

Exemplar Compliance Schedule

DECEMBER 2021



MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

Te Kāwanatanga o Aotearoa
New Zealand Government



**MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT**
HĪKINA WHAKATUTUKI

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December 2021

Cover image

Te Matapihi, Community Centre, Bulls – Architecture Workshop Wellington. 2019.
Image by Grant Davis.

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FOREWORD

Kia ora koutou,

The Ministry of Business, Innovation and Employment (MBIE), in collaboration with the Association of Building Compliance, has developed a ‘best-practice’/exemplar compliance schedule. The exemplar compliance schedule was developed for the recently completed Bulls Community Centre.

We hope by publishing this exemplar compliance schedule that councils around the country will make a conscious effort to raise the quality and specificity of their compliance schedules.

Background

Compliance schedules are required to comply with s103 of the Building Act 2004 (the Act). However, there is no prescribed form. Therefore, building consent authorities (BCAs) and territorial authorities (TAs) have created their own versions of compliance schedule documents.

Assessments of BCAs and TAs have identified that many find it challenging to compile a good quality, building-specific compliance schedule.

BCA accreditation

Most BCA accreditation assessments result in a finding of general non-compliance (GNC) from International Accreditation New Zealand (IANZ) against the compliance schedule requirements.

Just as we in the building control sector like to see building work going beyond the minimum requirements of the Building Code, this exemplar compliance schedule exceeds the content as required by the Act. Therefore, we do not expect IANZ to use this exemplar compliance schedule as the standard for their assessments. However, with the release of this exemplar we anticipate that GNCs will drop over time as BCAs gain a better understanding of the content needed to produce a good quality and compliant compliance schedule.

Capture detailed specified system information at application time

As the compliance schedule is a document which is valid for the entire life of the building, it is critical that the document provides relevant information and as much specificity about the specified systems as possible.

The quality and specificity of a compliance schedule is dependent on the quality of the specified system information provided by the designer(s) with the building consent application. We recommend that a BCA rejects or returns a building consent application with inadequate, generic specified system information at the time of receiving the application, rather than trying to capture the missing information during the processing of the consent.

Three stages of compliance schedule evolution

We suggest that for a large-scale, new-build commercial/industrial building, the compliance schedule should be seen to evolve during the following three stages of the project:

- **building consent issued** – Form 5 states the specified systems intended to be installed with their respective performance standards as supplied by the designer(s)

- **code compliance certificate issued** – accompanied by the compliance schedule which should accurately reflect the installed specified systems with their respective performance standards (note, if either differ from those stated on the Form 5 this is required to be documented via a minor variation or amendment, and in some circumstances a certificate of acceptance may be required)
- **first building warrant of fitness issued once the compliance schedule statement has expired at 12 months after the issue of the compliance schedule** – as the independent qualified persons (IQPs) have the technical expertise/knowledge for their given specified system(s) and they have undertaken or supervised regular inspections/maintenance since the issue of the compliance schedule, any compliance schedule discrepancies should be corrected via an amendment (Form 11).

Compliance schedules are ‘living documents’ that should be updated by TAs, in consultation with the building owner, whenever new information comes to hand (eg via an on-site audit or a test report from an IQP).

Acknowledgement

MBIE would like to thank the Rangitikei District Council, the Association of Building Compliance and those BCAs that participated in the limited consultation which was invaluable and assisted us greatly in developing this exemplar compliance schedule.

Any suggested improvements or questions relating to the exemplar compliance schedule can be sent to consentsystem@mbie.govt.nz

Ngā mihi

Building System Assurance Team

COMPLIANCE SCHEDULE

<Insert Building Consent
Authority logo/header>

Issued under s102 of the Building Act 2004

Compliance schedule number	CS0320	Anniversary date	30 September
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General building information

Street address of building	112 Bridge Street, Bulls
Legal description of land	Lot 79 Pt Lot 80 Blk A Deeds Plan 479 Pt DP 3014
Building name	Te Matapihi – Bulls Community Centre
Location of building within site/block number	 <p>Main entry on Criterion St frontage & occupies SW end of site</p>
Levels or unit numbers	3 levels (Grd, L1 & L2)
Year of first construction	2020
Intended life of the building	Indefinite
Highest fire hazard category	Not applicable
Risk group(s)	Not applicable (designed to C/VM2 Amendment 5, Nov 2017)
Compliance schedule is kept at:	112 Bridge Street, Bulls

Building use & occupancy (current lawfully established use)

Level	Classified use from NZBC A1 (plus description)	Use (NZBReg 2005 Schedule 2)	Occupancy load
Grd	Communal non-residential (community hall)	CL	348
1	Communal non-residential (library)	CL	124
2	Communal non-residential (roof terrace & meeting rooms)	CS	75
			547 Total

The owner			
Name of owner	Rangitikei District Council		
Contact person	John Doe		
Mailing address	Private Bag 1102, Marton 4741		
Street address/registered office	46 High Street, Marton		
Phone number	(06) 327 0099	Mobile	0800 422 522
E-mail address	John.Doe@rangitikei.govt.nz	Website	www.rangitikei.govt.nz

Specified systems contained in this compliance schedule	
SS 1	Automatic systems for fire suppression
SS 2	Automatic or manual emergency warning systems for fire or other dangers
SS 3 Electromagnetic or automatic doors or windows	
SS 3/1	Automatic doors
SS 4	Emergency lighting systems
SS 7	Automatic back-flow preventers connected to a potable water supply
SS 8 Lifts, escalators, travelators or other systems for moving people or goods within buildings	
SS 8/1	Passenger-carrying lifts
SS 9	Mechanical ventilation or air conditioning systems
SS 12 Audio loops or other assistive listening systems	
SS 12/2	FM radio frequency systems & infra-red beam transmission systems
SS 13 Smoke control systems	
SS 13/1	Mechanical smoke control
SS 14 Emergency power systems for, or signs relating to, a system or feature specified for any of the above systems or features	
SS 14/2	Signs relating to a system or feature specified in any of clauses 1 to 13
SS 15 Any or all of the following features, so long as: they form part of a building's means of escape from fire; those means also contain any or all of the systems or features specified in clauses 1-6, 9 & 13	
SS 15/2	Final exits (as defined by clause A2 of the Building Code)
SS 15/3	Fire separations (as so defined)
SS 15/4	Signs for communicating information intended to facilitate evacuation

Version control		
Version #	Notes or changes	Date
Version 0	Original building consent (BCO-180183 refers)	30 September 2020
Version 1		
Version 2		

SS 1 Automatic systems for fire suppression

Description (incl type)	Type 6 – automatic fire sprinkler system with automatic signaling to a remote receiving centre, plus a Type 2 manual fire alarm system. Includes a diesel sprinkler booster pump & a dual supply water tank. Concealed heads to the stage sub-floor area only						
Specified system photo/s	      						
Make (if known)	150mm valve set (Type X) – [brand name]	Installation Date	2020				
	Diesel engine & pump set – [brand name]						
Model (if known)	Valve set – [product code]	Diesel engine & pump set – [product code]					
Location/s	Interior sprinklers – throughout the building (incl within commercial kitchen hood on grd) Exterior sprinklers – to underside of L1 mezzanine & L2 floor, plus to L2 eaves Fire indicator panel is located on NE wall facing the car parking area, with the fire sprinkler inlet directly below the fire indicator panel Sprinkler stop valve & sprinkler booster pump is in the sprinkler pump room located off the stage sub-floor (directly below the rear stair) Freestanding secondary water supply tank (90 kilolitres capacity) is externally located at the rear of the building						
Performance standard	NZS 4541:2013 Automatic fire sprinkler systems (original version), Parts 1 to 10 & as modified by Para B2.1 of Appendix B to C/AS4 (Amendment 4, dated Jan 2017)						
Inspection standard	NZS 4541:2013 Automatic fire sprinkler systems (original version), refer to Part 12, Routine testing, maintenance, & inspections						

Inspection frequencies	Weekly	Monthly	Quarterly	Annually
Inspection personnel	IQP	IQP	IQP	IQP
Maintenance procedures	NZS 4541:2013 Automatic fire sprinkler systems (original version), refer to Part 12, Routine testing, maintenance, & inspections			
System interfacing	<p>Sprinkler activation is interfaced with the Type 2 system's alerting devices</p> <p>Functional testing (end to end) of the interface between the two systems is to be carried out annually & certified by each IQP for those systems. All relevant IQPs must be on site at the time of testing</p>			
Reporting procedures	<p>The building owner must obtain annual written reports from any IQP or other person who carried out one or more inspections &/or maintenance procedures. Reports must, as a minimum:</p> <ul style="list-style-type: none"> i. record any inspection, test, repair or maintenance carried out ii. record any faults found or maintenance required & the remedy applied iii. include the date the work was carried out iv. include the name of the person who performed the work <p>All reports must be kept at 112 Bridge St, Bulls & kept for a minimum of 2 years</p>			
Signage	<p>Signage includes:</p> <ul style="list-style-type: none"> • 'Sprinkler stop valve' signs (2 off) located on exterior wall adjacent to final exit door from rear stair & adjacent to sprinkler pump room double doors within the stage sub-floor • 'Sprinkler fire alarm' sign (1 off) mounted on the rear exterior wall of the sprinkler pump room • 'Fire sprinkler inlet' sign (1 off) located directly below the fire alarm panel facing the car park area <p>Note: All signage related to SS 1 to be signed off by the IQP for SS 14/2</p>			
Comments/notes	Nil			

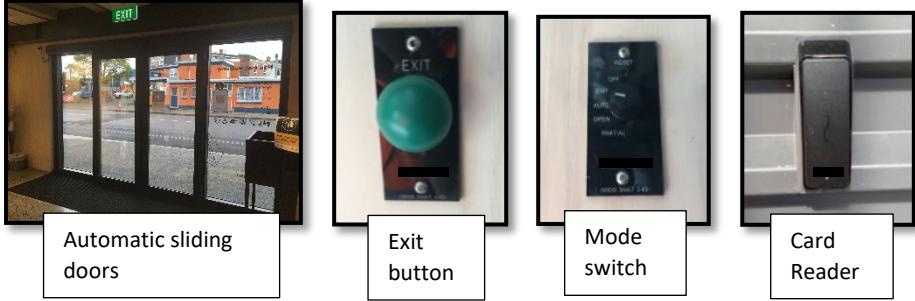
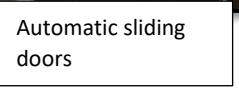
SS 2 Automatic or manual emergency warning systems for fire or other dangers

Description (incl type)	Type 6 – automatic fire sprinkler system with automatic signaling to a remote receiving centre, plus a Type 2 manual fire alarm system				
Specified system photo/s	 <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Fire indicator panel</p> </div> <div style="text-align: center;"> <p>Manual call point (MCP)</p> </div> <div style="text-align: center;"> <p>Alarm control unit</p> </div> </div>				
Make (if known)	[brand name & series number]	Installation date	2020		
Model (if known)	[model number]				
Location/s	<p>Manual call points (10 total – 6 on grd, 2 on L1 & 2 on L2). Refer to Appendix B of this document for location of MCPs</p> <p>Fire indicator panel is located on NE wall facing the car parking area & behind reception</p>				
Performance standard	NZS 4512:2010 Fire detection & alarm systems in buildings (original version) – (https://www.standards.govt.nz/shop/nzs-45122010/ refers)				
Inspection procedures	NZS 4512:2010 Fire detection & alarm systems in buildings (original version), refer to Part 6, Maintaining systems in compliance & good working order				
Inspection frequencies	Monthly	Annually			
Inspection personnel	IQP	IQP			
Maintenance procedures	NZS 4512:2010 Fire detection & alarm systems in buildings (original version), refer to Part 6, Maintaining systems in compliance & good working order				
System interfacing	<p>SS 1 Automatic systems for fire suppression SS 3/1 Automatic doors SS 8/1 Passenger-carrying lifts SS 9 Mechanical ventilation or air conditioning systems SS 12/2 FM radio frequency systems & infra-red beam transmission systems SS 13/1 Mechanical smoke control</p> <p>Functional testing (end to end) of the interface between the systems is to be carried out annually & certified by each IQP for those systems. All relevant IQPs must be on site at the time of testing</p>				
Reporting procedures	<p>The building owner must obtain annual written reports from any IQP or other person who carried out one or more inspections &/or maintenance procedures. Reports must, as a minimum:</p> <ol style="list-style-type: none"> i. record any inspection, test, repair or maintenance carried out ii. record any faults found or maintenance required & the remedy applied iii. include the date the work was carried out 				

	<p>iv. include the name of the person who performed the work</p> <p>All reports must be kept at 112 Bridge St, Bulls & kept for a minimum of 2 years</p>
Signage	<p>Signage includes:</p> <ul style="list-style-type: none"> • MCPs, refer to Appendix E of NZS 4512:2010 (original version) <p>Note: All signage related to SS 2 to be signed off by the IQP for SS 14/2</p>
Comments/notes	[Manufacturer name & model number] photoelectric rate of rise heat detector in L2 electrical cupboard is connected to SS 8/1 lift control equipment

Exemplar

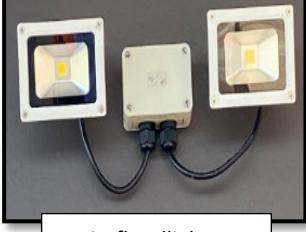
SS 3/1 Automatic doors

Description (incl type)	Bi-parting sliding automatic doors (1 off)		
Specified system photo/s	 <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Automatic sliding doors</p> </div> <div style="text-align: center;">  <p>Exit button</p> </div> <div style="text-align: center;">  <p>Mode switch</p> </div> <div style="text-align: center;">  <p>Card Reader</p> </div> </div>		
Make (if known)	[manufacturer]	Installation date	2020
Models (if known)	[model number]		
Location/s	Main entrance on Criterion St		
Performance standard	AS 5007:2007 Powered doors for pedestrian access & egress (original version), Section 5 refers		
Inspection procedures	AS 5007:2007 Powered doors for pedestrian access & egress (original version), refer to Appendix E, Automatic powered doors inspection & maintenance procedure		
Inspection frequencies	Daily (when in use)	Monthly	Annually
Inspection personnel	Owner or Agent	Owner or Agent	IQP
Maintenance procedures	AS 5007:2007 Powered doors for pedestrian access & egress (original version), refer to Appendix E, Automatic powered doors inspection & maintenance procedure		
System interfacing	<p>SS 2 Automatic or manual emergency warning systems for fire or other dangers</p> <p>Functional testing (end to end) of the interface between the two systems is to be carried out annually & certified by each IQP for those systems. All relevant IQPs must be on site at the time of testing</p>		
Reporting procedures	<p>The building owner must obtain annual written reports from any IQP or other person who carried out one or more inspections &/or maintenance procedures. Reports must, as a minimum:</p> <ul style="list-style-type: none"> i. record any inspection, test, repair or maintenance carried out ii. record any faults found or maintenance required & the remedy applied iii. include the date the work was carried out iv. include the name of the person who performed the work 		

	All reports must be kept at 112 Bridge St, Bulls & kept for a minimum of 2 years
Signage	<p>Signage includes:</p> <ul style="list-style-type: none"> • Signs for the manual exit button & the high-level mode switch <p>Note: All signage related to SS 3/1 to be signed off by the IQP for SS 14/2</p>
Comments/notes	This automatic door is a designated final exit & a staff access-card reader is installed on the outside only, adjacent to the door

Exemplar

SS 4 Emergency lighting systems

Description (incl type)	<ul style="list-style-type: none"> Non-maintained single-point emergency lights throughout the building interior Twin-floodlights (3 off) to illuminate exterior spaces Maintained illuminated exit signs (2 off) to the roof terrace 		
Specified system photo/s	 <p>Single-point</p>  <p>Twin-floodlights (front view)</p>  <p>Twin-floodlights (rear view)</p>  <p>Illuminated exit sign</p>		
Make (if known)	Single point – [brand name]	Installation date	2020
	Twin floodlights – [brand name]		
	Illuminated exit sign – [brand name]		
Models (if known)	Single point – [model name]	Twin floodlights – [model name]	Illuminated exit sign – [model name]
Location	Single point emergency lights throughout the building (including lift car)	Twin-floodlights (3 off) mounted on the exterior walls of rear stage door, L2 north pavilion & L2 south pavilion	Illuminated exit signs (2 off) to the exterior NW wall of L2 south pavilion & SE wall of L2 north pavilion.
	Refer to attached plans (Appendix B)		
Performance standard	AS 2293.1-2005 Emergency escape lighting & exit signs for buildings, Part 1: System design, installation & operation (Amendment 2, dated Aug 2014), & AS 2293.3-2005 Part 3: Emergency escape luminaries & exit signs (Amendment 2, dated Dec 2012), as modified by Appendix B of F6/AS1 (Third Edition, Amendment 4, dated Jan 2017)		
Inspection procedures	AS/NZS 2293.2:1995 Emergency escape lighting & exit signs for buildings, Part 2: Inspection & maintenance (Amendment 3, dated Feb 2014)		
Inspection frequencies	Six Monthly		Annually
Inspection personnel	IQP		IQP

Maintenance procedures	AS/NZS 2293.2:1995 Emergency escape lighting & exit signs for buildings, Part 2: Inspection & maintenance (Amendment 3, dated Feb 2014)
System interfacing	Not applicable
Reporting procedures	<p>The building owner must obtain annual written reports from any IQP or other person who carried out one or more inspections &/or maintenance procedures. Reports must, as a minimum:</p> <ul style="list-style-type: none"> i. record any inspection, test, repair or maintenance carried out ii. record any faults found or maintenance required & the remedy applied iii. include the date the work was carried out iv. include the name of the person who performed the work <p>All reports must be kept at 112 Bridge St, Bulls & kept for a minimum of 2 years</p>
Signage	<p>Signage includes:</p> <ul style="list-style-type: none"> • Manual test switch located on 4 electrical distribution boards (DBG1 in grd corridor to hall, DBG2 on stage, DBF1 in L1 multi-use room 2, DBF2 in L2 corridor) <p>Note: All signage related to SS 4 to be signed off by the IQP for SS 14/2</p>
Comments/notes	Note any evacuation signage associated with emergency lighting (eg pictograms, directional arrows, & exit signs) is covered by SS 15/4 of this compliance schedule

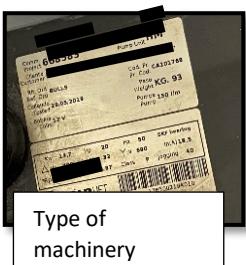
SS 7 Automatic back-flow preventers connected to a potable water supply

Description (incl type)	Atmospheric vacuum breaker to external hose/stand-pipe tap (3 off)		
Specified system photo/s			
Make (if known)	[manufacturer name]	Installation date	2020
Models (if known)	[model name]		
Location	Hose/stand-pipe taps: 1 on grd level (adjacent to fire indicator panel on NE wall facing the car parking area) & 2 on L2 (NW wall of north pavilion & SW wall of south pavilion)		
Performance standard	AS/NZS 2845.1:2010 Water supply – Backflow prevention devices, refer to Part 1: Materials, design, & performance requirements (Amendment 1, dated June 2014)		
Inspection procedures	AS/NZS 2845.3:2020 (original version), refer to Part 3: Field testing & maintenance		
Inspection frequencies	Annually		
Inspection personnel	IQP		
Maintenance procedures	AS/NZS 2845.3:2020 (original version), refer to Part 3: Field testing & maintenance		
System interfacing	Not applicable		
Reporting procedures	<p>The building owner must obtain annual written reports from any IQP or other person who carried out one or more inspections &/or maintenance procedures. Reports must, as a minimum:</p> <ul style="list-style-type: none"> i. record any inspection, test, repair or maintenance carried out ii. record any faults found or maintenance required & the remedy applied iii. include the date the work was carried out iv. include the name of the person who performed the work <p>All reports must be kept at 112 Bridge St, Bulls & kept for a minimum of 2 years</p>		
Signage	Nil		

Comments/notes	Network utility operator (NUO) owns the reduced pressure zone device ([Manufacturer name], [model name], serial # A076524) located within a caged enclosure on the property & adjacent to the Criterion St frontage & car park. The NUO is responsible for the maintenance & annual inspection of this backflow preventer & it is not subject to this compliance schedule
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Exemplar

SS 8/1 Passenger-carrying lifts

Description (incl type)	Accessible lift (1 off), machine room-less, rated capacity 13 persons maximum or 1000kg		
Specified system photo/s	    Lift car L2 machinery cupboard Type of machinery Heat detector interfaced with lift		
Make (if known)	[manufacturer name]	Installation date	2019
Models (if known)	[model name]		
Location	Adjacent to main stair (see drawing in Appendix B). Lift pump, lift machinery & control panel located in cupboard off L2 corridor		
Performance standard	NZS 4332:1997 Non-domestic passenger & goods lifts (original version), as modified by D2/AS1 (Second Edition, Amendment 7, dated Jan 2017)		
Inspection procedures	NZS 4332:1997 Non-domestic passenger & goods lifts (original version), Part 4, Section 69		
Inspection frequencies	Annually		
Inspection personnel	IQP		
Maintenance procedures	NZS 4332:1997 Non-domestic passenger & goods lifts (original version), Part 4, Section 69		
System interfacing	SS 2 Automatic or manual emergency warning systems for fire or other dangers Functional testing (end to end) of the interface between the two systems is to be carried out annually & certified by each IQP for those systems. All relevant IQPs must be on site at the time of testing		
Reporting procedures	The building owner must obtain annual written reports from any IQP or other person who carried out one or more inspections &/or maintenance procedures. Reports must, as a minimum: <ol style="list-style-type: none"> i. record any inspection, test, repair or maintenance carried out ii. record any faults found or maintenance required & the remedy applied iii. include the date the work was carried out iv. include the name of the person who performed the work All reports must be kept at 112 Bridge St, Bulls & kept for a minimum of 2 years		
Signage	Signage includes:		

	<ul style="list-style-type: none"> • ‘Do not use in event of fire’, & capacity – refer to F8/AS1, Para 5.3 & 7.3(a) respectively – (https://www.building.govt.nz/assets/Uploads/building-code-compliance/f-safety-of-users/f8-signs/asvm/f8-signs-2nd-edition-amendment4.pdf refers) <p>Note: All signage related to SS 8/1 to be signed off by the IQP for SS 14/2</p>
Comments/notes	For information only, a portable platform lift will be provided whenever stage access is required from the hall auditorium. This platform lift will serve several Rangitikei District Council public venues as & when required. It will be stored off-site & will be regularly inspected & maintained, but it is not subject to this compliance schedule

SS 9 Mechanical ventilation or air conditioning systems

Description (incl type)	<ul style="list-style-type: none"> Mechanical fresh air supply & extract air system Mechanical extraction to toilets 1800 x 900mm commercial kitchen extract hood (with sprinkler head) 		
Specified system photo/s	 <p>Commercial kitchen extract hood</p>  <p>WC cubicle extract</p>  <p>Fresh air supply & extract air system</p>  <p>Ducting in L2 cupboard</p>		
Make (if known)	Fresh air supply – [manufacturer name]	Installation date	2020
	Mechanical extract – [manufacturer name]		
	Kitchen extract – [manufacturer name]		
Model (if known)	Fresh air supply	Mechanical extract	Kitchen extract
Location	L1 library area	Grd – Unisex public toilet compartments	Grd – kitchen
Performance standard	L1 library area: NZS 4303:1990 Ventilation for acceptable indoor air quality (original version)		
	Grd public toilets & kitchen: AS/NZS 1668.2:2012 General ventilation & extract design (Amendment 2, dated Dec 2016)		
Inspection procedures	L1 library area: NZS 4303:1990 Ventilation for acceptable indoor air quality (original version)		
	Grd public toilets & kitchen: refer to HVAC construction producer statement dated 28 Aug 2020 attached to this compliance schedule (Appendix E refers) & with appropriate reference to Section 13 of AS 1851-2012 Routine service of fire protection systems & equipment (original version) when fire or smoke control function is included in the system installation		
Inspection frequencies	Monthly	Quarterly	Annually
Inspection personnel	IQP	IQP	IQP
Maintenance procedures	L1 library area: AS/NZS 1668.1:2015 The use of ventilation & air conditioning in buildings, refer to Part 1: Fire & smoke control in buildings (Amendment 1, dated Dec 2018)		
	Grd public toilets & kitchen: refer to HVAC construction producer statement dated 28 Aug 2020 attached to this compliance schedule (Appendix E refers) & ensure systems are maintained to continue to perform to the performance requirements of AS 1668.2-2002 (Amendment 2, dated June 2003)		
System interfacing	SS 1 Automatic systems for fire suppression SS 2 Automatic or manual emergency warning systems for fire or other dangers		

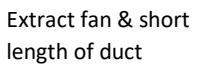
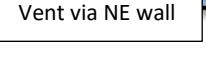
	Functional testing (end to end) of the interface between the systems is to be carried out annually & certified by each IQP for those systems. All relevant IQPs must be on site at the time of testing
Reporting procedures	<p>The building owner must obtain annual written reports from any IQP or other person who carried out one or more inspections &/or maintenance procedures. Reports must, as a minimum:</p> <ul style="list-style-type: none"> i. record any inspection, test, repair or maintenance carried out ii. record any faults found or maintenance required & the remedy applied iii. include the date the work was carried out iv. include the name of the person who performed the work <p>All reports must be kept at 112 Bridge St, Bulls & kept for a minimum of 2 years</p>
Signage	Nil
Comments/notes	Sprinkler head (High – blue 150 ⁰ C) in grd kitchen extract hood

SS 12/2 FM radio frequency systems & infra-red beam transmission systems

Description (incl type)	Hearing assistance system for audio & public address		
Specified system photo/s	  Receivers (4 off) International deafness symbol		
Make (if known)	WiFi based system	Installation date	2020
Models (if known)	[model name]		
Location	Main auditorium & library Master control unit in electrical cabinet in service room in stage sub-floor Receivers (4 off) for public use held at grd level reception counter		
Performance standard	NZBC G5 (Interior environment) – refer to sub-clauses G5.3.5 & G5.3.6 (version dated Dec 2000)		
Inspection procedures	All receivers shall be checked to confirm they are fully functional, effective & work over the full area of the system A listening test, using speech preferably, to check for distortion & clarity All signage related to the location of the hearing assistance system is present & in good condition WiFi system to be tested for the frequency response & signal to noise ratio		
Inspection frequencies	Six Monthly		Annually
Inspection personnel	IQP		IQP
Maintenance procedures	Planned preventative maintenance is to be applied to ensure continued operation during occupation of the building. In particular the following is to be carried out: <ul style="list-style-type: none"> • All missing or damaged signage related to the location of the hearing assistance system is to be replaced or repaired • A listening test, using speech preferably, to check for distortion & clarity • The latency of the WiFi system is to be checked to confirm it is within the 40mS limit compared to the audible sound. This may require specialised test equipment & software to verify, so may not be required to be repeated once the latency has been checked • Equipment for hire (eg earplugs, headset covers or ear pads) is to be sanitised & sealed in a bag or replaced after each use 		

	<ul style="list-style-type: none"> • Rechargeable batteries used in the receivers are to be recharged after each use to ensure full operating capacity • Where a component of the assistive listening system is found to be faulty or not operating as required, it is to be repaired or replaced without undue delay
System interfacing	<p>SS 2 Automatic or manual emergency warning systems for fire or other dangers – fire alarm muting interface</p> <p>Functional testing (end to end) of the interface between the two systems is to be carried out annually & certified by each IQP for those systems. All relevant IQPs must be on site at the time of testing</p>
Reporting procedures	<p>The building owner must obtain annual written reports from any IQP or other person who carried out one or more inspections &/or maintenance procedures. Reports must, as a minimum:</p> <ol style="list-style-type: none"> i. record any inspection, test, repair or maintenance carried out ii. record any faults found or maintenance required & the remedy applied iii. include the date the work was carried out iv. include the name of the person who performed the work <p>All reports must be kept at 112 Bridge St, Bulls & kept for a minimum of 2 years</p>
Signage	<p>Signage includes:</p> <ul style="list-style-type: none"> • International deafness symbol (decal on glazing adjacent to main entrance) – refer to F8/AS1, Para 6.3 (Amendment 4, dated Jan 2017) (https://www.building.govt.nz/assets/Uploads/building-code-compliance/f-safety-of-users/f8-signs/asvm/f8-signs-2nd-edition-amendment4.pdf refers) <p>Note: All signage related to SS 12/2 to be signed off by the IQP for SS 14/2</p>
Comments/notes	Nil

SS 13/1 Mechanical smoke control

Description (incl type)	Extract smoke system to stage		
Specified system photo/s	 <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Extract fan & short length of duct</p> </div> <div style="text-align: center;">  <p>Vent via NE wall</p> </div> </div>		
Make (if known)	[manufacturer name]	Installation date	2020
Model (if known)	[brand name]		
Location	Extract fan & short length of duct at high-level above the stage, venting to atmosphere through NE wall		
Performance standard	AS/NZS 1668.1:2015 The use of ventilation & air conditioning in buildings, refer to Part 1, Fire & smoke control in buildings (Amendment 1, dated Dec 2018)		
Inspection procedures	AS 1851-2012 Routine service of fire protection systems & equipment (original version), Section 13 refers		
Inspection frequencies	Six Monthly		Annually
Inspection personnel	IQP		IQP
Maintenance procedures	AS 1851-2012 Routine service of fire protection systems & equipment (original version), Section 13 refers		
System interfacing	<p>SS 2 Automatic or manual emergency warning systems for fire or other dangers</p> <p>Functional testing (end to end) of the interface between the two systems is to be carried out annually & certified by each IQP for those systems. All relevant IQPs must be on site at the time of testing</p>		
Reporting procedures	<p>The building owner must obtain annual written reports from any IQP or other person who carried out one or more inspections &/or maintenance procedures. Reports must, as a minimum:</p> <ul style="list-style-type: none"> i. record any inspection, test, repair or maintenance carried out ii. record any faults found or maintenance required & the remedy applied iii. include the date the work was carried out iv. include the name of the person who performed the work <p>All reports must be kept at 112 Bridge St, Bulls & kept for a minimum of 2 years</p>		

Signage	<p>Signage includes:</p> <ul style="list-style-type: none"> • ‘Smoke control activated’ signage on fire brigade panel [<i>brand name & series number</i>] located within stage sub-floor immediately adjacent to the double doors to the sprinkler pump room <p>Note: All signage related to SS 13/1 to be signed off by the IQP for SS 14/2</p>
Comments/notes	Nil

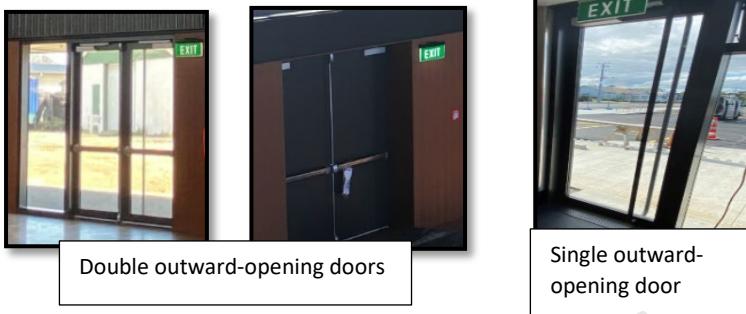
Exemplar

SS 14/2 Signs relating to a system or feature specified in any of clauses 1 to 13

Description (incl type)	Location, instructional, safety & restriction signs for specified systems included in this compliance schedule					
Specified system photo/s	 <div style="text-align: center;">Signage - SS 1</div>  <div style="text-align: center;">Signage - SS 2</div>  <div style="text-align: center;">Signage - SS 3/1</div>  <div style="text-align: center;">Signage - SS 8/1</div> <div style="text-align: center;">Signage - SS 12/2</div>					
Make (if known)	[manufacturer name]			Installation date	2020	
Model (if known)	Non-illuminated					
Related specified systems	SS 1	SS 2	SS 3/1	SS 4	SS 8/1	SS 12/2
	SS 13/1					
Location	Throughout building (incl exterior)					
Performance standard	Refer to the nominated performance standard for the given specified system, unless stated as F8/AS1 (Amendment 4, dated Jan 2017) in the 'signage' field of specified systems 1-13					
Inspection procedures	Inspections to ensure all signs are of the correct type, present in the right locations, legible, clearly visible, & unobstructed					

Inspection frequencies	Annually
Inspection personnel	IQP
Maintenance procedures	Maintenance shall be carried out in accordance with the nominated performance & inspection standard of the associated systems, & to ensure signs remain correctly positioned, legible & replaced immediately should they be missing
System interfacing	Not applicable
Reporting procedures	<p>The building owner must obtain annual written reports from any IQP or other person who carried out one or more inspections &/or maintenance procedures. Reports must, as a minimum:</p> <ul style="list-style-type: none"> i. record any inspection, test, repair or maintenance carried out ii. record any faults found or maintenance required & the remedy applied iii. include the date the work was carried out iv. include the name of the person who performed the work <p>All reports must be kept at 112 Bridge St, Bulls & kept for a minimum of 2 years</p>
Signage	Not applicable
Comments/notes	Safety management signs for maximum occupancy restrictions on the auditorium stage & L2 roof terrace to be checked on a regular basis but are not subject to this compliance schedule

SS 15/2 Final exits

Description (incl type)	Total of 8 final exits: <ul style="list-style-type: none"> • 5 double outward-opening doors • 1 automatic bi-parting sliding door • 2 single outward-opening doors to rear stair & public toilets respectively 		
Specified system photo/s	 <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Double outward-opening doors</p> </div> <div style="text-align: center;">  <p>Single outward-opening door</p> </div> </div>		
Make (if known)	[manufacturer name]	Installation date	2020
Models (if known)	[brand name]		
Location	2 from reception/entry foyer, 1 from public toilets, 4 from hall auditorium (all fitted with panic bolts) & 1 from rear stairwell. Refer to attached drawing in Appendix B & E		
Performance standard	NZBC C4 (Movement to place of safety) – refer to sub-clauses C4.3(a) & C4.5 (version dated Apr 2012)		
Inspection procedures	Final exits are to be inspected to ensure they can be opened & are not locked, barred or blocked (including the egress route). Door locking devices are to be clearly visible, easily operated without a key or other security device & do not prevent or override the direct operation of panic bolts		
Inspection frequencies	Daily (when in use)	Monthly	Annually
Inspection personnel	Owner or Agent	Owner or Agent	IQP
Maintenance procedures	Responsive maintenance shall be carried out to ensure occupants are not prevented from leaving the building in the event of an emergency. The final exits are to be maintained to ensure they are clearly identified, free of obstructions (including the egress route), unlocked & easy to use		
System interfacing	Not applicable		
Reporting procedures	The building owner must obtain annual written reports from any IQP or other person who carried out one or more inspections &/or maintenance procedures. Reports must, as a minimum: <ol style="list-style-type: none"> record any inspection, test, repair or maintenance carried out record any faults found or maintenance required & the remedy applied 		

	<p>iii. include the date the work was carried out iv. include the name of the person who performed the work</p> <p>All reports must be kept at 112 Bridge St, Bulls & kept for a minimum of 2 years</p>
Signage	<p>Signage includes:</p> <ul style="list-style-type: none"> • Refer to SS 15/4
Comments/notes	<p>External staff access card readers are installed adjacent to the final exits from the rear stair, public toilets, & the automatic bi-parting sliding door from reception</p>

Exemplar

SS 15/3 Fire separations

Description (incl type)	<p>Total of 3 fire cells:</p> <ul style="list-style-type: none"> • sprinkler pump room (located off stage sub-floor & under rear stairwell) • rear stairwell • rest of the building <p>Fire resistance rating of 60/60/60 provided to the fire separation between fire cells (generally 2-way fire-rated walls of 13mm plasterboard on both sides of H1.2 treated 90x45 timber wall framing). Total of 5 fire doors (-/60/60sm) installed (complying with NZS 4520:2010), all single-leaf with the exception of the double-leaf doors to the sprinkler pump room</p>		
Specified system photo/s			
Make (if known)	<p>-/60/60sm tagged fire doors by [manufacturer name] (5 off):</p> <p>Doorset # D10; label # OR14942/1 Doorset # D08; label # OR14942/5 Doorset # D14, label # OR14942/3 Doorset # D13, label # OR14942/2 Doorset # D33, label # OR14942/4</p>	Installation date	2020
Models (if known)	2-way fire-rated timber & plasterboard walls, solid-core fire doors		
Location	<p>Doors located at:</p> <ul style="list-style-type: none"> • sprinkler pump room (D10) • hall auditorium to rear stair (D08) • stage to rear stair (D14) • L1 mezzanine to rear stair (D13) • L2 south pavilion to rear stair (D33) <p>Walls located at:</p> <ul style="list-style-type: none"> • refer to attached drawing in Appendix B & C 		
Performance standard	NZBC C3 (Fire affecting areas beyond the fire source) & C4 (Movement to place of safety) – refer to sub-clauses C3.4 & C4.5 (version dated Apr 2012)		
Inspection procedures	<p>Daily and monthly inspections</p> <p>Fire separations that bound exit ways shall be visually inspected for:</p> <ul style="list-style-type: none"> • signs of damage or deterioration that could adversely affect their fire resistance function, particularly with respect to closures, exposed fire stopping & surface finish • new penetrations without suitable fire stopping 		

	<ul style="list-style-type: none"> an inspection shall be carried out to ensure doors forming part of an escape route can be opened & are not: <ul style="list-style-type: none"> locked barred blocked <p>Six-monthly & annual inspections</p> <p>The following minimum checks shall be carried out to the installation to ensure that:</p> <ul style="list-style-type: none"> doors are not damaged or obstructed door leaves close & latch automatically from any position double leaf doors stop with the leaves in line with the frame, & seals (where fitted) are in contact at meeting stile &/or frame door leaves on self-closers shut with an acceptable maximum closing force hardware is securely fixed no unauthorised hardware is attached fire doors in exit ways can be opened without keys to allow ready egress from the building at all times manufacturer's label is on the fire door leaf & frame doors are not wedged open doors have not been relocated without suitable fire separation in the ceiling space separations are not damaged or deteriorated in a way that could adversely affect their fire resistance function separations do not have new penetrations without suitable fire-stopping 			
Inspection frequencies	Daily (when in use)	Monthly	Six Monthly	Annually
Inspection personnel	Owner or Agent	Owner or Agent	IQP	IQP
Maintenance procedures	Responsive maintenance shall be carried out to ensure fire separations prohibit the spread of fire &, in the case of fire doors, occupants are not prevented from leaving the building in the event of an emergency. In particular the remedy of any defect identified in the above inspection procedures			
System interfacing	Not applicable			
Reporting procedures	<p>The building owner must obtain annual written reports from any IQP or other person who carried out one or more inspections &/or maintenance procedures. Reports must, as a minimum:</p> <ol style="list-style-type: none"> record any inspection, test, repair or maintenance carried out record any faults found or maintenance required & the remedy applied include the date the work was carried out include the name of the person who performed the work <p>All reports must be kept at 112 Bridge St, Bulls & kept for a minimum of 2 years</p>			
Signage	<p>Signage includes:</p> <ul style="list-style-type: none"> For signage to fire doors, refer to F8/AS1, Para 5.2 (Amendment 4, dated Jan 2017) 			

Comments/notes	There are elements of the building that are fire-rated (eg underside of stage, underside of all suspended floors, rear external wall). Note the installation of a fire collar to a single pipe (within the stage sub-floor) which penetrates the stage floor. Although these fire-rated elements shall be regularly checked & maintained, they are not considered to be 'fire separations' & therefore not subject to this compliance schedule
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Exemplar

SS 15/4 Signs for communicating information intended to facilitate evacuation

Description (incl type)	White signage lettering on green background (23 total) – generally signage with integrated LED lighting (except for two L2 emergency lights – see notes below)		
Specified system photo	 <p>White signage lettering on green background</p>		
Make (if known)	[manufacturer name]	Installation date	2020
Model (if known)	Exit signs, labels, & directional markings		
Location	Grd – 9 off (1 in stage sub-floor), L1 – 6 off (1 on stage), L2 – 8 off. (Refer to attached drawing in Appendix B)		
Performance standard	F8/AS1 (Amendment 4, Jan 2017) (https://www.building.govt.nz/assets/Uploads/building-code-compliance/f-safety-of-users/f8-signs/asvm/f8-signs-2nd-edition-amendment4.pdf refers)		
Inspection procedures	<p>All signs are to be inspected to ensure they are of the correct type, present, in the right locations, legible & illuminated. Furthermore, the signs are to be tested to ensure they remain illuminated in the event of a failure of the main lighting supply, for the same duration as required by NZBC F6 (Visibility in escape routes)</p> <p>Monthly inspection Illuminated signs shall be inspected to ensure they are:</p> <ul style="list-style-type: none"> • of the correct type • present & in the right locations • legible • illuminated <p>Annual inspection</p> <ul style="list-style-type: none"> • of the correct type • present & in the right locations • legible • signs required to be illuminated shall be tested to ensure they remain illuminated in the event of a failure of the main lighting supply, for the same duration as required by NZBC F6 (Visibility in escape routes) 		
Inspection frequencies	Monthly	Annually	
Inspection personnel	Owner or Agent		IQP

Maintenance procedures	Responsive maintenance shall be carried out to damaged signs. Replace any missing signs. Repair or replace any sign with defective integrated LEDs. Ensure signs remain correctly positioned, legible & where appropriate ensure the escape route is identified
System interfacing	Not applicable
Reporting procedures	<p>The building owner must obtain annual written reports from any IQP or other person who carried out one or more inspections &/or maintenance procedures. Reports must, as a minimum:</p> <ul style="list-style-type: none"> i. record any inspection, test, repair or maintenance carried out ii. record any faults found or maintenance required & the remedy applied iii. include the date the work was carried out iv. include the name of the person who performed the work <p>All reports must be kept at 112 Bridge St, Bulls & kept for a minimum of 2 years</p>
Signage	Not applicable
Comments/notes	Pictogram provided to the exterior wall-mounted emergency light fitting (2 off) to the NW wall of L2 south pavilion & SE wall of L2 north pavilion. For the illuminated aspect refer to SS 4

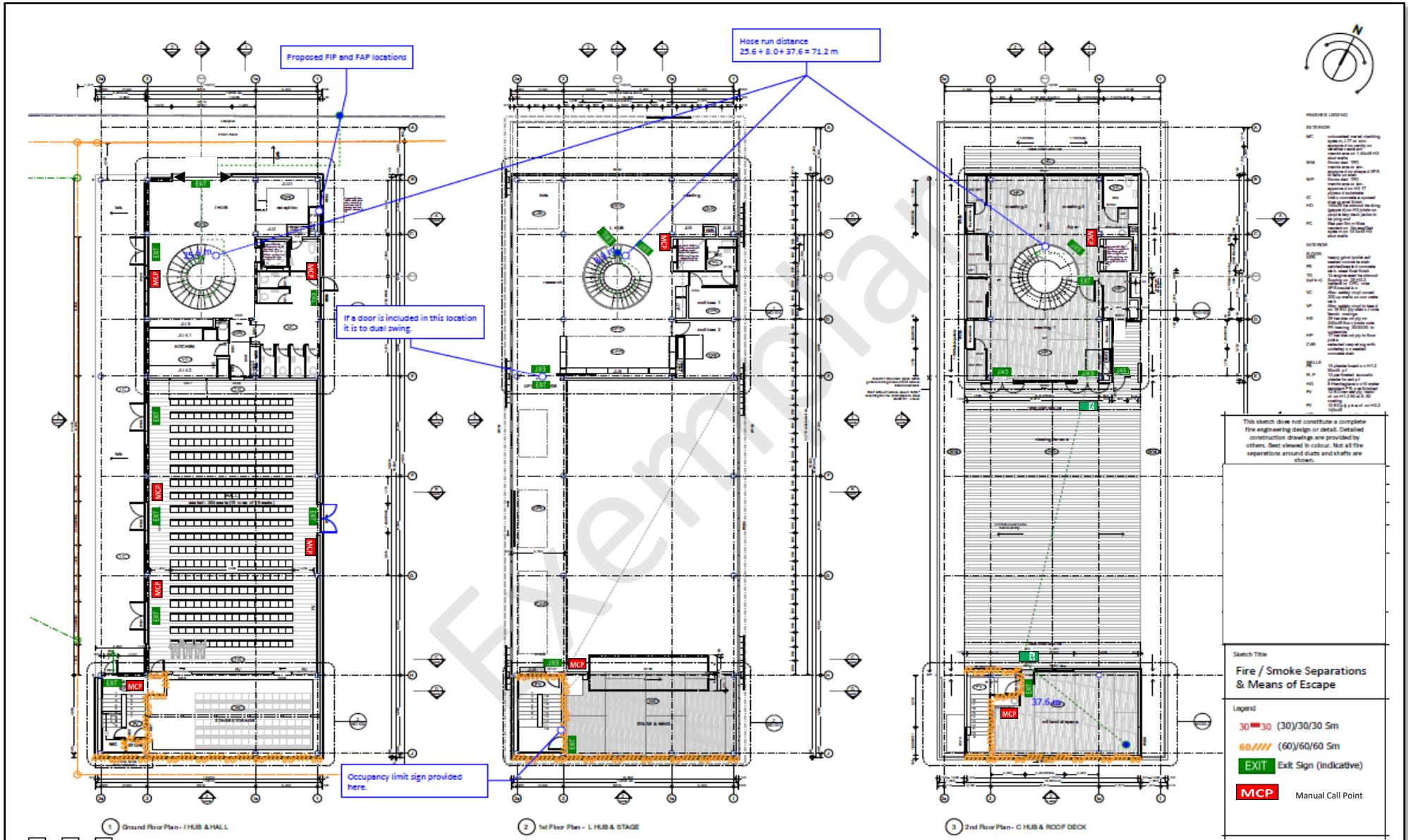
Signed on behalf of the Council			
Name	John Doe		
Position	Building Compliance Officer/ Building Warrant of Fitness Officer	Date	30 September 2020
Signature			
Address	46 High Street, Marton		

Appendices/attachments		
Appendix	Documents (including drawings)	Page number
Appendix A	Location & site plan of Bulls Community Centre (1 page)	31
Appendix B	Floor plans showing locations of exit signs & manual call points (1 page)	32
Appendix C	Cross-sections showing fire cells within the building (1 page)	33
Appendix D	Extract from fire engineering strategy report (6 pages)	34-39
Appendix E	HVAC construction producer statement (2 pages)	40-41
Appendix F	Evacuation floor maps (1 page)	42

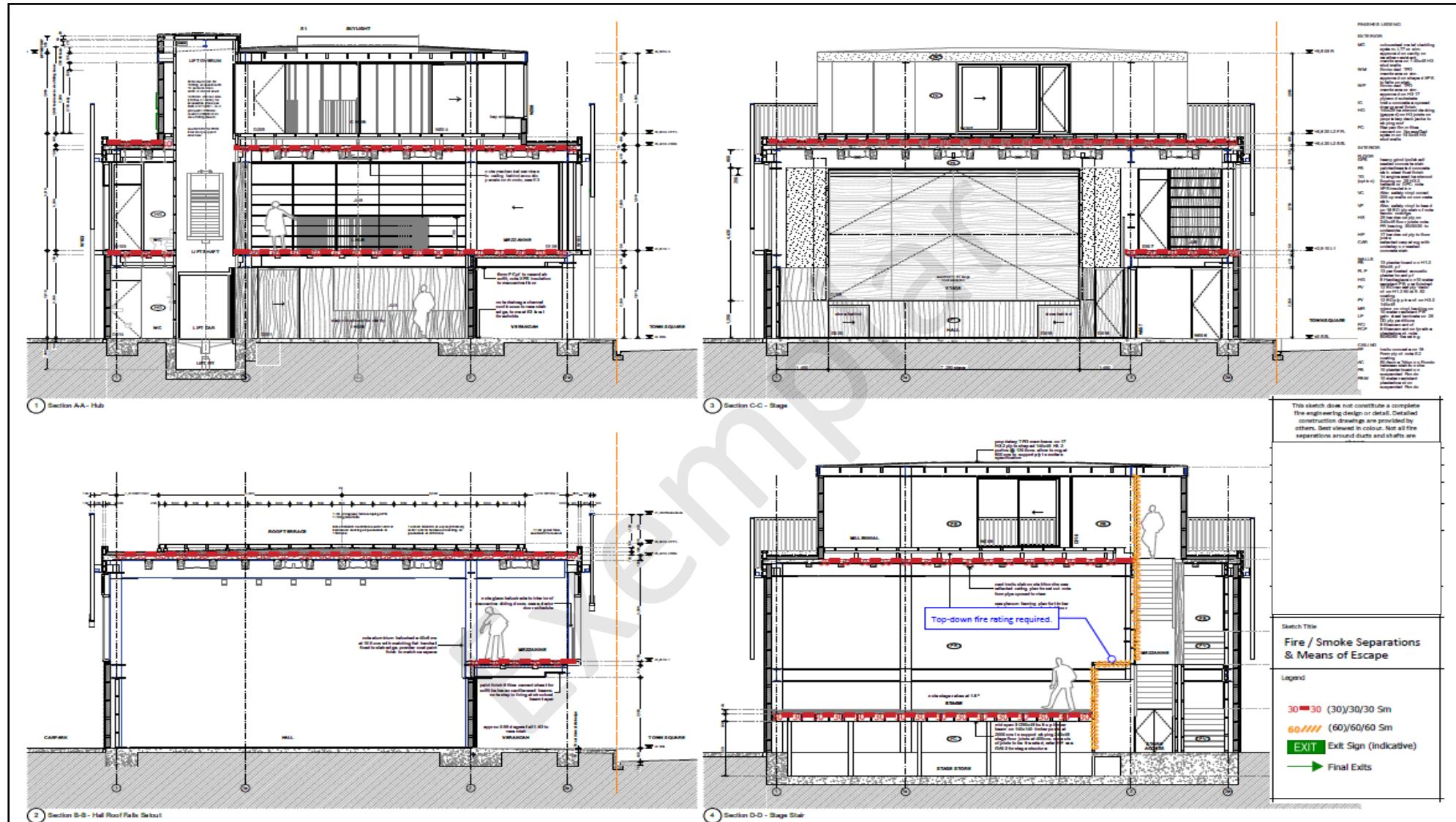
Appendix A: Location & site plan of Bulls Community Centre



Appendix B: Floor plans showing locations of exit signs & manual call points



Appendix C: Cross-sections showing fire cells within the building



1 SCOPE OF WORKS

We believe that the proposed Bulls Community Centre will be in compliance with the objectives of the New Zealand Building Code clauses C1 to C6 Protection from Fire, to the extent required by the Building Act, based on implementation of the following Scope of Works. This is required to be read in conjunction with the attached Fire Safety Sketches.

1.1 Active Fire Safety Systems

- 1) A sprinkler system is required to be installed throughout the building in accordance with NZS 4541. This system may include the amendments to NZS 4541, as outlined in Appendix B of C/AS1 to C/AS6.

All below ceiling sprinklers are to be quick response (i.e. Tact = 68°C and RTI = 50 m^{1/2}s^{1/2}). Where sprinklers are installed in plasterboard ceilings forming part of a fire rated floor/ceiling or fire rated universal ceiling assembly the sprinkler shall include one-piece escutcheons.

- 2) A manual fire alarm system is required to be installed throughout the building in accordance with NZS 4512.
- 3) A direct connection to the NZFS monitoring facility is required to be provided for the sprinkler system and manual call point system.

1.2 Means of Escape and Wayfinding

- 1) Doors are required to open in the direction shown on the attached plans.
- 2) Escape routes shall comply with NZBC D1. Stairs, landings, handrails, doors, vision panels and openings shall comply with the Acceptable Solution D1/AS1.
- 3) The clear height of escape routes shall be no less than 2100 mm across the full width (except for isolated ceiling fittings less than 200 mm in diameter, which may project downwards to reduce this clearance by no more than 100 mm).
- 4) Doors on escape routes are required to provide not less than 760 mm clear width and escape routes in general for means of escape shall provide no less than 850 mm clear width (note accessible routes will require being 1200 mm clear).
- 5) The two stairs are required, for means of escape, to provide a width of no less than 1000 mm and include a handrail on at least one side (note the stair deemed accessible will require two handrails and at least 900 mm width between handrails).
- 6) For means of escape provisions all doors on escape routes shall have door handles complying with D1/AS1 and door opening forces that do not exceed 67 N to release the latch, 133 N to set the door in motion, and 67 N to open the door to the minimum required width (note accessible requirements require this for fire doors and lesser opening forces for non-fire doors).

- 7) All locking devices on doors on escape routes shall be clearly visible, located where such a device would normally be expected, designed to be easily operated without a key or other implement and allow the door to open in a normal manner.
- 8) Both leafs of the double leaf doors from the hall shall be readily available for egress. It is assumed one leaf will be fixed shut and the other leaf will close against the fixed leaf and include a level handle to open. As such the normally fixed leaf shall be fitted with crash bars, where the actuating portion shall consist of a horizontal bar that is not less than half the width of the door leaf and be located between 800 mm and 1200 mm above the floor. The horizontal force is not to exceed 67 N and the door lock is to release allowing the door to swing freely.
- 9) Any doors on escape routes that are fitted with electronic locking devices shall either act under free handle or be fitted with a push button or switch that is fail safe (i.e. independent of any BMS or Security System) and releases the lock and allows the door to be opened (in the direction of escape) without a swipe card or key code. This push button or switch may be placed behind a break-glass panel but must be clearly labelled "Emergency door release". Electromechanical locks that are not free handle are required to unlock (fail safe/open) in the event of power failure or door malfunction.
- 10) If a door is provided between the upper stage and the LHub area it is required to swing in both directions.
- 11) Emergency lighting is required to be installed within the building in accordance with F6/AS1.
- 12) Exit signage is required to be installed throughout the building in accordance with F8/AS1 (note that F8/AS1 4.5.1 permits signs to be internally illuminated, externally illuminated or photoluminescent).

Indicative locations of exit signs are shown on the attached plans; however, these do not take account of possible obscuration due to the installation of storage racks, plant, furniture and other fittings and therefore should not be assumed to depict all required signs.

1.3 Control of Internal Fire and Smoke Spread

- 1) Fire rated systems are required to be tested assemblies in accordance with AS 1530 Part 4:2005, or NZS/BS 476:1987 Parts 21 and 22.
- 2) Floors within the building are required to achieve a FRR of no less than 30/30/30. Note though this fire rating may increase to 60/30/30 where the floor is providing primary support to a fire separation or portion of fire rated external wall that has a required 60/60/60 FRR. Structural Engineer is to confirm, refer latter section regarding primary support requirements.
- 3) The Stage floor over the stage storage area is noted to be constructed from timber. To achieve the required fire rating, the underside of the floor is to be lined with plasterboard as per a fire rated floor/ceiling system. Any penetrations through the linings by services are required to be fire stopped. It is recommended that light fittings be surface mounted, and sprinklers include one-piece escutcheons (or include exposed pipes and therefore do not penetrate the linings).

- 4) Any internal timber framed walls providing primary support to the stage floor are required to be lined each side with linings that achieve a 30 minute universal (one-way) fire rating.
- 5) Services penetrations and HVAC ductwork need not be fire rated through the floors where the floors are constructed from concrete.
- 6) All doors within fire separations are required to be certified fire rated door sets complying with NZS 4520 that achieve a FRR of no less than -/60/30 and are to include smoke seals to the doors or the door frames top and both side edges.
- 7) Fire separations bounding the rear stair are required to be continuous from the ground or floorslab below, up to the underside of the fire rated floor slab or fire rated ceiling above, or underside of the roofing material, as applicable.

Where there is a “cap” to the lobby within the fire rated stair this is to be constructed as per a “top-down” fire rated system (this is typically as per a fire rated wall turned horizontally). Where it is to be trafficable, structural flooring is to be provided beneath the plasterboard linings on the top of the joists and then another (thinner is acceptable) layer of flooring is provided on top of the plasterboard).

- 8) Fire separations are required to extend within the roof space to the gutter line to control fire spread via the cavity created by the eaves (if applicable).
- 9) All fire rated separations are to be marked within ceiling voids with a visible annotation stating, “Fire wall (60)/60/60 FRR, all penetrations to be fire stopped.”
- 10) All penetrations through fire separations (created by wires, cables, pipes, flush boxes, etc) are required to be fire stopped with systems (collars, wraps, sleeves, mastics, etc) that are approved for the proposed use (e.g. rating, orientation, penetration type, construction type) in accordance with AS 1530 and AS 4072.1. Where fire stopping systems to AS 4072.1 are not able to be provided, it is acceptable to incorporate systems tested to BS EN 1366.3, or UL 1479. Fire stopping systems are required to be installed strictly in accordance with the manufacturer’s instructions.

Note the floors are “intermediate floors” and are not providing a fire separation, as such penetrations by services through the floors do not require to be fire stopped. The exception to this is the Stage Floor, which by virtue of its construction it requires services penetrating the linings providing the fire rating to the floor to be fire stopped (refer 4.3.3 above).

- 11) Fire dampers are required to be installed where HVAC ductwork penetrates through fire separations. Dampers are to be installed in accordance with AS 1682 and the manufacturer’s instructions.
- 12) Throughout the building the internal surface finishes shall meet the following early fire hazard indices limitations (when tested to ISO 9705 as per C/VM2 Clause A1.2, or ISO 5660 as per C/VM2 Clause A1.3).

Building Elements	Location	Maximum Material Group
Ceilings and walls	Safe Path Stair (rear stair)	2
Ceilings	Publically Accessible Areas	2
Walls	Publically Accessible Areas	3
Ceilings and walls	All other occupied spaces	3
HVAC ducts	Internal surfaces	2
	External surfaces	3

The correlation of wall and ceiling surface finishes derived from Australian or European classifications to the Group Number requirements of NZBC Clause 3.4(a) can, without the need for further testing, be taken as described in the following.

Group Number to NZBC Clause C3.4(a) using ISO 9705:2003	Australian Group Number to NCC Specification C1.10 Clause 4 using AS ISO 9705:2003	European Classification to EN13501-1:2007+A1:2009
1-S	Group 1, and a smoke growth rate index not more than 100	Class A1, A2 or B and smoke production rating s1 or s2
1	Group 1	Class A1, A2 or B
2-S	Group 2, and a smoke growth rate index not more than 100	Class C and smoke production rating s1 or s2
2	Group 2	Class C
3	Group 3	Class D

- 13) Any foamed plastic building materials or exposed combustible insulating materials forming part of a wall, ceiling or roof system are required to have a completed system (foamed plastic and/or foamed plastic plus a surface lining) meeting the above maximum material group number as applicable for the location of this building material. In addition, the foamed plastic is to meet the flame propagation criteria as specified in AS 1366. It is strongly recommended that foamed plastic materials are not used.
- 14) The flooring shall meet the following critical radiant flux limitations (when tested to ISO 9239-1).

Area of Building	Minimum Critical Radiant Flux [kW/m ²]
Safe Path Stair	2.2
All other occupied spaces	1.2

- 15) Within the building any suspended flexible fabrics shall have a Flammability Index of no greater than 12 (when tested to AS 1530.2).
- 16) The use of fibre cement board products as part of a fully tested and certified fire separation will require specific consideration between the specifier of the product and the supplier to ensure that a tested and approved methodology for sealing of any penetration can be achieved in

accordance with AS 1530 and AS 4072.1.

- 17) Downlights are required to be designed and installed to C/AS1 to C/AS6 Part 7 and the manufacturer's requirements.
- 18) Any solid fuel, gas burning, and oil fired appliances and open fires, are required to be designed and installed to C/AS1 to C/AS6 Part 7 and the manufacturer's requirements.

1.4 Control of External Fire Spread

- 1) In general, all of the southern external wall as noted on the attached fire safety sketches is required to achieve a FRR of no less than (60)/60/60. Refer latter section regarding primary support requirements
- 2) Throughout the building the external surface finishes shall meet the following fire hazard limitations (when tested to ISO 5660 or AS/NZS 3837 at an irradiance of 50 kW/m² for a duration of 15 minutes):

If the distance to the relevant boundary is less than 1 m (e.g. the southern face):

- Peak Rate of Heat Release shall not exceed 100 kW/m².
- Total Heat Released shall not exceed 25 MJ/m².

If the distance to the relevant boundary is greater than 1 m

- Nil restrictions, due to sprinklers.

Note:

These requirements do not apply where either the finish is less than 1.0 mm thick and fixed directly to a non-combustible substrate or else the entire wall assembly has been tested at full scale in accordance with NFPA285 and passed the test criteria.

1.5 Firefighting

- 1) The fire alarm indicator panel and sprinkler inlet are required to be located on or close to the street frontage in a location approved by FENZ. A suggested location is shown on the attached plans, but approval is still required by FENZ.

1.6 Structural Fire Rating Requirements

- 1) Primary supporting structures for all fire rated elements are required to achieve a fire resistance rating of not less than 60/-/- for 60 minute FRR walls, or 30/-/- for 30 minute FRR floors, under the design dead and live loads required by NZBC B1 and any additional loads caused by the fire (e.g. from deformations/elongations of building elements due to elevated temperatures).

The structural engineer is required to identify the supporting structure for all fire rated elements, and these are in turn required to be suitably fire rated or demonstrated by calculation to not require treatment.

Fire rated walls may be cantilevered from a structural base having a FRR of no less than the building element concerned or be supported by primary elements outside the fire cell.

1.7 Management Requirements

- 1) The Stage is required to be managed such that no more than 50 occupants are present on stage at any one time.

A sign is to be provided within the stairwell adjacent to the door accessing the stage that states "Maximum Occupancy on the Stage is restricted to 50 persons. To be enforced by Building Management". This sign is to include safety red text 10 mm high on white background.

The scope of works above lists the fire safety precautions needed for compliance with the fire safety requirements of the Building Code, this scope of works should be read with the plans appended to this report. Information contained within the Fire Engineering Verification report is technical information intended to assist in the approvals process only.

2 MEANS OF ESCAPE

2.1 Risk Groups and Occupant Loads

The following is a summary of the design occupancies and risk group classifications within the building.

Table 1: Summary of Risk Groups and Occupant Loads

Level	Description	Risk Group	Occupant Density [m ² /person]	Occupant Load
G	Multi-use Space (IHUB)	40	1	40
	Reception	10	10	1
	Kitchen	15	5	3
	Hall	190	No. of Seats	304 ¹
1	Stage	55	N/A	50 ²
	Upper Stage (Balcony in Hall)	45	1	45
	Multi-use Spaces (LHUB, Research)	145	5	29
2	Meeting Space	75	2.5	30
	Multi-use Space (Millennial Space)	45	1	45

Explanatory Notes:

- 1) Occupant load for the Hall is determined from 19 rows of 16 seats as shown on the attached plans.
- 2) The client has proposed to implement a management plan to ensure no more than 50 occupants are present on stage.

Appendix E: HVAC construction producer statement

[Address]
[Phone number]
[Email address]

28 August 20

Bulls Community Centre
112 Bridge Street
Bulls, Rangitikei

HVAC CONSTRUCTION PRODUCER STATEMENT

Building Consent No.: BC 180183

[Name of the provider] has been engaged by the building consent applicant to install all mechanical services for the **Bulls Community Centre** building at the above address.

This producer statement is to certify that all ventilation, plant and equipment in the areas listed below, have been installed in accordance with best trade practices, relevant plans and specifications, manufacturers recommendations and New Zealand Building Code i.e. G4/AS1, and Rangitikei District Council bylaws and regulations.

The mechanical services have been installed by us in accordance with the following standards:

- a) NZS 4303:1990 – Ventilation for acceptable air quality
- b) NZS 4219:2009 – Seismic performance of engineering systems in buildings
- c) AS/NZS 1668.2:2002 – The use of air conditioning in buildings
- d) AS/NZS 4254:2002 – Ductwork for air handling systems in buildings
- e) AS/NZS 3000:2007 – Wiring Rules

Fresh Air Systems

Outdoor air introduced for these areas is calculated in accordance with NZS 4303 _ Table 2.

Library

SF-01 This roof mounted [brand name & series number] fan supply's filtered via (FIL-1) and tempered via (EDH-1) fresh air at a rate of 210l/s @ 220Pa.

This fresh air Supply fan, Filter and Duct heater should be serviced at least every three months.

Extract Systems

Ground Floor

Exhaust air for the areas listed below is calculated in accordance with AS 1668.2:1991, AS 1668.2:2012

EF-01 Toilet. This [brand name & series number] inline extract fan extracts foul air at a rate of 169l/s @ 150Pa.

EF-02 Toilet. This [brand name & series number] SIL inline extract fan extracts foul air at a rate of 229l/s @ 100Pa.

EF-06 Stage. This [brand name & series number] wall mounted extract fan extracts foul air at a rate of 419l/s @ 88Pa.

2nd Floor

EF-05 Library. This [brand name & series number] roof mounted extract fan extracts foul air at a rate of 210l/s @ 110Pa.

3rd Floor

EF-03 Toilet. This [brand name & series number] ceiling mounted extract fan extracts foul air at a rate of 93l/s @ 20Pa.

EF-04 Kitchenette. This [brand name & series number] ceiling mounted extract fan extracts foul air at a rate of 89l/s @ 25Pa.

These exhaust fan systems should be serviced at least every six months.

We understand that this producer statement will be relied on by Rangitikei District Council for the purposes of establishing compliance with the building consent.

Regards,

[Name, Role]

[Phone number]

[Email]

Appendix F: Evacuation floor maps

