Building Commission NSW

Attn: Proper Officer Duffy Kennedy Constructions Pty Limited (ACN 099 710 595) c/o- Yeldhams Taxation & Business Services Pty Limited 21 Dickson Avenue ARTARMON, NSW 2064

Service: By express post and by email

Building Work Rectification Order

Section 33 of the Residential Apartment Buildings (Compliance and Enforcement Powers) Act 2020

Duffy Kennedy Constructions Pty Limited (ACN 099 710 595) is being given this Building Work Rectification Order (Order) in relation to 707-711 Elizabeth Street, Waterloo, NSW 2017 (SP101747).

Duffy Kennedy Constructions Pty (ACN 099 710 595) Limited is required to cause building work to be carried out to remediate the serious defects as set out below in this Order.

Failure to comply with the requirements in this Order is a criminal offence.





CAS Ref: 11079554

Date: 06 May 2024

1. I, Matt Press, under section 33(1)(b) of the *Residential Apartment Buildings (Compliance and Enforcement Powers) Act 2020* (RAB Act), require you Duffy Kennedy Constructions Pty Limited (ACN 099 710 595) to do the things specified in column 4 in Table 1 to eliminate, minimise or remediate each serious defect at 707-711 Elizabeth Street, Waterloo, NSW 2017 (SP101747) described in columns 1, 2 and 3 of Table 1. Each requirement must be complied with by the time set out in column 5 of Table 1:

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
1.	External Common Area, Level 4, Rooftop	 Inadequate falls to roof membrane. Large volumes of ponding water to roof areas. The outlets are covered by a mesh that restricts the flow. 	 Stage 1. Submit a written report and designs to rectify the serious defect. Stage 2. Rectify the serious defect in accordance with the written report and designs provided at 	Stage 1 – 60 days Stage 2 – 120 days
		4. The overflow pipe is constrained by the metal capping over the hob.5. Signs of repair at a few locations.	stage 1.	
2.	Unit 305, Level 3, Living Area	 Visible water staining / trails down the face of glass of the balcony doors/windows. Buckets installed internally to manage the uncontrolled water entry into the habitable space. CCTV footage provided by the occupants shows PVC pipe cast in / embedded in concrete slab holding water with damaged and deformed joints. 	Stage 1. Submit a written report and designs to rectify the serious defect. Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 120 days

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
3.	Internal Common Area (Upper), All Upper Level, All Sides	 Inadequate termination height of the waterproofing system at the balcony doors. Absence of waterproof membrane and water bar to rear of doors. This is evident on roof top at entry points and parapet. 	Stage 1. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Submit a written report and designs to rectify the serious defect. Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 120 days
4.	Internal Common Area (Upper), Ground Floor, Stairs (Fire Isolated)	Clearance between the hand wheel serving hydrants and the wall adjacent is less than 100mm.	Stage 1.Submit a written report and designs to rectify the serious defect.Stage 2.Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 60 days
5.	Basement/ Ground Floor Common Area, Ground Floor, Foyer/ Lobby, Corridor	Fire extinguisher signage is absent or non-compliant.	Stage 1. Submit a written report and designs to rectify the serious defect. Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 60 days
6.	Internal Common Area (Upper), All Upper Levels, Foyer/ Lobby	Multiple service penetrations are inadequately fire rated or protected including, protection (smoke seals) of PEX pressure	Stage 1.	Stage 1 – 60 days

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
		services penetrating ceiling in meter cupboards not adequate.	Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified.	
			Submit a written report and designs to rectify the serious defect.	
			Stage 2.	Stage 2 – 60 days
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
7.	Basement/ Ground Floor	The hydrant exhaust pipe is not	Stage 1.	Stage 1 – 60 days
	Common Area, Basement I, Vehicle Driveway/ Ramp	wrapped for its entire length.	Submit a written report and designs to rectify the serious defect.	
			Stage 2.	Stage 2 – 60 days
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
8.	Basement/ Ground Floor	Multiple service penetrations are	Stage 1.	Stage 1 – 60 days
	Common Area, Basement I, Communications Room	protected.	Submit a written report and designs to rectify the serious defect.	
			Stage 2.	Stage 2 – 60 days
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
9.	Basement. Ground Floor Common Area, Basement 1, Basement Carpark	Fire hydrant pipework fixings have a fire-retardant material installed over some of the fixing points (at fixing point only) in an	Stage 1.	Stage 1 – 60 days

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
		attempt to achieve compliance with AS2419.1.	Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified.	
			Submit a written report and designs to rectify the serious defect.	
			Stage 2.	Stage 2 – 60 days
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
10.	Basement/ Ground Floor	Hydrant pipework installed	Stage 1.	Stage 1 – 60 days
	Common Area, Basement 1, Basement Carpark	not protected from damage by fire.	Submit a written report and designs to rectify the serious defect.	
			Stage 2.	Stage 2 – 60 days
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
11.	Basement/ Ground Floor	Head height clearance from the	Stage 1.	Stage 1 – 60 days
	Common Area, Basement 1, Fire Pump Room	finished floor level to overhead services is less than 2.1m.	Submit a written report and designs to rectify the serious defect.	
			Stage 2.	Stage 2 – 60 days
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
12.	Basement/ Ground Floor Common Area, Basement 1, Fire Pump Room	Suitable flexible couplings are not installed to the hydrant	Stage 1.	Stage 1 – 60 days

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
		pump set. Pipework reduces in size on outlet connection.	Submit a written report and designs to rectify the serious defect. Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 2 – 60 days
13.	External Common Area, Ground Floor, Eastern Side	Front face of all connections is not within 150mm of the front face of the cabinet.	Stage 1. Submit a written report and designs to rectify the serious defect. Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 60 days
14.	External Common Area, Ground Floor, Northern Side	 Fire Hose reels are connected to the potable metered water service. Water meter and isolation valves are installed at the property boundary. Water meter isolation valves are not locked in the open position. 	Stage 1. Submit a written report and designs to rectify the serious defect. Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 60 days
15.	Unit 307, Level 3, All Upper Levels, Other, SOU's Entry Doors	Fire doors are undersized and fitted with large gaps exceeding 3mm around the perimeter.	Stage 1. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified.	Stage 1 – 60 days

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Submit a written report and designs to rectify the serious defect.	
			Stage 2.	
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 2 – 60 days
16.	External Common Area,	Emergency exit signage is	Stage 1.	Stage 1 – 60 days
	Garden	missing / not visible.	Submit a written report and designs to rectify the serious defect.	
			Stage 2.	Stage 2 – 60 days
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
17.	Basement/ Ground Floor	Emergency exit signage is	Stage 1.	Stage 1 – 60 days
	Floor, Lift Lobby	obstructed.	Submit a written report and designs to rectify the serious defect.	
			Stage 2.	Stage 2 – 60 days
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
18.	Basement/ Ground Floor	Emergency exit signage is	Stage 1.	Stage 1 – 60 days
	Floor, Corridor		Submit a written report and designs to rectify the serious defect.	
			Stage 2.	Stage 2 – 60 days

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
19.	Basement/ Ground Floor Common Area, Ground Floor, Electrical Meter / Distribution Board (Main)	Warning labels for isolation are not provided to circuits controlling the charging facilities of the emergency lights	Stage 1. Submit a written report and designs to rectify the serious defect.	Stage 1 – 60 days
Room	and exit signs.	Stage 2.	Stage 2 – 60 days	
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
20.	Basement/ Ground Floor	The fire rated consumer mains	Stage 1.	Stage 1 – 60 days
Comm Basen	Common Area, Basement 1, Basement Carpark	are not installed on fire rated cable tray.	Submit a written report and designs to rectify the serious defect.	
			Stage 2.	
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 2 – 60 days
21.	Basement/ Ground Floor	Mechanical ductwork is installed	Stage 1.	Stage 1 – 60 days
	Common Area, Basement 1, Electrical Meter/ Distribution Board (Main)	walls where no fire damper is installed within the duct.	Submit a written report and designs to rectify the serious defect.	
	Room		Stage 2.	Stage 2 – 60 days
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
22.	External Common Area, Level 4, Common Area	Cracking of the concrete parapet and hob walls due to lack of edge distance for the anchors at the base of the fence post.	Stage 1. Submit a written report and designs to rectify the serious defect. Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 90 days
23.	Basement/ Grounds Floor Common Area, Basement 1, Southern Side, Eastern Side	Uncontrolled cracking of ground floor soffit at the set down and along previous repairs.	Stage 1. Submit a written report and designs to rectify the serious defect. Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 90 days
24.	Basement/ Ground Floor Common Area, Basemen 1, Eastern Side	Concrete spalling on the soffit of the ground floor slab.	Stage 1.Submit a written report and designs to rectify the serious defect.Stage 2.Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 90 days
25.	Basement/ Ground Floor Common Area, Basement 1, Northern Side, Southern Side, Eastern Side, Waste Storage/ Processing Room	Base of the concrete wall sets back by 20 to 50 mm which deviates from the 'For Construction Drawing Basement Slab Sections – Sheet 2 S03.06	Stage 1. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified.	Stage 1 – 60 days

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
		Rev 2' by Van Der Meer, leaving exposed reinforcement.	Submit a written report and designs to rectify the serious defect. Stage 2. Rectify the serious defect in accordance with the written report and designs provided at	Stage 2 – 90 days
26.	Basement/ Ground Floor	Embedded timber in the wall. As	stage 1. Stage 1.	Stage 1 – 60 days
Common Area, Basement 1, th Western Side	reinforcement will corrode.	Submit a written report and designs to rectify the serious defect.		
			Stage 2.	
		Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 2 – 90 days	
27.	Basement/ Ground Floor	1. Uncontrolled cracking in the	Stage 1.	Stage 1 – 60 days
Common Area, Basement 1, Eastern Side, Vehicle Driveway/ Ramp	 basement ramp / soffits. 2. Cracking immediately adjacent to the sawn joint and 	Submit a written report and designs to rectify the serious defect,		
		not contained within the joint. 3. Past repair work defective.	Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 2 – 90 days
28.	External Common Area,	Centralised hot water plant is	Stage 1.	Stage 1 – 60 days
		restricted access.	Submit a written report and designs to rectify the serious defect,	
			Stage 2.	Stage 2 – 60 days

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
29.	External Common Area, Other, Rooftop	 Heated water services / connections to the hot water plant are not thermally insulated. Thermal insulation is not correctly installed on the service risers in each meter cupboard. 	Stage 1. Submit a written report and designs to rectify the serious defect, Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 60 days
30.	External Common Area, Other, Rooftop, Hydraulic - Plant area	Tundishes for the hot water plant are not terminated correctly for connection or capped off were redundant.	Stage 1. Submit a written report and designs to rectify the serious defect, Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 60 days
31.	External Common Area, Rooftop	PE pipework is installed in an external location above ground exposed to UV. It is installed on the ground without fixings and is not protected against mechanical damage.	Stage 1. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Submit a written report and designs to rectify the serious defect, Stage 2.	Stage 1 – 60 days Stage 2 – 60 days

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
32.	External Common Area, Rooftop	50L electric storage hot water unit is installed in the plant area without a safe tray waste, connections not insulated and plastic pipework is installed within 1m of the hot water unit outlet.	Stage 1. Submit a written report and designs to rectify the serious defect, Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 60 days
33.	External Common Area, Rooftop	AC unit condensate drains are not connected to a drainage system. Condensate currently discharges onto the roof / plant area floor.	Stage 1. Submit a written report and designs to rectify the serious defect, Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 60 days
34.	External Common Area, Rooftop	All rainwater outlets are installed with a mesh covering which restricts / reduces outlet performance and increases possible blockage.	Stage 1. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Submit a written report and designs to rectify the serious defect, Stage 2.	Stage 1 – 60 days Stage 2 – 60 days

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
35.	External Common Area, Other, Rooftop	Rainwater heads are installed with under sized overflows.	Stage 1. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified. Submit a written report and designs to rectify the serious defect,	Stage 1 – 60 days
			Stage 2.	Stage 2 – 60 days
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
36.	External Common Area,	Floor waste is installed in the	Stage 1.	Stage 1 – 60 days
	Platform	accept the flow of stormwater and does not have a removable	Submit a written report and designs to rectify the serious defect,	
		grate.	Stage 2.	Stage 2 – 60 days
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
37.	Item removed			
38.	Internal Common Area (Upper), All Upper Levels, Foyer/ Lobby	Authority water meters are not installed for each SOU.	Stage 1. Carry out inspections that will satisfy the department that all locations of this recurring defect have been identified.	Stage 1 – 60 days

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Submit a written report and designs to rectify the serious defect,	
			Stage 2.	Stage 2 – 60 days
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
39.	Internal Common Area	Minimum separation is not	Stage 1.	Stage 1 – 60 days
	Lobby	hydraulic services in multiple locations throughout the building.	Submit a written report and designs to rectify the serious defect,	
			Stage 2.	
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 2 – 60 days
40.	Basement/ Ground Floor	Stormwater drainage has	Stage 1.	Stage 1 – 60 days
	Basement Carpark	reduced in pipework size.	Submit a written report and designs to rectify the serious defect,	
			Stage 2.	
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 2 – 60 days
41.	Basement/ Ground Floor	A number of fixture waste pipes	Stage 1.	Stage 1 – 60 days
	Common Area, Basement 1, Basement Carpark	are installed in 50mm pipework which is undersized for elevated drainage systems.	Submit a written report and designs to rectify the serious defect,	
			Stage 2.	Stage 2 – 60 days

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.	
42.	Basement/ Ground Floor Common Area, Basement 1, Water Storage/ Processing Room	Hose tap within the bin room is installed without a backflow prevention device.	Stage 1. Submit a written report and designs to rectify the serious defect,	Stage 1 – 60 days
			Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 2 – 60 days
43.	Basement/ Ground Floor Common Area, Basement 1, Basement Carpark	Pipework is not labelled in several areas throughout the basement carparks.	Stage 1. Submit a written report and designs to rectify the serious defect, Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 60 days
44.	Basement/ Ground Floor Common Area, Basement 1, Basement Carpark	Sewer / stormwater drainage pipework is installed without adequate fall, when aligned to the adjacent bulkhead/ when measured with a digital level / when measured with a spirit level and block.	Stage 1. Submit a written report and designs to rectify the serious defect, Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 1 – 60 days Stage 2 – 60 days

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement	
45.	Basement/ Ground Floor	There are no vibration	Stage 1.	Stage 1 – 60 days	
	Basement Carpark	of the pump.	Submit a written report and designs to rectify the serious defect,		
			Stage 2.	Stage 2 – 60 days	
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.		
46.	Basement/ Ground Floor	Floor waste is installed without a	Stage 1.	Stage 1 – 60 days	
	Common Area, Basement I, Waste Storage/ Processing Room	removable grate.	Submit a written report and designs to rectify the serious defect,		
			Stage 2.	Stage 2 – 60 days	
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.		
47.	External Common Area,	Overflow relief gully is not	Stage 1.	Stage 1 – 60 days	
	Ground Floor, Eastern Side	above the surrounding ground.	Submit a written report and designs to rectify the serious defect,		
			Stage 2.	Stage 2 – 60 days	
			Rectify the serious defect in accordance with the written report and designs provided at stage 1.		
48.	External Common Area,	Isolation switches to each	Stage 1.	Stage 1 – 60 days	
	Plant/ Mechanical Platform, Rooftop	apartment condenser are not identified to indicate the apartment and circuit breaker of origin.	Submit a written report and designs to rectify the serious defect,		

Serious Defect Ref Number	Location of Serious Defect	General description of Serious Defect	Requirement	Time for compliance with Requirement
			Stage 2. Rectify the serious defect in accordance with the written report and designs provided at stage 1.	Stage 2 – 60 days

Conditions of this Order

- 2. You must make good any consequential damage caused in carrying out the works specified in this Order.
- 3. A design that is prepared for a building element for building work or a design that is prepared for a performance solution for building work (including a building element) in this Order must comply with the *Design and Building Practitioners Act 2020* (**DBP Act**).
- 4. Where this Order requires you to submit a written report, then written report must:
 - a. be prepared by a suitably qualified person or specialist being a person who is a registered design practitioner under the DBP Act; and
 - b. be prepared with consideration to this Order and the Reasons for this Order; and
 - c. detail the specific building work necessary to meet the codes and relevant standards specified in column 5 of Table 2; and
 - d. be prepared with consideration to other building work already constructed at the time of this Order and not the subject of a serious defect including designs for that building work, and other building work required by this Order including designs for that building work, and manufacturer's specifications; and
 - e. be submitted to the Building Commission via email to <u>ocaudits@customerservice.nsw.gov.au</u>.

Duration of this Order

- 5. This Order remains in force until it is revoked by the Secretary.
- 6. This order is given on the date that it is listed above in accordance with section 67 of the RAB Act.

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Matt Press Director Building Compliance Building Commission NSW

Date: 06/05/24

Reasons for the Building Work Rectification Order

- 7. The Department of Customer Service (**the Department**) administers the *Residential Apartment Buildings* (*Compliance and Enforcement Powers*) *Act 2020* (**RAB Act**).
- 8. Under section 33 of the RAB Act, if the Secretary of the Department, or their authorised delegate, has a reasonable belief that building work was carried out in a manner that could result in a serious defect in relation a residential apartment building or that a residential apartment building has a serious defect, they may order the developer of that building to carry out or not carry out specified building work or to take other specified action to eliminate, minimise or reduce the serious defect or potential serious defect.
- 9. Section 3 of the RAB Act defines a serious defect. Section 3 of the RAB Act also defines to term "building element" by reference to the *Design* and *Building Practitioners Act 2020* (**DBP Act**). Section 4 of the RAB Act defines the term "developer". Section 6 of the RAB Act provides the building work to which the RAB Act applies. Relevant excerpts from sections 3, 4 and 6 of the RAB Act and section 6 of the DBP Act are set out in **Attachment A** to this Order.
- 10. I, Matt Press, Director(Building Compliance, Building Commission NSW, Department of Customer Service) am an authorised delegate of the Secretary of the Department.
- 11. Duffy Kennedy Constructions Pty Limited (ACN 099 710 595) (**Developer**) is the developer of the residential apartment building known as 707 Elizabeth Street, Waterloo, NSW 2017 (SP101747) (**the Development**) for the purposes of section 4(c) of the RAB Act.
- 12. The Development comprises carparking and 35 residential units. The RAB Act applies to building work at the Development because it is a class 2 building, is currently occupied and is less than 10 years old.
- 13. On 14 July 2023, with the consent of the owner's corporation for the Development, third party investigators engaged by the Department attended the Development (**Investigator**). The Investigator prepared a report on serious defects in the Development dated 26 July 2023 (**Inspection Report**).
- 14. I, Matt Press, have formed a reasonable belief that the Development has serious defects based on the following.
- 15. I have reviewed the Inspection Report.
- 16. My reasonable belief is also based upon the following matters, set out in Table 2 below in respect of each serious defect identified in column 1 of Table 2 (where that reference corresponds to the reference set out in Table 1 above).

Table 2 – basis of reasonable belief as to serious defect

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
1.	Waterproofing Systems	 Inadequate falls to roof membrane. Large volumes of ponding water to roof areas Outlets are covered by a mesh that restricts the flow. Overflow pipe is constrained by the metal capping over the hob. Signs of repair at a few locations was evident. 	Water ponding demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard 4654.2 Waterproofing Membranes for External Above Ground Use, Section 2 Design, and Installation, 2.5 Substrate, 2.5.2 Falls. Australian Standard AS4654.2 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Deemed-to- Satisfy provision F1.4. Deemed-to-Satisfy provision F1.4 is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4.
2.	Waterproofing Systems	 Visible water staining / trails down the face of glass of the balcony doors/windows. Buckets installed internally to manage the uncontrolled water entry into the habitable space. 	Uncontrolled water ingress demonstrates a failure to comply with the Building Code referenced in column 5.	 Building Code of Australia (BCA) Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4. Deemed-to-Satisfy provision F1.1 is a pathway that can satisfy the Building Code of Australia (BCA) Volume One,

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
		3. CCTV footage provided by the occupants shows PVC pipe cast in / embedded in concrete slab holding water with damaged and deformed joints.		Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirements: FP1.3 Rainwater drainage systems.
3.	Waterproofing systems	 Inadequate termination height of the waterproofing system at the balcony doors. Absence of waterproof membrane and water bar to rear of doors. 	Inadequate waterproofing system termination detail demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard AS4654.2, Waterproofing Membranes for External Above Ground Use, Part 2 Design, and installation, 2.8 Termination of membranes, 2.8.3 Doors and windows onto external waterproofed areas. Australian Standard AS4654.2 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Deemed-to- Satisfy provision F1.4. Deemed-to-Satisfy provision F1.4 is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section F Health and Amenity, Part F1 Damp and Weatherproofing, Performance Requirement FP1.4.
4.	Fire Safety Systems	Clearance between the hand wheel serving hydrants and the wall adjacent is less than 100mm.	Hydrant installation demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard 2419.1 - 2017 Fire hydrant installations Part 1: system design, installation and commissioning, Section 3 Hydrant location, coverage, and related provisions, 3.2

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				Hydrants, 3.2.2 Features, accessibility, and clearances. Australian Standard AS2419.1 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1.3 Fire hydrants. Deemed-to-Satisfy provision E1.3 is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1 Firefighting equipment, Performance Requirement EP1.3.
5.	Fire Safety Systems	Fire extinguisher signage is absent or non-compliant.	The signage installed/ absence of signage demonstrates a failure to comply with the Building Code Australian Standards referenced in column 5.	Australian Standard AS2444 Portable fire extinguishers and fire blankets – Selection and installation, Section 3 Location of portable fire extinguishers, Clause 3.2 Extinguisher location. Australian Standard AS2444 Portable fire extinguishers and fire blankets – Selection and location, Section 3 Location of portable fire extinguishers, Clause 3.3 Extinguisher location signs, Clause 3.3.3 Sign location. Australian Standard AS2444 appears as a standard referenced in the Building

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1.6 Portable fire extinguishers. Deemed-to-Satisfy provision E1.6 is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1 Firefighting equipment, Performance Requirement EP1.2.
6.	Fire Safety Systems	Multiple service penetrations are inadequately fire rated or protected.	Inadequate fire-resisting sealing to the penetration/s demonstrates a failure to comply with the Building Code referenced in column 5.	 Building Code of Australia (BCA) Volume One, Section C Fire Resistance, Performance Requirements CP2 Spread of fire CP8 Fire protection of openings and penetrations Part C3 Protection of openings, Deemed-to-Satisfy provisions C3.12 Openings in floors and ceilings for services C3.15 Openings for service installations Deemed-to-satisfy provision C3.15 Openings for service installations is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section C Fire resistance,

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				Performance Requirement CP8.
7.	Fire Safety Systems	Hydrant exhaust pipe is not wrapped for its entire length.	Hydrant installation demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard 2419.1 - 2005 Fire hydrant installations Part 1: system design, installation and commissioning, Section 8 Pipework and Valves. Australian Standard AS2941 - 2002 Fixed Fire Protection Installations - Pumpset Systems which is a secondary referenced standard in AS2419.1 - 2005 Australian Standard AS2419.1 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1.3 Fire hydrants. Deemed-to-Satisfy provision E1.3 is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1 Firefighting equipment, Performance Requirement EP1.3.
8.	Fire Safety Systems	Multiple service penetrations are inadequately fire rated or protected.	Inadequate fire-resisting sealing to the penetration/s demonstrates a failure to comply with the Building Code referenced in column 5.	Building Code of Australia (BCA) Volume One, Section C Fire Resistance, Performance Requirements o CP2 Spread of fire

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				 CP8 Fire protection of openings and penetrations Part C3 Protection of openings, Deemed-to-Satisfy provisions: C3.12 Openings in floors and ceilings for services C3.15 Openings for services C3.15 Openings for service installations Deemed-to-satisfy provisions C3.15 Openings for service installations is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section C Fire resistance, Performance Requirement CP8.
9.	Fire Safety Systems	Fire hydrant pipework fixings have a fire-retardant material installed over some of the fixing points (at fixing point only) in an attempt to achieve compliance.	Hydrant pipework installation demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard AS2419.1 Fire hydrant installations Part 1: system design, installation and commissioning, Section 8 Pipework design and installation, 8.5 Internal pipework, 8.5.1 General. Australian Standard AS2419.1 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1.3 Fire hydrants. Deemed-to-Satisfy provision E1.3 is a pathway that can satisfy the Building Code of

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				Australia (BCA) Volume One, Section E Services and equipment, Part E1 Firefighting equipment, Performance Requirement EP1.3.
10.	Fire Safety Systems	Hydrant pipework installed throughout the basement levels is not protected from damage by fire.	Hydrant pipework installation demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard AS2419.1 Fire hydrant installations Part 1: system design, installation and commissioning, Section 8 Pipework design and installation, 8.5 Internal pipework, 8.5.1 General. Australian Standard AS2419.1 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1.3 Fire hydrants. Deemed-to-Satisfy provision E1.3 is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1 Firefighting equipment, Performance Requirement EP1.3.
11.	Fire Safety Systems	Head height clearance from the finished floor level to overhead services are less than 2.1m.	The inadequate head height clearance demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard AS2419.1 Fire Hydrant Installations – System Design, Installation and Commissioning Clause 6.4.1.

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
12.	Fire Safety Systems	Use of suitable flexible couplings are not installed to the hydrant pump set. Pipework also appears to reduce in size on outlet connection.	Hydrant installation demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard 2419.1 - 2005 Fire hydrant installations Part 1: system design, installation, and commissioning. Australian Standard AS2941 - 2002 Fixed Fire Protection Installations - Pumpset Systems, Section 9 Compression - Ignition Drivers and Controllers which is a secondary referenced standard in AS2419.1 - 2005. Australian Standard AS2419.1 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1.3 Fire hydrants. Deemed-to-Satisfy provision E1.3 is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1 Firefighting equipment, Performance Requirement EP1.3.
13.	Fire Safety Systems	Front face of all connections is not within 150mm of the front face of the cabinet.	Hydrant installation demonstrates a failure to comply with the Building Code referenced in column 5.	Australian Standard 2419.1 - 2005 Fire hydrant installations Part 1: system design, installation and commissioning, Section 7 Fire Brigade Booster Assembly, 7.4

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				 Fire Brigade Booster Assembly Arrangement. Australian Standard AS2419.1 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1.3 Fire hydrants. Deemed-to-Satisfy provision E1.3 is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1 Firefighting equipment, Performance Requirement EP1.3.
14.	Fire Safety Systems	 Fire Hose reels are connected to the potable metered water service. Water meter and isolation valves are installed at the property boundary. Water Mater Isolation valves are not locked in the open position. 	Inadequate installation of padlocks to isolation valves that can prevent flow of water to the hose reels indicates a failure to comply with the Building Code and Australian Standards referenced in column 5.	 Australian Standard AS2441 Installation of fire hose reels, Section 6 Water Supply, 6.2 Metered water supply. Australian Standard AS2441 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1.4 fire hose reels. Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E1 Firefighting equipment, Performance Requirement EP1.1.

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
15.	Fire Safety Systems	Fire doors are undersized and fitted with large gaps exceeding 3mm around the perimeter.	Non-compliant door/s demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard AS1905.1- Components for the protection of openings in fire-resistant wall Part 1: Fire resistant door sets, Section 5 Installation. Australian Standard AS1905.1 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section C Fire resistance, Specification C3.4 Fire doors, smoke doors, fire windows and shutters, Clause 2. Fire doors. Specification C3.4 Fire doors, smoke doors, fire windows and shutters, Clause 2. Fire doors is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section C Fire resistance, Performance Requirement CP2.
16.	Fire Safety Systems	Emergency exit signage is missing / not visible.	Failure to ensure the adequate installation of exit signage demonstrates a failure to comply with Building Code referenced in column 5.	Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E4 Visibility in an emergency, exit signs and warning signs, Deemed-to-Satisfy provision E4.5 Exit signs. Deemed-to-Satisfy provision E4.5 Exit signs is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section E Services and equipment,

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				Performance Requirement EP4.2 Identification of exits.
17.	Fire Safety Systems	Emergency exit signage is incorrectly directing and obstructed.	Failure to ensure the adequate installation of exit signage demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	 Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E4 Visibility in an emergency, exit signs and warning signs, Deemed-to-Satisfy provision E4.5 Exit signs. Deemed-to-Satisfy provision E4.5 Exit signs is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Performance Requirement EP4.2 Identification of exits.
18.	Fire Safety Systems	Emergency exit signage is missing / not visible.	Failure to ensure the adequate installation of exit signage demonstrates a failure to comply with Building Code referenced in column 5.	 Building Code of Australia (BCA) Volume One, Section E Services and equipment, Part E4 Visibility in an emergency, exit signs and warning signs, Deemed-to-Satisfy provision E4.5 Exit signs. Deemed-to-Satisfy provision E4.5 Exit signs is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section E Services and equipment, Performance Requirement EP4.2 Identification of exits.

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
19.	Fire Safety Systems	Warning labels for isolation are not provided to circuits controlling the charging facilities of the emergency lights and exit signs.	Failure to ensure the adequate installation of exit signage demonstrates a failure to comply with the Australian Standard referenced in column 5.	Australian Standard 2293 clause 2.4 - Labelling of devices controlling the operation of emergency lighting.
20.	Fire Safety Systems	Fire rated consumer mains are not installed on fire rated cable tray.	Failure to ensure the adequate installation of a fire rated cable tray demonstrates a failure to comply with Australian Standards referenced in column 5.	Australian Standard 3013 for the protection of safety services that are required to meet a WS53 protection rating.
21.	Fire Safety Systems	Mechanical ductwork is installed that penetrates fire isolating walls where no fire damper has been installed within the duct.	Absence of a damper in a building element with a required FRL demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard AS1682.2 Fire, smoke and air dampers, Part 2; Installation, 5 Selection, 5.2 Fire dampers, 5.2.1 Integrity. Australian Standard AS/NZS 1668.1 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Part C3 Protection of openings, C3.15 Openings for service installations. Australian Standard AS4254.2 Ductwork for air handling systems in buildings Part 2: Rigid duct, Section 2 Duct construction and installation, 2.1 Ductwork, 2.1.1 General. Australian Standard AS4254 appears as a standard referenced in the Building Code of Australia (BCA)

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				Volume One, Section C Fire resistance, Specification C1.10 Fire hazard properties, 5. Air- handling ductwork. Deemed-to-satisfy provision Specification C1.10 Fire hazard properties, 5. Air-handling ductwork is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section C Fire resistance, Performance Requirement CP2.
22.	Structural Systems	Cracking of the concrete parapet and hob walls due to lack of edge distance for the anchors at the base of the fence post.	Installation demonstrates a failure to comply with the Building Code referenced in column 5.	Australian Standard 3600- 2009 Concrete structures, Section 2 Design procedures, actions, and loads, 2.3, Design for serviceability, 2.3.3, Cracking. Australian Standard AS3600 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section B Structure, Deemed-to-Satisfy provision B1.4 Determination of structural resistance of materials and forms of construction
23.	Structural Systems	Uncontrolled cracking of ground floor soffit at the set down and along previous repairs.	Cracking identified demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard 3600- 2009 Concrete structures, Section 2 Design procedures, actions, and loads, 2.3, Design

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				for serviceability, 2.3.3, Cracking. Australian Standard AS3600 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section B Structure, Deemed-to-Satisfy provision B1.4 Determination of structural resistance of materials and forms of construction.
24.	Structural Systems	Concrete spalling on the soffit of the ground floor slab.	Failure to correctly install the concrete/formwork demonstrates a failure to comply with the Australian Standards referenced in column 5.	Australian Standard AS3600 Concrete Structures - Section 4 – Design for durability. Australian Standard AS3600 Concrete Structure - Section 17 - Materials and construction requirements.
25.	Structural Systems	Base of the concrete wall sets back by 20 to 50 mm which deviates from the 'For Construction Drawing Basement Slab Sections – Sheet 2 S03.06 Rev 2' by Van Der Meer, leaving exposed reinforcement.	Unprotected reinforcement is a defect in a building element that is attributable to a failure to comply with the Australian Standard referenced in column 5.	Australian Standard AS3600 Concrete structures, Section 4, Design for durability 4.10 Requirements for cover to reinforcing steel and tendons, 4.10,3 Cover for corrosion protection, 10.4.3.1 General, 4.10.3.7 Embedded items cover, 17.1.3 Handling, placing, and compacting of concrete. Drawing S03.06 by Van Der Meer

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
26.	Structural Systems	Embedded timber in the wall. As the timber absorbs moisture, the reinforcement will corrode.	Embedded timber demonstrates a failure to comply with the Australian Standards referenced in column 5.	 Australian Standard AS3600 Concrete Structures Section 4 - Design for durability, 4.10 Requirements for cover to reinforcing steel and tendons, 4.10.3 Cover for corrosion protection, 4.10.3.7 Embedded items cover Section 17 - Materials and construction requirements, 17.1.7- Rejection of concrete, 17.1.7.2 Hardened concrete Section 17 - Materials and construction requirements, 17.1.3 Handling, placing, and compacting of concrete Australian Standard AS3610.1 Formwork for Concrete, Section 3.0 Surface finish & Colour control, Table 3.2.1 requires Class 3 finish for concrete surfaces that are not concealed.
27.	Structural Systems	 Uncontrolled cracking in the basement ramp / soffits. Cracking immediately adjacent the sawn joint and not contained within the joint. Past repair work defective. 	Cracking demonstrates a failure to comply with the Australian Standards referenced in column 5.	 Australian Standard 3600- 2009 Concrete structures, Section 2 Design procedures, actions, and loads, 2.3, Design for serviceability, 2.3.3, Cracking. Australian Standard AS3600 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section B Structure, Deemed-to-Satisfy

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				provision B1.4 Determination of structural resistance of materials and forms of construction.
28.	Building essential services	Centralised hot water plant installed in a location that has restricted access.	Installation of the hot water plant in location that has restricted access demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5	 Australian Standard 3500.4 - 2018 Plumbing and Drainage Part 4: Heated Water services, Section 5 Installation of Water Heaters - General Requirements, Clause 5.3 Location. Australian Standard AS3500.4 appears as a standard referenced in the Building Code of Australia (BCA) Volume Three, Section B Water Services, Part B2 Heated Water Services. Building Code of Australia (BCA) Volume Three, Section B Water Services, Part B2 Heated Water Services.
29.	Building essential services	 Heated water services / connections to the hot water plant are not thermally insulated. Thermal insulation installed incorrectly on the service risers in each meter cupboard. 	Lack of thermal insulation on heated water services demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	 Australian Standard AS/NZS3500.4 –2018 Plumbing and Drainage– Heated Water Services, Section 8 Water and Energy Efficiency, Clause 8.2 Insulation. Australian Standard AS3500.4 appears as a standard referenced in the Building Code of Australia (BCA)

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				Volume Three, Section B Water Services, Part B2 Heated Water Services. Deemed-to-Satisfy provision B2 is a pathway that can satisfy the Building Code of Australia (BCA) Volume Three, Section B Water Services, Part B2 Heated Water Services.
30.	Building essential services	Tundishes for the hot water plant are not terminated correctly for connection or capped off were redundant.	Installation of tundishes that are not correctly terminated or capped sanitary vent pipes against walls and in close proximity to trafficable areas demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard AS/NZS3500.2 -2015 Plumbing and Drainage Part 2: Sanitary plumbing and drainage, Section 6 General Design Requirements For Sanitary Plumbing Systems, Clause 6.8 Vents. Australian Standard AS3500.2 appears as a standard referenced in the Building Code of Australia (BCA) Volume Three, Section C Sanitary Plumbing and Drainage Systems, Part C1 and C2. Deemed-to-Satisfy provision C1 & C2 is a pathway that can satisfy the Building Code of Australia (BCA) Volume Three, Section C Sanitary Plumbing and Drainage Systems.
31.	Building essential services	PE pipework is installed in an external location above ground exposed to UV. It is	Installation of PE pipework above ground in direct sunlight demonstrates a failure to comply	Australian Standard 3500.1 - 2018 Plumbing and Drainage

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
		installed on the ground without fixings and is not protected against mechanical damage.	with the Building Code and Australian Standards referenced in column 5.	 Part 1: Water services, Section 2 Materials and Products, 2.4 Limitations on Use of Pipes and Fittings, 2.4.3 Plastic pipes and fittings. Australian Standard AS3500.1 appears as a standard referenced in the Building Code of Australia (BCA) Volume Three, Section B Water Services, Part B1 Cold Water Services. Building Code of Australia (BCA) Volume Three, Section B Water Services, Part B1 Cold Water Services, Objective B01.
32.	Building essential services	A 50L electric storage hot water unit is installed in the plant area without a safe tray waste, connections not insulated and plastic pipework installed within 1m of the hot water unit outlet.	Lack of thermal insulation, safe tray waste and proximity of pipe materials to unit demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	 Australian Standard AS/NZS3500.4 –2018 Plumbing and Drainage– Heated Water Services, Section 2 Materials and Products, Section 5 Installation of Water Heaters - General Requirements. Australian Standard AS3500.4 appears as a standard referenced in the Building Code of Australia (BCA) Volume Three, Section B Water Services, Part B2 Heated Water Services. Building Code of Australia (BCA) Volume Three, Section B

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				Water Services, Part B2 Heated Water Services.
33.	Building essential services	AC unit condensate drains are not connected to a drainage system. Condensate discharges onto the roof / plant area floor.	Lack of drainage provided for the AC condenser units on balconies demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard 3666.1 - 2002 Air Handling and water systems of buildings - Microbial control Part 1: Design, installation and commissioning, Section 2 Design, Installation, and commissioning of Air-Handling Systems. Australian Standard AS3666.1 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section B Water Services, Part B1 Cold Water Services. Building Code of Australia (BCA) Volume Three, Section B Water Services, Part B1 Cold Water Services, Performance Requirement BP1.2.
34.	Building essential services	All rainwater outlets are installed with a mesh covering which restricts / reduces outlet performance and increases possible blockage.	Installation of stormwater drainage with a non-standard untested mesh cover demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard 3500.3 - 2018 Plumbing and Drainage Part 3: Stormwater drainage, Section 3 Roof Drainage Systems - Design, Clause 3.8 Balcony and Terrace Areas. Australian Standard AS3500.3 appears as a standard referenced in the Building Code of Australia (BCA)

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				Volume One, Section F Health and Amenity, Part F1.1 Stormwater Drainage. Deemed-to-Satisfy provision F1.1 is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section F Health and Amenity, Part F1.1 Stormwater Drainage.
35.	Building essential services	Rainwater heads are installed with under sized overflows.	Inadequate overflow size demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard 3500.3 - 2018 Plumbing and Drainage Part 3: Stormwater drainage, Section 3 Roof Drainage Systems - Design, Clause 3.7 Box Gutter Systems. Australian Standard AS3500.3 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section F Health and Amenity, Part F1.1 Stormwater Drainage. Building Code of Australia (BCA) Volume One, Section F Health and Amenity, Part F1.1 Stormwater Drainage.
36.	Building essential services	Floor waste is installed in the roof top plant room which can accept the flow of stormwater and does not have a removable grate.	Installation of a floor waste within an external location which can accept stormwater and without a removable grate demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard 3500.2 - 2018 Plumbing and Drainage Part 2: Sanitary plumbing and drainage, Clause 3.19.2 Drainage Connections and Clause 4.6.7 Floor Waste Gullies.

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				 Australian Standard AS3500.2 appears as a standard referenced in the Building Code of Australia (BCA) Volume Three, Section C Sanitary Plumbing and Drainage Systems, Part C1 and C2. Deemed-to-Satisfy provision C1 & C2 is a pathway that can satisfy the Building Code of Australia (BCA) Volume Three, Section C Sanitary Plumbing and Drainage Systems.
37.	Item removed			
38.	Building essential services	Authority water meters are not installed for each SOU.	Lack of floor wastes in the hydraulic services cupboard demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	 Australian Standard 3500.1 - 2018 Plumbing and Drainage Part 1: Water services - Sydney Water Multi-level individual metering guide. Australian Standard AS3500.1 appears as a standard referenced in the Building Code of Australia (BCA) Volume Three, Section B Water Services, Part B1 Cold Water Services. Deemed-to-Satisfy provision B1 is a pathway that can satisfy the Building Code of Australia (BCA) Volume Three, Section B Water Services, Part B1 Cold Water Services, Part B1 Cold Water Services, Objective B01.

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
39.	Building essential services	Minimum separation is not achieved between electrical and hydraulic services in multiple locations throughout the building.	Inadequate separation of services demonstrates a failure to comply with the Australian Standards referenced in column 5.	 Australian Standard AS3500 – Plumbing and drainage Clause 5.2 Proximity to other Services. Australian Standard AS/NZS3000 Electrical Installations "Wiring Rules" Clause 3.9.8.4 Proximity to non-electrical services.
40.	Building essential services	Stormwater drainage is reduced in pipework size.	Installation of pipework with a reduction in size downstream demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	 Australian Standard 3500.3 - 2018 Plumbing and Drainage Part 3: Stormwater drainage. Australian Standard AS3500.3 appears as a standard referenced in the Building Code of Australia (BCA) Volume One, Section F Health and Amenity, Part F1.1 Stormwater Drainage. Deemed-to-Satisfy provision F1.1 is a pathway that can satisfy the Building Code of Australia (BCA) Volume One, Section F Health and Amenity, Part F1.1 Stormwater Drainage.
41.	Building essential services	Fixture waste pipes are installed in 50mm pipework which is undersized for elevated drainage systems.	Installation of pipework with a size less than 65mm diameter within elevated drainage systems demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	 Australian Standard 3500.2 - 2018 Plumbing and Drainage Part 2: Sanitary plumbing and drainage, Section 10 General Installation of Pipework. Australian Standard AS3500.2 appears as a standard referenced in the Building Code of Australia (BCA)

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				Volume Three, Section C Sanitary Plumbing and Drainage Systems, Part C1 and C2. Building Code of Australia (BCA) Volume Three, Section C Sanitary Plumbing and Drainage Systems.
42.	Building essential services	Hose tap within the bin room is installed without a backflow prevention device.	Lack of backflow prevention on the hose taps within the bin room that is within reach of a potential hazard/cross contamination demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard 3500.1 - 2018 Plumbing and Drainage Part 1: Water services, Section 4 Cross-connection Control and Backflow Prevention. Australian Standard AS3500.1 appears as a standard referenced in the Building Code of Australia (BCA) Volume Three, Section B Water Services, Part B1 Cold Water Services. Building Code of Australia (BCA) Volume Three, Section B Water Services, Part B1 Cold Water Services, Performance Requirement BP1.2.
43.	Building essential services	Pipework is not labelled in several areas throughout the basement carparks.	Inadequate identification of pipework demonstrates a failure to comply with the Australian Standard referenced in column 5.	Australian Standard AS/NZS 3500.1 Plumbing and drainage, Part 1: Water services, Section 5 Installation of cold-water services, Clause 5.21 Identification of piping.

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
44.	Building essential services	Sewer / stormwater drainage pipework is installed without adequate fall, when aligned to the adjacent bulkhead/ when measured with a digital level / when measured with a spirit level and block.	Inadequate pipe fall demonstrates a failure to comply with the Australian Standard referenced in column 5.	Australian Standard AS3500.2 – 3.4 Grades of drains 3.4.1 Minimum grade.
45.	Building essential services	No vibration eliminators installed at the base of the pump.	Lack of vibration eliminators demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard 3500.1 - 2018 Plumbing and Drainage Part 1: Water services, Section 13 Pumps. Australian Standard AS3500.1 appears as a standard referenced in the Building Code of Australia (BCA) Volume Three, Section B Water Services, Part B1 Cold Water Services. Deemed-to-Satisfy provision B1 is a pathway that can satisfy the Building Code of Australia (BCA) Volume Three, Section B Water Services, Part B1 Cold Water Services, Performance Requirement BP1.2.
46.	Building essential services	Floor waste installed without a removable grate.	Installation of a floor waste without a removable grate demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	Australian Standard 3500.2 - 2018 Plumbing and Drainage Part 2: Sanitary plumbing and drainage, Clause 4.6.7 Floor Waste Gullies. Australian Standard AS3500.2 appears as a standard referenced in the Building Code of Australia (BCA) Volume Three, Section C

Serious Defect Reference	Building element	Defect	Reason why defect is a serious defect	Applicable approved plan, Code or Australian Standard
				 Sanitary Plumbing and Drainage Systems, Part C1 and C2. Deemed-to-Satisfy provision C1 & C2 is a pathway that can satisfy the Building Code of Australia (BCA) Volume Three, Section C Sanitary Plumbing and Drainage Systems.
47.	Building essential services	Overflow relief gully is not installed at the minimum 75mm above the surrounding ground.	Installation of the system overflow relief gully not achieving minimum heights above FGL demonstrates a failure to comply with the Building Code and Australian Standards referenced in column 5.	 Australian Standard 3500.2 - 2018 Plumbing and Drainage Part 2: Sanitary Plumbing and drainage, Clause 4.6.6.7 Height Above Surrounding Ground. Australian Standard AS3500.2 appears as a standard referenced in the Building Code of Australia (BCA) Volume Three, Section C Sanitary Plumbing and Drainage Systems, Part C1 and C2. Building Code of Australia (BCA) Volume Three, Section C Sanitary Plumbing and Drainage Systems.
48.	Building essential services	Isolation switches to each apartment condenser are not identified to indicate the apartment and circuit breaker of origin.	Omittance of labelling demonstrates a failure to comply with the Australian Standard referenced in column 5.	• AS/NZS 3000 clause 2.3.2.2.2 Identification which denotes that the requirements for isolation shall be clearly marked to identify the circuit or equipment they isolate.

Why is it appropriate to give the Building Work Rectification Order?

- 17. I am aware that the Development is occupied which may delay the Developer doing the things ordered to be done by this Order. I have taken this into account when specifying the time periods in column 5 of Table 1. I am of the view the periods above for serious defects reference numbers 1 to 48 (inclusive) are reasonable periods for compliance in all the circumstances for the specified actions required by this Order to be carried out. I have formed this belief balancing the risks that the serious defects pose against the period of time it will take to carry out the specified actions.
- 18. The potential consequence of the serious defects set out in this Order are that they may negatively impact the amenity of the Development for owners and occupiers of the Development and may reduce the ability of the Development being used for its intended purposes by owners and occupiers of the Development such as a reduction in the habitability of apartments by their residents.
- 19. Considering the potential consequences, I give greater weight to the seriousness of each defect and failure to adhere to the Building Code of Australia, Australian Standards and the approved plans and the benefits arising from remediating the defects and I find that it is appropriate, in the exercise of my discretion, to make this Order requiring the Developer to carry out the building works or take the actions described above within the periods described above.
- 20. I have considered all of the circumstances. I accept that this Order requires considerable further building works and actions that are likely to be costly, and I give this consideration moderate weight. However, the cost to the Developer must be balanced against the benefit to the owners and occupiers of the Development in having the Development constructed according to approved plans, the Building Code of Australia, and Australian Standards.
- 21. I am aware that obtaining reports from third parties required by this Order will pose time constraints and costs on the Developer. However, I balance these considerations against the serious defects outlined in this Order and the consequences these serious defects pose.

Consideration of written representations

- 22. On 20 December 2023, a notice of intention to issue a building work rectification order (**Order**) and a draft copy of the Order was served on the Developer, Local Council, the Owners Corporation and Principal Certifier. The parties were invited to provide written submissions relating to the draft copy of the Order by 29 January 2024.
- 23. The Strata Committee provided written representations in response to the notice of intention by way of email on 22 January 2024 stating that:
 - a. some serious defects are not included within the draft Order;
 - b. some serious defects are not described in sufficient detail within the draft Order;
 - c. they had engaged various building defect specialist consultants (**Nominated Experts**) to produce defect reports (**Reports**) and these Reports should be appended to the final Order as annexures;
 - d. the Developer be required to rectify all defects identified within the Reports in addition to those listed within the Order;
 - e. Nominated Experts should have final sign off for each serious building defect outlined in the Nominated Expert Reports; and
 - f. where an undertaking manager is appointed, they should be third party and appointed by Project Intervene.

- 24. I have considered the representations made by the Strata Committee and determined it is not appropriate to modify the Order. I am of the view that the serious defects as set out in this Order and as based on the Inspection Report, are reasonable and appropriate and reflect the actions required to rectify the serious defects.
- 25. Written submissions were received by the Developer, however they did not go to the substance of the Order and therefore have not been included.
- 26. Accordingly, I am satisfied that it is appropriate to issue to Order as set out above.

Conclusion

27. Having regard to the above and the benefits arising from eliminating, minimising, or remediating the serious defects, I find that it is appropriate, in the exercise of my discretion, to make this Order.

Notes about this Order

- A person is not required to obtain consent or approval under the *Environmental Planning and Assessment Act 1979* to carry out work in compliance with a requirement of a Building Work Rectification Order.
- It is an offence to fail to comply with this Order. The maximum penalty for a company is 3,000 penalty units and in addition, for every day the offence continues, 300 penalty units. For and individual the maximum penalty is 1,000 penalty units and in addition, for every day the offence continues, 100 penalty units.
- You may appeal to the Land and Environment Court against this Order within 30 days after this Order is given unless the Land and Environment Court grants leave for it to be made after that time. Lodging an appeal does not operate to stop the effect of this Order unless ordered by the Court.
- You are entitled to be given reasons for this Order unless it has been given in an emergency. The reasons have been included within this Order and are not provided separately.
- The Secretary has given the following persons notice of the making of this building work rectification order:
 - the relevant local council,
 - o if the local council is not the certifier in relation to the building work—the principal certifier,
 - o if you are not the owner of the land concerned—the owner of the land concerned,
 - o if the order relates to a strata building-the relevant owners corporation,
 - o any other person prescribed by the regulations.
- This Order specifies a time by which, or period within which, the order must be complied with. This Order continues to have effect until it is complied with even though the time has passed, or the period has expired, unless any requirement under this Order is revoked.

Annexure A

serious defect, in relation to a building, means -

a defect in a building element that is attributable to a failure to comply with the performance requirements of the Building Code of Australia, the relevant Australian Standards, or the relevant approved plans, or

a defect in a building product or building element that -

is attributable to defective design, defective or faulty workmanship or defective materials, and

causes or is likely to cause -

the inability to inhabit or use the building (or part of the building) for its intended purpose, or

the destruction of the building or any part of the building, or

a threat of collapse of the building or any part of the building, or

a defect of a kind that is prescribed by the regulations as a serious defect, or

the use of a building product (within the meaning of the Building Products (Safety) Act 2017) in contravention of that Act.

building element, as defined in the Design and Building Practitioners Act 2020 (NSW), means any of the following -

(a) the fire safety systems for a building within the meaning of the Building Code of Australia,

waterproofing,

an internal or external load-bearing component of a building that is essential to the stability of the building, or a part of it (including but not limited to in-ground and other foundations and footings, floors, walls, roofs, columns, and beams),

a component of a building that is part of the building enclosure,

those aspects of the mechanical, plumbing, and electrical services for a building that are required to achieve compliance with the Building Code of Australia,

other things prescribed by the regulations for the purposes of this section.

- (2) The regulations may exclude things from being building elements for the purposes of this Act.
- (3) In this section –

above grade wall means a wall above the level of the ground surrounding a building.

below grade wall means a wall below the level of the ground surrounding a building.

building enclosure means the part of the building that physically separates the interior environment of the building from the exterior environment, including roof systems, above grade and below grade walls (including windows and doors).

a **developer**, in relation to building work, means any of the following persons, but does not include any person excluded from this definition by the regulations —

- (b) the person who contracted or arranged for, or facilitated or otherwise caused, (whether directly or indirectly) the building work to be carried out,
- if the building work is the erection or construction of a building or part of a building the owner of the land on which the building work is carried out at the time the building work is carried out,

the principal contractor for the building work within the meaning of the Environmental Planning and Assessment Act 1979,

in relation to building work for a strata scheme — the developer of the strata scheme within the meaning of the Strata Schemes Management Act 2015,

any other person prescribed by the regulations for the purposes of this definition.

Section 6 - Act applies only to residential apartment building work

(1) The exercise of any function under this Act applies only to building work in respect of a residential apartment building that –

(c) is or was authorised to commence in accordance with a construction certificate or complying development certificate issued under the Environmental Planning and Assessment Act 1979, or is required to be authorised by a construction certificate or complying development certificate, and

has not been completed or has been completed within the period of 10 years before the exercise of that function.

(2) The regulations may provide that a specified provision, or specified provisions, of this Act extend to other classes of buildings (within the meaning of the Building Code of Australia).