

BUILDING CODE OF AUSTRALIA NCC 2022, VOLUME ONE DESIGN COMPLIANCE REPORT

Alterations to an existing Unit (1) 1/29 Margaret Street, Fairlight NSW 2094

REVISION	DATE	PREPARED BY
230338.V01.A FINAL – A	13 February 2024	Rhiannon Thurlow Unrestricted Building Surveyor BDC 2762

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1 EXECUTIVE SUMMARY

1.1 General/ Purpose of the Report

This report provides an assessment for compliance with the Building Code of Australia / National Construction Code 2022 Volume 1 in relation to 1/29 Margaret Street, Fairlight NSW 2094 in support of a DA lodgement to Northern Beaches Council in accordance with the DA Lodgement Checklist.

This report will assess the proposed works in relation to BCA compliance, and identify the extent to which the existing building may comply with the relevant provisions of the NCC/BCA. Assessment of the proposed design considers these provisions and identifies such as either:

- Being complied with (Complies); or
- Not being complied with (Does not Comply); or
- Requiring further information to be provided for the purpose of a Construction Certificate (Note); or
- Not being relevant (N/A)

Where any non-compliances are identified, if deemed necessary suitable recommendations to remedy the non-compliances shall be detailed.

1.2 Description

The proposed scope of works for the purpose of this report include alterations to an existing unit (Unit 1) including internal reconfigurations, replacement of external openings to the Eastern Elevation and new openings proposed to the Southern Elevation.

1.3 Report Basis

This report is based on:

- i. The Building Code of Australia/National Construction Code 2022, Volume One, inclusive of NSW Variations
- ii. Environmental Planning and Assessment Act 1979.
- iii. Environmental Planning and Assessment Regulation 2021.
- iv. Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021.

The report is to address the following areas;

• NCC 2022 Parts C, D, E

Design and operation of the existing essential services is outside the scope of this report and should be the responsibility of the services engineers to determine compliance with the applicable codes and verify design.

BCA Clauses not mentioned in this statement have not been assessed.

This assessment did not have access to the Annual Fire Safety Certificate and some issues may come to light after review of this document.

Note – NCC 2022 was adopted in NSW on 1 May 2023; In accordance with Section 19 of the *EP&A* (Development Certification and Fire Safety) Regulation 2021, the version of the BCA applicable to a project is the version of the BCA in force as at the date of application for a Construction Certificate for building work involving the entrance floor or greater.

Therefore, assessment comments contained within this report may be subject to amendments to comply with any updated versions of the NCC if/as applicable.

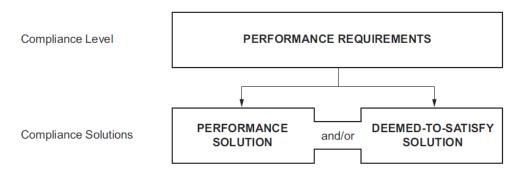
1.4 BCA/NCC Compliance Pathways

Compliance with the NCC is achieved by complying with -

- (a) The Governing Requirements of the NCC; and
- (b) The Performance Requirements

Performance Requirements are satisfied by one of the following,

- (a) Performance Solution
- (b) Deemed-to-Satisfy Solution
- (c) A combination of (a) and (b)



1.5 Exclusions & Limitations

This report does not consider the following except where specifically mentioned;

- i. Structural design of existing FRL's and compliance.
- ii. The operating capability of any existing services in the building.
- iii. The existing level of BCA compliance unless specifically identified in this report.
- iv. The operational and/or performance capabilities or compliance of any existing services installed within the building.
- v. The Disability Discrimination Act 1992 except where specifically mentioned.
- vi. Disability (Access to Premises Building) Standards 2010.

2 BUILDING CHARACTERISTICS

2.1 Classification

The following table presents a summary of the relevant building classification items of the proposed building development.

BCA Classification	2, 7a
Rise in Storeys	4
Effective Height	13.75m
Type of Construction	Α
Climate Zone	Zone 5
Maximum Floor Area / Volume	N/A
Planning Zone	R1 – General Residential

2.2 Use of Building

The use of the building/s is described as follows:

- Residential Flat Building containing 6 units

3 BUILDING CODE OF AUSTRALIA ASSESSMENT

3.1 FIRE SAFETY UPGRADES TO EXISTING BUILDINGS (EP&A REGS 2021)

3.1.1 SECTION 62 - CONSIDERATION OF FIRE SAFETY

The proposed development does not seek to change the use of a building, and as such Section 62 of the EP&A Regs 2021 does not apply.

3.1.2 SECTION 64 - CONSIDERATION OF FIRE SAFETY

Sub-Clause	Requirement	Comment/Advice
1	This section applies to the determination of a development application that involves the rebuilding or alteration of an existing building if— (a) the proposed building work and previous building work together represent more than half of the total volume of the building, or (b) the measures contained in the building are inadequate— (i) to protect persons using the building, if there is a fire, or (ii) to facilitate the safe egress of persons using the building from the building, if there is a fire, or (iii) to restrict the spread of fire from the building to other buildings nearby.	The proposed building works does not involve of represent greater than 50% of the existing volume of the building. The measures contained within the building and their adequacy are further discussed within this report.
2	The consent authority must consider whether it is appropriate to require the existing building to be brought into total or partial conformity with the Building Code of Australia	For Reference

3	In this section— previous building work means building work completed or authorised within the previous 3 years. total volume of a building means the volume of the building before the previous building work commenced and measured over the building's roof and external walls.	For Reference
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3.2 NCC COMPLIANCE TABLE

BCA Clause	Title	Complies	Does Not Comply	Note	N/A
	Part C2 – Fire Resistance and Stability				
C2D2	Type of construction required				✓
C2D3	Calculation of rise in storeys				✓
C2D4	Buildings of multiple classification				✓
C2D5	Mixed types of construction				✓
C2D6	Two storey Class 2, 3 or 9c buildings				✓
C2D7	Class 4 parts of buildings				✓
C2D8	Open spectator stands and indoor sports stadiums				✓
C2D9	Lightweight construction			✓	
C2D10	Non-combustible building elements			✓	
C2D11	Fire hazard properties				✓
C2D12	Performance of external walls in fire				✓
C2D13	Fire-protected timber: Concession				✓
C2D14	Ancillary elements				✓
C2D15	Fixing of bonded laminated cladding panels				✓
	Part C3 – Compartmentation and Separation				
C3D3	General floor area and volume limitations				✓
C3D4	Large isolated buildings				✓
C3D5	Requirements for open spaces and vehicular access				✓
C3D6	Class 9 buildings				✓
C3D7	Vertical separation of openings in external walls				✓
C3D8	Separation by fire walls				✓
C3D9	Separation of classifications in the same storey				✓
C3D10	Separation of classifications in different storeys				✓
C3D11	Separation of lift shafts				✓

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C3D12	Stairways and lifts in one shaft		✓
C3D13	Separation of equipment		✓
C3D14	Electricity supply system		✓
C3D15	Public corridors in Class 2 and 3 buildings		✓
	Part C4 - Protection of openings		
C4D3	Protection of openings in external walls		✓
C4D4	Separation of external walls and associated openings in different fire compartments		✓
C4D5	Acceptable methods of protection		✓
C4D6	Doorways in fire walls		✓
C4D7	Sliding fire doors		✓
C4D8	Protection of doorways in horizontal exits		✓
C4D9	Openings in fire-isolated exits		✓
C4D10	Service penetrations in fire-isolated exits		✓
C4D11	Openings in fire-isolated lift shafts		✓
C4D12	Bounding construction: Class 2 and 3 buildings and Class 4 parts	✓	
	Part D2 – Provision for Escape	•	
D2D3	Number of exits required	✓	
D2D4	When fire-isolated stairways and ramps are required	✓	
D2D5	Exit travel distances	✓	
D2D6	Distance between alternative exits		✓
D2D7	Height of exits, paths of travel to exits and doorways	✓	
D2D8	Width of exits and paths of travel to exits	✓	
D2D9	Width of doorways in exits or paths of travel to exits	✓	
D2D10	Exit width not to diminish in direction of travel		✓
D2D11	Determination and measurement of exits and paths of travel to exits		✓
D2D12	Travel via fire-isolated exits		✓
D2D13	External stairways or ramps in lieu of fire-isolated exits		✓
D2D14	Travel by non-fire-isolated stairways or ramps		✓
D2D15	Discharge from exits	✓	
D2D16	Horizontal exits		✓
D2D17	Non-required stairways, ramps or escalators		✓
D2D18	Number of persons accommodated		✓
D2D19	Measurement of distances		✓

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D2D20	Method of measurement			✓
D2D21	Plant rooms, lift machine rooms and electricity network substations: concession			✓
D2D22	Access to lift pits			✓
D2D23	Egress from Primary Schools			✓
	Part D3 – Construction of exits			
D3D3	Fire-isolated stairways and ramps			✓
D3D4	Non-fire-isolated stairways and ramps	✓		
D3D5	Separation of rising and descending stair flights			✓
D3D6	Open access ramps and balconies			✓
D3D7	Smoke lobbies			✓
D3D8	Installations in exits and paths of travel			✓
D3D9	Enclosure of space under stairs and ramps			✓
D3D10	Width of required stairways and ramps			✓
D3D11	Pedestrian ramps			✓
D3D12	Fire-isolated passageways			✓
D3D13	Roof as open space			✓
D3D14	Goings and risers			✓
D3D15	Landings			✓
D3D16	Thresholds			✓
D3D17	Barriers to prevent falls			✓
D3D18	Height of Barriers			✓
D3D19	Openings in Barriers			✓
D3D20	Barrier Climbability			✓
D3D21	Wire Barriers			✓
D3D22	Handrails	✓		
D3D23	Fixed platforms, walkways, stairways and ladders			✓
D3D24	Doorways and doors	✓		
D3D25	Swinging doors			✓
D3D26	Operation of latch			✓
D3D27	Re-entry from fire-isolated exits			✓
D3D28	Signs on doors			✓
D3D29	Protection of openable windows	✓		
D3D30	Timber stairways: Concession			✓

3.3 DETAILED ANALYSIS - RELEVANT PROVISIONS

3.3.1 Part C2 – Fire Resistance and Stability

BCA Clause	Title	Assessment & Comment	Complies	Does Not Comply	Note	N/A
C2D9	Lightweight construction	Should the proposed works require a loadbearing beam or column to support the removal of internal walls, that beam and/or column shall achieve the required FRL as identified in Specification 5. Where the FRL is achieved by way of Lightweight Construction, it shall comply with C2D9 and Specification 6. Details shall be included as relevant, to the Construction Certificate documentation.			√	
C2D10	Non-combustible building elements	Noted. In a building of Type A Construction, the External walls, including all components incorporated in them must be non-combustible. For the purpose of the Construction Certificate, non-combustible materials shall be specified for the new openings within external walls of the building.			✓	

3.3.2 Specification 5 - Fire-Resisting Construction – Type A Construction

BCA Clause	Title	Assessment & Comment	Complies	Does Not Comply	Note	N/A
S5C2	Exposure to fire- source features	Fire-source feature: Any one or more of the following: (a) The far boundary of a road, river, lake or the like adjoining the allotment. (b) A side or rear boundary of the allotment. (c) An external wall of another building on the allotment which is not a Class 10 building.				√
S5C4	Lintels	A lintel must have the FRL required for the part of the building in which it is situated unless a concession under S5C4(2) is able to be applied. Recommendation: any new lintels required to be designed by a Structural Engineer as complying with S5C4 with the relevant documentation being provided at Construction Certificate stage.			√	

Page 11 of 18 Noted. Building element Class of building — FRL: (in minutes) Structural adequacylintegritylinsulation
5, 7a or 9 6 2, 3 or 4 part EXTERNAL WALL (including any column and other building ele ent incorporated within it) or other external building element, where the distance from any fire-source feature to which it is exposed is less than 1.5 m 90/ 90/ 90 90/ 60/ 60 120/120/120 120/ 90/ 90 180/180/180 180/180/120 240/240/240 1.5 to less than 3 m 90/ 60/ 30 120/ 60/ 30 180/120/90 240/180/ 90 3 m or more For non-loadbea less than 1.5 m -/ 90/ 90 -/120/120 -/180/180 -/240/240 Type A fire-.5 to less than 3 m **-/ 60/ 60** resisting EXTERNAL COLUMN not incorp S5C11 construction -120/-/-90/-/-180/-/-240/-/-For non-loadbearing columns-COMMON WALLS and FIRE fire-resistance of 90/ 90/ 90 120/120/120 180/180/180 240/240/240 building elements INTERNAL WALLS ire-resisting lift and stair shafts 90/ 90/ 90 180/120/120 -/ 90/ 90 -/120/120 -/120/120 -/120/120 Non-*loadbearing* Bounding *public corridor*s, publ 90/ 90/ 90 120/-/-180/-/-240/-/-**-/** 60/ 60 Between or bounding 90/ 90/ 90 120/-/-180/-/-240/-/adbearing **-/** 60/ 60 Ventilating, pipe, garbage, and like ts not used for the discharge of hot products of combustic -/120/120 -/120/120 OTHER LOADBEARING INTERNAL WALLS, INTERNAL BEAMS, TRUSSES 90/ 90/ 90 120/120/120 180/180/180 FLOORS The Fire Source Features in relation to the Northern & Eastern external walls are the far boundary of a road. The Fire Source Feature in relation to the Southern external walls are the Southern Side Boundary. External Walls to the Northern, Eastern and Southern elevations are more than 3m from the Fire Source Features. The existing building is of masonry construction (brickwork) in good repair and would be considered to generally meet the FRL requirements of Table S5C11a to Table S5C11g

[CSR & Think Brick Australia. "Identifying the Fire Resistance of Clay Masonry

Walls." Think Brick.]

3.3.3 Part C4 - Protection of openings

BCA Clause	Title	Assessment & Comment	Complies	Does Not Comply	Note	N/A
C4D3	Protection of openings in external walls	Openings in an external wall that is required to have an FRL must be protected in accordance with C4D5, and if wall-wetting sprinklers are used they must be located externally. This requirement only applies if the distance between the opening and the fire-source feature to which it is exposed is less than— (a) 3m from a side or rear boundary of the allotment; or (b) 6m from the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a storey at or near ground level; or (c) 6m from another building on the allotment that is not Class 10. Existing openings within the external walls are located more than 3m from a side or rear boundary throughout the building. Openings which are proposed as new, or to be modified in relation to the proposed works at Unit 1, are more than 3m from a side boundary, and/or more than 6m from the far boundary of the adjoining roads. Both existing and proposed openings are not considered to require protection of openings under C4D3 / C4D5.				✓

Page 13 of 18 A doorway in a Class 2 or 3 building must be protected if it provides access from a sole-occupancy unit to-(a) a public corridor, public lobby, or the like; or (b) a room not within a sole-occupancy unit; or (c) the landing of an internal non fire-isolated stairway that serves as a required exit; or (d) another sole-occupancy unit. A doorway in a Class 2 or 3 building must be protected if it provides access from a room not within a sole-occupancy unit to-(a) a public corridor, public lobby, or the like; or Bounding (b) the landing of an internal non fire-isolated stairway construction: that serves as a required exit. ✓ C4D12 Class 2 and 3 buildings and Class 4 parts Protection for a doorway must be at least— (a) in a building of Type A construction — a self-closing – /60/30 fire door; and (b) in a building of Type B or C construction — a selfclosing, tight fitting, solid core door, not less than 35 mm thick. The doorways providing access from the sole-occupancy units to the public corridor are self-closing -/120/30 Fire Doors (compliant).

3.3.4 Part D2 - Provision for Escape

recommended.

BCA Clause	Title	Assessment & Comment	Complies	Does Not Comply	Note	N/A
D2D4	When fire- isolated stairways and ramps are required	The internal stairway serves 3 consecutive storeys of residential units. One storey may be included for other ancillary purposes only (laundry).	√			

The doorway to the shared laundry facility from the public corridor is a self-closing solid core door. No upgrades

3.3.5 Part D3 - Construction of exits

BCA Clause	Title	Assessment & Comment	Complies	Does Not Comply	Note	N/A
D3D14	Goings and risers	The existing stairs providing internal access to Units 2, 3, 4, 5 and 6 remain unaffected by the proposed building works and are not considered relevant to this assessment.				✓
D3D22	Handrails	A suitable handrail is provided to the common stair which provides access to the shared laundry.	✓			
D3D29	Protection of openable windows	Openable windows to Unit 1 are less than 2m above the surface beneath.	✓			

3.3.6 Part D4 – Access for people with disabilities

The DtS requirements for a Class 2 building are that access be provided to the entry of a sole-occupancy unit.

The Access to Premises Code requires access to the "New Part" and the "Affected Part".

A part of a building is a new part of the building if it is an extension to the building or a modified part of the building An affected part is:

- (a) the principal pedestrian entrance of an existing building that contains a new part; and
- (b) any part of an existing building, that contains a new part, that is necessary to provide a continuous accessible path of travel from the entrance to the new part.

The definition of 'affected part' of a building is limited to the area between (and including) the principal pedestrian entrance and the new work, but does not extend from the entrance to the allotment boundary or any required carparking spaces.

Recommendation: No upgrade to existing provisions. The proposed works do not involve works to an area from the principal pedestrian entrance of an existing building that contains a new part. The works are limited to that within Unit 1.

3.3.7 SECTION E - SERVICES AND EQUIPMENT

Note – verification has been provided from the installer of the SOU entry doors that FRL -120/30 doors were supplied. This was also verified via inspection of the doorsets and their tags to AS1905.1-2005.

Given the scope of building works and consideration to the existing building, the following fire safety measures are required:

- Smoke alarm system complying with AS3786-2014 located on or near the ceiling in the hallway serving bedrooms. Where there is more than one alarm installed within a sole-occupancy unit, alarms must be interconnected within the sole-occupancy unit.

4 CONCLUSION

In this regard we make no recommendations for upgrade to the existing building in relation to BCA compliance given the scope of proposed works in relation to the building, and that the nature of the works will not reduce the performance of the building in relation to fire spread, protection and/or egress.

The project will be subject to construction documentation that further provides the relevant details to demonstrate compliance as described within this report in relation to the proposed works.

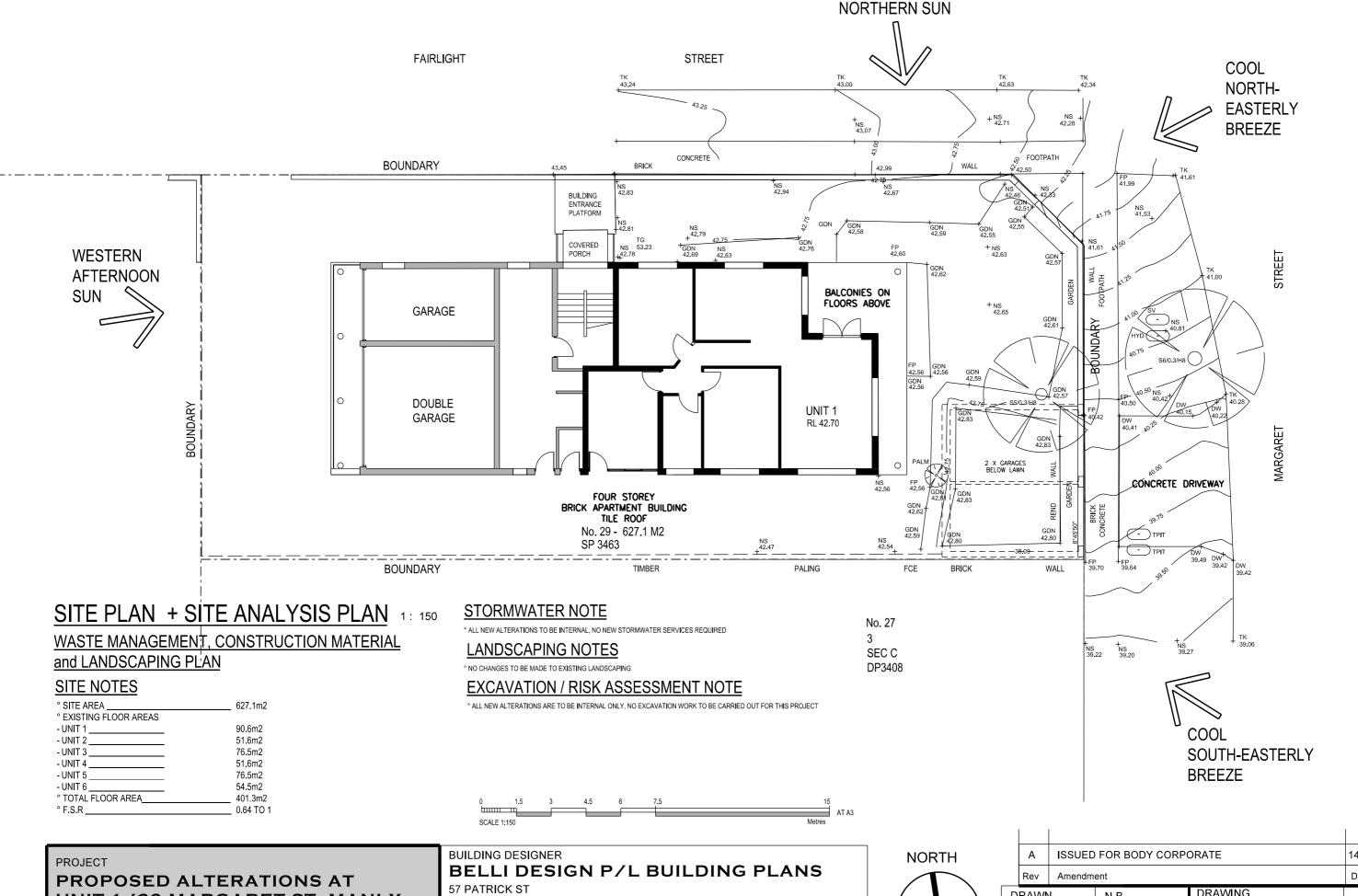
--- End of Report ---

APPENDIX A - FIRE SAFETY SCHEDULE

FIRE SAFETY MEASURES	STANDARD OF PERFORMANCE
Smoke Alarms System (within SOUs)	AS3786-1993, AS3786-2014
Fire doors (Entry doors to SOUs 2, 3, 4, 5 & 6)	FRL -/120/30 AS 1905.1-2015
Street Hydrant	AS2419
Solid core door (to common laundry)	

APPENDIX B - ARCHITECTURAL DRAWINGS

PREPARED BY	PLAN TITLE	DRAWING NO.	REVISION	DATE
Belli Design P/L	Site & Analysis Plan	2301-DA1	Α	14/11/2023
Belli Design P/L	Ground Floor Plan	2301-DA2	Α	14/11/2023
Belli Design P/L	Existing First & Second Floor Plan	2301-DA3	Α	14/11/2023
Belli Design P/L	Existing Third Floor Plan	2301-DA4	Α	14/11/2023
Belli Design P/L	North Elevation	2301-DA5	Α	14/11/2023
Belli Design P/L	South Elevation	2301-DA6	Α	14/11/2023
Belli Design P/L	East Elevation & Section A-A	2301-DA7	Α	14/11/2023



UNIT 1/29 MARGARET ST, MANLY FOR MR AND MRS S & A FLEET

AVALON BEACH 2107

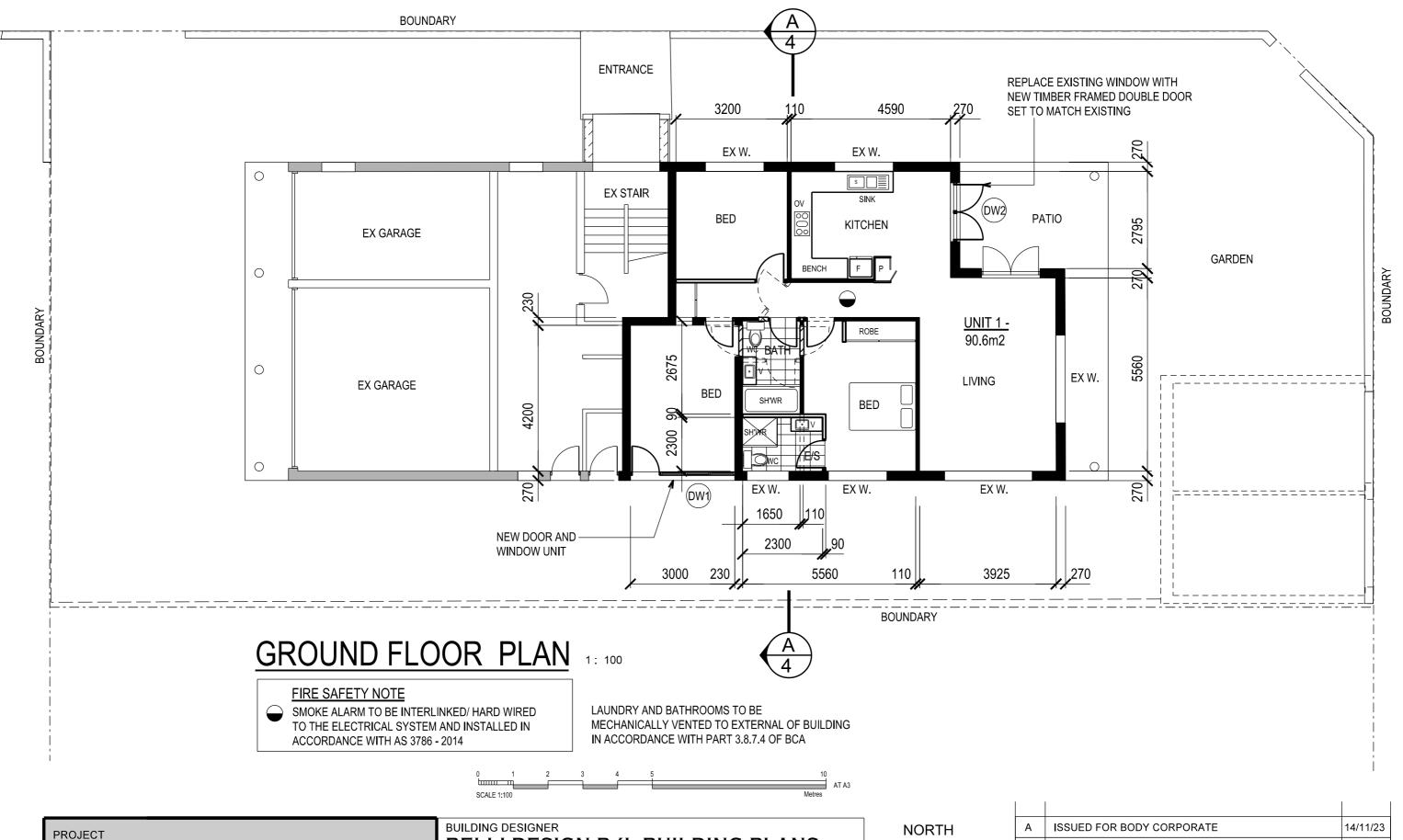
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TITLE SITE & ANALYSIS PLAN



Α	ISSUED FOR BODY CORPORATE			14/11/23
Rev	Amendment			
VAVVIV N D		N B	DRAWING NUMBER	REV
			■ NUMBER	

TREV Amendin	CIII		Date
DRAWN	NB	DRAWING	REV
DATE	09/11/2023	NUMBER	
SCALE	1 : 150 AT A3	2301-DA1	Α



PROPOSED ALTERATIONS AT **UNIT 1/29 MARGARET ST, MANLY FOR** MR AND MRS S & A FLEET

BELLI DESIGN P/L BUILDING PLANS

57 PATRICK ST

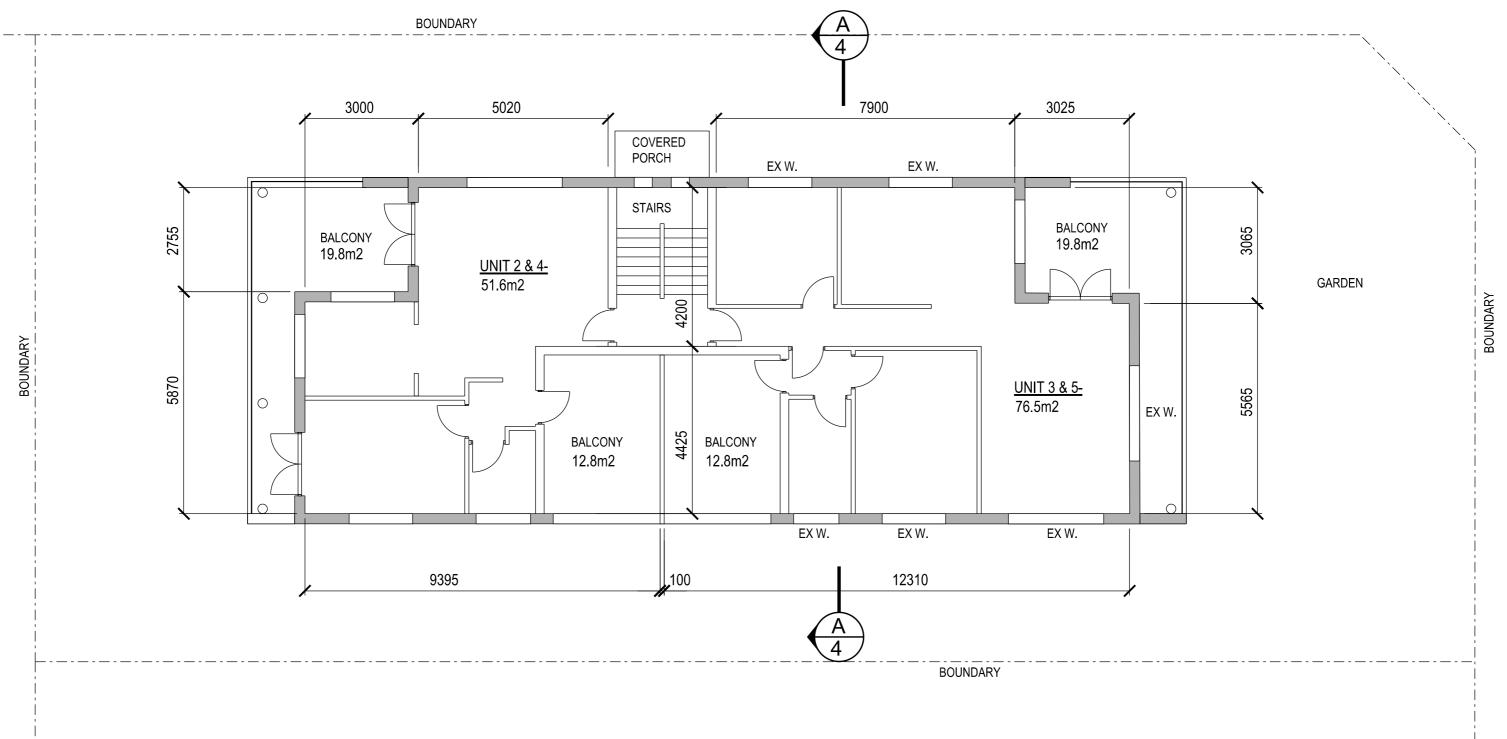
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TITLE GROUND FLOOR PLAN



	Α	ISSUED	FOR BODY CORPO	ORATE	14/11/23
	Rev	Amendm	nent		Date
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FIRST & SECOND EXISTING FLOOR PLAN 1: 100

<u>UNIT 2 & 4 - 51.6m2</u> <u>UNIT 3 & 5 - 76.5m2</u>



PROJECT

PROPOSED ALTERATIONS AT UNIT 1/29 MARGARET ST, MANLY FOR MR AND MRS S & A FLEET

BUILDING DESIGNER

BELLI DESIGN P/L BUILDING PLANS

57 PATRICK ST

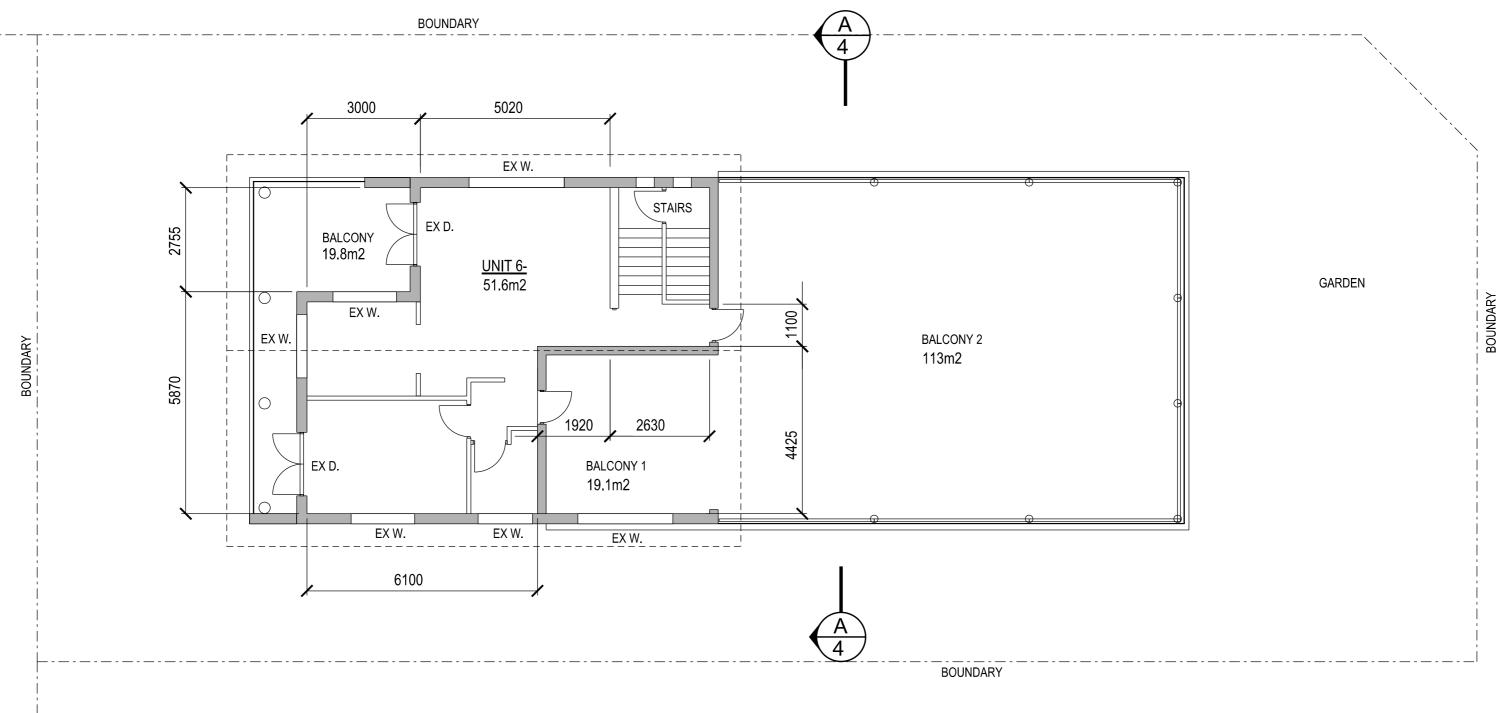
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EXISTING FIRST & SECOND FLOOR PLAN

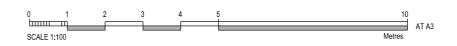


	A	ISSUED	FOR BODY CORP	ORATE	14/11/23
	Rev Amendment				Date
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DATE			09/11/2023	NUMBER	
SCALE			1:100 AT A3	2301-DA3	Α



EXISTING THIRD FLOOR PLAN 1: 100

<u>UNIT 6 - 54.5m2</u>



PROJECT

PROPOSED ALTERATIONS AT UNIT 1/29 MARGARET ST, MANLY FOR MR AND MRS S & A FLEET BUILDING DESIGNER

BELLI DESIGN P/L BUILDING PLANS

57 PATRICK ST

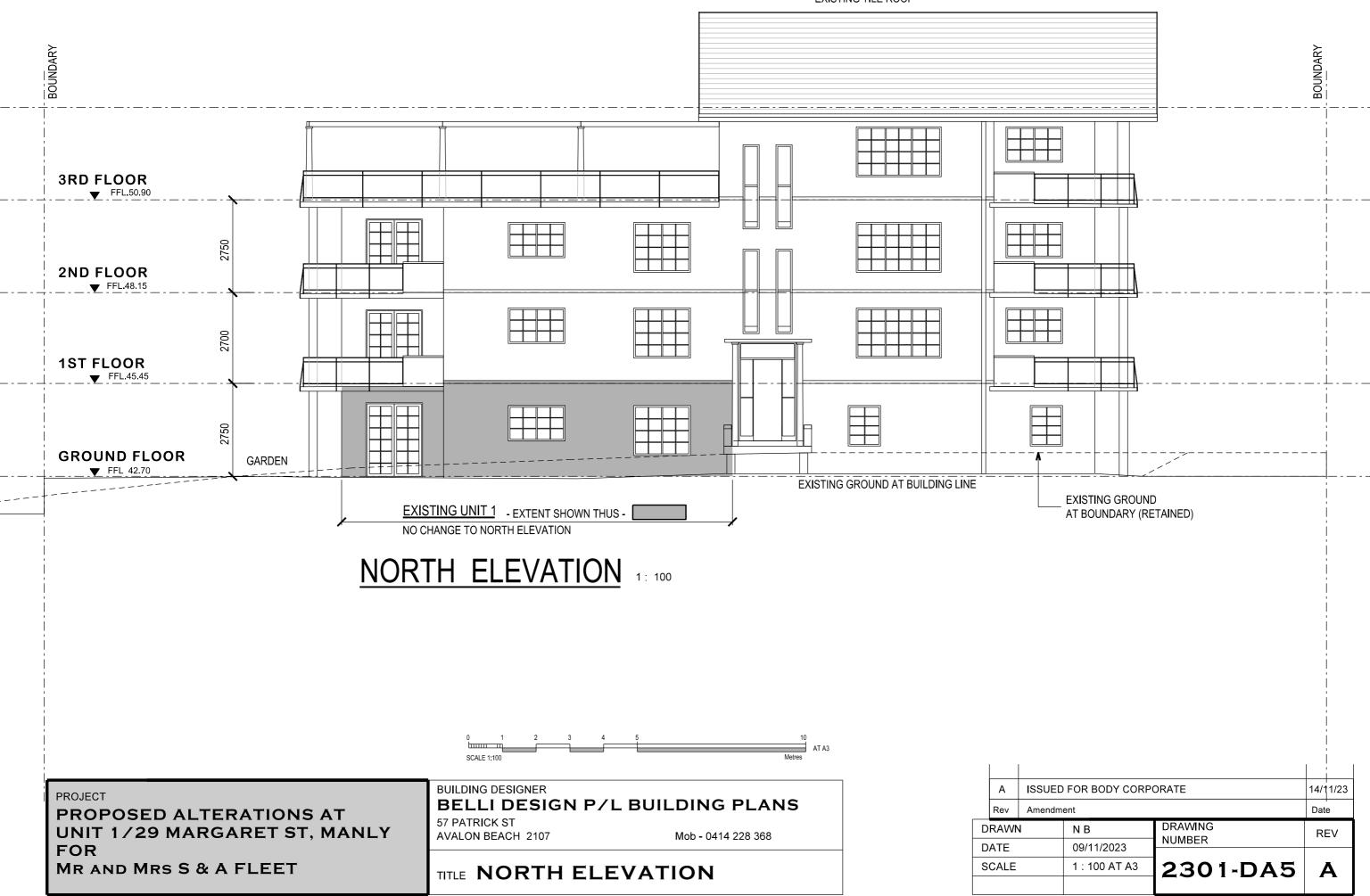
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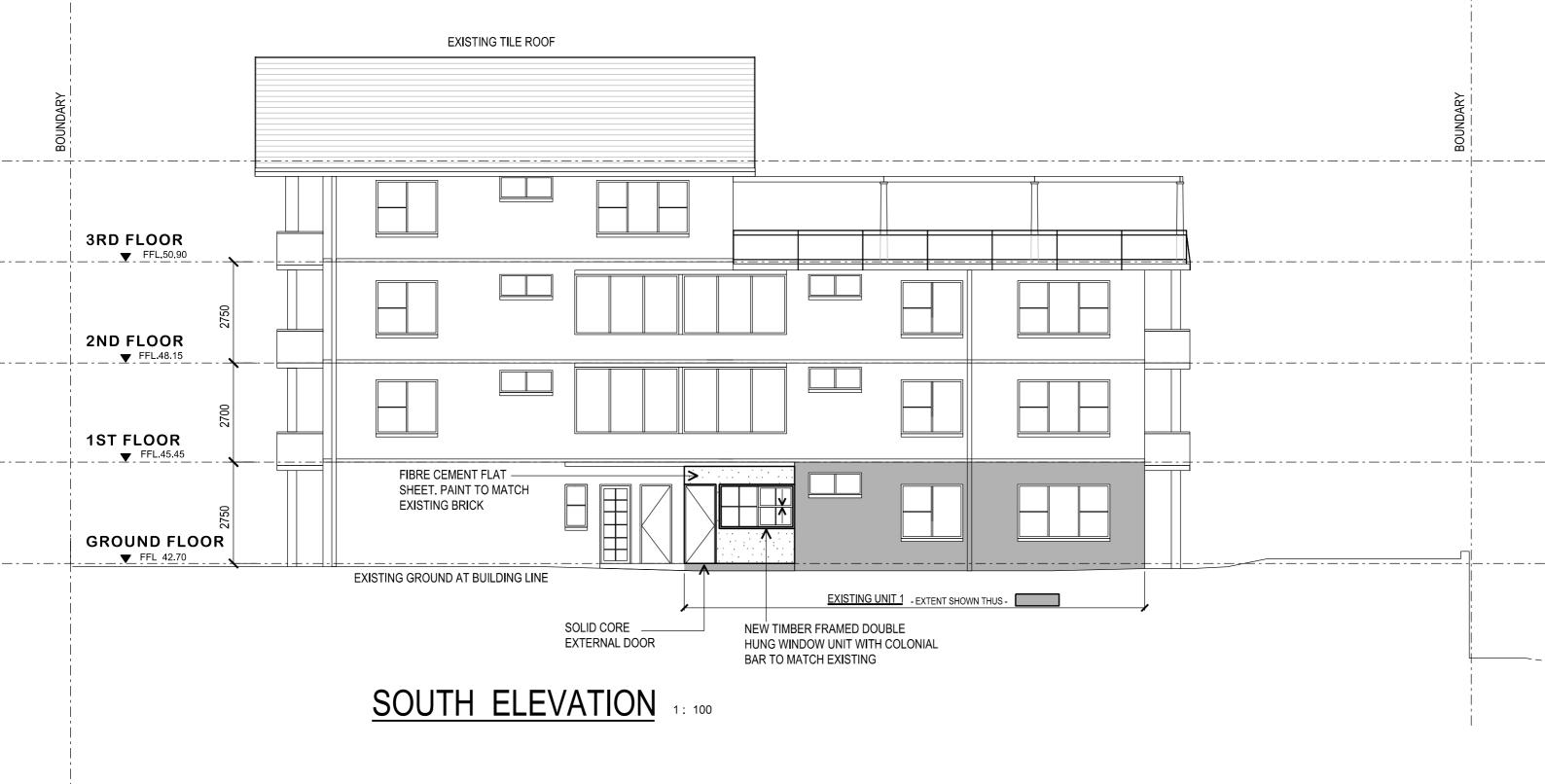
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EXISTING THIRD
TITLE FLOOR PLAN



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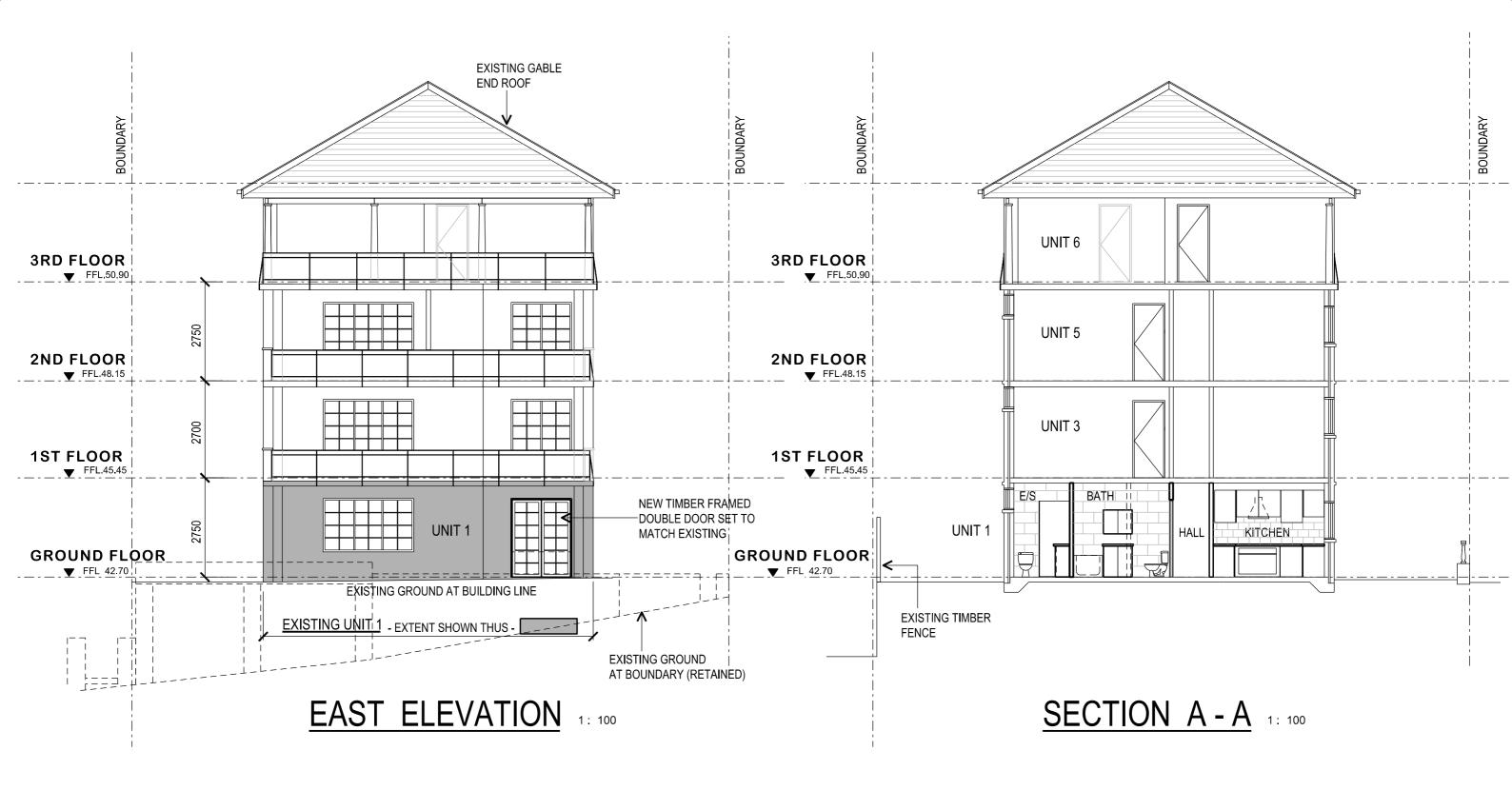


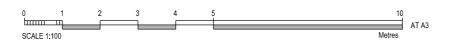


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PROJECT
PROPOSED ALTERATIONS AT UNIT 1/29 MARGARET ST, MANLY
UNIT 1/29 MARGARET ST, MANLY
FOR
MR AND MRS S & A FLEET

BELLI DESIGN P/L BUILDING PLANS 57 PATRICK ST **AVALON BEACH 2107** TITLE SOUTH ELEVATION





PROPOSED ALTERATIONS AT
UNIT 1/29 MARGARET ST, MANLY
FOR
MR AND MRS S & A FLEET

BUILDING DESIGNER
BELLI DESIGN P/L BUILDING PLANS

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Mob - 0414 228 368

EAST ELEVATION & SECTION A -A

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