FORMIGA1

Design Development Report

Project: S230601 - Alterations to the Existing Hall Building at St Luke's Grammar, Bayview

Location: 1973 Pittwater Road, Bayview, NSW, 2104

Completed For: St Luke's Grammar

On Behalf of: Midson Group

Date: 2nd August 2023

Revision Number: B

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Revision Schedule			
Revision	**Date**	**Report Information**	
A	15/06/2023	**Reason for Revision**	Initial review of the amending Development Application design
			Prepared by
		Name	Scott Naylor
		Signature	
B	02/08/2023	**Reason for Revision**	Revised report based on relocation of the proposed Canteen area
			Prepared by
		Name	Scott Naylor
		Signature	

This report has been prepared and checked by the experienced team at Formiga1. For any queries regarding this report, please contact our office.

1. Introduction

Formiga1 has been engaged by Midson Group to provide a BCA Assessment Report/Fire Audit Report for the existing building and associated proposed work of the alterations to the Hall Building.

While this work is not affecting the adjoining building to the West of the Hall Building, this building does need to be considered as part of the proposed work to the Hall Building due to its proximity.

The proposal to construct this alteration to the existing building has a number of technical considerations to address as part of any proposed work. These have been developed by establishing a process for the assessment of the work outlined in the Environmental Planning and Assessment Act 1979. The Act gives a number of requirements and considerations for existing and new works and how the building assessment provisions are usually applied.

2. Purpose

The purpose of this report is to provide a high level design guide on an approach to building compliance assessment and establish scope for some of the aspects. The advice contained within this report provides guidance as to whether BCA compliance can be achieved in accordance with the Environmental Planning and Assessment Regulation 2021, Section 19. We understand that the proposed development will be subject to a Development Application and this Design Development Report will form part of the DA submission to Council for their determination.

Given the restrictions and technical limitations of the existing building, a mix of transitional provisions combined with performance and prescriptive measures will be used to establish the compliance of proposed works. This approach is subject to an approval by the Consent Authority.

This report seeks to outline the basis from which performance solutions can be developed for a number of aspects. An exhaustive list of variations to individual prescriptive measures will need to be completed as the design is further developed and performance solutions compiled.

3. Scope, Limitations and Exclusions

The scope of this assessment is limited to the current design documentation and will require further development of the building's design. The aspects noted for compliance are based on generic examples gleaned from similar buildings that comply using a combination of prescriptive and performance measures. It should be expected that individual aspects will vary in any detailed design though wider concepts and characteristics will make a similar contribution, particularly to overall fire safety.

This report is limited to the design documentation supplied and is only intended to outline the services that will be required.

This Design Development Report does not address safety provisions enforced under the Local Government Act, such as, Occupational Health and Safety Act, Water, drainage, gas, telecommunications and electricity supply authority requirements, etc. The application of the Disability (Access to Premises) Standard 2010 has been assessed as part of this report, however, no other provisions of the Disability Discrimination Act 1992 have been reviewed.

4. Approval Methodology

The Environmental Planning and Assessment Regulation 2021 outlines the approval processes for different types of buildings and the method by which they are assessed. These works have been assessed against the Building Code of Australia 2022 that is currently enforced. However, as a requirement of the EP&A Regulation, Section 19, the final design for approval is to be assessed against the BCA enforced at the date of the application for the Construction Certificate. Therefore, the advice provided in this report may become outdated if a revised BCA is released before the Application for a Construction Certificate is received.

The application of the Disability (Access to Premises) Standard and provision for access for people with disabilities will need to be addressed against the current BCA. As this is based in Commonwealth Legislation, State regulatory transitional provisions do not apply and compliance with the current code is required. Please note that the Deemed to Satisfy Provisions of the BCA are not the only method of compliance and a Performance Solution is expected as part of any work in any building. Generally, compliance with BCA Part D3 will be required throughout.

Transitional provisions within Section 64 of the EP&A Regulation 2021 will apply to the change of building use and the extent of these provisions is determined by the Consent Authority (ie. Council). These provisions give the Consent Authority power to determine the extent of upgrade work required and whether total or partial conformity with the current BCA is required.

This report has been prepared on the basis of Council's Building Assessment Referral Response, being:

"A 'Building Code of Australia (BCA) Assessment Report' / 'Fire Audit Report' from an appropriately qualified Registered Certifier will need to be submitted to address the following:

The report is to detail the extent to which the existing building (relevant affected parts) does or does not comply with the deemed to satisfy provisions of Sections C, D, E and F of the Building Code of Australia. The report is to also provide recommendations with respect to the existing building / works required to ensure that the specified measures and facilities contained in the existing building, including any modifications to be made by the proposed development are appropriate for its intended use to:
i) restrict the spread of fire from the building to other buildings nearby, and
ii) protect persons using the building, and to facilitate their egress from the building in the event of fire, and
iii) as required, provide access for persons with a disability, and
iv) provide facilities and services appropriate for the development."

Development Consent from Council or other Consent Authority will be required prior to the start of any work on site.

5. Building Compliance

The assessment has been based on the following plans:

- Architectural Plans by Glendenning Szoboszlay Architects, Project Number 1403, Date 05/04/2023.

This assessment has been tabulated and items identified in relation to Action, Consider and Note, meaning the following:

- **Action** - Requires action on your behalf to either address a non-compliance and/or provide further information on how compliance is proposed to be met for the item;
- **Consider** - Full details are not yet documented and the item should be considered as the design is developed to ensure compliance is met;
- **Note** - A general note stating that compliance has been achieved for the item.

5.1. Principal Building Characteristics

Aspect	Building
Existing Classification	Hall Building - Class 5/9b Admin/School/Assembly Building
Proposed Classification	Hall Building - Class 5/9b Admin/School/Assembly Building
Rise in Storeys	Hall Building - 2 Storeys
Effective Height	Hall Building - <12m
Construction Type	Hall Building - Type B
Compartment Limit	Hall Building - 5,500m^2
Occupants	Occupant numbers will be determined based on the design intent of this building as this is more suitable than table outlined in D2D18.

The adjoining building to the West of the Hall Building appears to have been constructed as Type C construction (despite containing two storeys) due to the following reasons:

1. The external walls contain combustible weatherboards and framing as permitted for Type C and not for Type B construction.
2. The floor of the building does not achieve an FRL of 30/30/30 as permitted by Type C construction and not for Type B construction.
3. External loadbearing walls do not contain an FRL where >3m and <18m from a fire-source feature as permitted for Type C construction and not for Type B construction.

The building is assumed to have been constructed legally under an approval. This approval would have been issued by a suitably qualified building surveyor who considered the building to be of Type C construction and will remain assessed as Type C construction in this report. If this work is deemed to have not been carried out through an approval from a building surveyor then this approach will be reconsidered.

5.2. Building Code of Australia Assessment

BCA Part	Comments	Consider/ Action/ Note
	BCA Section B - Structure	
Part B	Not applicable to Council's BCA Assessment Report/Fire Audit Report.	Note
	BCA Section C - Fire Resistance	
Part C2	C2D2 - The building is Type B construction with a general FRL of 120 minutes throughout. Construction is required to be in accordance with clauses S5C21 - S5D2 of Specification 5 including non-combustibility for a number of aspects. Generally the required minimum FRLs are as follow: **a.** External Loadbearing Wall <1.5m from a fire source feature - **120/120/120 - Not applicable to this work** **b.** External Loadbearing Wall >1.5m but <3m from a fire source feature - **120/90/60 - Not applicable to this work** **c.** External Loadbearing Wall >3m but <9m from a fire source feature - **120/30/30 - The exposure between the proposed external wall of the Hall Building and the adjoining building to the West is 3.27m. If the new wall of the Hall Building is non-loadbearing then it will not require an FRL. If loadbearing, an FRL will be required.**	Consider Consider

	The adjoining West Building appears to have been constructed as Type C construction as the external walls contain combustible weatherboards and framing as permitted for Type C and not for Type B construction. Therefore, the proposed work to the Hall Building will not affect the West Building as a Type C building.	
	d. External Loadbearing Wall >9m but <18m from a fire source feature - **120/30/-- - The exposure between the proposed external wall of the Hall Building and the adjoining building to the West is 3.27m. If the new wall of the Hall Building is non-loadbearing then it will not require an FRL. If loadbearing, an FRL will be required.**	Consider
	The adjoining West Building appears to have been constructed as Type C construction as the external walls contain combustible weatherboards and framing as permitted for Type C and not for Type B construction. Therefore, the proposed work to the Hall Building will not affect the West Building as a Type C building.	
	e. External Loadbearing Wall >18m from a fire source feature - **No requirement**	
	f. External Non-loadbearing Wall <1.5m from a fire source feature - **--/120/120 - Not applicable**	
	g. External Non-loadbearing Wall >1.5m but <3m from a fire source feature - **--/90/60 - Not applicable**	
	h. External Non-loadbearing Wall >3m from a fire source feature - **No requirement**	
	i. External Loadbearing Columns <18m from a fire source feature - **120/--/--**	
	j. External Loadbearing Columns >18m from a fire source feature - **No requirement**	
	k. External Non-loadbearing Columns - **No requirement**	
	l. Fire Walls - **120/120/120 - Not applicable**	
	m. Internal Loadbearing Fire-resisting Shaft Walls - **120/120/120 - Not applicable**	
	n. Internal Non-loadbearing Fire-resisting Shaft Walls - **--/120/120 - Not applicable**	
	o. Internal Loadbearing Walls bounding public corridors, public lobbies, sole-occupancy units, etc - **No requirement (note the concession below)**	
	p. Internal Non-loadbearing Walls bounding public corridors, public lobbies, sole-occupancy units, etc - **No requirement**	
	q. Other Internal Loadbearing Walls, Beams, Trusses & Columns - **120/--/-- - Not applicable**	
	r. Floors - **30/30/30 or fire-protective covering - The existing floor of the Hall Building is assumed to be compliant, however, no areas of the floor were visible to confirm this construction.**	Consider
	s. Roofs - **No requirement**	
	NOTE: *Refer to BCA Spec 5 (S5C2) for guidance relating to the exposure of the building to fire source features.*	
	S5C21 - All loadbearing internal walls and fire walls must be constructed from concrete, masonry or fire-protected timber. In addition to this all non-loadbearing internal walls required to be fire-resisting as mentioned above, the wall must be non-combustible. Compliance is achieved.	Note
	S5C21 - Internal columns and walls (other than fire/shaft walls) in the floor immediately below the roof are not required to achieve an FRL.	Note
	C3D11 - As the existing lift is not connecting more than 2 storeys, it is permitted to not be contained within a fire-rated shaft.	Note

	C2D10 - Non-combustibility of elements is outlined in BCA C2D10, being: a. External walls and common walls (including facade, framing, insulation, etc.). b. Flooring and floor framing of lift pits. c. Fire-rated non-loadbearing internal walls. d. Non-loadbearing shafts. ***NOTE:*** *BCA C2D10(4) outlines materials that are exempt from the requirements of non-combustibility as well as materials that are considered non-combustible. This does permit the installation of timber noggings/blocking for the bracing of fixtures.*	Consider
	The Hall Building is deemed to be compliant through areas visually inspected, though external wall cavities were not able to be inspected.	Note
	C2D14 - Attachments to the external walls must also be non-combustible unless they form part of the concessions within BCA C2D14.	Consider
	No combustible attachments were observed on site.	Note
	C2D11 - Fire hazard properties are required to comply with BCA C2D11 and BCA Spec 7.	Consider
	Generally no major concerns of the existing building was observed, though fire hazard properties are unknown for the existing coverings and assumed to be compliant at the time of installation.	Note
Part C3	C3D3 - Compartment limits for this building are outlined in BCA Table C3D3. The Class 5/9b portion has a floor area limit of 5,500m^2 and 33,000m^3 and compliance is achieved.	Note
	C3D4 and C3D5 - This building is not considered a large isolated building and as such there are no additional provisions applying to the building.	Note
	C3D7 - The building is not required to be provided with vertical spandrel separation as it is only Type B construction.	Note
	C3D9 and C3D10 - The provisions for fire separation of classifications in the same storey and different storeys do not apply to the separate Class 5 and 9b parts of the Hall building as these classifications require the same FRLs under Specification 5.	Note
	C3D12 - Compliance is achieved as the lifts and stairs are not proposed to be within the same shafts.	Note
	C3D13 - Services are required to be separated in accordance with BCA C3D13. Noting that lift control panels are excluded as they are not proposed within a machine room. No such equipment was observed on site or appears to be proposed as part of this work.	Note
	C3D14 - Electricity supply systems are also required to be separated from the remainder of the building in accordance with BCA C3D14. Confirmation as to whether or not the main switch board will sustain emergency equipment operating in the emergency mode is needed to determine if the main switchboard requires this separation. Emergency equipment comprises of; hydrant and/or sprinkler system pumps, smoke control systems, emergency lifts, fire detection and alarm systems, sound/intercom systems for emergency purposes. No such equipment was observed on site or appears to be proposed as part of this work.	Note

Part C4	**C4D3 - If the new external walls of the Hall Building are loadbearing and within 18m of the West Building then they will require an FRL under Specification 5 listed above. If an FRL is required for these walls then any opening within these walls <6m from the West Building requires protection.**	Consider
	As the West Building is considered to be approved and constructed as Type C construction openings in the external walls do not need to be upgraded as the external wall does not require an FRL under Specification 5.	Note
	C4D5 - Smoke doors are not applicable to these buildings.	Note
	C4D7 - Sliding fire doors are not proposed.	Note
	C4D10 - No fire-isolated stairs are being proposed.	Note
	C4D10 - Penetrations are required to comply with C4D13, C4D15, 3.12, C3.15 and Spec 13 as applicable. Particular attention should be given to **plumbing supply** with combined copper and poly pipe and consideration of any **gas penetrations**. Gas penetrations cannot use Spec 13, even where all metal systems, compliance can only be achieved using a tested system in accordance with AS1530.4 and AS4072.1.	Consider
	No penetrations through the required fire-rated floor could be observed on site. This will need to be considered as the design progresses if Council requires the existing floor to achieve an FRL.	Consider
BCA Section D - Access and Egress		
Part D2	D2D3 - The buildings have the required minimum of 2 exits from each storey. Compliance has been shown.	Note
	D2D4 - Stairs are permitted to be non-fire-isolated as they only connect two storeys and are external to the buildings.	Note
	D2D14 - The conditions of BCA D2D14 for travelling via non-fire-isolated stairways also appear to be fulfilled including total distance travel of 80m to the building discharge point.	Note
	D2D5 and D2D6 - Exit travel is generally 20m to single exit or 20m to a point of choice and 40m to the first exit. Distance between alternative exits is limited to 60m. Plans appear to show compliance in all areas.	Note
	D2D7 to D2D9 - Minimum exit widths are generally 1m throughout for a height of 2m and 1980mm at doorways. These dimensions are free of obstructions (eg. handrails, fire extinguishers). As the Upper Level of the Hall Building can accommodate up to 370 persons under BCA D2D18, the minimum aggregate exit widths are 3.50m and as the Library can accommodate up to 116 persons, the aggregate width of 1.25m will apply. The proposed works show 3.64m to the Hall doors and connection to the street being 5.30m which meets all requirements.	Note
	The proposed reduction in size of New Stair 2 likely reduces the aggregate egress width of the adjoining North Building. As the previous proposed work for New Stair 2 maintained the width of the existing stair then no question was raised. Further details will be required as to the population of the North Building and the width of egress paths from the North Building to the street.	Action

	D2D15 - Requires the path from all exits of all buildings to be connected to a public road. Compliance is achieved.	Note
Part D3	D3D4 - Non-fire-isolated stairs are required to be constructed of reinforced or prestressed concrete, steel in no part less than 6mm thick or timber in accordance with BCA D3D4. Concrete was observed throughout.	Note
	D3D8 - Installations in the path of travel are required to comply with D3D8, including the smoke sealing and non-combustible enclosure of distribution boards and central telecommunications boards. This can be achieved via applying the required construction to the individual DB enclosures **or** to the entire cupboard. Existing non-compliance appears to be addressed in the proposed work.	Consider
	D3D9 - The spaces underneath stairs are not permitted to be enclosed as a cupboard. Compliance is achieved.	Note
	D3D15 - Ramps serving the building where works are being carried out must not exceed a gradient of 1:14 and must be slip-resistant in accordance with BCA D3D15. Compliance for existing construction achieved and proposed work shows compliance.	Note
	D3D14 - Stairs serving the building where works are being carried out are required to comply with BCA D3D14 for tread construction and BCA D4D4, which references AS1428.1, Clause 11. Please refer to further comments in D4D4. Compliance for existing construction was observed and proposed work shows compliance.	Note/Consider
	D3D15 - Stairs and landings serving the building where works are being carried out shall comply with BCA D3D15 including slip resistance. Compliance for existing construction was observed and proposed work shows compliance.	Note/Consider
	This building is required to comply with BCA D3D16 - D3D21 and D3D29 for fall protection. Reasonable provision appears to be made for:	
	a. Balustrades are to be a minimum height of 1m. Compliance for existing construction was observed as well as no gaps permitting a 125mm sphere to pass through.	Note
	b. BCA 2022 has introduced a new requirement for where barriers are fixed to the vertical face forming an edge of a landing, balcony, deck, stairway, etc. (ie. cantilever balustrades), the opening formed between the barrier and the face must not exceed 40 mm. Compliance for existing construction was observed and proposed work shows compliance.	Note
	c. Windows with openable components below 865mm that have a falling distance of >4m to the surface beneath, must be fitted with a restricting device to ensure the openable portion of the windows does not exceed 125mm or be fitted with a protection that does not have any openings exceeding 125mm (eg. Security screen). Window elements must not climbable between the heights of 150mm and 760mm (eg. sills, transoms, etc.). Windows all contain restricting devices to limit openings to <125mm.	Note
	D3D16 - Door thresholds throughout the accessible paths of travel must not incorporate a step, except where a threshold ramp with a maximum gradient of 1:8 is provided to an **external** door for a maximum height of 35mm for a maximum length of 280mm and located within 20mm of the door that it serves. Generally compliance is achieved with these requirements throughout.	Note/Consider

	D3D22 - One handrail is required to be fixed between the height of 865mm and 1000mm and a second handrail fixed between 665mm and 750mm along the stairways. Refer to Part D4 for further comments on handrails. Generally compliance is achieved with these requirements throughout.	Note/Consider
	D3D22 - Handrails to the external stairs are required to one side of the stairway and must comply with Clause 12 of AS1428.1 as required by BCA D3D22 (1)(f) (eg. height 865-1000mm, handrail dimensions, etc.). Compliance for existing construction achieved.	Note/Consider
	D3D25 - Please note the limitations of D3D24 on buildings for sliding doors. Door swing is required to comply with BCA D3D25. Where building entrances are also exits, consideration should be given to compliance with D3D24 – D3D26, including door swing, sliding doors and the like. **The Music Class, Tut1, Tut2, Tut3, corridor between Tut rooms and Canteen all swing against the direction of egress. These are permitted to do so if the doors are provided with a device to keep the door in the open position. No such device was installed on site.**	Consider Action
	D3D26 - Operation of latches are to comply with BCA D3D26 for both doors in path of travel and exit doors (excluding doors to spaces that are inaccessible to persons when the door is locked (eg. cleaners room)). **The entry door to the Admin room has a latch height of 1240mm and does not achieve compliance with the 900-1100mm height.**	Consider Action
Part D4	D4D2 - This building is required to be accessible throughout. Paths connecting this building with other buildings, disabled car spaces and main pedestrian entry points along the boundary shall also comply with AS1428.1. Generally compliance has been achieved throughout	Note
	D4D4 - Accessways are required to be in accordance with D4D4 and AS1428.1 including circulation, provisions, turning and passing spaces. A number of existing doors throughout the Hall building do not achieve the required 850mm clear width and door circulation spaces not achieved. This is existing construction approved at the time of construction and would not be triggered under the Access to Premises Standard 2010 as it does not form the "new part" or "affected part". This should be considered in Council's determination in the DA assessment as to whether this item can be applied with a concession for existing compliance or be upgraded under s.64 of the EP&A Regulation 2021.	Action
	Additionally, the existing ramp providing access to the Hall Building and associated lift does not achieve the required 2070x1540mm 180° turning space at the mid landing as only 2070x1120mm is achieved. This is existing construction approved at the time of construction, but will be triggered for upgrade as part of the Access to Premises Standard 2010 as this ramp is part of the main entry.	Action
	D4D4 - Please note that stairs (including fire isolated stairs if used for circulation) will be required to comply with Clause 11 and Clause 10 respectively of AS1428.1. This means minimum widths are generally 1200mm between walls. Generally compliance is achieved to existing stairs serving these buildings, however, minor non-compliances of handrail 300mm horizontal extensions are not provided but are considered quite minor. This is existing construction approved at the time of construction and would not be triggered under the Access to Premises Standard 2010 as it does not form the "new part" or "affected part". This should be considered in Council's determination in the DA assessment as to whether this item can be applied with a concession for existing compliance or be upgraded under s.64 of the EP&A Regulation 2021.	Action

	D4D6 - Provision of carparks for people with disabilities is required in accordance with D4D6. An existing accessible car space is provided on site, however, there is no associated shared space. This is existing construction approved at the time of construction and would not be triggered under the Access to Premises Standard 2010 as it does not form the "new part" or "affected part". This should be considered in Council's determination in the DA assessment as to whether this item can be applied with a concession for existing compliance or be upgraded under s.64 of the EP&A Regulation 2021.	Action
	D4D7 - Braille signage is required in accordance with BCA D4D7 and BCA Spec D4D7 including directional and exit signage. This is existing construction approved at the time of construction and would not be triggered under the Access to Premises Standard 2010 as it does not form the "new part" or "affected part". This should be considered in Council's determination in the DA assessment as to whether this item can be applied with a concession for existing compliance or be upgraded under s.64 of the EP&A Regulation 2021.	Action
	D4D8 - Hearing augmentation is only required where inbuilt amplification exists. It is likely that inbuilt amplification systems will not be installed, however, please have the electrical engineer refer to BCA D3.7 for further details.	Consider
	D4D9 - TGSIs are required in accordance with D4D9. The main entry stairway to the Hall Building has not been provided with TGSIs.	Action
BCA Section E - Services and Equipment		
Part E1	***E1D2 - FIRE HYDRANTS***	
	Fire hydrant coverage is required to all areas of both buildings in accordance with BCA E1D2 and AS2419.1. The following items outline the issues relating the hydrant coverage:	
	a. Concerns exist over the hydrant system that has been installed to the site as there was no hydrant booster visible during the inspection. There are two external hydrants installed within the site that are not deemed to be feed hydrants due to the distance to a hard stand area being >20m. Therefore, these hydrants are considered attack hydrants which are required to be served by a booster.	Action
	b. Additionally, hydrant coverage has not been achieved to a number of areas within the buildings from a 60m hose length extending 1m into every room plus a 10m spray reaching all areas of the room (ie. Lower Floor of the Hall Building) and potentially other buildings within the site outside of this scope of work.	Action
	E1D3 - FIRE HOSE REELS	
	The classroom and associated corridor areas of the buildings and Class 5 admin areas do not require Fire Hose Reels under the current BCA, however please note the fire extinguisher requirements of the current BCA to permit this to occur. Fire Hose Reel coverage will be required to the Hall, Library and the Canteen area. The Hall and Library currently achieve FHR coverage and the proposed work will not result in a non-compliance.	Note
	Installation of any new Fire Hose Reels shall be in accordance with AS2441 (eg. mounting heights, signage, pressures, etc.) and locations to be within 4m of an exit. The following areas are not in accordance with these provisions.	Consider
	E1D4 - SPRINKLERS	
	Sprinklers are not required for this building.	Note

	E1D14 - FIRE EXTINGUISHERS Fire extinguishers are required in accordance with Table E1D14 and AS2444 as applicable. No issues were observed on site.	Note
	Increased extinguisher coverage will be required to the Class 5 admin and class 9b classrooms and associated corridor areas not provided with FHR coverage.	Consider
	E1D15 - FIRE CONTROL CENTRES A Fire Control Centre is **not** required in the building as it is <25m in height and is <18,000m2 in floor area.	Note
Part E2	NSW E2D16 - Air-handling systems that are not individual room units <1000L/s or miscellaneous exhaust systems in accordance with Section 5 and 6 of AS1668.1 must automatically shutdown upon activation of the smoke detection system or sprinkler system as these air-handling systems do not form part of the zone smoke control systems.	Consider
	The Hall Building does not contain any ducted air-handling systems and as such does not contain any smoke detectors. Any new work for ducted systems will require compliance with this requirement.	Note
	This Hall Building has been considered an “other assembly building” in accordance with Clause E2D14 - E2D20. As such, there is currently a smoke ventilation system installed, however, the removal of the stage to the hall space will result in this area no longer being considered an “other assembly building” and the smoke ventilation system will no longer be required.	Note
Part E3	E3D1 - Lift installations shall be in accordance with E3 and AS1735. Emergency lifts are not required for this building as it has an effective height of <25m.	Note
	E3D7 - Lift features, type and size shall comply with E3D7. The existing lift achieves compliance with these requirements.	Note
	E3D9 - Fire service controls are not required for the lifts in this building as the building has an effective height of <12m.	Note
Part E4	E4D2 - Emergency lighting and illuminated exit signage is required throughout and has been provided where necessary.	Note
	Layouts will likely need to change to reflect the proposed alterations and will be reliant upon the egress paths and viewing distances of the signage (typically 24m)..	Consider
	D4D7 - Please note the requirements for braille exit signage outlined in the DTS provisions of D4D7.	Consider
BCA Section F - Health and Amenity		
Part F1	F1D3 - Stormwater drainage must comply with AS3500.3. The current buildings generally appear to achieve compliance.	Note/Consider
	F1D4 - Exposed joints in the drainage surface must not be located beneath or run through a planter box, water feature or similar object of the building. The joints are to be provided with protection in accordance with Section 2.9 of AS4654.2. The current buildings generally appear to achieve compliance.	Note/Consider

	F1D5 - Waterproofing membranes for external above ground use must comply with AS4654 Parts 1 & 2. Not applicable to the existing buildings.	Note/Consider
	F1D8 - Subfloor ventilation is required to be provided in accordance with BCA Table F1D8. The current buildings generally appear to achieve compliance.	Note/Consider
Part F2	F2D2 - Waterproofing to wet areas shall be provided in accordance with BCA F2D2 and AS3740. Compliance is assumed.	Note/Consider
	F2D4 - Where a floor waste is installed, the floor must be provided with a continuous sloping surface to the floor waste between 1:50 & 1:80 in accordance with BCA F2D4.	Note/Consider
Part F3	**BCA Performance Requirement F3P1 for weatherproofing of external walls will need to be addressed by a Performance Solution as there are no DTS provisions relating to F3P1 for materials outside of BCA F3D5. Compliance is assumed for the existing construction, though a new Performance may be required for the new work.**	Note/Action
	F3D2 - Roofing materials as listed in BCA F3D2 or another material provided with an external waterproofing membrane as per AS4654 Parts 1 & 2 are deemed acceptable. General concrete slab construction without this membrane is not deemed compliant. Compliance is assumed.	Note/Consider
	F3D3 - Sarking-type materials used for weatherproofing of roofs and walls must comply with AS4200 Parts 1 & 2. Compliance is assumed.	Note/Consider
	F3D4 - All glazing assemblies in external walls shall comply with AS2047 and are limited to those specific assemblies noted in BCA F3D4. Compliance is assumed.	Note/Consider
	F3D5 - Masonry, autoclaved aerated concrete or metal wall cladding used as the external cladding must comply with AS3700, AS5146.3 or 1562.1 in order to be deemed to satisfy with no Performance Solution. Compliance is assumed.	Note/Consider
Part F4	F4D3 - The buildings forming part of the works do not contain any facilities utilised in the calculation of sanitary facilities. The proposed work adds an accessible WC and ambulant facility to increase the number of available facilities for the site. Existing facilities in other buildings are assumed to comply.	Note
Part F5	F5D2 - Room heights are deemed to be sufficient as follows: **a.** 2.0m for stairways and ramps; **b.** 2.1m for car parking areas, store rooms and sanitary compartments; **c.** 2.4m for classrooms, assembly buildings and corridors accommodating <100 persons, as well as, commercial kitchens; **d.** 2.7m for classrooms, assembly buildings and corridors accommodating >100 persons.	Note
Part F6	F6D2 - Natural light is required to all general purpose classrooms and playrooms at 10% of the floor area. A sufficient allowance for light appears to be provided for the existing areas.	Note
	F6D6 - Ventilation may be achieved by natural or mechanical means. Compliance generally achieved with natural ventilation throughout.	Note
	F6D9 - Sanitary compartments have restrictions on where they can open directly to, particularly in public and shared areas. Compliance is achieved.	Note

Part F7	Not applicable to these buildings.	Note
BCA Section G - Ancillary Provisions		
Part G1	Not applicable to Council's BCA Assessment Report/Fire Audit Report.	Note
Part G2	Not applicable to Council's BCA Assessment Report/Fire Audit Report.	Note
Part G3	Not applicable to Council's BCA Assessment Report/Fire Audit Report.	Note
Part G4	Not applicable to Council's BCA Assessment Report/Fire Audit Report.	Note
Part G5	Not applicable to Council's BCA Assessment Report/Fire Audit Report.	Note
Part G6	Not applicable to Council's BCA Assessment Report/Fire Audit Report.	Note
BCA Section J - Energy Efficiency		
Parts J2- J9	Not applicable to Council's BCA Assessment Report/Fire Audit Report.	Note

6. Conclusion

This report provides an assessment of the referenced architectural documentation against the Environmental Planning and Assessment Act, referenced Australian Standards, as well as, the Performance Requirements and the Deemed to Satisfy provisions of the National Construction Code Series, Building Code of Australia (Volume 1) for the proposed development.

Key compliance issues have been identified through this assessment. These issues are to be resolved prior to the approval stage by means of; Performance Solutions, altered design documentation or clarification of information on building plans.

Notwithstanding the above, it is considered that compliance with the provisions of the BCA is readily achievable, provided the above matters are appropriately addressed by the project team. Additionally, it is considered that the matters raised can be adequately addressed in the preparation of the Building Approval documentation without resulting in any foreseeable inconsistencies with the Development Approval.