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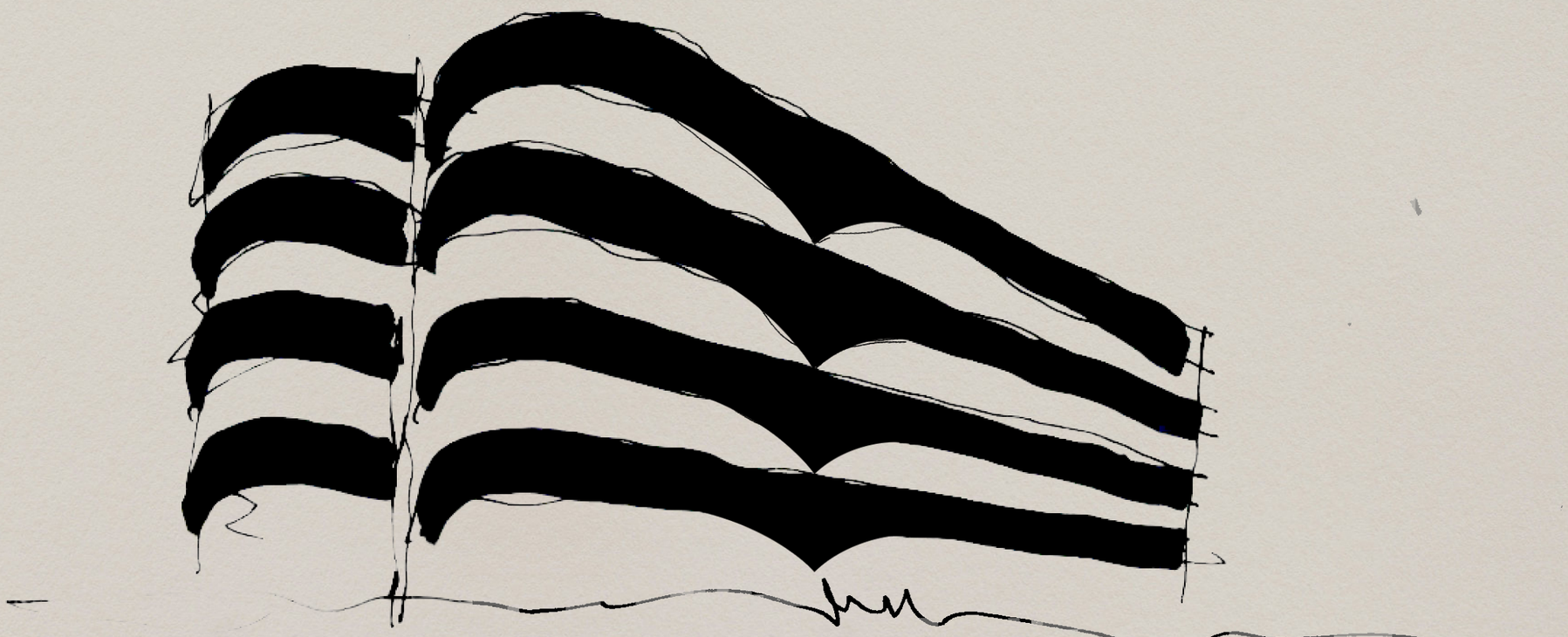
North Steyne 101



# 101 North Steyne

Stage A.2 Development Application
Development Application Design Report
19 December 2024

Prepared for Time & Place
Prepared by Ivo Pery
Approved by Nicole Leuning

smart design studio

We acknowledge the Traditional Custodians of the land and pay respect to the Elders, past, present and future. We honour Aboriginal and Torres Strait Islander peoples' cultural and spiritual relationship to place and rich contribution to our society. To that end, all our work speaks to uphold the notion that if we care for Country, it will care for us.

## Project Overview

This new residential building situated on North Steyne provides a considered and elegant addition to the Manly beach front. Simple geometric forms create a timeless architectural expression, whilst a refined palette of robust materials is selected to withstand the conditions of its coastal location. Set in an abundant garden of endemic coastal species, the residences will form a welcome contribution to the urban fabric of Manly.

# Contents

## Context and Analysis

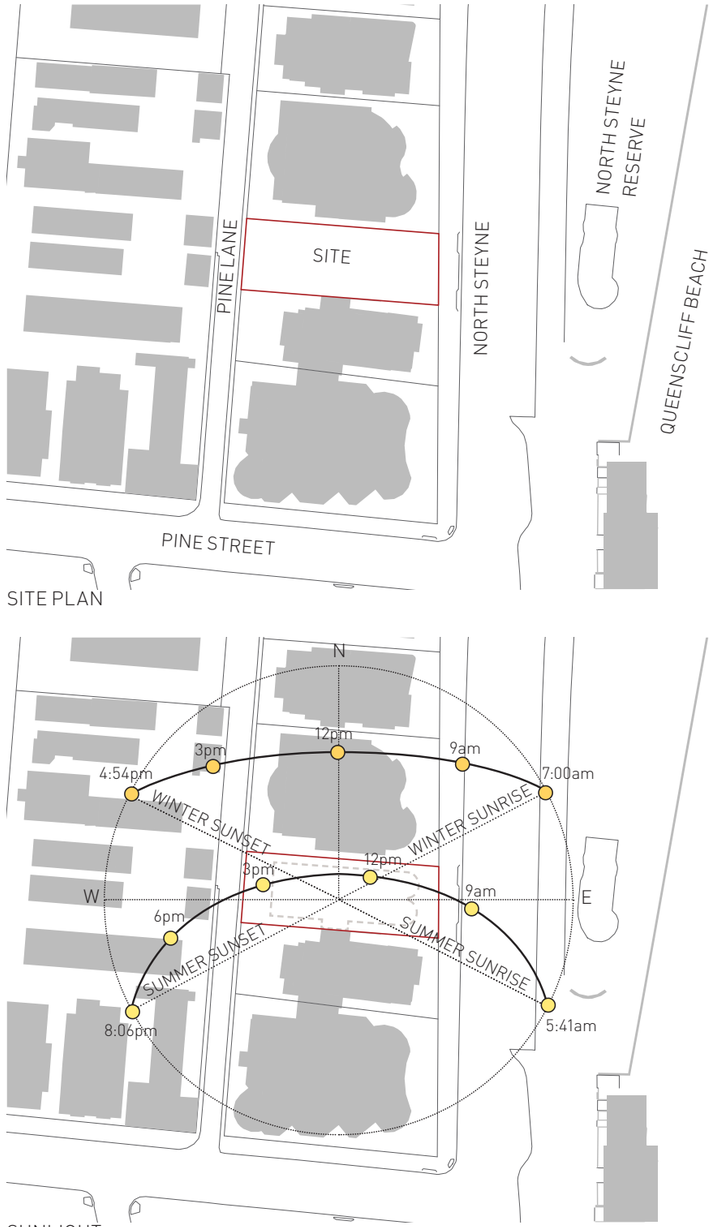
## Location

Situated in the Manly precinct, opposite North Steyne Reserve and Queenscliff Beach, the site benefits from its fantastic natural setting as well as amenities such as bike lanes, local shops and restaurants. It is also well served by public transport with a bus stop a few meters from the entry.

# Context and Analysis

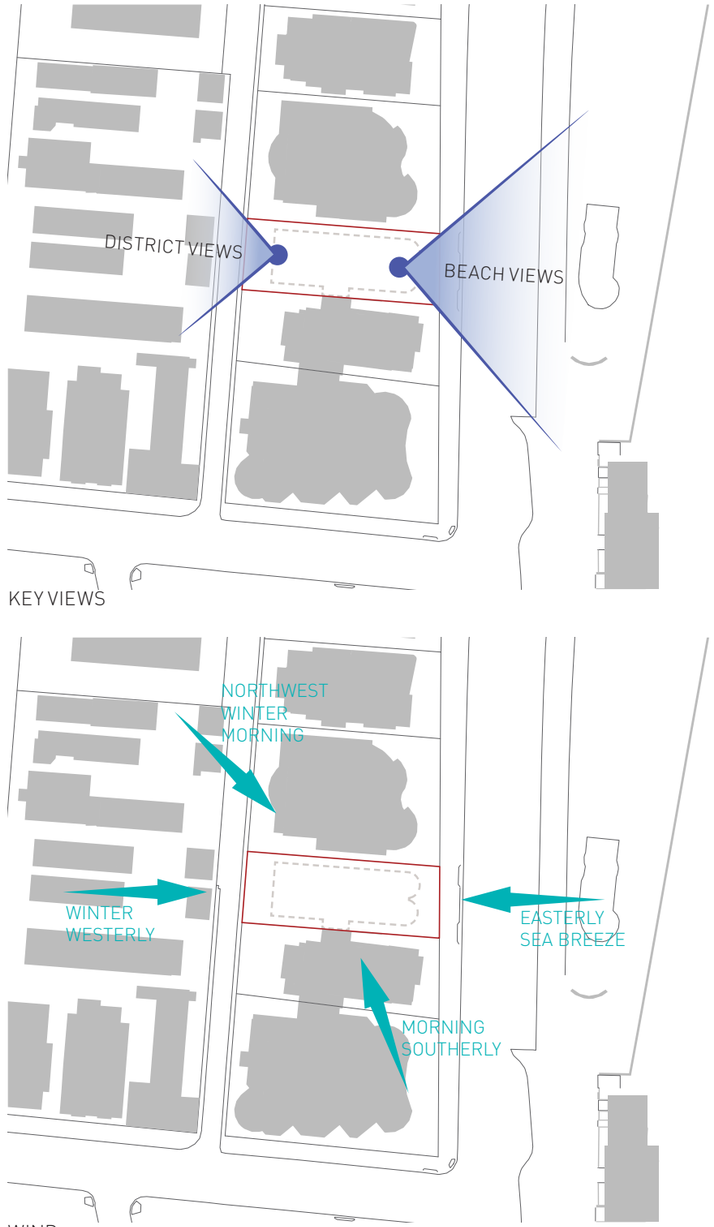
## Site Analysis

The site presents a number of opportunities and constraints which inform the design, including ocean and district views, good public transport links , the opportunity to remove on-grade parking and 2 vehicle crossings, the amenity of the reserve and beach to the east and the availability of cooling summer coastal breezes.



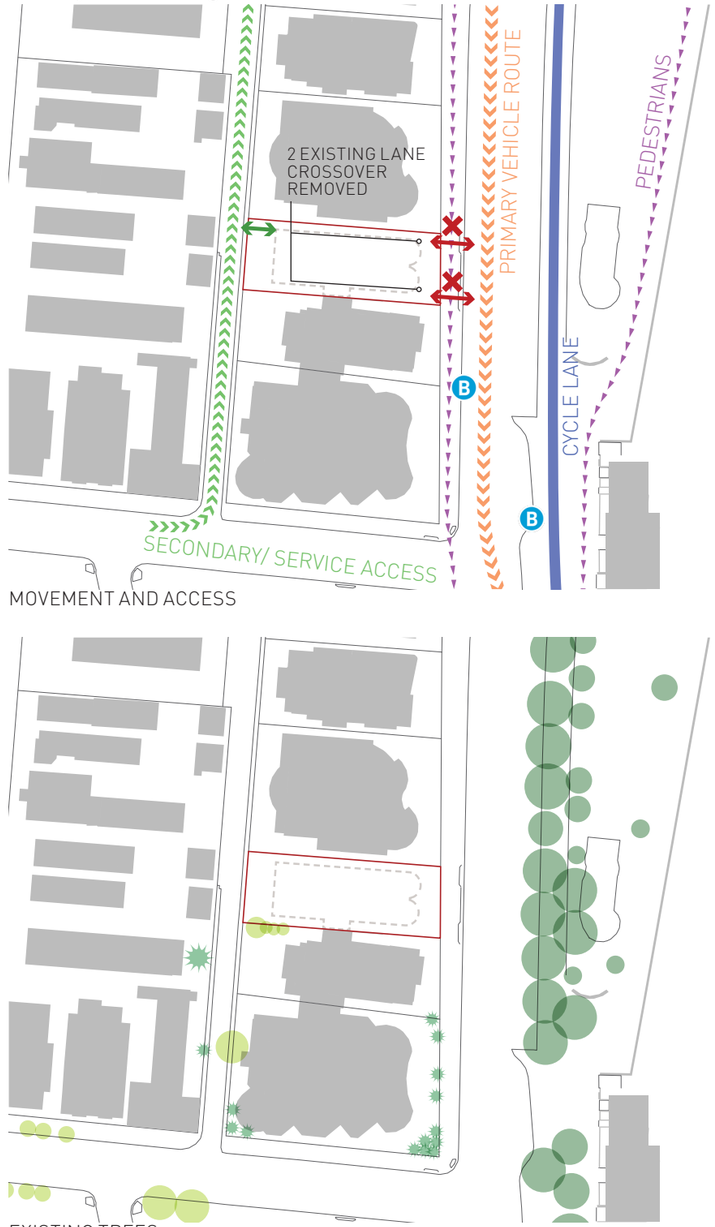

SITE PLAN

SUNLIGHT




KEY VIEWS

WIND




MOVEMENT AND ACCESS

EXISTING TREES

## Context and Analysis

## Neighbourhood Scale

The site faces North Steyne where the existing architectural expression is characterised by 5-storey apartment buildings with parking at ground or basement level. 96 North Steyne to the south is currently under development and will comprise 5 storeys of accommodation with additional height for plant (shown in white).


image intended for streetscape context. NB the buildings represented are not to scale


## North Steyne - Neighbour Character

Buildings neighbouring the site are predominately 5-storey residential buildings with the upper floor somewhat recessive or set back. The block also contains higher buildings including the 9-storey tower at number 114-117.  The proposal builds upon this strong established street character with a proposed 4-storey primary element and an upper floor set back from the building line.


A - 96-97 North Steyne

B - 98-100 North Steyne

C - 102-104 North Steyne

D -106-107 North Steyne

D -114-117 North Steyne

## Context and Analysis

## Outlook

A. The site benefits from a prime water front location with views over the North Steyne Reserve. Ocean views are available through the tree line, providing a stunning natural outlook.

B. That same tree line serves a reverse function in filtering views towards the site for pedestrians enjoying the beach and the reserve.

A - views from

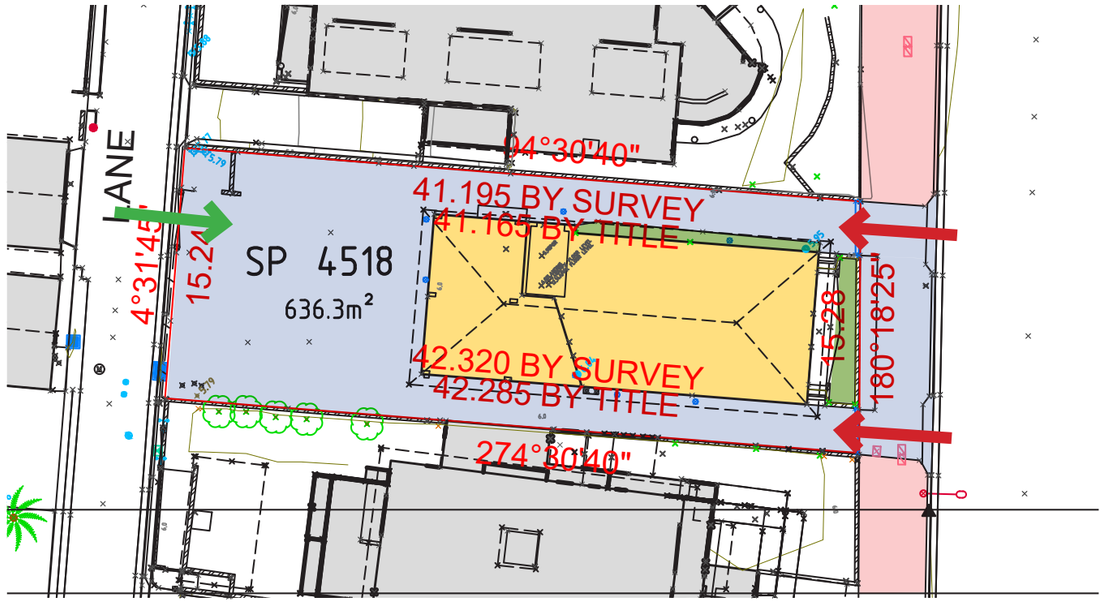
B - views to

## Context and Analysis

## Existing Building

The existing building comprises 3 storeys of red brick apartments with a dated architectural expression. It has a dual frontage with both street and laneway access. The building is currently of a lower scale than the surrounding buildings and is set further forwards. There are no existing trees and with the exception of small front and side gardens with grass and shrub planting, the open space surrounding the building is entirely taken up with hard-stand on-grade parking.


# Context and Analysis




## Public Realm

The proposal seeks to:

— Remove the 2 x North Steyne crossovers
— Retain the 1 x existing Pine Lane crossover
— Provide more on street parking to North Steyne
— Reinstate the herringbone brick footpath to match the surrounding public domain
— Green the public realm

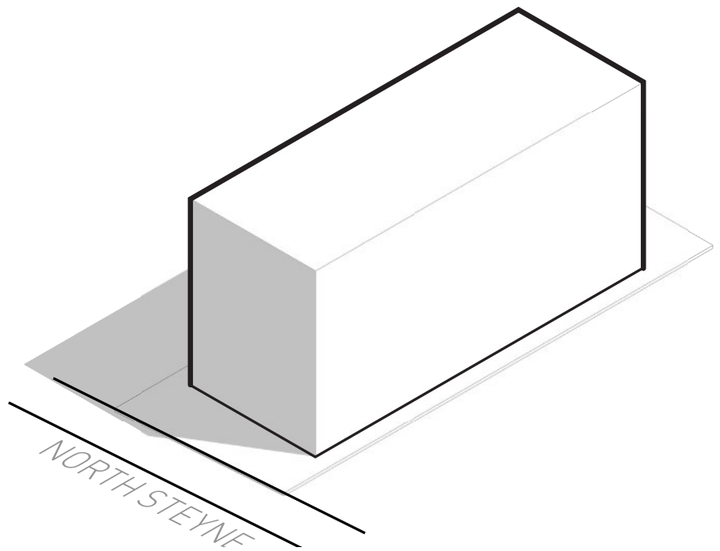
existing hardscape on site
existing planting on site
herringbone brick pavement
existing vehicle entry points - removed
existing vehicle entry points - retained

Tarmac in front of existing site breaks continuity of public realm

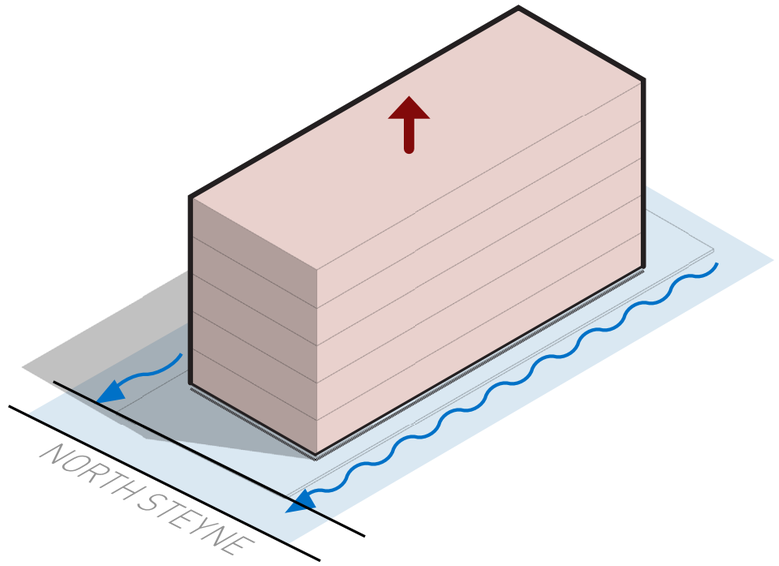

Proposal seeks to reinstate herringbone brick and remove North Steyne vehicle crossovers

Key Moves

## Key Moves

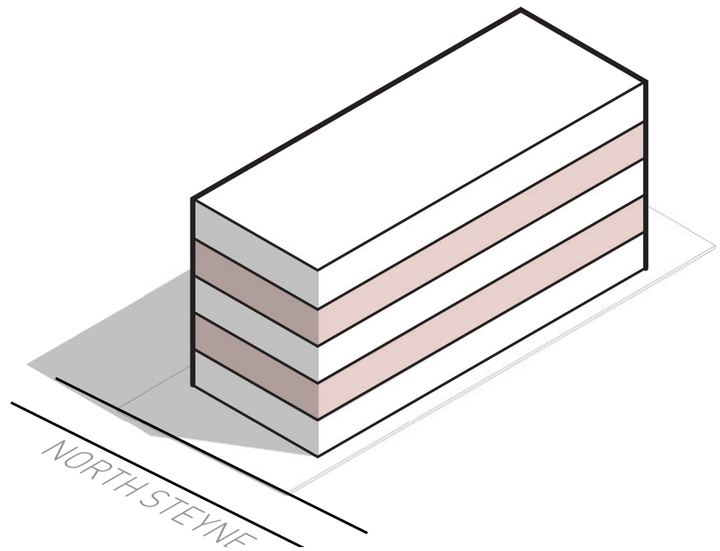



1. Establish mass with appropriate setbacks

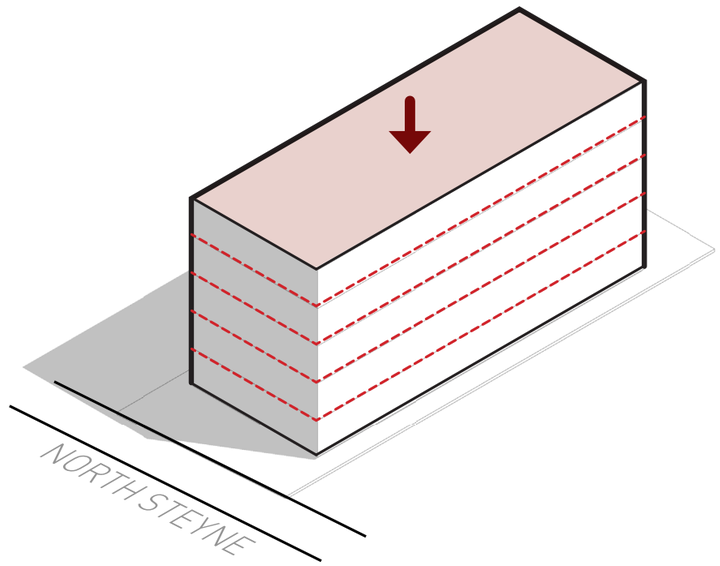



3. Lift building up out of flood plain

## Responding to Site Controls

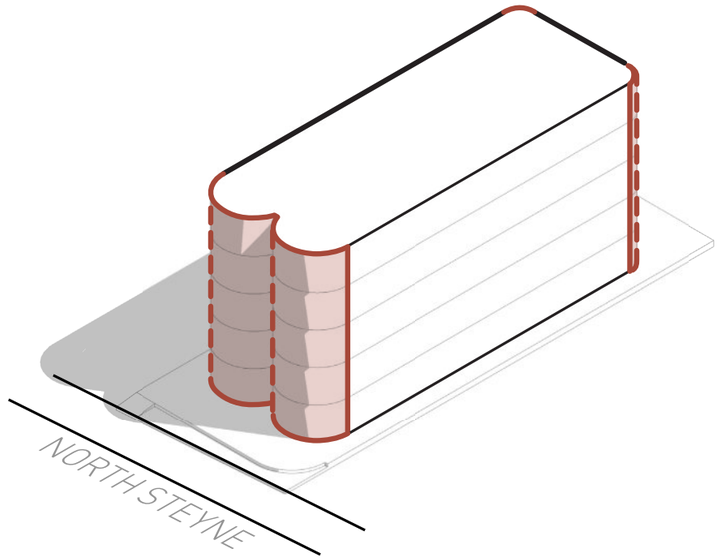



2. Match 5 storeys of neighbours

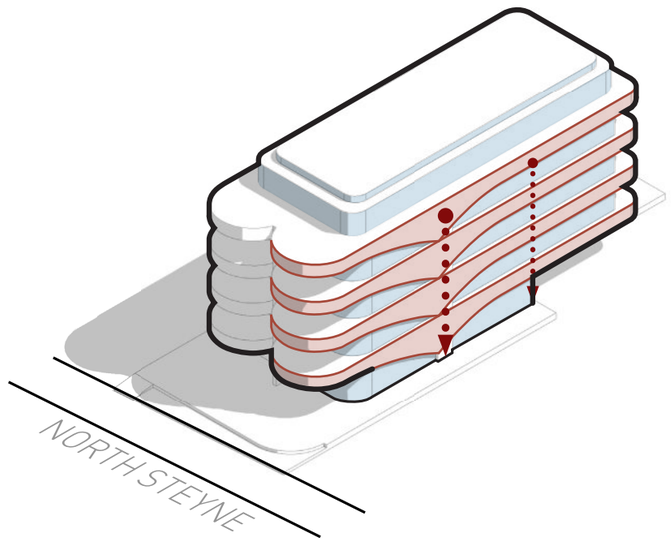



4. Compress height to minimum whilst achieving ADG compliance

## Key Moves

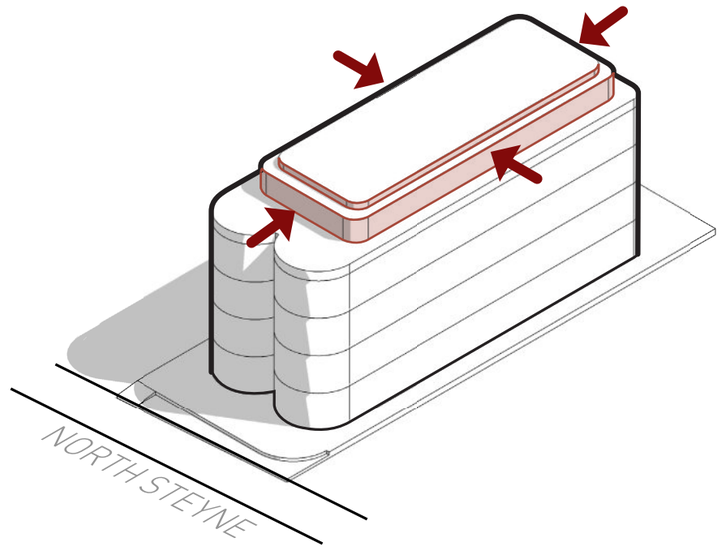



1. Round off corners to improve neighbours' views

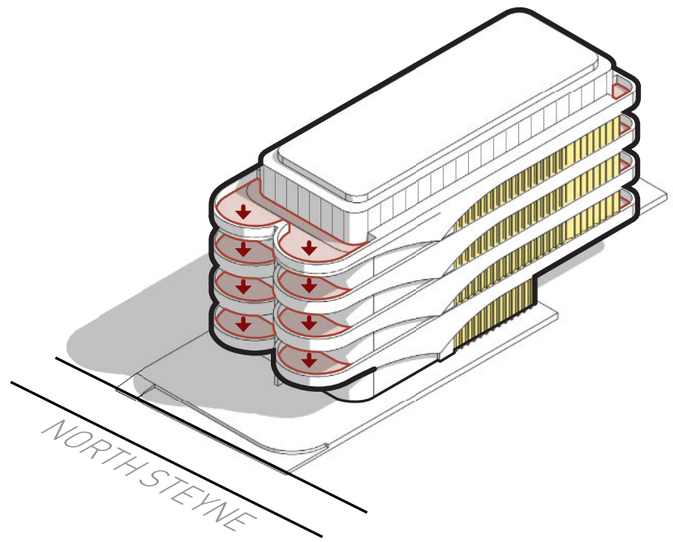



3. Punch windows and articulate structure

## Articulation




2. Setbacks reduce perceived height




4. Identify balconies and introduce solar shading

Proposal and Materials

## North Steyne - View from East

## North Steyne - View from North-East

Pine Lane - View from north-West

## Proposal and Materials

## Design References

A limited palette of quality materials and textures utilised in different ways creates a harmonious and refined architectural expression. Light-coloured solid elements made from sandblasted concrete and articulated with terrazzo and metal louvres respond to the natural material tones of this beachside location.

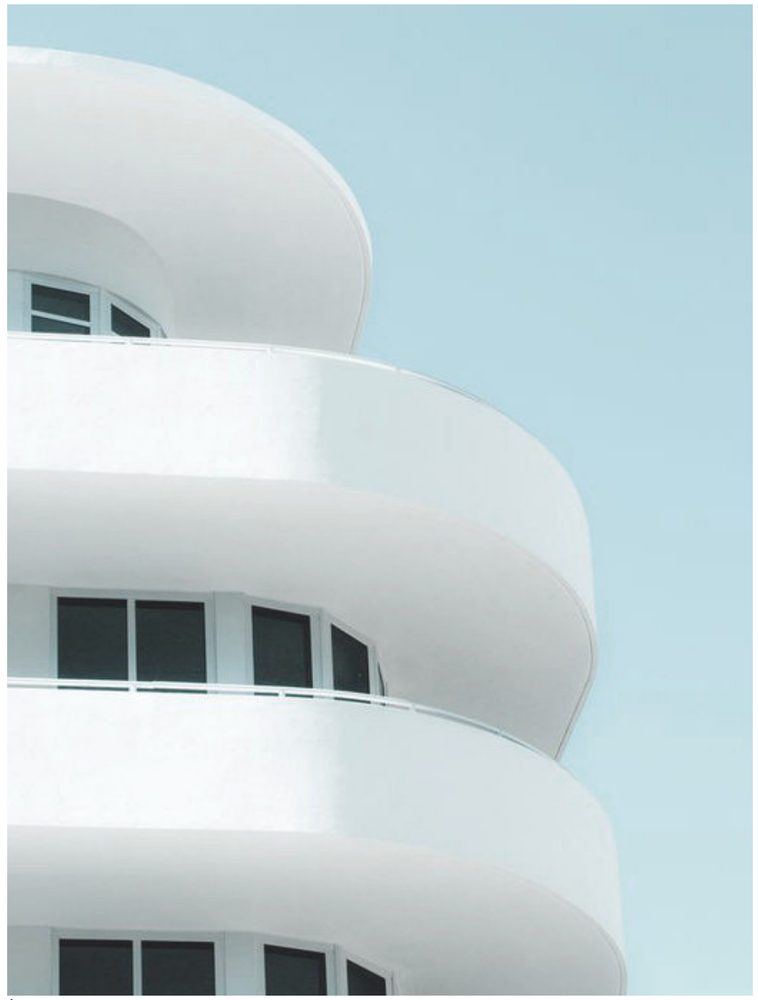
1 Art Deco, Miami Beach

2 Natural coastal tones

3 Sculptural forms

4 On Bourke, Smart Design Studio

5 Bureau, Leopold Banchini Architects



1

2

3

4

5

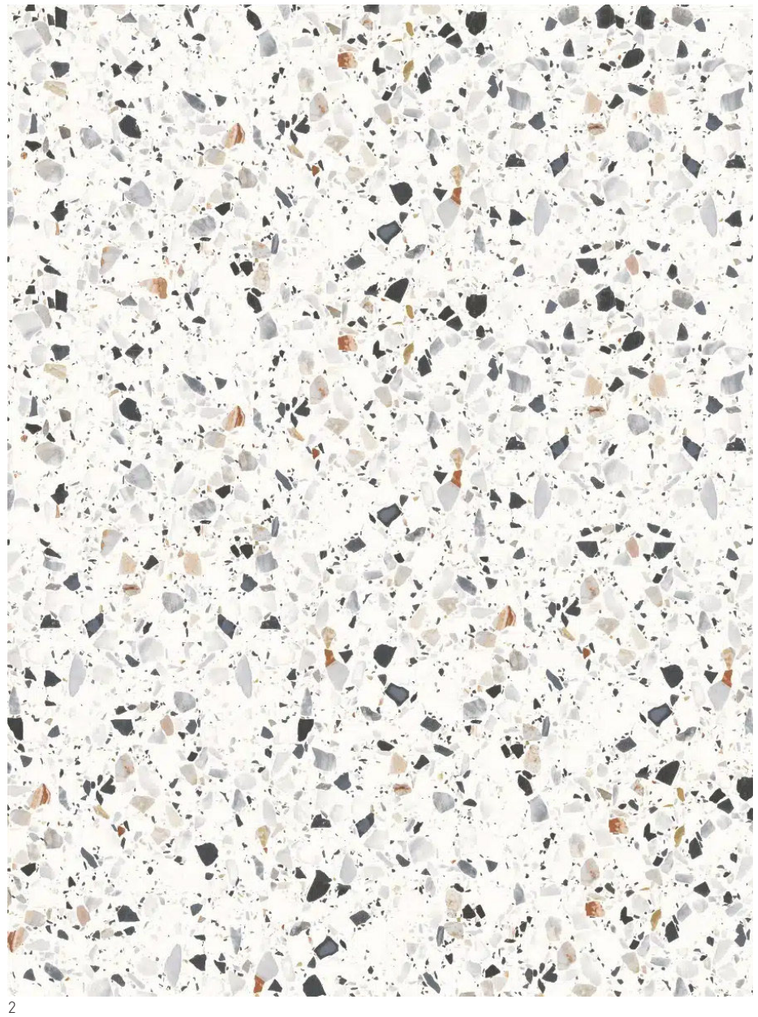
## Proposal and Materials

## Materials Board

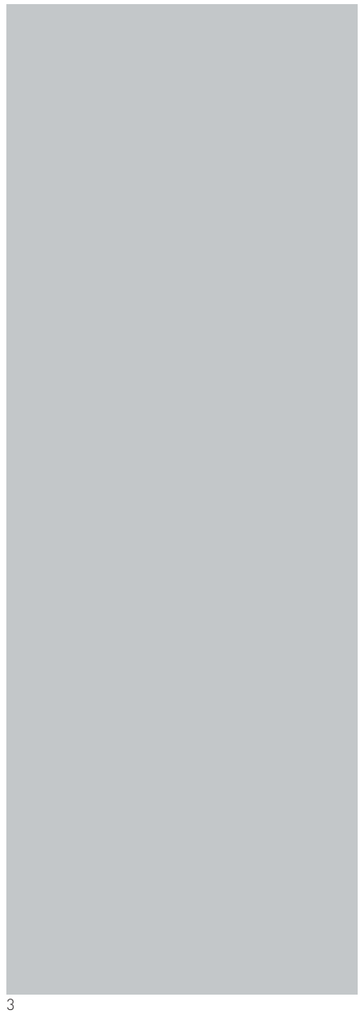
Appealing and robust materials are selected for their longevity and light-coloured tones that respond to the coastal location.

1. Sand Blasted Concrete
2. Terrazzo
3. Aluminium Metal Work
4. Glazing

1



2



3

4

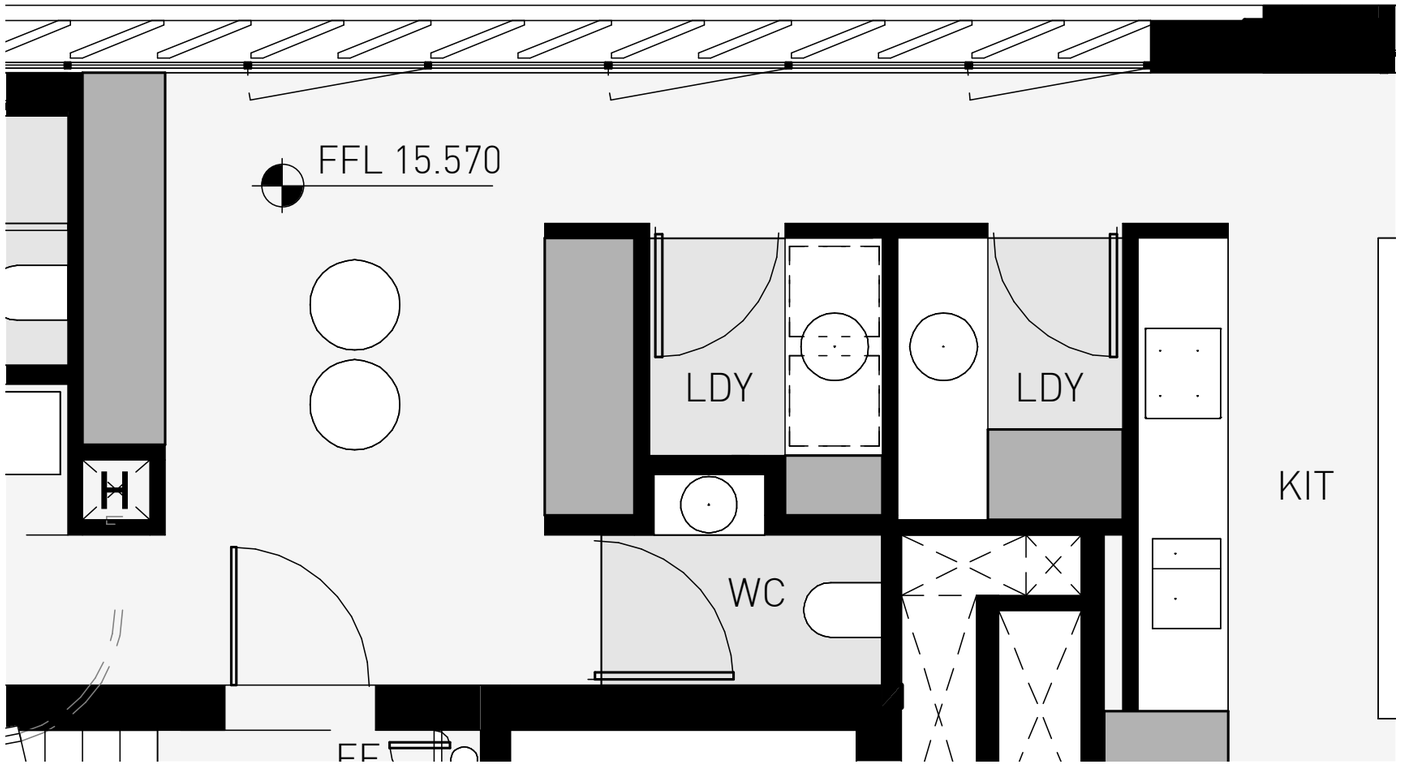
## Proposal and Materials

## Window Cleaning Strategy

Aluminium and terrazzo louvre screens form part of the architectural expression and provide screening for privacy and for sun-shading.

— To allow for ventilation, every second bay of windows are hinged inwards on a restrictor stay

— When the stays are unlocked, the windows can be fully opened to allow for cleaning of the outer face of the windows from within the apartments



Plans

# Plans

# Site Plan

**LEGEND**

New Wall

To be Demolished

Site Setbacks

COMPLIANCE SYMBOL LEGEND

CROSS VENTILATION

LIVABLE

ACCESSIBLE

SOLAR ACCESS 2HRS +

SOLAR ACCESS <2HRS

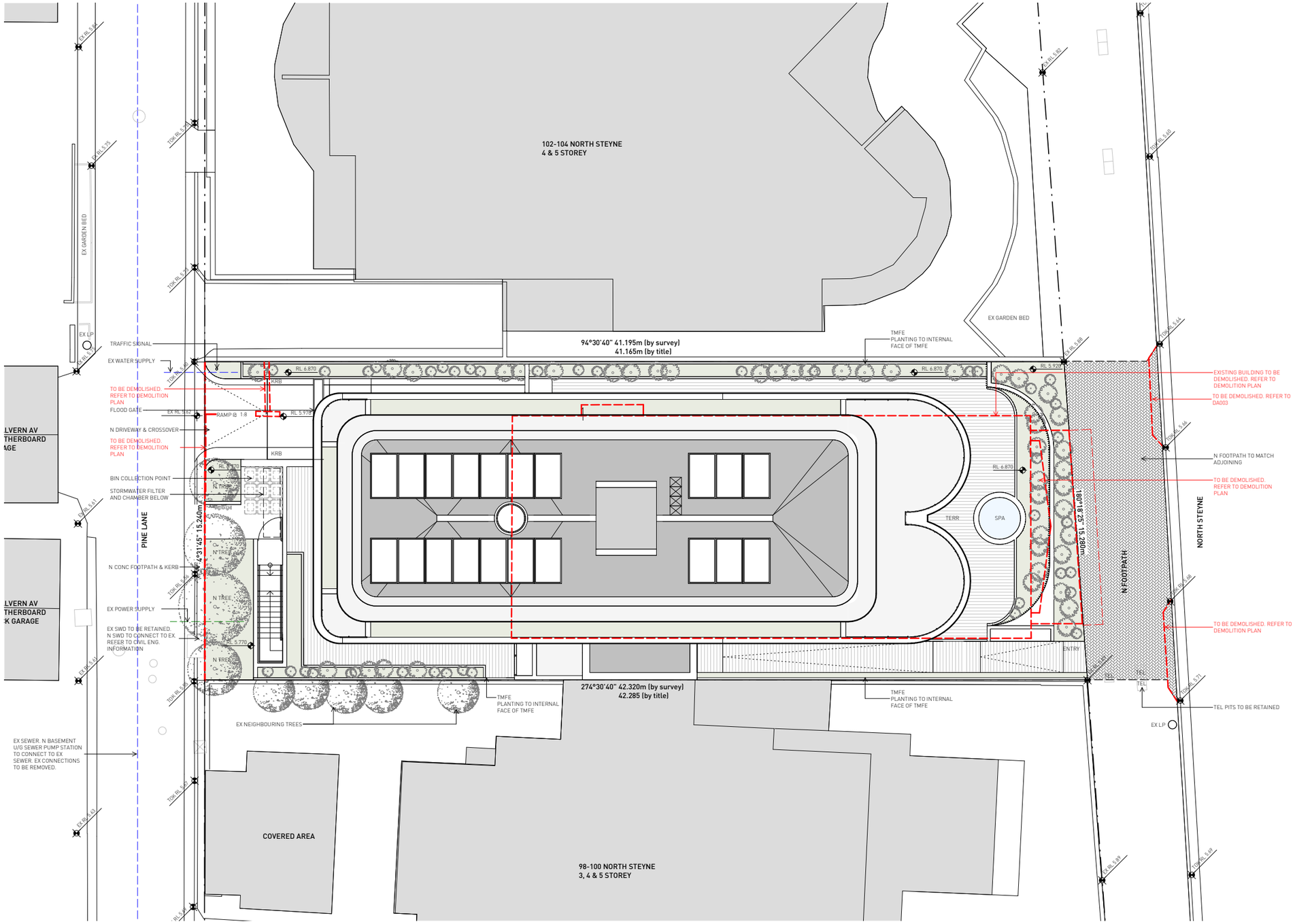
SOLAR ACCESS NONE

LANDSCAPE LEGEND

NEW TREE

EXISTING TREE RETAINED

EXISTING TREE REMOVED

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# Plans

# Basement Plan

**LEGEND**

New Wall

To be Demolished

Site Setbacks

COMPLIANCE SYMBOL LEGEND

CROSS VENTILATION

LIVABLE

ACCESSIBLE

SOLAR ACCESS 2HRS +

SOLAR ACCESS <2HRS

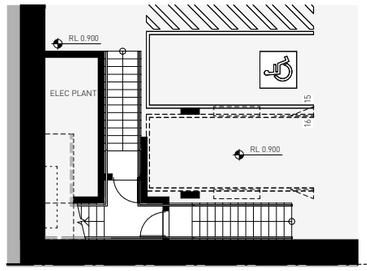
SOLAR ACCESS NONE

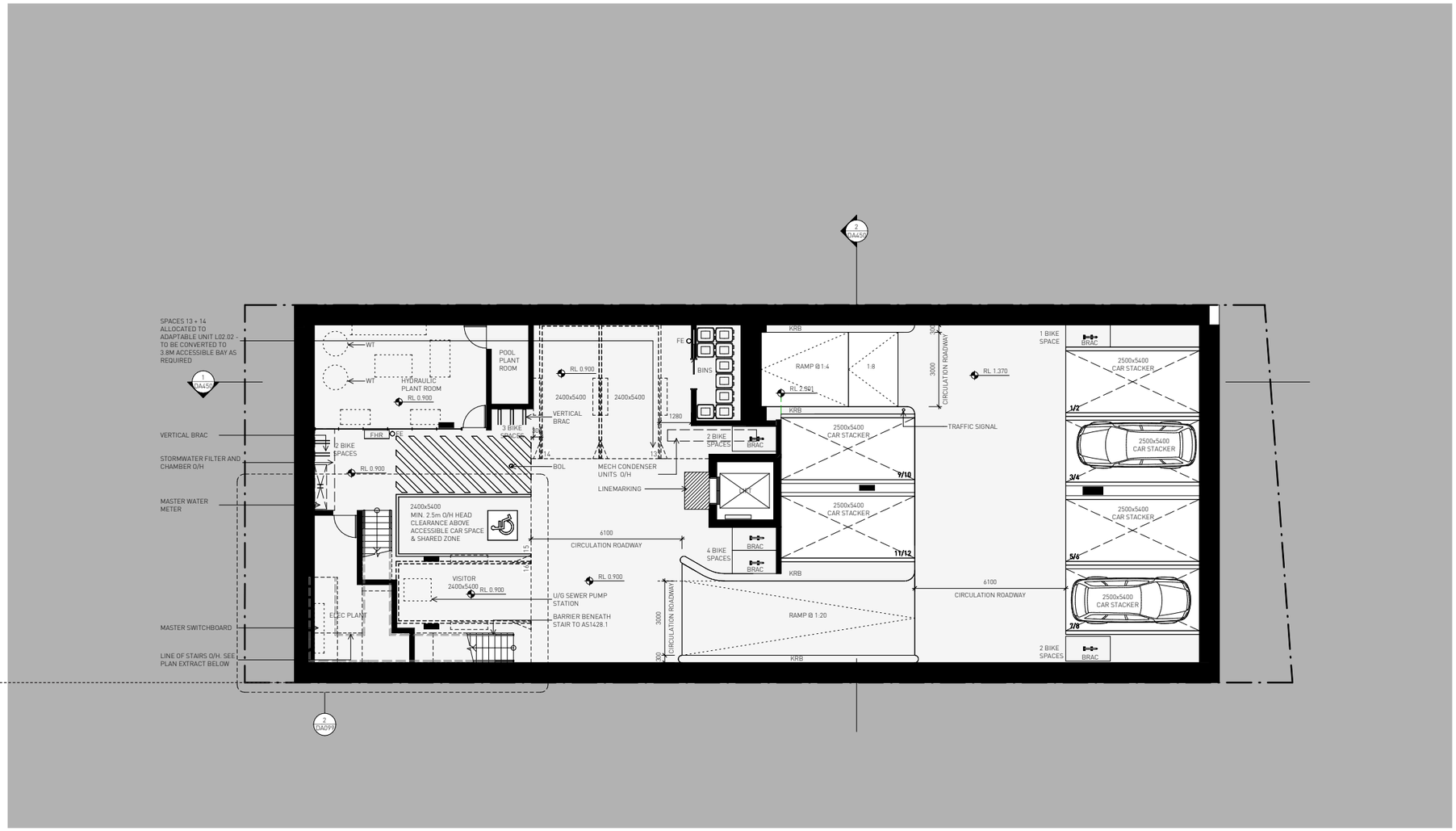
LANDSCAPE LEGEND

NEW TREE

EXISTING TREE RETAINED

EXISTING TREE REMOVED

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# Plans

# Ground Floor Plan

LEGEND

New Wall

To be Demolished

Site Setbacks

COMPLIANCE SYMBOL LEGEND

CROSS VENTILATION

LIVABLE

ACCESSIBLE

SOLAR ACCESS 2HRS +

SOLAR ACCESS <2HRS

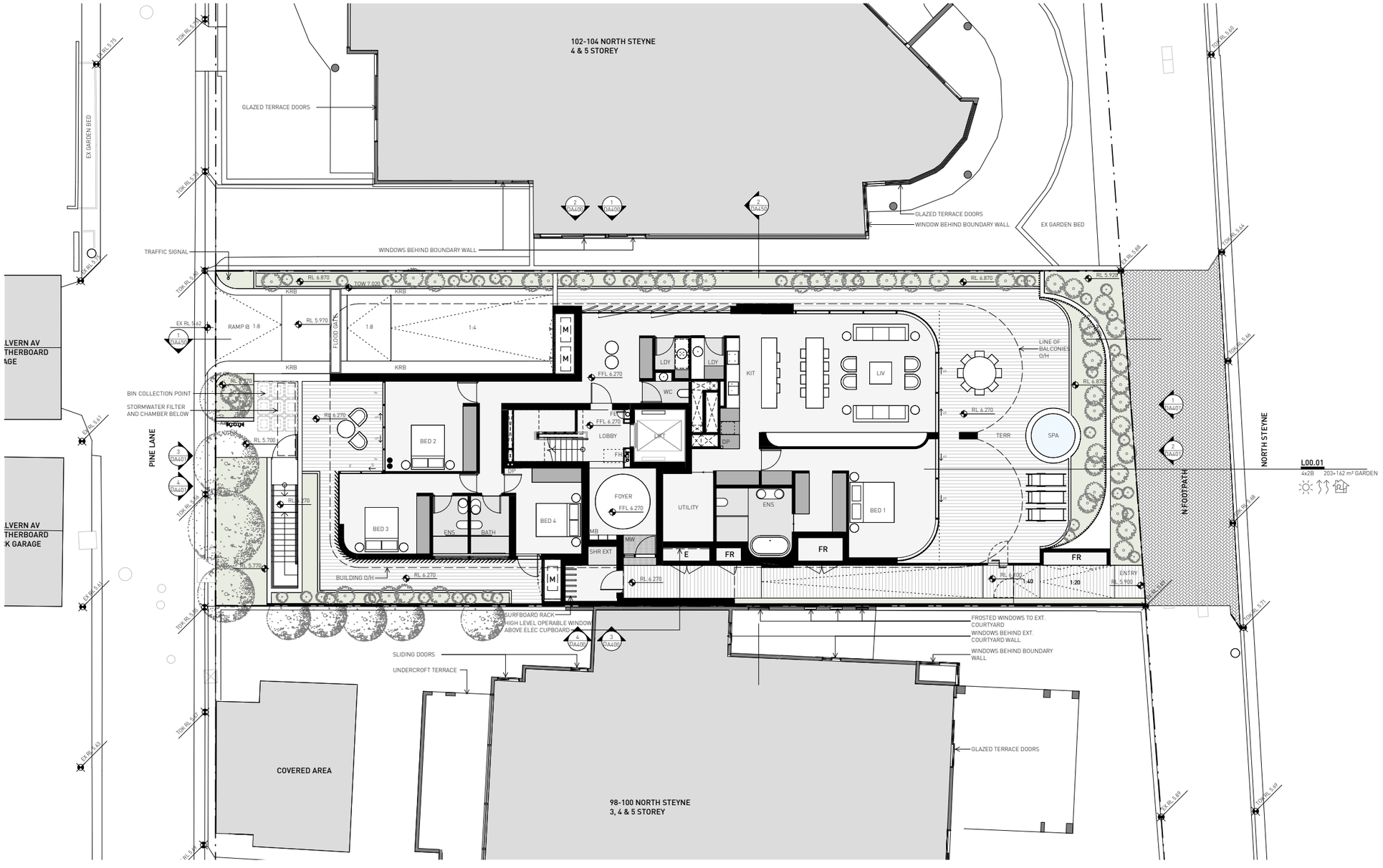
SOLAR ACCESS NONE

LANDSCAPE LEGEND

NEW TREE

EXISTING TREE RETAINED

EXISTING TREE REMOVED

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drawing number DA100

# Plans

# Level 1-2 Plan

**LEGEND**

New Wall

To be Demolished

Site Setbacks

COMPLIANCE SYMBOL LEGEND

CROSS VENTILATION

LIVABLE

ACCESSIBLE

SOLAR ACCESS 2HRS +

SOLAR ACCESS <2HRS

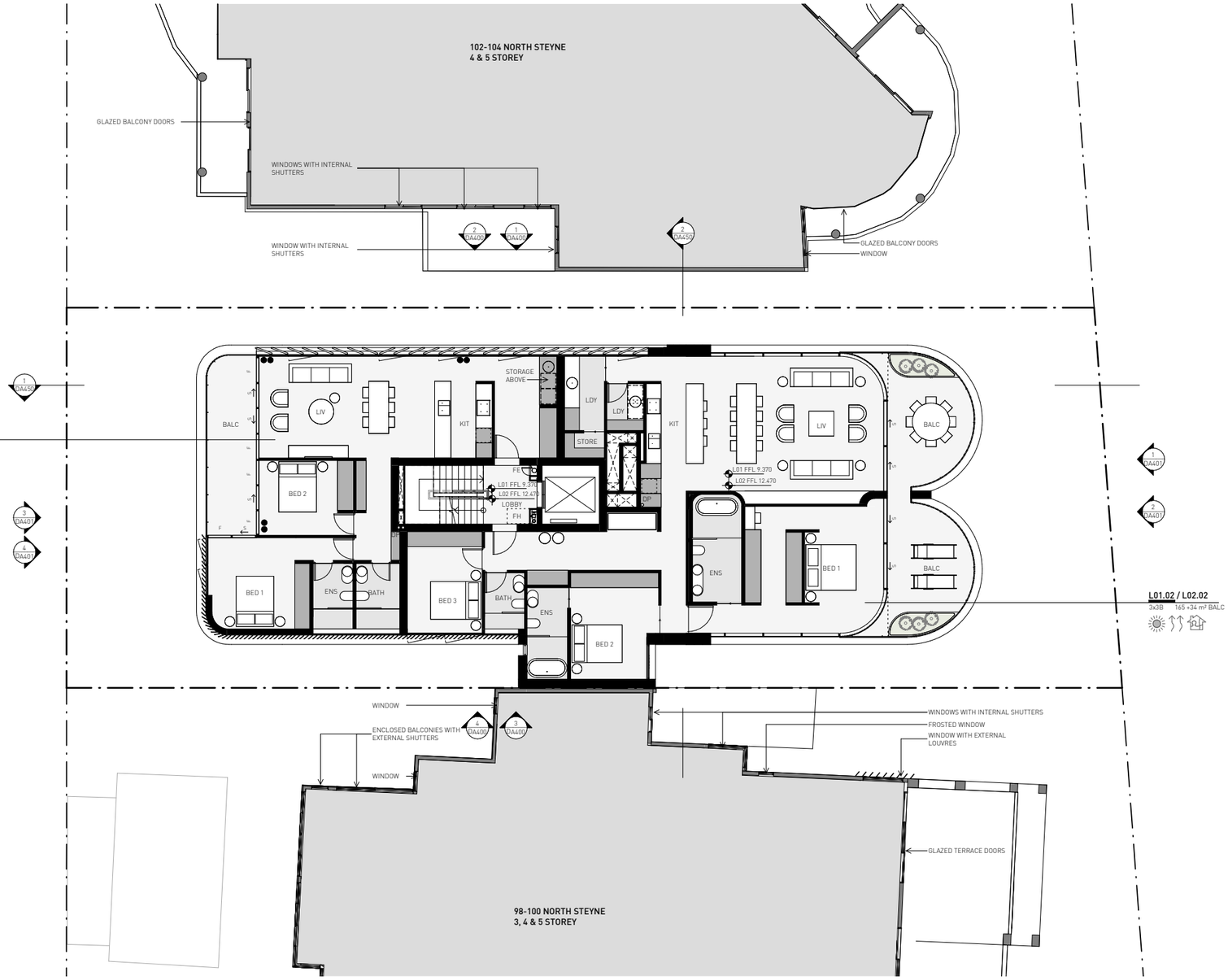
SOLAR ACCESS NONE

LANDSCAPE LEGEND

NEW TREE

EXISTING TREE RETAINED

EXISTING TREE REMOVED

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# Plans

# Level 3 Plan

**LEGEND**

New Wall

To be Demolished

Site Setbacks

COMPLIANCE SYMBOL LEGEND

CROSS VENTILATION

LIVABLE

ACCESSIBLE

SOLAR ACCESS 2HRS +

SOLAR ACCESS <2HRS

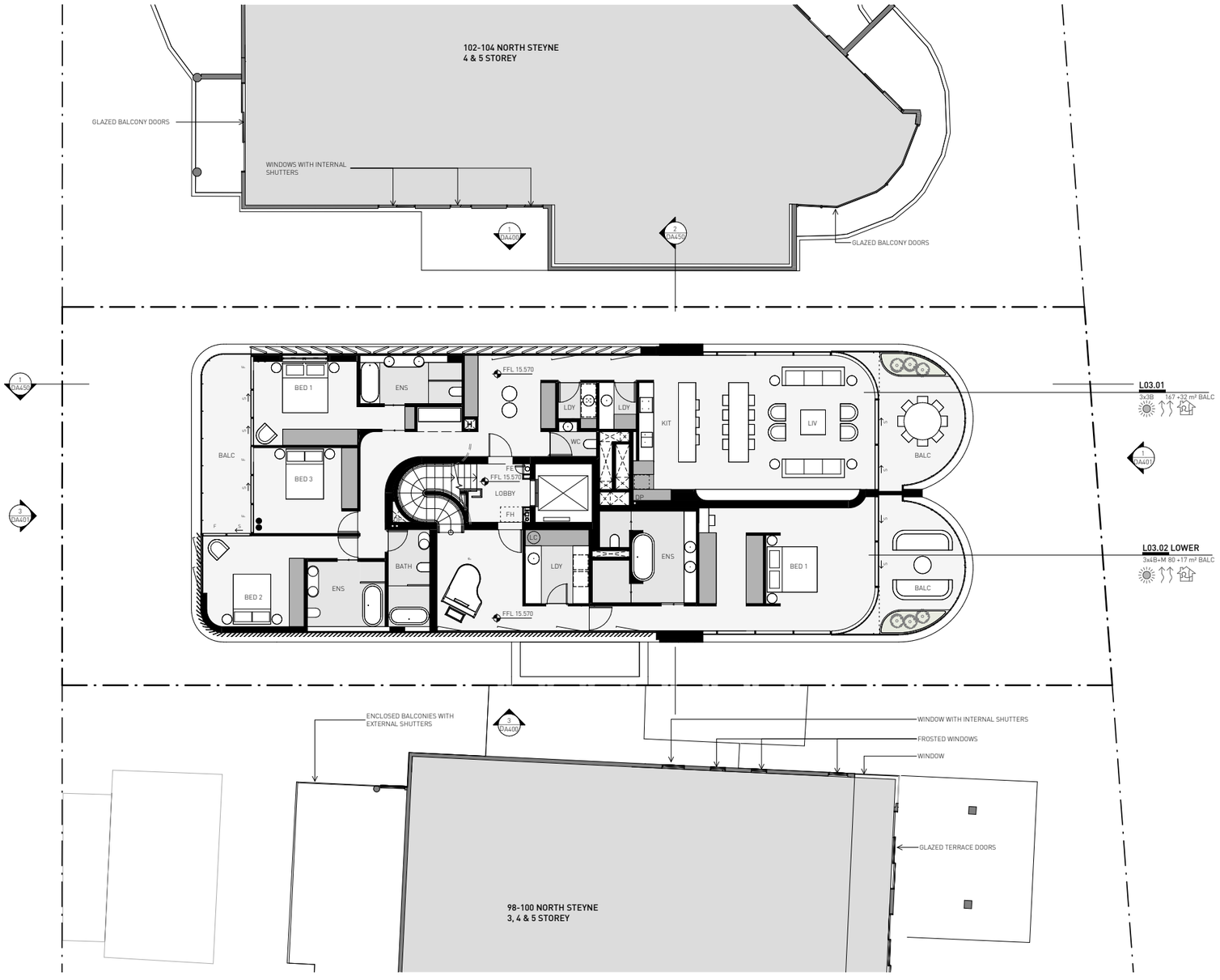
SOLAR ACCESS NONE

LANDSCAPE LEGEND

NEW TREE

EXISTING TREE RETAINED

EXISTING TREE REMOVED

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# Plans

# Level 4 Plan

**LEGEND**

New Wall

To be Demolished

Site Setbacks

COMPLIANCE SYMBOL LEGEND

CROSS VENTILATION

LIVABLE

ACCESSIBLE

SOLAR ACCESS 2HRS +

SOLAR ACCESS <2HRS

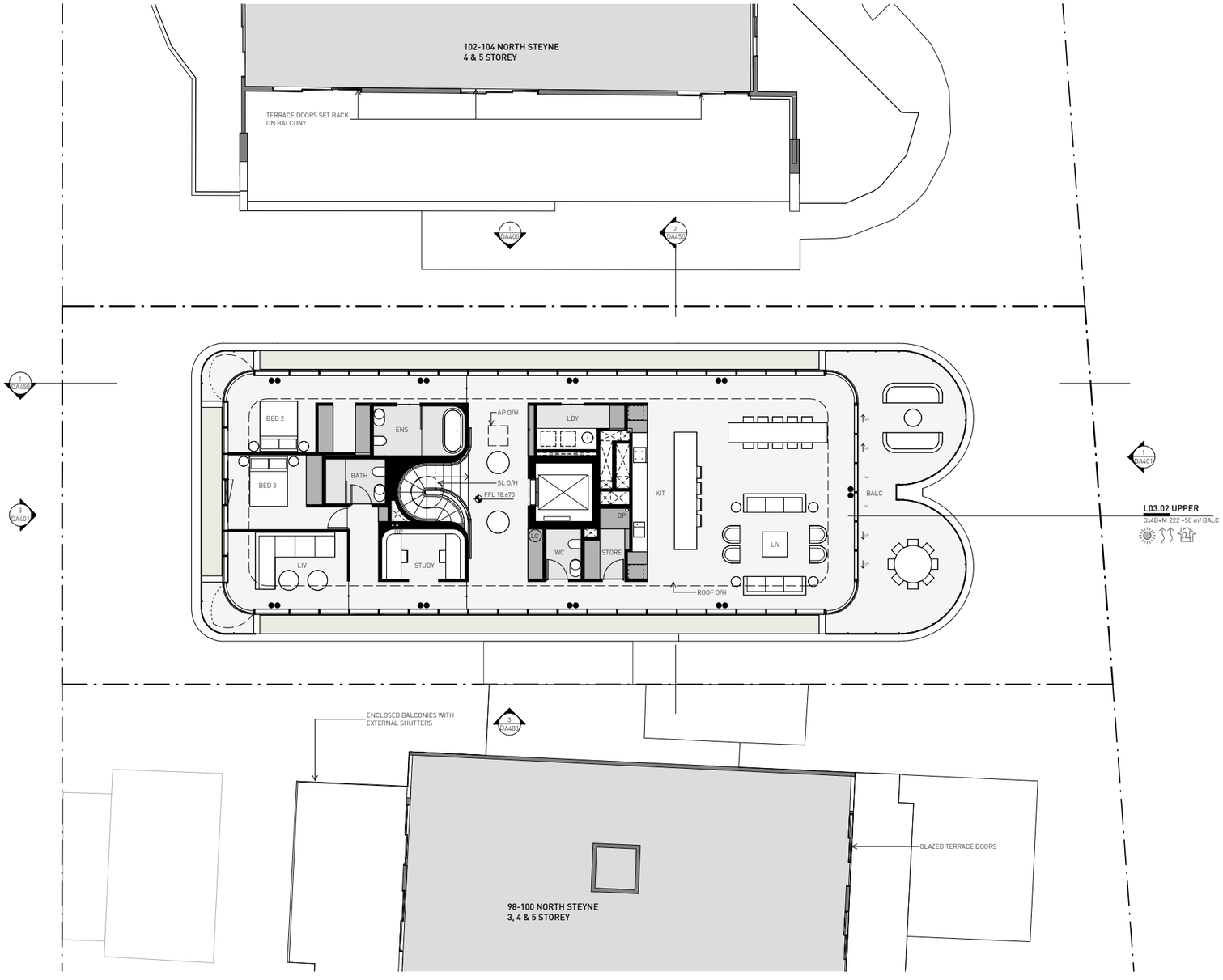
SOLAR ACCESS NONE

LANDSCAPE LEGEND

NEW TREE

EXISTING TREE RETAINED

EXISTING TREE REMOVED

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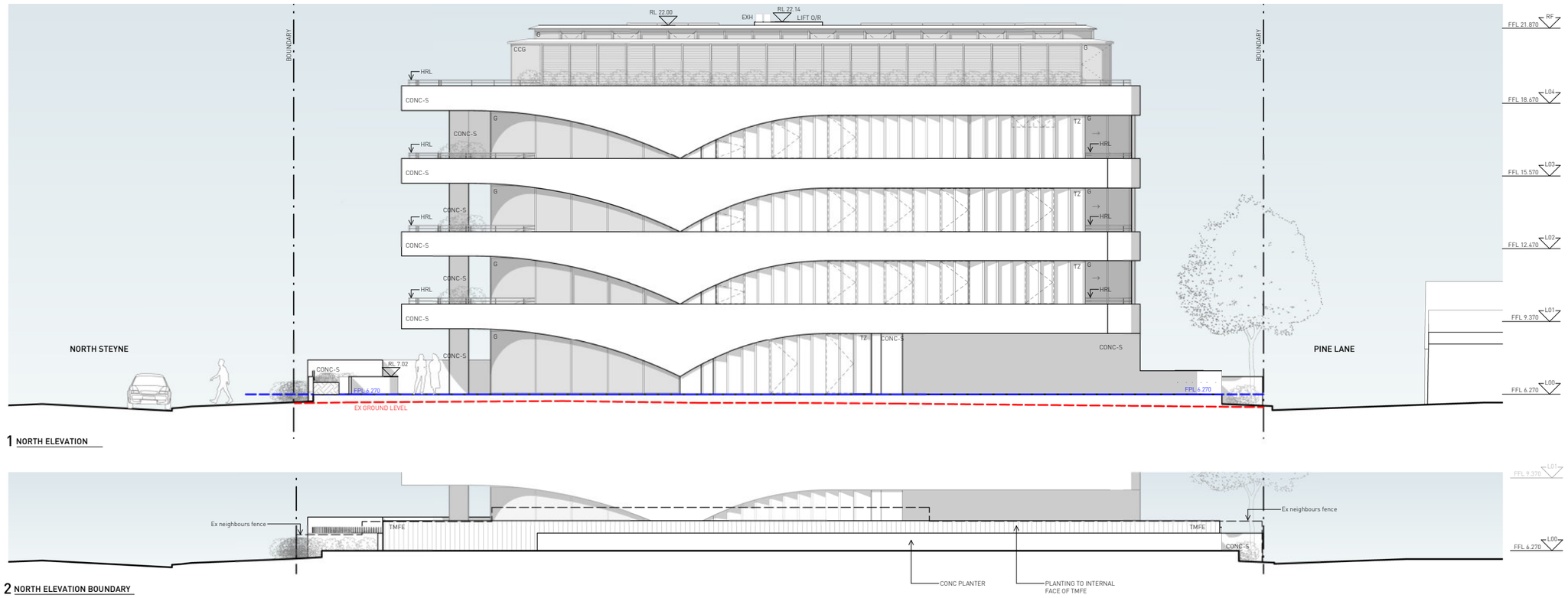
# Plans

# North Elevation



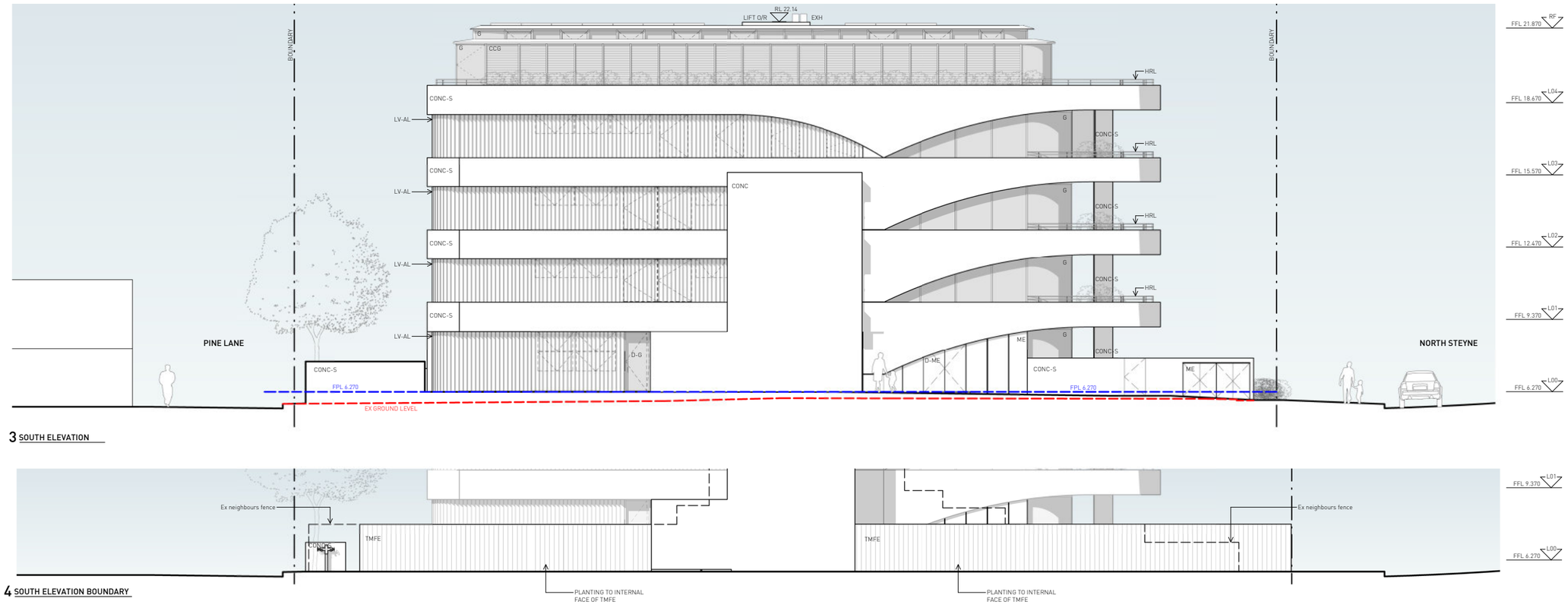

1 NORTH ELEVATION

2 NORTH ELEVATION BOUNDARY

**scale** 1:200 @a3 uno **drawing number** DA400

# Plans

# South Elevation




3 SOUTH ELEVATION




4 SOUTH ELEVATION BOUNDARY

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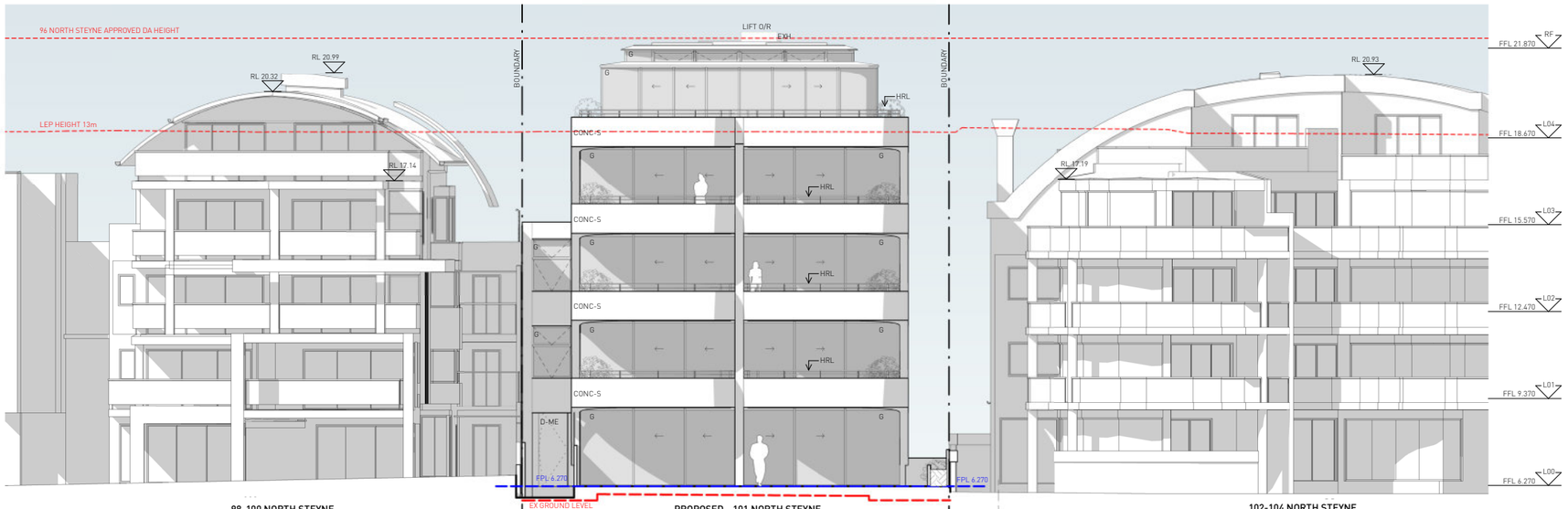
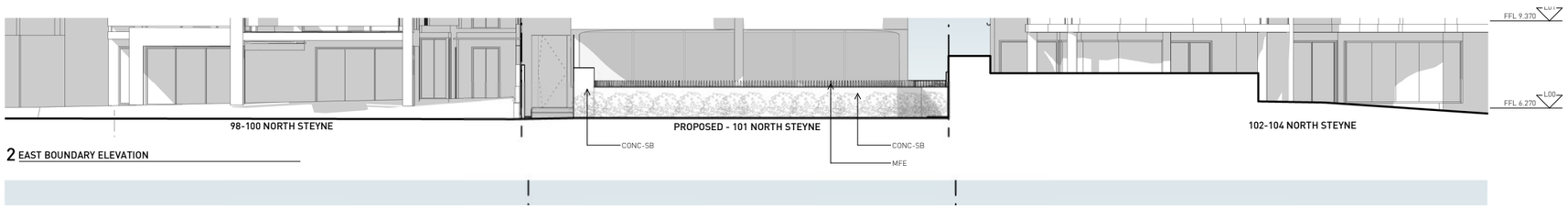
# Plans

# East Elevation (North Steyne)




1 EAST ELEVATION

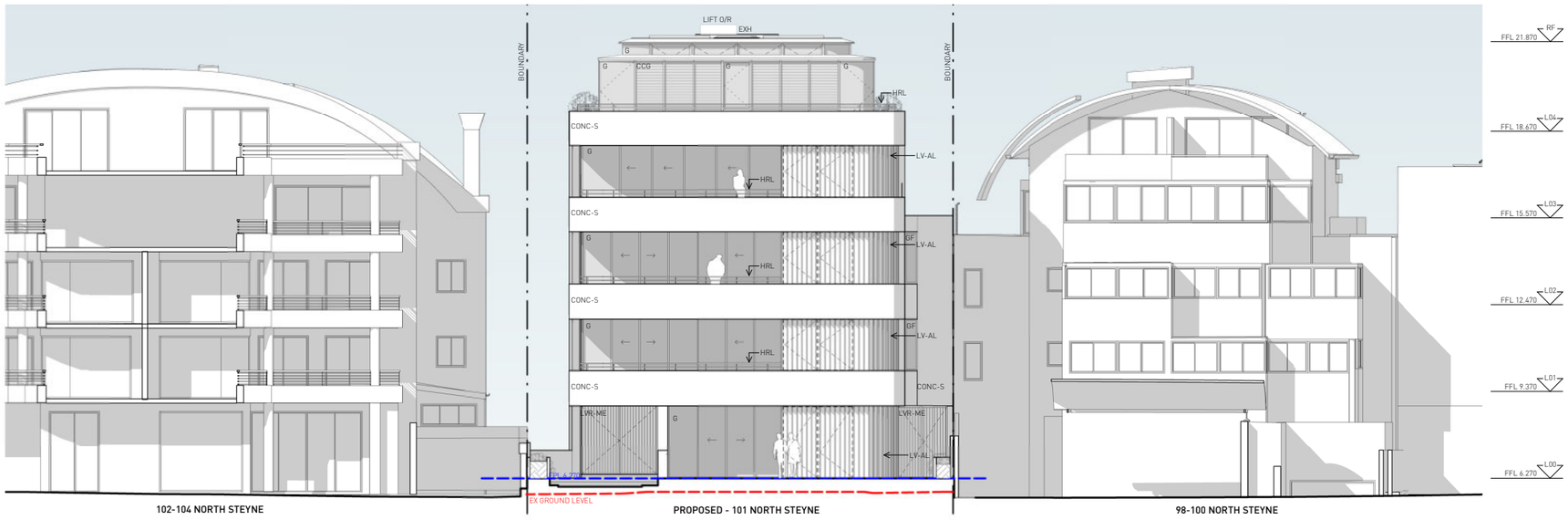



2 EAST BOUNDARY ELEVATION

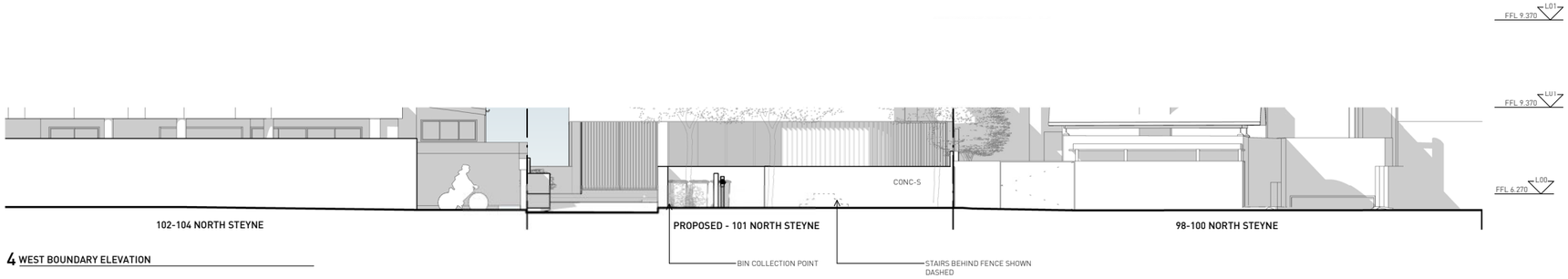
**scale** 1:200 @a3 uno **drawing number** DA401

# Plans

## West Elevation (Pine Lane)




**3** WEST ELEVATION




**4** WEST BOUNDARY ELEVATION

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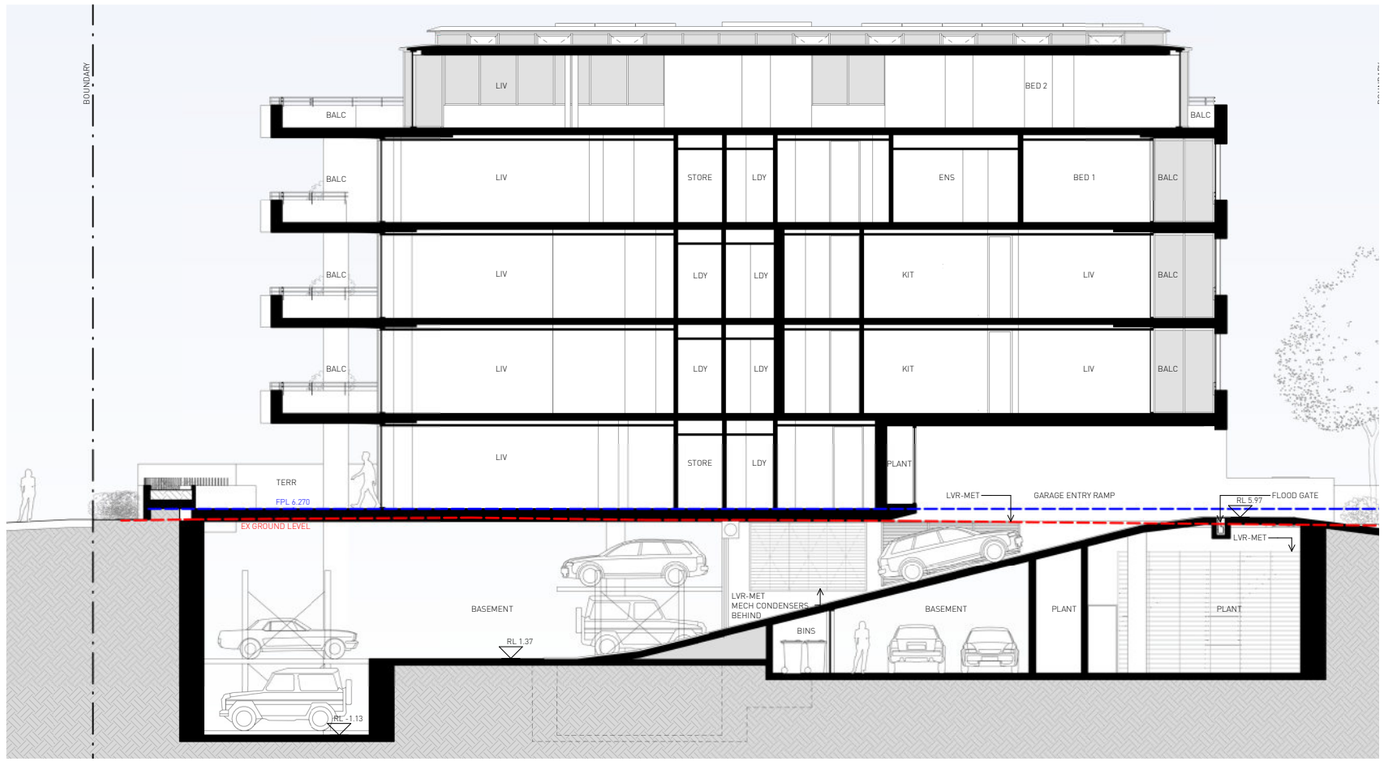
# Plans

# Sections




1 SECTION A


2 SECTION B

**scale** 1:200 @a3 uno **drawing number** DA450

Height

## Height


## Height Heat Map

Analysis of the North Steyne streetscape shows a clear pattern of predominantly 5-storey buildings, framed by taller buildings to the northern end of the block and to the next block to the south. The existing building on the site is an outlier at 3-storeys and the proposed 5-storey development will bring this site in line with the neighbouring dwellings.

- 2 storey
- 3 storey
- 4 storey
- 5 storey
- 6 storey
- 8+ storey

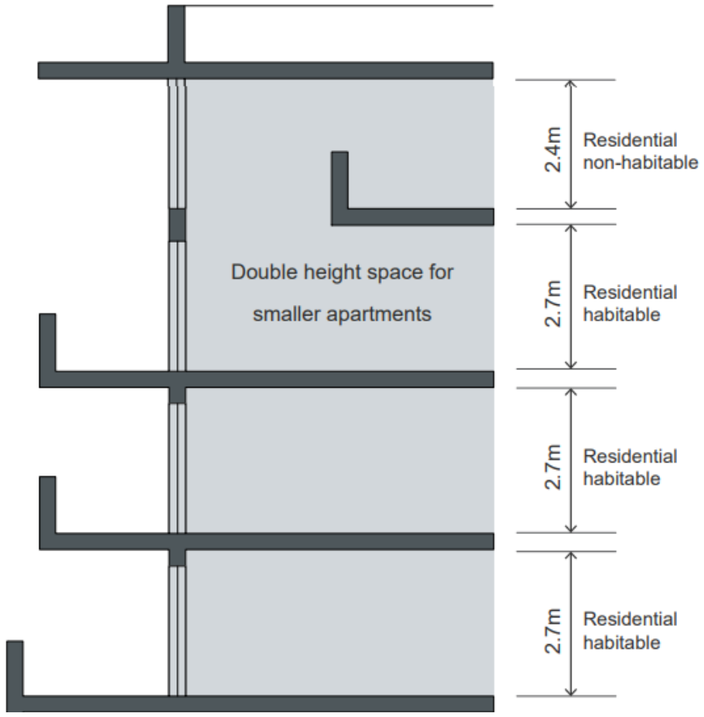
## Height

## Floor to Floor Heights

The two buildings immediately neighbouring the site were built in the early 1990s prior to the introduction of the ADG and both have a typical floor to floor of less than 2.7m, as surveyed. This means internal ceiling heights are approximately 2.4m, less that the 2.7m ceiling to habitable rooms currently set out by the ADG.
The proposal is for a building that meets current ceiling height requirements and is of the same height in storeys as the neighbouring buildings.


## Height

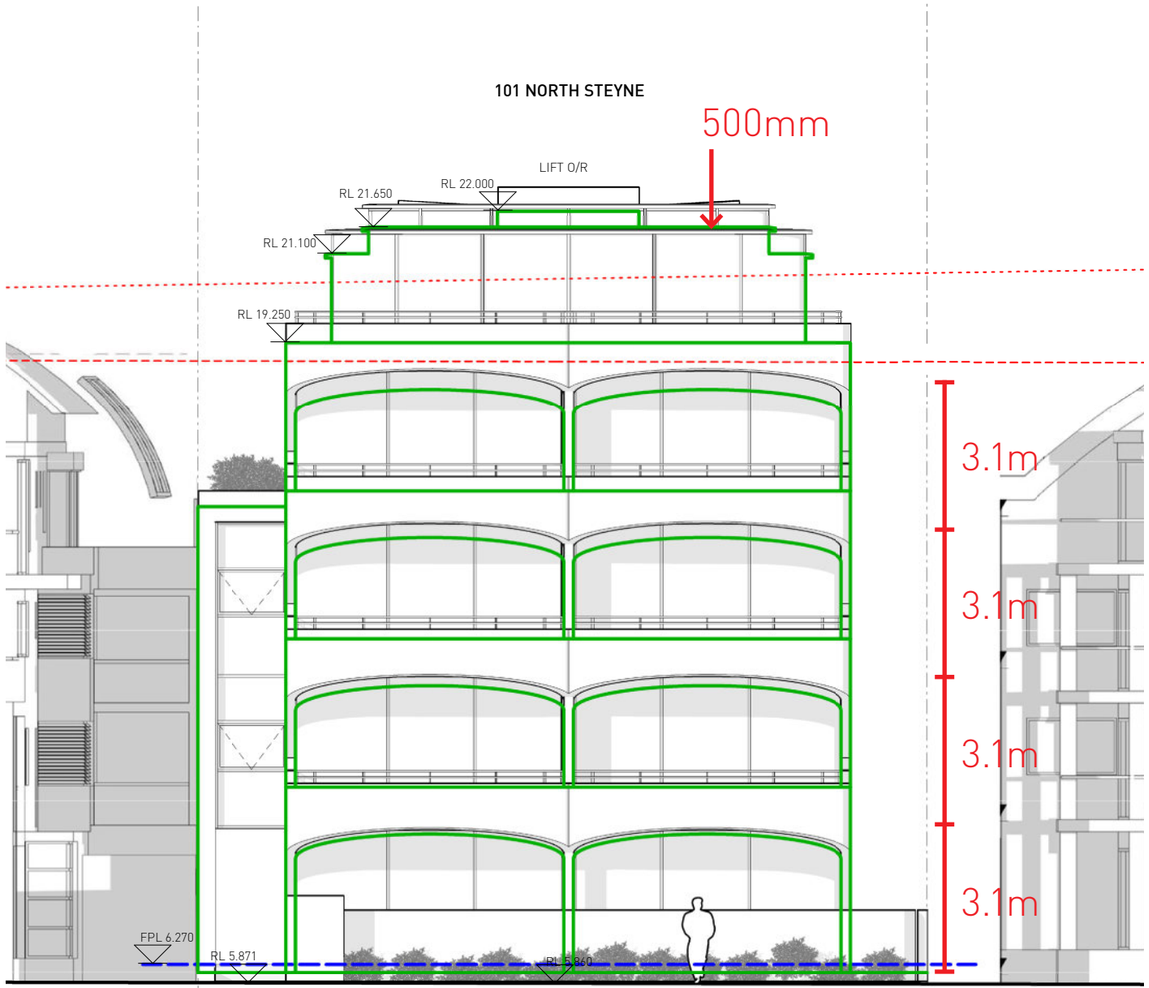
| Minimum ceiling height<br>for apartment and mixed use buildings | |
|---|---|
| Habitable rooms | 2.7m |
| Non-habitable | 2.4m |
| For 2 storey apartments | 2.7m for main living area floor<br>2.4m for second floor, where its area does not exceed 50% of the apartment area |
| Attic spaces | 1.8m at edge of room with a 30 degree minimum ceiling slope |
| If located in mixed used areas | 3.3m for ground and first floor to promote future flexibility of use |




ADG minimum floor to ceiling of 2.7m

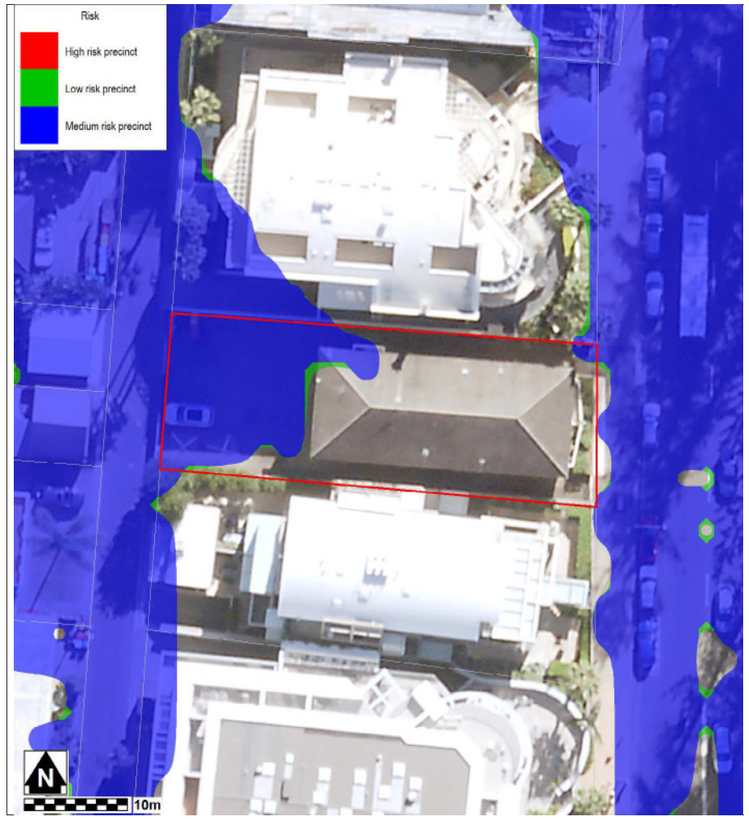
## ADG Compliance

The Apartment Design Guide sets out a minimum ceiling height of 2.7m to all habitable rooms. Apartment buildings are typically designed to a minimum of 3.2m floor to floor to accommodate structure and services and achieve these ceiling heights.  For this proposal, the floor to floor height has been reduced by careful design to 3.1m whilst still achieving 2.7m ceilings. This allows a reduction in the overall building height of 0.5m.




Building height reduced with 3.1m floor to floor (demonstrated on an old design)

## Height




Notes:

- **Low Flood Risk precinct** means all flood prone land not identified within the High or Medium flood risk precincts.
- **Medium Flood Risk precinct** means all flood prone land that is (a) within the 1% AEP Flood Planning Area; and (b) is not within the high flood risk precinct.

## Flood Information[1]:

### Map A - Flood Risk Precincts

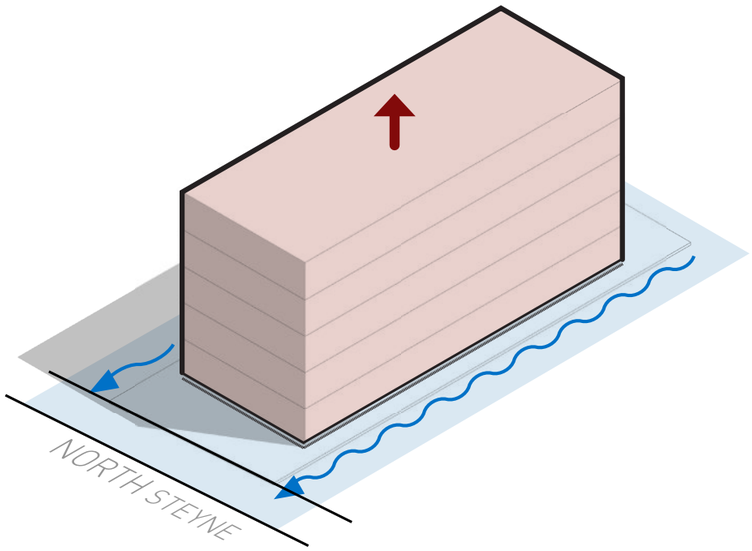
Maximum Flood Planning Level (FPL) [2, 3, 4]: 6.47 m AHD

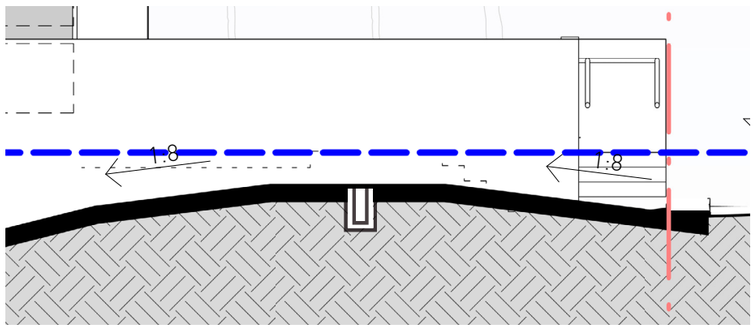
- 1:100 year (1% AEP) level = 5.97m AHD
- Freeboard = 300
- **FPL = 6.27m AHD**

Map, notes and flood information taken from 'Flood Information Report for 101 North Steyne Manly' based on 'Manly to Seaforth Flood Study 2019, Cardno.'

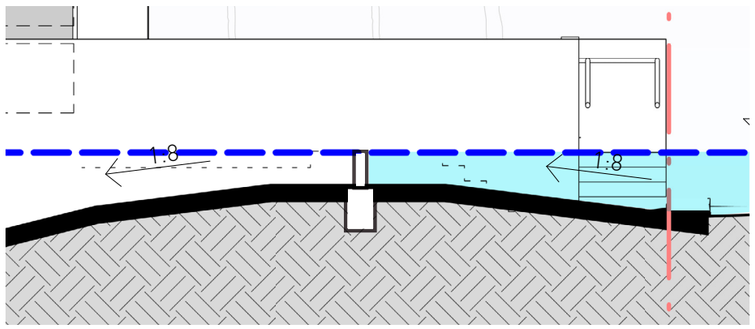
## Flood Impact

The site sits in a medium risk flood precinct and has been designed to withstand a 1 in 100 year flood event. This has been achieved by raising the ground floor to the flood planning level (FPL) + 300mm freeboard, a level which sits approximately 350mm above the natural street level and the ground floor levels of adjacent buildings.
Flood risk to the basement car park is managed via tanking and by setting the crest of the ramp at the 1 in 100 year flood level. A small automatic hydraulic flood gate addresses the remaining 300mm.




day to day - floodgate down

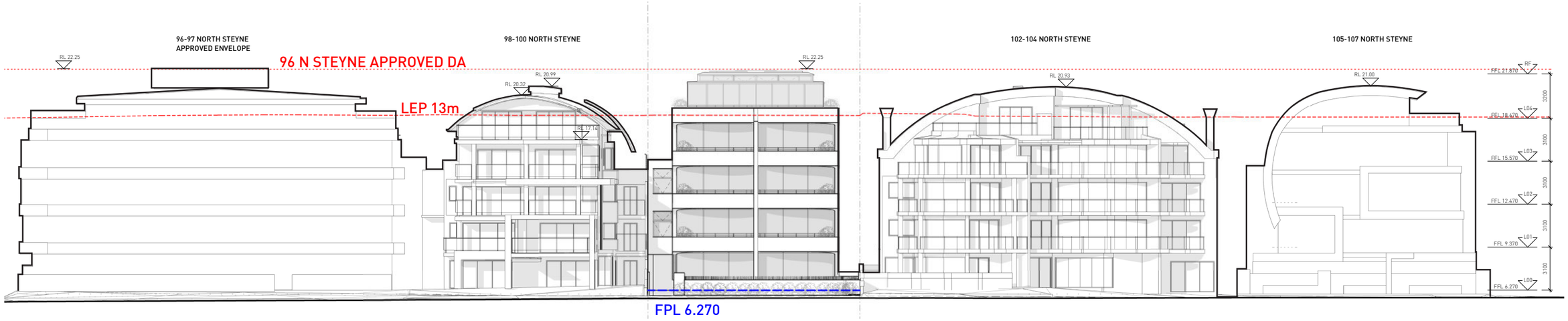



1 in 100 year event - floodgate up

# Height

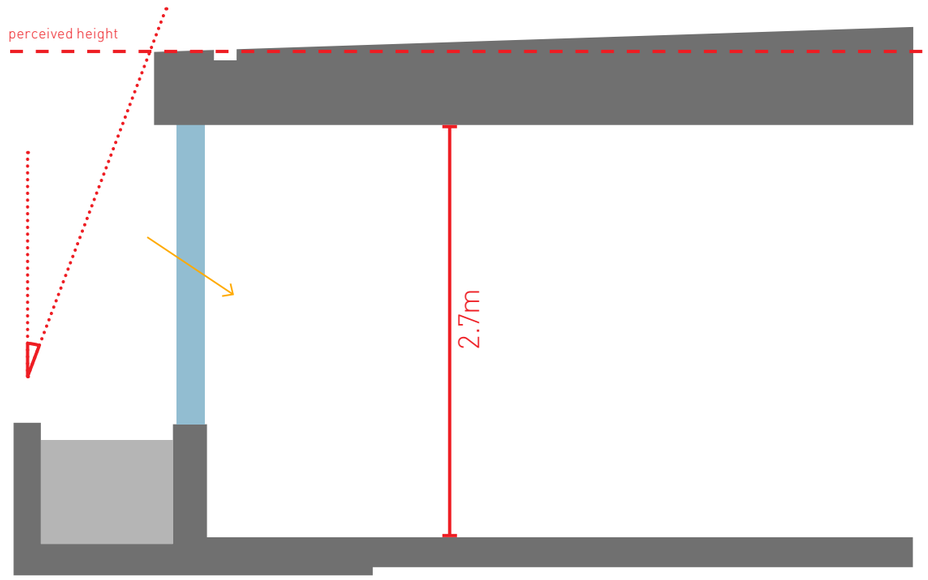
## Neighbour Context

The proposal sits below the height of the recently approved additions to 96 North Steyne and as shown above is consistent with the height in storeys of number 96 and other nearby buildings. The additional overall height in relation to the immediate neighbours is required to meet current minimum ceiling height and flood planning requirements that were not in place when these residences were constructed.

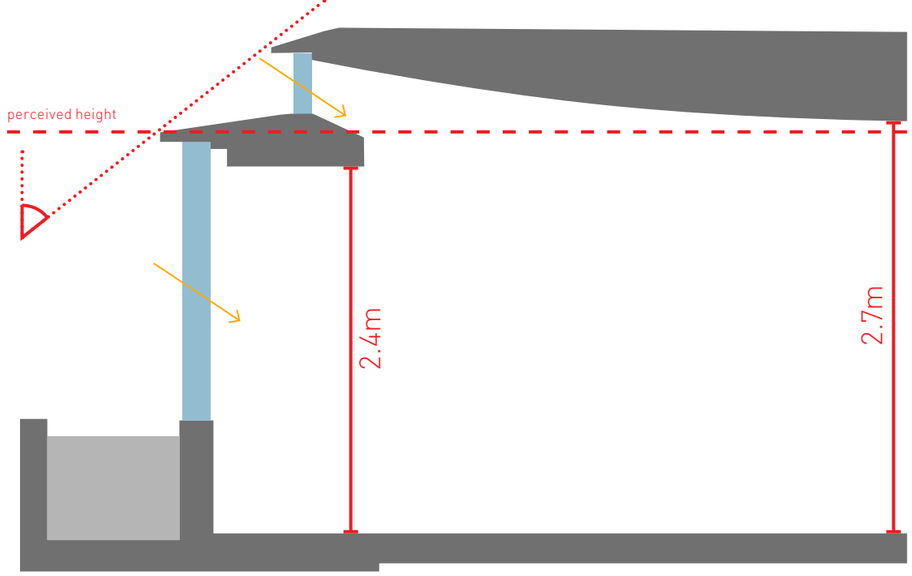



5 storeys approved | 5 storeys existing | 5 storeys proposed | 5 storeys existing | 5 storeys existing

# Height



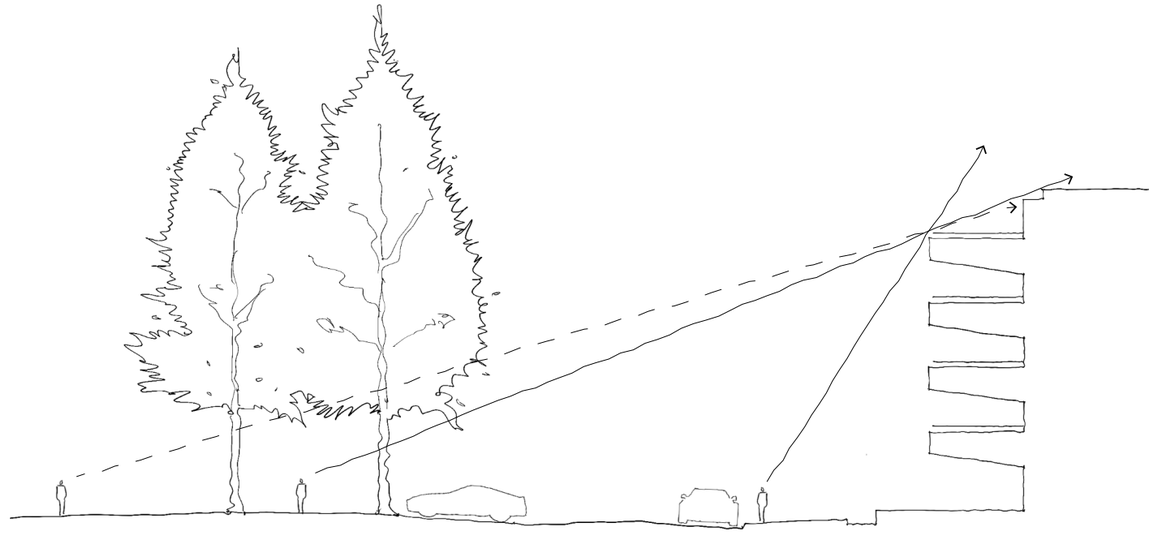

traditional roof




clerestory roof

## Perceived Height

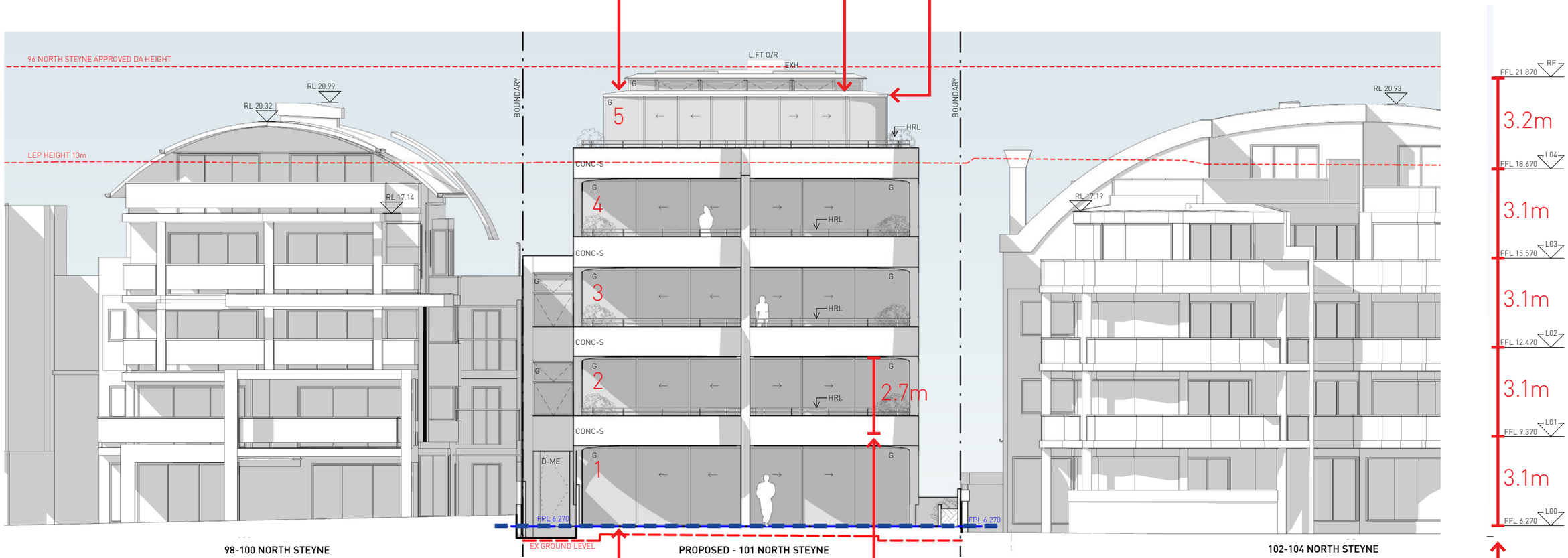
Whilst recognising that the proposed design is taller than its two immediately adjacent neighbours, steps have been taken to design the roof and balconies in such a way as to greatly reduce the perceived height of the building.
A standard roof design leads to a thick roof edge and structure giving a heavy and clunky appearance. By carefully shaping the roof, we achieve a thin edge profile, allow more light into the centre of the plan and further set back the majority of the roof making it difficult to see from the public domain.



Set back top floor reduces perceived heigh further.

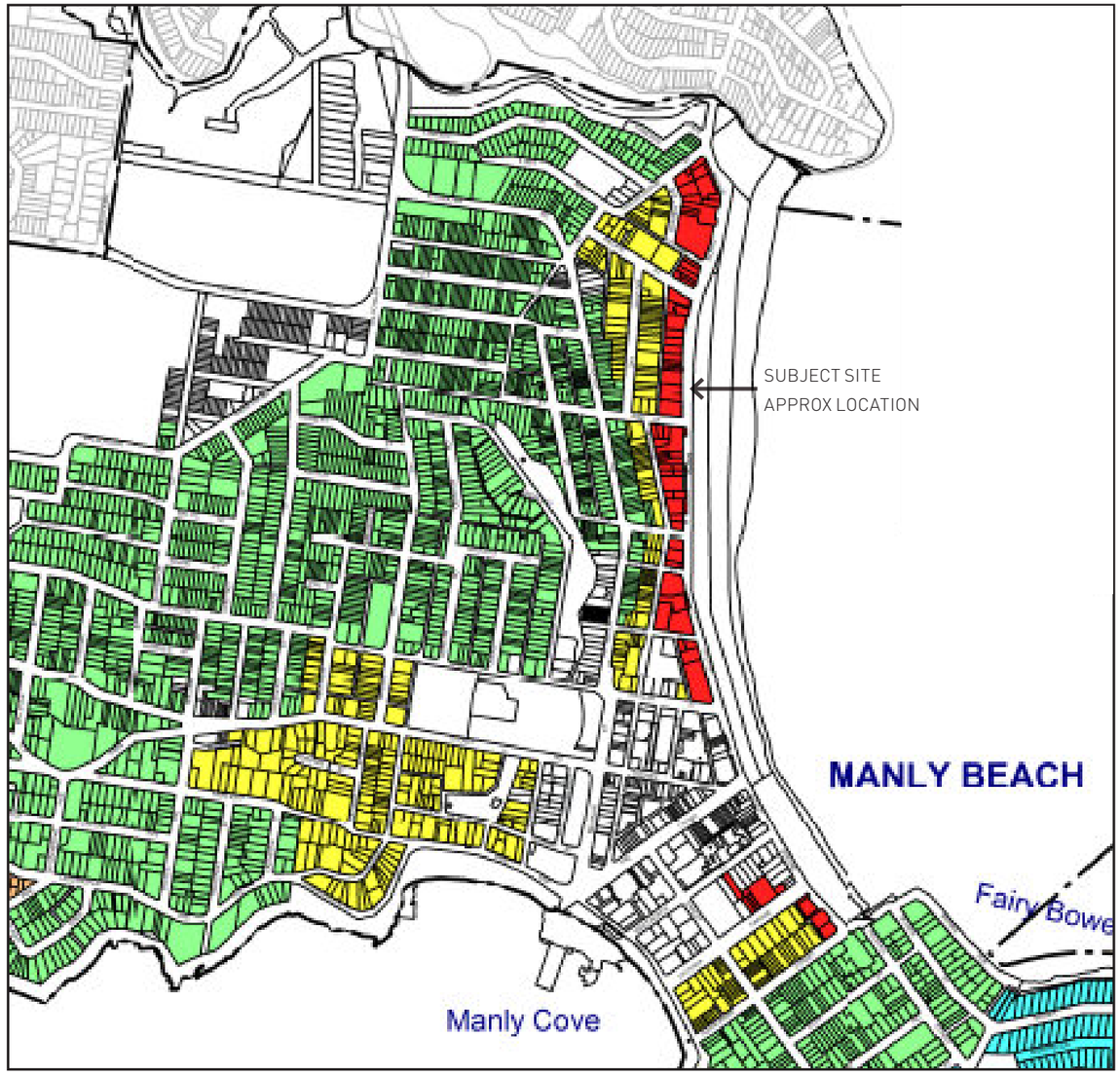
# Height

# Height Summary



FSR

## FSR




Map of residential density areas: Manly DCP 2021, Schedule 1, Map A

## Residential Density

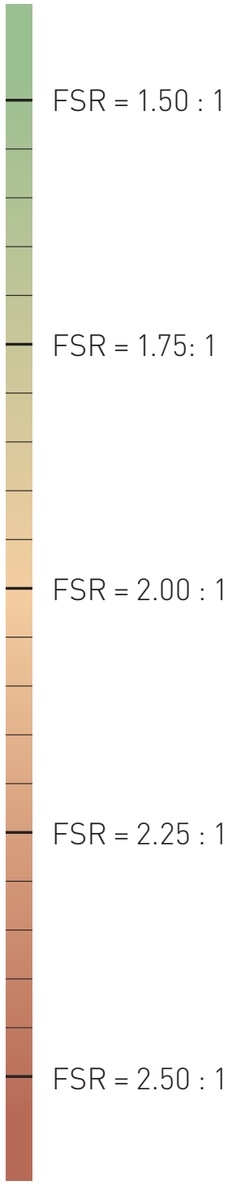
- The Manly DCP 2021 establishes a pattern of higher density development at the coast with a transition to lower density further from the beach.
- The nominated FSR for the site is 1.5:1
- The proposed FSR is 1.93:1 as shown on the following page. This is consistent with the established street pattern as demonstrated.

# FSR


# Actual Residential Density

## GFA

| | SQM |
|---|---|
| Site Area | 636 |
| GFA | 1.93:1 |

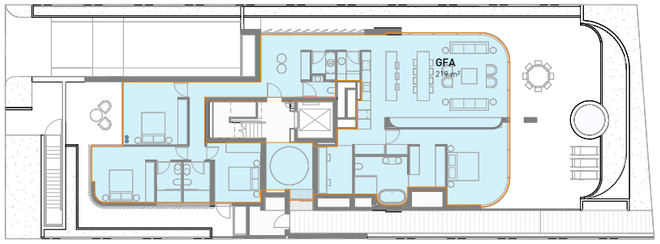


# FSR

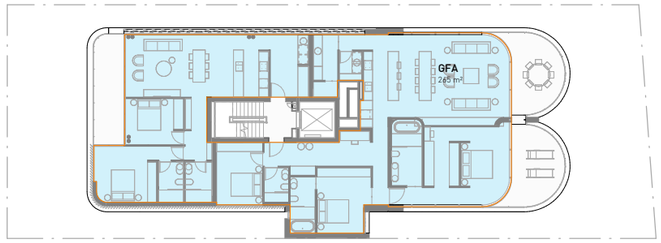
# GFA Diagrams

**GFA**

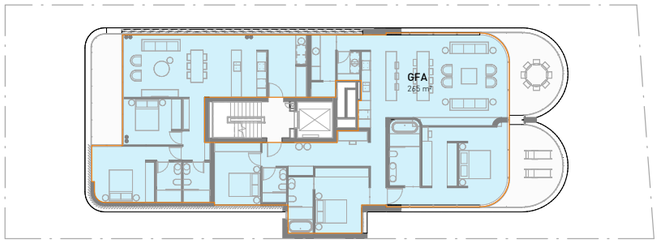
| | | SQM |
|---|---|---|
| Site Area | Site area | 636 |
| GFA | Achieved | 1.93:1 |
| | Target | 1.93:1 |



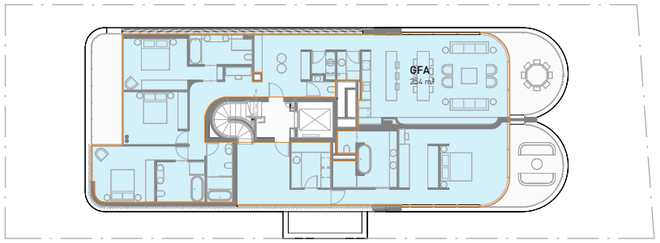

L00 Plan



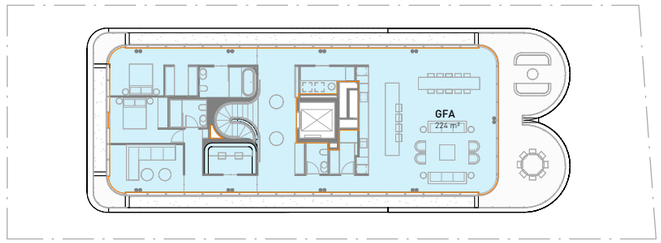

L01 Plan



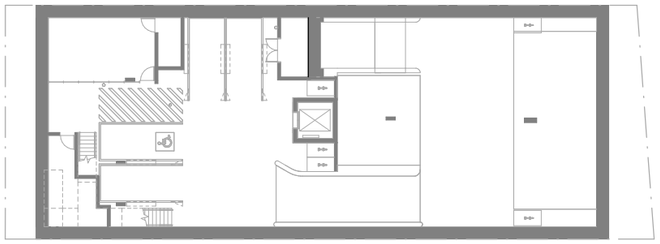

L02 Plan




L03 Plan




L04 Plan



B01 Plan (no GFA)

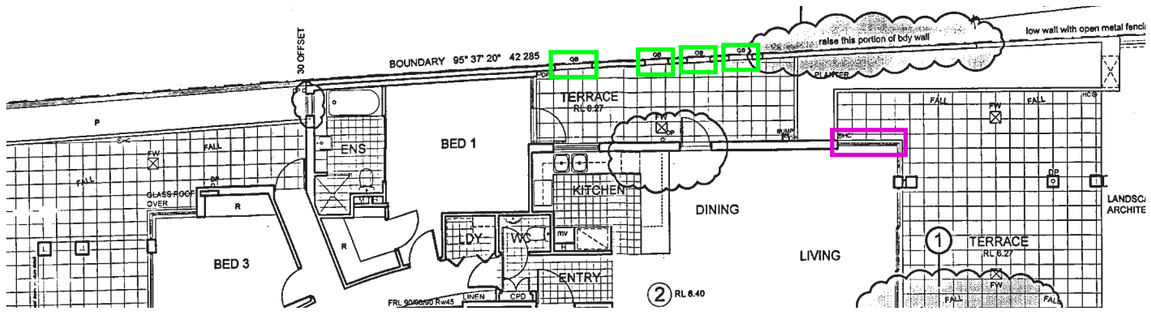
# Privacy to Neighbouring Dwellings

# Privacy to Neighbouring Dwellings

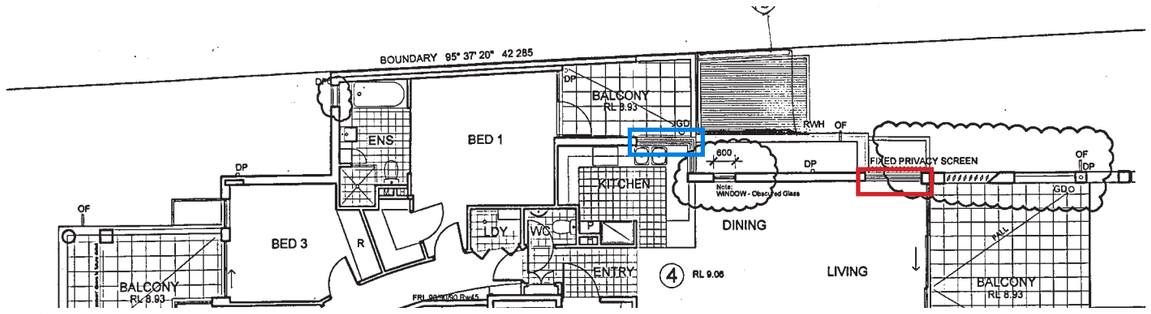
## Introduction

Apartments to the north and south of the site have their primary aspect to the east towards the beach or the western district view outlook. Windows facing the subject site are to secondary rooms such as bathrooms, laundries and studies and in many cases are set back or screened via obscured glass or louvres. Further detail is provided in the following pages.

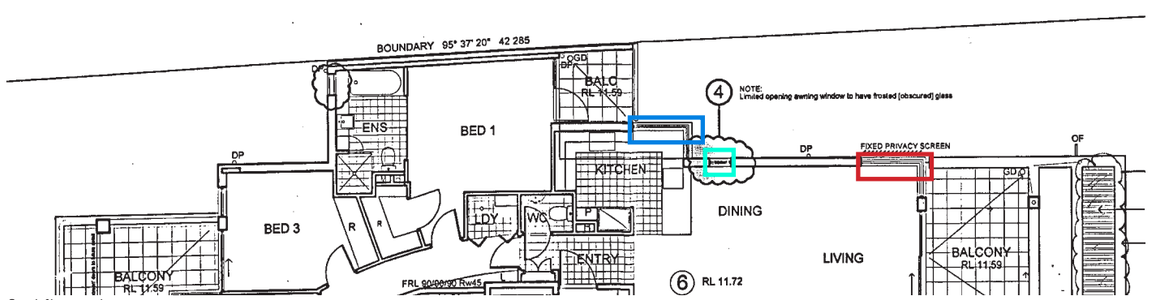
# Privacy to Neighbouring Dwellings



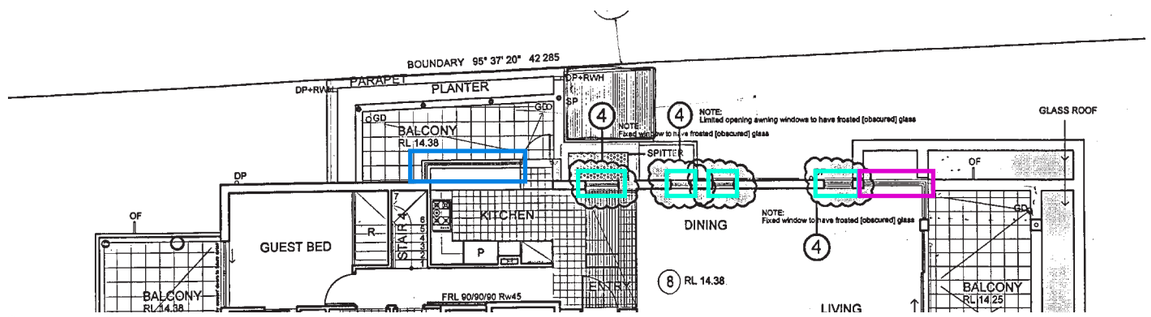

Ground floor plan




1st floor plan




2nd floor plan




3rd floor plan

# 98-100 North Steyne

- Windows to South Facade are secondary use spaces - study/ laundry/ kitchen
- Balconies are recessed with bedroom windows set deep into plan (8.7m from boundary)
- Curved living room windows have a primary aspect to the street and beach front

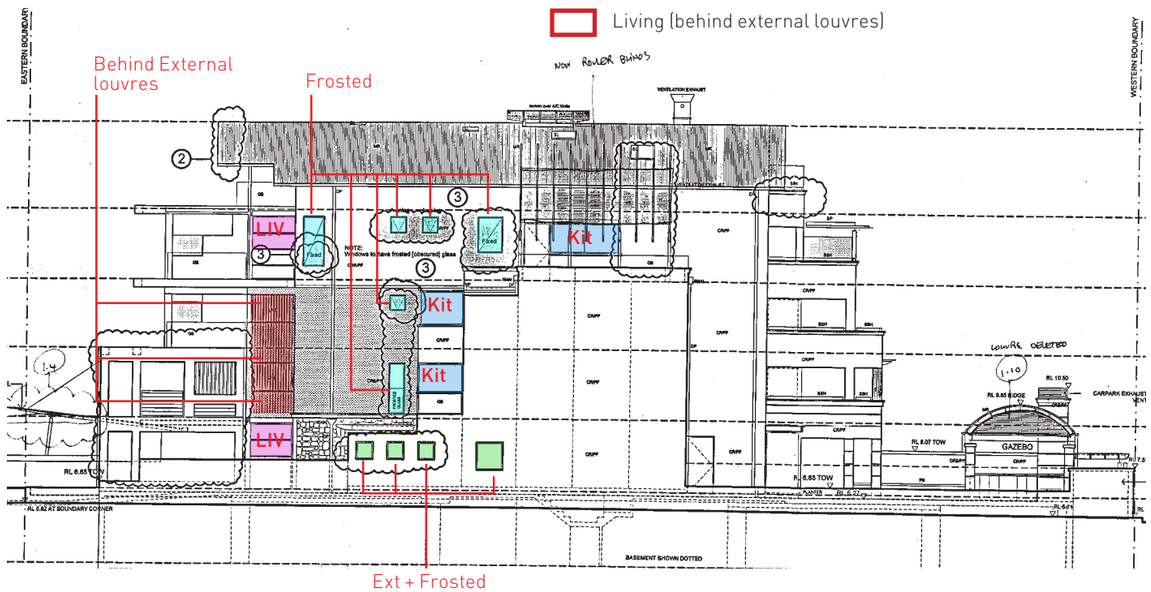
Secondary Use spaces

Secondary Use spaces (frosted windows)

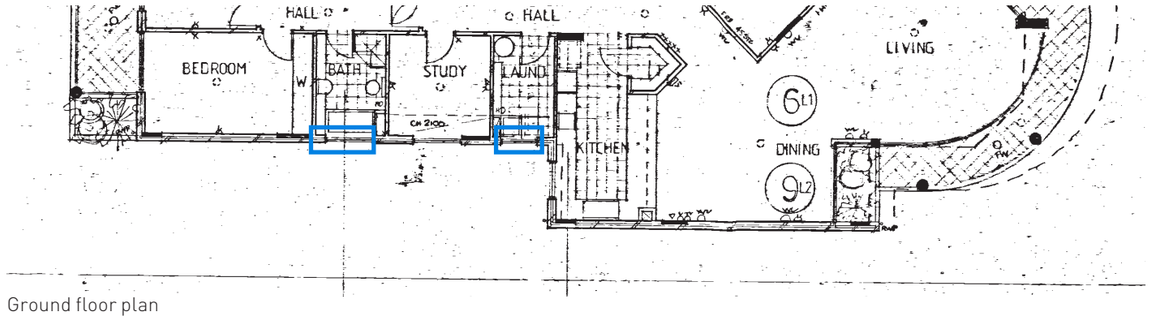
Living/Bedrooms

External terrace (frosted windows)

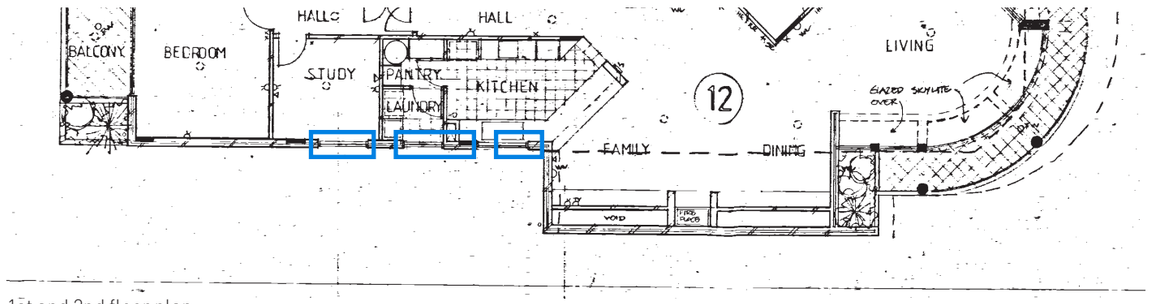
Living (behind external louvres)



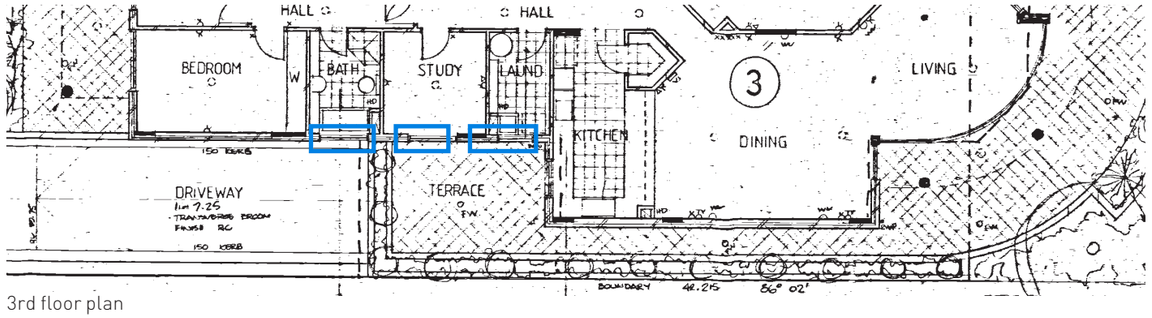
# Privacy to Neighbouring Dwellings



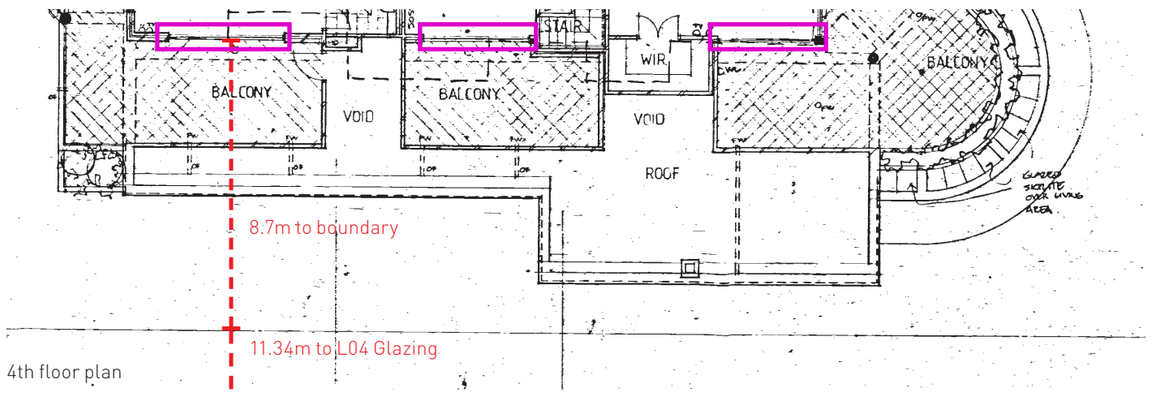

Ground floor plan




1st and 2nd floor plan




3rd floor plan



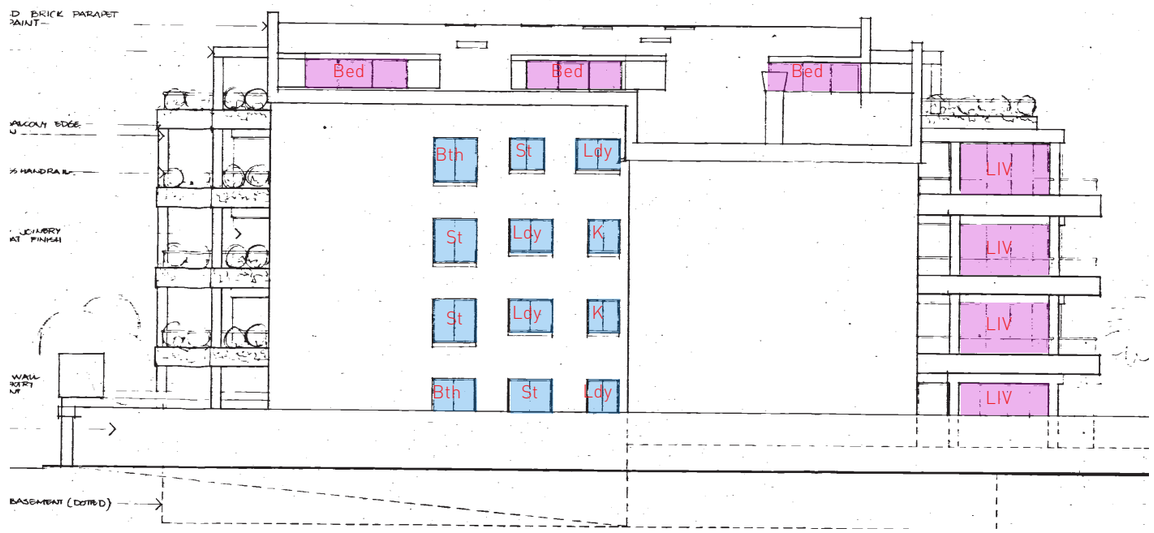

4th floor plan

## 102-104 North Steyne

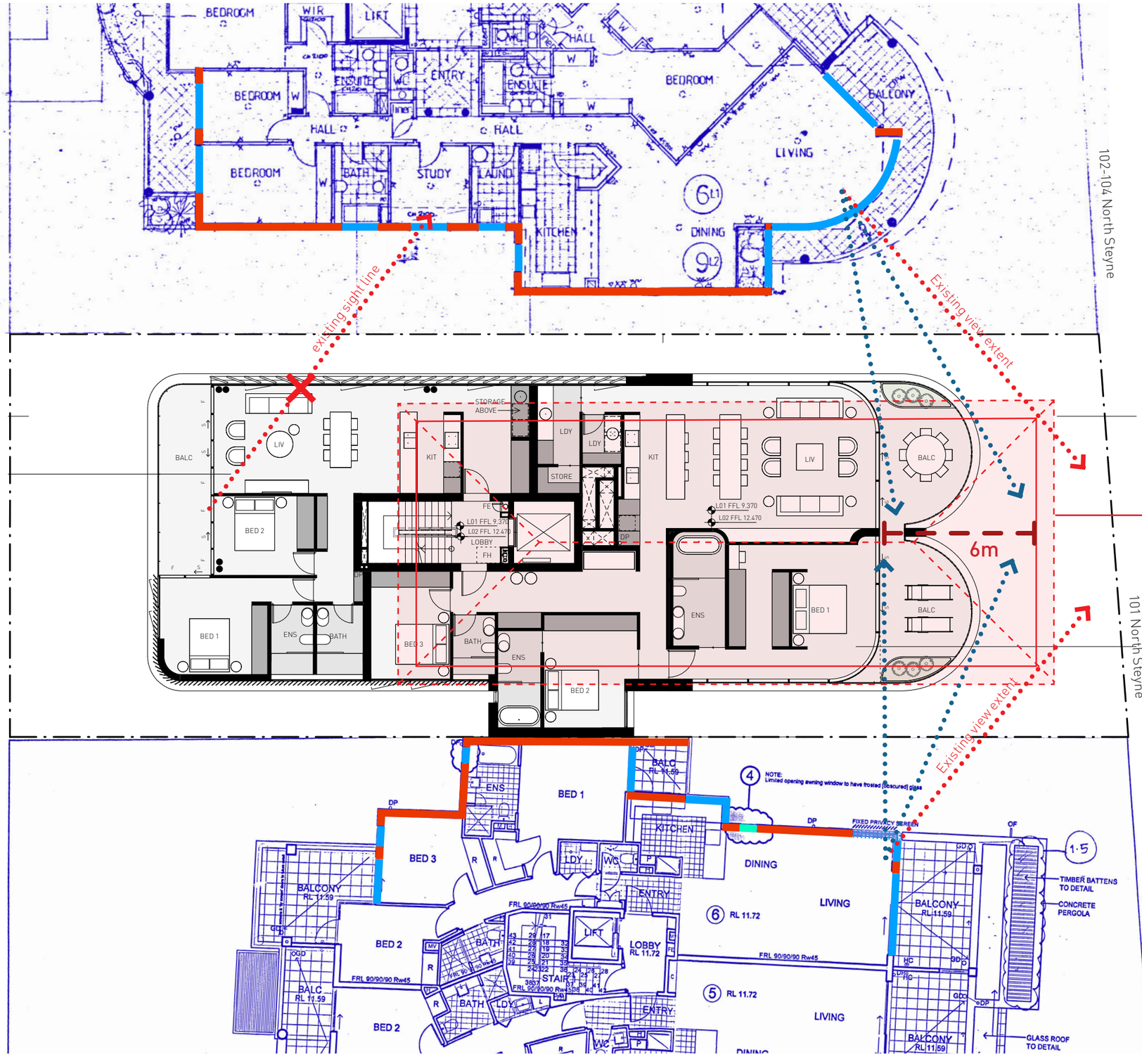
- All living spaces are oriented east or west
- The majority of windows are frosted
- 3 kitchen windows are located to this facade
- Ground level openings shown in green give on to an external courtyard and comprise frosted glass
- The proposed design to 101 North Steyne incorporates privacy louvres to achieve an acceptable degree of privacy between rooms in the two buildings

Secondary Use spaces (with internal shutters)

Living/Bedrooms



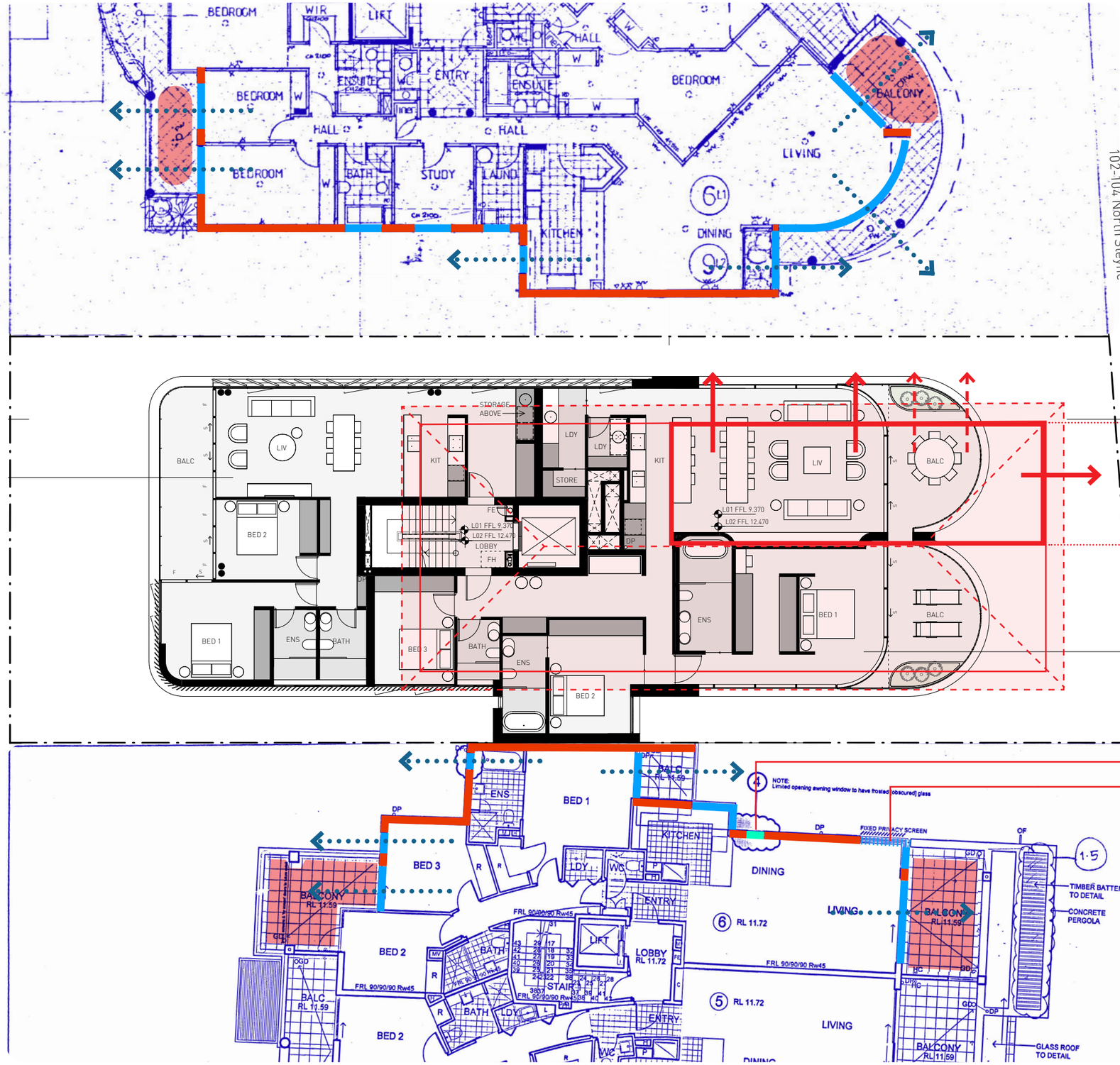
## Privacy to Neighbouring Dwellings




## Neighbours' Outlook Improved

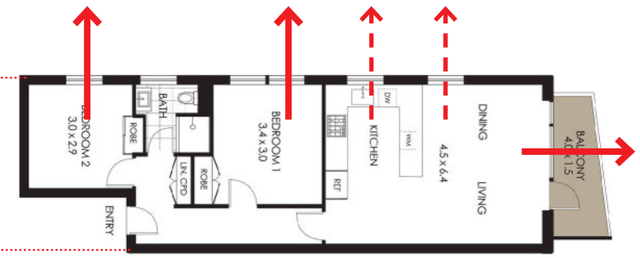
- Proposed building sits back from existing alignment
- Proposed glass line sits 6m back from existing
- Together these improve view extent for neighbours
- Line of sight is removed to neighbouring studies from existing rear garden communal open space

# Privacy to Neighbouring Dwellings




# Privacy Analysis

- Primary views for apartments are now east/ west
- No habitable rooms with primary view to north
- Balcony planters are introduced to set back primary usable space of balconies further from neighbouring balconies
- Together these measures mean the design achieves a good level of internal and external visual privacy




existing floor plan

primary view

secondary view

## Privacy to Neighbouring Dwellings

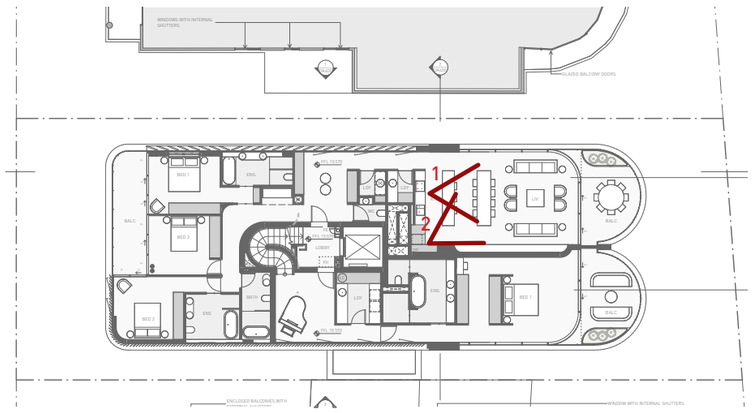
1

2

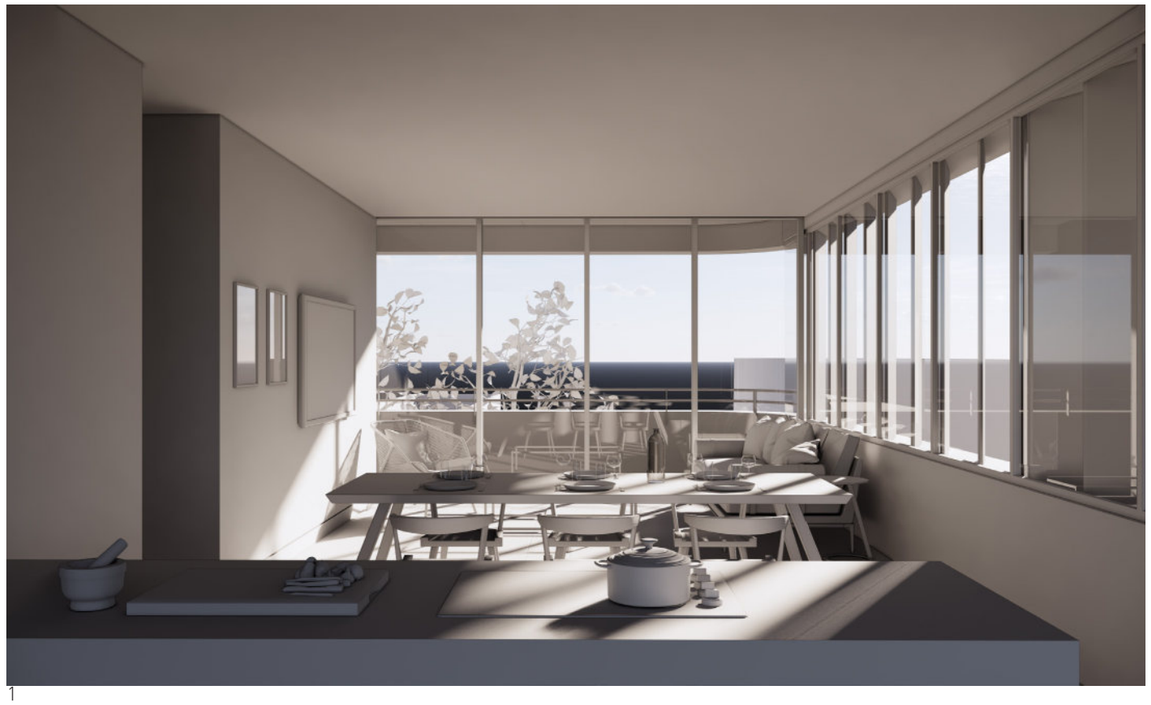
## Living Space Privacy - Eastern apartments

— Living spaces are oriented towards the eastern ocean views

— Windows to the sides taper to direct views forwards and outwards



## Privacy to Neighbouring Dwellings

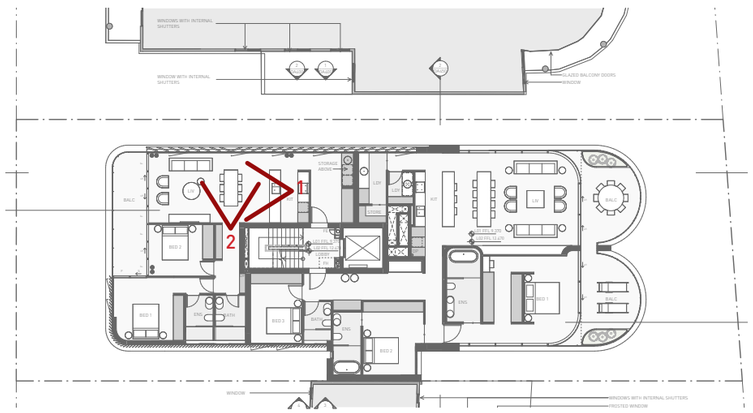


1

2

## Living Space Privacy - Western Apartments

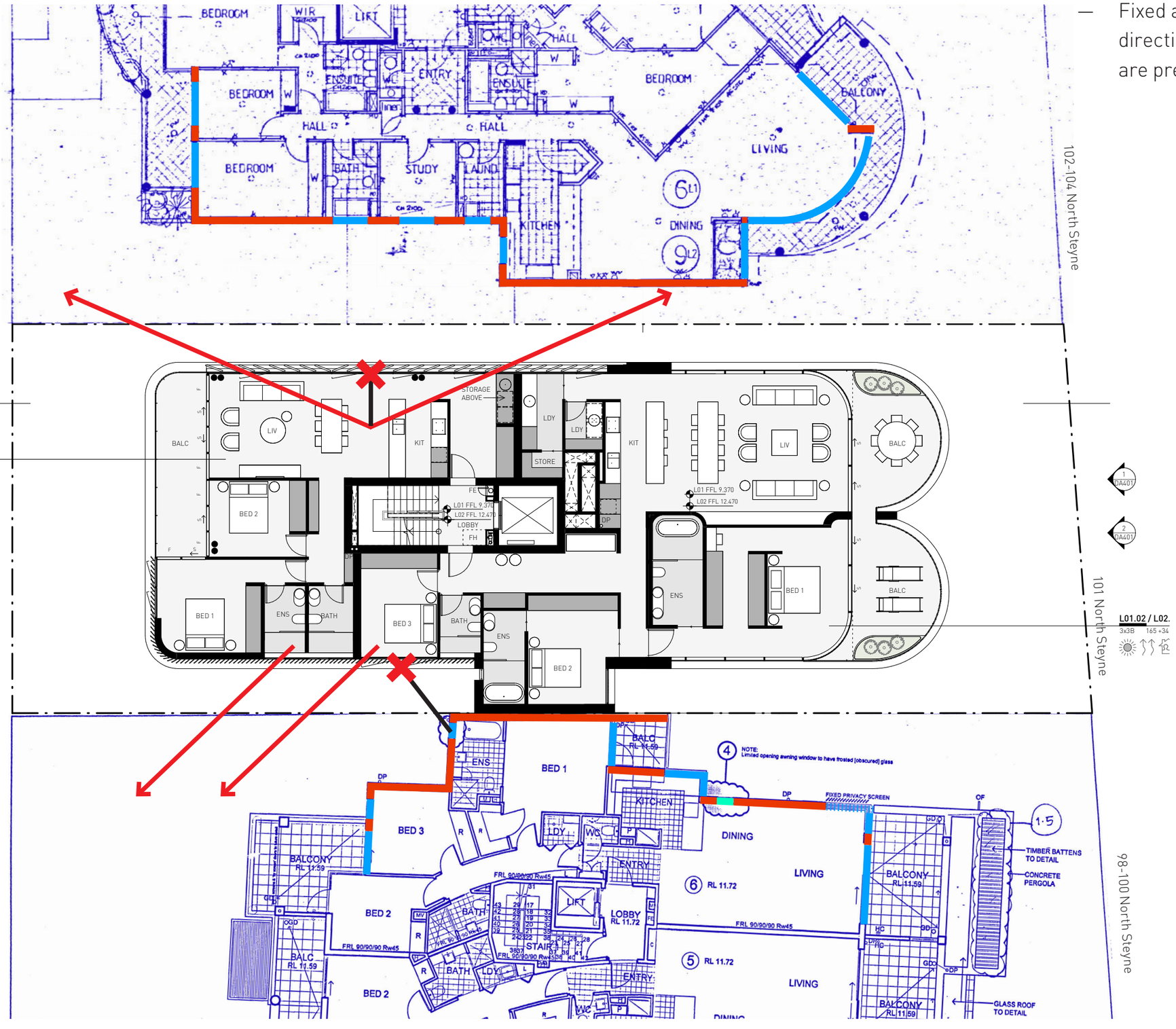
— Western apartment district outlook
— Louvres prevent overlooking
— No direct views to neighbours



## Privacy to Neighbouring Dwellings

## Improved Privacy

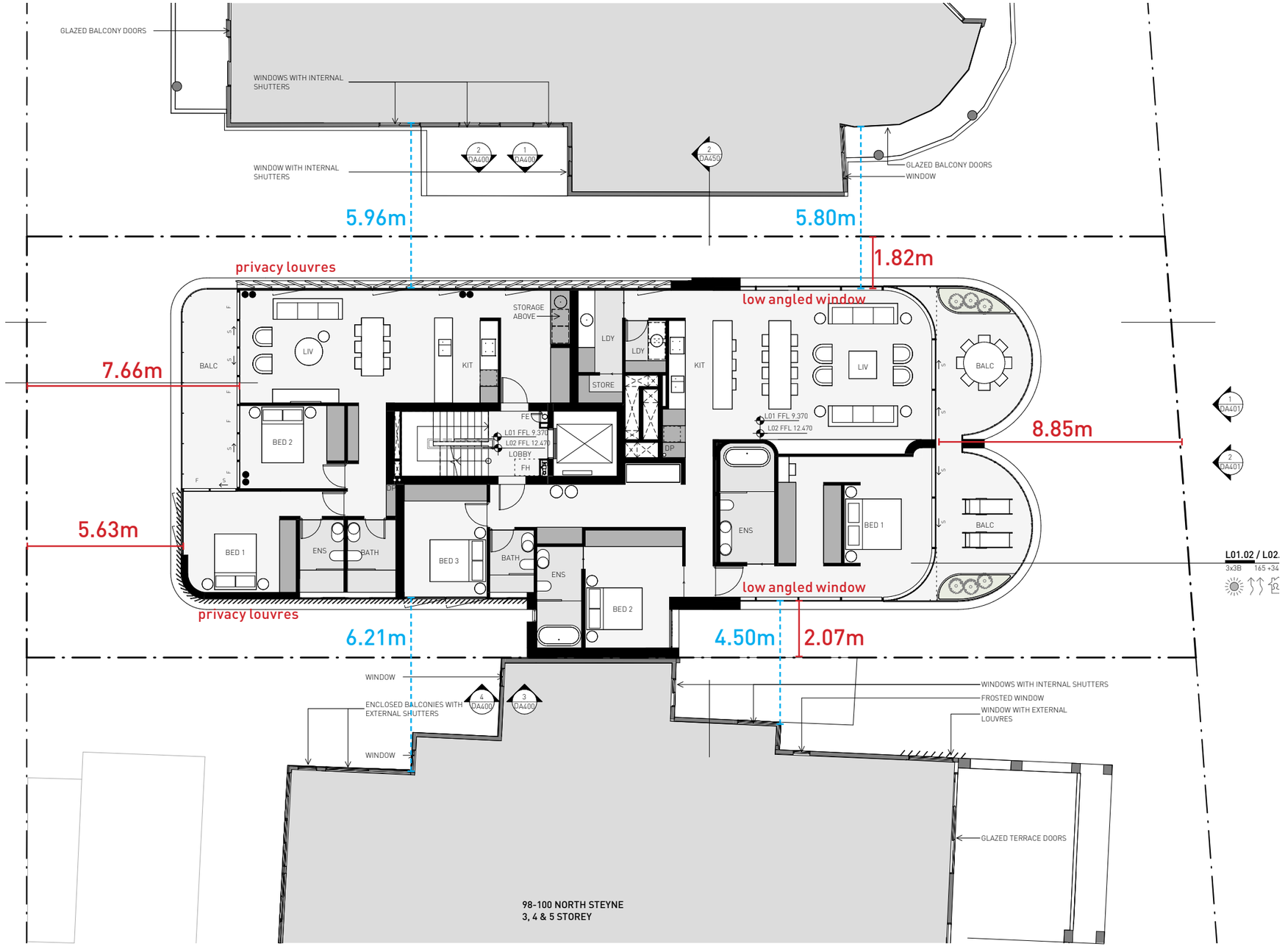
— Louvres provide directional views and allow light in
— Fixed angles to the louvres mean outlook is directional and lines of sight to neighbouring rooms are prevented



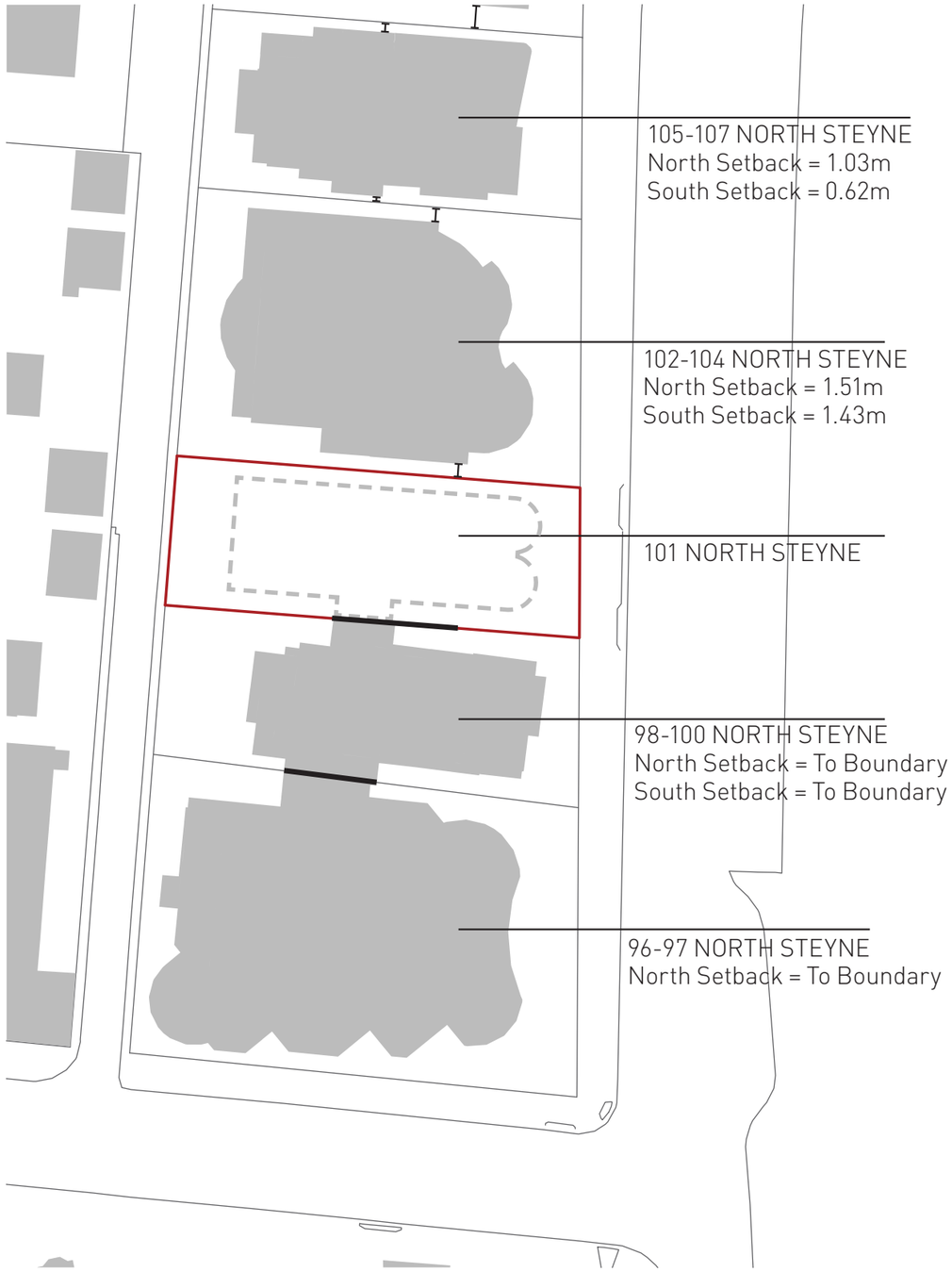
# Setbacks and Separation

## Side setback analysis

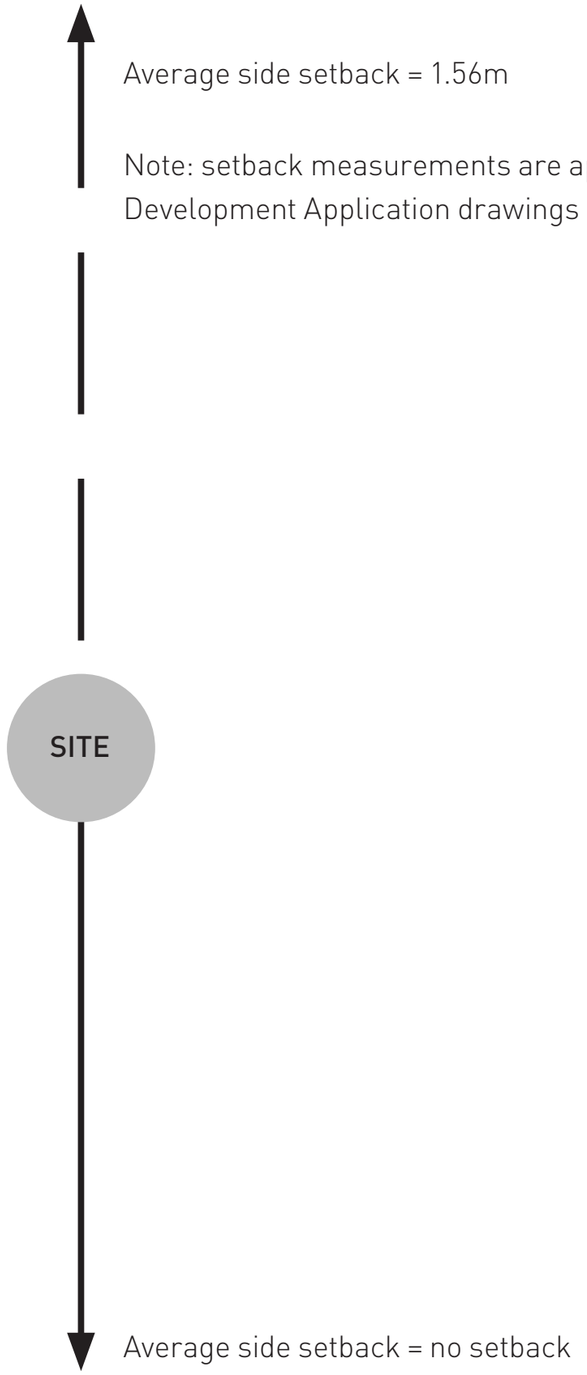
There is an established pattern of narrow setbacks or zero lot boundaries to the apartment buildings of North Steyne. Further detail is provided on the following page. This proposal is consistent with the setbacks of adjacent buildings, providing adequate separation whilst enabling efficient planning on a narrow site.



## Setbacks and Separation




## Side setback analysis



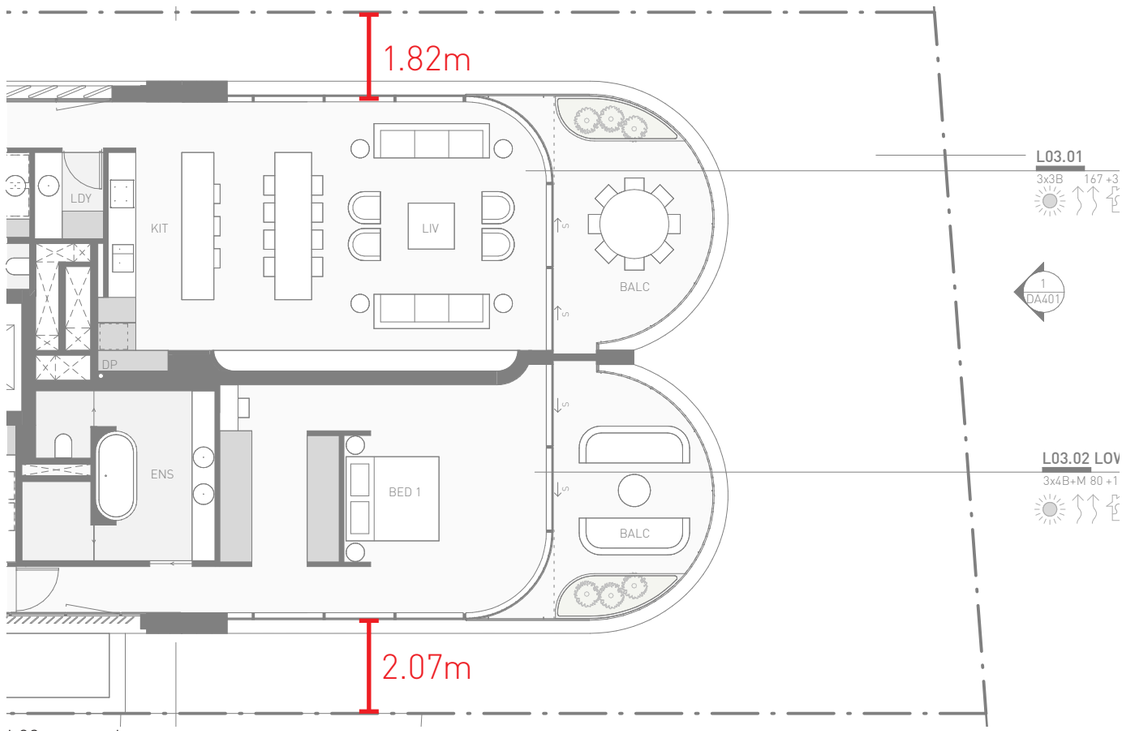
# Setbacks and Separation

## Improved Side Setbacks

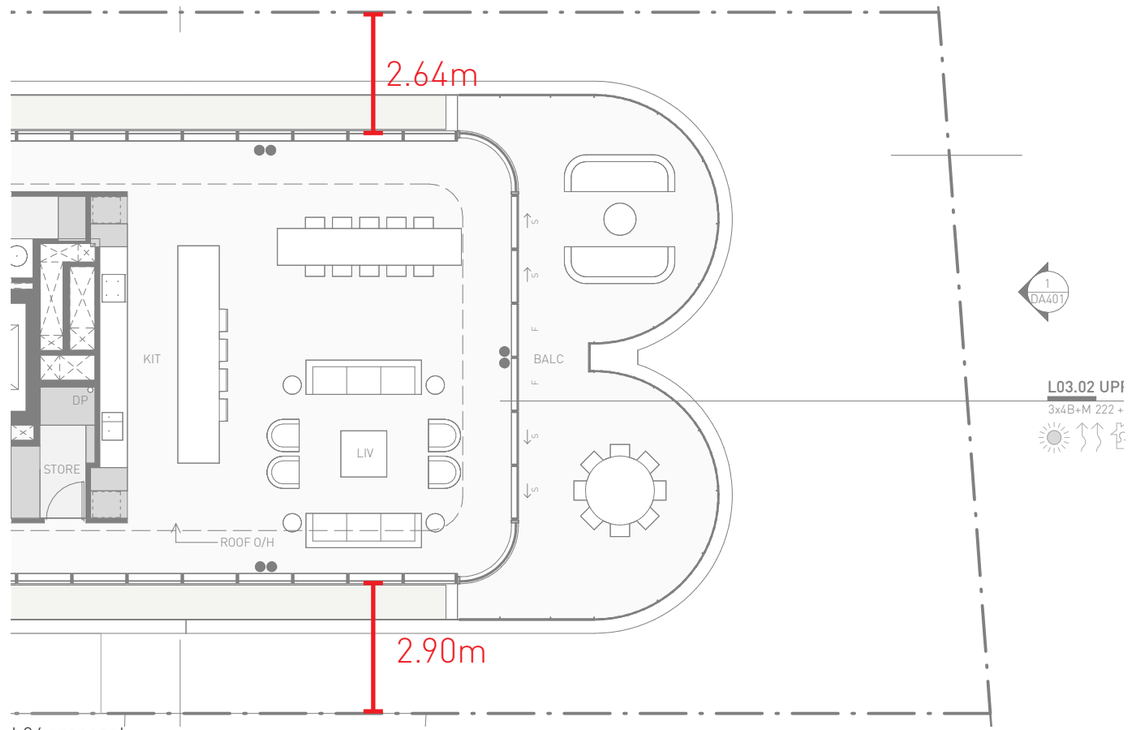
Following advice from Council via a Pre-DA meeting, setbacks have been increased from approx 1.6m to the below:

— Lower levels. 1.95m average, ranging from 2.07m to 1.82m

— Level 4. 2.9m to the south and 2.64m to the north




L03 proposal

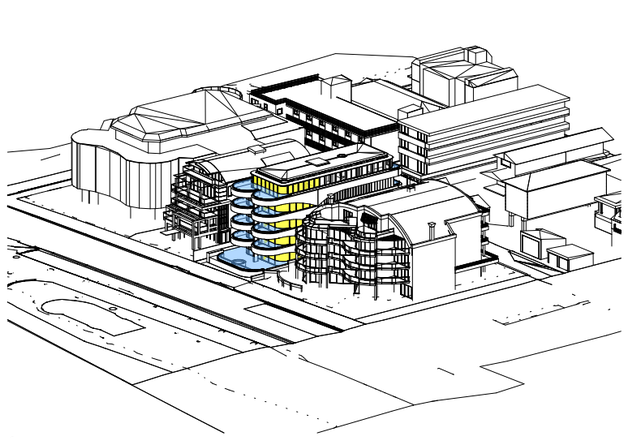



L04 proposal

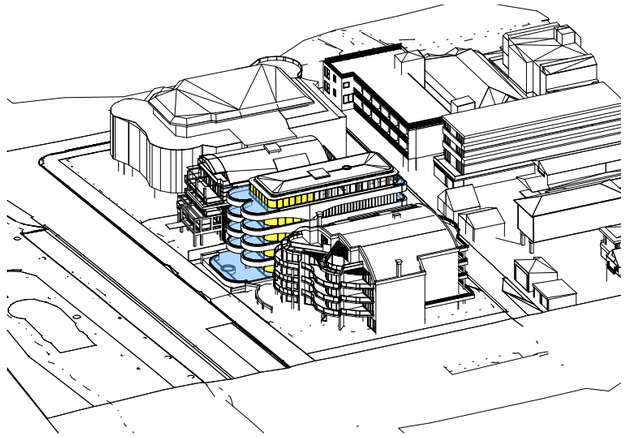
Compliance

# Compliance

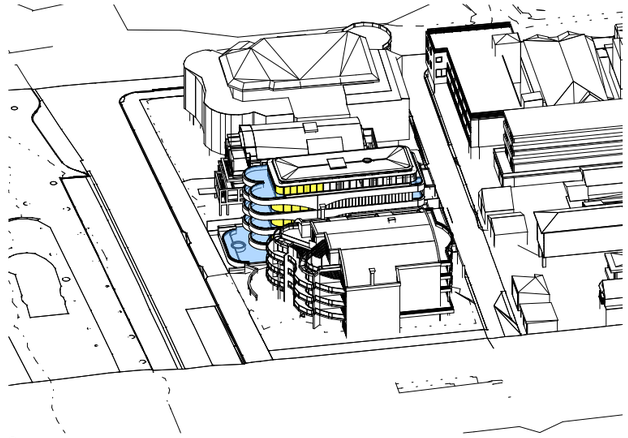
## Sun Eye Views



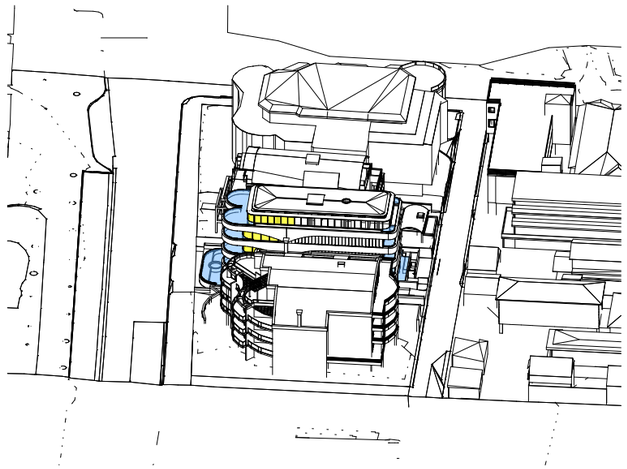
1 SUN STUDY JUNE 21, 09.00



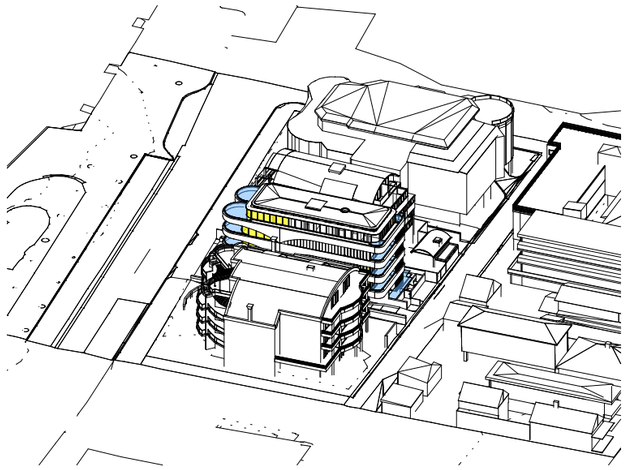
2 SUN STUDY JUNE 21, 10.00



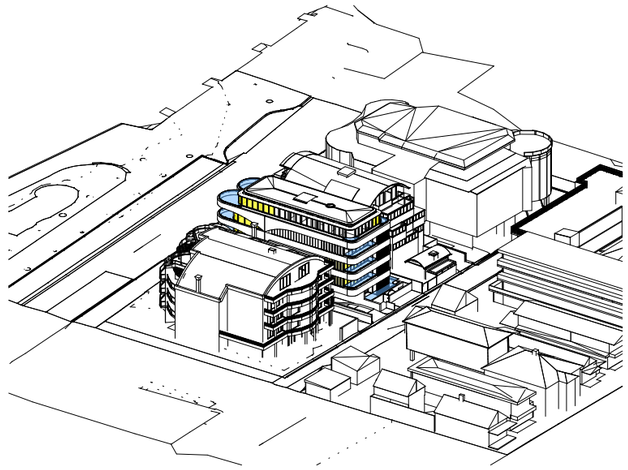
3 SUN STUDY JUNE 21, 11.00



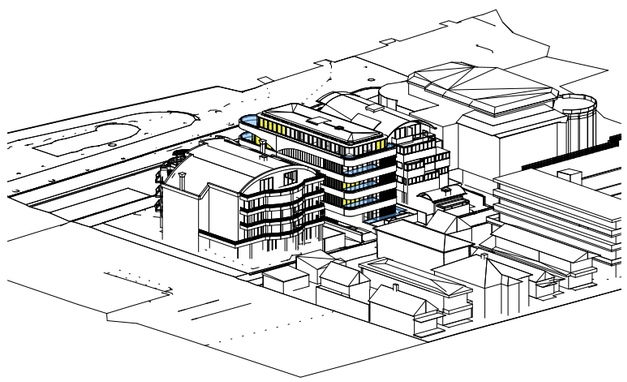
4 SUN STUDY JUNE 21, 12.00



5 SUN STUDY JUNE 21, 13.00



6 SUN STUDY JUNE 21, 14.00



7 SUN STUDY JUNE 21, 15.00

**KEY**

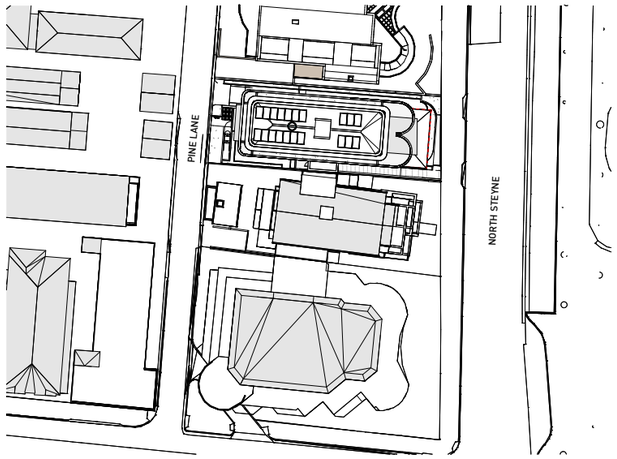
Living rooms
receive a minimum of 2 hours direct sunlight
between 9 am - 3 pm at mid winter

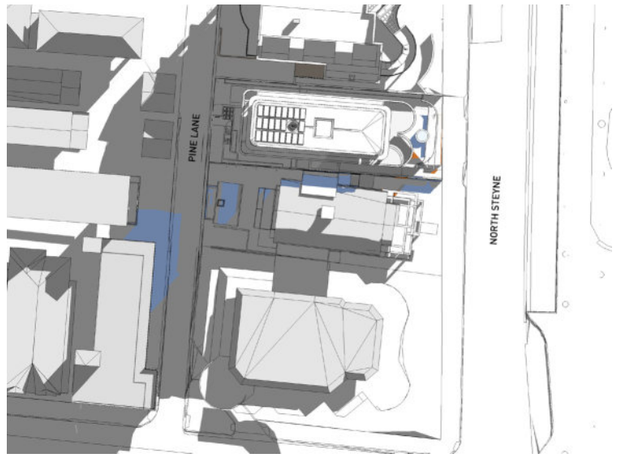
Private Open Space - 1m above ground
receive a minimum of 2 hours direct sunlight
between 9 am - 3 pm at mid winter

**drawing number** DA800

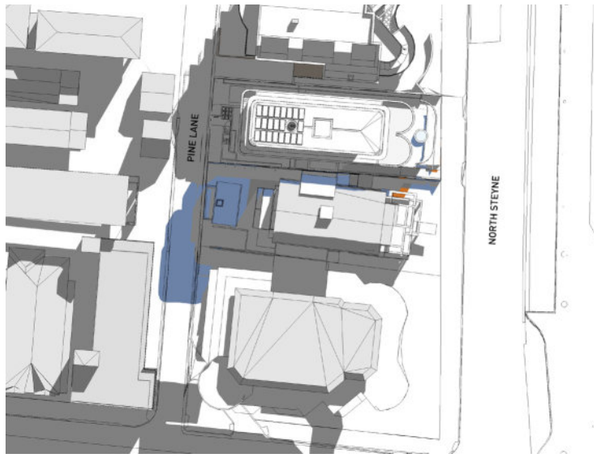
# Compliance

## Shadow Plan

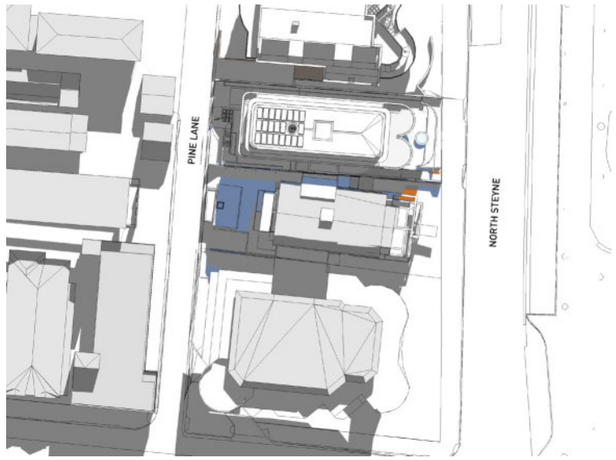



SHADOW STUDY - JUNE 21, 09.00

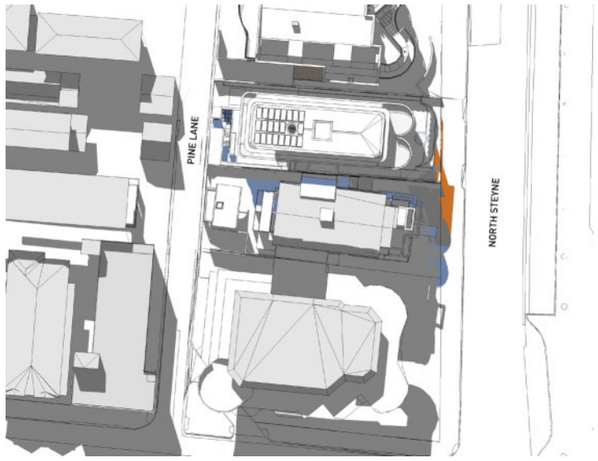



SHADOW STUDY - JUNE 21, 10.00




SHADOW STUDY - JUNE 21, 11.00


SHADOW STUDY - JUNE 21, 12.00




SHADOW STUDY - JUNE 21, 13.00


SHADOW STUDY - JUNE 21, 14.00


SHADOW STUDY - JUNE 21, 15.00

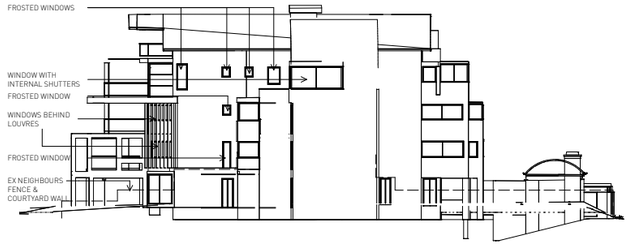
**KEY**

- Proposed shadows
- Reduced shadows
- Existing shadows

**drawing number** DA801

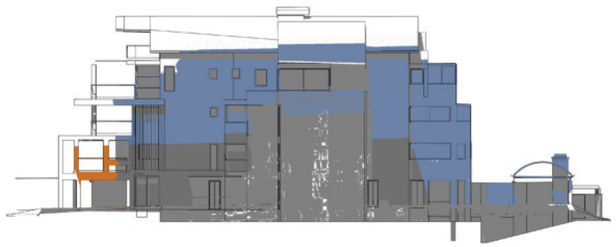
# Compliance

# 98-100 Shadow Elevations

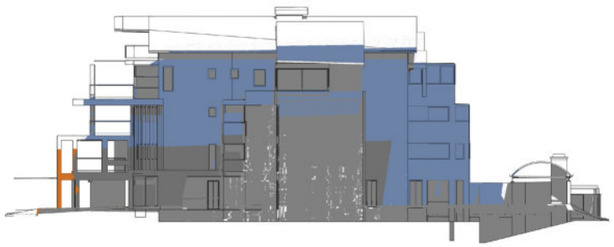



SHADOW STUDY - JUNE 21, 09.00

SHADOW STUDY - JUNE 21, 10.00



SHADOW STUDY - JUNE 21, 11.00



SHADOW STUDY - JUNE 21, 12.00

SHADOW STUDY - JUNE 21, 13.00

SHADOW STUDY - JUNE 21, 14.00

SHADOW STUDY - JUNE 21, 15.00

**KEY**

Proposed shadows

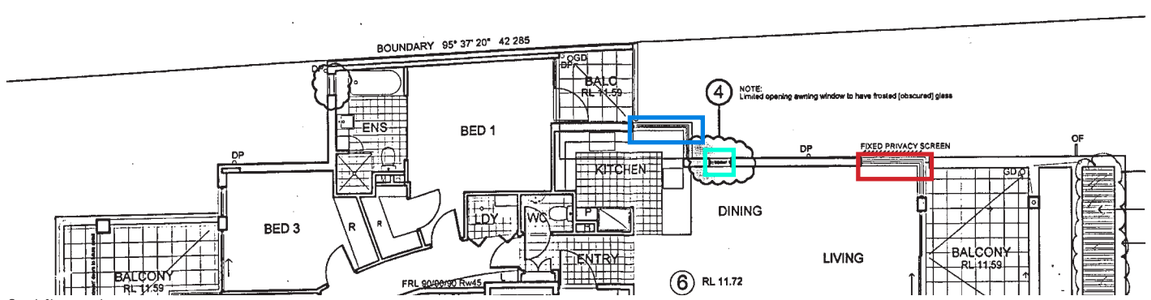
Reduced shadows

Existing shadows

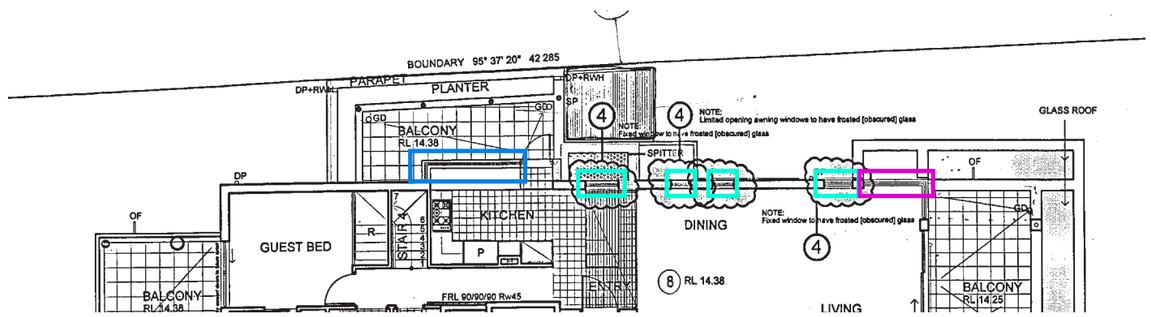
**drawing number** DA802

## Compliance

Photograph taken 24.05.24 at 11.34 am




2nd floor plan




3rd floor plan

## 98-100 Shadow Analysis

Comparing existing and proposed shadows:

- Shading is reduced to ground floor living spaces due to increased front setback
- Some additional shadow impacts to secondary windows on L2 and L3. These rooms have primary outlook to the east.

Window analysis

- All living spaces are oriented east or west
- The majority of windows are frosted glass with no outlook or are secondary spaces such as kitchens
- Kit 1 window receives minimal additional shadowing from 9-11am
- Kit 2 window receives additional shadowing from 9-2pm
- Kit 3 window is currently overshadowed between 9am-3pm mid winter and receives no additional overshadowing
- Overshadowing has been minimised as far as possible by increasing the front set back and stepping the roof form. Improvements are made to front facade living spaces.

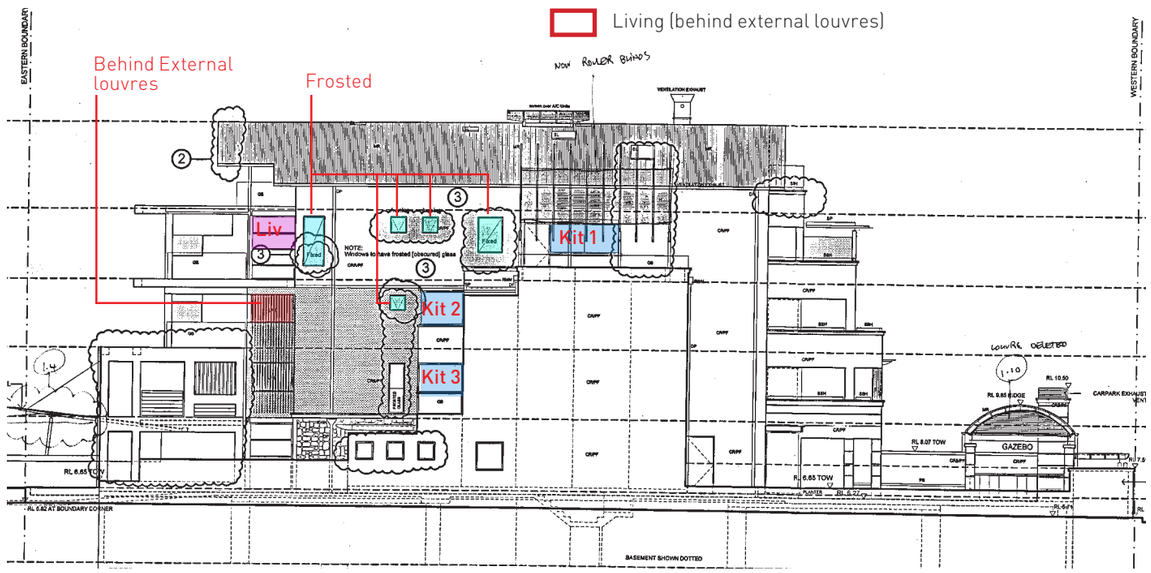
Secondary Use spaces

Secondary Use spaces (frosted windows)

Living/Bedrooms

External terrace (frosted windows)

Living (behind external louvres)



# Compliance

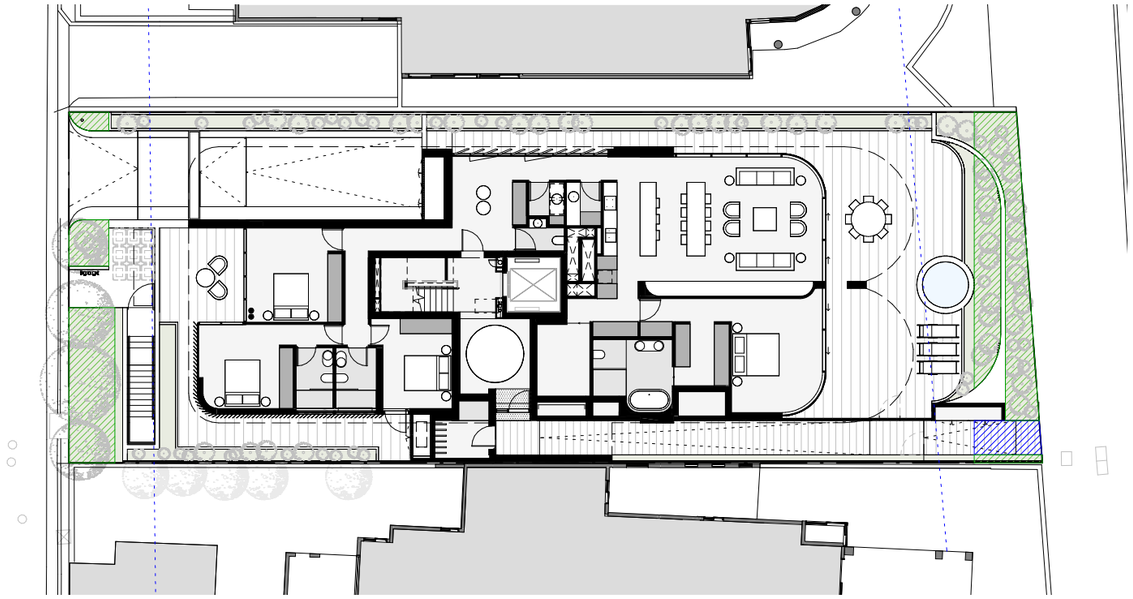
## Deep Soil

- 7.6% (47.6m$^2$) provided
- Above the 7% ADG target
- 4 x new trees proposed to Pine Lane deep soil setback
- Generous deep soil landscape buffer to North Steyne frontage
- Additional planters have been designed above basement areas with sufficient soil depth required to ensure good health of plants

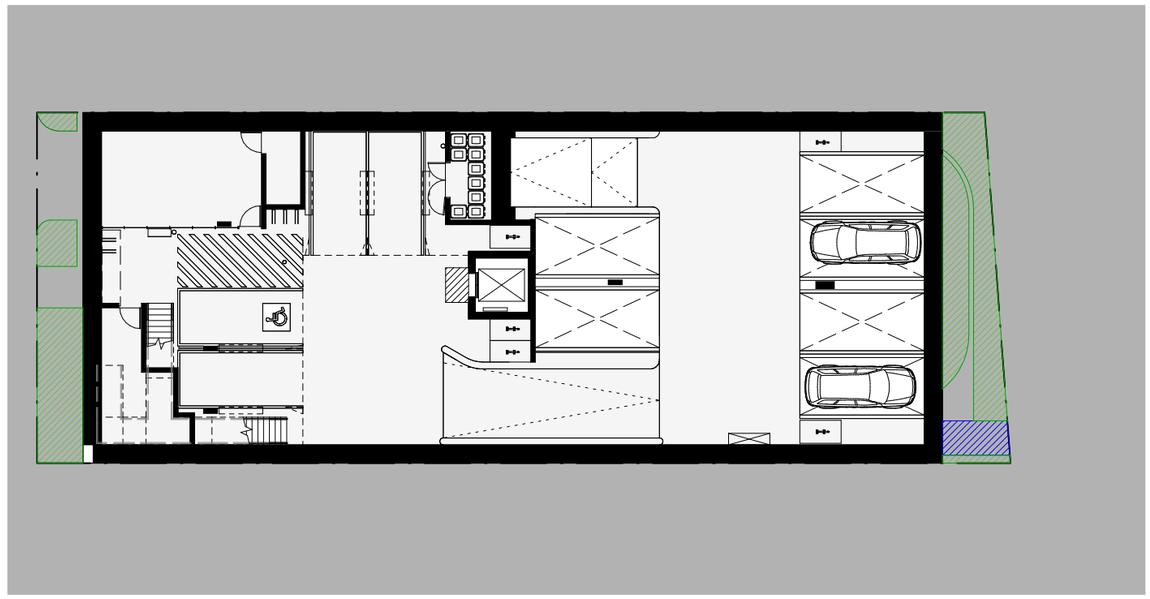
**DEEP SOIL KEY**

Deep soil zone

Deep soil zone below permeable paving calculated as 50% permeable



Ground Floor Plan



Basement Plan

**DEEP SOIL**

TOTAL SITE AREA = 635.7m$^2$
The ADG requires that deep soil zones occupy a minimum of 7% of the site by area.

TOTAL DEEP SOIL REQUIRED = 44.5m$^2$
TOTAL DEEP SOIL PROPOSED = 47.6m$^2$

**drawing number** DA806

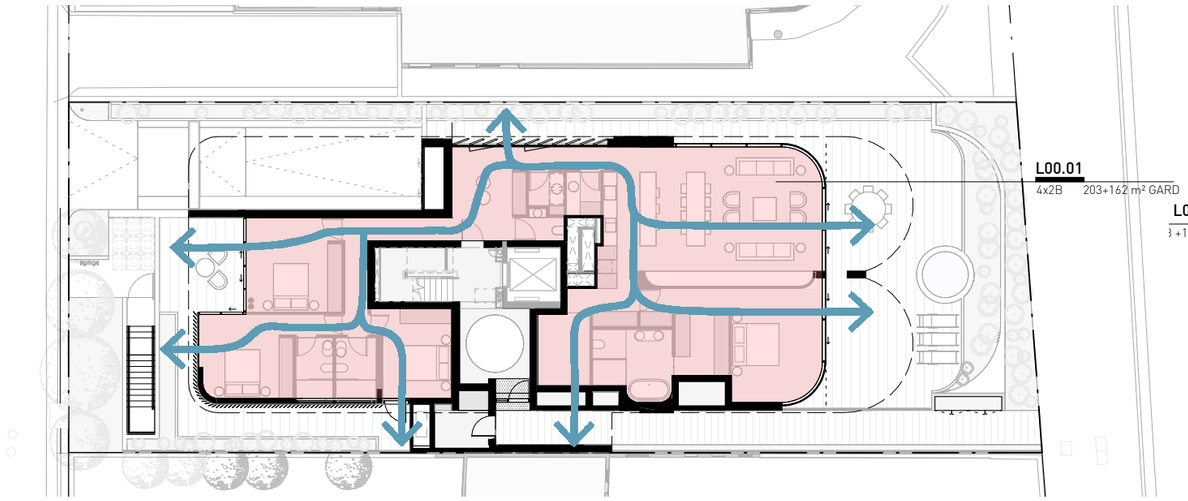
## Compliance

**KEY**

Min 2 hrs direct sunlight to living rooms/private open spaces
Between 9am - 3pm Mid-Winter

Less than 2 hrs direct sunlight to living rooms/private open spaces
Between 9am - 3pm Mid-Winter

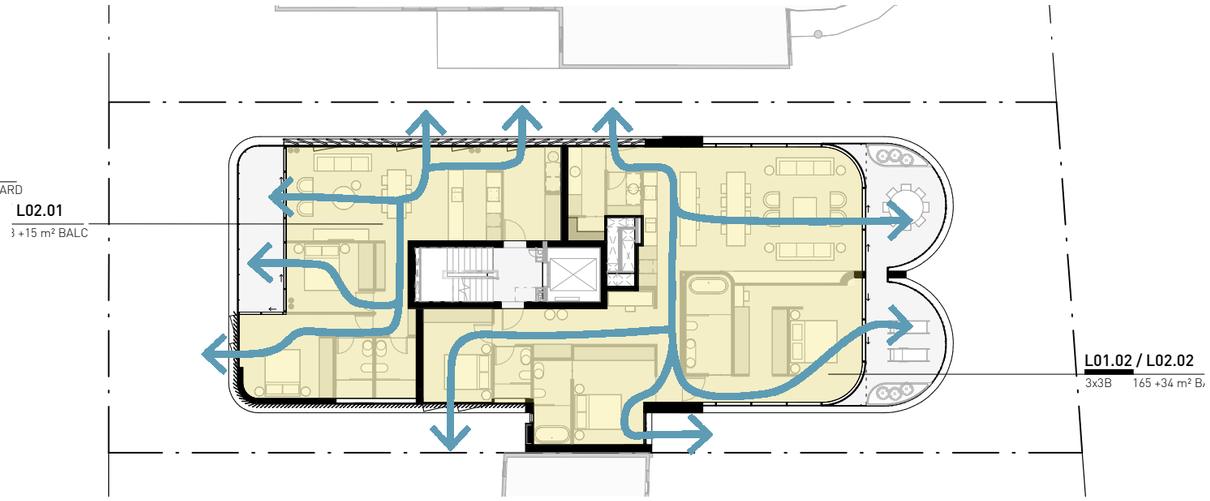
Cross Ventilation



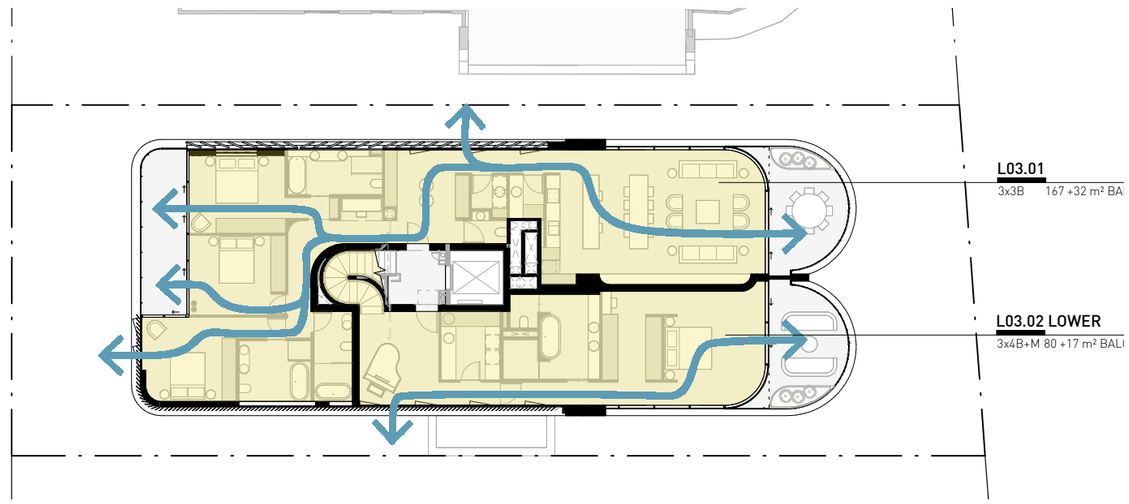

Ground Floor Plan

## ADG Solar Access + Cross Ventilation

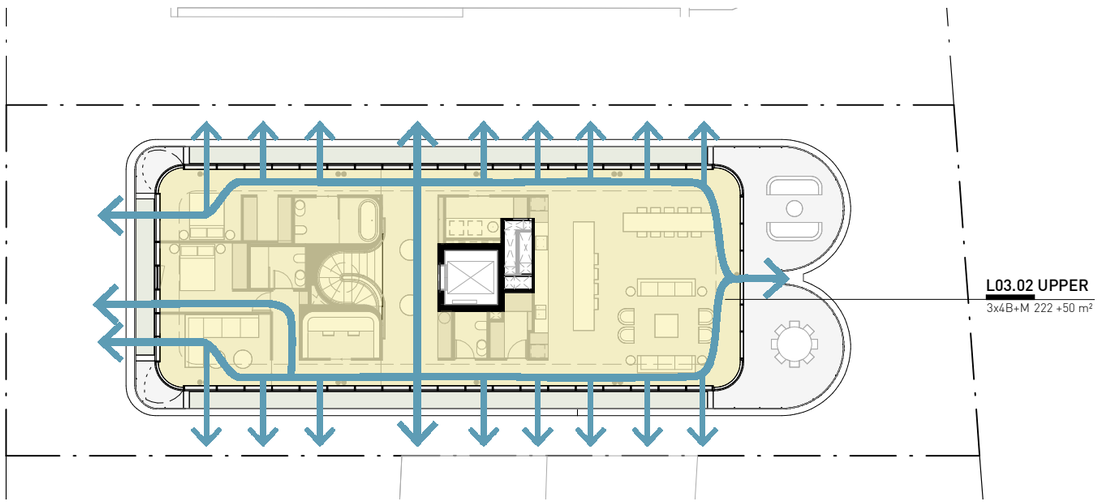
- ADG metrics exceeded
- 86% (6 of 7) of apartments receive over 2 hours direct sunlight mid-winter
- 15% (1 of 7) receive just under 2 hours. This apartment has extensive glazing
- No apartments receive no sun mid-winter
- 100% are naturally cross-ventilated




L01-L02 Plan




L03 Plan




L04 Plan

**drawing number** DA807

# Design Verification Statement

**smart design studio**

**14 stokes avenue**
**alexandria nsw 2015**
**tel 02 8332 4333**

19 December 2024

Kim Zolijalali
Time & Place
Level 34 - Suite 3402
Australia Square
264 George Street
Sydney NSW 2000

RE: DESIGN VERIFICATION STATEMENT
101 North Steyne, Manly NSW, 2095

Dear Kim,

Pursuant to Clauses 10 & 11 of the Architects Act 2003, Smart Design Studio Pty Ltd is an architect corporation under the Act and the nominated architects are William Smart (Registered Architect NSW #6381) and Christina Markham (Registered Architect NSW #5569).

I confirm that I designed, or directed the design of, the residential flat development at the above-mentioned address. In my professional opinion, the design is generally in accordance with the design quality principles set out in Chapter 4 of the State Environmental Planning Policy (Housing) 2021. We have provided further detail on the design's consistency with the design quality principles contained in our 'State Environmental Planning Policy (Housing) 2021 Schedule 9 Design principles for residential apartment development' summary document which accompanies this development application.

Please do not hesitate to call if you have any queries.

Yours sincerely,

Signer ID: 3SJVU4OS12...

**WILLIAM SMART**
registered architect nsw #6381
principal
smart design studio

# Apartment Design Guide

# State Environmental Planning Policy (Housing) 2021 Schedule 9 Design principles for residential apartment development

| design principles | objective | comments | y / n |
|---|---|---|---|
| 01<br>Context and Neighbourhood Character | Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.<br>Responding to context involves identifying the desirable elements of an area's existing or future character. Well designed buildings respond to and enhance the qualities and identity of the area. | The site is situated within the Manly precinct, a coastal community in the Northern beaches of Sydney. The proposal is designed to harmonise with the existing and anticipated built environment. It draws on its environment, enhancing the qualities of the area through good design, the choice of light coloured warm tones and coastal character. The design responds to the distinct scales, material palettes and architectural forms typical of Manly. | y |
| 02<br>Built Form and Scale | Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.<br>Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook. | The proposed design responds to the existing and desired future character of the precinct. It takes into account the scale, bulk, and height of nearby buildings and applies the same principles to modern design practice standards. The design recognises a pattern of development within the area and responds in kind with a form that steps back as the building rises. The form has also been shaped in such a way as to protect and enhance existing views for the neighbours whilst creating new residences with good outlook and internal amenity. | y |
| 03<br>Density | Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.<br>Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment. | The proposed design aims to achieve a high level of amenity for residents within each apartment through the use of generous indoor and outdoor spaces that are light filled, natually ventilated with good outlook to natural surroundings. The inclusion of appealing private open spaces further enhances the sustainability and desirability of the proposal.<br>The design aligns with local government targets for increased housing supply and diversity.<br>The site is very well served by existing public transport. Residents will also enjoy close proximity to beaches, restaurants, public parks and recreational amenities. | y |
| 04<br>Sustainability | Good design combines positive environmental, social and economic outcomes. Good sustainable design includes the inclusion of natural cross ventilation and sunlight to provide amenity for residents and passive thermal design for ventilation, heating and cooling, reducing reliance on technology and operation costs.<br>Other elements include recycling and reuse of materials and waste, use of sustainable materials, and deep soil zones for groundwater recharge and vegetation. | The building design prioritises sustainability and incorporates features that lead to positive environmental, social, and economic outcomes. The design aims to enhance resident amenity whilst reducing running costs.<br>Natural cross-ventilation and good solar access coupled with shading and efficient services optimises thermal comfort for residents and reduces the need for artificial heating and cooling systems. The orientation of the builidng allows 85% of the dwellings to receive a minimum of 2 hours of sunlight during the winter solstice between 9am-3pm, reducing heating needs. A fin screening system provides effective protection from the summer sun and 100% of the apartments are naturally cross-ventilated. Together, this allows residents to maintain a comfortable indoor environment and reducing reliance on air-conditioning.<br>The light coloured sandblasted concrete exterior combined with other low-maintenance materials have been selected for longevity to prolong the life of the building. The thermal mass properties of the concrete shell construction helps regulate indoor temperatures, reducing heating and cooling costs. Additionally, the building incorporates roof-mounted PV panels to generate sustainable energy.<br>Low-energy and low-water use plants, appliances, lights, and fittings have been selected for the building to promote sustainability. The building's convenient location near public transport and the Manly beachfront encourages walking or cycling, reducing reliance on cars and promoting sustainable transportation. Ample bicycle parking, as well as EV charging points, will be provided for residents and visitors, promoting sustainable transport. | y |

## Apartment Design Guide

## State Environmental Planning Policy (Housing) 2021 Schedule 9 Design principles for residential apartment development

| | | | |
|---|---|---|---|
| 05<br>Landscape | Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well-designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.<br>Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access and respect for neighbours' amenity and provides for practical establishment and long- term management. | The proposed landscaping is central to creating an engaging and harmonious environment, enhancing aesthetics and sustainability.<br>The landscaping design offers a welcoming, green retreat for ground floor residents, whilst creating a verdant street frontage to North Steyne, improving the public domain. Deep soil zones to the front and rear of the property allow for extensive greening of the site, while pockets of greenery exist at higher levels of the building via balcony planters to improve outlook, assist with privacy and green the building.<br>Appropriately sized trees line the rear of the property, visually enhancing this area whilst providing wind buffering and shading to the lower floors and ground floor gardens | y |
| 06<br>Amenity | Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well-being.<br>Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility. | A high level of amenity is achieved in the design through:<br>• 85% of the dwellings receive a minimum of 2 hours sun mid-winter between 9am-3pm<br>• 100% of the apartments are north-facing<br>• The design minimises overshadowing to neighbouring properties<br>• 100% of the apartments are naturally cross ventilated providing fresh air to occupants<br>• Generously sized apartments typically exceed the minimum ADG requirements<br>• Layouts are well-considered and carefully planned with good storage provided<br>• High quality materials are proposed | y |
| 07<br>Safety | Good design optimises safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.<br>A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose. | Clear lines of sight and passive surveillance are maintained at all interfaces between the building and the public realm. The residential entry point is clearly defined and is accessed via a secure glass door. The rear stairway is secured by a locked gate and external areas, lobbies, circulation areas and the basement car park level will all be well-lit and maintained. | y |
| 08<br>Housing Diversity and Social Interaction | Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.<br>Well-designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix.<br>Good design involves practical and flexible features, including different types of communal spaces for a broad range of people, providing opportunities for social interaction amongst residents. | The development features a thoughtfully designed mix of 3 and 4-bedroom apartments, all with well-resolved floor plans and generous living spaces. Some apartments are oriented both towards the beach outlook to the east, with other apartments facing the western district outlook. This provides a range of dwelling types and sizes, appealing to diverse household compositions including families, owner occupiers, downsizers and professionals, who will be drawn to the benefits of the Manly location.<br>The central core offers a high quality of finish and a common circulation stair with opportunities for social interaction. Generous, oversized terraces and balconies for each unit, coupled with the park, bike paths and beach across the road render dedicated communal open space unnecessary, with ample opportunities for social engagement and relaxation for residents. | y |
| 09<br>Aesthetics | Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.<br>The visual appearance of well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape. | The proposal seeks to achieve a calm and coherent form that sits comfortably in its coastal location site. A careful composition of curved and arched forms offers visual variety, interest and articulation and draws on the shapes and volumes of buildings in the local context. In response to its surroundings, a light colour palette of pale sandblasted concrete, terrazzo and metal louvres and subtle accents of colour to the window framing and boundary fencing is intended to harmonise with the materials prevalent in the local context. | y |

# ADG Objectives + Design Criteria

| section | objective | design criteria | proposal / comments | y / n |
|---|---|---|---|---|
| **03 Siting the Development** | | | | |
| 3A<br>Site Analysis | 3A-1 Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context. | | The site analysis notes the key potential opportunities and constraints of the site which inform the design, being:<br>• Eastern ocean views and western district views<br>• Good public transport links<br>• Opportunity to remove on-grade parking and 2 vehicle crossings<br>• Amenity of the reserve and beach to the east<br>• Solar access to north, east and west<br>• Availability of cooling summer coastal breeze<br>• Setting of predominantly 5-storey residential street character | y |
| 3B<br>Orientation | 3B-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development.<br><br>3B-2 Overshadowing of neighbouring properties is minimised during mid-winter. | | The building is shaped to reflect the existing street alignments, with the primary facade and pedestrian access facing North Steyne and vehicular access via Pine Lane to the rear. Living areas are placed on the northern side of the building, optimising solar access, while bedrooms are predominately placed along the south.<br><br>The building reflects the character of its neighbours with 4 primary stories and a recessed upper level. The design aims to minimise overshadowing of its southern neighbour mid-winter as far as possible. Whilst there is some increase in shading, the impact of this is mitigated as the dwellings of the neighbouring building have their primary orientation to the east and west and most of the north facing windows are of obscured glass or otherwise screened, meaning they have limited access to winter sun in their current configuration. | y |
| 3C<br>Public Domain | 3C-1 Transition between private and public domain is achieved without compromising safety and security.<br><br>3C-2 Amenity of the public domain is retained and enhanced. | | A clearly defined and securely accessed residential lobby is accessible from the main street frontage. External areas, lobbies, circulation areas and car park levels will all be well-lit and good lines of sight will be maintained at all interfaces between the building and the public realm.<br><br>The surrounding public domain is enhanced through an emphasis on well-considered and high-quality landscaping throughout as well as the improved appearance of fences and frontages. The 2 x existing driveway crossovers to North Steyne are removed, adding valuable car spaces to the street. The existing tarmac footpath on North Steyne is removed and replaced with a continuation of the herringbone brick finish to neighbouring footpaths, creating a more coherent public domain. | y |

# ADG Objectives + Design Criteria

| section | objective | design criteria | proposal / comments | y / n |
|---|---|---|---|---|
| 3D<br>Open Space | 3D-1 An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.<br><br>3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting.<br><br>3D-3 Communal open space is designed to maximise safety.<br><br>3D-4 Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood. | 3D-1.1 Communal open space has a minimum area equal to 25% of the site.<br><br>3D-1.2 Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9am and 3pm on 21 June (mid winter). | As the residents benefit from exceptional amenities adjacent to the site in the form of Queenscliffe Beach, the North Steyne reserve, play areas, cycleway, shops and restaurants, communal open space is not considered necessary for this site. In addition, residents enjoy oversized private open space in the form of gardens, terraces and balconies all of which exceed ADG minimum sizes. | n |
| 3E<br>Deep Soil Zones | 3E-1 Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality. | 3E-1.1 Deep soil zones are to meet the following minimum requirements:<br>site area / min depth / deep soil (% site area)<br>< 650m2 / n/a / 7%<br>650 - 1,500m2 / 3m<br>> 1,500m2 / 6m<br>> 1,500m2 with tree cover / 6m | The area of deep soil provided is 47.6m2, which is 7.5% of the overall site area and above the 7% target. In addition to the deep soil allowance, extra planters have been designed above basement areas with sufficient soil depth required to ensure good health of plants. | y |
| 3F<br>Visual Privacy | 3F-1 Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy.<br><br>3F-2 Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space. | 3F-1.1 Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:<br>building height / habitable rooms and balconies / non-habitable rooms<br>up to 12m (4 storeys) / 6m / 3m<br>up to 25m (5-8 storeys) / 9m / 4.5m<br>over 25m (9+ storeys) / 12m / 6m<br>Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2)<br>Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties. | All apartments have primary views and outlook to either the east, the west or both, capitalising on ocean and district views and away from neighbours to the north and south.<br><br>High levels of visual privacy are achieved between neighbouring units. Direct lines of sight between bedrooms and studies are prevented through the use of directional louvres which allow light and outlook whilst preventing overlooking.<br><br>Although separation distances to the north and south do not meet recommended ADG metrics, the objective of 3F is met via careful design and the use of screening elements to achieve reasonable levels of visual privacy. Separation distances also fall into the same range as neighbouring buildings and following this pattern creates consistency in the streetscape. | y |

# ADG Objectives + Design Criteria

| section | objective | design criteria | proposal / comments | y / n |
|---|---|---|---|---|
| 3G<br>Pedestrian Access and Entries | 3G-1 Building entries and pedestrian access connects to and addresses the public domain.<br><br>3G-2 Access, entries and pathways are accessible and easy to identify.<br><br>3G-3 Large sites provide pedestrian links for access to streets and connection to destinations. | | The building entry is accessed directly from a paved walkway leading from the North Steyne entrance.<br><br>All lobbies are clearly identifiable and are accessible. | y |
| 3H<br>Vehicle Access | 3H-1 Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes. | | The existing site has three vehicle crossovers, with 2 on North Steyne and 1 on Pine Lane. The proposal seeks to remove both of the crossovers on North Steyne, with benefits for the public domain including improved appearance, improvements in safety for pedestrians using the North Steyne footpath and the return of 2 car spaces for public use.<br><br>The garage entry and ramp has been designed to minimise the width of the vehicle crossing. Traffic signalling will be employed as an extra safety measure in addition to line markings and signage.<br><br>Refer to the traffic report submitted with this proposal for further information. | y |
| 3J<br>Bicycle and Car Parking | 3J-1 Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional centres.<br><br>3J-2 Parking and facilities are provided for other modes of transport.<br><br>3J-3 Car park design and access is safe and secure.<br><br>3J-4 Visual and environmental impacts of underground car parking are minimised.<br><br>3J-5 Visual and environmental impacts of on-grade car parking are minimised. | 3J-1.1 For development in the following locations:<br>• on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or<br>• on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre<br>the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less.<br>The car parking needs for a development must be provided off street. | Car parking is provided in compliance with the minimum numbers prescribed by Manly Council<br><br>Bicycle parking is provided at the rate set out under the DCP for residents and visitors.<br><br>Refer to the traffic report submitted with this proposal for further information. | y |

# ADG Objectives + Design Criteria

| section | objective | design criteria | proposal / comments | y / n |
|---|---|---|---|---|
| **04 Designing the Building** | | | | |
| 4A<br>Solar and Daylight Access | 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.<br><br>4A-2 Daylight access is maximised where sunlight is limited.<br><br>4A-3 Design incorporates shading and glare control, particularly for warmer months. | 4A-1.1 Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas.<br><br>4A-1.2 In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9am and 3pm at mid-winter.<br><br>4A-1.3 A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid-winter. | 85% (6 of 7) of apartments across the development achieve the ADG recommendation for solar access.<br><br>15% of apartments (1 of 7) receive just under 2 hours of sunlight between 9am and 3pm mid-winter. This apartment has extensive glazing to maximise daylight access.<br><br>Refer to the diagrams within the Design Report for further information. | y |
| 4B<br>Natural Ventilation | 4B-1 All habitable rooms are naturally ventilated.<br><br>4B-2 The layout and design of single aspect apartments maximises natural ventilation.<br><br>4B-3 The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents. | 4B-3.1 At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed.<br><br>4B-3.2 Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line. | 100% of apartments are naturally cross-ventilated.<br><br>All habitable rooms are naturally ventilated via operable windows or sliding doors with a ventilating area not less than 5% of the floor area of room required to be ventilated in accordance with the NCC.<br><br>Cross-through apartments do not exceed 18m to glass line. | y |
| 4C<br>Ceiling Heights | 4C-1 Ceiling height achieves sufficient natural ventilation and daylight access.<br><br>4C-2 Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms.<br><br>4C-3 Ceiling heights contribute to the flexibility of building use over the life of the building. | 4C-1.1 Minimum ceiling heights for apartment and mixed-use buildings, measured from finished floor level to finished ceiling level:<br><br>Min ceiling height<br>Habitable rooms: 2.7m<br>Non-habitable: 2.4m<br>For 2 storey apartments: 2.7 main living area, 2.4m for second floor, where its area does not exceed 50% of the apartment area<br>Attic spaces: 1.8m at edge of room with a 30 degree minimum ceiling slope<br>If located in mixed use areas: 3.3m for ground and first floor to promote future flexibility of use | All apartments achieve sufficient daylight access and natural ventilation.<br><br>Ceiling heights are a minimum of 2.7m ceiling height in habitable rooms.<br><br>Bedrooms 2 and 3 in Apartment L03.02 Upper have a portion of lower ceiling height due to the lower roof at the perimeter of the top floor. These rooms benefit from extensive glazing and good district views. | y |
| 4D<br>Apartment Size and Layout | 4D-1 The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity. | 4D-1.1 Apartments are required to have the following minimum internal areas:<br><br>studio: 35m2<br>1 bedroom: 50m2<br>2 bedroom: 70m2 | Apartment sizes in the proposal are generous with all being above minimum sizes. All apartments meet the ADG minimum requirements for internal areas. | |

| section | objective | design criteria | proposal / comments | y / n |
|---|---|---|---|---|
| | | 3 bedroom 90m2<br><br>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m2 each.<br>A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m2 each. | | |
| | 4D-2 Environmental performance of the apartment is maximised. | 4D-1.2 Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms. | All habitable rooms are provided with glazing in an external wall with a minimum glass area of not less than 10% of the floor area of the room. Living areas and bedrooms are all located on the external face of the building. | y |
| | | 4D-2.1 Habitable room depths are limited to a maximum of 2.5 x the ceiling height. | Typical apartment layouts include open planned kitchen, dining, and living areas. All comply with the maximum depth of 3x the height (8.1m). Apartment layouts have been optimised to provide good natural lighting to habitable spaces. | |
| | | 4D-2.2 In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window. | | |
| | 4D-3 Apartment layouts are designed to accommodate a variety of household activities and needs. | 4D-3.1 Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (excluding wardrobe space). | All master bedrooms have a minimum area of more than 10m2 with other bedrooms being 9m2 or more. | |
| | | 4D-3.2 Bedrooms have a minimum dimension of 3m (excluding wardrobe space). | All bedrooms achieve a minimum dimension of 3m. | |
| | | 4D-3.3 Living rooms or combined living/dining rooms have a minimum width of:<br>• 3.6m for studio and 1 bedroom apartments<br>• 4m for 2 and 3 bedroom apartments. | All living rooms achieve the minimum widths. | |
| | | 4D-3.4 The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts. | All apartments achieve the minimum widths. | |
| 4E<br>Private Open Space and Balconies | 4E-1 Apartments provide appropriately sized private open space and balconies to enhance residential amenity.<br><br>4E-2 Primary private open space and balconies are appropriately located to enhance liveability for residents.<br><br>4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building.<br><br>4E-4 Private open space and balcony design maximises safety. | 4E-1.1 All apartments are required to have primary balconies as follows:<br><br>min area / min depth<br>studio: 4m2 / n/a<br>1 bedroom: 8m2 / 2m<br>2 bedroom: 10m2 / 2m<br>3+ bedroom: 12m2 / 2.4m | Private open spaces meet or exceed the minimum requirements of the ADG. | y |

| section | objective | design criteria | proposal / comments | y / n |
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| | | The minimum balcony depth to be counted as contributing to the balcony area is 1m.<br><br>4E-1.2 For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m2 and a minimum depth of 3m. | | |
| 4F<br>Common Circulation Spaces | 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments.<br><br>4F-2 Common circulation spaces promote safety and provide for social interaction between residents. | 4F-1.1 The maximum number of apartments off a circulation core on a single level is eight.<br><br>4F-1.2 For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40. | A maximum of 2 apartments per level share access to the circulation core. | y |
| 4G<br>Storage | 4G-1 Adequate, well designed storage is provided in each apartment.<br><br>4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments. | 4G-1.1 In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:<br>storage volume<br>studio 4m3<br>1 bedroom 6m3<br>2 bedroom 8m3<br>3+ bedroom 10m3<br><br>At least 50% of the required storage is to be located within the apartment. | All apartments accommodate the required storage volumes within the apartment. | y |
| 4H<br>Acoustic Privacy | 4H-1 Noise transfer is minimised through the siting of buildings and building layout.<br><br>4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments. | | Adequate building separation is provided within the development and from neighbouring buildings/ adjacent uses. Refer to the acoustic report provided with this submission for further details.<br><br>Noisier areas within the proposed development including building entries and corridors are located above each other with quieter areas above other quiet areas. Party walls will be appropriately insulated in accordance with applicable requirements. | y |

# ADG Objectives + Design Criteria

| section | objective | design criteria | proposal / comments | y / n |
|---|---|---|---|---|
| 4J<br>Noise and Pollution | 4J-1 In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings.<br><br>4J-2 Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission. | | Apartments are elevated and set back from the primary street frontages. The building fabric will incorporate insulation and good sealing to prevent noise transfer through gaps as well as other measures where necessary to attenuate noise impacts to apartments.<br><br>Sources of noise such as condenser units have been placed in the basement and behind screens to minimise any noise impact towards neighbours.<br><br>Refer to the acoustic report provided with this submission for further details. | y |
| 4K<br>Apartment Mix | 4K-1 A range of apartment types and sizes is provided to cater for different household types now and into the future.<br><br>4K-2 The apartment mix is distributed to suitable locations within the building. | | A variety of apartment types are provided with both larger and smaller units distributed throughout the building on different levels. | y |
| 4L<br>Ground Floor Apartments | 4L-1 Street frontage activity is maximised where ground floor apartments are located.<br><br>4L-2 Design of ground floor apartments delivers amenity and safety for residents. | | Ground floor apartments are orientated away from the street. A double landscape buffer with planting both outside and inside the fence line assists in providing safety and amenity. | y |
| 4M<br>Facades | 4M-1 Building facades provide visual interest along the street while respecting the character of the local area.<br><br>4M-2 Building functions are expressed by the façade. | | The building facades achieve a striking and coherent design that offers variety, interest and articulation.. Cantilevered balconies provides a column free facade whilst bringing light and views into the habitable spaces, whilst the side facades express the cantilevered form via arched openings. The Pine lane elevation feels calm and more domestic in character, responding to the transition away from the beach front buildings.<br><br>In response to the building's surroundings, the colour palette is intended to harmonise with the tones and materials prevalent within the local seaside context. . | y |
| 4N<br>Roof Design | 4N-1 Roof treatments are integrated into the building design and positively respond to the street.<br><br>4N-2 Opportunities to use roof space for residential accommodation and open space are maximised.<br><br>4N-3 Roof design incorporates sustainability features. | | The roof is integrated into the design and is set well back from the street to reduce the apparent bulk and scale of the building. It is conceived as a stepped form with a slim lower edge minimising visual scale together with a higher portion designed to scoop light into the apartment via clerestory windows. This design means the roof line is largely obscured from the North Steyne street frontage. | y |

# ADG Objectives + Design Criteria

| section | objective | design criteria | proposal / comments | y / n |
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| 4O<br>Landscape Design | 4O-1 Landscape design is viable and sustainable.<br><br>4O-2 Landscape design contributes to the streetscape and amenity. | | The roof is treated as the 5th elevations of the building, with considered layouts consolidating servicing and laying out PVs for the best spatial effect. Materials and design treatments are integrated with the building design to compliment the architectural aesthetic.<br><br>Service elements are designed to be as discreet as possible and sustainability features include 20 PV panels. . | y |
| 4P<br>Planting on Structures | 4P-1 Appropriate soil profiles are provided.<br><br>4P-2 Plant growth is optimised with appropriate selection and maintenance.<br><br>4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces. | | Diverse planting with appropriate soil profiles is to be provided with suitable plant species selected. Refer to the landscape design package for further information. | y |
| 4Q<br>Universal Design | 4Q-1 Universal design features are included in apartment design to promote flexible housing for all community members.<br><br>4Q-2 A variety of apartments with adaptable designs are provided.<br><br>4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs. | | The development achieves 100% of the total apartments in incorporating the Livable Housing Design Guideline's Silver Level universal design features. | y |
| 4R<br>Adaptive Reuse | 4R-1 New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place.<br><br>4R-2 Adapted buildings provide residential amenity while not precluding future adaptive reuse. | | No existing buildings will be retained on site. | y |
| 4S<br>Mixed Use | 4S-1 Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement.<br><br>4S-2 Residential levels of the building are integrated within the development, and safety and amenity are maximised for residents. | | The proposed development is not mixed use. | y |
| 4T<br>Awnings and Signage | 4T-1 Awnings are well located and complement and integrate with the building design.<br><br>4T-2 Signage responds to the context and desired streetscape character. | | Eaves and overhangs are designed to provide shelter from sun and rain and are closely integrated with the building design.<br><br>Signage will be limited to building identification, navigation, and statutory signage. This will be developed during detailed design to fit harmoniously with the architecture and to contribute positively to the precinct. | y |

| section | objective | design criteria | proposal / comments | y / n |
|---|---|---|---|---|
| 4U<br>Energy Efficiency | 4U-1 Development incorporates passive environmental design.<br><br>4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer.<br><br>4U-3 Adequate natural ventilation minimises the need for mechanical ventilation. | | Apartments all have screened northern frontages with orientation primarily to the east or the west, creating good opportunity for passive solar design. The thermal mass properties of the sandblasted concrete structure help regulate indoor temperatures, reducing heating and cooling costs. Natural ventilation reduces reliance on air-conditioning.<br><br>The 4th floor utilises a closed cavity system with integrated blinds. This system maintains a more consistent internal temperature with minimal energy consumption and will be further aided with cross ventilation from the clerestory windows | y |
| 4V<br>Water Management and Conservation | 4V-1 Potable water use is minimised.<br><br>4V-2 Urban stormwater is treated on site before being discharged to receiving waters.<br><br>4V-3 Flood management systems are integrated into site design. | | Potable water use is minimised through specification of low- use fittings. Apartments are individually metered. Low-water use species are proposed for landscaped areas.<br><br>Flood management is addressed via locating the ground level at the flood planning level (+6.27m). The basement is protected by tanking and a ramp crest set at the 1:100 year flood level (+5.97m) with a 300 high flood gate used above this to achieve the flood planning level.<br><br>Refer to the flood and civil engineering reports for further details. | y |
| 4W<br>Waste Management | 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents.<br><br>4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling. | | Refer to the Waste Management report. | y |
| 4X<br>Building Maintenance | 4X-1 Building design detail provides protection from weathering.<br><br>4X-2 Systems and access enable ease of maintenance.<br><br>4X-3 Material selection reduces ongoing maintenance costs. | | The proposed materials are selected to withstand the demands of the environment and to weather gracefully. Painted and applied finishes are minimised. Openings are protected by overhangs and water is designed to be collected and discharged in a controlled and discrete manner.<br><br>Glazing can be cleaned from either inside apartments, or at ground level via a reach and wash system.<br><br>The proposed materials include sandblasted concrete and terrazzo, with an aluminium glazing system. These materials are robust and durable and require minimal maintenance. | y |

Yield

# Yield

# Yield and ADG

## yield schedule

**summary**

| | sqm |
|---|---|
| site area | 636 |
| max FSR | 1.5 |
| max GFA | 954 |
| achieved FSR | 1.93 |
| achieved GFA | 1227 |
| balconies | 359 |

**apartments**

| | no. | mix % |
|---|---|---|
| 2B/2B | 2 | 29% |
| 3B/3B | 2 | 29% |
| 3B/4B | 2 | 29% |
| 4B/4B | 1 | 14% |
| total: | 7 | 100% |

**adg & adaptables**

| | no. units | target | achieved |
|---|---|---|---|
| solar | 6 | 80% | 86% |
| no sun | 1 | <15% | 14% |
| cross vent | 7 | 60% | 100% |
| adaptable | 2 | 25% | 29% |
| liveable homes | 7 | 100% | 100% |

# Yield

# Parking

## yield schedule

**car parking**

| | no. units | rate | required | provided |
|---|---|---|---|---|
| 2B | 2 | 1 | 2 | 2 |
| 3B | 4 | 2 | 8 | 8 |
| 4B | 1 | 2 | 2 | 2 |
| visitor | | 20% | 1.4 | 1 |
| acc | | | 1 | 1 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| total | | | 13.4 | 14 |

**bike parking**

| | rate per unit | required | no. |
|---|---|---|---|
| resi | 2 | 14 | 14 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| total | | | 14 |

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