing, unless they continuously wrap around the landing
- 1200mm long landings, (including mid landings)
- Step visibility and contrast NZS4121 4.10.5
- Stairs shall not be open riser , (to allow for people with vision impairment or prosthetic devices to slide a a solid riser) refer NZS4121 C8.1.1
- Stairs shall be constructed in design per NZS4121 cl 8.1.2 and with consideration of :

8.3.1 Pitch
8.4.2 Risers and treads
8.3.2 Height
8.3.3 Top and bottom steps
8.3.4 Encroachment into corridors
8.3.5 Opening of doors
8.4.1 Width of stairs
8.4.3 Nosing's

- Is Provision of auditory and visual cues in place with strong colour contrast shall be provided at the head and foot of any internal flight of steps refer NZS4121 8.5.1 (see figure 22).
- As per D1 AS/1 **4.1.7** any Leading edges of treads or *nosing's* (if any) on *accessible stairways* shall:
  a) Be rounded to avoid a sharp edge (see Figure 13), and
  b) Be colour contrasted with the rest of the tread.

INTERIOR ENVIRONMENT

- Within public facilities where the occupant loads is 250 or less no less than 2 accessible wheelchair spaces shall be provided.n.a
- In regards to wheel chair spaces within public facilities (public seating) where the occupant load is 250 or less no less than 2 accessible wheelchair spaces shall be provided. Refer NZS4121 12.2.1.1n/a
- For every 250 thereof extra, an additional one space is required n/a
- Within a accessible route do the architectural plans, clearly confirm and stated at least a 300mm to the side of the door as per NZS4121 cl 7.1.5.2, and fig 19
- Do the plans clearly state the door handles required heights, along the asked above.
- Reception counters provided for public use shall be accessible with a maximum height of 755mm and a kneehole with a minimum height of 675mm and depth of 540mm, and have a width of no less than 900mm refer NZS4121 cl 11.1
- Other forms of counters and desks such as public bars, shops, supermarket checkouts shall also meet the requirements, of NZS4121 cl 11.1 and Fig 37
- Listening systems shall be provided in communal non-residential buildings occupied by more than 250 people and any cinema or public hall and assembly spaces in old people's homes occupied
- by more than 20 people refer to NZS4121 cl 12.2.2
- The light switches and plug socket outlets have been made accessible and usable. And be positioned between 500mm and 1200mm above finished floor level, refer to G5 Interior Environment.
- The food preparation and laundry facilities in camping grounds and accessible accommodation units in communal residential buildings have been made accessible, refer to NZS4121 cl 14.7.4n/a
- Consider where transparent glazing material may be mistaken for a door way or an unimpeded path of travel, the glazing is to be marked in accordance with the manifestation in order to make the glass visible asked
- Consider if the accessible route does have adequate activity space to enable a person in a wheelchair to negotiate the route while permitting an ambulant person to pass
- Consider if there are sufficient accessible accommodation units provided that meet the requirements for access and facilities for persons with disabilities
- Compliance seen with NZS4121 Appendix D3 in regards to all routes within an accessible building.
- Compliance seen with NZS4121 Appendix D3 in regards to wheel chair :
  - D3.3.4.2 Turning space
  - D3.3.4 Minimum clear floor space
  - D3.3.4.1 Clear width
  - D3.3.5 Reach
  - D3.3.6 Viewing range
  - Figures D12 to D18

- Compliance seen with NZS4121 Appendix D3 in regards to accessible fitting rooms within clothing shops having door locks,
- The door opening out
- The door having a Handrail/ grab rail to the inside of the door
- The room having the required clear turning space
- Coat hangers being at a max height of 1350, as per NZS4121 fig D16 (within Appendix D)

PLACES OF ASSEMBLY

☐ N/A ☒ ACCEPTABLE

☐ **D2 Mechanical Installation for Access**

☐ D2/AS1 ☐ NZS 4332 ☐ EN81 ☐ EN115 ☐ Alternative Solution

☒ N/A ☐ ACCEPTABLE

☐ **E1 Surface Water**

☐ E1/VM1 ☐ E1/AS1 ☐ AS/NZS 3500.3 ☐ Alternative Solution

No change to the amount of surface water collected ort the way it is disposed.
However as a change in use to 2 residential apartments I have asked a question about floor levels.

- Flood zone, secondary flow path n/a
- Floor level above crown of road or above lowest point of site as per E1 2.0.1 a), b) asked in B
- ~~Storm water disposal Silt traps/sumps provided/compliant~~
- ~~Sighted number of outlets provided capable of services roof area as per E1/AS1 NZBC~~
- ~~down pipes sized and located to be compliant with E1 table 5~~
- ~~Please on the drainage plans clearly show the newly proposed impervious surfaces as having any storm water collected and discharged to an approved outlet before that storm water can become a nuisance to the house or any neighbouring properties as required by E1.2, note the storm water disposal Silt traps/sumps must be provided as per this to be proposed system and with the sumps sized per sumps sized as per E1 fig 8 and 9~~
- ~~Sighted type 1 and type 2 surface water sumps sized as per E1 fig 8 and 9~~
- ~~Sighted drains sized and located as per E1 AS/2 cl 3.2.2 and E1 AS/1 cl 3.1~~
- ~~Sighted all inspection points as required by E1 cl 3.7~~
- ~~Sighted compliant spreader in place spreading a load from a roof area of 20sqm and under as required by E2 8.1.6~~

☐ N/A ☐ ACCEPTABLE

☒ **E2 External Moisture**

☐ E2/VM1 ☒ E2/AS1 ☐ AS/NZS 3500.3 ☐ Alternative Solution

Recognised appraisals for systems have been provided – check the proposed use is wholly within the scope and limitations of these appraisals and manufacturers product literature.

All cladding/waterproofing/tanking:

Timber Treatment and Grading

- Treatment complies with NZS3602
- Grading complies with NZS3604

FFL clearance

All ok as required by E2/AS1

Risk Matrix

Wall cladding – some existing walls are concrete which are to have additional cladding over the top – the proposed cladding to be Flashclad metal cladding on a cavity with Flashman cavity system Branz appraisals provided OK

James Hardies Axon panel horizontal to the south elevation. Manufacturers specs provided.

You have provided details for windows installed over James Hardie Hardieflex cladding – please show this cladding location on the elevations.

- Cladding selection appropriate:
- Product information provided, details, specifications, quality assurance check sheet
- Does the drained cavity comply with the general requirements of Section 9?
- Are EIF and flush finished fibre cement claddings on a cavity regardless of risk matrix
- Is Extra high wind zone on a cavity with a ridged wall underlay
- Window head flashing in very high and Extra high wind zone must have seal between underside of head flashing and top of window flange as per E2/AS1 cl 9.1.10.4 and fig 71(c)
- If Extra High wind zone: Does it have the flashing upstand dimension as required by E2/AS1 table 7 (with a hem/hook) and been increased by 25mm to (60 mm) as required by cl 4.5.1 and 9.1 (c)
- Do any decorative elements etc attached to any EIF and flush finished fibre cement claddings have a 10 degree slope to allow water to drain off
- Sheet ply wood and fibre cement can only be direct fixed as per risk matrix table IF have horizontal joints flashed and vertical joints with a cover batten and or h jointer
- Head, sill and jamb flashing details supplied and show compliance with E2.3.2
- Direct fixed cladding must clearly show jamb battens H3.2 in place
- Check sill tray for direct fixed windows
- Window support bars to all windows over 600mm on cavity systems
- Sighted vermin-proofing above window and door heads and at the base of a drained cavity in compliance with E2/AS1 fig 66
- Joinery compliant with NZS 4211 and correct wind loading
- Proprietary system with appraisal and/or Combined Councils Approval List, codemark product
- Meter box flashing details supplied and show compliance with E2.3.2 as being met
- Exterior Cladding to soffit detail supplied and show compliance with E2.3.2 as being met
- Exterior wall to gable junction detailed supplied and show compliance with E2.3.2 as being met
- Exterior cladding joints detailed and show compliance with E2.3.2 as being met
- Exterior cladding joints and junctions with dis similar products and show compliance with E2.3.2
- Exterior Cladding to apron flashing between wall and roof detail supplied and show compliance with E2.3.2
- Penetrations through exterior wall details supplied and show compliance with E2.3.2
- Wall cladding to parapet junction details supplied and show compliance with E2/AS1 fig 12
- Cantilevered deck junction with wall details supplied and show compliance with E2/AS1 Fig 18
- Sighted all brick veneer vents in place as required by E2 to bottom and top of veneer and openings greater than 2.4
- roof pitch for masonry or metal tile roof as within scope of E2 AS/1
- Underlay to tiled roof required check table
- Sighted Concrete Block Wall waterproof membrane in place.
- Are control joints located and in correct placement by E2/AS1 for concrete, brick walls

- Brick veneer max 220kg/m2, min thickness 70mm
- Max height above FGL for 1 storey 4m, 2 storey 7m – E2/AS1 fig 73b

Roof cladding

No changes to the existing roof other than installing skylights and vents – installation details shown sheets A38 and A18 OK

AURAE canopy specs provided. OK

You have shown a proposed canopy over entry doors to ground floor apartments. Please amend the plans to show where stormwater collected discharges .

- ~~Cladding system in compliance with E2/AS1:~~
- ~~Proprietary system with appraisal~~
- ~~Internal gutters as per E2/AS1 and cladding type~~
- ~~Roof flashing detailed at eave for VH wind zone~~
- ~~Roof underlay to concrete tiles in very high extra high wind zone~~
- ~~Roof underlay runs horizontally on slopes less than 10 degrees~~
- Skylight flashing details provided and compliant sighted
- ~~Solar Panel connections meet E2/AS1~~
- ~~Roof cladding ridge details supplied and show compliance with E2.3.2 and as per cladding type, metal or corrugate~~
- ~~Roof to wall ridge as per E2/AS1 fig 45 and flashing dimensions as per table 7~~
- ~~Roof cladding Barge details supplied and show compliance with E2.3.2 and flashing cover as per table 7~~
- ~~Roof cladding parallel apron details supplied and show compliance with E2.3.2~~
- ~~Roof cladding wall to gutter junction details supplied and show compliance with E2.3.2~~
- ~~Roof cladding eaves flashing details supplied and show compliance with E2/AS1 fig 45 as being met for:~~
  ~~All roofs under 10 degrees~~
  ~~All soffits widths under 100mm~~
  ~~All roofs in very high extra high areas~~
- Sighted roof and pipe penetrations compliant with E2/AS1 cl 8.4.17 sighted
- ~~Sighted valleys details supplied and show compliance with E2.3.2~~
- ~~Membrane roof minimum pitch 2 degree~~
- ~~Hidden gutters minimum slope of 8 degrees~~
- ~~Membrane gutters without crooks seams metal must have welded joins~~

Deck details no deck

☐ N/A ☐ ACCEPTABLE

☒ **E3 Internal Moisture**

☐ E3/VM1 ☒ E3/AS1 ☐ Alternative Solution

- Sighted containment and a floor waste provided for accidental overflow as required by E3 cl 2.0 Ground floor assessed first. All wet areas have a FWG
- Upper floor all wet areas except laundries have FWG.
- How are you protecting other property from the possible overflow of laundry tubs located in the 6 apartments? If you are relying oon integrated overflow to laundry tubs then Please confirm and note on the plans the laundry tub has an overflow with a 25l per minute capacity. Please provide

manufacturer's confirmation that this flow rate has been tested and verified in accordance with BS EN 274 .

And, please add a note to the plans stating that either The maximum flow rate from the inlet tap(s) is less than 25l per minute, or b) The water supplies to the inlet tap(s) for that laundry tub are fitted with proprietary flow restrictors (such as cartridges) to limit the tap flow rate to less than 25l per minute.

- Containment of accidental overflow: Please add notes to plans to clearly state whether impervious floor coverings are to be sealed or coved. Are the ground floor kitchens to have tiles or floor boards? Please amend the plans so one option is shown.
- Details on sheet A44 are given for both a tiled and acrylic showers – please highlight any tiled showers on the floor plans and provide manufacturers specifications and Branz appraisal for any pre- tiling membrane to be used.
- Sighted wet areas floors in compliance with E3 cl 3.3.1 n/a
- Sighted wet areas walls in compliance with E3 cl 3.3.1 n/a
- Sighted shower floors without enclosure or upstand as having within a 1500 radius from rose head a floor slope of 1.50 n/a appears to be proprietary showers
- Sighted junctions of shower trays to wall linings as per E3 cl 3.3.4 sheet A44
- Sighted enclosures to showers being impervious and at least 1.8m high or 50mm above the rose head in compliance with E3/AS1 cl 3.3.3. proprietary showers shown OK
- Sighted all water splash areas wall and floors in compliance with E3 cl 3.0
- Sighted all details of junctions of bath to wall and basin to wall as having a 150mm impervious lining upstand as the splashback, in compliance with E3/AS1 fig 3 detail shown sheet A44 OK
- Please amend the plans to show surfaces finishes to wall linings experiencing watersplash and thereby show compliance with E3/AS1 clause 3.1.2

☐ N/A ☒ ACCEPTABLE

☐ **F1 Hazardous Agents on Site**

☐ F1/VM1 ☐ F1/AS1 ☐ Alternative Solution

- Proposal includes storage handling of hazardous agents. Compliant proposal
- GIS/Edocs (address), SLUR checked for information relating historic hazardous agents on site

☒ N/A ☐ ACCEPTABLE

☒ **F2 Hazardous Building Materials**

☐ F2/VM1 ☒F2/AS1 ☐ NZS 4223 ☐ Alternative

- Large glazed panels with no mid-rail, 500mm require manifestation markings asked
- Possible asbestos on site to be removed, OSH requirements met – sighted note below
- Sighted glazing as specified where subject to human impact to be compliant with NZS4223 yes
- Sighted any glazing within a wet area within 2000mmof floor as being A grade safety NZS 4223.3 2016 Section 8.1 – Proprietary showers to bathrooms ok
- Double check any references on plans to be now **NZS4223.3 2016 not 1999 sighted**
- Mirror and glass wall cladding with 200mm of the floor shall be safety glass unless glass is fully backed and completely adhered to a solid material. NZS 42223.3 2016 Section 17 n/a
- F2 NZBC NZ4223, Section 3 sighted OK

- Glazing within 2m of riser as per NZS4223.3 2016 Section 11 ok
- Please note NZS 4223.3 cl 9.1 (4) and Cl 2.2 of which were, transparent glazing material may be mistaken for a door way or an unimpeded path of travel, the glazing is to be marked in accordance with NZS 4223.3 cl the 2.2 manifestation, in order to make the glass visible. Therefore so as compliance with the above codes can be seen supply the compliant information clearly on the plans. Refer to NZS 4223.3 Cl 2.2.2, 6.6.2 (definition of low level glazing capable of being mistaken for an unimpeded path of travel, and Appendix C of which is referred to throughout the standard)

Questions if Asbestos on site

- The Health and Safety in Employment Act 2015 sets out a number of duties that are to be fulfilled in order to ensure that no employee suffers avoidable harm while working, and that no other person suffers harm because of the work being performed. In meeting its commitment to fulfil those duties so as compliance with F2AS/1 and F5AS/1 can be seen please supplies an ASBESTOS REMOVAL MANAGEMENT PLAN.

Conditions/Notes for consent if Asbestos identified

- The business/entity responsible for removing asbestos to have the appropriate licence under the WorkSafe NZ requirements related to the Health and Safety at Work (Asbestos) Regulations 2016, except for exclusions and transitional matters allowed under the Regulations. A supervisor, named on the licence, to be provided when required by the Regulations.
- No licence is required under the Regulations for ≤10m² (cumulative for site) of non-friable asbestos or ACM, and related or minor ACD.
- For Class A or B work provide copy of appropriate asbestos removal licence to the contract administrator before removal starts.
- Appropriately notify the WorkSafe NZ of licensed asbestos removal to the Health and Safety at Work (Asbestos) Regulations 2016, at least 5 days before starting the work.
- Provide an independent licensed Asbestos Assessor or equivalent under the Health and Safety at
- Work (Asbestos) Regulations 2016, for Class A and Class B work.
- Comply with the Health and Safety at Work Act 2015 in general, NZBC F5/AS1, WorkSafe NZrequirements including WorkSafe Management and Removal of Asbestos (Approved CoP), andHealth and Safety at Work (Asbestos) Regulations 2016.Holders of a Class A removal licence to have a certified safety management system (SMS) to WorkSafe NZ requirements.

Note: ***Building inspection of asbestos MUST be completed by a qualified assessor prior any works starts.*** **Asbestos testing must be performed by registered specialist. Asbestos management Plan must be provided and Procedure of handling asbestos must comply with NZBC F2 and Procedures for encapsulation in accordance to the Occupational Safety and Health section of the Department of Labour.**

-

☐ N/A ☐ ACCEPTABLE

☒ **F3 Hazardous Substances & Processes**

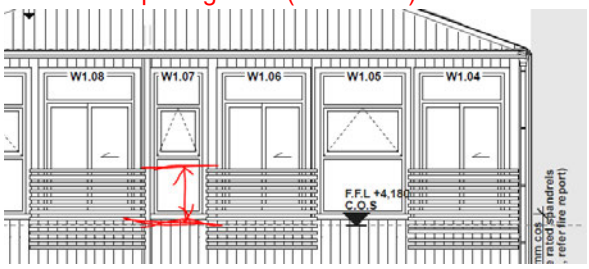
☐ F3/VM1 ☐ F3/AS1 ☐ Alternative Solution

☒ N/A ☐ ACCEPTABLE

☒ **F4 Safety from Falling**

☐F4/VM1 ☐ F4/AS1 Act ☐ Alternative Solution

Note barriers must meet F4 and B1 NZBC requirements

- Timber balustrade complies with NZS 3604, DBH guide to barrier design or DBH simple house design n/a
- Barrier Timber balustrade sizes spacing's and treatment complies with NZS 3604, n/a
- Barriers to opening doors(see below)
- 

- Please dimension the height of the barrier above FFL. Please provide construction details and show fastening details to the building, and label materials to be used. Please demonstrate how these barriers comply with F4 as the gaps in horizontal members appears to allow for climbing.
- If a proprietary system please provide product information (including installation details) and include a PS1(issued within 12 months) from the manufacturer.

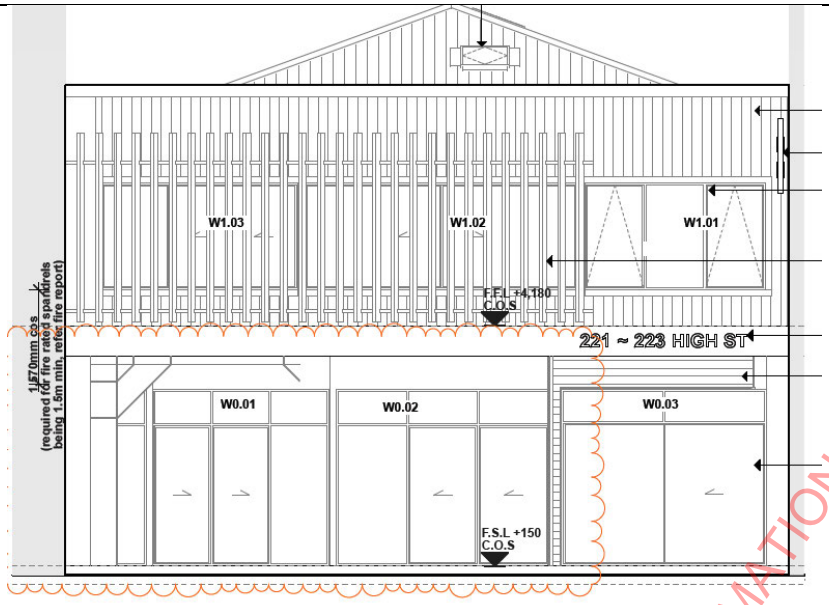
Based on the Southern elevation (see below) sliding windows to apartments 5 and 6 open more than 100mm and protection from falling is provided by aluminium louvres. Is this correct? Please demonstrate how these louvres provide an F4 compliant barrier in particular show a Dia100mm sphere would be unable to be dropped from these open windows. Check this one as the veranda is there if you fell.

Please provide manufacturers specifications for the louvres including installation instructions and details.

Please amend the plans to show a specification for the finish to the exposed section of portal frame.

Please confirm the portal frame and W0.01 do not occupy the same space.

Please amend the plans to show the wall cladding above W0.01 and W0.02.



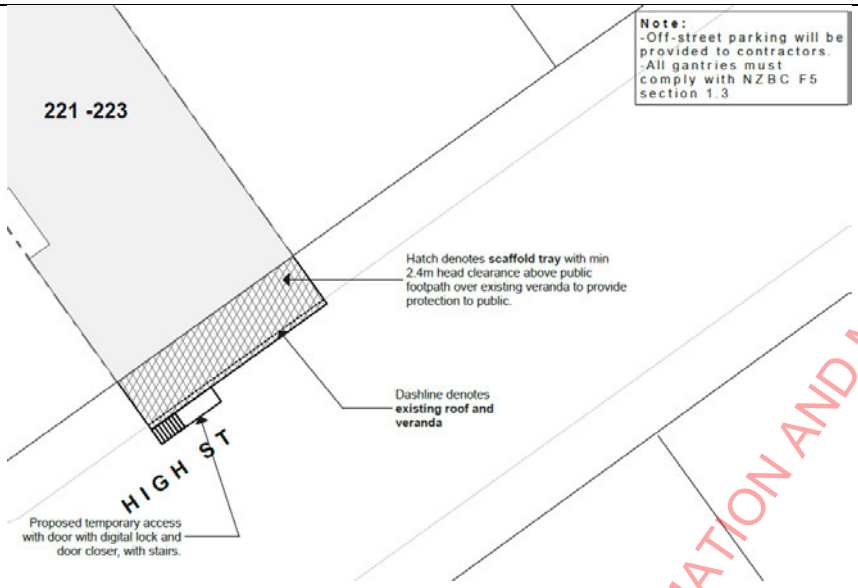
- Check max 100mm sphere on deck balustrades and barriers – n/a stairs solid no internal barriers
- Check decks over 1000mm in height, 1100mm commercial
- Barriers fitted above retaining walls to B1/F4 NZBC
- Check Max 150mm sphere on stairs
- Possible height of fall from an open window is more than 1000mm, a restrictor must be fitted in compliance with either F4/AS1 cl 2.1.1 (b) for children frequency, or cl 2.1.3 (b) for no children sighted restrictors in place.

☐ N/A ☒ ACCEPTABLE

☒ F5 Construction Demolition Hazards

☐ F5/VM1 ☒ F5/AS1 ☐ Alternative Solution

- Gantry's constructed to B1/AS1 requirements
- Barriers required for site location, high levels of pedestrian traffic, (i.e. in CB D), and dwellings over 2 storeys above ground, where specific hazards exist.
- Design meets/provides details of managing construction and demolition hazards on site
- Fencing details provided and compliant – no details provided on plans for the fencing off of the stairs.
- CPU required for construction or occupation?



☐ N/A ☒ ACCEPTABLE

☒ F6 Lighting for Emergency

☐ F6/VM1 ☒ F6/AS1 ☐ Alternative Solution

- Emergency Lighting, installation details provided and compliant
- Emergency lighting shown – Please provide a construction layout from a suitably qualified person specifying all luminaires and signage by manufacturer and product code. Please provide a PS1 from the emergency lighting designer.
- Light in accordance with specific purpose group (Type 1-7 Alarm)
- Consideration of NZBC F6 requirement that the entire escape route needs to have emergency lighting provided, and this includes the need for within all exit ways and at change of levels along/on the escape route, as the escape route ends once a safe place has been arrived at, which is also then at the end of the steps and ramp to the exterior if they are leading out from the fire designs proposed escape (emergency lighting along the ramp and on the steps, so as people rushing out of the building will not trip because of poor lighting, until they are at least at their designated safe point).

☐ N/A ☒ ACCEPTABLE

☒ F7 Warning Systems

☐ F7/VM1 ☐ F7/AS1 ☐ AS/NZS 1668 ☒ NZS 4512 ☐ NZS 4515 ☐ NZS 4541 ☐ Alternative Solution

- Fire Alarm system complies with C/NZBC and fire report asked for specs in C section
- Domestic smoke alarm Type 1
- Smoke detectors within 3 m of escape of bedrooms as per F7 3.3.1
- Smoke alarms located so that an alarm is given before the escape route from any bedroom becomes blocked by smoke, This includes those parts of escape routes on other floors as per F7 3.3.1
- Sighted smoke detectors at the top and bottom of escape route (ie internal stairways)

☐ N/A ☒ ACCEPTABLE

☒ **F8 Signs**

☐ F8/VM1 ☒ F8/AS1 ☐ Alternative Solution

- Must meet requirement of F8 NZBC i.e.
- Escape routes yes
- Emergency related features n/a
- Potential hazards
- Consider if Accessible signs throughout the accessible route for people with disabilities have been provided. Considered the entire journey starting from the first sign showing where to park their car all the way into every accessible part/ route of the building.

☐ N/A ☒ ACCEPTABLE

☐ **F9 Restricting access to residential pools**

☐ F9/AS1 ☐ F9/AS2 ☐ Alternative Solution

☒ N/A ☐ ACCEPTABLE

☒**G1 Personal Hygiene**

☐ G1/VM1 ☒ G1/AS1 ☐ AS/NZS 3500. 5 ☐Alternative Solution

- **Apartments all 6 comply as below**
- At least one door located between toilet and kitchen/food storage G1/AS1 cl 3.2.1 sighted
- Basin located in toilet or in an immediately adjacent space G1/AS1 cl 3.3.1 in bathrooms
- If there is only a single door provided between the kitchen and toilet, a basin must be located in the same space as the toilet G1/AS1 cl 3.3.1 sighted
- Number of WC,WHB, Urinals, showers requirements met sighted met
-
- **Commercial spaces:**
- At least one door located between toilet and kitchen/food storage G1/AS1 cl 3.2.1 yes
- Basin located in toilet or in an immediately adjacent space G1/AS1 cl 3.3.1 yes
- If there is only a single door provided between the kitchen and toilet, a basin must be located in the same space as the toilet G1/AS1 cl 3.3.1 yes
- Number of WC,WHB, Urinals, showers requirements met – Check the number of WCs, urinals, basins and accessible facilities as being compliant with G1 AS/1 4.2.1 and tables 1 & 2check floor areas are 112 and 57m2 – Basically for all user groups 2 are required per occupancy. Can I accept that there is only 1 unisex WC provided?
- Please provide an additional unisex WC for each commercial fitout.
- Check can we allow this
- No showers required OK
-
- Accessible facilities meet layout requirements of G1?AS1 NZBC asked questions in D1 section
- Consider line of sight, from the access or accessible route, refer to G1 AS/1 6.1.1
- Consider G1 AS/1 fig 10 in regards to if the space will be defined as a separate cubicle or not. A separate cubicle (accessible toilet does not have to consider line of sight as one person goes in and locks the door , that no one can now come along and open door and see within the toilet area) refer to G1 AS1 6.2.1 and 6.3.1.

- .

☐ N/A ☐ ACCEPTABLE

☒ G2 Laundering

☐ G2/VM1 ☒ G2/AS1 ☐ Alternative Solution

- Sighted laundering facilities provided as required by G2 cl 1.0.1
- Sighted laundry facilities provided with service connections as required by G2 cl 1.1
- Check the Laundry floor space shall be no less than shown in Figure 1. Each apartment has a laundry

☐ N/A ☒ ACCEPTABLE

☒ G3 Food Preparation

☐ G3/VM1 ☐ G3/AS1 ☐ Alternative Solution

- Sighted cooker provided as per G3 cl 1.2
- Sighted refrigerated storage per G3 cl 1.3
- Sighted a provided food preparation area and surface in compliance as per G3 cl 1.1.3
- Sighted wall linings adjacent to appliances and facilities as having surfaces that can be kept clean and hygienic as per G3 cl 1.6 sighted sheet 16

☐ N/A ☒ ACCEPTABLE

☒ G4 Ventilation

☐ G4/VM1 ☒ G4/AS1 ☐ AS 1668.2 ☐ Alternative Solution

Ventilation of Apartment 1:
Bedroom 1 :Please revise how the bedroom is ventilated. It cannot be ventilated by the adjacent habitable space as this space has a kitchen, and none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met.
Mechanical ventilation to bathroom met OK

Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.

Entry, Kitchen, Living and Dining.
Please revise calculation highlighted below the operable window area is well less than required.

G4 Ventillation Calculation

Apartment 1
BATHROOM Room Size: 4m² Req'd min. Opening Area (5%) = 4m² x 0.05 = 0.2 m²
FAN Calculation 4m² x 3.9 m height = 15.6m³ 15.6m² x 15 ARCH = 234m³/hr 234m³/hr / 3.6 = 65 l/s
FAN: 150mm Manrose Axial 105 l/s, 380m3/hr
BEDROOM 1 Room Size: 12.3 m² Req'd min. Opening Area (5%) = 12.3 m² x 0.05 = 0.62 m²
Total Opening Area: IJ0.01 = 2.90 m² = COMPLIES
ENTRY, KITCHEN,LIVING & DINING Room Size: 41.1 m² Req'd min. Opening Area (5%) = 41.1 m² x 0.05 = 2.1 m²
Total Opening Area: W0.04 = 0.65 m² W0.05 = 0.76 m² TOTAL = 2.3 m² = COMPLIES

Ventilation of Apartment 2:

Bathroom mechanical ventilation OK

Bedroom 1 and Bedroom 2 both appear to be ventilated via another habitable space. Please revise as none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met.

Open plan living space has correctly sized operable windows.

Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.

Ventilation of Apartment 3:

Is there a laundry tub proposed for apartment 3? If so please show on the floor plan.

Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.

Bathroom ventilation mechanical OK

Bedroom 1 appears to be ventilated via another habitable space. Please revise as none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met.

Bedroom 2 operable skylight OK

Kitchen living dining calcs show OK

Ventilation of Apartment 4:

Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.

Bathroom ventilation mechanical OK

Bedroom 1 appears to be ventilated via another habitable space. Please revise as none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met.

Bedroom 2 operable skylight OK

Kitchen living dining calcs show OK

Ventilation of Apartment 5:

Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.
Bathroom ventilation mechanical OK
Bedroom 2 appears to be ventilated via another habitable space. Plus the skylight operable area of skylight enough OK
Bedroom 1 operable skylight OK
Kitchen living dining calcs show OK

Ventilation of Apartment 6:
Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.
Bathroom ventilation mechanical and skylight OK
Bedroom 1 appears to be ventilated via another habitable space. Plus the skylight operable area of skylight enough OK
Bedroom 2 ventilation via windows – area OK
Kitchen living dining calcs show OK

Habitable spaces ventilated via another habitable space

1.3.4 *Habitable spaces* without openings to the exterior must be ventilated via another *habitable space* by:

a) providing from the other *habitable space* to outside, openable windows and/or other openings of *net openable area* of no less than 5% of the combined floor area of the combined *habitable spaces*, and

b) providing high and low level *trickle ventilators* located on the external wall (see Paragraph 1.3.5 for *trickle ventilators*), sized according to the combined floor area, and

c) providing an area of *permanent opening* between the two spaces of no less than 5% of the combined floor area of the *habitable spaces*, and

d) having a combined distance of the *habitable spaces*, measured between the external wall and furthest opposing wall, of less than 6 metres.

COMMENT:
Habitable spaces must not be naturally ventilated via an adjacent space that is a bathroom, kitchen, toilet or laundry.

- Sighted habitable rooms with openings to the outside that are at least 5% of the room floor area, or mechanical ventilation in place that Mets requirements of G4
- Mechanical ventilation manufacturers details, plans, specification, calculations and PS1 submitted Please provide construction details to show the ventilation vents through the exterior wall, including head, jamb and sill details. To be checked.

☐ N/A ☒ ACCEPTABLE

☒ **G5 Interior Environment**

☐ G5/VM1 ☐ G5/AS1 ☐ Alternative Solution

- Accessible counter required not sure of occupancies as yet
- An adequate, controlled interior temperature shall apply only to habitable spaces, bathrooms and recreation rooms in old people's homes and early childhood centres

☒ N/A ☐ ACCEPTABLE

☒ G6 Airborne and impact sound

☐ G6/VM1 ☒ G6/AS1 ☐ Alternative Solution

- G6/AS1 NZBC sound ratings between inter-floor/inter-tenancy walls/floors comply with STC required- Habitable spaces
- Upper and lower level apartments are separated from each other OK with the GIB GBTLIC60 system OK

Two way FRR — timber frame wall — acoustic resilient mount

Specification number	Performance		Specifications	
GBTLIC 60	STC	62	Lining	2 x 10mm GIB Braceline®/GIB Noise
	Rw	60	LB/NLB	Load bearing
	FRR	60/60/60	Partition	170–175mm wide

-
- The existing first floor is 100mm concrete slab over beams – I am satisfied that the required IC rating for this floor is sufficient. In addition ceilings are shown as lined with 13mm GIB board over GIB rondo ceiling battens OK Based on this additional layer I am satisfied that ANARP the code requirement for an IIC of 55 is being complied with. The additional on ceiling insulation might also help – is this happening.
- G6 compliance.
  You have indicated polished concrete floors to the upper apartments – please demonstrate how the required Impact Insulation Class rating of 55 or higher is achieved where upper level apartments are above habitable spaces in lower level apartments.
- Proposed fire separations between upper level apartments as below OK

Two way FRR — timber frame wall — acoustic resilient mount

Specification number	Performance		Specifications	
GBTLIC 60	STC	62	Lining	2 x 10mm GIB Braceline®/GIB Noiseline® each side
	Rw	60	LB/NLB	Load bearing
	FRR	60/60/60	Partition	170–175mm wide

-
- Proposed fire separations to ground floor are all shown as having the GBTL120 system with R2.2 pink batts. Please demonstrate how the required STC ratings are achieved between tenancies on the ground floor. The GBTL 120 system indicated has an STC rating of 45.

Two way FRR — timber frame

Specification number	Performance		Specifications	
GBTL 120	FRR	120/120/120	Lining	2 layers 16mm GIB Fyreline® each side
	STC	45	LB/NLB	Load bearing
	Rw	45		

REQUIREMENTS OF NZBC CLAUSE G6

The minimum requirements in NZBC Clause G6 between occupancies to 'prevent undue noise transmission from other occupancies or common spaces to household units' are:

- Sound Transmission Class (STC) for walls, floors and ceilings of no less than 55.
- Impact Insulation Class (IIC) for floors of no less than 55.

In this literature, systems that are designed to achieve compliance with this requirement are called 'Intertenancy' systems. Those that are suitable for non-building code applications i.e. partitions within the same tenancy, are call 'Sub-Intertenancy' systems.

☐ N/A ☒ ACCEPTABLE

☒ G7 Natural Light

☐ G7/VM1 ☒ G7/AS1 ☐ Alternative Solution

Assessment undertaken individually for each apartment.

Apartment 1: This apartment has just 1 external wall with windows.

Please demonstrate (by providing a cross section showing window heights) how the bedroom (habitable space) complies with the requirement for visual awareness of the outside environment.

Please demonstrate (by providing a cross section showing window heights) how the head height for windows complies with G7/AS1 part C. Please note a window area in excess of 10% of the floor area may be necessary.

Please also demonstrate whether the no sky condition applies for external glazing. If it does please provide a schedule of surface finishes for the floor ceiling and walls so high reflectance surfaces can be seen as per G7/AS1 clauses 1.02 to 1.04

Apartment 2:

Please demonstrate how both the proposed bedrooms meet G7. Please demonstrate how the required levels of natural light and an awareness of the outside environment are met.

The living area assessed and OK. – well over 10% floor area. This answers

Apartment 3:

Bedroom 2: Please demonstrate how bedroom 1 meets the requirements of G7 for an awareness of the outside environment. Please include the size of the skylight in G7 calcs on sheet A37.

Bedroom 1 Please demonstrate how bedroom 1 meets the requirements of G7 for natural light. (borrowed light from windows W1.07, W1.08 and W1.09 provide daylight to this bedroom) Please show compliance with G7/AS1 clauses 1.02 to 1.04, please include any cross sections, schedule of floor ceiling and wall finishes showing surface reflectance's as required. An awareness of the outside environment via living dining windows OK.

Living area has enough glazing for 80m2 easily meets G7.

Apartment 4:

Please add a G7 assessment of apartment 4 to sheet A37. Please include the size of the skylight in G7 calcs on sheet A37.

Living dining kitchen areas. W1.04-W1.06. enough glazing for 100m2 OK

bedroom 1 meets the requirements of G7 for an awareness of the outside environment.

Bedroom 1 Please demonstrate how bedroom 1 meets the requirements of G7 for natural light. (borrowed light from windows W1.04 and W1.05 provide daylight to this bedroom) Please show compliance with G7/AS1 clauses 1.02 to 1.04, please include any cross sections, schedule of floor ceiling and wall finishes showing surface reflectance's as required.

Living area has enough glazing for 80m2 easily meets G7.

Apartment 5:
Compliant for both daylight and awareness of the outside environment.
Apartment 6:
Compliant for both daylight and awareness of the outside environment.
Check Bedroom 210m2 – Only light provided by FW1.11 W1.11 W1.12 and FW1.12 4x0.45=1.8m2 OK

☐ N/A ☒ ACCEPTABLE

☒ G8 Artificial Light

☐ G8/VM1 ☐ G 8/AS1 ☐ NZS 6703 ☐ Alternative Solution

- Residential dwellings must have minimum LUX requirements outlined in G8/AS1 NZBC

☐ N/A ☒ ACCEPTABLE

☒G9 Electricity

☐ G9/VM1 ☒ G9/AS1 ☐ Alternative Solution ☒ Certificate Required pre-CCC

- Electrical certificate to be supplied
- ~~In Buildings intended for use by persons with disabilities, light switches and socket outlets shall be horizontally aligned with the door handles. The toggle, rocker, push pad, or push button control of light switches shall project clear of the switch plate~~

☐ N/A ☒ ACCEPTABLE

☒ G10 Piped Services

☐ G10/VM1☒ G10/AS1☐ NZS 5261☐ Alternative Solution

- Piping for Gas used as an Energy Source

☐ N/A ☒ ACCEPTABLE

☒ G11 Gas as an Energy Source

☐ G11/VM1 ☒ G11/AS1 ☐ Alternative Solution ☒ Certificate Required pre-CCC

- Please show the location for the existing gas meter.
- Gas Meters shall not be located in:
- A lift-well or lift machine room
- A space containing electrical switch gear
- Vertical safe path or riser ducts, or
- A position that obstructs escape routes in the event of an emergency
- The gas infinity system can be located as proposed refer NZS5261 fig3 and table 16
- Rinnai HDi200 infinity units to apartments OK specs supplied and flue installation instructions.
- The gas bottles can be located as proposed refer NZS5261 G2-G4 (page 150- 154)

☐ N/A ☒ ACCEPTABLE

☒ G12 Water Supplies

☐ G12/VM1 ☒ G12/AS1 ☐AS/NZS 3500. 1 ☐ AS/NZS 3500. 5 ☐ Alternative Solution

- Distance from HWC to Kitchen compliant assess when gas heaters shown. OK
- Potable water supply - as a fee simple subdivision is proposed individual supply for each lot will be required. Please provide a water supply plan showing locations of all water feeds to the 6 apartments and 2 commercial spaces. Please show all pipe sizes. Please show locations for water meters and tobies. And please show location of the backflow prevention device.

Please revise notes referring to VT26 gas water heaters as a Rinnai HDi200 infinity is shown for each apartment

- sanitary fixtures as being tempered and less than 55 degrees in residential homes in gas water heater specs
- Sighted water supply pipe work to all new fixtures sized as per G12 table 3 &4
- Please on the construction plans clearly show/state a safe tray below each Hot Water Cylinders in the roof space as per G12 5.2.3 which requires water to be prevented from penetrating another household unit within the same building, as per E33.2 requirements. n/a external gas water heater.s
- Sighted hot water supply to supply to sanitary fixtures as being tempered and less than 45 degrees in early childhood centres, schools, old people's homes, and institutions for people with psychiatric or physical disabilities, hospitals n/a
- the plans or in the specification show any the required backflow device as required by G12 cl 3.4.1 and the back flow proposed compliant with hazard requirements of table 2 (spa pools swimming pools etc) n/a for apartments
- HWC specifications and valved set up supplied and shows compliance with G12
  Please on the construction plans supply HWC schematic drawings showing the setup and locations of all valving and including the relief drain and if it is a combined relief clearly show the required tarnishing (clear 25mm separation) and its location, so compliance with G12 can be seen established.
- HWC seismic restrained yes HWC's shown to lower floor commercial tenancies.
- Consider Copper or polybute under concrete floor n/a HW supply near ceiling so pipework can be run up and down if required.
  ~~Please have noted that the water supplies to the island bay kitchen is polybutylene, please as polybutylene piping only has only a 15 year durability life and as B2 requires pipe work under structural concrete slabs to have a 50 year life, supply details of how this will be achieved?, perhaps~~

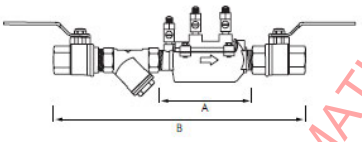
~~by a 65mm UPVC duct pipe that is set up in a way that allows any possible failure of the polybutylene water to be recognised, and then the water supply replaced within this 65mm sleeve.~~

1. ~~Please show on the plans the concrete floor pipe details, as B2 requires pipework under structural concrete slabs to have a 50 year life (min). Perhaps by installing a uPVC duct pipe that is set up in a way that allows any possible failure of the water pipe to be recognised, and then the water pipe replaced within this sleeve~~

2.

350 (SMALL)
DOUBLE CHECK VALVE ASSEMBLY
20MM - 50MM

WILKINS



☒ N/A ☐ ACCEPTABLE

☒ G13 Foul Water

☐G13/VM1 ☐ G13/AS1☒ AS/NZS 3500. 2 ☐ AS/NZS 3500.5 ☐ Alternative Solution ☒ Trade Waste ☐ Env. Health

Please clarify whether you are re using any existing sewer or stormwater laterals.

If you are planning on reusing either lateral please show how you will achieve compliance with AS/NZS 3500:2:2015 clause 3:16 re-use of existing sanitary drains n/a all new

- Plumbing schematic layout compliant (required if a two storey house) one supplied OK
- Are existing stormwater or sewer laterals being used? If so show compliance with AS/NZS3500.2:2015 cl 3.16 – reuse of existing sanitary drains – plumbing plans show totally new foulwater drainage system up to council main
- Anchoring of drains required? see AS/3500 part 2 fig 3.2 n/a
- Trench shared with other services? is the sewer water drain in correct location AS/3500 part 2 fig 3 Water services not shown.
- Silt traps/sumps provided/compliant n/a
- Overflow relief for sewer drain (private) correct height above the ground check G13 AS/2 cl 3.3.1 and AS3500 part 2 cl 4.6.5
- Terminal vents size 80mm G13 and 50mm AS3500 part 2 sighted 2 vents both 50mm above highest connection. OK
- Sighted drain terminal vent in place, correctly sized and on the wet , and open vented – AS/NZS 3500.2 cl 6.8.5 2 TV's both DN50 OK
- Branch vent size and located per G13 table 5 AS3500 part 2 fig 3.6 OK
- Please amend the plans to show all inspection points as required (before drains travel under building/SLAB, at all WC connection to drain)
- Sighted gully traps charged – ORG to be charged by tap- noted - OK
- Main drains sized and graded as per AS/NZS3500.2:2015 section 3 or G13/AS2 – yes DN150 grade to be
- Please show the proposed minimum gradient for the DN150 drain.
- Please note you have shown a DN150 stack connecting to a DN100 drain please revise so a larger pipe does not connect to a smaller pipe.
- Unvented branch drains are shown as DN100 min gradient 1.65% 1:60 OK, Max 2 WC's and 30DU's

per branch drain. Checked all GF branch drains less than 10m and none have over 30DU'd or 2 WC's.

- Main drains no less than 100mm dia, branch drains shall be 65mm dia – see AS/NZS3500.2:2015 section 3
- Plumbing drains sized and graded as per AS/NZS3500.2:2015 table 6.5.1
- Base of stacks and restriction zones in compliance with AS/NZS 3500.25 cl 6.6-6.7
- Anchoring of drains to AS/NZS 3500.2 fig 3.4.4
- Height of gully above ground in compliance with AS/NZS 3500.2 cl 4.6.6.6
- Connections to base of stack and near base of stack in compliance with AS/NZS 3500.2 fig 6.6.3.2 and fig 6.7.1 – sighted restricted areas in the form of notes on the plans.
- Back Flow prevention

As there is potential for the two commercial units to become food outlets/cafes etc. Please consider running a greasy waste line alongside the sewer line that they are putting in for either or both of the two units to be able connect up to. Please also consider installing a communal grease trap at the rear of the building.

Trade waste, grease trap (commercial site where it has a commercial Kitchen) Comment from Wayne.

Good morning Lyall,
As there is potential for the two commercial units to become food outlets/cafes etc. I suggest that they run a greasy waste line alongside the sewer line that they are putting in for either or both of the two units to be able connect up to. Should also consider installing a communal grease trap at the rear of the building.

Cheers
Wayne

-

☐ N/A ☒ ACCEPTABLE

☐ **G14 Industrial Liquid waste**

☐ G14/VM1 ☐ G14/AS1 ☐ Alternative Solution ☐ Trade Waste ☐ Env. Health

☒ N/A ☐ ACCEPTABLE

☒ **G15 Solid waste**

☐ G15/VM1 ☐ G15/AS1 ☐ Alternative Solution

Upper apartments have a space for rubbish – not labelled,– Ground floor units have external space to keep bins OK

- Please label the Location of safe hygienic holding prior to disposal, of solid waste arising from the intended use of the building on the plan.
- Based on the plans supplied you are providing a ground floor rubbish area for the upper level apartments. Please amend the plans as follows:
- Please label the ground floor rubbish area on the plan.
- Please demonstrate how the ground floor rubbish area is to be adequately ventilated to the open air in compliance with NZBC G4.
- Please confirm the concrete floor will be graded at 1 in 50 to a floor drain. Fl
- finishes to Walls in spaces where storage bins are likely to receive food wastes and are subject to spillage shall be constructed of concrete, galvanised sheet steel, vinyl or similar material.
- How is the FWG in the ground floor rubbish area to be charged?
  A. A water supply tap, complying with NZBC G12, shall be provided for washing down common

waste storage areas.

☐ N/A ☒ ACCEPTABLE

☒ H1 Energy Efficiency

☐H1/VM1 ☒H1/AS1 ☐ NZS 4214 ☒ NZS 4218 ☐ NZS 4243 ☐ NZS 4214 ☐ NZS 4305 ☐ NZS 4859
☐ Alternative Solution ☐ Solar unit ☐ ALF Design

Thermal Insulation

Please clearly show the extent of

- Hot water supply to kitchen insulated as per H1 sec 5 if longer than 12m yes
- HWC distribution pipes thermally insulated within the first 2m of the cylinder, as per NZS4305 3.7 yes
- R Values meet the requirements of NZS4218 table 2 Ceiling R3.2 pink batts OK
- Walls R2.8 Pink Batts Ultra OK
- H1 report supplied calculated in accordance with NZS4218 cl 1.1.2 with compliant heat loss Yes
- The H1 calcs show the overall building performs better than the reference building(less heat loss)
- Garage/habitable space area clearly defined as insulated?n/a
- Is there a min gap of 25mm between the roof underlay and the insulation? As per NZS4246 cl6.2.10 and Fig23 no skillion OK
- If the commercial building under 300sqm with window areas of less than 30% to its walls then the schedule Method OK modelling used.

Based on the details for installation of replacement joinery in concrete block walls you are strapping and lining internal walls and installing 45mm expol insulation. Please amend the wall framing notes to clearly show the full extent of this additional strapping and lining on the proposed floor plans for both levels.

How have you determined that condensation will not occur between the expol and the external concrete walls.

Please confirm the only timber framed external walls are to the Southern Elevation. Please add notes to the plans to state the framing specs and any insulation added to this external wall.

.

~~Schedule Scope~~

~~Total area (including north elevation) less than 30% total glazing coverage (schedule)~~
~~Residential less than 300sqm's~~

- ~~Zone 2~~
- ~~Ceilings R2.9~~
- ~~Walls R1.9~~
- ~~Floor R1.3~~
- ~~Vertical Glazing 0.26~~
- ~~Skylights, double glazed~~

☐ N/A ☒ ACCEPTABLE

-
-
-
-

☒ N/A - these New Zealand Building Code clauses were considered, but not relevant to this consent application to demonstrate compliance.

Collective evidence referred to can be found in Consent Document Container in TRIM

Attachments:

Cross ☒ - *indicates the box related to all additional sheets used to record assessment decision. For each additional sheet, write the number of sheets attached where there is more than one.*

☒ Work Sheets	☒ Alteration – section 112(2)
☒ Change of use - section 115	☐ Dialogue Record
☐ Waiver Modification	☒ Compliance Schedule changes
☒ Checklist for Producer statements	☐ Collective evidence
☐ Revised documents received and assessed	☐ section 72 and hazards
☒ Alternative solutions	☐ Approved for Granting and issuing

I have assessed the documentation submitted with this application inclusive of subsequent further information and I am satisfied, on reasonable grounds, that the provisions of the building code would be met if the building work is completed in accordance with the approved stamped documentation.

Assessed by:

Name: **Lyall Huizer** Signature: Lyall Huizer Date: 1/5/2021

Name: Signature: Date:

Form of Review Required: ☐ Technical ☒ Internal Audit ☐ not required

Reviewer's Comments

Notes:

Indicate Building Code clause and NZ Standard addressed. Identify what was assessed, what you assessed it against and once satisfied on reasonable grounds indicate your outcome.

Processing check pre RFI (13/4/2021)

Initial Property/PIM check

- Legal – ownership, property, value = *checked and confirmed by BO*
- Site factors = *checked and confirmed by BO, RFI on floor levels*
- Hazards – natural, HAIL, EPB, Heritage = *checked and confirmed by BO*
- Infrastructure *n/a*
- Compliance Schedule, BWoF = *The CS is to be completed and signed off for each section*
- Prior consents, existing buildings = *n/a*
- Planning, subdivision, sect-37 = *n/a*
- Dev Con's = *checked and confirmed by BO, calculations completed correctly*

- Others – TW, EH, RT = *n/a*

Comments

Inspections and Proclaim boxes in 038 form not completed
Ditto in CI, not entered into CI

BC processing – General

- General form headers, description = *yes. Bracing calculations checked yes but nor means of compliance*
- Competency = *yes*
- RBW/LBP checks = *yes, na to this project*
- Dialogue = *dialogue record not completed*
- Has all documentation been saved using the appropriate naming conventions? *Noted:*

Doc 10 should be SPECIFICATIONS, product data?
Doc 11 is CALCS Architectural (not structural)
Doc 21 & 22 are not specifications (SBCO issue in naming conventions)
Doc 49 – is a FENZ document, provision made for that in naming

NZBC clauses:

Key risk areas (discuss)Structure – the engineer has stated that 70%NBS is being achieved ANARP. But there is no discussion as to what the limiting factors are, and why greater than 70%NBS can't be achieved. No reasonable argument made for ANARP. No discussion on probable mode of failure, in a ULS event will sleeping occupants be able to escape OK?

Additional question added to RFI.

BC processing – supplemental Worksheets

- Producer Statement checks = *ok Noted that legal description not provided*
- Alternative Solutions = *ok section completed (but is provided twice)*

- Natural Hazards sect-71/72 N/A
- Waiver/modification = *NA*

Producer statements

(a) Has the accept procedure for producer statements for design been followed? *yes*

Requests for further information

Have RFIs been clearly articulated? Yes, questions are clear and information provided

BC processing – Pre Approval

- **Requests for further information**

(a) Have all RFIs been addressed and accounted for on the processing checklist? *yes*
(b) Have superseded drawings, if there were any, been removed from the Consent – APPROVED set? *NA*

- 038 clearly recorded, signed, dated, *yes*
- Ci Proclaim completed correctly = *yes/no*

The next section only relates to commercial applications

Sect-118 Accessibility requirements = *Discussed by BO, and RFI raised*

Sect-112 Alter Existing = Refer discussion re NBS above
Sect-115 Change of Use = Sect-115(a) (new households) G6 noted for ANARP, however no demonstration of tested systems has been offered for ITC55? *(discuss)*

(C1-C6 Extra commercial consideration: Fire protection well covered, good picking up on the fire window issue *(discuss)*

Have all the features for the protection from fire been clearly shown in the approved plans and specifications? Comment below:

Sect-100+ Compliance Schedule & Spec Systems = The CS section needs to be completed and identified that the standards are appropriate

Further Actions

Process issues needing action, record

Were there any training needs identified and if so, record below what type of training will be required:
(Send email to Quality Assurance Manager if formal train required) No specific training suggested, fire training is being developed shortly.

Assessed by (Senior Officer) Name: **Natalie Shearer** Signature: Date:4/5/21

- Decision to grant *(discuss)*
Lyall has addressed all the matter raised in the pre RFi review this consent can now be granted

Consent cover letter and From 5

- Cover Letter = *yes*
- Form-5 Consent, conditions *yes*
- Attachments = *yes*
- BC approval notes = *yes*
- Required inspections = *yes*
- Required documentation = *ok*

Statutory clock

-Has the statutory clock been stopped and started appropriately? The clock need to be updated before issue to reflect the time taken

Assessed by (Senior Officer) Name: **Mike Humphrey** Signature: Date:4/11/21

Issues to be resolved as per RFI #1	
Date sent:	Response received:

1. B1: structure - you have provided earthquake strengthening calculations and drawings bringing the building up to 70%NBS - Please provide a statement from the Seismic Engineer showing why this is the highest level of compliance possible based on an "ANARP" analysis. RFI1 response received 14/7/2021 contains a response from the structural engineer giving clear reasons for limiting the seismic

strengthening to 70%. See below – I agree with this reasoning and accept that this level of strengthening is ANARP for this building and can be accepted under BA115 part (a) In particular paragraph b highlights the fact that due the age of construction(1950's) all structural elements might need to be replaced for 100%NBS – clearly which would possibly involve a rebuild of the whole building not reasonable practicable for financial reasons.

a) *Steel sections for the ground floor strengthening will be bigger if we aimed higher than 70%NBS and this will mean less usable space for the proposed use of the building.*
b) *We are estimating that the building was constructed during the 1950's. If a higher level of compliance is needed, say 100%NBS, the rest of structural items need to be strengthened/upgraded as well due to the building age. The cost involved in strengthening/upgrading the rest of the structural items will significantly outweigh the benefits that will be gained.*
c) *Once the strengthening works are in place, the structural system of the building will be quite regular for earthquake loading. The strengthening involves providing new concrete walls at the longitudinal side walls and new steel moment resisting frame at a regular spacing in the transverse direction. With these new structural elements in place, the performance of the building under earthquake loading will be balanced and the risk will be relatively low. Regular buildings generally performed quite well during the earthquakes as observed in Christchurch in 2011.*

2. Please include in this statement the mode of failure for the building before and after the proposed earthquake strengthened work has been completed. In particular a statement covering the steps taken to ensure that in a ULS event sleeping occupants be able to escape. RFI1 response received 14/7/2021 contains a response from the structural engineer below – confirming that the building will not collapse and occupants can escape answering Q2

The mode of failures of the structure before strengthening is flexural yielding of the existing concrete columns at Level 1 in the longitudinal direction and having a limited number of shear walls at both levels in the longitudinal direction. While in the transverse direction, we are expecting pounding actions to the neighbouring buildings since the existing concrete moment resisting frames at the ground floor are relatively flexible and the reinforcing confinement does not meet the current code standard. These modes of failures are considered as non-ductile failures. Once the limited ductile (μ=3.0) strengthening works are in place, we are expecting

the failure to happen at Level 1 existing concrete columns in the transverse direction and ductile yielding of the new steel frames. The type of failure will be flexural yielding in a ductile manner. Since the 70%NBS strengthening design can achieve a limited ductile failure, we can say that the structure may suffer damage but will not collapse in this considered ULS event design level (70%NBS), so that occupants can escape the building.

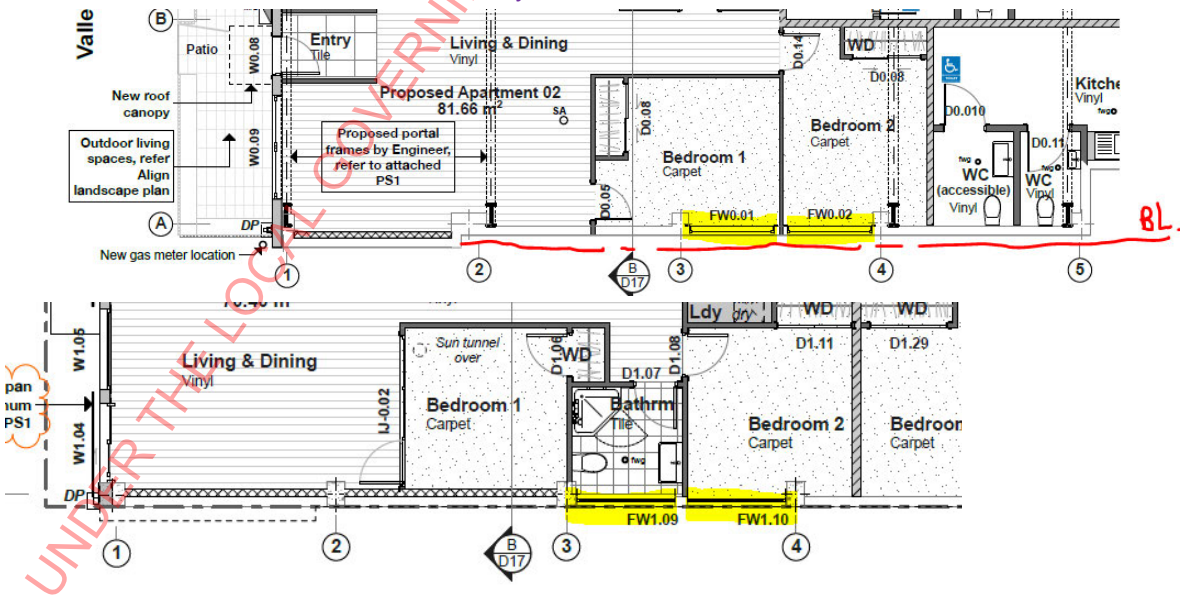
3. Building consent application form : Section 7 – Please amend the proposed classified use to Commercial and Housing. RFI1 response received 14/7/2021 contains a revised BC application form sheet 7 now corrected answering Q3
4. PS1 from SED engineer : Please enter the Lots and DP number into the PS1 as supplied. RFI1 response received 14/7/2021 contains a revised PS1 answering Q4
5. Please show the FGL adjacent the lower level apartments (Margaret street service lane) and demonstrate how compliance with E1 clause2.0.1 is met. (Floor level above crown of road or above lowest point of site as per E1 2.0.1 a), b)) RFI1 response received 14/7/2021 contains a note stating that the FFL is the minimum 150 above the crown of the road. Making Q6 moot.
6. If the required difference in level cannot be achieved please demonstrate how surface water is prevented from entering apartment 1 and 2. See above question is moot. OK
7. Please amend the cross sections and floor plans to show the extent and construction details of any proposed ceilings. RFI1 response received 14/7/2021 contains revised sections now showing ceiling construction details. Ref sheets A14,16,21,22, and 23 These show the Ground floor FR ceiling above apartments 1 and 2, (GBSJA45 2/13mm fyreline on metal clip ceiling battens) and notes specify ceilings types to the upper level (13mm GIB on steel battens) answering Q7.

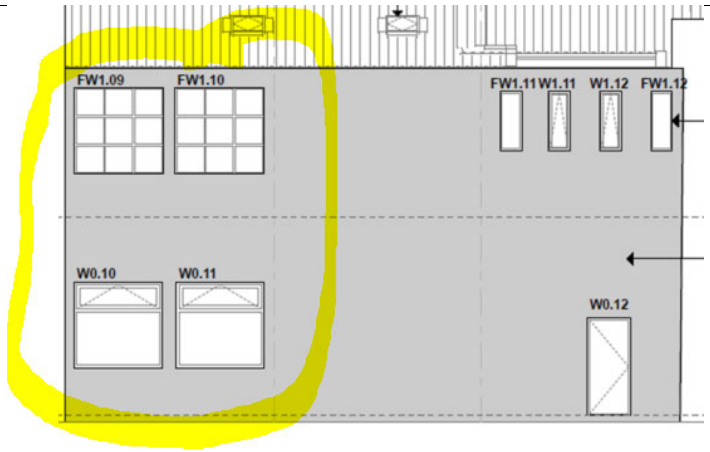
8. Proposed type 4 and type 5 alarm systems. Please provide a layout plan from a suitably qualified person showing all detectors by type, sounder locations, location of the manual call point/s and fire alarm panel. Please provide evidence that Fire and Emergency have approved the proposed location for Multi Zone fire alarm panel as per NZS 4512:2010 Paragraph 403.1 Not answered by the fire engineer - need to see the design and FENZ approval.
9. Please amend the plans to specify fire collars to both the stacks, plumbing wastes and other penetrations as required. RFI 1 response received 14/7/2021 contains a general note added to the plans see below - and a further note regarding inspection of collars etc by an independent person has been provided. Follow up phone call confirming who has specified the collars etc. The fire engineer will provide a PS4 covering all penetrations. Test results have been provided however there are no data sheets for the proposed FR collars foams or sealants please provide.

FRR Penetration - Steel Portal
All Steel Portal Frame to be fire stopped with Hilti 606 sealant at penetation to FRR walls. Refer assessment for instruciton.
FRR Penetration - pipes
All pipes to be fire stopped with Hilti fire collar CFS-C penetation to FRR walls.

FIRE STOPPINGS MONITORING:
Coordination and construction monitoring of all fire design elements will be provided on site by a suitably qualified person to ensure the design and final construction adequately meet the fire design report with an associated Producer Statement confirming compliance.
Fire Stoppings location to be documented, information & specification to be provided to fire engineer to review.

10. Based on the plans supplied windows FW1.09, FW1.10, W0.10 and W0.11 are new replacement windows in walls within 1m of the boundary. Therefore please demonstrate how the proposed glazing is compliant with C/AS2 clause 5.2.4. Based on table 5.1 the maximum permitted size of fire resistant glazing is 1m² and figure 5.1 requires a separation distance between adjacent FR windows of at least the width of the wider window being installed. (see below) Question not answered by Fire Engineer in a way I can understand. Phone call to designer. Please note windows FW1.09 and FW1.10, W0.10 and W0.11 are located on or not far from the boundary.





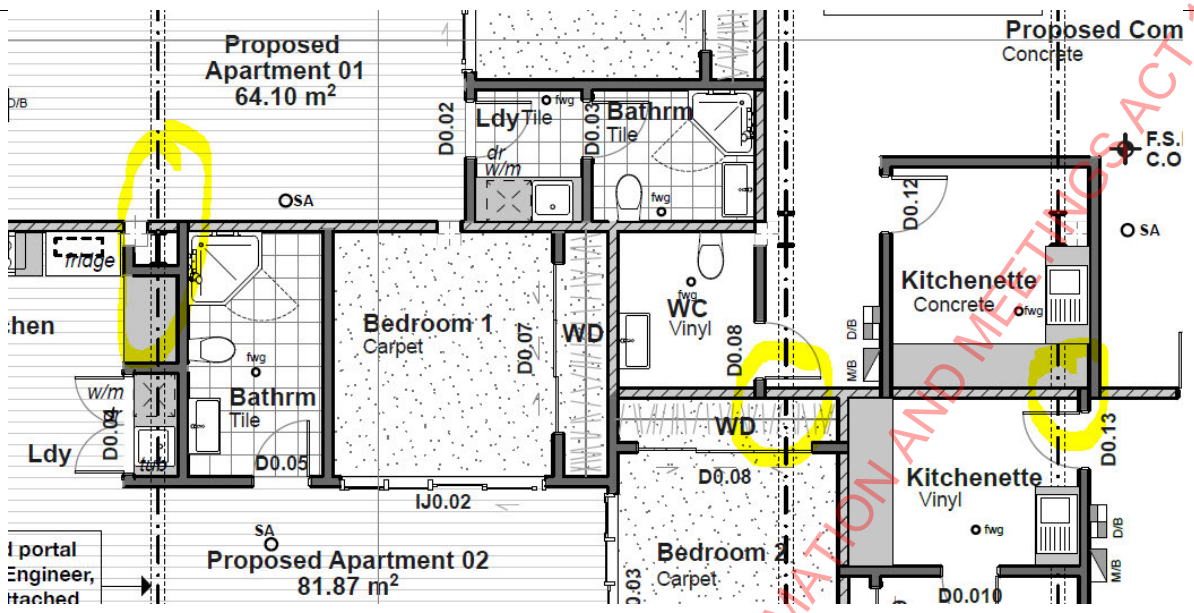
11. Fire Rated windows and doors: Please provide manufacturers specifications for all external fire rated windows and doors. Please revise the window schedule to include the manufacturer of the windows, the particular model or type, and their proposed FRR ratings. RFI1 response received 14/7/2021 contains a revised door and window schedule now stating the actual FR windows and doors to be installed. (sheet 28) with details for installation on sheet 49 OK Specs not provided and they need to include door sets for internal doors.
12. Please demonstrate how E2 compliance is to be achieved by providing details for the installation of fire rated windows including sill, head and jamb details. RFI1 response received 14/7/2021 contains these details to sheet 49 – FR windows are set into concrete – details provided with Fire retardant sealant to gaps is shown OK
13. Doors SD1.01 to SD1.05: These are shown on the fire report as requiring a 60 minute fire rating. Please provide a manufacturers specification for all proposed fire doors including evidence of a -/60/60 fire rating. Please add this information to the door and window schedule. Please include manufacturers installation details for fire and smoke doors showing head and jamb details as required. Please revise the internal door schedule to include the manufacturer of the doors, the particular model or type, and their proposed FRR ratings. RFI1 response received 14/7/2021 contains specs for the FR doors - The -60/60/sm rating is confirmed in specs and on the plans OK Need to see the spec for hardware
14. Please show on the plans all structural steelwork to be fire rated as per C/AS2 clause 2.3.4 . Please clearly state the particular fire rated system proposed and the FRR value this system provides. (FRR of 120 required) RFI1 response received 14/7/2021 contains a note from the SED engineer confirming that the new steelwork itself does not need a fire rating as additional steelwork is providing bracing not gravity load support answering this part of Q14. OK

    Hi Andrew,

    We can confirm that the ground floor portal frames don't need to be fully fire rated. The main gravity supports are still the existing concrete beams and columns. If the portal frames were damaged by fire, it will not cause any stability issue.

    Thanks.

15. Please provide details showing steelwork penetrations through fire separations in particular how the integrity of the fire separation is to be maintained. (see below) RFI1 response received 14/7/2021 contains a note stating that HILTI 606 fire stopping sealant to be used where steel penetrates the GIB FR walls – need to see data sheet for the HILTI 606 sealant. Does the ceiling to apartments 1 and 2 means that the beam penetration through the walls is within this protected area? is the purpose of the GIB 45min ceiling to mean the beam penetrations through the walls above this ceiling do not need to be fire rated?



16. Final Exit for commercial space 01: Please revise W0.02 to show a hinged door of the correct width so compliance with C/AS2 3.15.1 can be seen. (sliding door acceptable where the occupancy is less than 20) RFI1 response received 14/7/2021 contains a revised door layout with a hinged door in place – answering Q16
17. Please provide manufacturers documentation demonstrating the proposed carpet, vinyl and floor boards meet the minimum critical heat flux value of 2.2 see 2.2kW/m². RFI1 response received 14/7/2021 contains a note stating there is no selection made as yet - not acceptable the actual products must be specified and product data in support of the minimum critical radiant flux supplied.
18. Fire report 1.3.6 states penetrations in fire separations to be fire stopped – you have supplied testing reports for various Hilti products provided. Please add notes to the plans to clearly state which Hilti firestop / jacket products are to be used where on the plans. Please provide manufacturers specs for any proposed fire stops/ fire rated sealants. RFI1 response received 14/7/2021 contains the notes added however No data sheets or installation specs please supply data sheets for all Hilti products expected to be used on site.
19. Please show the height of door handles to W0.01 and W0.02. RFI1 response received 14/7/2021 contains revised joinery layouts showing the heights of handles answering Q19
20. Please confirm the door opening forces of no greater than 22N for interior hinged doors and 38N for exterior hinged doors(you have indicated 2 sliding doors as final exits) RFI1 response received 14/7/2021 contains this note added to the plans answering Q20
21. Please show manifestation to windows W0.01, W0.02 and W0.03 so compliance with NZS4223.3 2016 clause 6 and clauses 2.2.2 can be seen. RFI1 response received 14/7/2021 contains revised joinery layout now showing manifestation as required and answering Q21
22. Please provide a dimensioned floor plan and interior elevations of the proposed unisex accessible bathrooms showing the following: RFI1 response received 14/7/2021 contains revised plans and interior elevations as requested.

- They are of sufficient size for the manoeuvring of wheelchairs to and within the cubicle
- Include an interior clear space of 1600mm by 1900mm – sighted for both
- Door must open out, but can open to bathroom if the bathroom big enough for the door arch not to intrude into the required 1500 turning circle (NZS4121 C10.5.5) door opens out for both
- Have a Handrail/ grab rail to inside of door sighted for both
- Have the ability to wash hands while seated on the pan sighted for both

- Have the ability to reach sanitary disposal bins while seated on the pan sighted for both in that there is space for bin adjacent the pan
- Have the ability for the wheelchair user to open the doors sighted for both
- The toilet within the Accessible toilet to have a height to the top of the pan seat og 460mm refer NZS4121 10.5.6.1 sighted dimensioned for both
- Have the ability for the wheelchair user to remain balanced on the pan whilst transferring to and from the pan makes no sense.
- Provided with appropriate washbasins and with lever operated mixers provided sighted for both
- Toilet roll holder, and mirror located in correct position sighted for both

23. Please amend the plans to show signage provided in sufficient locations to identify accessible routes and facilities provided for people with disabilities. RFI1 response received 14/7/2021 contains amended plans with signage sighted for both WC's
24. You have provided details for windows installed over James Hardie Hardieflex cladding – please show this cladding location on the elevations. RFI1 response received 14/7/2021 contains a note stating this cladding removed.
25. You have shown a proposed canopy over entry doors to ground floor apartments. Please amend the plans to show where stormwater collected in these canopies discharges . RFI1 response received 14/7/2021 contains specs for the canopies and they have a drain hole – see below. Basically this unit sits over the front doors of units 1 and 2 – based on the plans it is sized as 0.9 x1.2m. and would drip into the only outdoor space available. Can I accept this – there is s DP available.
26. How are you protecting other property from the possible overflow of laundry tubs located in the 6 apartments? If you are relying on integrated overflow to laundry tubs then Please confirm and note on the plans the laundry tub has an overflow with a 25l per minute capacity. Please provide manufacturer's confirmation that this flow rate has been tested and verified in accordance with BS EN 274 .
And, please add a note to the plans stating that either The maximum flow rate from the inlet tap(s) is less than 25l per minute, or b) The water supplies to the inlet tap(s) for that laundry tub are fitted with proprietary flow restrictors (such as cartridges) to limit the tap flow rate to less than 25l per minute. RFI1 response received 14/7/2021 contains a note and revised plans stating that the laundry tubs are removed answering Q26

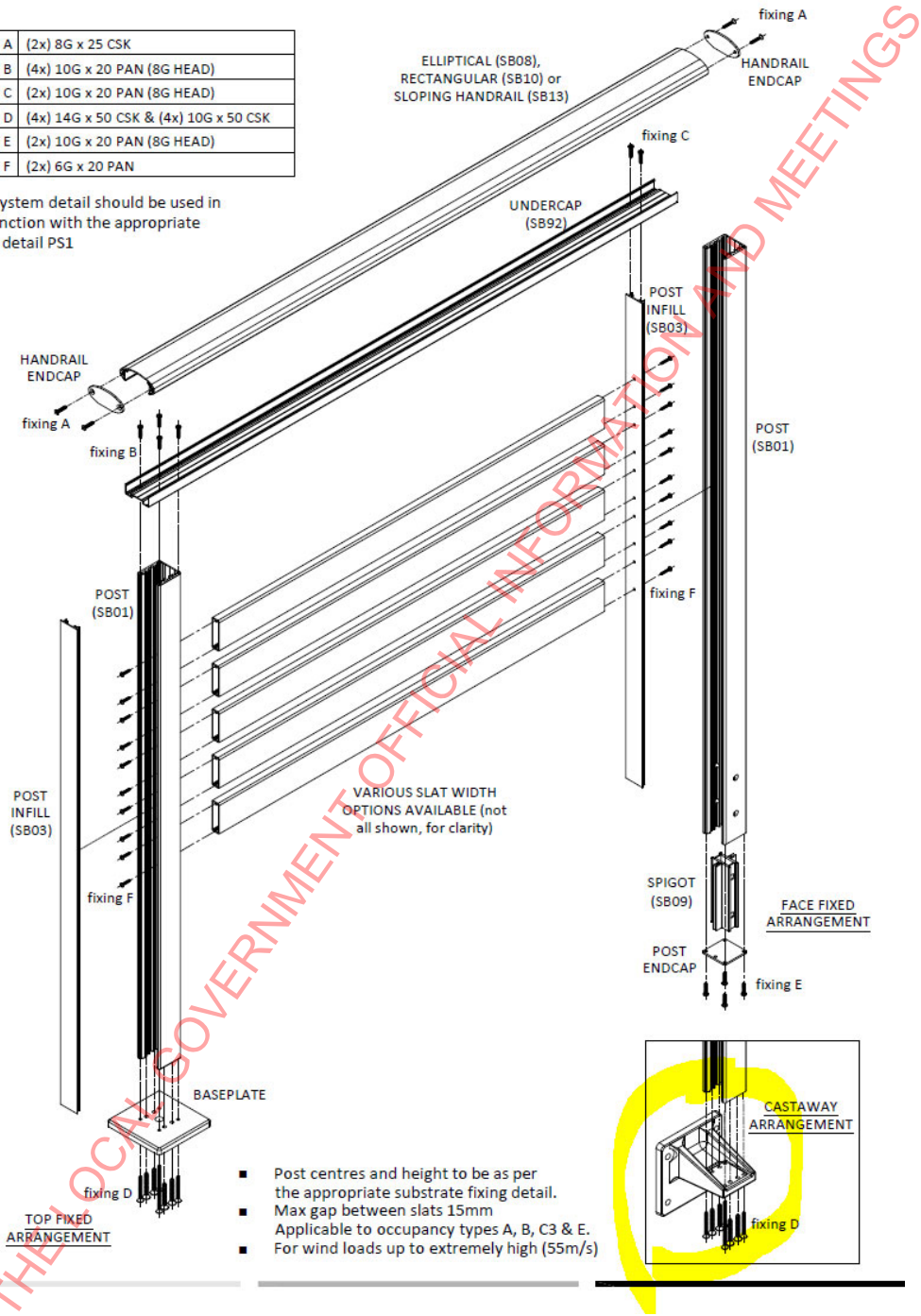
27. Containment of accidental overflow: Please add notes to plans to clearly state whether impervious floor coverings are to be sealed or coved. Are the ground floor kitchens to have tiles or floor boards? Please amend the plans so one option is shown. RFI1 response received 14/7/2021 contains a note and revised plans stating that the floor covering to be vinyl. Plan sheets A14 and A16 has a note stating the vinyl to be 150mm upstand to floor wall junctions answering Q27
28. Details on sheet A44 are given for both a tiled and acrylic showers – please highlight any tiled showers on the floor plans and provide manufacturers specifications and Branz appraisal for any pre- tiling membrane to be used. RFI1 response received 14/7/2021 has revised notes and details only proprietary showers with an acrylic liner to be used.
29. Please amend the plans to show surfaces finishes to wall linings experiencing watersplash and thereby show compliance with E3/AS1 clause 3.1.2 RFI1 response received 14/7/2021 contains a note stating that the kitchen and laundry to have tiled splashback OK
30. Barriers to opening doors(see below) Please dimension the height of the barrier above FFL. Please provide construction details and show fastening details to the building, and label materials to be used. Please demonstrate how these barriers comply with F4 as the gaps in horizontal members appear to allow for climbing. RFI1 response received 14/7/2021 contains the dimension added as requested max gap between gaps noted as 15mm Height(checked F4/AS1 ok) shown as 1000mm above FFL (household unit of multi unit dwellings) – checked F4 – OK Ares pecs , PS1 and installation detail appropriate. Please provide fixing details for the Clearspan infill and the exterior wall. The PS1 supplied

and sheet BL.2.1.9 does not specify this fixing.

CLEARSPAN SLAT PANEL ASSEMBLY - HORIZONTAL SLAT INFILL

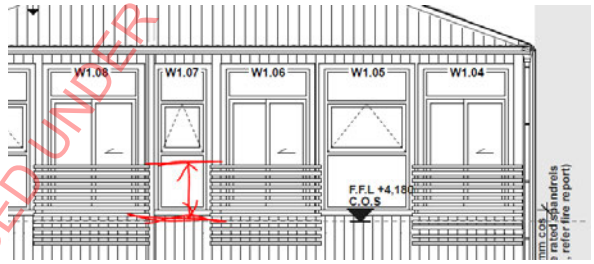
fixing A	(2x) 8G x 25 CSK
fixing B	(4x) 10G x 20 PAN (8G HEAD)
fixing C	(2x) 10G x 20 PAN (8G HEAD)
fixing D	(4x) 14G x 50 CSK & (4x) 10G x 50 CSK
fixing E	(2x) 10G x 20 PAN (8G HEAD)
fixing F	(2x) 6G x 20 PAN

This system detail should be used in conjunction with the appropriate fixing detail PS1



- Post centres and height to be as per the appropriate substrate fixing detail.
- Max gap between slats 15mm Applicable to occupancy types A, B, C3 & E.
- For wind loads up to extremely high (55m/s)

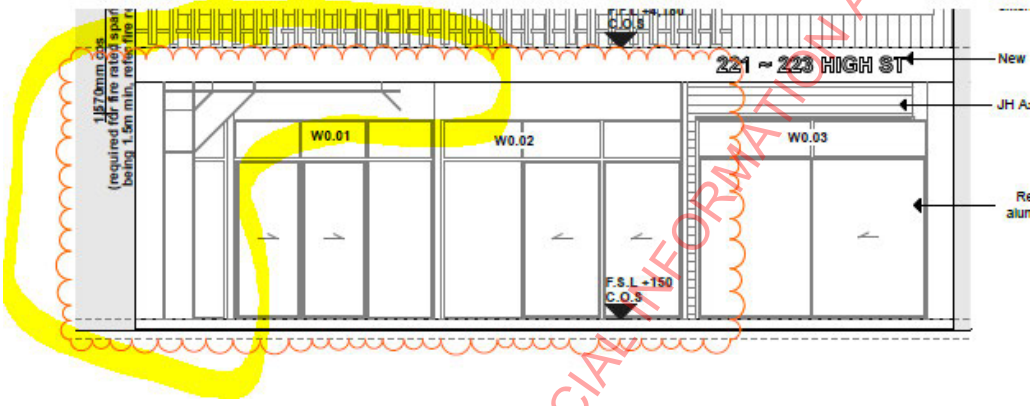
31.



32. If the above barrier is a proprietary system please provide product information (including installation

details) and include a PS1(issued within 12 months) from the manufacturer.

33. Based on the Southern elevation sliding windows to apartments 5 and 6 open more than 100mm and protection from climbing out onto the veranda below is provided by aluminium louvres. Is this correct? Please demonstrate how these louvres provide an F4 compliant barrier in particular show a Dia100mm sphere would be unable to be dropped from these open windows. RFI1 response received 14/7/2021 contains a note stating that these windows do not open and are all fixed panes – therefore not acting as a F4 barrier Q32 answered
34. Please provide manufacturers specifications for the louvres including installation instructions and details. RFI1 response received 14/7/2021 contains a PS1 and installation specs for this system OK
35. Please have the SED engineer provide a paint specification for the finish to the exposed section of portal frame. (see below) RFI1 response received 14/7/2021 contains revised plans now showing the portal frame enclosed with flashclad on cavity over rab board answering Q34



36. Please confirm the portal frame and W0.01 do not occupy the same space. RFI1 response received 14/7/2021 contains revised plans with the window removed answering Q35
37. Please amend the plans to show the wall cladding above W0.01 and W0.02. RFI1 response received 14/7/2021 has the cladding changed to flashclad answering Q36. Branz appraisal is provided for the flashclad cladding – need the referenced installation specs
38. Emergency lighting shown – Please provide a construction layout from a suitably qualified person specifying all luminaires and signage by manufacturer and product code. Please provide a PS1 from the emergency lighting designer. RFI1 response received 14/7/2021 contains plans and PS1 from a lighting designer showing the layout for emergency lighting. PS1 from Kerry Highsted of Electrical Supply Corp along with plans, and product specifications. I am satisfied the escape routes for both commercial occupancies are less than 20m Answering Q37
39. Please provide an additional unisex WC for each commercial fitout. So compliance with G1/AS1 table 1 number of sanitary facilities can be seen.(please note 1 accessible bathroom per commercial space is acceptable) RFI1 response received 14/7/2021 contains notes and revised plans now showing a second WDC to both commercial tenancies answering Q38.

G4: Ventilation Questions 39 – 50 covers ventilation of apartments by mechanical ventilation – Please provide a PS1 or letter from a suitable qualified person covering the design of the proposed DVS systems for the residential apartments and confirming the proposed system meets the requirements of G4. Please also demonstrate how G4 is to be met for the 2 retail tenancies.

Ventilation of Apartment 1:

40. Bedroom 1 :Please revise how the bedroom is ventilated. It cannot be ventilated by the adjacent habitable space as this space has a kitchen, and none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met. (see below) RFI1 response received 14/7/2021 contains a note stating that a ventilation system is to be installed. Extract through roof still shown – mechanical ventilation for kitchen and bathrooms.

Habitable spaces ventilated via another habitable space

1.3.4 *Habitable spaces* without openings to the exterior must be ventilated via another *habitable space* by:

a) providing from the other *habitable space* to outside, openable windows and/or other openings of *net openable area* of no less than 5% of the combined floor area of the combined *habitable spaces*, and

b) providing high and low level *trickle ventilators* located on the external wall (see Paragraph 1.3.5 for *trickle ventilators*), sized according to the combined floor area, and

c) providing an area of *permanent opening* between the two spaces of no less than 5% of the combined floor area of the *habitable spaces*, and

d) having a combined distance of the *habitable spaces*, measured between the external wall and furthest opposing wall, of less than 6 metres.

COMMENT:
Habitable spaces must not be naturally ventilated via an adjacent space that is a bathroom, kitchen, toilet or laundry.

41. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering. RFI1 response received 14/7/2021 contains a note stating that the dryer is to be self condensing and shows that the laundry tub is to be removed. Can I accept this. OK I consider it acceptable for occupants to have only a self condensing dryer. This answers Q40.

42. Entry, Kitchen, Living and Dining. Please revise calculation highlighted below the operable window area is well less than required.

G4 Ventillation Calculation

Apartment 1
BATHROOM **Room Size: 4m²** Req'd min. Opening Area (5%) = 4m² x 0.05 = **0.2 m²** **FAN Calculation** 4m² x 3.9 m height = **15.6m³** 15.6m² x 15 ARCH = **234m³/hr** 234m³/hr / 3.6 = **65 l/s**
FAN: 150mm Manrose Axial **105 l/s, 380m3/hr**
BEDROOM 1 **Room Size: 12.3 m²** Req'd min. Opening Area (5%) = 12.3 m² x 0.05 = **0.62 m²**
Total Opening Area: IJ0.01 = 2.90 m² = COMPLIES
ENTRY, KITCHEN,LIVING & DINING **Room Size: 41.1 m²** Req'd min. Opening Area (5%) = 41.1 m² x 0.05 = **2.1 m²**
Total Opening Area: W0.04 = 0.65 m² W0.05 = 0.76 m² TOTAL = 2.3 m² = COMPLIES

Ventilation of Apartment 2:

43. Bedroom 1 and Bedroom 2 both appear to be ventilated via another habitable space. Please revise as none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met.
44. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.

Ventilation of Apartment 3:

45. Is there a laundry tub proposed for apartment 3? If so please show on the floor plan.
46. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.
47. Bedroom 1 appears to be ventilated via another habitable space. Please revise as none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met.

Ventilation of Apartment 4:

48. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.
49. Bedroom 1 appears to be ventilated via another habitable space. Please revise as none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met.

Ventilation of Apartment 5:

50. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.

Ventilation of Apartment 6:

51. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.

G6 compliance.

52. You have indicated polished concrete floors to the upper apartments – please demonstrate how the required Impact Insulation Class rating of 55 or higher is achieved where upper level apartments are above habitable spaces in lower level apartments. RFI 1 response received 14/7/2021 contains amended plans now showing vinyl flooring to the upper level and a GIB system GBSJA45 to be installed to the ceiling below the system is shown on the plans is supporting documentaiton supplie yes – I am satiafied that this added below the existing concrete block wall achieves an ANARP IIC rating – It is worth noting that there are 2 layers of 13mm GIB Fyreline requried to the ceiling
53. Please demonstrate how the required STC ratings are achieved between tenancies on the ground floor. The GBTL 120 system indicated has an STC rating of 45. RFI 1 response received 14/7/2021 contains amended plans now showing a composite system as per the letter from GIB below – Drawings may be required to explain how this system is to work.

RFI 1 response received 14/7/2021 contains amended plans now showing - as this solution is from GIB themsleves I will accept it however I Please provide drawings/details as required to clearly show how the proposed GIB wall system is to be constructed – This system has been recommended by GIB to achieve a STC rating of 55 between the commercial and residential tenancies

54.

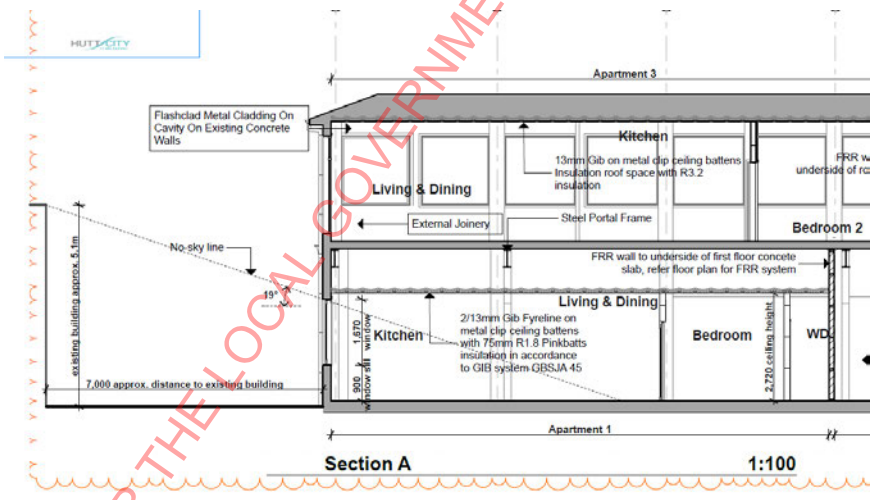
However it is possible with the ST-001 clip as long as furring channels are run vertically to support the plasterboard sheet joints.

Refer to two-way FRR – steel frame wall – acoustic resilient mount GBSIC 45a system page 53 GIB® Noise Control Systems 2017 manual
but replace the linings with 2/16mm GIB Fyreline® fixed as per two-way FRR – steel frame GBS 120a system page 42 of attached GIB® Fire Rated Systems 2018 manual.

G7: Natural light

Apartment 1: This apartment has just 1 external wall with windows.

55. Please demonstrate (by providing a cross section showing window heights) how the bedroom (habitable space) complies with the requirement for visual awareness of the outside environment. RFI 1 response received 14/7/2021 contains a cross section showing the room see below I cannot see how G7 is met for this bedroom.



56. Please demonstrate (by providing a cross section showing window heights) how the head height for windows complies with G7/AS1 part C. Please note a window area in excess of 10% of the floor area may be necessary. See above

Please also demonstrate whether the no sky condition applies for external glazing. If it does please provide a schedule of surface finishes for the floor ceiling and walls so high reflectance surfaces can be seen as per G7/AS1 clauses 1.02 to 1.04 See above

57. Apartment 2:

Please demonstrate how both the proposed bedrooms meet G7. Please demonstrate how the required levels of natural light and an awareness of the outside environment are met. RFI 1 response received 14/7/2021 contains a revised floor plan layout now each bedroom has an exterior window - The living area assessed and OK. – well over 10% floor area. This answers Q56

Apartment 3:

58. Bedroom 2: Please demonstrate how bedroom 1 meets the requirements of G7 for an awareness of the outside environment. Please include the size of the skylight in G7 calcs on sheet A37. RFI 1 response received 14/7/2021 contains a revised floor plan layout with skylight removed.

59. Bedroom 1 Please demonstrate how bedroom 1 meets the requirements of G7 for natural light. (borrowed light from windows W1.07, W1.08 and W1.09 provide daylight to this bedroom) Please show compliance with G7/AS1 clauses 1.02 to 1.04, please include any cross sections, schedule of floor ceiling and wall finishes showing surface reflectance's as required. RFI 1 response received 14/7/2021 contains a revised floor plan layout now showing a sun tunnel providing daylight to this room how does the sun tunnel provide the same daylight as a window that is 10% of the floor area – does the bollowed light make up a difference – an argument needs to be made. Please confirm the floor top ceiling glazing in IJ0.01 to provide an awareness of the outside.

Apartment 4:

60. Please add a G7 assessment of apartment 4 to sheet A37. Please include the size of the skylight in G7 calcs on sheet A37. Where is the assessment? You cannot just write complies. RFI 1 response received 14/7/2021 contains a revised floor plan layout now showing the skylight has been deleted.

61. Bedroom 1: Please demonstrate how bedroom 1 meets the requirements of G7 for natural light. (borrowed light from windows W1.04 and W1.05 provide daylight to this bedroom) Please show compliance with G7/AS1 clauses 1.02 to 1.04, please include any cross sections, schedule of floor ceiling and wall finishes showing surface reflectance's as required. RFI 1 response received 14/7/2021 contains a revised floor plan layout now showing a sun tunnel to bedroom 1 how does the sun tunnel provide the same daylight as a window that is 10% of the floor area – does the bollowed light make up a difference – an argument needs to be made. Please confirm the floor top ceiling glazing in IJ0.01 to provide an awareness of the outside.

62. F5:– no details provided on plans for how members of the public are prevented from climbing the stairs. RFI 1 response received 14/7/2021 contains a revised floor plan layout now showing a temp access door with digital lock – I am satisfied that access is restricted this answers Q61
63. Please show the location for the existing gas meter. RFI 1 response received 14/7/2021 contains a revised floor plan layout now showing location of the gas meter on the southern end of the service lane elevation and answers Q62
64. Potable water supply - as a fee simple subdivision is proposed individual supply for each lot will be required. Please provide a water supply plan showing locations of all water feeds to the 6 apartments and 2 commercial spaces. Please show all pipe sizes. Please show locations for water meters and tobies. And please show location of the backflow prevention device. RFI 1 response received 14/7/2021 contains a note stating that Envelope Engineering will be engaged to work on subdivision services, this will be applied as a separate application to council and wellington water for approval – Please provide finalised drawings from envelope for the finalised 3 waters as discussed.
65. Please revise notes referring to VT26 gas water heaters as a Rinnai HDi200 infinity is shown for each apartment RFI 1 response received 14/7/2021 contains a note stating this answering Q64

66. Please amend the plans to show all inspection points as required (before drains travel under building/SLAB, at all WC connection to drain) RFI 1 response received 14/7/2021 contains a note stating that Envelope Engineering will be engaged to work on subdivision services, this will be applied as a separate application to council and wellington water for approval
67. Please show the proposed minimum gradient for the DN150 drain. RFI 1 response received 14/7/2021 contains a note and revised plan the drain is to be DN100 – gradient shown as 1.65%
68. Please note you have shown a DN150 stack connecting to a DN100 drain please revise so a larger pipe does not connect to a smaller pipe. RFI 1 response received 14/7/2021 contains a note and revised plumbing plan the stack is DN100 not DN150
69. As there is potential for the two commercial units to become food outlets/cafes etc. Please consider running a greasy waste line alongside the sewer line that they are putting in for either or both of the two units to be able connect up to. Please also consider installing a communal grease trap at the rear of the building. Thank you for the suggestion, I think we will just leave it to the future owner to decide, so for this consent, we will not include the greasy waste and trap. OK
70. Based on the plans supplied you are providing a ground floor rubbish area for the upper level apartments. Please amend the plans as follows: RFI 1 response received 14/7/2021 contains responses to the points below and answers Q69 – check on the correct size requried. 4 Apartments to use this room. Carry distance acceptable. Size acceptable 2m2 floor area by 1m high requried

- Please label the ground floor rubbish area on the plan. Sighted amended plans showing clearly labelled rubbish room
- Please demonstrate how the ground floor rubbish area is to be adequately ventilated to the open air in compliance with NZBC G4. Vent added to this room up through ceiling an extracts via rood acceptable
- Please confirm the concrete floor will be graded at 1 in 50 to a floor drain. Sighted amended plans showing clearly labelled rubbish room floor graded
- finishes to Walls in spaces where storage bins are likely to receive food wastes and are subject to spillage shall be constructed of concrete, galvanised sheet steel, vinyl or similar material. Sighted amended plans showing vinyl flooring and wall covering OK
- How is the FWG in the ground floor rubbish area to be charged? Mop sink to discharge to it OK

71. Based on the details for installation of replacement joinery in concrete block walls you are strapping and lining internal walls and installing 45mm expol insulation. Please amend the wall framing notes to clearly show the full extent of this additional strapping and lining on the proposed floor plans for both levels. RFI Please revise sheets A14 and A16 to show walls to be strapped and lined.
72. How have you determined that condensation will not occur between the expol and the external concrete walls. RFI 1 response received 14/7/2021 contains a letter from Expol confirming the details as provided will prevent condensation on the concrete wall faces. Answering Q71 C/AS2 section 4.17.2 does this system have a group number as per C/AS2 table 4.3 and does the expanded foam. Check Natalie.
73. Please confirm the only timber framed external walls are to the Southern Elevation. Please add notes to the plans to state the framing specs and any insulation added to this external wall. RFI 1 response received 14/7/2021 contains a revised plan with clarification on location of new wall framing.

RFI2: sent 31 July 2021

Original RFI Question 4: Proposed type 4 and type 5 alarm systems. Please provide a layout plan from a suitably qualified person showing all detectors by type, sounder locations, location of the manual call point/s and fire alarm panel. Please provide evidence that Fire and Emergency have approved the proposed location for Multi Zone fire alarm panel as per NZS 4512:2010 Paragraph 403.1 This question not answered.

Please provide a layout plan from a suitably qualified person showing all detectors by type, sounder locations, location of the manual call point/s and fire alarm panel. ***Ask discussed with fire Engineer, It is intended to undertake the fire alarm install on a design build basis as is typical for projects of this scale. The fire alarm will be subject to***

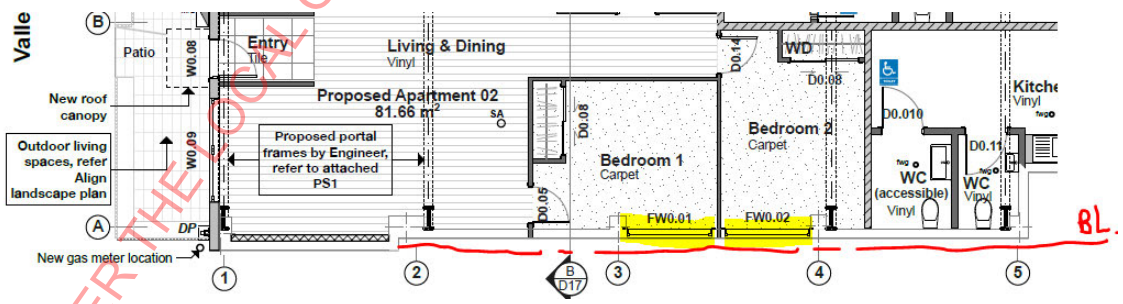
***independent certification of the design and install*. Please provide evidence that Fire and Emergency have approved the proposed location for Multi Zone fire alarm panel as per NZS 4512:2010 Paragraph 403.1** RFI2 response received 23/9/2021 contains a Fenz approved plan showing Fire Alarm Panel location provided.

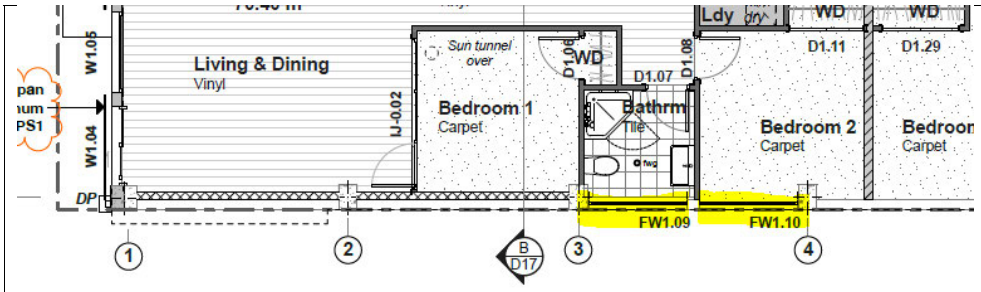
Original RFI Question 9. Please amend the plans to specify fire collars to both the stacks, plumbing wastes and other penetrations as required. Notes have been added to plans stating Hilti Collars and Sealant to be used for fire stopping penetrations .
You have procided test results

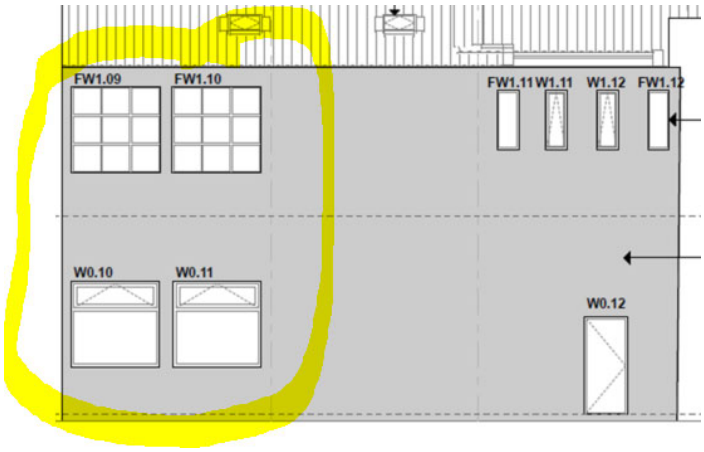
Further question: Please provide relevant data sheets for the proposed Hilti fire collars and Hilti 606 sealants. Not really answered. Checked website and the installation details supplied are the same as provided – actual instruction sheets are single page pictographic instructions and don't add anything to the documents supplied. I am satisfied that the enough information for installation of the fire collars has been supplied answering Original Q9.

Original RFI Question 10. Based on the plans supplied windows FW1.09, FW1.10, W0.10 and W0.11 are new replacement windows in walls within 1m of the boundary. Therefore please demonstrate how the proposed glazing is compliant with C/AS2 clause 5.2.4. Based on table 5.1 the maximum permitted size of fire resistant glazing is 1m² and figure 5.1 requires a separation distance between adjacent FR windows of at least the width of the wider window being installed. (see below)

Please note windows FW1.09 and FW1.10, W0.10 and W0.11 are located on or not far from the boundary (well within 300mm) and as such C/AS2 clause 5.2.4 is appropriate. Therefore please demonstrate how the proposed glazing is compliant with C/AS2 clause 5.2.4 Spoke with fire engineer and agreed that the question was moot. As discussed with fire Engineer, The windows in this case are to be fire rated window systems achieving an integrity and insulation rating. The referenced clause 5.2.4 deals with fire resistive glazing which is restricted as noted. However this is glazing which does not achieve an insulation rating (refer clause 5.4.2) and would be restricted as they could still cause fire spread via radiation from the window panel. But as stated this is not the system proposed and the intention is to install fire rated windows (i.e. achieving both integrity and insulation ratings), as similar to any door in an external wall etc.







Original RFI Question 11. Fire Rated windows and doors: Please provide manufacturers specifications for all external fire rated windows and doors. Please revise the window schedule to include the manufacturer of the windows, the particular model or type, and their proposed FRR ratings.
Your response contains a revised door and window schedule now stating the actual FR windows and doors to be installed. (sheet 28) with details for installation of FR windows and doors added to sheet 49. Product information from Pacific doors has been supplied for the following window and door sets:

- Pacific PFW60 Fuego-Light Steel Fire Window -/60/30
- Pacific VP120 Hinged Door Set -/120/60sm
- Pacific VP60A Door Set -/60/60sm

Further 3 questions:

- **Regarding FW0.03 Please show an insulation rating of 60min for this door on the door and window schedule. Sighted 60min for insulation OK**
- **Please also amend the door and window schedule so hardware for all doors is specified. Noted on plans now and specs supplied answering original Q11**
- **Please provide manufacturers specs for this hardware. Noted on plans now and specs supplied answering original Q11**

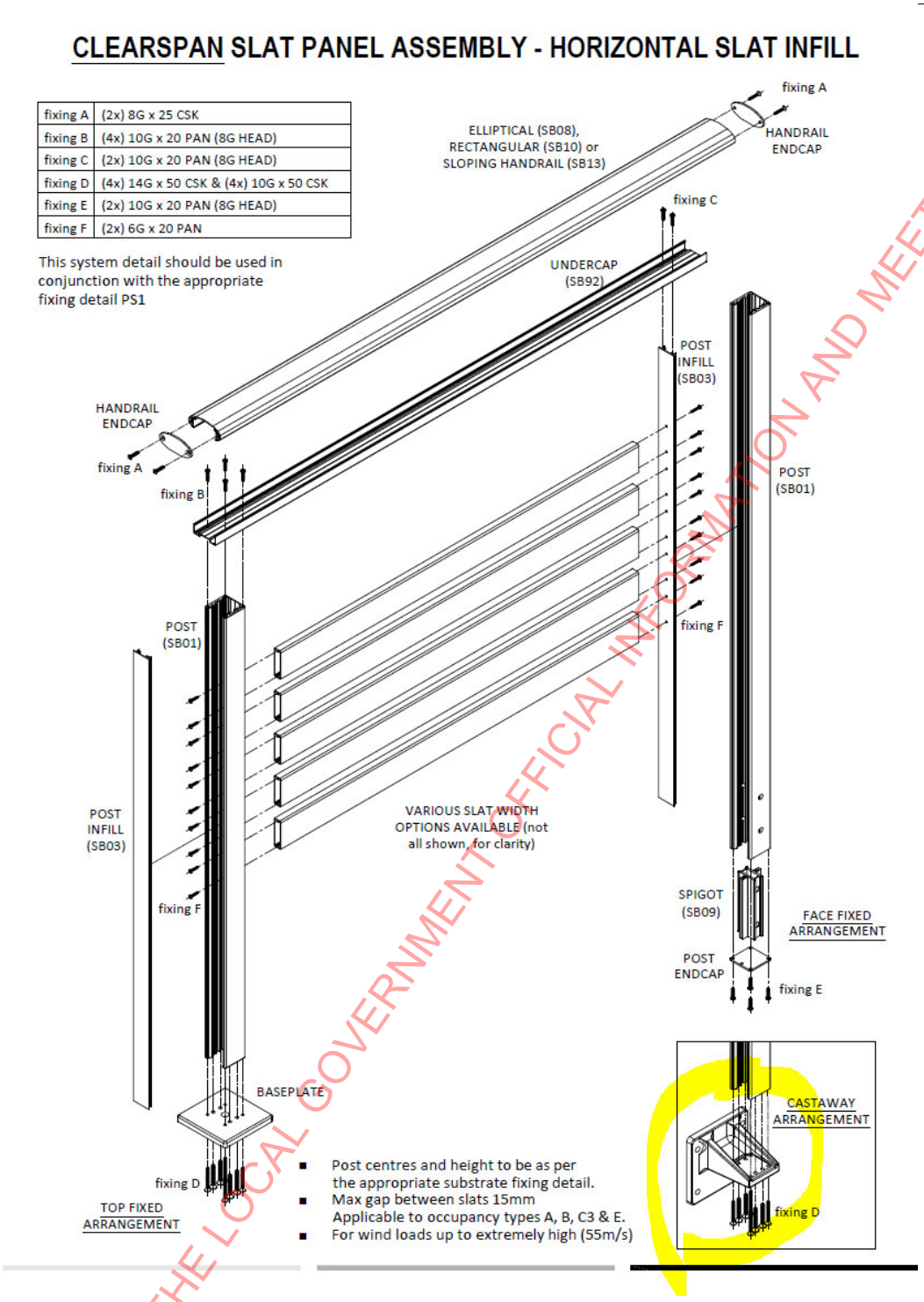
Original RFI Question 17. Please provide manufacturers documentation demonstrating the proposed carpet, vinyl and floor boards meet the minimum critical heat flux value of 2.2 see 2.2kW/m². Your response indicates no flooring selections have been made as yet -

Further question: the flooring products must be specified and product data in support of the minimum

critical radiant flux supplied. RFI1 response received 23/9/2021 contains specifications for various flooring products as follows:
Amor Classic Laminate plank flooring – 6.1kW/m2 OK.
Empire Direct stick carpet 6.5 kW/m2
Cable bay over underlay 2.7 kW/m2
Original Q17 answered

Original RFI Question 30: Barriers to opening doors(see below) Please dimension the height of the barrier above FFL. Please provide construction details and show fastening details to the building, and label materials to be used. Please demonstrate how these barriers comply with F4 as the gaps in horizontal members appear to allow for climbing.
You have shown the barrier height and provided product data including a PS1 for the infill balustrade system.

Further Question: Please provide fixing details for the Clearspan infill and the exterior wall. The PS1 supplied and sheet BL.2.1.9 does not specify this fixing. RFI1 response received 23/9/2021 contains a fixing detail and (generic) PS1 to cover this detail for the fixing of the cast away bracket. The generic PS1's supplied for the entrance canopy and the horizontal slat system state they are valid for a BC issued 2 years after date on the PS1's which are 2020 so acceptable however the PS1 for the castaway bracket is dated 16/8/2019 and should be updated.



G4: Ventilation Questions 39 – 50 covers ventilation of apartments by mechanical ventilation – A combination of DVS systems and operable windows now shown to the 6 apartments. This answers Q39-50.

New Question: Please also demonstrate how the ventilation requirements of G4 are to be met for the 2 retail tenancies. RFI1 response received 23/9/2021 contains a quote for a DVS system for the commercial tenancies. Based on the size of the 2 office spaces the system can deliver air at the required l/s from Table 2 of NZS4303:1990 Table checked for office space and OK – no separate reception areas are shown

on the floor plans – if retail then the unit might need to run at slightly higher than 70% to achieve 1.5l/s for the 102m2 space. However the occupancy stated is office not retail so accepted. Separate extraction is shown for the bathrooms and kitchens OK. Positive pressure will be maintained for both office spaces Accepted.

Original RFI Q53: Please demonstrate how the required STC ratings are achieved between tenancies on the ground floor. The GBTL 120 system indicated has an STC rating of 45. Your response contains amended plans now showing a composite system as per the letter from GIB below – Drawings may be required to explain how this system is to work.

Further Question: Please provide drawings/details as required to clearly show how the proposed GIB wall system is to be constructed – This system has been recommended by GIB to achieve a STC rating of 55 between the commercial and residential tenancies. RFI2 response received 23/9/2021 contains this detail noted answering Q53.

However it is possible with the ST-001 clip as long as furring channels are run vertically to support the plasterboard sheet joints.

Refer to two-way FRR – steel frame wall – acoustic resilient mount GBSIC 45a system page 53 GIB® Noise Control Systems 2017 manual
but replace the linings with 2/16mm GIB Fyreline® fixed as per two-way FRR – steel frame GBS 120a system page 42 of attached GIB® Fire Rated Systems 2018 manual.

Original RFI1 Questions 55, 56 and 57 relate to achieving G7 compliance to apartment 1.

Please make an ANARP argument outlining measures taken to achieve the best possible daylight levels and awareness of the outside for bedroom 1 within this apartment.
Please note any increase in existing windows to the exterior wall, any internal joinery allowing for a view through to the outside and any high reflectance paint finishes that are proposed in your ANARP argument. RFI2 response received 23/9/2021 contains the following response - *Apartment 1 Bedroom room has been relocated to be closer to the northern side window to ensure daylight access through internal window/door to as practical as possible, please refer A14, and A22 – Accepted. The change in layout brings the bedroom closer to the windows in external walls OK.* **Need to see the actual ANARP argument.**

Apartment 3 bedroom 1 and Apartment 4 bedroom 1: achieving G7 compliance to apartments 3 and 4

For both these bedroom please make an ANARP argument for G7 compliance in terms of daylight levels and an awareness of the outside. Please note any increase in existing windows to the exterior wall, any internal joinery allowing for a view through to the outside, the inclusion of sky tunnels, and any high reflectance paint finishes that are proposed in your ANARP argument. Need to see the actual ANARP argument though.

Original RFI1 Question 63 - Potable water supply - as a fee simple subdivision is proposed individual supply for each lot will be required. Please provide a water supply plan showing locations of all water feeds to the 6 apartments and 2 commercial spaces. Please show all pipe sizes. Please show locations for water meters and tobies. And please show location of the backflow prevention device. You have indicated that Envelope Engineering will be engaged to work on subdivision services, this will be applied as a separate application to council and wellington water for approval

Please provide drawings from envelope for the finalised 3 waters as discussed. RFI2 response received

23/9/2021 contains a proposed 3 waters plan for subdivision. Spoke with Andrew from Tadworks and they are going to go for a unit title subdivision with a body corp for 8 titles - 2 offices and 6 apartments. Ryan Rose (Envelope) doing the 3 waters. They proposed 2 of 40mm OD rider mains to get the required capacity. SORG that the proposed water supply is satisfactory to service 6 apartments and 2 units. Check with Jarrod Ward regards compliance schedule stuff.

Original RFI1 Questions 70 - Based on the details for installation of replacement joinery in concrete block walls you are strapping and lining internal walls and installing 45mm expol insulation. Please amend the wall framing notes to clearly show the full extent of this additional strapping and lining on the proposed floor plans for both levels. Plans supplied don't show the [proposed strapped and lined walls.

Please revise sheets A14 and A16 to show walls to be strapped and lined. RFI2 response received 23/9/2021 contains a clear note to plans that all concrete walls for the apartment are to be strapped and lined as per the spec below this answers original Q70

Original RFI1 Questions 71 - How have you determined that condensation will not occur between the expol and the external concrete walls. You have supplied a letter from Expol confirming the details as provided will prevent condensation on the concrete wall faces.

Further question: Please provide confirmation from EXPOL that the proposed insulation is non combustable or Please confirm that the completed system – ie GIB lining over expol has the required group rating as specifed in C/AS2 table 4.3 – RFI2 response received 23/9/2021 contains confirmation from Expol that the insulation is non combustable answering original question 71 RFI2

RFI3: Further questions emailed 30/9/2021

Original RFI Question 30: Barriers to opening doors (see below) Please dimension the height of the barrier above FFL. Please provide construction details and show fastening details to the building, and label materials to be used. Please demonstrate how these barriers comply with F4 as the gaps in horizontal members appear to allow for climbing.
You have shown the barrier height and provided product data including a PS1 for the infill balustrade system.

Further Question: Please provide fixing details for the Clearspan infill and the exterior wall. The PS1 supplied and sheet BL.2.1.9 does not specify this fixing. RFI1 response received 23/9/2021 contains a fixing detail and (generic) PS1 to cover this detail for the fixing of the cast away bracket. The generic PS1's supplied for the entrance canopy and the horizontal slat system state they are valid for a BC issued 2 years after date on the PS1's which are 2020 so acceptable however the PS1 for the castaway bracket is dated 16/8/2019 and should be updated. Updated PS1's supplied answering this question.

Please make an ANARP argument outlining measures taken to achieve the best possible daylight levels and awareness of the outside for bedroom 1 within this apartment.
Please note any increase in existing windows to the exterior wall, any internal joinery allowing for a view through to the outside and any high reflectance paint finishes that are proposed in your ANARP argument. RFI2 response received 23/9/2021 contains the following response - *Apartment 1 Bedroom room has been relocated to be closer to the northern side window to ensure daylight access through internal window/door to as practical as possible,*

please refer A14, and A22 – Accepted. The change in layout brings the bedroom closer to the windows in external walls OK. **Need to see the actual ANARP argument. This argument supplied and accepted answering this question.**

BC No 210296

Alternative Solutions	**Code Clause**
Refer ECB-WI-005, as presented by applicant for building consent ☐ Plumbing and Drainage ☒Building	B1 B2 E2 F2

Proposal:

. Sections of concrete block exterior wall are being clad in the Flashman vertical weatherboard cavity system. The system includes vertically fixed DUALBORD and EUROBORD weatherboards, cavity battens, internal and external corner flashings, starter strips, cladding jointers, joinery flashings and accessories. Branz appraisal 829(2020) supplied.

Expert Opinion:

The following testing on the Flashclad Horizontal Weatherboard Cavity Cladding System has been completed by BRANZ: The Flashclad Horizontal Weatherboard Cavity Cladding System has been tested to NZBC Verification Method E2/VM1.

Uniform wind face load tests to simulate wind pressures on BEVELBORD and EUROBORD weatherboard were carried out by BRANZ. BEVELBORD when fixed to framing at 600 mm centres achieved a design differential pressure of 3.84 kPa. EUROBORD when fixed to framing at 800 mm centres achieved a design differential pressure of 4.3 kPa. The results were used in assessing the Flashclad Horizontal Weatherboard Cavity Cladding System.

Decision:

. The scope of use in this project falls within the scope limitations of the branz appraisal 829(2020)

Review:

Assessor:
Name: Lyall Huizer

Signature: Lyall Huizer

Moderator:
Name:

Signature:

BC210298

Alternative Solutions	Code Clause
Refer ECB-WI-005, as presented by applicant for building consent ☐ Plumbing and Drainage ☒Building	B1 B2 E2 F2

Proposal:

. Sections of concrete block exterior wall are being clad in the Flashman cladding system which utilises the Flashman window and door flashing system. Branz appraisal 573 (2013) supplied.
The Flashman Window and Door Flashing System is a complete window and door flashing system for use in cavity construction. The system consists of an extruded aluminium cavity closure head flashing, jamb and sill flashings and flashing accessories.

Expert Opinion:

BRANZ expert opinion on NZBC E2 code compliance for the Flashman Window and Door Flashing System was based on testing and evaluation of all details within the scope and as stated within this Appraisal. The Flashman Window and Door Flashing System was tested to NZBC Verification Method E2/VM1 to verify the systems performance in NZS 3604 Wind Zones up to, and including Extra High and specific design wind pressures up to an ultimate limit state (ULS) of 2.5 kPa. The testing assessed the performance of the window head, jamb and sill details, for weatherboard,
EIFS, fibre cement and stucco plaster systems. In addition to the weathertightness test, the details contained within the Technical Literature have been reviewed, and an opinion has been given by BRANZ technical experts that the system will meet the performance levels of NZBC Acceptable Solution E2/AS1 for drained cavity claddings.

Decision:

. The scope of use in this project falls within the scope limitations of the branz appraisal 573. (2013)

Review:

Assessor:
Name: Lyall Huizer

Signature:

Moderator:
Name:

Signature:

BC No 210296

Compliance Schedule Changes Yes	**Compliance Schedule Number(if known)** **CS1249**

☒ New draft compliance schedule	☐ No changes to extent or additional systems	☐ Alteration to extent/system or additional systems

General:	Lawful use: retail
Owner/property details:218 Willis Ltd(owner) 221-223 High Street, Hutt Central – Lower Hutt	FHC:2
Levels;2	Occupancy: Current 100 Proposed 70
Year constructed: Circa 1954	Purpose groups: CM and SR

Proposed new/altered removed specified systems

Specified System	**To be installed/altered/removed/not required**
SS 1 Automatic systems for fire suppression	
SS 2 Automatic or manual emergency warning systems for fire or other emergencies	**New system**
SS 3 Electromagnetic or automatic doors or windows	
SS 4 Emergency lighting systems	**New System**
SS 5 Escape route pressurisation systems	
SS 6 Riser mains for use by fire services	
SS 7 Automatic back-flow preventers connected to a potable water supply	**New System**
SS 8 Lifts, escalators, travelators, or other systems for moving people or goods within buildings	
SS 9 Mechanical ventilation or air conditioning systems	**New Systems**
SS 10 Building maintenance units providing access to exterior and interior walls of buildings	
SS 11 Laboratory fume cupboards	
SS 12 Audio loops or other assistive listening systems	

SS 13 Smoke control systems	
SS 14 Emergency power systems for, or signs relating to, a system or feature specified in any of SS 1 to SS 13 above	**New**
SS 15 Other fire safety systems or features (systems for communicating information intended to facilitate evacuation, final exits, fire separations, signs, smoke separations)	**SS15/2 altered** **SS15/3 fire separations existing altered and new.** **SS15/4 New signage**
SS 16 Cable cars	

Any other comments regarding compliance schedules

BWOF Officer

Name:

Signature:

Building Officer

Name: Lyall Huizer

Signature: Lyall Huizer

Below is appendix B as provided by the agent.

Ph 04 899 0800
Andrew: 0273103404
E-mail: andrew@tadworks.co.nz

Appendix B List of Specified Systems					
The following specified systems are existing, being altered, added to, or removed in the course of the building work		**Status**	**Performance standards**	**Inspection & maintenance procedures**	**Reporting frequency**
Structural Performance					
SS2	Automatic or manual emergency warning systems for fire or other dangers	New	NZS 4512: 2010	Part 6 NZS4512: 2010	Monthly checks as per Clause 602 and Annual checks as per Clause 603 of NZS 4512:2010.
SS4	Emergency lighting systems	New	AS/NZS2293.1 : 2005	AS/NZS2293.2: 1995	Six Monthly and Twelve Monthly inspections by IQP to AS/ NZS2293.2:1995 Section 3.
SS7	Automatic backflow preventers connected to a potable water supply	Add/New	AS/NZS 2845.1	AS 2845.3	Testing: Annually
SS14.2	Signs for system	New	F8/AS1 Amendment 4 (effective 1 January 2017)	Inspection and maintenance procedures to ensure all signs are of the correct type, present in the right locations, legible, clearly visible and unobstructed. Signs shall be refurbished before they become illegible, and shall be replaced immediately should they be missing.	Monthly by owner and Annually by IQP
SS15.2	Final exits	Altered	Paragraph 3.15 of the acceptable solutions C/AS2 to C/AS6(2019)	Inspections and maintenance procedures in accordance with the details on pages 49 - 50 in the MBIE Compliance Schedule Handbook, Amendment 3	Monthly by owner and annual by IQP

Ph 04 899 0800
Andrew: 0273103404
E-mail: andrew@tadworks.co.nz

SS15.3	Fire Separation	Altered /New	For walls, floors and ceilings: Structural adequacy/ Integrity/ *Fire Resistance Rating* defined by C/AS2 for Buildings other than Risk Group SH, First edition 2019 Paragraph 4.9.2 & Section 2.3 For fire doors: Integrity/ Insulation & NZS 4520:2010 Fire resistant door sets	Owner to undertake visual inspection of fire partitions including doors to ensure their proper operation Inspections and maintenance procedures in accordance with the details on pages 50 – 51 in the Ministry of Business, Innovation and Employment Compliance Schedule Handbook, Amendment 3 Section 7, Appendix A & Appendix C of NZS 4520:2010 Fire resistant door sets	Monthly by Owner, 6 monthly and annual by IQP
SS15.4	Signs for communication information intended to facilitate evacuation	New	F8/AS1 Amendment 4 (effective 1 January 2017) (Section 4)	Inspection and maintenance procedures to ensure all signs are of the correct type, present in the right locations, legible, clearly visible and unobstructed. Signs shall be refurbished before they become illegible, and shall be replaced immediately should they be missing. Defects in illuminated signs shall be replaced immediately they are apparent.	Monthly by owner and annual by IPQ

SS 1 Automatic systems for fire suppression n/a

Back to Index

SS 2 Automatic or manual emergency warning systems for fire or other emergencies yes

2B

System description: Analogue Addressable FAP with Amplified Sounders ☐ Type 3 automatic fire alarm system activated by heat detectors and manual call points to NZS 4512 ☒ Type 4 automatic fire alarm system activated by smoke detectors and manual call points to NZS 4512 ☒ Type 5 automatic fire alarm system with modified smoke detection and manual call points to NZS 4512	**System modified by:** ☐ Existing ☒ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s): Type 5 in apartments, Type 4 in retail and common property	

Performance standards:	NZS 4512:2010		
Inspection, maintenance and reporting procedures:	*(As required by the performance standard above)*		
Frequency of inspections:	Monthly		Annually
Maintained and inspected by:	Independent qualified person		Independent qualified person

Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:

Back to Index

SS 3 Electromagnetic or automatic doors or windows

3A

System description: ☐ Automatic sliding doors ☐ Powered doors for pedestrian access and egress ☐ Automatic revolving doors	**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):	

Performance standards:	☐ NZS 4239:1993 (automatic sliding doors), ☐ AS 5007:2007 (powered doors for pedestrian access and egress)

	☐ AS 4290:2000 (automatic revolving doors)		
Inspection, maintenance and reporting procedures:	**Daily and monthly inspections:** Doors should be inspected to ensure they can be opened and that they are not; locked, barred or blocked Full inspections and maintenance procedures in accordance with the details on page 22 in the Ministry of Business, Innovation and Employment Compliance Schedule Handbook, Amendment 3.		
Frequency of inspections:	Daily	Monthly	Annually
Maintained and inspected by:	Owner (for crowd occupancies with multiple exits and more than one level)	Independent qualified person (for crowd occupancies) Owner (other occupancies)	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

3B

System description: Access controlled doors			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	Meet the requirements of paragraphs 3.15.2 and 3.15.7, C/AS2 (2019)		
Inspection, maintenance and reporting procedures:	**Daily and monthly inspections:** Doors should be inspected to ensure they can be opened and that they are not; locked, barred or blocked Full inspections and maintenance procedures in accordance with the details on page 23 in the Ministry of Business, Innovation and Employment Compliance Schedule Handbook, Amendment 3		
Frequency of inspections:	Daily	Monthly	Annually
Maintained and inspected by:	Owner (for crowd occupancies with multiple exits and more than one level)	Independent qualified person (for crowd occupancies) Owner (other occupancies)	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

3C

System description: Interfaced fire or smoke doors or windows where the door or window is designed to close on the activation of the building emergency warning system or detection device			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	Specific design to meet the requirements of paragraphs 3.15.9 and 3.15.10, C/AS2 (2019)		
Inspection, maintenance and reporting procedures:	Inspections and maintenance procedures in accordance with the details on page 24 in the Ministry of Business, Innovation and Employment Compliance Schedule Handbook, Amendment 3		
Frequency of inspections:	Daily	Monthly	Annually
Maintained and inspected by:	Owner (for crowd occupancies with multiple exits and more than one level)	Independent qualified person (for crowd occupancies) Owner (other occupancies)	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

Back to Index

SS 4 Emergency lighting systems

4A

System description: Emergency lighting system to AS 2293 Part 1 and 3			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s): common areas and public spaces to meet correct light admittance, PS1 to be supplied for design			
Performance standards:	F6/AS1 Amendment 4 Effective 1 January 2017 AS/NZS 2293.1 & 3:1995 Emergency evacuation lighting for buildings - System design, installation and operation - Emergency luminaires and exit signs		
Inspection, maintenance and reporting procedures:	AS/NZS 2293 Part 2: Emergency lighting and exit signs for buildings - Part 2: Routine service and maintenance.		
Frequency of inspections:		6-monthly	Annually

Maintained and inspected by:		Independent qualified person	Independent qualified person

4B

System description: Emergency lighting system to NZS 6742 (older systems installed between 1971 to 1995)			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	NZS 6742:1971		
Inspection, maintenance and reporting procedures:	*(As required by the performance standard above)*		
Frequency of inspections:		6-monthly	Annually
Maintained and inspected by:		Independent qualified person	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

Back to Index

SS 5 Escape route pressurisation systems

5A

System description: Air pressurisation systems pressurising escape routes and safe paths			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	AS/NZS 1668.1:1998		
Inspection, maintenance and reporting procedures:	AS 1851:2012		
Frequency of inspections:	Monthly		Annually
Maintained and inspected by:	Independent qualified person		Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance			

standards and consideration of the proposed inspection , maintenance and reporting requirements:

SS 6 Riser mains for use by fire services

6A

System description: Riser mains / hydrant systems to NZS 4510			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	NZS 4510:2008		
Inspection, maintenance and reporting procedures:	*(As required by the performance standard above)*		
Frequency of inspections:			Annually
Maintained and inspected by:			Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

SS 7 Automatic back-flow preventers connected to a potable water supply

7A

System description: Automatic backflow preventer to AS/NZS 2845.1 connected to potable water supply			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	AS/NZS 2845.1:2010		
Inspection, maintenance and reporting procedures:	Field testing and maintenance of testable devices as specified by AS 2845.3:2010 and NZ backflow testing standard 2011		
Frequency of inspections:			Annually
Maintained and inspected by:			Independent qualified person

Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:

Back to Index

SS 8 Lifts, escalators, travelators, or other systems for moving people or goods within buildings

8A

System description: Passenger and goods lifts			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	☐ NZS 4332:1997 and modified by D2/AS1 ☐ EN 81-20: 2014 and modified by D2/AS1		
Inspection, maintenance and reporting procedures:	☐ Inspections and maintenance procedures carried out in accordance with the requirements of the checklist on pages 30 - 32 in the Ministry of Business, Innovation and Employment Compliance Schedule Handbook, Amendment 3 ☐ Inspections and tests carried out annually in accordance with EN 81-20, Annex C.1 ☐ Manufacturer's Maintenance Schedule		
Frequency of inspections:			Annually
Maintained and inspected by:			Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

8B

System description: Platform lifts and low-speed lifts	**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):	

Performance standards:	NZS 4334:2012		
Inspection, maintenance and reporting procedures:	Inspections and routine maintenance to be carried out in accordance with the requirements of Appendix A of NZS 4334:2012.		
Frequency of inspections:			Annually
Maintained and inspected by:			Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

8C

Back to Index

SS 9 Mechanical ventilation or air conditioning systems

9A

System description: ☐ Mechanical ventilation system ☒ Mechanical extraction system ☐ Includes fire and smoke control interfaced with fire alarm			**System modified by:** ☐ Existing ☒ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s): Extraction from bathrm and ldy ground floor apt. Extraction from bathrm and Kitchen ground floor apt. Extraction from WC and Kitchenette Comm 01. Extraction from WC and Kitchenette Comm 02.			
Performance standards:	☐ NZS 4303:1990 for mechanical ventilation with outdoor air ☐ AS 1668.2:2002 for mechanical ventilation with outdoor air ☐ AS 1668.2:2002 for mechanical extraction systems ☐ AS/NZS 3666.1:2011 for air-handling system ☐ AS/NZS 1668.1:1998 for fire and smoke control		
Inspection, maintenance and reporting procedures:	☐ Inspection and maintenance of system hygiene to AS/NZS 3666.2:2011 ☐ Fire and smoke control features to Section 13, AS 1851:2012		
Frequency of inspections:	Monthly	3 monthly	Annually
Maintained and inspected	Independent qualified	Independent qualified	Independent qualified

by:	person	person	person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

9B

System description: Cooling tower connected to HVAC plant		**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)	
Location(s):			
Performance standards:	AS/NZS 3666.1:2011		
Inspection, maintenance and reporting procedures:	Inspections and testing to ensure adequate chemical control is being achieved in the water in cooling towers to be performed as detailed on pages 39 – 40 in the Ministry of Business, Innovation and Employment Compliance Schedule Handbook, Amendment 3.		
Frequency of inspections:		Monthly	Annually
Maintained and inspected by:		Independent qualified person	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

9C

System description: CO_2 detection in enclosures used by vehicles		**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)	
Location(s):			
Performance standards:	Section 7, AS 1668.2:2002		
Inspection, maintenance and reporting procedures:	Appendix M, AS 1668.2 Supplement 1-2002		
Frequency of inspections:		Monthly	Annually
Maintained and inspected		Independent qualified	Independent qualified

by:		person	person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

9D

Back to Index

SS 10 Building maintenance units providing access to exterior and interior walls of buildings

10A

System description: Building maintenance units that provides access to exterior or interior walls of a building, is installed as part of the building, and is mechanical, electrical, or hydraulic in nature			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	☐ BS 6037.1:2017 for suspended access equipment ☐ BS 6037.2:2004 for travelling ladders and gantries		
Inspection, maintenance and reporting procedures:	*(As required by the performance standard above)*		
Frequency of inspections:		3 monthly	Annually
Maintained and inspected by:		Independent qualified person	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

Back to Index

SS 11 Laboratory fume cupboards

11A

System description: Laboratory fume cupboards		**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):		
Performance standards:	☐ AS/NZS 2243.8:2006 for ducted fume cupboard systems	

	☐ AS/NZS 2243.1:2005 for local ventilation systems (fume hoods and plenums)		
Inspection, maintenance and reporting procedures:	*(As required by the performance standard above)*		
Frequency of inspections:		Monthly	Annually
Maintained and inspected by:		Independent qualified person	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

SS 12 Audio loops or other assistive listening systems

12A

System description: ☐ Audio loops ☐ FM radio frequency systems ☐ Infrared beam transmission systems ☐ Wi-Fi based systems			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	☐ AS 60118.4:2007 for audio loops ☐ Specific design to meet Appendix H, NZS 4121:2001		
Inspection, maintenance and reporting procedures:	Inspections and maintenance procedures in accordance with the details on pages 43 – 44 in the Ministry of Business, Innovation and Employment Compliance Schedule Handbook, Amendment 3.		
Frequency of inspections:		6 monthly	Annually
Maintained and inspected by:		Independent qualified person	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

SS 13 Smoke control systems

13A

System description: Mechanical smoke control to AS/NZS 1668.1			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	AS/NZS 1668.1:1998		
Inspection, maintenance and reporting procedures:	Inspections and maintenance procedures as specified AS 1851:2012		
Frequency of inspections:		Monthly	Annually
Maintained and inspected by:		Independent qualified person	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

13B

System description: Natural Smoke Control			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	AS/NZS 1668.1:1998		
Inspection, maintenance and reporting procedures:	☐ Inspections and maintenance procedures as specified AS 1851:2012 ☐ In accordance with the details on pages 45 - 46 in the Ministry of Business, Innovation and Employment Compliance Schedule Handbook, Amendment 3		
Frequency of inspections:	Monthly	6 monthly	Annually
Maintained and inspected by:	Owner	Independent qualified person	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

13C

System description: Smoke curtains			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	EN 12101		
Inspection, maintenance and reporting procedures:	☐ Inspections and maintenance procedures as specified AS 1851:2012 ☐ In accordance with the details on pages 46 - 47 in the Ministry of Business, Innovation and Employment Compliance Schedule Handbook, Amendment 3		
Frequency of inspections:		6 monthly	Annually
Maintained and inspected by:		Independent qualified person	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection, maintenance and reporting requirements:			

Back to Index

SS 14 Emergency power systems for, or signs relating to, a system or feature specified in any of SS 1 to SS 13 above

14A

System description: Emergency power systems required for any specified system listed on this compliance schedule e.g. an engine alternator set for a sprinkler system pressure boost pump, uninterruptible power supply for an emergency lighting system, an engine alternator set for provisions of electrical supply to passenger lifts or an engine alternator set for provision of electrical supply to a smoke clearance system			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	NZS 6104:1981		
Inspection, maintenance and reporting procedures:	*(As required by the performance standard above)*		
Frequency of inspections:		Monthly	Annually
Maintained and inspected		Independent qualified	Independent qualified

by:		person	person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

14B

System description: Signs relating to a system or feature listed on this compliance schedule e.g. fire alarm call points, automatic doors, access control doors, lifts or assistive listening systems			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	F8/AS1 Amendment 4 Effective 1 January 2017 F8.3.1, F8.3.2 and F8.3.3		
Inspection, maintenance and reporting procedures:	Inspection and maintenance procedures to ensure all signs are of the correct type, present in the right locations, legible, clearly visible and unobstructed. Signs shall be refurbished before they become illegible, and shall be replaced immediately should they be missing.		
Frequency of inspections:	Owner or independent qualified person		Annually
Maintained and inspected by:	Dependent on the specified system they are attached to		Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

Back to Index

SS 15 Other fire safety systems or features (systems for communicating information intended to facilitate evacuation, final exits, fire separations, signs, fire separations)

15/1

System description: Emergency warning intercommunications system as part of emergency warning systems for fire or other emergencies	**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):	

Performance standards:	☐ AS 1670.4:2004 ☐ NZS 4512:2010		
Inspection, maintenance and reporting procedures:	☐ AS 1851:2012 ☐ NZS 4512:2010		
Frequency of inspections:		Monthly	Annually
Maintained and inspected by:		Independent qualified person	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

15/2

System description: Final exit doors			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	☐ Paragraph 3.15 of the acceptable solutions C/AS2 to C/AS6(2019) ☐ NZS 1900 (for buildings built and as altered prior to the introduction of the Building Act)		
Inspection, maintenance and reporting procedures:	Inspections and maintenance procedures in accordance with the details on pages 49 - 50 in the Ministry of Business, Innovation and Employment Compliance Schedule Handbook, Amendment 3		
Frequency of inspections:	Daily	Monthly	Annually
Maintained and inspected by:	Owner (for crowd occupancies with multiple exits and more than one level)	Independent Qualified Person (for crowd occupancies) Owner (other occupancies)	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

15/3

System description: Fire separations protecting a means of escape			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	☐ Part 4, C/AS2 (2019) ☐ NZS 1900 (for buildings built and as altered prior to the introduction of the Building Act)		
Inspection, maintenance and reporting procedures:	Owner to undertake visual inspection of fire partitions including doors to ensure their proper operation Inspections and maintenance procedures in accordance with the details on pages 50 – 51 in the Ministry of Business, Innovation and Employment Compliance Schedule Handbook, Amendment 3		
Frequency of inspections:	Monthly	6 monthly	Annually
Maintained and inspected by:	Owner	Independent Qualified Person	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

15/4

System description: Signs at all final exit points and throughout escape routes			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	F8/AS1 SIGNS Amendment 4 Effective 1 January 2017 F8.3.1, F8.3.2 and F8.3.3		
Inspection, maintenance and reporting procedures:	Inspection and maintenance procedures to ensure all signs are of the correct type, present in the right locations, legible, clearly visible and unobstructed. Signs shall be refurbished before they become illegible, and shall be replaced immediately should they be missing. Defects in illuminated signs shall be replaced immediately they are apparent.		
Frequency of inspections:		Monthly	Annually

Maintained and inspected by:		Owner	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

15/4

System description: Photoluminescent signs and escape path marking			**System modified by:** ☐ Existing ☐ New ☐ Altered ☐ Added ☐ Removed (select as required)
Location(s):			
Performance standards:	Paragraph 4.5.4, F8/AS1		
Inspection, maintenance and reporting procedures:	All products are still configured as at installation and there is no material damage to any of these products. All products are clean from general dust build up and any other specific obscuring deposits. All products are clearly visible and have not been covered up by carpet or other materials. All products mark a clear path and have not been obstructed by physical hazards such as trolleys, machinery, partitions, etc. All products can be used to provide clear escape path marking and there has been no change to the configuration of the building which renders the escape path unusable. All light required to charge the product is operation as designed at installation		
Frequency of inspections:		Monthly	Annually
Maintained and inspected by:		Owner	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

15/5

System description: Smoke separations that form part of the means	**System modified by:** ☐ Existing ☐ New ☐ Altered ☐

of escape from fire			Added ☐ Removed (select as required)
Location(s):			
Performance standards:	☐ EN 12101.1:2005 and Appendix C, C/AS2 (2019) ☐ NZS 1900 for buildings built and as altered prior to the introduction of the Building Act		
Inspection, maintenance and reporting procedures:	Owner to ensure smoke separations shall be maintained at all times in a safe condition with particular attention to proper operation of smoke control doors. Full inspection and maintenance procedures in accordance with the details on pages 51 - 52 in the Ministry of Business, Innovation and Employment Compliance Schedule Handbook, Amendment 3.		
Frequency of inspections:	Monthly	6 monthly	Annually
Maintained and inspected by:	Owner	Independent qualified person (crowd occupancies)	Independent qualified person
Building Officer consideration of appropriateness of proposed specified systems and their performance standards and consideration of the proposed inspection , maintenance and reporting requirements:			

SS 16 Cable cars

Back to Index

16A

PRODUCER STATEMENT PS1 CHECKLIST -

The following checksheet provides some examples to provide context. These examples are not an exhaustive list. Wider judgement needs to be applied when considering the suitability of a Producer Statement.

Building Code Clause/s: (have consideration if B2 should be included for specific design elements)	B1 – Ok not in seaspray exposure zone.	
Has the initial section been correctly completed? (Issued by, To, To be supplied to, In respect of, At)	☐ Yes ☒ No (RFI) Please enter the Lots and DP number into the PS1 as supplied.	
Is the PS1 covering 'All' or 'Part only' of the works associated with the consent for the selected code clause?	**All** ☐ When no other work is being carried out in relation to the code clause 'all' should be selected.	**Part only** ☒ If 'Part only' is selected, it needs to be clearly outlined what specific work relating to the code clause is covered. **Description**: Structural design of Specific Items.
Are the services they're engaged to provide an accurate reflection of the scope of their involvement in the project?	☐ Yes ☐ No (RFI)	**Comment:**
Has the method of compliance been accurately described using an acceptable compliance path? (ie B1/VM1)	☒ Yes ☐ No (RFI) ☒ B1/VM1 ☐	**Comment:**
Has the building work covered by the Producer Statement been correctly referenced (ie correct plan range and version and any other relevant documents)	☒ Yes ☐ No (RFI)	**Comment:** Drawings are titled 221-223 High Street Hutt Central, Lower Hutt and numbered 2812/S0.1-S4.5/Rev A Sighted OK JOB No. 2812 DRAWING REGISTER DWG NO. / TITLE / REVISION S0.1 SPECIFICATION SUMMARY A S1.1 GROUND FLOOR STRENGTHENING PLAN A S1.2 FIRST FLOOR STRENGTHENING PLAN A S1.3 ROOF STRENGTHENING PLAN A S2.1 SECTION – S1 A S4.1 CONNECTION DETAILS – 1 A S4.2 CONNECTION DETAILS – 2 A S4.3 CONNECTION DETAILS – 3 A S4.4 CONNECTION DETAILS – 4 A S4.5 CONNECTION DETAILS – 5 A
Do the 'subject to' requirements align with the proposed schedule of inspections? ie if a particular ground bearing capacity is stated or if dependent on original structure being as per plans are these things listed on their proposed inspection schedule?	☒ Yes ☐ No (RFI)	**Comment:** noted *as suitable Existing structure and foundation for fixing.* *How are you assessing this on site?*
Do the 'subject to' requirements trigger a need for other design documentation and Producer Statements to be supplied? (ie pile design by others)	☐ Yes ☐ No (RFI)	**Comment:**

Is the proposed level of construction monitoring appropriate for the project and do the proposed inspections adequately cover the work?		☒ Yes ☐ No (RFI)	**Comment:** 5 Inspections in total listed at top of the 010
Company Producer Statement issued by: **Is the design firm a member of ACENZ?**		Focus Engineering Consultants Ltd ☐ Yes ☒ No **Comment:**	**Date:** 25/2/2021
Engineer who signed PS1:		David Lai	**CPEng #** 232550 **# Checked on the Registration Authority Register** ☒
Does Engineers Practice field align with work being undertaken?		☒ Yes ☐ No (RFI) ☒ Structural ☐ Geotech ☐ Fire ☐ Mechanical ☐ Other	
Engineers qualifications and memberships?	☒ BE ☐ BE (Hons) ☐ BEng(Hons)	☐ PhDeng ☒ ME ☐ BEngTech	☐ MEFE ☐ CMEngNZ ☐ Engineering NZ ☐ Other
Is the professional indemnity insurance appropriate?		☒ Yes ☐ No (RFI)	**Comment:**
Has the Producer Statement been signed by the appropriate engineer?		☒ Yes ☐ No (RFI)	**Comment:**
Is the date on the Producer Statement within an acceptable timeframe? (Generally 3 months for specific designs and 2 years for proprietary systems)		☒ Yes ☐ No (RFI)	**Comment:**
Has relevant supporting information been provided that outlines the scope of the engineer's involvement, and clearly shows their design and workings?		☒ Plans with sufficient detail ☒ Calculations ☒ Inspection Schedule ☐ Specifications ☐ Geotech report	☐ Proprietary/ Manufacturer ☐ Others ☐ Computer Modelled (note type) **Comment:**
PS4 – Does the inspection schedule or other documentation indicate who is going to carry out construction monitoring and that a PS4 will be provided at the completion of the project?		☒ Yes ☐ No (RFI)	**Comment:**
Is a peer review required?	**Possible triggers for peer review:** ☒ Change of use ☐ Substantial project ☐ Earthquake-prone building ☐ Complicated project ☐ Info provided identifies building is less than 34% NBS		

	If any of these triggers apply refer to Building manager to discuss if peer review is appropriate – Checked with Chris Hoddinot and not being referred for a structural review – Claire Stevens also agrees with this decision. Email trimmed into BC folder. **Comment:** Need to check on the original NBS for the original building. Note a DSA completed by ISPS in 2016 trimmed in EQ576500 folder of the property file. The report states 43% in transverse direction	
Have all sections of the form been completed, and the Producer Statement confirms compliance of the design work with the relevant clause/s of the Building Code?	☒ Yes ☐ No (RFI)	**Comment:**
Has sufficient information been provided to accept the Producer Statement?	☒ Yes ☐ No (RFI)	
ISO Application of Judgement ECB-WI-006 ISO Acceptance of Expert Opinion ECB-WI-005	☐ Applied ☐ Applied	
Signed by accepting officer: Date:	Lyall Huizer 21/4/2021	

BC No

Change of Use - s115	**Code Clause**
"As near as is reasonably practicable" As presented by applicant for building consent	

Upgrading Triggered - Means of escape from fire, Protection of other property, Sanitary facilities, Structural performance, Fire rating performance, access and facilities for people with disabilities (if this is a requirement under section 118)

Code clauses to be addressed

G6: The existing first floor is 100mm concrete slab over beams – I am satisfied that the required IC rating for this floor is sufficient. In addition ceilings are shown as lined with 13mm GIB board over GIB rondo ceiling battens OK Based on this additional layer I am satisfied that ANARP the code requirement for an IIC of 55 is being complied with. The additional on ceiling insulation might also help – is this happening.

Reasoning:

Expert Opinion:

Decision:

Assessor:
Name:

Signature:

Moderator:
Name:

Signature:

BC No

Alteration - s112(2) Discretion to Avoid Upgrade Triggers

Refer to Building Act – Section that applied at the time
As presented by applicant for building consent

Proposal:

Reasoning:

Decision:

Assessor:
Name:

Signature:

Moderator:
Name:

Signature:

BC No

Waiver of Modification

As presented by applicant for building consent

Proposal:

Reasoning:

Decision:

Assessor:
Name:

Signature:

Moderator:
Name:

Signature:

NATURAL HAZARD CHECK LIST

To be completed when the land is likely to be subject to a hazard.

1.	Is the land the building work is occurring on subject to or likely to be subject to a hazard? s71(1)(a) Common hazards are, for example: ▪ 1 in 100 flood hazard or ▪ 1 in 3 slope for most common hazards	☐ Yes - proceed to Q2 ☒ No
2.	What is the hazard and what information is available about it and from where? (Refer to s71(3) for hazards under BA04 and hazard information source)	
3.	Is the building work construction of a new building or major alteration? s71(2)?	☐ Yes - proceed to Q4 ☐ No - explain why the alteration is not major - consider guidance and how these apply - no further input required.
4.	Is the land connected to the building work? In urban sites the whole section is likely to be connected to the building work but in larger pieces of land, the hazard may be considered remote from the building work (Auckland City Council v Logan).	☐ Yes - proceed to Q5 ☐ No - such as in rural and lifestyle sites. Explain the disconnect.
5.	Is the building work likely to accelerate, worsen or result in a natural hazard on this land or any other property?	☐ Yes - the building consent needs to be refused. ☐ No - proceed to Q6
6.	Has adequate provision been made or will be made to protect or restore the **land** and **building work** from the natural hazard? s71(2)(a) and (b)? (It is usually straight forward to protect the building work but more difficult to protect the land from the hazard)	☐ Yes - the building consent can be processed with no further consideration of a hazard required. ☐ No - proceed to Q7
7.	Will the Building work mitigate the hazard **but** not the land hazard?	☐ Yes - the building consent can be processed but apply the s73 notice. ☐ No – building consent needs to be refused.
8.	Has a waiver been sought and is it reasonable to grant waiver s72(c)? Note: a waiver is not required if the proposed building work complies with the building code but the building consent will be granted under s72 and subject to a s73 notice.	☐ Yes ☐ No

s7(2)(a)

Richard Senior
Environmental Consents
T 04 570 6974
richard.senior@huttcity.govt.nz
Our reference:BC210296

Dear Sir/Madam

FURTHER ITEMS REQUIRED

Building Consent Application BC210296 at 221 High Street HUTT CENTRAL 5010

I am writing to advise that we require further items before we can accept your application.

Please provide the information below and upload via our web link:
https://kiteworks.huttcity.govt.nz/form/building#/ - Reference BC210296.

▪ Check Sheet - Customer Use column (on Page 1 only)	Different property address Please correct. Tick boxes incomplete for the following sections. 1k, 1n, 3e, 3i, 4c, 5b, 5c, 5f, 10k, 11j, 11m, 11n, 11o, 11p, 11q, 11u, 12c, 12d, 12g, 12i, 12n, 12o
▪ Building Consent Application form	Section 7. Please confirm the total floor area of the new residential apartment units. Proposed use Please add" Residential Apartments";; Page 7 missing. Section 8. Means of compliance has not been completed to indicate all relevant NZBC clause applicable. E.g. C1, C5, C6, Section 9. Show CS number, Risk Group and Total occupancy

	numbers; Appendix B has not been completed correctly to reflect the level of information or accuracy required. Appendix B has not been completed correctly. For existing systems just tick existing only where these are not being altered. For altered systems, just tick altered and include the performance standards, Inspection & maintenance standards and reporting frequency. For new systems (those that are not already listed on the compliance schedule) tick added/ new and include the performance standards, Inspection & maintenance standards and reporting frequency. Please refer to the attached guidance which should assist you to complete Appendix B correctly.
▪ Proof of Ownership - One recent copy of current certificate/s of title (i.e. not older than three (3) months) or where applicable one copy of purchase agreement (if recently purchased) or one copy of relevant portions of current lease.	Proof of ownership required.
▪ Inspections and Monitoring: Details of proposed inspection regime including monitoring by council officers and other professionals e.g. architects, engineers, surveyors and certification to be supplied on completion.	Structural engineers construction monitoring schedule of inspections
▪ Means of barricading the site - Provide details of temporary barriers, gates which swing inwards or other means of restricting public access to the area	Site Safety Management plan
▪ Details about the building such as: Number of storeys, type of materials the building is constructed of (note: Photos would be useful).	Safety methodology plan report for asbestos assessment,, identification and removal requirements.
▪ Plumbing and drainage plan (1:100) showing: Note: If you	Schematic plumbing plan

have supplied drainage details for surface water disposal on the site plan, no drainage plan is required. Fixtures and fittings, hot water system(s), if the building is more than one storey with sanitation fittings on upper floors, provide and isometric layout showing wastes, pipes and falls, drainage layout with inspection bends and junctions indicated for both sewer and stormwater, any other drainage on site including council mains and retaining wall field drains, ventilation of sanitary rooms, calculations for sizing of downpipes	required
▪ Assessment of building for compliance with the building code: section 115(a) of the building act 2004 requires that the work comply fully with all clauses of the building code	Provide Change of Use assessment as indicated on the check sheet. i.e. An assessment of the building is required with respect to all building code clauses. If the proposal is for the project to meet anything less than full compliance with any clauses of the building code
▪ Specification:	Specifications for the back flow device and show locations on the plans including the watermeter location: Emergency lighting design documentation. HCC requests approval confirmation letter from FENZ for the FAP location. Please provide a copy of the fire report appended plans to s7(2)(a) [redacted] HCC recommends that a completed firefighting facilities check sheet counter signed by the area manager or his designate should be supplied at building consent stage. Although this form is not mandatory it is recommended to demonstrate that the performance criteria requirements of NZBC Clause C5 have been met Provide a comprehensive

	performance specification for both the window joinery & glazing (air leakage, URL, wind pressure, seismic & thermal performance)
▪ Accessibility (for building/uses listed in schedule 2 of the Building Act 2004) - Assessment of access and facilities for people with disabilities for the whole building. The assessment must incorporate a statement that the assessor is suitably experienced/ qualified and has carried out a site visit inspection as part of the assessment.	S118 applies to the commercial tenancy however no accessibility Report has been provided.

If you have any questions please don't hesitate to contact me.

Yours sincerely

Richard Senior
Senior Building Officer

Original RFI Question 4: Proposed type 4 and type 5 alarm systems. Please provide a layout plan from a suitably qualified person showing all detectors by type, sounder locations, location of the manual call point/s and fire alarm panel. Please provide evidence that Fire and Emergency have approved the proposed location for Multi Zone fire alarm panel as per NZS 4512:2010 Paragraph 403.1 This question not answered.
Please provide a layout plan from a suitably qualified person showing all detectors by type, sounder locations, location of the manual call point/s and fire alarm panel.
Ask discussed with fire Engineer, It is intended to undertake the fire alarm install on a design build basis as is typical for projects of this scale. The fire alarm will be subject to independent certification of the design and install.
Please provide evidence that Fire and Emergency have approved the proposed location for Multi Zone fire alarm panel as per NZS 4512:2010 Paragraph 403.1.
Please find attached correspondence stamped plan from FENZ Ops confirming the request to locate the FAP near the apartment stair which will be incorporated.

Original RFI Question 9. Please amend the plans to specify fire collars to both the stacks, plumbing wastes and other penetrations as required. Notes have been added to plans stating Hilti Collars and Sealant to be used for fire stopping penetrations .
Further question: Please provide relevant data sheets for the proposed Hilti fire collars and Hilti 606 sealants.
Please refer attachments

Original RFI Question 10. Based on the plans supplied windows FW1.09, FW1.10, W0.10 and W0.11 are new replacement windows in walls within 1m of the boundary. Therefore please demonstrate how the proposed glazing is compliant with C/AS2 clause 5.2.4. Based on table 5.1 the maximum permitted size of fire resistant glazing is 1m2 and figure 5.1 requires a separation distance between adjacent FR windows of at least the width of the wider window being installed. (see below)
Please note windows FW1.09 and FW1.10, W0.10 and W0.11 are located on or not far from the boundary (well within 300mm) and as such C/AS2 clause 5.2.4 is appropriate. Therefore please demonstrate how the proposed glazing is compliant with C/AS2 clause 5.2.4
Ask discussed with fire Engineer, The windows in this case are to be fire rated window systems achieving an integrity and insulation rating. The referenced clause 5.2.4 deals with fire resistive glazing which is restricted as noted. However this is glazing which does not achieve an insulation rating (refer clause 5.4.2) and would be restricted as they could still cause fire spread via radiation from the window panel. But as stated this is not the system proposed and the intention is to install fire rated windows (i.e. achieving both integrity and insulation ratings), as similar to any door in an external wall etc.

Original RFI Question 11. Fire Rated windows and doors: Please provide manufacturers specifications for all external fire rated windows and doors. Please revise the window schedule to include the manufacturer of the windows, the particular model or type, and their proposed FRR ratings.
Your response contains a revised door and window schedule now stating the actual FR windows and doors to be installed. (sheet 28) with details for installation of FR windows and doors added to sheet 49. Product information from Pacific doors has been supplied for the following window and door sets:

- Pacific PFW60 Fuego-Light Steel Fire Window -/60/30

- Pacific VP120 Hinged Door Set -/120/60sm
- Pacific VP60A Door Set -/60/60sm

Further 3 questions:

- Regarding FW0.03 Please show an insulation rating of 60min for this door on the door and window schedule. **Drawing revised, please refer A28. and Please also attach quote from Pacific Doors.**
- Please also amend the door and window schedule so hardware for all doors is specified. **Hardware selected, please refer drawing A28, inlcuding lockset, closer**
- Please provide manufacturers specs for this hardware. **Please see attachments**

Original RFI Question 17. Please provide manufacturers documentation demonstrating the proposed carpet, vinyl and floor boards meet the minimum critical heat flux value of 2.2 see 2.2kW/m2. Your response indicates no flooring selections have been made as yet -
Further question: the flooring products must be specified and product data in support of the minimum critical radiant flux supplied. Product noted on plan.
Please refer page A14 and A16, and refer to attachment of product selection by flooring design

Original RFI Question 30: Barriers to opening doors(see below) Please dimension the height of the barrier above FFL. Please provide construction details and show fastening details to the building, and label materials to be used. Please demonstrate how these barriers comply with F4 as the gaps in horizontal members appear to allow for climbing.
You have shown the barrier height and provided product data including a PS1 for the infill balustrade system.
Further Question: Please provide fixing details for the Clearspan infill and the exterior wall. The PS1 supplied and sheet BL.2.1.9 does not specify this fixing.
Please refer manufacture fixing detail and PS1

G4: Ventilation Questions 39 – 50 covers ventilation of apartments by mechanical ventilation – A combination of DVS systems and operable windows now shown to the 6 apartments. This answers Q39-50.
New Question: Please also demonstrate how the ventilation requirements of G4 are to be met for the 2 retail tenancies
we have contact DVS to proposal system for ventilation, please refer quote.

Original RFI Q53: Please demonstrate how the required STC ratings are achieved between tenancies on the ground floor. The GBTL 120 system indicated has an STC rating of 45. Your response contains amended plans now showing a composite system as per the letter from GIB below – Drawings may be required to explain how this system is to work.
Further Question: Please provide drawings/details as required to clearly show how the proposed GIB wall system is to be constructed – This system has been recommended by GIB to achieve a STC rating of 55 between the commercial and residential tenancies.
Please refer new detail on page A14

Original RFI1 Questions 55, 56 and 57 relate to achieving G7 compliance to apartment 1.

Please make an ANARP argument outlining measures taken to achieve the best possible daylight levels and awareness of the outside for bedroom 1 within this apartment. Please note any increase in existing windows to the exterior wall, any internal joinery allowing for a view through to the outside and any high reflectance paint finishes that are proposed in your ANARP argument.
Apartment 1 Bedroom room has been relocated to be closer to the northern side window to ensure daylight access thorugh internal window/door to as practical as possible, please refer A14, and A22

Original RFI1 Question 63 - Potable water supply - as a fee simple subdivision is proposed individual supply for each lot will be required. Please provide a water supply plan showing locations of all water feeds to the 6 apartments and 2 commercial spaces. Please show all pipe sizes. Please show locations for water meters and tobies. And please show location of the backflow prevention device. You have indicated that Envelope Engineering will be engaged to work on subdivision services, this will be applied as a separate application to council and wellington water for approval
Please provide drawings from envelope for the finalised 3 waters as discussed.
Please refer design doc from Envelope

Original RFI1 Questions 70 - Based on the details for installation of replacement joinery in concrete block walls you are strapping and lining internal walls and installing 45mm expol insulation. Please amend the wall framing notes to clearly show the full extent of this additional strapping and lining on the proposed floor plans for both levels. Plans supplied don't show the [proposed strapped and lined walls.
Please revise sheets A14 and A16 to show walls to be strapped and lined.
Note add, please refer A14 and A16

Original RFI1 Questions 71 - How have you determined that condensation will not occur between the expol and the external concrete walls. You have supplied a letter from Expol confirming the details as provided will prevent condensation on the concrete wall faces.
Further question: Please provide confirmation from EXPOL that the proposed insulation is non combustable or Please confirm that the completed system – ie GIB lining over expol has the required group rating as specifed in C/AS2 table 4.3
Refer s7(2)(a) confirmation letter from Expol

221 High Street / BC210296 SRFI responds

- Check Sheet - Customer Use column (on Page 1 only)
Different property address Please correct. Tickboxes incomplete for the following sections.
1k, 1n, 3e, 3i, 4c, 5b, 5c, 5f, 10k, 11j, 11m, 11n, 11o, 11p, 11q, 11u, 12c, 12d, 12g, 12i, 12n, 12o
Please refer attached Checklist

- Building Consent Application form
Section 7. Please confirm the total floor area of the new residential apartment units.
Proposed use Please add" Residential Apartments";
Page 7 missing.
Section 7. Means of compliance has not been completed to indicate all relevant NZBC clause applicable. E.g. C1, C5, C6,
Section 9. Show CS number, Risk Group and Total occupancy numbers;
Appendix B has not been completed correctly. For existing systems just tick existing only where these are not being altered. For altered systems, just tick altered and include the performance standards, Inspection & maintenance standards and reporting frequency. For new systems (those that are not already listed on the compliance schedule) tick added/ new and include the performance standards, Inspection & maintenance standards and reporting frequency. Please refer to the attached guidance which should assist you to complete Appendix B correctly.
please refer attachment

- Proof of Ownership - One recent copy of current certificate/s of title (i.e. not older than three (3) months) or where applicable one copy of purchase agreement (if recently purchased) or one copy of relevant portions of current lease.
Proof of ownership required.
Please refer attachment

- Inspections and Monitoring: Details of proposed inspection regime including monitoring by council officers and other professionals e.g. architects, engineers, surveyors and certification to be supplied on completion.
Structural engineers construction monitoring schedule of inspections
Please refer attachment

- Means of barricading the site - Provide details of temporary barriers, gates which swing inwards or other means of restricting public access to the area
Site Safety Management plan
Please see attachment

Details about the building such as: Number of storeys, type of materials the building is constructed of (note: Photos would be useful).
Safety methodology plan report for asbestos assessment, identification and removal requirements.
We will engage a specilist to confirm if any asbestos used o the existing building, note added on demolition plan to ensure this happens first prior any building/demolition works start. Refer page A05 and A07

Plumbing and drainage plan (1:100) showing: Note: If you have supplied drainage details for surface water disposal on the site plan, no drainage plan is required. Fixtures and fittings, hot water system(s), if the building is more than one storey with sanitation fittings on upper floors, provide and isometric layout showing wastes, pipes and falls, drainage layout with inspection bends and junctions indicated for both sewer and stormwater, any other drainage on site including council mains and retaining wall field drains, ventilation of sanitary rooms, calculations for sizing of downpipes
Schematic plumbing plan requried.
Please refer attachment, architecture plan page A46

Assessment of building for compliance with the building code: section 115(a) of the building act 2004 requires that the work comply fully with all clauses of the building code
Provide Change of Use assessment as indicated on the check sheet. i.e. An assessment of the building is required with respect to all building code clauses. If the proposal is for the project to meet anything less than full compliance with any clauses of the building code.
Please refer attachment.

Specification:
Specifications for the back flow device and show locations on the plans including the watermeter location.
Backflow preventer and watermeter location noted on plan, refer A12 and attachment for Backflow product data
Emergency lighting design documentation.
We will be engaging specilist to provide most suitable emergency

lighting design, this is to be provided at a later date in the consent process.
HCC requests approval confirmation letter from FENZ for the FAP location.
Please provide a copy of the fire report appended plans to s7(2)(a) email s7(2)(a) HCC recommends that a completed firefighting facilities check sheet counter signed by the area manager or his designate should be supplied at building consent stage. Although this form is not mandatory it is recommended to demonstrate that the performance criteria requirements of NZBC Clause C5 have been met
We will send plan Stuart for comments, and fire fighting facilities check sheet will be provided in consent processing.
Provide a comprehensive performance specification for both the window joinery & glazing (air leakage, URL, wind pressure, seismic & thermal performance)
Please refer attachment of revised specification that incluing joinery and galzing now, note "as oer NZS4223.3:2016" to ensure complies with the code

Accessibility (for building/uses listed in schedule 2 of the Building Act 2004) - Assessment of access and facilities for people with disabilities for the whole building. The assessment must incorporate a statement that the assessor is suitably experienced/qualified and has carried out a site visit inspection as part of the assessment.
S118 applies to the commercial tenancy however no accessibility Report has been provided.
Please refer attachment

Page 3 of 3

23 March 2021

s7(2)(a)

Richard Senior
Environmental Consents
T 04 570 6974
richard.senior@huttcity.govt.nz
Our reference:BC210296

Dear Sir/Madam

FURTHER ITEMS REQUIRED

Building Consent Application BC210296 at 221 High Street HUTT CENTRAL 5010

I am writing to advise that we require further items before we can accept your application.

Please provide the information below and upload via our web link:
https://kiteworks.huttcity.govt.nz/form/building#/ - Reference BC210296.

▪ Building Consent Application form	Appendix B (Separate specified systems list) as not been completed correctly to reflect the correct performance standards, Inspection & maintenance standards and reporting frequency. Please refer to the attached guidance which should assist you to complete Appendix B correctly. Please also note that there is an error on the guidance document provided. Reference to the handbook should also not be referenced. You have not shown SS14.2 or SS15.4 The performance standards, Inspection & maintenance standards shown for SS14.2, SS15.3 are incorrect.

▪ Plans	Please provide a revise index plan to reflect the additional sheets now supplied.
▪ Specification:	Re the emergency lighting design documentation please clarify when this shall be supplied as you have stated that the performance standard is AS/NZS2293 therefore this documentation is required at BC submission stage.

If you have any questions please don't hesitate to contact me.

Yours sincerely

Richard Senior
Senior Building Officer

From: Chris Hoddinott
To: Lyall Huizer
Subject: RE: BC210296 221 High Street

Hi Lyall,
Generally we send change of use applications for a structural review to determine if they will achieve their target NBS percentage through the proposed strengthening.
This one I am not going to send to be reviewed for the following reasons:

- The owner has previously been advised the building is not earthquake-prone.
- The calculations provided with the application suggest the building achieves 50% NBS as it is. There is strengthening proposed to bring the building up to 70% NBS.
- I think we don't need to send this one for review as 50% NBS is not too bad, and they are doing work to improve on that.

I checked this with Claire and she agrees. If you think it needs to be reviewed or you've seen something you want to discuss let me know.
Cheers,

Chris Hoddinott

Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, **W** www.huttcity.govt.nz **F** huttcitycouncil

---

From: Lyall Huizer
Sent: Wednesday, 21 April 2021 12:22 PM
To: Chris Hoddinott
Subject: BC210296 221 High Street

Hi Chris,
Change of use for this one retail to residential.
Earthquake strengthening up to to 70% NBS s7(2)(a)
Cheers Lyall

01 May 2021

s7(2)(a)

Lyall Huizer
Environmental Consents
T 04 5706713
lyall.huizer@huttcity.govt.nz
Our reference: BC210296

Dear s7(2)(a)

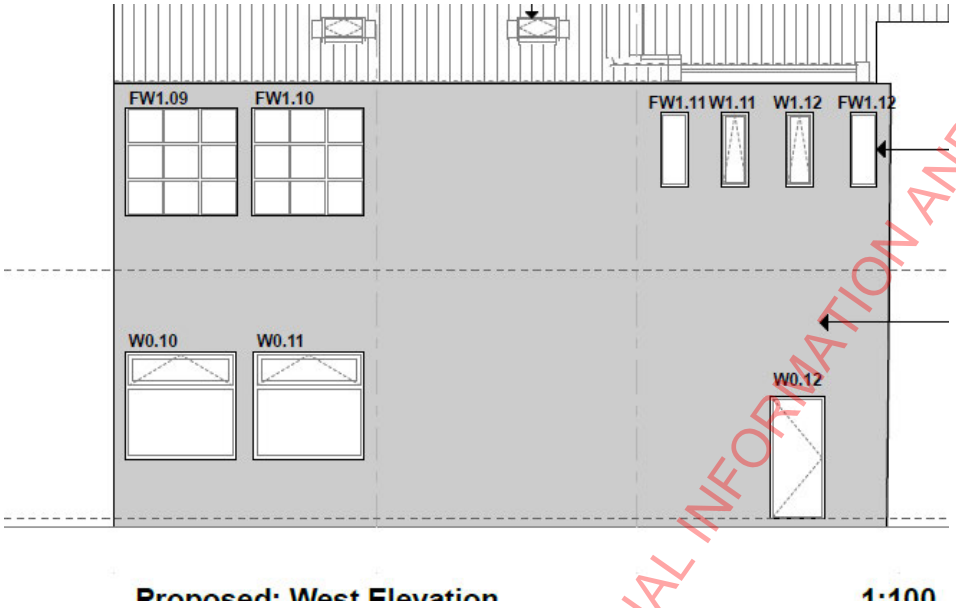
Request for more information about your Building Consent application at 221 High Street HUTT CENTRAL 5010

Thank you for your application for a Building Consent at the above property, received on 12 Mar 2021.

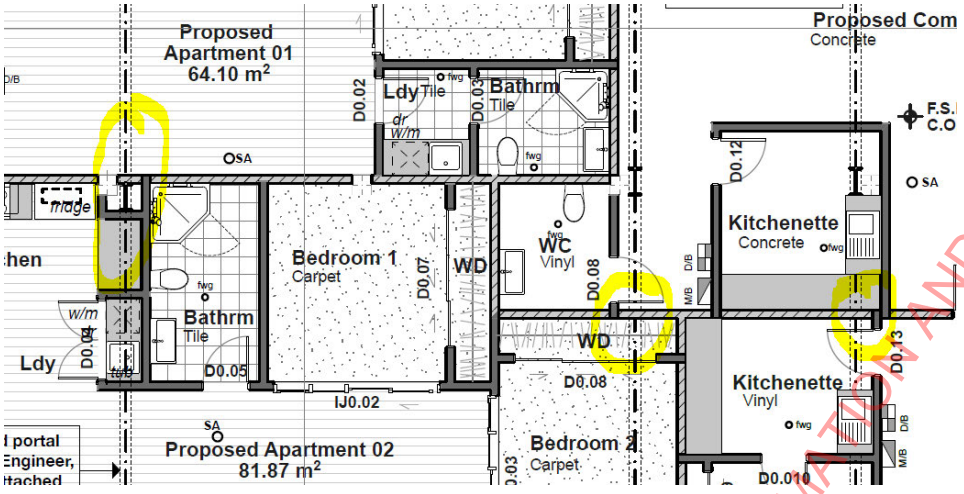
I have examined your application and found that it is missing some important pieces of information, without which I cannot process your application. The information I need is:

1. B1: structure - you have provided earthquake strengthening calculations and drawings bringing the building up to 70%NBS - Please provide a statement from the Seismic Engineer showing why this is the highest level of compliance possible based on an “ANARP” analysis.
2. Please include in this statement the mode of failure for the building before and after the proposed earthquake strengthened work has been completed. In particular a statement covering the steps taken to ensure that in a ULS event sleeping occupants be able to escape.
3. Building consent application form : Section 7 – Please amend the proposed classified use to Commercial and Housing.
4. PS1 from SED engineer : Please enter the Lots and DP number into the PS1 as supplied.
5. Please show the FGL adjacent the lower level apartments (Margaret street service lane) and demonstrate how compliance with E1 clause2.0.1 is met. (Floor level above crown of road or above lowest point of site as per E1 2.0.1 a), b))
6. If the required difference in level cannot be achieved please demonstrate how surface water is prevented from entering apartment 1 and 2.
7. Please amend the cross sections and floor plans to show the extent and construction details of any proposed ceilings.
8. Proposed type 4 and type 5 alarm systems. Please provide a layout plan from a suitably qualified person showing all detectors by type, sounder locations, location of the manual call point/s and fire alarm panel. Please provide evidence that Fire and Emergency have approved the proposed location for Multi Zone fire alarm panel as per NZS 4512:2010 Paragraph 403.1
9. Please amend the plans to specify fire collars to both the stacks, plumbing wastes and other penetrations as required.
10. Based on the plans supplied windows FW1.09, FW1.10, W0.10 and W0.11 are new replacement windows in walls within 1m of the boundary. Therefore please demonstrate how the proposed glazing is compliant with C/AS2 clause 5.2.4. Based on table 5.1 the maximum

permitted size of fire resistant glazing is 1m² and figure 5.1 requires a separation distance between adjacent FR windows of at least the width of the wider window being installed. (see below)



11. Fire Rated windows and doors: Please provide manufacturers specifications for all external fire rated windows and doors. Please revise the window schedule to include the manufacturer of the windows, the particular model or type, and their proposed FRR ratings.
12. Please demonstrate how E2 compliance is to be achieved by providing details for the installation of fire rated windows including sill, head and jamb details.
13. Doors SD1.01 to SD1.05: These are shown on the fire report as requiring a 60 minute fire rating. Please provide a manufacturers specification for all proposed fire doors including evidence of a -/60/60 fire rating. Please add this information to the door and window schedule. Please include manufacturers installation details for fire and smoke doors showing head and jamb details as required. Please revise the internal door schedule to include the manufacturer of the doors, the particular model or type, and their proposed FRR ratings.
14. Please show on the plans all structural steelwork to be fire rated as per C/AS2 clause 2.3.4 . Please clearly state the particular fire rated system proposed and the FRR value this system provides. (FRR of 120 required)
15. Please provide details showing steelwork penetrations through fire separations in particular how the integrity of the fire separation is to be maintained. (see below)



16. Final Exit for commercial space 01: Please revise W0.02 to show a hinged door of the correct width so compliance with C/AS2 3.15.1 can be seen. (sliding door acceptable where the occupancy is less than 20)
17. Please provide manufacturers documentation demonstrating the proposed carpet, vinyl and floor boards meet the minimum critical heat flux value of 2.2 see 2.2kW/m².
18. Fire report 1.3.6 states penetrations in fire separations to be fire stopped – you have supplied testing reports for various Hilti products provided. Please add notes to the plans to clearly state which Hilti firestop / jacket products are to be used where on the plans. Please provide manufacturers specs for any proposed fire stops/ fire rated sealants.
19. Please show the height of door handles to W0.01 and W0.02.
20. Please confirm the door opening forces of no greater than 22N for interior hinged doors and 38N for exterior hinged doors(you have indcated 2 sliding doors as final exits)
21. Please show manifestation to windows W0.01, W0.02 and W0.03 so compliance with NZS4223.3 2016 clause 6 and clauses 2.2.2 can be seen.
22. Please provide a dimensioned floor plan and interior elevations of the proposed unisex accessible bathrooms showing the following:

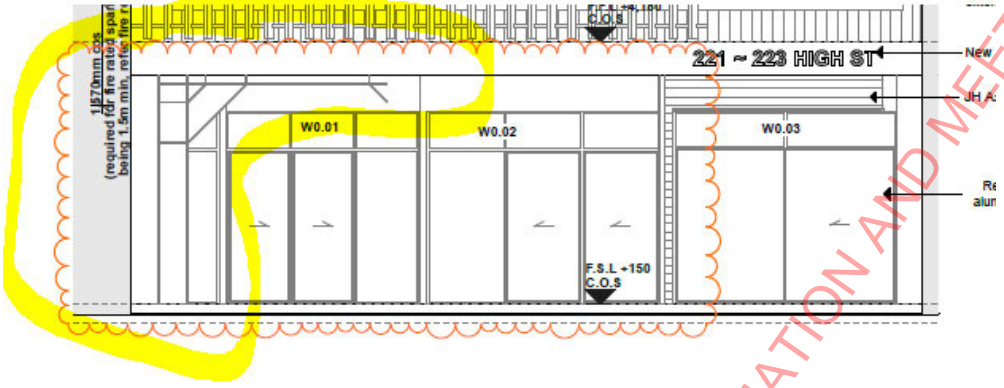
- They are of sufficient size for the manoeuvring of wheelchairs to and within the cubicle
- Include an interior clear space of 1600mm by 1900mm
- Door must open out, but can open to bathroom if the bathroom big enough for the door arch not to intrude into the required 1500 turning circle (NZS4121 C10.5.5)
- Have a Handrail/ grab rail to inside of door
- Have the ability to wash hands while seated on the pan
- Have the ability to reach sanitary disposal bins while seated on the pan
- Have the ability for the wheelchair user to open the doors
- The toilet within the Accessible toilet to have a height to the top of the pan seat og 460mm refer NZS4121 10.5.6.1
- Have the ability for the wheelchair user to remain balanced on the pan whilst transferring to and from the pan
- Provided with appropriate washbasins and with lever operated mixers provided
- Toilet roll holder, and mirror located in correct position

23. Please amend the plans to show signage provided in sufficient locations to identify accessible routes and facilities provided for people with disabilities.
24. You have provided details for windows installed over James Hardie Hardieflex cladding – please show this cladding location on the elevations.
25. You have shown a proposed canopy over entry doors to ground floor apartments. Please amend the plans to show where stormwater collected in these canopies discharges .
26. How are you protecting other property from the possible overflow of laundry tubs located in the 6 apartments? If you are relying on integrated overflow to laundry tubs then Please confirm and note on the plans the laundry tub has an overflow with a 25l per minute capacity. Please provide manufacturer's confirmation that this flow rate has been tested and verified in accordance with BS EN 274 .
    And, please add a note to the plans stating that either The maximum flow rate from the inlet tap(s) is less than 25l per minute, or b) The water supplies to the inlet tap(s) for that laundry tub are fitted with proprietary flow restrictors (such as cartridges) to limit the tap flow rate to less than 25l per minute.

27. Containment of accidental overflow: Please add notes to plans to clearly state whether impervious floor coverings are to be sealed or coved. Are the ground floor kitchens to have tiles or floor boards? Please amend the plans so one option is shown.
28. Details on sheet A44 are given for both a tiled and acrylic showers – please highlight any tiled showers on the floor plans and provide manufacturers specifications and Branz appraisal for any pre- tiling membrane to be used.
29. Please amend the plans to show surfaces finishes to wall linings experiencing watersplash and thereby show compliance with E3/AS1 clause 3.1.2
30. Barriers to opening doors(see below) Please dimension the height of the barrier above FFL. Please provide construction details and show fastening details to the building, and label materials to be used. Please demonstrate how these barriers comply with F4 as the gaps in horizontal members appears to allow for climbing.

31. If the above barrier is a proprietary system please provide product information (including installation details) and include a PS1(issued within 12 months) from the manufacturer.
32. Based on the Southern elevation sliding windows to apartments 5 and 6 open more than 100mm and protection from climbing out onto the veranda below is provided by aluminium louvres. Is this correct? Please demonstrate how these louvres provide an F4 compliant barrier in particular show a Dia100mm sphere would be unable to be dropped from these open windows.
33. Please provide manufacturers specifications for the louvres including installation instructions and details.

34. Please have the SED engineer provide a paint specification for the finish to the exposed section of portal frame. (see below)



35. Please confirm the portal frame and W0.01 do not occupy the same space.
36. Please amend the plans to show the wall cladding above W0.01 and W0.02.
37. Emergency lighting shown – Please provide a construction layout from a suitably qualified person specifying all luminaires and signage by manufacturer and product code. Please provide a PS1 from the emergency lighting designer.
38. Please provide an additional unisex WC for each commercial fitout. So compliance with G1/AS1 table 1 number of sanitary facilities can be seen.(please note 1 accessible bathroom per commercial space is acceptable)

G4: Ventilation

Ventilation of Apartment 1:

39. Bedroom 1 :Please revise how the bedroom is ventilated. It cannot be ventilated by the adjacent habitable space as this space has a kitchen, and none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met. (see below)

Habitable spaces ventilated via another habitable space

1.3.4 *Habitable spaces* without openings to the exterior must be ventilated via another *habitable space* by:

a) providing from the other *habitable space* to outside, openable windows and/or other openings of *net openable area* of no less than 5% of the combined floor area of the combined *habitable spaces*, and

b) providing high and low level *trickle ventilators* located on the external wall (see Paragraph 1.3.5 for *trickle ventilators*), sized according to the combined floor area, and

c) providing an area of *permanent opening* between the two spaces of no less than 5% of the combined floor area of the *habitable spaces*, and

d) having a combined distance of the *habitable spaces*, measured between the external wall and furthest opposing wall, of less than 6 metres.

COMMENT:
Habitable spaces must not be naturally ventilated via an adjacent space that is a bathroom, kitchen, toilet or laundry.

40. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.

41. Entry, Kitchen, Living and Dining. Please revise calculation highlighted below the operable window area is well less than required.

G4 Ventillation Calculation

Apartment 1
BATHROOM Room Size: 4m² Req'd min. Opening Area (5%) = 4m² x 0.05 = 0.2 m² FAN Calculation 4m² x 3.9 m height = 15.6m³ 15.6m² x 15 ARCH = 234m³/hr 234m³/hr / 3.6 = 65 l/s
FAN: 150mm Manrose Axial 105 l/s, 380m3/hr
BEDROOM 1 Room Size: 12.3 m² Req'd min. Opening Area (5%) = 12.3 m² x 0.05 = 0.62 m²
Total Opening Area: IJ0.01 = 2.90 m² = COMPLIES
ENTRY, KITCHEN,LIVING & DINING Room Size: 41.1 m² Req'd min. Opening Area (5%) = 41.1 m² x 0.05 = 2.1 m²
Total Opening Area: W0.04 = 0.65 m² W0.05 = 0.76 m² TOTAL = 2.3 m² = COMPLIES

Ventilation of Apartment 2:

42. Bedroom 1 and Bedroom 2 both appear to be ventilated via another habitable space. Please revise as none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met.
43. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.

Ventilation of Apartment 3:

44. Is there a laundry tub proposed for apartment 3? If so please show on the floor plan.
45. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.
46. Bedroom 1 appears to be ventilated via another habitable space. Please revise as none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met.

Ventilation of Apartment 4:

47. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.
48. Bedroom 1 appears to be ventilated via another habitable space. Please revise as none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met.

Ventilation of Apartment 5:

49. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.

Ventilation of Apartment 6:

50. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering.

G6 compliance.

51. You have indicated polished concrete floors to the upper apartments – please demonstrate how the required Impact Insulation Class rating of 55 or higher is achieved where upper level apartments are above habitable spaces in lower level apartments.
52. Please demonstrate how the required STC ratings are achieved between tenancies on the ground floor. The GBTL 120 system indicated has an STC rating of 45.

Two way FRR — timber frame

Specification number	Performance		Specifications	
GBTL 120	FRR	120/120/120	Lining	2 layers 16mm GIB Fyrelne® each side
	STC	45	LB/NLB	Load bearing
	Rw	45		

G7: Natural light

Apartment 1: This apartment has just 1 external wall with windows.

53. Please demonstrate (by providing a cross section showing window heights) how the bedroom (habitable space) complies with the requirement for visual awareness of the outside environment.
54. Please demonstrate (by providing a cross section showing window heights) how the head height for windows complies with G7/AS1 part C. Please note a window area in excess of 10% of the floor area may be necessary.
55. Please also demonstrate whether the no sky condition applies for external glazing. If it does please provide a schedule of surface finishes for the floor ceiling and walls so high reflectance surfaces can be seen as per G7/AS1 clauses 1.02 to 1.04

Apartment 2:

56. Please demonstrate how both the proposed bedrooms meet G7. Please demonstrate how the required levels of natural light and an awareness of the outside environment are met.

Apartment 3:

57. Bedroom 2: Please demonstrate how bedroom 1 meets the requirements of G7 for an awareness of the outside environment. Please include the size of the skylight in G7 calcs on sheet A37.

58. Bedroom 1 Please demonstrate how bedroom 1 meets the requirements of G7 for natural light. (borrowed light from windows W1.07, W1.08 and W1.09 provide daylight to this bedroom) Please show compliance with G7/AS1 clauses 1.02 to 1.04, please include any cross sections, schedule of floor ceiling and wall finishes showing surface reflectance's as required.

Apartment 4:

59. Please add a G7 assessment of apartment 4 to sheet A37. Please include the size of the skylight in G7 calcs on sheet A37.

60. Bedroom 1: Please demonstrate how bedroom 1 meets the requirements of G7 for natural light. (borrowed light from windows W1.04 and W1.05 provide daylight to this bedroom) Please show compliance with G7/AS1 clauses 1.02 to 1.04, please include any cross sections, schedule of floor ceiling and wall finishes showing surface reflectance's as required.

61. F5:– no details provided on plans for how members of the public are prevented from climbing the stairs.
62. Please show the location for the existing gas meter.
63. Potable water supply - as a fee simple subdivision is proposed individual supply for each lot will be required. Please provide a water supply plan showing locations of all water feeds to the 6 apartments and 2 commercial spaces. Please show all pipe sizes. Please show locations for water meters and tobies. And please show location of the backflow prevention device.
64. Please revise notes referring to VT26 gas water heaters as a Rinnai HDi200 infinity is shown for each apartment
65. Please amend the plans to show all inspection points as required (before drains travel under building/SLAB, at all WC connection to drain)
66. Please show the proposed minimum gradient for the DN150 drain.
67. Please note you have shown a DN150 stack connecting to a DN100 drain please revise so a larger pipe does not connect to a smaller pipe.
68. As there is potential for the two commercial units to become food outlets/cafes etc. Please consider running a greasy waste line alongside the sewer line that they are putting in for either or both of the two units to be able connect up to. Please also consider installing a communal grease trap at the rear of the building.
69. Based on the plans supplied you are providing a ground floor rubbish area for the upper level apartments. Please amend the plans as follows:

- Please label the ground floor rubbish area on the plan.
- Please demonstrate how the ground floor rubbish area is to be adequately ventilated to the open air in compliance with NZBC G4.
- Please confirm the concrete floor will be graded at 1 in 50 to a floor drain. Fl
- finishes to Walls in spaces where storage bins are likely to receive food wastes and are subject to spillage shall be constructed of concrete, galvanised sheet steel, vinyl or similar material.
- How is the FWG in the ground floor rubbish area to be charged?

70. Based on the details for installation of replacement joinery in concrete block walls you are strapping and lining internal walls and installing 45mm expol insulation. Please amend the wall framing notes to clearly show the full extent of this additional strapping and lining on the proposed floor plans for both levels.
71. How have you determined that condensation will not occur between the expol and the external concrete walls.

72. Please confirm the only timber framed external walls are to the Southern Elevation. Please add notes to the plans to state the framing specs and any insulation added to this external wall.

Under section 48(2) of the Building Act 2004, I have stopped processing your application until I receive this information.

Be sure to include your application number, which is BC210296.

Submitting your response online through our secure file transfer system will speed up processing, and avoid large files clogging up email systems. Please use this link: https://kiteworks.huttcity.govt.nz/form/building#/, or post your reply to: Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040.

Please note that if you do not send this information to me by 15 May 2021 the council has the option of declining your application. You would then have to make a new application and pay another fee.

Please do not hesitate to contact me by email or on 04 5706713 if you have any questions.

Yours sincerely,

Lyall Huizer
Building Officer

1. B1: structure you have provided earthquake strengthening calculations and drawings bringing the building up to 70%NBS - Please provide a statement from the Seismic Engineer showing why this is the highest level of compliance possible based on an "ANARP" analysis. **Please refer Engineer Respond.**

2. Please include in this statement the mode of failure for the building before and after the proposed earthquake strengthened work has been completed. In particular a statement covering the steps taken to ensure that in a ULS event sleeping occupants be able to escape. **Please refer Engineer Respond.**

3. Building consent application form : Section 7 Please amend the proposed classified use to Commercial and Housing. **Please refer attachment.**

4. PS1 from SED engineer : Please enter the Lots and DP number into the PS1 as supplied. **Please refer revised document attached.**

5. Please show the FGL adjacent the lower level apartments (Margaret street service lane) and demonstrate how compliance with E1 clause2.0.1 is met. (Floor level above crown of road or above lowest point of site as per E1 2.0.1 a), b) **Yes the FSL is 150mm min above the road (Margaret Service Lane), please see photo below.**

6. If the required difference in level cannot be achieved please demonstrate how surface water is prevented from entering apartment 1 and 2. **As above, minimum floor level achieved**

7. Please amend the cross sections and floor plans to show the extent and construction details of any proposed ceilings. **Ceiling noted on sections, please refer A14, A16, A21, A22, and A23.**

8. Proposed type 4 and type 5 alarm systems. Please provide a layout plan from a suitably qualified person showing all detectors by type, sounder locations, location of the manual call point/s and fire alarm panel. Please provide evidence that Fire and Emergency have approved the proposed location for Multi Zone fire alarm panel as per NZS 4512:2010 Paragraph 403.1. **Please refer Engineer responds**

9. Please amend the plans to specify fire collars to both the stacks, plumbing wastes and other penetrations as required. **General note added on plan, Please refer A14 and A16.**

10. Based on the plans supplied windows FW1.09, FW1.10, W0.10 and W0.11 are new replacement windows in walls within 1m of the boundary. Therefore please demonstrate how the proposed glazing is compliant with C/AS2 clause 5.2.4. Based on table 5.1 the maximum permitted size of fire resistant glazing is 1m2 and figure 5.1 requires a separation distance between adjacent FR windows of at least the width of the wider window being installed. (see below) **Please refer fire Engineer respond**

11. Fire Rated windows and doors: Please provide manufacturers specifications for all external fire rated windows and doors. Please revise the window schedule to include the manufacturer of the windows, the particular model or type, and their proposed FRR ratings. **Manufacture and Model noted on schedule, and detail provided, refer A28 and A49.**

12. Please demonstrate how E2 compliance is to be achieved by providing details for the installation of fire rated windows including sill, head and jamb details. **Manufacture details add, please refer Page A49.**

13. Doors SD1.01 to SD1.05: These are shown on the fire report as requiring a 60 minute fire rating. Please provide a manufacturers specification for all proposed fire doors including evidence of a -/60/60 fire rating. Please add this information to the door and window schedule. Please include manufacturers installation details for fire and smoke doors showing head and jamb details as required. Please revise the internal door schedule to include the manufacturer of the doors, the particular model or type, and their proposed FRR ratings. **FRR requirement and manufacturer add to schedule, refer A28 and A49 and Product data sheet and Fire Engineer respond.**

14. Please show on the plans all structural steelwork to be fire rated as per C/AS2 clause 2.3.4 . Please clearly state the particular fire rated system proposed and the FRR value this system provides. (FRR of 120 required). **Engineer confirmed the steel portal does not require to be fire protected, Note added to ensure Steel portal penetration to FRR wall with Hilton fire stopping sealant, refer A14 and attached**

15. Please provide details showing steelwork penetrations through fire separations in particular how the integrity of the fire separation is to be maintained. **Engineer confirmed the steel portal does not require to be fire protected, Note added to ensure Steel portal penetration to FRR wall with fire stopping, refer A14 and ENG letter.**

16. Final Exit for commercial space 01: Please revise W0.02 to show a hinged door of the correct width so compliance with C/AS2 3.15.1 can be seen. (sliding door acceptable

where the occupancy is less than 20). **Hinge add on plan, window and door schedule updated, refer A14 and A24**

17. Please provide manufacturers documentation demonstrating the proposed carpet, vinyl and floor boards meet the minimum critical heat flux value of 2.2 see 2.2kW/m2. **There are no selection of the product yet, but general note add to ensure final selection of product meet requirement, refer A14 and A16.**

18. Fire report 1.3.6 states penetrations in fire separations to be fire stopped – you have supplied testing reports for various Hilti products provided. Please add notes to the plans to clearly state which Hilti firestop / jacket products are to be used where on the plans. Please provide manufacturers specs for any proposed fire stops/ fire rated sealants. Note add on plan and plumbing plan to ensure too pipe penetration to be fire stoped with Hilti fire collar, **Steel portal frame penetration to be fire-stopped with Hilti 606 to the fire rated walls, and fire collar to all pipe penetration. Please refer note on A12, A13, A14 and A16.**

19. Please show the height of door handles to W0.01 and W0.02. **Height of handle add to W0.01, W0.02, W0.03 refer A24**

20. Please confirm the door opening forces of no greater than 22N for interior hinged doors and 38N for exterior hinged doors (you have indcated 2 sliding doors as final exits). **General note add, sliding door changed to hinge doors, please refer A14, A16, A24 ~ A28**

21. Please show manifestation to windows W0.01, W0.02 and W0.03 so compliance with NZS4223.3 2016 clause 6 and clauses 2.2.2 can be seen. **manifestation add, refer A24**

22. Please provide a dimensioned floor plan and interior elevations of the proposed unisex accessible bathrooms showing the following:

- They are of sufficient size for the manoeuvring of wheelchairs to and within the cubicle
- Include an interior clear space of 1600mm by 1900mm
- Door must open out, but can open to bathroom if the bathroom big enough for the door arch not to intrude into the required 1500 turning circle (NZS4121 C10.5.5)
- Have a Handrail/ grab rail to inside of door
- Have the ability to wash hands while seated on the pan
- Have the ability to reach sanitary disposal bins while seated on the pan
- Have the ability for the wheelchair user to open the doors
- The toilet within the Accessible toilet to have a height to the top of the pan seat og 460mm refer NZS4121 10.5.6.1
- Have the ability for the wheelchair user to remain balanced on the pan whilst transferring to and from the pan

- Provided with appropriate washbasins and with lever operated mixers provided
- Toilet roll holder, and mirror located in correct position

Please refer Enlarged Accessible toilet plans, on page A35 and A36

23. Please amend the plans to show signage provided in sufficient locations to identify accessible routes and facilities provided for people with disabilities. **Signage add, please refer A14**

24. You have provided details for windows installed over James Hardie Hardieflex cladding – please show this cladding location on the elevations. **Cladding changed from Hardieflex to Flashclad cladding, details previously page A35 and A36 for all hardieflex removed.**

25. You have shown a proposed canopy over entry doors to ground floor apartments. Please amend the plans to show where stormwater collected in these canopies discharges. **The roof canopy does come with a drip hole, it is a proprietary system, please refer attached manufacture doc.**

26. How are you protecting other property from the possible overflow of laundry tubs located in the 6 apartments? If you are relying on integrated overflow to laundry tubs then Please confirm and note on the plans the laundry tub has an overflow with a 25l per minute capacity. Please provide manufacturer's confirmation that this flow rate has been tested and verified in accordance with BS EN 274 . And, please add a note to the plans stating that either The maximum flow rate from the inlet tap(s) is less than 25l per minute, or b) The water supplies to the inlet tap(s) for that laundry tub are fitted with proprietary flow restrictors (such as cartridges) to limit the tap flow rate to less than 25l per minute. FWG Floor waste Gully installed in. **Laundry Tubs removed from drawings, washing machine to discharge to drainage pipe through wall, refer A12, A13, A14 and A16.**

27. Containment of accidental overflow: Please add notes to plans to clearly state whether impervious floor coverings are to be sealed or coved. Are the ground floor kitchens to have tiles or floor boards? Please amend the plans so one option is shown. **All kitchen, living and dining area confirmed to be vinyl floorboards, please refer A14 and A16**

28. Details on sheet A44 are given for both a tiled and acrylic showers – please highlight any tiled showers on the floor plans and provide manufacturers specifications and Branz appraisal for any pre- tiling membrane to be used. **Tiled shower removed, projects use shower tray, refer A45**

29. Please amend the plans to show surfaces finishes to wall linings experiencing watersplash and thereby show compliance with E3/AS1 clause 3.1.2. **Note add to ensure floor and floor upstand waterproofing, and waterproofing behind kitchen and laundry, Refer A14 and A16**

30. Barriers to opening doors(see below) Please dimension the height of the barrier above FFL. Please provide construction details and show fastening details to the building, and label materials to be used. Please demonstrate how these barriers comply with F4 as the gaps in

horizontal members appears to allow for climbing. **Dimension add, balustrade is a proprietary system, please refer A19 and attached manufacture doc.**

31. If the above barrier is a proprietary system please provide product information (including installation details) and include a PS1(issued within 12 months) from the manufacturer. **Note add on drawings, Please refer A16, A19 and attached manufacture doc.**

32. Based on the Southern elevation sliding windows to apartments 5 and 6 open more than 100mm and protection from climbing out onto the veranda below is provided by aluminium louvres. Is this correct? Please demonstrate how these louvres provide an F4 compliant barrier in particular show a Dia100mm sphere would be unable to be dropped from these open windows. **Windows update to be fixed to living and dining to apartment 05 and 06, Please refer A24.**

33. Please provide manufacturers specifications for the louvres including installation instructions and details. **Please refer attached manufacturer doc**

34. Please have the SED engineer provide a paint specification for the finish to the exposed section of portal frame. **Note add to enclose steel portal witch JH Flashclad cladding, refer A14 and A20**

35. Please confirm the portal frame and W0.01 do not occupy the same space. **That window removed, please refer A14**

36. Please amend the plans to show the wall cladding above W0.01 and W0.02. **Cladding to be changed to Flashclad (previously Hardieflex), refer A19**

37. Emergency lighting shown – Please provide a construction layout from a suitably qualified person specifying all luminaires and signage by manufacturer and product code. Please provide a PS1 from the emergency lighting designer. **Please refer attachment, design and PS1 by Electrical Supply Corp. Page A47 and A48, and attached doc.**

38. Please provide an additional unisex WC for each commercial fit-out. So compliance with G1/AS1 table 1 number of sanitary facilities can be seen.(please note 1 accessible bathroom per commercial space is acceptable). **One extra Unisex toilet add to each commercial office, Please refer A14.**

G4: Ventilation

Ventilation of Apartment 1:
39. Bedroom 1 Please revise how the bedroom is ventilated. It cannot be ventilated by the adjacent habitable space as this space has a kitchen, and none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met. (see below). **Mechanical Ventilation proposed, please refer attachment from manufacturer**

40. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering. **All dryer to be self-condensing and laundry tub removed., please refer A14**

41. Entry, Kitchen, Living and Dining. Please revise calculation highlighted below the operable window area is well less than required. **Mechanical Ventilation proposed, please refer attachment from manufacturer.**

Ventilation of Apartment 2:

42. Bedroom 1 and Bedroom 2 both appear to be ventilated via another habitable space. Please revise as none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met. **Mechanical Ventilation proposed, please refer attachment from manufacturer.**

43. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering. **All dryer to be self-condensing and laundry tub removed, please refer A14**

Ventilation of Apartment 3:

44. Is there a laundry tub proposed for apartment 3? If so please show on the floor plan. **No Laundry tub proposed.**

45. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering. **All dryer to be self-condensing and laundry tub removed, please refer A16**

46. Bedroom 1 appears to be ventilated via another habitable space. Please revise as none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met. **We have proposed mechanical ventilation , please refer attachment from manufacturer.**

Ventilation of Apartment 4:

47. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering. **All dryer to be self-condensing and laundry tub removed, please refer A16**

48. Bedroom 1 appears to be ventilated via another habitable space. Please revise as none of the requirements of G4/AS1 clause 1.3.4 a-d appear to be met. **We have proposed mechanical ventilation , please refer attachment from manufacturer**

Ventilation of Apartment 5:

49. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering. **All dryer to be self-condensing and laundry tub removed, please refer A16**

Ventilation of Apartment 6:

50. Please demonstrate how moisture generated from laundering the performance clause G4.3.3 which requires buildings to have a means of collecting or otherwise removing the following from the spaces in which they are generated – in this case b) moisture from laundering. **All dryer to be self-condensing and laundry tub removed, please refer A16**

G6 compliance.

51. You have indicated polished concrete floors to the upper apartments – please demonstrate how the required Impact Insulation Class rating of 55 or higher is achieved where upper level apartments are above habitable spaces in lower level apartments. **We have updated to vinyl floorboard flooring to apartment, please refer A14 and A16. We installed lower ceiling to the ground floor level that achieve STC55 rating in accordance GIB system GBSJA 45, please refer A21, A22, A23 and A37.**

52. Please demonstrate how the required STC ratings are achieved between tenancies on the ground floor. The GBTL 120 system indicated has an STC rating of 45. **FRR 120min wall system updated to a combination of GIB system to achieve both 120min FRR and 55 STC rating. Refer A14, and GIB helpline email.**

Helpline (WWB) Jul 6, 2021, 1:49 PM (2 days ago)
to me

Hi Andrew,

Thank you for the follow up enquiry and apologies for the delayed reply.

I have had a discussion with our Senior Development Engineer and the outcome is as follow;
Unfortunately this cannot be done with any of our GIB Rail® systems.

However it is possible with the ST-001 clip as long as furring channels are run vertically to support the plasterboard sheet joints.

Refer to two-way FRR – steel frame wall – acoustic resilient mount GBSIC 45a system page 53 GIB® Noise Control Systems 2017 manual
but replace the linings with 2/16mm GIB Fyreline® fixed as per two-way FRR – steel frame GBS 120a system page 42 of attached GIB® Fire Rated Systems 2018 manual.

Call me if this does not make sense.

G7: Natural light

Apartment 1: This apartment has just 1 external wall with windows.

53. Please demonstrate (by providing a cross section showing window heights) how the bedroom (habitable space) complies with the requirement for visual awareness of the outside environment. **The visual awareness is provide by the window above and between the kitchen counters, the window sill height reduced to 0.9m (above slab) and the upper height is 2.57m(above slab). Please refer to section on A22 demonstrate the height.**

54. Please demonstrate (by providing a cross section showing window heights) how the head height for windows complies with G7/AS1 part C. Please note a window area in excess of 10% of the floor area may be necessary. **The total kitchen, entry, living and dining and bedroom (exclude wardrobe)**

Total habitable space floor area is 52.9sqm

W0.04 is 0.7x1.67m= 1.17sqm

W0.05 is 1.56X1.67m = 2.6sqm

W0.06 is 0.85x2.0m= 1.7sqm

Total window area is 5.47 sqm / total floor area of 5.29sqm = 10.3%.

55. Please also demonstrate whether the no sky condition applies for external glazing. If it does please provide a schedule of surface finishes for the floor ceiling and walls so high reflectance surfaces can be seen as per G7/AS1 clauses 1.02 to 1.04. **Please refer to section on A22 demonstrate the no-sky line. Please confirm if we still need reflectance finishes.**

Apartment 2:

56. Please demonstrate how both the proposed bedrooms meet G7. Please demonstrate how the required levels of natural light and an awareness of the outside environment are met. **Layout redeveloped to ensure both bedrooms has its own window, please refer A14**

Apartment 3:

57. Bedroom 2: Please demonstrate how bedroom 1 meets the requirements of G7 for an awareness of the outside environment. Please include the size of the skylight in G7 calcs on sheet A37. **Skylights removed, as this room with two existing windows. FW1.06 and FW1.07 both are approx. 1.8x1.8m with 0.9m sill above the slab.**

58. Bedroom 1 Please demonstrate how bedroom 1 meets the requirements of G7 for natural light. (borrowed light from windows W1.07, W1.08 and W1.09 provide daylight to this bedroom) Please show compliance with G7/AS1 clauses 1.02 to 1.04, please include any cross sections, schedule of floor ceiling and wall finishes showing surface reflectance's as required. **Velux Sun tunnel installed to bedroom 1 to get natural light, therefore it is no longer a case of borrowing light. please refer A16**

Apartment 4:

59. Please add a G7 assessment of apartment 4 to sheet A37. Please include the size of the skylight in G7 calcs on sheet A37. **Skylight removed.**

60. Bedroom 1: Please demonstrate how bedroom 1 meets the requirements of G7 for natural light. (borrowed light from windows W1.04 and W1.05 provide daylight to this bedroom) Please show compliance with G7/AS1 clauses 1.02 to 1.04, please include any cross sections, schedule of floor ceiling and wall finishes showing surface reflectance's as required. **Velux Sun tunnel installed to bedroom 1 to get natural light, therefore it is no longer a case of borrowing light. please refer A16**

61. F5:–no details provided on plans for how members of the public are prevented from climbing the stairs. **Lockable gate noted, refer A04.**

62. Please show the location for the existing gas meter. **According to gas industry: "Connection status : Gas is currently not required. Gas supply has either been capped or plugged and the meter has been removed (GNM)", New gas meter location add on plan, refer A14**

63. Potable water supply - as a fee simple subdivision is proposed individual supply for each lot will be required. Please provide a water supply plan showing locations of all water feeds to the 6 apartments and 2 commercial spaces. Please show all pipe sizes. Please show locations for water meters and tobies. And please show location of the backflow prevention device. **Envelope Engineering will be engaged to work on subdivision services, this will be applied as a separate application to council and wellington water for approval**

64. Please revise notes referring to VT26 gas water heaters as a Rinnai HDi200 infinity is shown for each apartment. **Infinity model revised, refer A12 and A13**

65. Please amend the plans to show all inspection points as required (before drains travel under building/SLAB, at all WC connection to drain) **Envelope Engineering will be engaged to work on subdivision services, this will be applied as a separate application to council and wellington water for approval**

66. Please show the proposed minimum gradient for the DN150 drain. **This is a typo, Drainage pipe changed to 100dia, gradient is 1.65% which is noted on the plan, please refer A12**

67. Please note you have shown a DN150 stack connecting to a DN100 drain please revise so a larger pipe does not connect to a smaller pipe. **This is a typo, revised to DN100, please refer A12**

68. As there is potential for the two commercial units to become food outlets/cafes etc. Please consider running a greasy waste line alongside the sewer line that they are putting in for either or both of the two units to be able connect up to. Please also consider installing a communal grease trap at the rear of the building. **Thank you for the suggestion, I think we will just leave it to the future owner to decide, so for this consent, we will not include the greasy waste and trap.**

69. Based on the plans supplied you are providing a ground floor rubbish area for the upper level apartments. Please amend the plans as follows:

- Please label the ground floor rubbish area on the plan. **Rubbish area noted, please refer A14**
- Please demonstrate how the ground floor rubbish area is to be adequately ventilated to the open air in compliance with NZBC G4. **Extract fan added to travel two storey and vent through roof space, Pleaser Refer A14 and A18**
- Please confirm the concrete floor will be graded at 1 in 50 to a floor drain. **Note add, Please refer A14**

- finishes to Walls in spaces where storage bins are likely to receive food wastes and are subject to spillage shall be constructed of concrete, galvanised sheet steel, vinyl or similar material. **Note add to vinyl flooring and wall to be 1.5m above FFL, refer A14**

- How is the FWG in the ground floor rubbish area to be charged? **The FWG will be charged by the mob sink, Please refer updated plumbing plan A12.**

70. Based on the details for installation of replacement joinery in concrete block walls you are strapping and lining internal walls and installing 45mm Expol insulation. Please amend the wall framing notes to clearly show the full extent of this additional strapping and lining on the proposed floor plans for both levels. **New wall note add to clearly identify the strap lining area for both floors for apartment only, please refer A14 an A16**

71. How have you determined that condensation will not occur between the expol and the external concrete walls.**We have add more specify about the expos product elected, to be "EXPOL Platinum Board", and regarding condensation, please refer A14 and A16, and email from s7(2)(a) from Expol.**

s7(2)(a)

9:20 AM (20 minutes ago)

to me

Hi s7(2)(a) as discussed if you insulate between the strapping and then gib over the top you will have successfully insulated the concrete wall and therefore eliminating condensation.

Ho[pe this helps.

Regards,

s7(2)(a)

Structural EPS & GeoFoam Consultant

s7(2)(a) W. www.expol.co.nz

EXPOL Legal Disclaimer. This email is confidential and may contain legally privileged information. If you are not the intended recipient you must not disclose or use the information contained in it. If you have received this email in error, please notify us immediately by return email and delete the document

EXPOL earth

POLYSTYRENE RECYCLING

0800 8[illegible]3 www.expolearth.co.nz

72. Please confirm the only timber framed external walls are to the Southern Elevation. Please add notes to the plans to state the framing specs and any insulation added to this external wall. **Yes, it is only applied to the southern elevation first floor wall, note added, wall framing are existing timber framing, insulation noted, refer A16.**

FOCUS
ENGINEERING CONSULTANTS LTD

Level 1, 240 Thorndon Quay
PO Box 9586, Marion Square, Wellington 6141, New Zealand
Phone: +64 4 382 8678
E: info@focusec.co.nz // www.focusec.co.nz

27th May 2021

Hutt City Council
30 Laings Road
Private Bag 31912
Lower Hutt 5040

Reference: BC210296

Dear Sir or Madam,

221-223 High Street, Hutt Central, Lower Hutt – Seismic Strengthening to 70%*NBS* (IL2)

Regarding your Request for further information dated 1st May 2021.

Please refer to the following for our response to the structural queries:

1. B1: structure – you have provided earthquake strengthening calculations and drawings bringing the building up to 70%NBS. Please provide a statement from the Seismic Engineer showing why this is the highest level of compliance possible based on an "ANARP" analysis.

   The reasons why the highest level of compliance possible based on an "ANARP" analysis is 70%NBS are listed below:

   a) *Steel sections for the ground floor strengthening will be bigger if we aimed higher than 70%NBS and this will mean less usable space for the proposed use of the building.*
   b) *We are estimating that the building was constructed during the 1950's. If a higher level of compliance is needed, say 100%NBS, the rest of structural items need to be strengthened/upgraded as well due to the building age. The cost involved in strengthening/upgrading the rest of the structural items will significantly outweigh the benefits that will be gained.*
   c) *Once the strengthening works are in place, the structural system of the building will be quite regular for earthquake loading. The strengthening involves providing new concrete walls at the longitudinal side walls and new steel moment resisting frame at a regular spacing in the transverse direction. With these new structural elements in place, the performance of the building under earthquake loading will be balanced and the risk will be relatively low. Regular buildings generally performed quite well during the earthquakes as observed in Christchurch in 2011.*

2. Please include in this statement the mode of failure for the building before and after the proposed earthquake strengthened work has been completed. In particular a statement covering the steps taken to ensure that in a ULS event sleeping occupants be able to escape.

   The mode of failures of the structure before strengthening is flexural yielding of the existing concrete columns at Level 1 in the longitudinal direction and having a limited number of shear walls at both levels in the longitudinal direction. While in the transverse direction, we are expecting pounding actions to the neighbouring buildings since the existing concrete moment resisting frames at the ground floor are relatively flexible and the reinforcing confinement does not meet the current code standard. These modes of failures are considered as non-ductile failures. Once the limited ductile (μ=3.0) strengthening works are in place, we are expecting

the failure to happen at Level 1 existing concrete columns in the transverse direction and ductile yielding of the new steel frames. The type of failure will be flexural yielding in a ductile manner. Since the 70%NBS strengthening design can achieve a limited ductile failure, we can say that the structure may suffer damage but will not collapse in this considered ULS event design level (70%NBS), so that occupants can escape the building.

We trust that you find these meet your requirements. Please do not hesitate to contact the undersigned should you have any queries or if you would like to discuss any aspects in more detail.

Yours faithfully,
FOCUS ENGINEERING CONSULTANTS LTD

s7(2)(a)

ASSOCIATE STRUCTURAL ENGINEER

s7(2)(a)

Gmail

s7(2)(a)

221-223 High Street - Portal Frame Fire Rating

s7(2)(a)
To: s7(2)(a)
Cc:

Thu, Jun 17, 2021 at 11:26 AM

Hi s7(2)(a)

We can confirm that the ground floor portal frames don't need to be fully fire rated. The main gravity supports are still the existing concrete beams and columns. If the portal frames were damaged by fire, it will not cause any stability issue.

Thanks.

s7(2)(a)

Associate Structural Engineer // Focus Engineering Consultants Ltd

s7(2)(a)

s7(2)(a) W. www.focusec.co.nz

s7(2)(a)

Lyall Huizer
Environmental Consents
T 04 5706713
lyall.huizer@huttcity.govt.nz
Our reference: BC210296

Dear s7(2)(a)

2nd Request for more information about your Building Consent application at 221 High Street HUTT CENTRAL 5010

Thank you for response to my previous request for further information regarding the above building consent.

I have examined your responses and have a couple of follow up questions as detailed below:

Original RFI Question 4: Proposed type 4 and type 5 alarm systems. Please provide a layout plan from a suitably qualified person showing all detectors by type, sounder locations, location of the manual call point/s and fire alarm panel. Please provide evidence that Fire and Emergency have approved the proposed location for Multi Zone fire alarm panel as per NZS 4512:2010 Paragraph 403.1 This question not answered.

Please provide a layout plan from a suitably qualified person showing all detectors by type, sounder locations, location of the manual call point/s and fire alarm panel. Please provide evidence that Fire and Emergency have approved the proposed location for Multi Zone fire alarm panel as per NZS 4512:2010 Paragraph 403.1

Original RFI Question 9. Please amend the plans to specify fire collars to both the stacks, plumbing wastes and other penetrations as required. Notes have been added to plans stating Hilti Collars and Sealant to be used for fire stopping penetrations .

Further question: Please provide relevant data sheets for the proposed Hilti fire collars and Hilti 606 sealants.

Original RFI Question 10. Based on the plans supplied windows FW1.09, FW1.10, W0.10 and W0.11 are new replacement windows in walls within 1m of the boundary. Therefore please demonstrate how the proposed glazing is compliant with C/AS2 clause 5.2.4. Based on table 5.1 the maximum permitted size of fire resistant glazing is 1m² and figure 5.1 requires a

separation distance between adjacent FR windows of at least the width of the wider window being installed. (see below)

Please note windows FW1.09 and FW1.10, W0.10 and W0.11 are located on or not far from the boundary (well within 300mm) and as such C/AS2 clause 5.2.4 is appropriate. Therefore please demonstrate how the proposed glazing is compliant with C/AS2 clause 5.2.4

Original RFI Question 11. Fire Rated windows and doors: Please provide manufacturers specifications for all external fire rated windows and doors. Please revise the window schedule to include the manufacturer of the windows, the particular model or type, and their proposed FRR ratings.

Your response contains a revised door and window schedule now stating the actual FR windows and doors to be installed. (sheet 28) with details for installation of FR windows and

doors added to sheet 49. Product information from Pacific doors has been supplied for the following window and door sets:

- Pacific PFW60 Fuego-Light Steel Fire Window -/60/30
- Pacific VP120 Hinged Door Set -/120/60sm
- Pacific VP60A Door Set -/60/60sm

Further 3 questions:

- **Regarding FW0.03 Please show an insulation rating of 60min for this door on the door and window schedule.**
- **Please also amend the door and window schedule so hardware for all doors is specified.**
- **Please provide manufacturers specs for this hardware.**

Original RFI Question 17. Please provide manufacturers documentation demonstrating the proposed carpet, vinyl and floor boards meet the minimum critical heat flux value of 2.2 see 2.2kW/m². Your response indicates no flooring selections have been made as yet -

Further question: the flooring products must be specified and product data in support of the minimum critical radiant flux supplied.

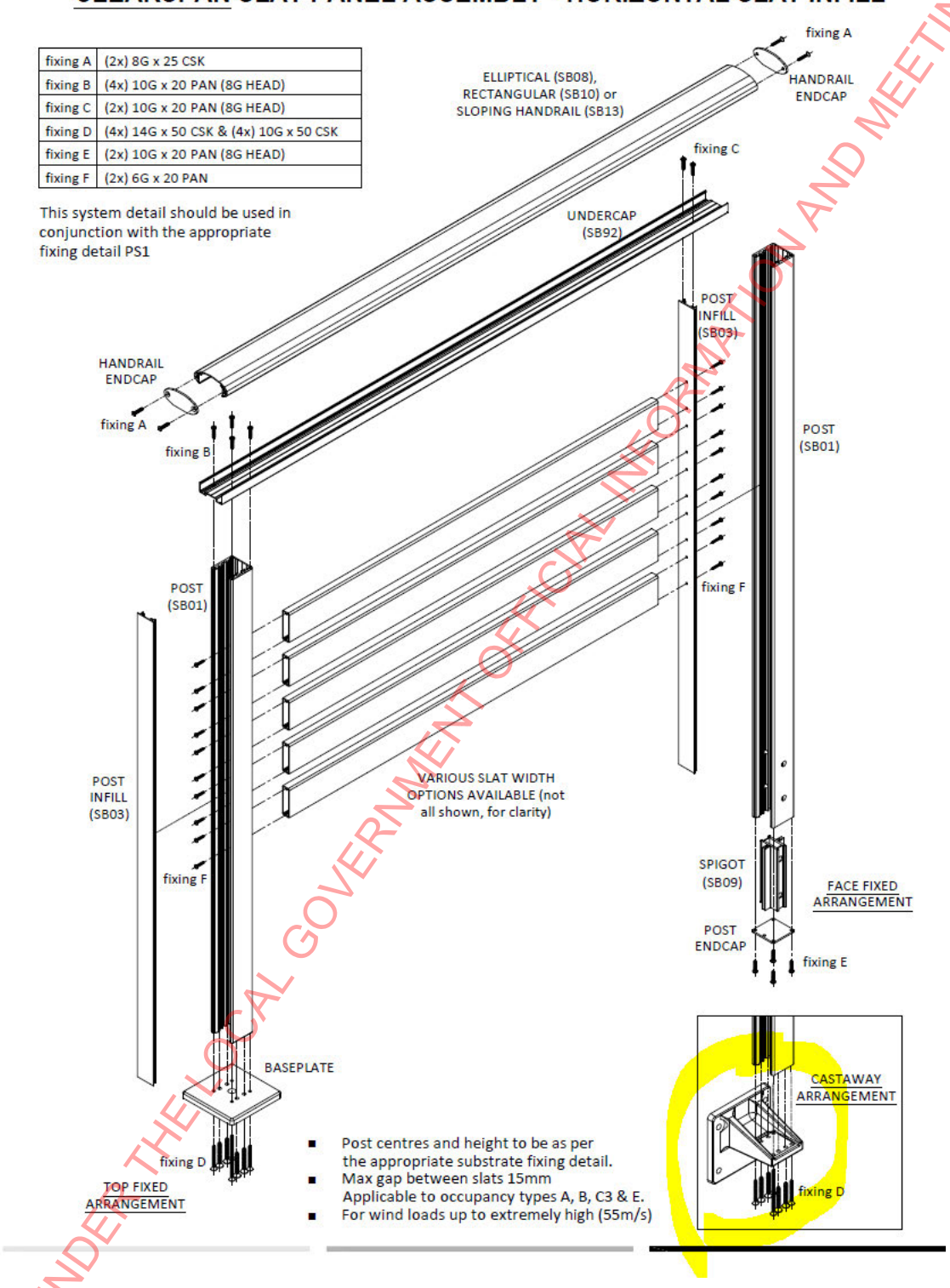
Original RFI Question 30: Barriers to opening doors(see below) Please dimension the height of the barrier above FFL. Please provide construction details and show fastening details to the building, and label materials to be used. Please demonstrate how these barriers comply with F4 as the gaps in horizontal members appear to allow for climbing.
You have shown the barrier height and provided product data including a PS1 for the infill balustrade system.

Further Question: Please provide fixing details for the Clearspan infill and the exterior wall. The PS1 supplied and sheet BL.2.1.9 does not specify this fixing.

CLEARSPAN SLAT PANEL ASSEMBLY - HORIZONTAL SLAT INFILL

fixing A	(2x) 8G x 25 CSK
fixing B	(4x) 10G x 20 PAN (8G HEAD)
fixing C	(2x) 10G x 20 PAN (8G HEAD)
fixing D	(4x) 14G x 50 CSK & (4x) 10G x 50 CSK
fixing E	(2x) 10G x 20 PAN (8G HEAD)
fixing F	(2x) 6G x 20 PAN

This system detail should be used in conjunction with the appropriate fixing detail PS1



- Post centres and height to be as per the appropriate substrate fixing detail.
- Max gap between slats 15mm
  Applicable to occupancy types A, B, C3 & E.
- For wind loads up to extremely high (55m/s)

G4: Ventilation Questions 39 – 50 covers ventilation of apartments by mechanical ventilation – A combination of DVS systems and operable windows now shown to the 6 apartments. This answers Q39-50.

New Question: Please also demonstrate how the ventilation requirements of G4 are to be met for the 2 retail tenancies.

Original RFI Q53: Please demonstrate how the required STC ratings are achieved between tenancies on the ground floor. The GBTL 120 system indicated has an STC rating of 45. Your response contains amended plans now showing a composite system as per the letter from GIB below – Drawings may be required to explain how this system is to work.

Further Question: Please provide drawings/details as required to clearly show how the proposed GIB wall system is to be constructed – This system has been recommended by GIB to achieve a STC rating of 55 between the commercial and residential tenancies.

However it is possible with the ST-001 clip as long as furring channels are run vertically to support the plasterboard sheet joints.

Refer to two-way FRR – steel frame wall – acoustic resilient mount GBSIC 45a system page 53 GIB® Noise Control Systems 2017 manual
but replace the linings with 2/16mm GIB Fyreline® fixed as per two-way FRR – steel frame GBS 120a system page 42 of attached GIB® Fire Rated Systems 2018 manual.

Original RFI1 Questions 55, 56 and 57 relate to achieving G7 compliance to apartment 1.

Please make an ANARP argument outlining measures taken to achieve the best possible daylight levels and awareness of the outside for bedroom 1 within this apartment.
Please note any increase in existing windows to the exterior wall, any internal joinery allowing for a view through to the outside and any high reflectance paint finishes that are proposed in your ANARP argument.

Apartment 3 bedroom 1 and Apartment 4 bedroom 1: achieving G7 compliance to apartments 3 and 4

For both these bedroom please make an ANARP argument for G7 compliance in terms of daylight levels and an awareness of the outside. Please note any increase in existing windows to the exterior wall, any internal joinery allowing for a view through to the outside, the inclusion of sky tunnels, and any high reflectance paint finishes that are proposed in your ANARP argument.

Original RFI1 Question 63 - Potable water supply - as a fee simple subdivision is proposed individual supply for each lot will be required. Please provide a water supply plan showing locations of all water feeds to the 6 apartments and 2 commercial spaces. Please show all pipe sizes. Please show locations for water meters and tobies. And please show location of the backflow prevention device. You have indicated that Envelope Engineering will be engaged to work on subdivision services, this will be applied as a separate application to council and wellington water for approval

Please provide drawings from envelope for the finalised 3 waters as discussed.

Original RFI1 Questions 70 - Based on the details for installation of replacement joinery in concrete block walls you are strapping and lining internal walls and installing 45mm expol insulation. Please amend the wall framing notes to clearly show the full extent of this additional strapping and lining on the proposed floor plans for both levels. Plans supplied don't show the [proposed strapped and lined walls.

Please revise sheets A14 and A16 to show walls to be strapped and lined.

Original RFI1 Questions 71 - How have you determined that condensation will not occur between the expol and the external concrete walls. You have supplied a letter from Expol confirming the details as provided will prevent condensation on the concrete wall faces.

Further question: Please provide confirmation from EXPOL that the proposed insulation is non combustable or Please confirm that the completed system – ie GIB lining over expol has the required group rating as specifed in C/AS2 table 4.3

Under section 48(2) of the Building Act 2004, I have stopped processing your application until I receive this information.

Be sure to include your application number, which is BC210296.

Submitting your response online through our secure file transfer system will speed up processing and avoid large files clogging up email systems. Please use this link: https://kiteworks.huttcity.govt.nz/form/building#/, or post your reply to: Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040.

Please note that if you do not send this information to me by 14 August 2021 the council has the option of declining your application. You would then have to make a new application and pay another fee.

Please do not hesitate to contact me by email or on 04 5706713 if you have any questions.

Yours sincerely,

Lyall Huizer
Building Officer

From: s7(2)(a)
To: Lyall Huizer
Subject: Re: [EXTERNAL] Re: BC210296
Date: Thursday, 28 October 2021 6:56:50 am
Attachments: image001.jpg
hccsmalllogo_fc6f6e05-be46-4dd3-bc01-910915b54a7e.jpg
Spectrum_Face Fixed To Concrete With Castaway Bracket-PS1.pdf
Spectrum CS.2.1.3 Entrance Canopy - Concrete PS1 - 14 Sep 20.pdf

Hi Lyall

Trust you had a good weekend. Thank you for being patient with us, at last lease see the attachments of revised PS1 from manufacture for both the balustrade system and roof Canopy.

Could you please let me know if our consent should be granted, jsut want to inform our contractors so we can start booking them as soon as possible.

Thanks, please let me know if you have any other questions.

Kind regards

s7(2)(a)

Telephone: s7(2)(a)
Mobile: s7(2)(a)
Address: s7(2)(a)
Email: s7(2)(a)

s7(2)(a)

On Thu, Sep 30, 2021 at 1:48 PM Lyall Huizer <Lyall.Huizer@huttcity.govt.nz> wrote:

> Cool thanks – I'll look out for it – it's the last item required.
>
> Cheers Lyall
>
> **Lyall Huizer**
> Building Officer
> Hutt City Council, 30 Laings Road, 5040, Lower Hutt 5040, New Zealand
> T 04 570 6713, W www.huttcity.govt.nz
>
> **From:** s7(2)(a)
> **Sent:** Thursday, 30 September 2021 1:33 PM
> **To:** Lyall Huizer
> **Subject:** [EXTERNAL] Re: BC210296
>
> Hi Lyall
>
> The balustrade manufacturer is currently updating the PS1 from their outsourced

engineer company, and the revised PS1 will be with us early next week.

Kind regards

s7(2)(a)

Telephone: s7(2)(a)

Mobile: s7(2)(a)

Address: s7(2)(a)

Email: s7(2)(a)

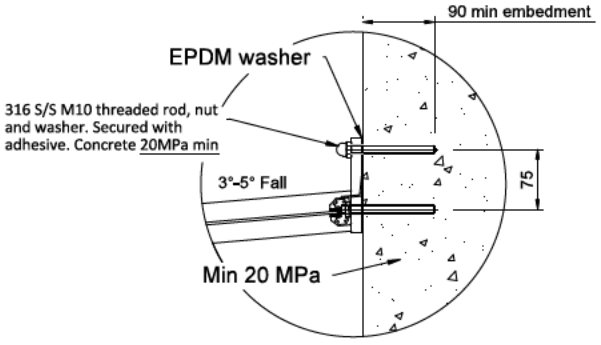
s7(2)(a)

On Thu, Sep 30, 2021 at 10:52 AM Lyall Huizer <Lyall.Huizer@huttcity.govt.nz> wrote:

> HI s7(2)(a)
>
> Just to follow up on our conversation:
>
> Regards the 3 waters – I am satisfied with the proposed drawing as prepared by s7(2)(a) I am going to check with s7(2)(a) regarding any requirements for compliance schedule he may have.
>
> Fire collars and sealant – apologies I have sighted the installation instructions. OK
>
> 1/ The generic PS1's supplied for the entrance canopy and the horizontal slat system state they are valid for a BC issued 2 years after date on the PS1's which are 2020 so acceptable however the PS1 for the castaway bracket is dated 16/8/2019 and should be updated.
>
> 2/ Please make an ANARP argument outlining measures taken to achieve the best possible daylight levels and awareness of the outside for bedrooms without an external wall. What I need is a statement from you summarising all the measures you have taken to maximise daylight into these bedrooms and that you consider this is as near as is reasonably practicable given the building is existing.
>
> Any questions please feel free to call me
>
> Best Regards
>
> Lyall
>
> **Lyall Huizer**
>
> Building Officer
>
> Hutt City Council, 30 Laings Road, 5040, Lower Hutt 5040, New Zealand

T 04 570 6713, **W** www.huttcity.govt.nz

FRAMED ENTRANCE CANOPY - ONTO CONCRETE



Fixed to concrete

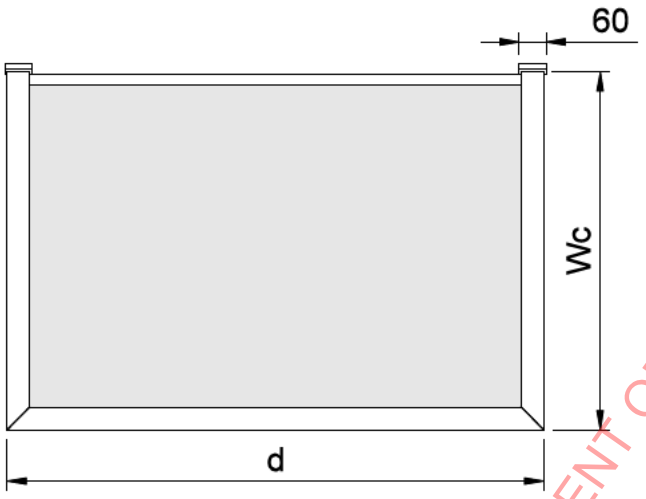
DESIGN ENGINEER

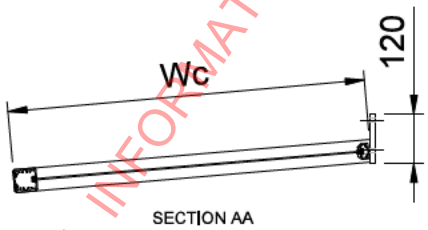
This detail has been reviewed by Kirk Roberts Consulting Engineers Ltd. Refer to Producer Statement for Design (PS1)

Job No: 1920274

Date: 14/09/20

Signed: _____





SECTION AA

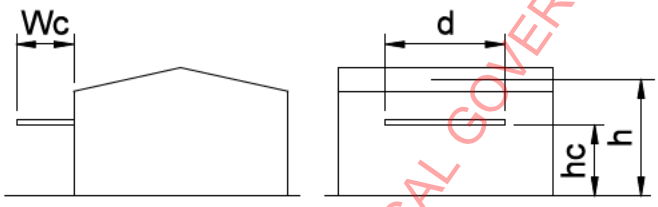
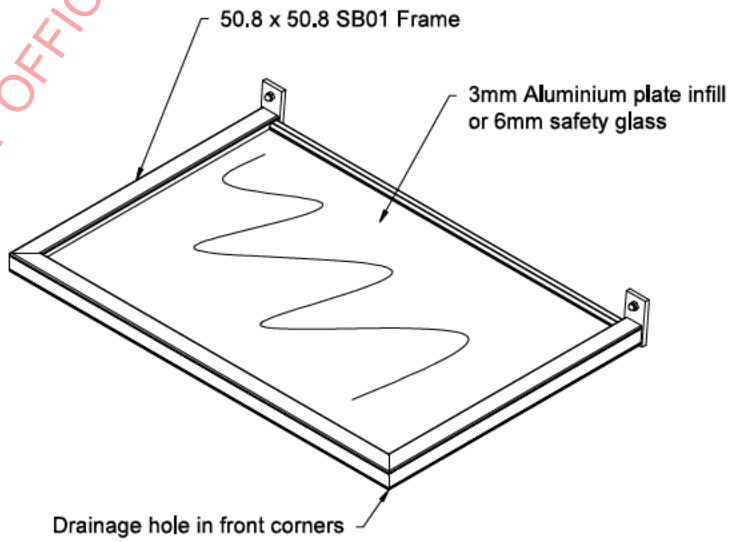


Fig1



		Canopy size Wc x d (see fig 1, 0.5 ≤ hc/h ≤ 0.75)				
	Wc	0.8m	0.9m	1.0m	1.1m	1.2m
up to Very High (50m/s)	d, Max	2.1m	2.1m	2.1m	1.6m	1.5m
Extra High (55m/s)		2.1m	2.1m	1.75m	1.45m	1.2m

- For different sizes of Wc & d contact Spectrum.
- For different ratios of hc/h contact Spectrum.

KIRK ROBERTS CONSULTING

PRODUCER STATEMENT – PS1 – DESIGN

ISSUE:A

(Guidance on use of Producer Statements is available at www.engineeringnz.org)

ISSUED BY: Kirk Roberts Consulting Engineers Ltd. (Design Firm) PROJECT NO: 1920274

TO: Spectrum (Owner/Developer)

TO BE SUPPLIED TO: Territorial Local Authority (Building Consent Authority)

IN RESPECT OF: Framed Entrance Canopy – Onto Concrete (detail countersigned by myself and dated 14/9/20) (Description of Building Work)

AT: Nationwide (Address) LOT: N/A DP: N/A SO

We have been engaged by the owner/developer referred to above to provide Structural Engineering Design services in respect of the requirements of Clause(s) B1/VM1 of the Building Code for
All ☐ or Part only ☒ (as specified in the attachment to this statement), of the proposed building work.

The design carried out by us has been prepared in accordance with:
☒ Compliance Documents issued by the Ministry of Business, Innovation & Employment B1/VM1 or (verification method / acceptable solution)

☐ Alternative solution as per the attached schedule.....

The proposed building work covered by this producer statement is described on Spectrum drawings detail titled "Framed Awning–Onto Concrete", and numbered CS.2.1.3, RevA 11.09.20 together with the specification, and other documents set out in the schedule attached to this statement.

On behalf of the Design Firm, and subject to:

(i) All proprietary products meeting their performance specification requirements;
(ii) Maximum Site Wind Speed of 50m/s at Ultimate Limit State (Extra High Wind in accordance with NZS3604:2011).
(iii) Compliance Documents issued by the Ministry of Business, Innovation & Employment provisions of B1/VM1: AS/NZS1170:2002 (loads), AS/NZS1664.1:1997 (aluminium); AS/NZS 4223.3:2016 (glazing)
(iv) This PS1 is for the canopy system listed above only. The design of the supporting structure (concrete etc) for loads imposed from the canopy system is the responsibility of others.
(v) This certificate does not cover weather-tightness.
(vi) Compliance with B2 is achieved on the following specific items using the standards noted below.
- Steel members – coating in accordance with the specification to AS/NZS2312
- Concrete members – covers in accordance with the specification to NZS 3101
- Aluminium members – coatings in accordance with the specification to AS/NZS 1664.1.1997
(vii) This Producer Statement - Design is valid for a building consent issued within 2 years from the date of issue;
(viii) Inspections of the structural elements shall be undertaken by the Building Consent Authority (council). As Kirk Roberts Consulting Engineers are not undertaking inspections, we cannot issue a Producer Statement for Construction Review – PS4.

I believe on reasonable grounds that a) the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached schedule, will comply with the relevant provisions of the Building Code and that b), the persons who have undertaken the design have the necessary competency to do so. ~~I also recommend the following level of construction monitoring/observation:~~ (Refer note above)
~~☐ CM1 ☐ CM2 ☒ CM3 ☐ CM4 ☐ CM5 (Engineering Categories) or ☐ as per agreement with owner/developer (Architectural)~~

I, Damian John McMillan am: ☒ CPEng 229150 # (Name of Design Professional)

I am a Member of: ☒ Engineering New Zealand ☐ NZIA and hold the following qualifications: B.E.(Hons), CMEngNZ, CPEng
The Design Firm issuing this statement holds a current policy of Professional Indemnity Insurance no less than $200,000*.
The Design Firm is a member of ACENZ: ☒

SIGNED BY Damian John McMillan ON BEHALF OF Kirk Roberts Consulting Engineers Ltd. (Design Firm)

Date: 14/09/2020 (signature).....

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Design Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of $200,000.*

This form is to accompany Form 2 of the Building (Forms) Regulations 2004 for the application of a Building Consent.

CLEARSPAN or CLEARVIEW FACE FIXED TO CONCRETE WITH CASTAWAY BRACKET

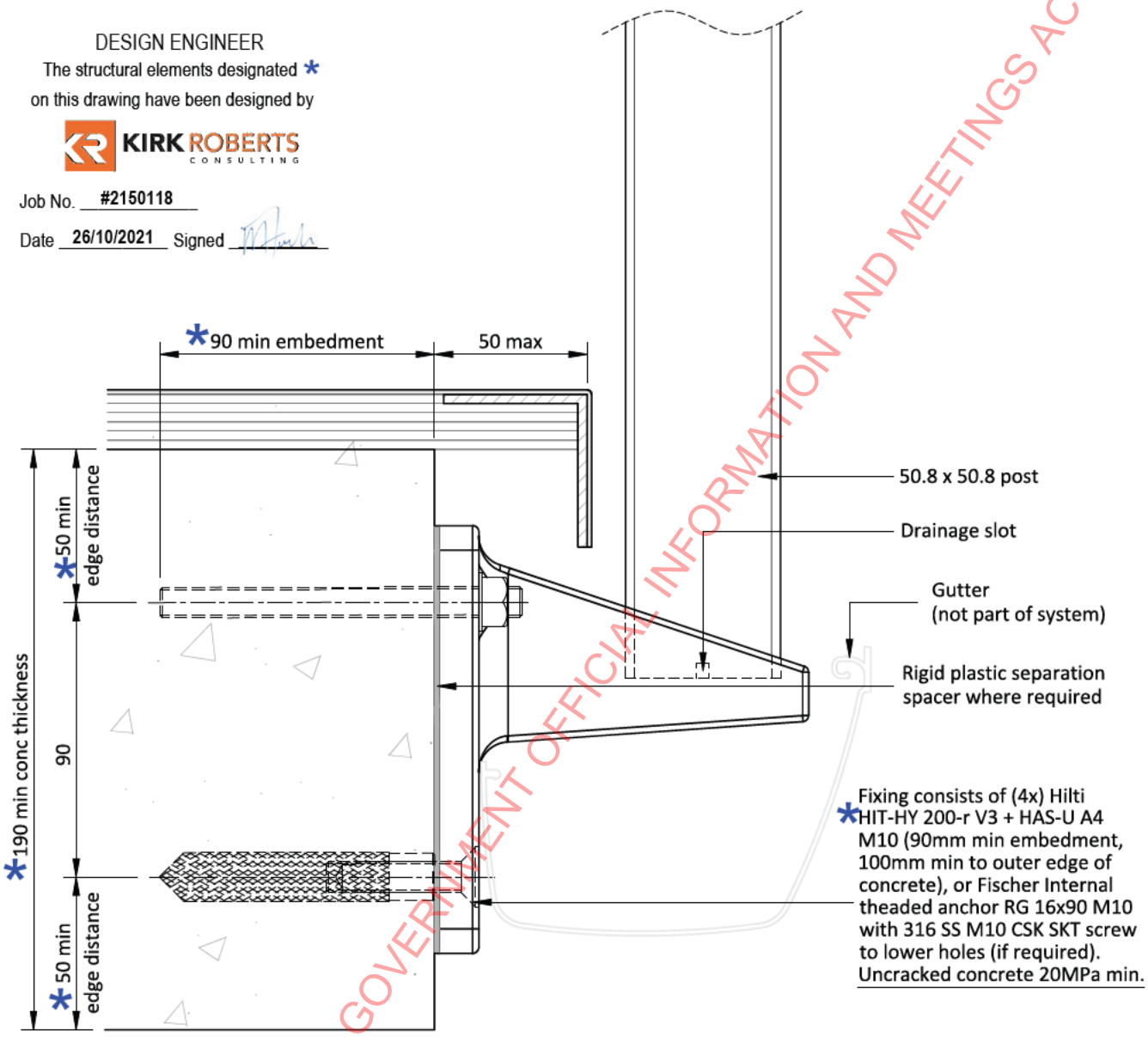
DESIGN ENGINEER

The structural elements designated * on this drawing have been designed by

KIRK ROBERTS CONSULTING

Job No. #2150118

Date 26/10/2021 Signed



			Leverage height max (distance from top of handrail to bottom of post)								
			0.95m	1.00m	1.05m	1.10m	1.15m	1.20m	1.25m	1.30m	1.35m
Glass or Solid infill (Vista, Classic, Clearview)	Up to very high wind zone (50m/s)	Maximum post ctrs	1.39m	1.32m	1.26m	1.20m	1.15m	1.10m	1.05m	0.95m	0.85m
	Extra high wind zone (55m/s)		1.39m	1.32m	1.24m	1.13m	1.03m	0.95m	0.87m	0.78m	0.68m
35% max closed area (Settler, Heritage, Face hung fin)	All wind zones (up to 55m/s)		1.39m	1.32m	1.26m	1.20m	1.15m	1.10m	1.05m	0.95m	0.85m

- Applicable to occupancy types A, B, C3 & E.
- This fixing detail PS1 should be used in conjunction with the appropriate system PS1.
- This is a balustrade connection detail. Deck design, construction and water-proofing is the responsibility of others. For all other applications or non-standard or site specific connections not covered under the standard detail manual please contact Spectrum.

spectrum
0800 355 366
info@spectrum.co.nz
www.spectrum.co.nz

Balustrade. subject to change without notice.

BL.3.1.15 Rev:C 26.10.21

KIRK ROBERTS CONSULTING

PRODUCER STATEMENT – PS1 – DESIGN

ISSUE:A

(Guidance on use of Producer Statements is available at www.engineeringnz.org)

ISSUED BY: Kirk Roberts Consulting Engineers Ltd. (Design Firm) **PROJECT NO: 2150118**

TO: Spectrum (Owner/Developer)

TO BE SUPPLIED TO: Territorial Local Authority (Building Consent Authority)

IN RESPECT OF: Spectrum - Clearspan or Clearview face fixings to concrete with castaway bracket (detail countersigned by myself and dated 26/10/2021)

(Description of Building Work)

AT: Nationwide (Address) **LOT** **DP**

We have been engaged by the owner/developer referred to above to provide **Structural Engineering Design** services in respect of the requirements of Clause(s) **B1/VM1** of the Building Code for
All ☐ or Part only ☒ (as specified in the attachment to this statement), of the proposed building work.

The design carried out by us has been prepared in accordance with:
☒ Compliance Documents issued by the Ministry of Business, Innovation & Employment **B1/VM1** or (verification method / acceptable solution)

☐ Alternative solution as per the attached schedule.....

The proposed building work covered by this producer statement is described on **Spectrum** drawings detail titled "**Clearspan or Clearview face fixings to concrete with castaway bracket",** and numbered **BL.3.1.15 Rev:C 26.10.21** together with the specification, and other documents set out in the schedule attached to this statement.
On behalf of the Design Firm, and subject to:

(i) **All proprietary products meeting their performance specification requirements;**
(ii) **Structural design loads are based on a 50 year design life and Importance Level 2 structure (normal structures and structures not in other importance levels) as defined in AS/NZS 1170.0 2004 clause 3.3**
(iii) **This PS1 is for the balustrade system listed above only. The design of the design of the supporting structure for loads imposed from the balustrade system (including torsional loads) is the responsibility of others.**
(iv) **This certificate does not cover weather-tightness.**
(v) **This Producer Statement - Design is valid for a building consent issued within 2 years from the date of issue;**
(vi) **Inspections of the structural elements shall be undertaken by the Building Consent Authority (council). As Kirk Roberts Consulting Engineers are not undertaking inspections, we cannot issue a Producer Statement for Construction Review – PS4.**

I **believe on reasonable grounds** that a) the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached schedule, will comply with the relevant provisions of the Building Code and that b), the persons who have undertaken the design have the necessary competency to do so. ~~I also recommend the following level of construction monitoring/observation:~~ (Refer note above)
~~☐CM1 ☐CM2 ☒CM3 ☐CM4 ☐CM5 (Engineering Categories) or ☐ as per agreement with owner/developer (Architectural)~~

I, **Max Warwick Fowler** am: ☒CPEng **1008603 #**
(Name of Design Professional)

I am a Member of: ☒ Engineering New Zealand ☐ NZIA and hold the following qualifications: **B.E.(Hons), CMEngNZ, CPEng**
The Design Firm issuing this statement holds a current policy of Professional Indemnity Insurance no less than $200,000*.
The Design Firm is a member of ACENZ: ☒

SIGNED BY **Max Warwick Fowler** ON BEHALF OF **Kirk Roberts Consulting Engineers Ltd.** (Design Firm)

Date: 26/10/2021 (signature).....

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Design Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of $200,000.*

This form is to accompany **Form 2 of the Building (Forms) Regulations 2004** for the application of a Building Consent.

From: s7(2)(a)
To: Lyall Huizer
Subject: [EXTERNAL] Re: BC210296
Date: Thursday, 30 September 2021 1:35:22 pm
Attachments: hccsmalllogo_fc6f6e05-be46-4dd3-bc01-910915b54a7e.jpg

Hi Lyall

Regarding to daylight to bedroom in apartment 1:

The bedroom in apartment 1 does not have a window directly linked to the space, however, the idea is to borrow light and ensure public awareness is well managed to be as practical as possible given the building. The proposed approach is to allow a full length glazed joinery (IJ-0.02) between the bedroom and living/dining to allow natural light penetrate through, and allow it to see the outside through the windows W0.05 and W0.04 which are 900mm sill height, and the head height is 2.47m from slab. Given this apartment is facing the north side, which receives all day sunlight, and from my professional opinion, the bedroom does receive sufficient daylight to be as practical as possible given the building is existing.

Thanks, please feel free to give me a call if you have any questions.

Kind regards

s7(2)(a)

Telephone: s7(2)(a)
Mobile: s7(2)(a)
Address: s7(2)(a)
Email: s7(2)(a)

www.tadworks.co.nz

On Thu, Sep 30, 2021 at 10:52 AM Lyall Huizer <Lyall.Huizer@huttcity.govt.nz> wrote:

> HI s7(2)(a)
>
> Just to follow up on our conversation:
>
> Regards the 3 waters – I am satisfied with the proposed drawing as prepared by s7(2)(a) I am going to check with s7(2)(a) regarding any requirements for compliance schedule he may have.
>
> Fire collars and sealant – apologies I have sighted the installation instructions. OK
>
> 1/ The generic PS1's supplied for the entrance canopy and the horizontal slat system state they are valid for a BC issued 2 years after date on the PS1's which are 2020 so acceptable however the PS1 for the castaway bracket is dated 16/8/2019 and should be updated.

2/ Please make an ANARP argument outlining measures taken to achieve the best possible daylight levels and awareness of the outside for bedrooms without an external wall. What I need is a statement from you summarising all the measures you have taken to maximise daylight into these bedrooms and that you consider this is as near as is reasonably practicable given the building is existing.

Any questions please feel free to call me

Best Regards

Lyall

Lyall Huizer
Building Officer
Hutt City Council, 30 Laings Road, 5040, Lower Hutt 5040, New Zealand
T 04 570 6713, **W** www.huttcity.govt.nz

Building Consent no:	**BC210296**
Applicant's name:	s7(2)(a) [redacted]
Owner's name:	218 Willis Ltd
Site address:	221 High Street, HUTT CENTRAL 5010
Issue date:	19 November 2021

BUILDING CONSENT

CONSENT HOLDER PLEASE NOTE:

- You must keep these plans and specifications on site during construction and make them available to Council officers on request.
- You must ensure all work complies with the enclosed documents.
- You must ensure that the owner (if you are not that person) and anyone undertaking any work on site are aware of all consent conditions.

INSPECTIONS

- Inspection bookings are subject to availability. **Phone 04 570 6754 to book an inspection**.
- You must ensure a Council inspector approves any work listed in the enclosed inspection schedule before you cover over or close up the work.
- You must ensure safe access for inspectors to carry out their work.

OBLIGATION TO COMPLY WITH OTHER LAWS

You must carry out all work in accordance with your Building Consent, as set out in the Building Act 2004 and Building Regulations 1992. The issuing of this Building Consent does not relieve the owner of the building or proposed building of any duty or responsibility under any other act relating to or affecting the building or proposed building. Nor does the issuing of this Building Consent permit the construction, alteration, demolition or removal of a building or proposed building if such work would be in breach of any act.
All work shall comply with the New Zealand Building Code.

Hutt City Council
30 Laings Road
Private Bag 31912
Lower Hutt 5040
New Zealand
www.huttcity.govt.nz
T 04 570 6666
F 04 569 4290

19 November 2021

s7(2)(a) [redacted]

Lyall Huizer
Environmental Consents
DDI: 04 5706713
lyall.huizer@huttcity.govt.nz
Our reference: BC210296

Dear Sir/Madam,

Approval of Building Consent for 221 High Street, HUTT CENTRAL 5010, (BC210296)

I am pleased to advise that, acting under delegated authority from Hutt City Council, I have approved your Building Consent application at the above address. Your copy is attached.

Please take the time to read this document carefully and in full before starting any work. You should pay particular attention to the list of inspections set out in the consent - each inspection is compulsory. **Note: Inspection bookings are subject to availability**

A copy of the approved plans and specifications must be kept on site at all times during building work and made available to Council staff on request.

The consent is issued under section 51 of the Building Act 2004, which obliges you to carry out your work in accordance with the plans and specifications submitted in your application. Providing you do that, I am satisfied your building will meet the performance rules of the Building Code.

There are several important legal things you should know about this Building Consent:

1. It neither gives nor implies any right beyond the legal boundaries of your land. You must get the permission of affected owner(s) to carry out any work beyond those boundaries.

2. It does not affect any duty or responsibility under any other act relating to your building project.

3. It does not allow you to construct, alter, demolish or remove the building if such actions would breach any other act.

You should be aware that this Building Consent lapses if you do not start work within 12 months of the date shown at the end of your consent document.

A final point: Section 92 of the Building Act 2004 requires you to apply for a Code Compliance Certificate as soon as practicable after completing work. (The certificate confirms you have built in compliance with your Building Consent and the Building Code.) If you do not apply for a certificate within two years of the date the Building Consent was granted, namely by 05 November 2023, the Council is required by section 93 of the same act to decide whether or not to issue the certificate.

Yours sincerely,

Lyall Huizer
Building Officer

FORM 5

BUILDING CONSENT

Issued under section 51 of the Building Act 2004

THE BUILDING

BUILDING CONSENT NO: BC210296

Street address of building: 221-223 High Street, HUTT CENTRAL 5010
Legal description of land where building is located: LOT 3 DP 17503, LOT 4 DP 17503
Building name: -
Location of building within site/block number: existing building, whole site
Level/unit number: two storey

THE OWNER

Name of owner: s7(2)(a)
Mailing address:

Street address/registered office: as per mailing address
Contact person: s7(2)(a)
Landline:
Mobile: s7(2)(a)
Daytime:
After-hours:
Fax:
Email: s7(2)(a)
Website:

First point of contact for communications with Hutt City Council: s7(2)(a)
s7(2)(a) Tel: s7(2)(a) Email: s7(2)(a)

BUILDING WORK

The following building work is authorised by this Building Consent:

HOUSING (Multi-unit Dwelling) & COMMERCIAL: (CoU) Alterations to 2-storey commercial building (shallow founded RC slab on grade, RC MR frame & RC walls, steel roof trusses) - Convert Ground Floor rear area into 2x apartments (1-bedroom 65m² & 2-bedroom 82m²) and alter front into 2x commercial/retail units, convert First Floor offices into 4x 2-bedroom apartments (65-74m²). Seismic strengthen (new transverse steel portals, spraycrete shear walls, steel ceiling plane X-bracing), partial over-clads/new walls with cavity fixed Flashclad vertical Dualbord & horizontal Euroline aluminium w/boards, new & replacement d/glazed aluminium & steel firewindow joinery, new skylights, Gib on LTF internal walls, strap & lines RC walls, new flush Gib ceilings, install insulation, interior fitouts, install new services & finishes.

This Building Consent is issued under section 51 of the Building Act 2004. This Building Consent does not relieve the owner of the building (or proposed building) of any duty or responsibility under any other Act relating to or affecting the building (or proposed building). This Building Consent also does not 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.

This Building Consent is subject to the following conditions:

a) Council, as a Building Consent Authority is entitled, at all times during normal working hours or while building work is being done, to inspect the land, any building and the building work that has been or is being carried out on or off the building site.

COMPLIANCE SCHEDULE

A Compliance Schedule is required for the building. The Compliance Schedule must contain the following Specified Systems and comply with the performance standards for those systems required by the building code - refer Draft Compliance Schedule attached.

(continues)

ATTACHMENTS

Copies of the following documents are attached to this Building Consent:

- Development Contribution notice.
- Draft Compliance Schedule CS1249.

Lyall Huizer
Building Officer, Environmental Consents

On behalf of Hutt City Council

Date: 19 November 2021

BUILDING CONSENT NOTES

Building:

You are to exclude the public from the worksite for the duration of this consent works. All work must be in accordance with clause F5 of the NZ Building Code, which requires you to safeguard people from injury and to protect neighbouring property from any damage and in accordance with clause F2 which requires you to safeguard people from injury and illness from hazardous materials. You must maintain any site fencing/barriers/hoardings, warning signs and safety precaution measures in place and secure the worksite from unauthorised access for the duration of the works.

Note: the building may contain small amounts of existing bonded non-friable Asbestos Containing Material (ACM). Demolishing and altering small amounts (less than 10sqm total) of non-friable ACM can be done by non-licensed asbestos specialists but must still be done by properly trained persons and must be carried out in accordance with the WorkSafe Approved Code of Practice (Management & Removal of Asbestos) and the Health and Safety at Work (Asbestos) Regulations 2016, it is also recommended personnel read the WorkSafe "Working with or near asbestos - quick guide for builders" and attend appropriate training. It is extremely important you control any dust or fragments from the ACM, all asbestos waste must be double bagged and disposed of at a place approved by the Council.

A Chartered Professional Engineer (Structural) shall monitor the construction of the specific engineered design structural work and issue a (PS4) Construction Review Producer Statement together with supporting information to Hutt City Council at completion. The work shall be inspected/verified to EngNZ/ACENZ construction monitoring level CM3 including specifically inspecting the following (refer to the Engineer's specifications and inspection regime for detail):

- Steel Frame: Inspection of steel moment frames. (Estimated 2 inspections)
- Concrete Walls: Inspection of steel reinforcements before spraying concrete (Estimated 2 inspections)
- Roof braces: Inspection of steel cross braces and struts

Wherever possible, you should arrange for your structural Engineer - David Lai of Focus Engineering Consultants Ltd 04 382 8678 (# 2812)

Please liaise directly with your Engineer – s7(2)(a) [redacted] - (contact: s7(2)(a) [redacted] phone: s7(2)(a) [redacted] job# 2812) - to coordinate appropriate times for the inspections.

It is important to note that the inspections listed above are additional to those required by Hutt City Council. We will require a copy of the Engineer's site notes and PS4 as part of your application for a Code Compliance Certificate at the completion of the building work. The contractors are to give at least 48-hours prior notice to the Engineer of any required inspection and attend upon the Engineer for any inspection including offsite at the fabrication workshops by the Engineer or his nominated inspectors as specified or agreed. Contractors are to allow to supply the Engineer with any required material certificate/information or independent third party inspection/testing certificates or Producer Statements at completion as specified.

The Fire Engineer shall monitor the construction of the passive firerating work and active fire safety precaution systems and issue a PS4 Construction Review Producer Statement together with supporting information to HCC at completion. The work shall be inspected/verified to EngNZ/ACENZ construction monitoring level CM2 including periodic onsite inspections and review of work methodologies and shop drawings/submissions as specified. Please liaise directly with your engineer – s7(2)(a) (phone: s7(2)(a)) to coordinate appropriate times for the inspections. It is important to note that the inspections listed above are additional to those required by Hutt City Council. We will require a copy of the engineer's site notes and PS4 as part of your application for a Code Compliance Certificate at the completion of the building work.

You are required to supply Council the following completed and signed PS3 Construction Producer Statements or other noted documentation at completion certifying the work has been completed in accordance with the consent documents and the NZ Building Code:

- From the main building contractor (you are also to supply a copy to the structural Engineer).
- From the structural steelwork contractor (you are also to supply a copy to the structural Engineer).
- From the Carpentry LBP installer of the external claddings including the installation of RAB's, underlays, flashing tapes, flashings, seals, cavity mount systems and the claddings.
- From the Spectrum Aluminium Ltd approved contractor for the aluminium balustrades and louvre systems.
- From the Ardex New Zealand Ltd approved applicator of the internal wet areas waterproofing membranes system.
- From the heating, ventilation & air-conditioning contractor, this shall include confirming the HVAC plant and ducting has been mounted and seismically restrained in accordance with NZS4219:2009.
- From the passive firerating protection systems installer (for all firerated: separations, protective encasements/enclosures, closures, penetrations and firestopping) from an installer registered with the Fire Protection Association of NZ, this is to include a schedule listing out all the firerated services penetrations/firestops and closures in fire separations as per AS4072.1:2005 (this shall as a minimum include location & installation label/tag, type/description, firerating, manufacturer model/system/ID code, data/specification sheet reference, installers name, optional - photo(s) of install). You are also to supply a copy to the fire Engineer.
- A copy of the manufacturer's register of all the firerated doorsets installations as per NZS4520:2010 section-6.4 (which shall include the following information: (a) Building and door identification; (b) Fire resistance rating of the doorset; (c) Installing company's name and address; (d) Date the door was dispatched; (e) Date the installation declaration was received; (f) Details of hardware fitted; and (g) Door clearances). You are also to supply a copy to the fire Engineer.

- From the Registered Electrician emergency lighting installer including confirming the installation complies with AS/NZS2293 parts 1 & 3 as amended by F6AS1 Appendix-B, declaration of compliance of the installation performance after onsite testing in accordance with F6/AS1 part-1.4, and AS2293.3:2005 Appendix B declaration of compliance for the emergency light fittings (including illuminated type exit sign fittings). You are also to supply a copy to the fire Engineer.
- A NZS4512:2010 Appendix-J type Completion Certificate from an approved fire alarm system contractor including certification from an independent third party Accredited Inspection Body. You are also to supply a copy to the fire Engineer.

Plumbing and Drainage:
All drainage work must be done by an Authorised Person under the Plumbers, Drainlayers and Gasfitters Act 2006, the work must be supervised and inspected by a Certifying Drainlayer. The position of any existing drains is to be accurately located and proven clear of construction prior to work commencing. You must submit an accurate “as-laid” drainage plan

at completion (the plan must show the buildings, site boundaries, fixtures, pipe locations/type/size/material, key features/inspection points and key set-out dimensions and invert levels or depths). The plan must be signed off by the Certifying Drainlayer and state their name, registration number and date.

All plumbing work (waterfitting and sanitary plumbing) must be done by an Authorised Person under the Plumbers, Drainlayers and Gasfitters Act 2006, the work must be supervised and inspected by a Certifying Plumber. You are required to submit a PS3 Construction Producer Statement certifying all the plumbing work has been completed in accordance with the consent documents and the NZ Building Code from the Certifying Plumber at completion including stating their name and registration number. You must submit an accurate “as-built” sanitary plumbing plan of the upper levels at completion (the plans must show the building, rooms/layout, fixtures, pipe locations/type/size/material and key features/vents/stacks /inspection points/etc). The plan must be signed off by a Certifying Plumber and state their registration number.

You are required to install a new testable backflow prevention device (complying to AS/NZS2845:2010 and HCC Water Supply Bylaw 2010 part-10) to the main water supply as per the plans and specifications complete with suitable isolator valves. The backflow preventor must be installed in a location and manner to suit the application and allow future access as per NZBC G12/AS1 parts-3.6 & 3.7. This work must be done by a Certifying Plumber, and the installation inspected and tested by an approved Independently Qualified Person for Compliance Schedule Specified System-7. You are required to submit a test certificate for the installed backflow prevention system at completion together with details of the backflow device and an updated as-built plan if the consented location has changed.

You are required to install an approved water meter on the main water supply to the property at the boundary in accordance with GHD/Wellington Water Ltd requirements and HCC Water Supply Bylaw 2010 part-11. Note: this work must be done by a Wellington Water Ltd approved contractor.

All gasfitting work must be done by an Authorised Person under the Plumbers, Drainlayers and Gasfitters Act 2006, the work must be supervised and inspected by a Certifying Gasfitter. The Certifying Gasfitter must submit a Gas Safety Certificate and as required a gas Certificate of Compliance at completion.

Compliance Schedule:
Refer to the attached Draft Compliance Schedule CS1249 - the building must contain the scheduled Specified Systems and comply with the performance standards for those systems as required by the Building Code.

Planning:
The Council has granted a Resource Consent, and the proposal can proceed in accordance with the conditions of that consent (reference = RM200404). Note in particular you are to:

- Notify the council Resource Consent Monitoring unit at least two days prior to commencing works onsite, phone: 04 560 1044 or email: enforcement@huttcity.govt.nz.
- Take measures to control site run-off and sediment, protect existing water courses or stormwater drainage and prevent blown dust or dirt outside the worksite and prevent dirt or debris being deposited on the road corridor.

Environmental Health:
All building work must comply with construction noise standard NZS6803:1999 (please refer to the Construction Noise guide enclosed with the consent documents). You must ensure that any activity causing vibration does not result in that vibration being discernible beyond the boundaries of the property. The proposed works involve driven piles, earthworks, vibratory rollers and/or demolition works which are unlikely to meet this requirement. It is therefore recommended that you contact the Council's Environmental Health Team on 04 570 6666 to discuss the construction method and ways to minimise any noise and vibration disturbance to the surrounding properties.

Other Legislation:
You must ensure you comply with the Local Government Act 2002, the Health Act 1956, the Hazardous Substances and New Organisms Act 1996, the Health and Safety at Work Act 2015 and Hutt City Council bylaws, including particularly the Hutt City Council Water Supply Bylaw 2010, Hutt City Council Drainage Bylaw 2016 and the Hutt Valley Trade Wastes Bylaw 2016.

INSPECTIONS

The following inspections are required:

- Pre-slab Building (concrete slab): Call for an inspection when you have placed all the damp-proof membrane, sealed all overlaps and penetrations, and installed reinforcing mesh using sufficient chairs in the correct places.
- Pre-slab Plumbing (concrete slab): Call for an inspection after you have installed all underground plumbing and drainage pipes but before backfilling and installing the damp-proof membrane and reinforcing mesh.
- Pre-wrap: Call for an inspection after you have completed roof and wall framing, including any exterior sheet bracing, but before installing building wrap (building paper, RAB board or ply).
- Pre-clad: Call for an inspection after you have installed building wrap, window and door flashing tape, cavity systems (where applicable) and flashing systems, but before installing joinery or before installing roof cladding.
- Fire walls: Call for an inspection after installing fire-rated walls, but before concealing them. You must seal any penetrations (by pipes or wiring, for example) to the same fire rating as the walls themselves.
- Pre-line Building: Call for an inspection after the building exterior is weathertight and you have installed structural components (including bracing), insulation and fire-rated systems, but before lining the walls.
- Pre-line Plumbing: Call for an inspection when the plumbing has been installed and a plumber is ready to subject it to a pressure test.
- Drainage: Call for an inspection after you have installed sewer and stormwater pipes and they are under test, but before you backfill. (For demolition work call after capping the services.) You must have ready for the inspector a scaled “as-laid” drainage plan.
- Final inspection: Prepare for a final inspection by completing all work, passing all inspections, and submitting a Code Compliance Certificate application, ensuring you enclose all necessary certificates and guarantees. The Council will call to set an inspection time.

Please note that 8 inspection visits have been paid for. Additional inspection visits will be charged and must be paid before the Code Compliance Certificate can be issued.

Important information about inspections

Book every inspection: It is vital you arrange an inspection at each stage listed above. This is a condition of your Building Consent. If you continue on without one, it is quite likely the Council will later make you undo work in order to make an inspection possible (for example, removing plasterboard from interior walls, in the case of a pre-line inspection, so bracing, insulation and moisture content can be checked). Failure to get an inspection will also delay – and could jeopardize – your Code Compliance Certificate. Council, as a Building Consent Authority is entitled, at all times during normal working hours or while building work is being done, to inspect the land, any building and the building work that has been or is being carried out on or off the building site.

Engineering inspections: When your building involves an Engineer (whether for structural, fire design, mechanical or geotechnical work), the Council recommends that you co-ordinate that person's site inspections, where applicable, with those by the Council inspector. An inspection by an Engineer does not cancel your obligation to call a Council inspector if the work relates to the compulsory inspections listed above. Engineers must provide a PS4 Producer Statement confirming the work they have overseen complies with the submitted designs, as well as supplying site inspection notes detailing the type of inspection, what was inspected, where it was inspected and the extent of that inspection.

Be thorough: Before ringing to book, make sure you have completed every aspect of the stage you want inspected. If there is unfinished work, the inspector will have to return – and you will face an extra inspection fee. (You will not get a Code Compliance Certificate until you have paid outstanding fees.)

Contact us: When you ring to book an inspection, be ready with your Building Consent number - **BC210296**. The Council will need to know your name, phone number and the type of inspection you want. Inspection bookings are subject to availability. **Phone 04 570 6754** between 8am and 5pm Monday to Friday to book an inspection.

Final Inspection and Code Compliance Certificate:

When you finish building work, the Council will carry out a Final inspection and – providing the work complies with the Building Consent – issue a Code Compliance Certificate. This is a formal statement, issued under section 95 of the Building Act 2004, confirming that you have carried out work in compliance with your Building Consent. You are legally required to apply for this certificate when you finish work. An application form for Code Compliance Certificate is enclosed. Complete this at the end of building work and submit it to the Council, along with copies of the following documents:

- A completed application for Code Compliance Certificate
- Energy works certificates for all electrical and gas work – Electrical & Gas Certificates of Compliance and related Electrical & Gas Safety Certificate(s)

The following documents are required under section 94 of the Building Act 2004:

- A Certifying Drainlayer signed "as-laid" drainage plan with key dimensions and key notes
- A Certifying Plumber signed "as-built" sanitary plumbing plan with key notes
- A PS3 Construction Producer Statement from the Certifying Plumber for all sanitary plumbing and waterfitting work
- A backflow preventer test certificate from an IQP approved for SS7
- A PS4 Construction Review Producer Statement from the structural Engineer with copies of inspection reports/ site notes
- A PS3 Construction Producer Statement from the main building contractor
- A PS3 Construction Producer Statement from the structural steelwork contractor
- A PS3 Construction Producer Statement from the Carpentry LBP wall claddings installer
- A PS3 Construction Producer Statement from the proprietary balustrades and louvres system contractor
- A PS3 Construction Producer Statement from the internal waterproofing membranes system applicator
- A PS3 Construction Producer Statement from the heating, ventilation and air-conditioning system contractor
- A PS4 Construction Review Producer Statement from the fire Engineer with copies of inspection reports/ site notes
- A PS3 Construction Producer Statement for the installation of passive firerating systems
- A schedule of all penetration firestop installations
- A copy of the NZS4520 register for the installation of all fire doorsets

- A PS3 Construction Producer Statement from the Registered Electrician emergency lighting contractor with declarations of compliance for the installation and lights
- A NZZ4510:2010 compliance certificate from the fire alarm contractor including certification from an independent third party Accredited Inspection Body

Issued by:

Lyall Huizer
Building Officer

Form 3

DEVELOPMENT CONTRIBUTION NOTICE

Section 36, Building Act 2004

To: s7(2)(a) [redacted]

For: BC210296 at 221-223 High Street, Hutt Central LOWER HUTT 5010

A Code Compliance Certificate for the building work will not be issued until a Development Contribution of $12,132.00 is paid. The Development Contribution must be paid to Hutt City Council. Contact us for an invoice, or email: es.admin@huttcity.govt.nz

Our payment options are, —

- Credit Card: eservices.huttcity.govt.nz or visit our homepage: huttcity.govt.nz
- Internet Banking: Hutt City Council, 03-0531-0429500-04, Westpac, Lower Hutt – and the BC number as Reference
- Visit our office at 30 Laings Road Lower Hutt

If the Development Contribution is not paid,—

(a) the Council may, under section 208(b) of the Local Government Act 2002, withhold the Code Compliance Certificate that would be issued under section 95 of the Building Act 2004:

(b) the Building Consent authority, under section 94(4) of the Building Act 2004, must refuse to issue a Code Compliance Certificate for the building work until it has received—

i. evidence that the Development Contribution has been paid or made by the owner to the Council; or

ii. a copy of a written agreement between the owner and the Council that the Code Compliance Certificate may be issued:

(c) the Council may, under section 208(d) of the Local Government Act 2002, register the Development Contribution under the Statutory Land Charges Registration Act 1928 as a charge on the title of the land in respect of which the development contribution was required.

Signature:

Lyall Huizer

Building Officer

On behalf of: Hutt City Council

Date: 19 November 2021

BC No 210296

DIALOGUE RECORD		
Date /Time	Phone, Fax, Email, letter	Participants, summary of dialogue. Reference to documents sent/received
5/5/2021	email	RFI1 emailed to the owner and designer
14/7/2021	Email	RFI1 response from Andrew of Tadworks
29/7/2021	email	Spoke with Andrew regarding RFI response and went through questions likely to be asked in RFI2.
31/7/2021	email	RFI2 emailed to Andrew at Tadworks
30/9/2021	email	Follow up questions RFI3
30/9/2021	email	Anarp argument for G7 – PS1's to follow.
28/10/2021	email	PS1's from Engineer covering Proprietary systems.