45 McLaren St North Sydney

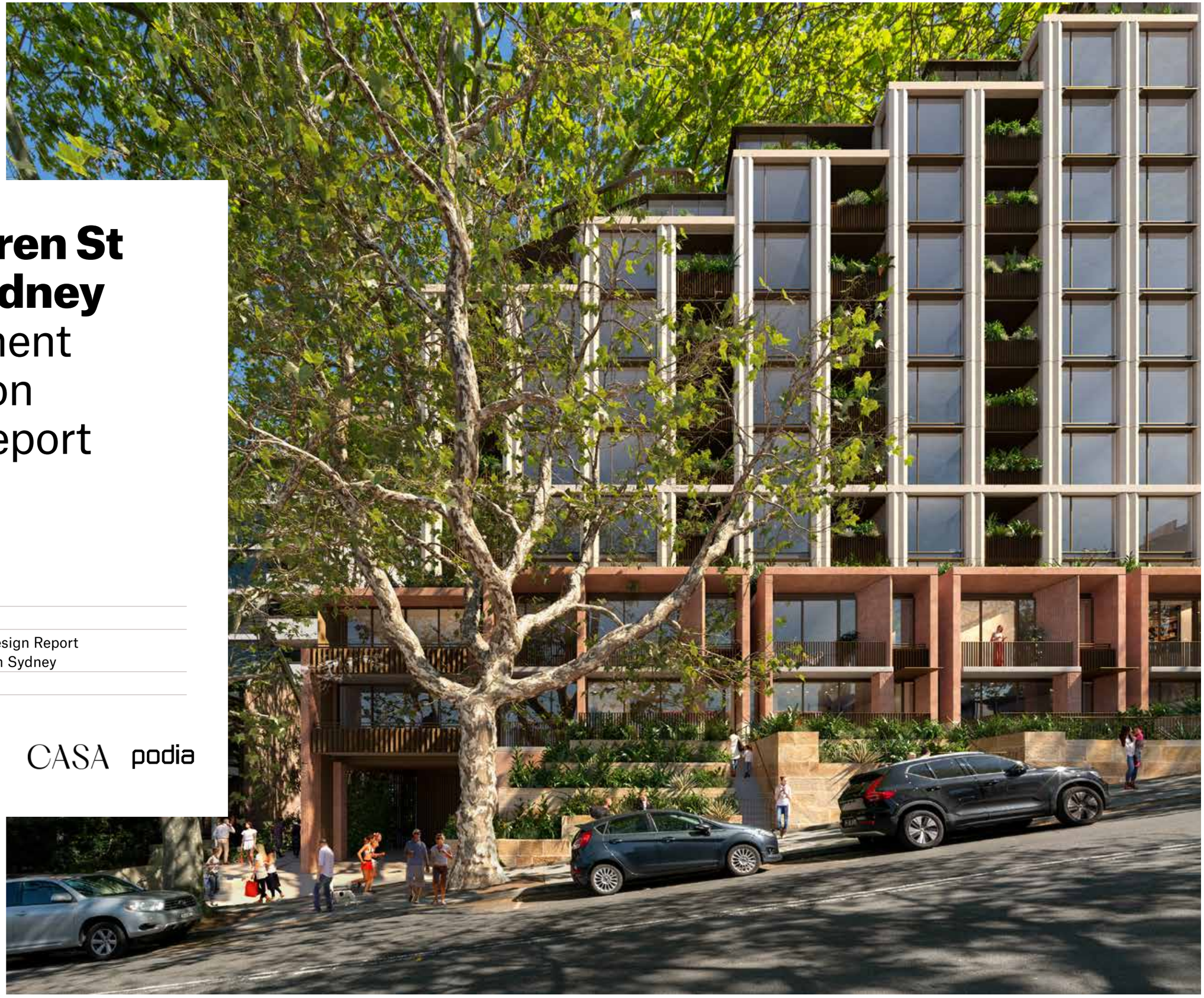
Development Application Design Report

Prepared for CASA

Development Application Design Report
for 45 McLaren Street, North Sydney

June 2023

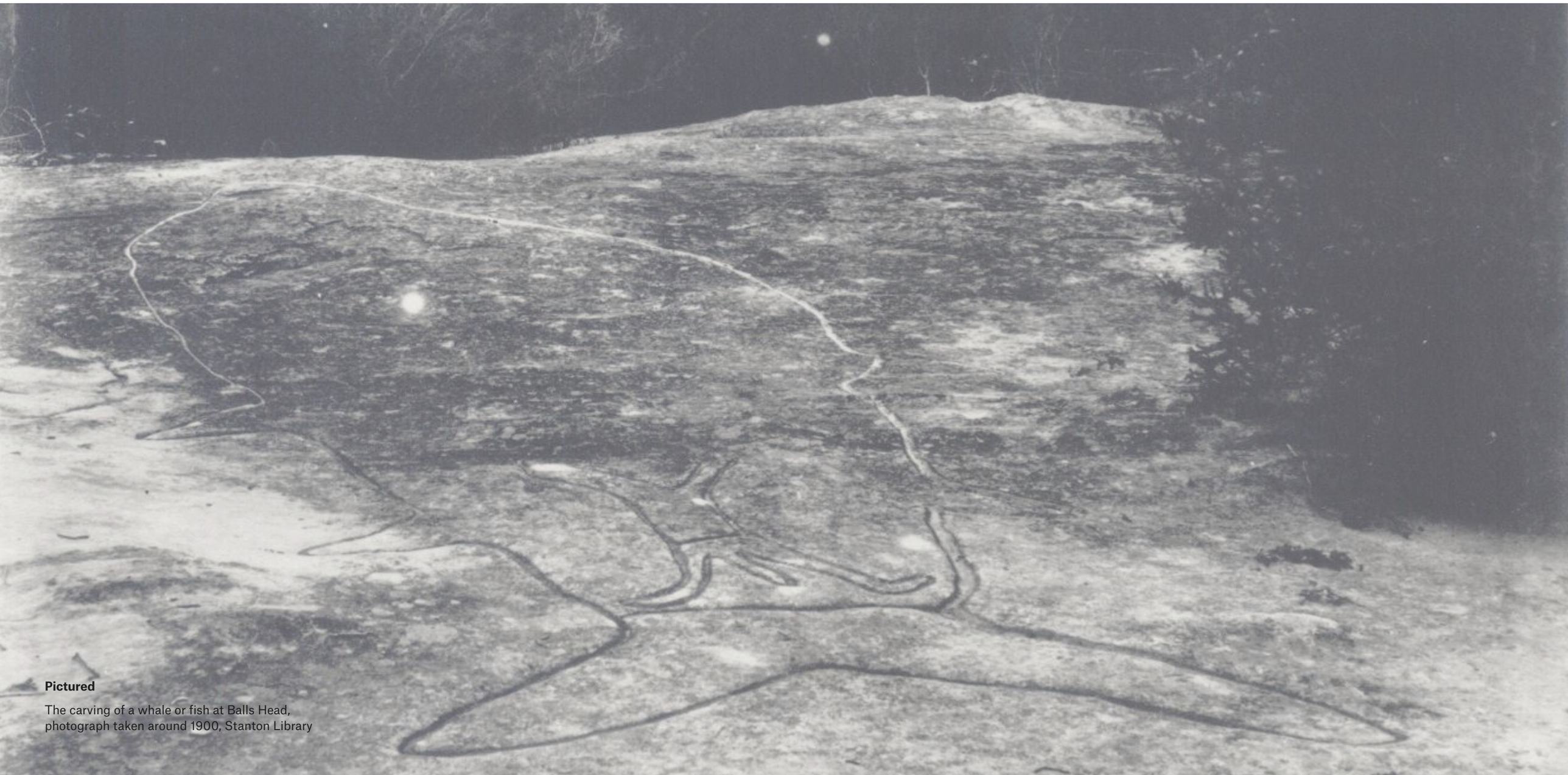
BATESSMART CASA podia



We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past, present and emerging. This project is on the land of the Cammeraygal of the Eora Nation.

Common Ground First Nations

www.commonground.org.au



Pictured

The carving of a whale or fish at Balls Head, photograph taken around 1900, Stanton Library

Transformative thinking for the future city.

Bates Smart is a city-making design practice. We combine architecture, interior design and urban design to create places and spaces that improve people's lives. We have been transforming Australian cities for 165 years, improving our surroundings, our opportunities, our growth and our quality of life.

Client

CASA & PODIA

Consultant Team

Bates Smart gratefully acknowledge the consultant team who were integral to the preparation of this Development Application:

Architecture + Urban	Bates Smart
Planning	URBIS
Structure	RBG
Services	Neuron & IGS
Civil	RBG
Landscape	360 Degrees
Fire	ELab
Traffic	Impact
Waste	Impact
Access	Design Confidence
BASIX	IGS
BCA	McKenzie Group
Acoustic	ELAB
Flooding	RBG
Arborist	Australis Tree Management

Project Number	S12400.A

Nominated NSW Registered Architects

Philip Vivian Reg. No. 6696 / Simon Swaney Reg. No. 7305 / Guy Lake Reg. No. 7119

Disclaimer

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Contents

1.0 Introduction

This Design Report has been prepared by Bates Smart Architects on behalf of Podia & CASA and forms part of a Development Application to be submitted to North Sydney Council.

It describes the proposed urban design and architectural response for the site known as 45 McLaren Street located within the North Sydney CBD.

In summary, the development proposes:

— Total 11,036 m^2 GFA (FSR 6.16:1), comprised of 8903 m^2 Residential GFA, 1818m^2 Non-Residential GFA and 315m^2 Residential Amenity

— 71 residential apartments

— A public through site link connecting Harnett Street and Walker Street

— A basement carpark over 2 levels

— Communal roof terrace at Level 08

SEPP65 Verification Statement

We confirm that Guy Lake of Bates Smart Architects directed the design of the Development Application and that Mr. Lake is registered as an architect in accordance with the Architects Act 2003.

We confirm that in our professional opinion the proposed design is consistent with the design principles set out in State Environmental Planning Policy 65 – Design Quality of Residential Flat Development and has been designed with regard to the Apartment Design Guide (ADG).

"Timeless, Luxury, Sanctuary.
... providing residents with a comfortable, timeless sanctuary they can call home, away from the bustling city outside."

--- Podia & CASA

Our vision is for a sustainable, mixed-use building that provides exceptional dwellings which capitalise on the site's location between North Sydney's dense and thriving CBD and North Sydney's Civic Precinct.

Thoughtful design and careful planning underpin generous homes with excellent amenity, including high levels of daylight, cross ventilation, district views, expansive terraces and abundant landscaping.

The stepped form with staggered landscaped terraces transition between the low-mid scale residences located south of the site, to the tall residential towers directly north of the site, and preserve solar access to the future Ward Street Plaza.

The podium design complements the site's lower-scale density, fine-grain heritage and leafy character along Walker Street, as well as the mixed-use character along McLaren Street. Importantly, the lower levels of the building will provide positive place making initiatives to activate McLaren, Walker and Harnett streets as well as the expanded and improved through-site link.

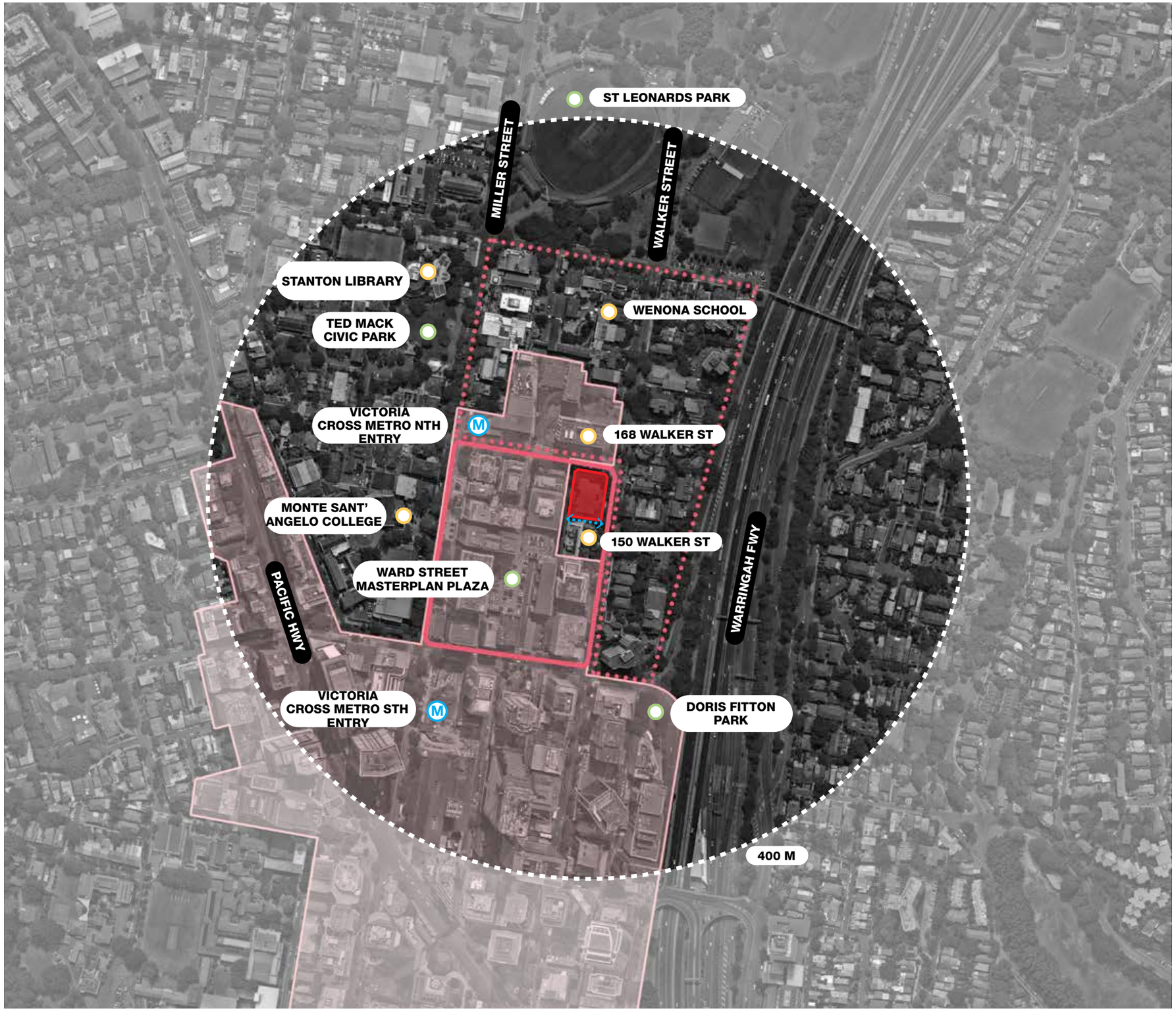
2.0

Site and Context Analysis

2.1 Site Location

The site is located on the corner of Walker Street and McLaren Street in North Sydney, the transition point between North Sydney CBD, the Ward Street Masterplan and the North Sydney Civic Precinct. The site has frontages to Walker, McLaren, and Harnett streets, with a pedestrian through-site link to the south of the site, that connects Walker and Harnett streets.

It is less than 200m from the Victoria Cross Metro north entry, less than 400m from the Victoria Cross Metro south entry, and is directly opposite the recently D.A. approved residential tower, 168 Walker Street.



Key

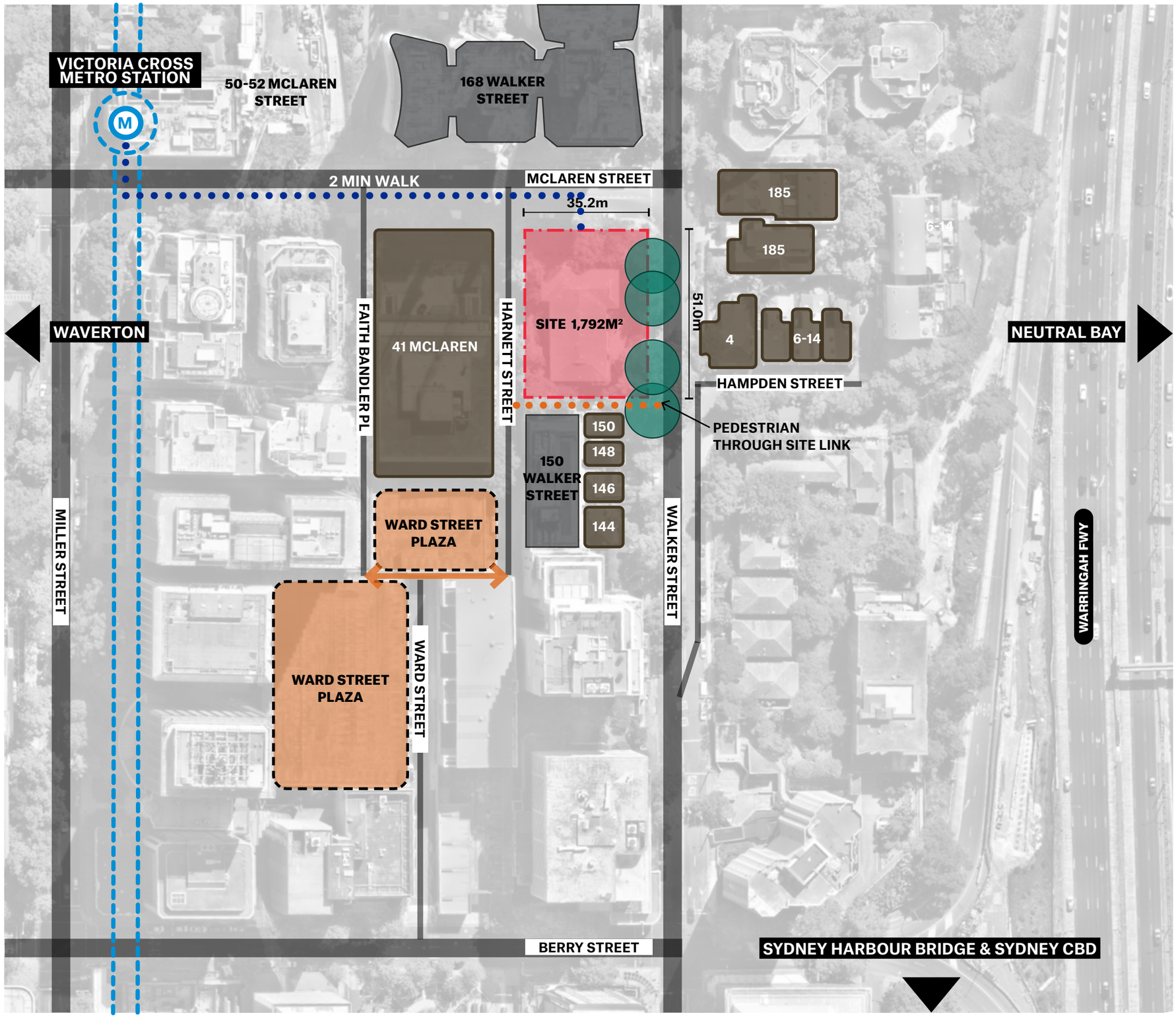
- Site
- North Sydney Centre
- Ward Street Masterplan
- Civic Precinct Transition Zone
- Through-Site Link

2.2 Site Analysis

The 1,792m² site has a primarily east-west orientation. Currently zoned as High Density Residential (MU1) under the North Sydney LEP 2013.

The local area currently has a mix of 2-9 storey multi-residential buildings and single storey houses. Set back frontages and large street trees along Walker Street provide the main character of the area.

The site is not within a conservation area, however there are a number of heritage listed items in the vicinity, particularly 41 McLaren St to the West and heritage houses to the South.



Key

- Future Mid Block Link
- Significant Trees
- Major Roads
- Minor Roads
- Existing Open Space
- Future Open Space
- Site
- CBD Boundary
- Metro
- Heritage Site

2.3 Site Photos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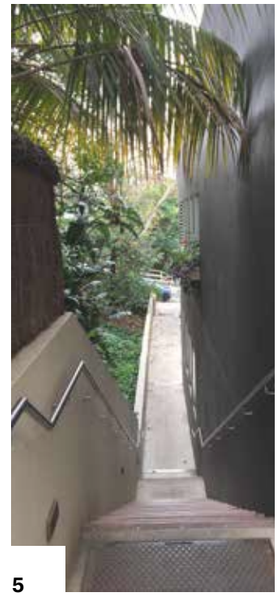
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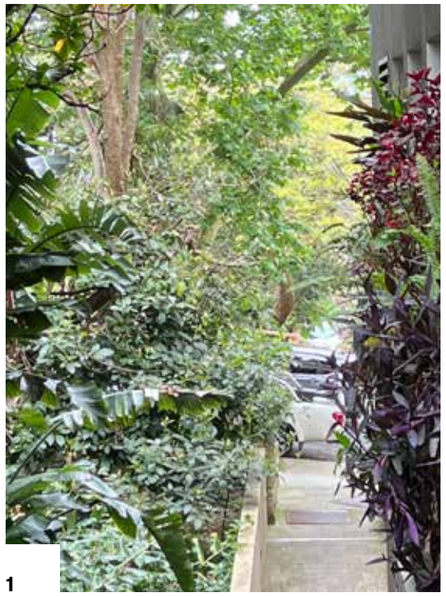
Principle 1: Context and neighbourhood character

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.
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 including the adjacent sites, streetscape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.

2.4 Character

The area has a rich character from residential scale buildings with brick and sandstone cottages, pastel toned rendered brick walls to the evolving character of taller apartment buildings.

From the ornate scrollwork of the wrought iron balconies to the intricate carvings on the window frames. The proposed design is heavily inspired by the materiality and finess of its surrounding with a focus on incorporating the fine details that make them so unique and special.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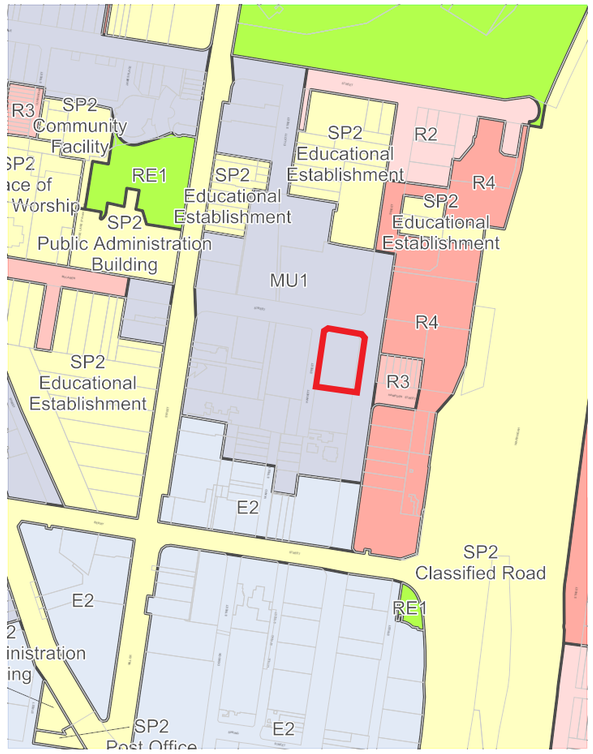
Pictured

1. ‘Gully landscape’ of the through-site link
2. Heritage ornament, fine detail
3. Greys and greens of endemic flora
4. Wendy Whitely’s Secret Garden
5. Heritage Brick
6. Repetition, pastel tones, articulated walls and parapets
7. Sandstone, shutters, domestic elements
8. Angular, repetitious, softened by landscape

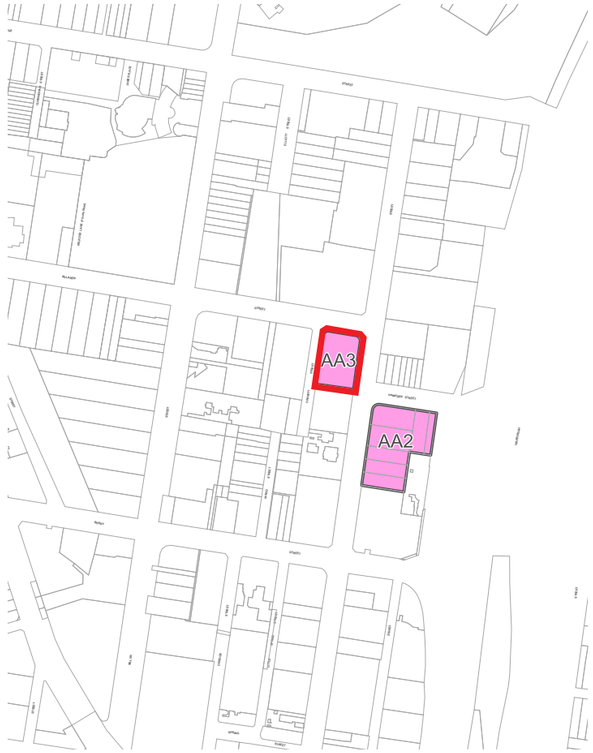
2.5 Planning Context
Key LEP Controls

North Sydney Local Environmental Plan 2013
Source: NSW Planning Portal



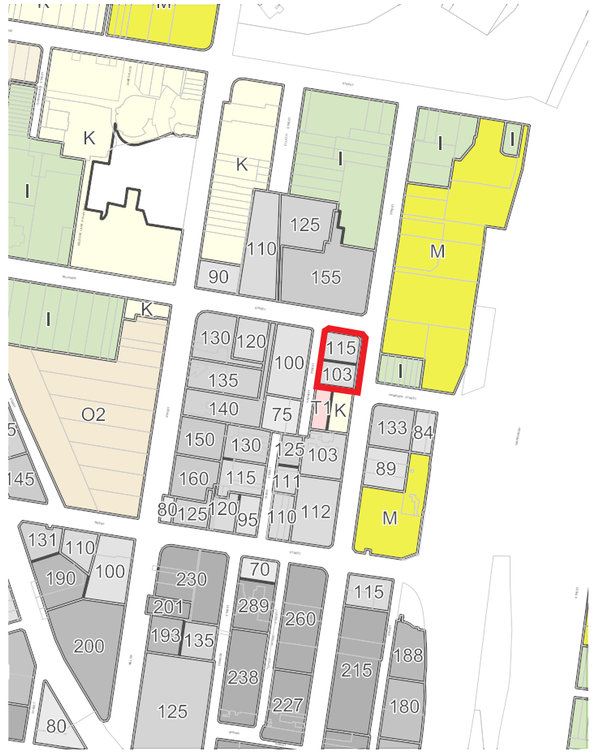
Land Zoning

The site is zoned as High Density Residential (MU1) under the North Sydney LEP 2013.



Floor Space Ratio

The maximum residential floor space ratio is 6.25:1 and commercial floor space ratio is 1:1 based on the North Sydney LEP 2013.



Height of Building

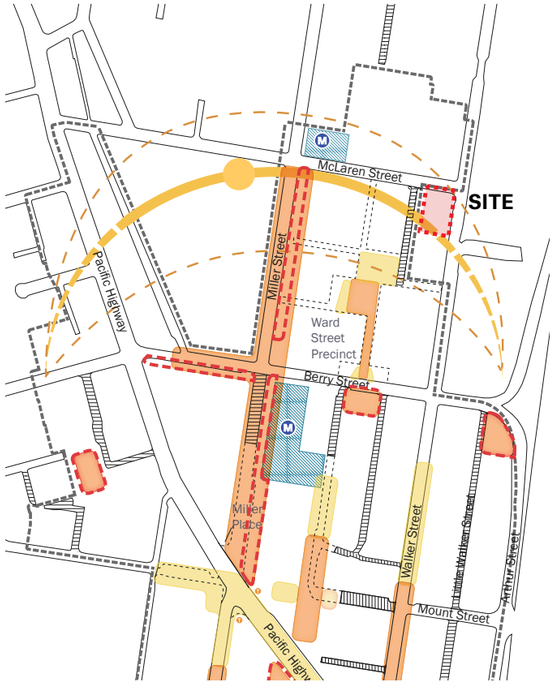
The site has a maximum building height of RL115 to the northern portion and RL103 to the southern end.

Heritage

No part of the site is listed in the North Sydney LEP 2013 as a Heritage Item. However the lots directly south, east and west of the site are local-heritage listed.

2.6 Planning Context

North Sydney Public Domain Strategy



Sun access to key public spaces and adjacent conservation areas

The North Sydney Public Domain Strategy, highlights key public domain and consrvation area that must retain solar access:

good solar access areas in spring, autumn and summer only for the north plaza

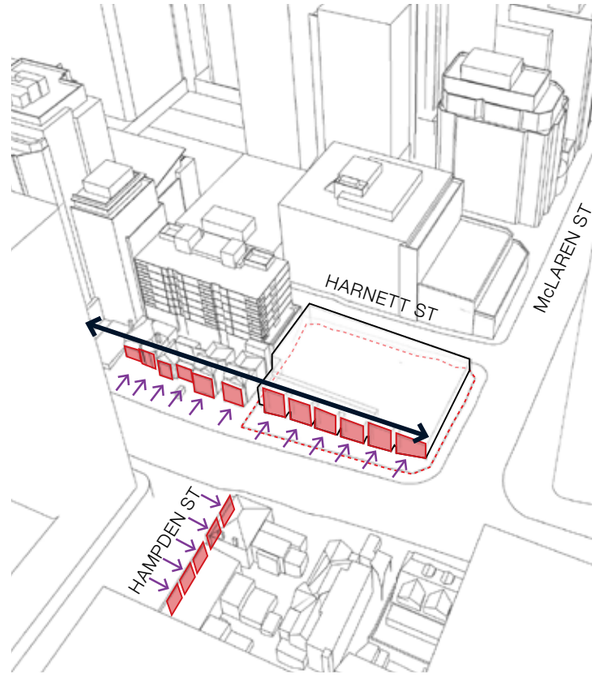
good solar access areas all year round to the central plaza

Landscape

The public domain strategy has identified opportunities for further landscaping, planting and parks to improve the overall CBD environment and maintain the green, natural character of the area.

Links and Open Space

Public domain improvements and a new through-site link, tying in this key corner site with the transformation of the Ward Street Precinct, fulfilling Council's vision to activate the Precinct and create a safe, comfortable and legible pedestrian network



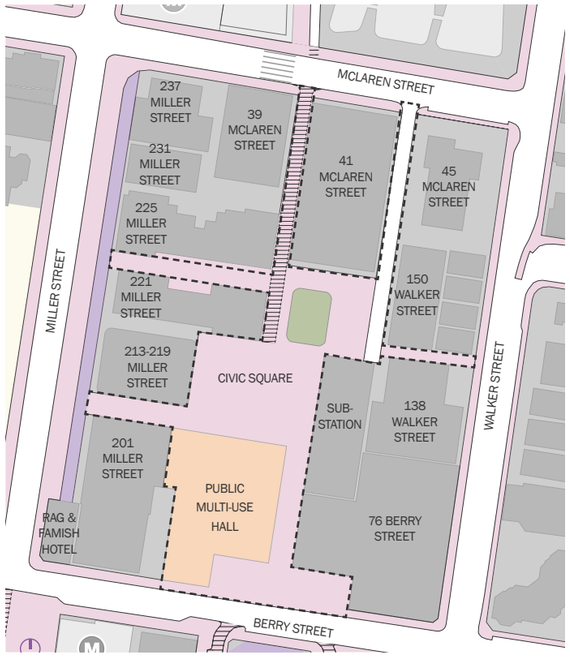
Setbacks and Street Frontage Heights

The proposal has a 3 storey podium with nil setback and 3m setback to upper levels in accordance with council feedback and the DCP provisions.

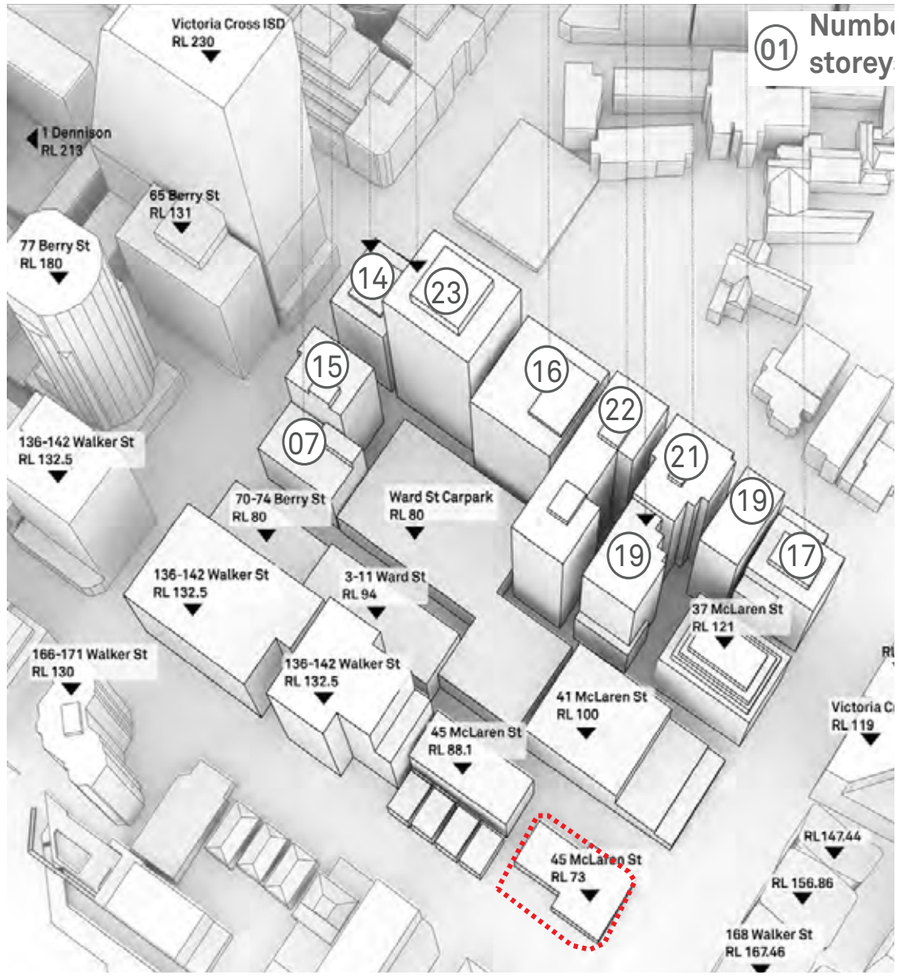
2.7 Planning Context
Ward Street Plaza

The Public Domain Design for the Ward Street Masterplan incorporates the Ward Street Plaza at the centre of the masterplan, as well as a pocket park immediately north of the Plaza.

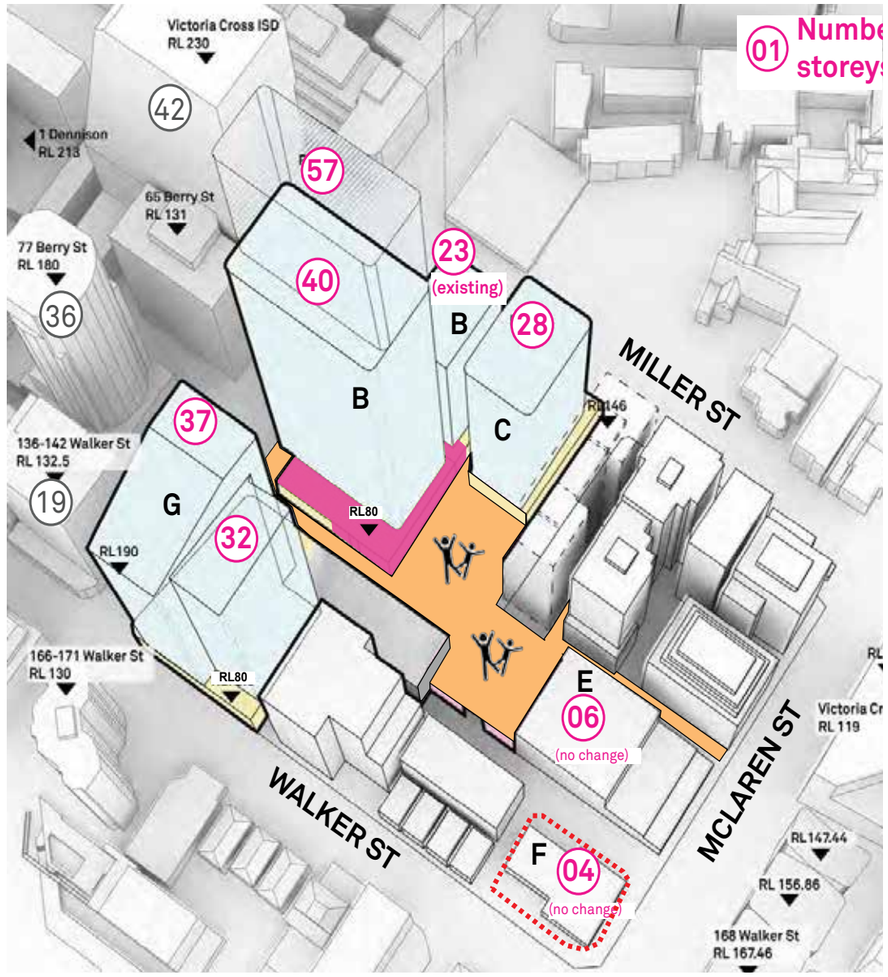
The site aims to build on the strategy of strengthening the building uplift created by the Victoria Cross Metro through a mixed-use offering, whilst still providing good solar access to the centra plaza.



Proposed Masterplan Overview



Existing Masterplan Built Form



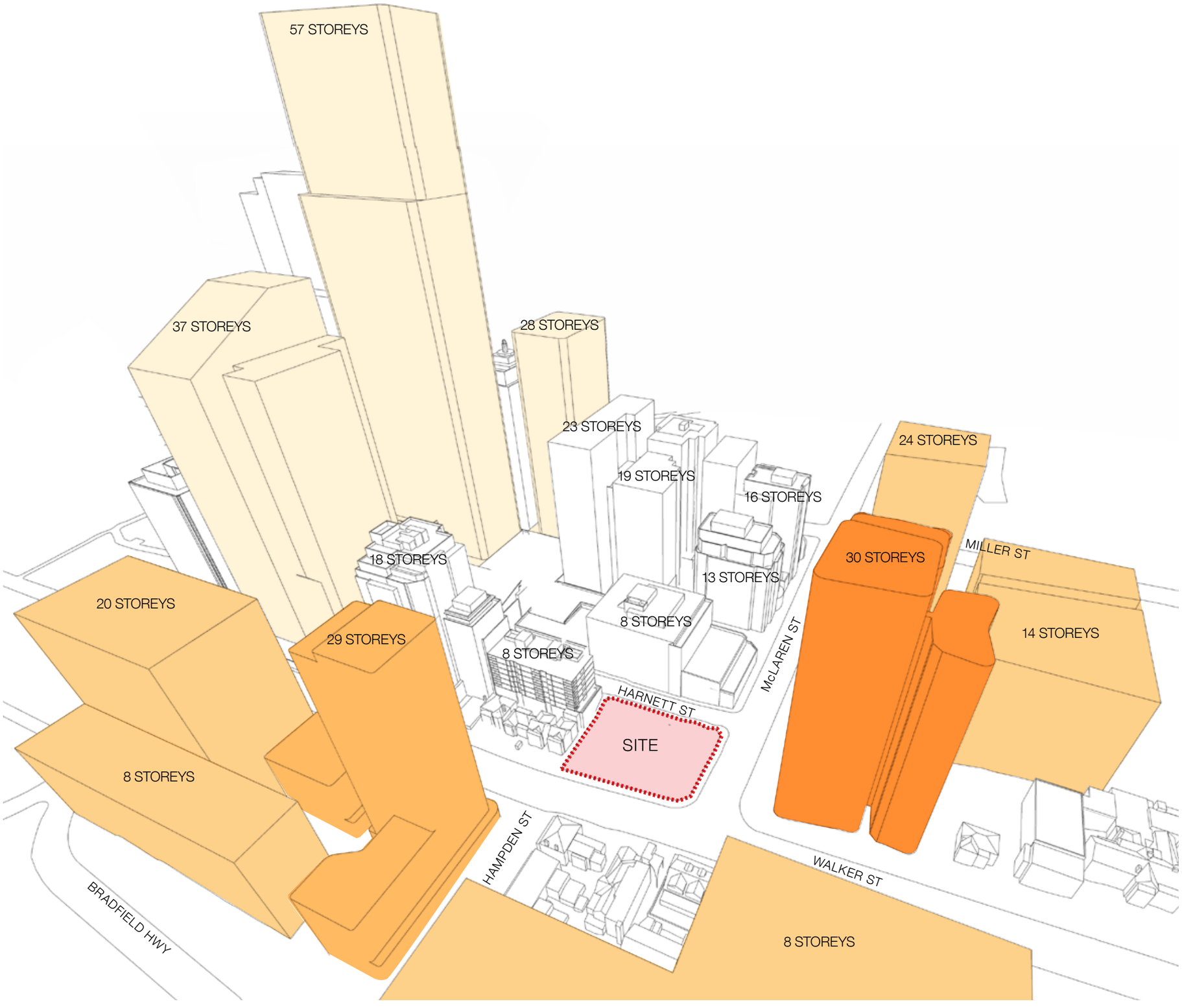
Proposed Masterplan Built Form

2.8 Planning Context
Site Future Context

The height of the proposal is consistent with its surrounding context and fits within the broader Ward Street Masterplan Precinct.

The building massing addresses the need to maintain solar access to the Central Square of the future Ward Street Plaza from 9am throughout the year, whilst creating a transition in height between the tower at 168 Walker Street and the residential apartments at 150 Walker Street.

A detailed consistency test of the planning proposal follows.



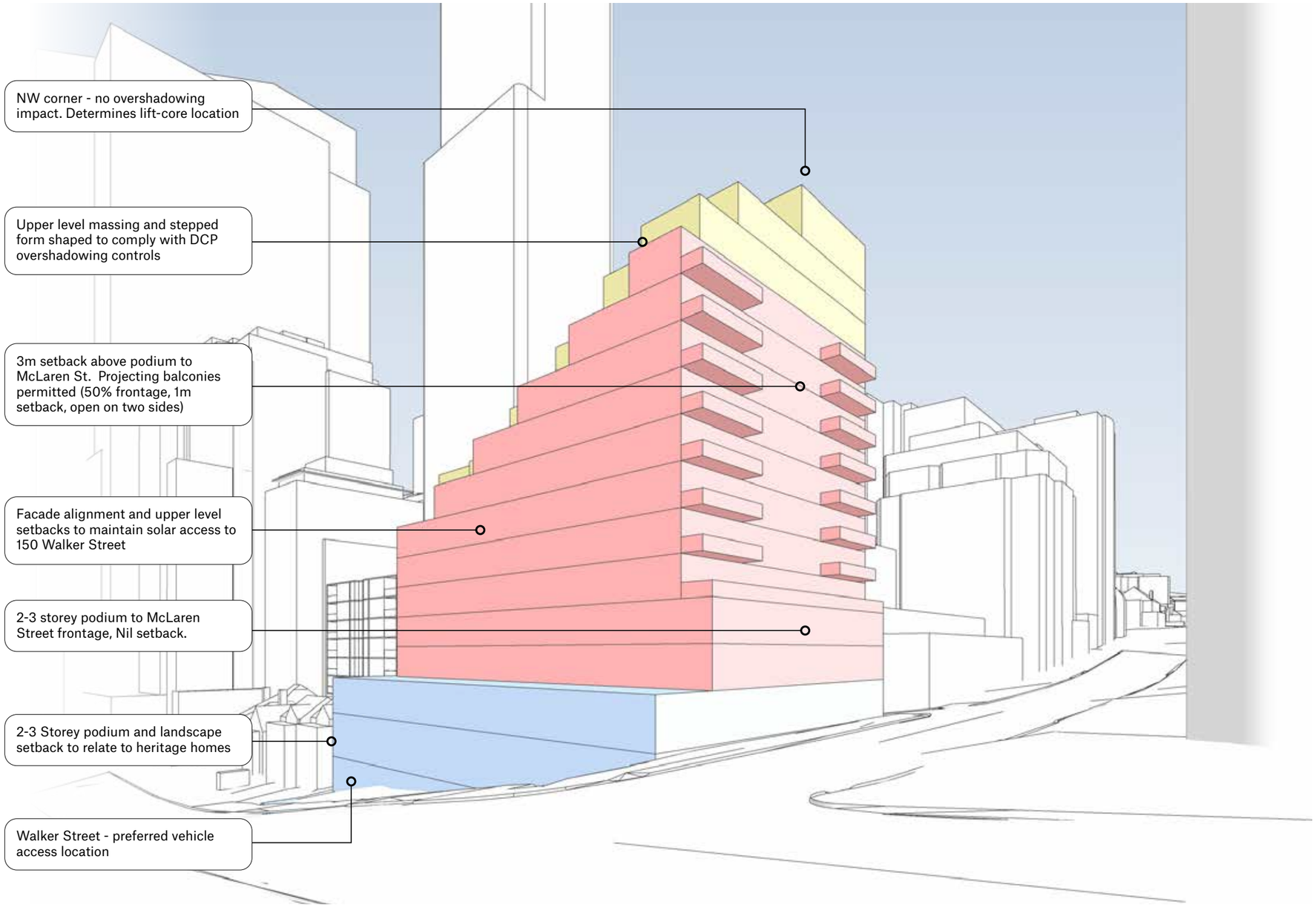
KEY

- ward street masterplan
- civic precinct study
- planning proposal - post gateway
- approved DA

2.9 Planning Context
Planning Proposal Massing

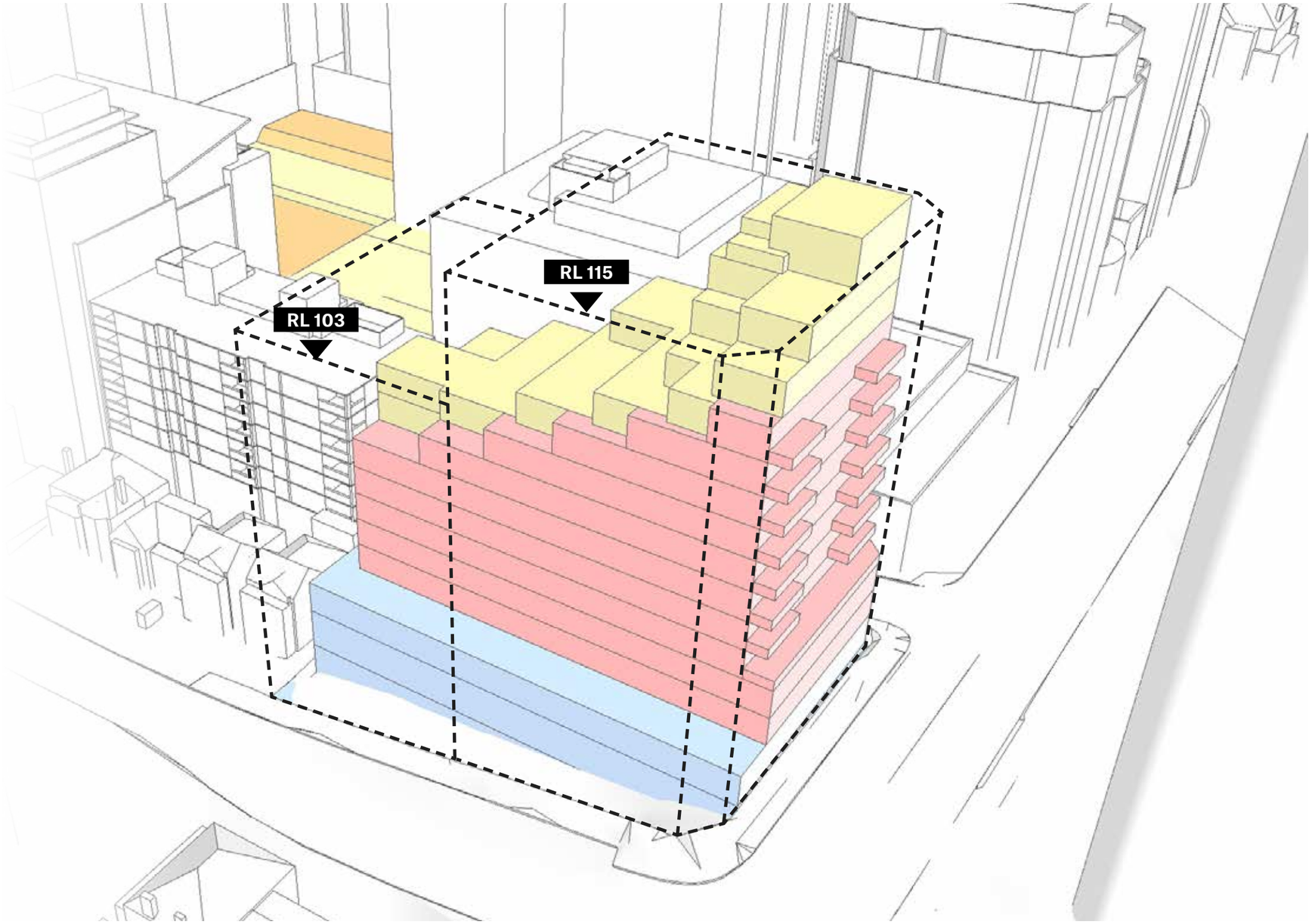
Allowable building envelope

The result of the planning proposal is an envelope which is shaped by ensuring the building allows neighbouring properties to continue receive solar access as we all ensuring the future plaza is not overshadowed.



2.10 Planning Context
LEP Height

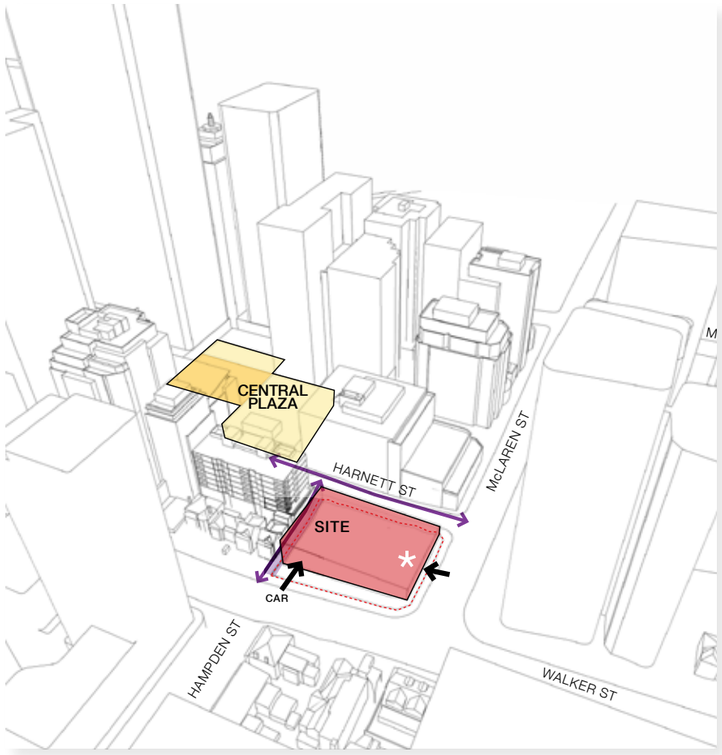
The proposed building sits fully within the LEP building heights.



3.0

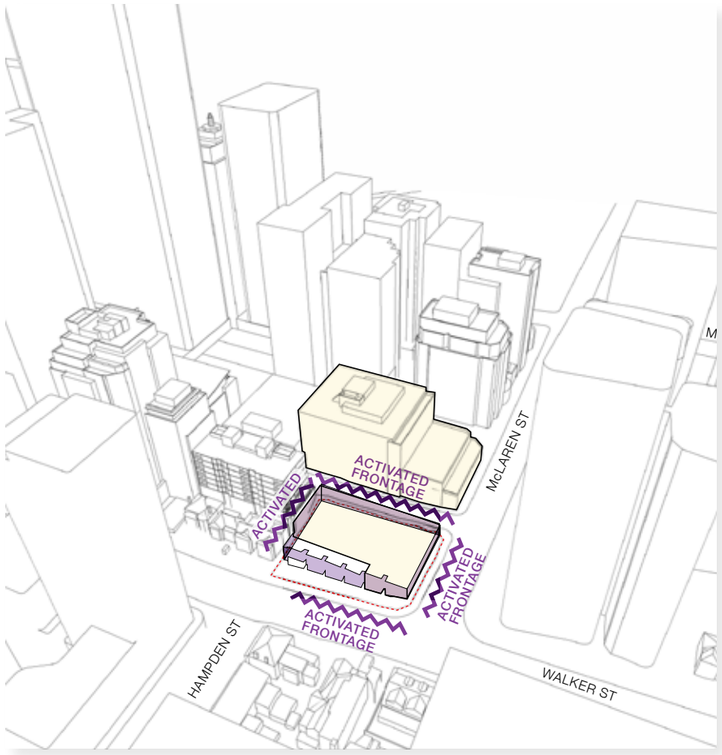
Massing Approach

3.1 Massing Approach



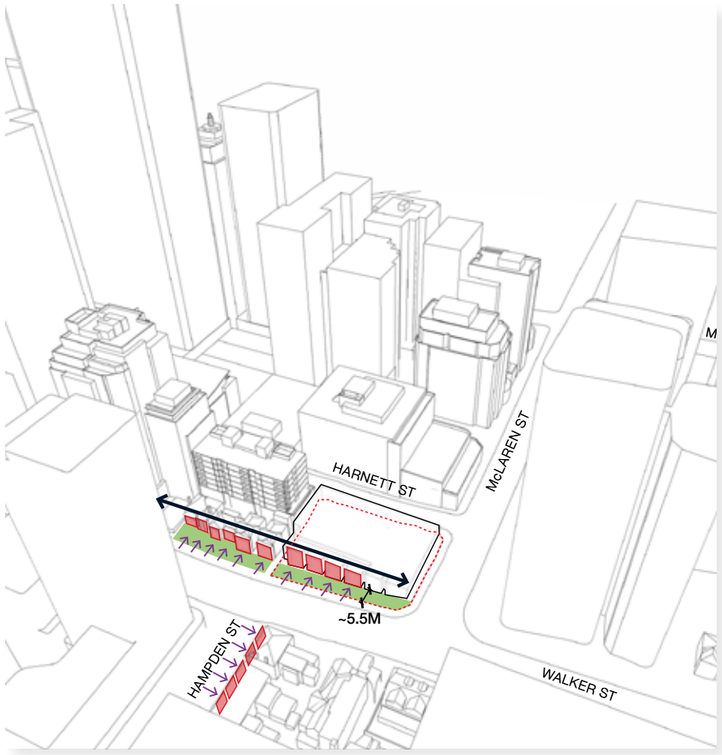
Access, arrival and linkages

- New through site linkage to future Plaza
- Primary residential entry on McLaren Street
- Vehicle access on Walker Street. Low point of site and acknowledged by Council as preferred site access frontage.
- Complexities relating to existing trees and flooding being addressed in concept design



Land-use and activations

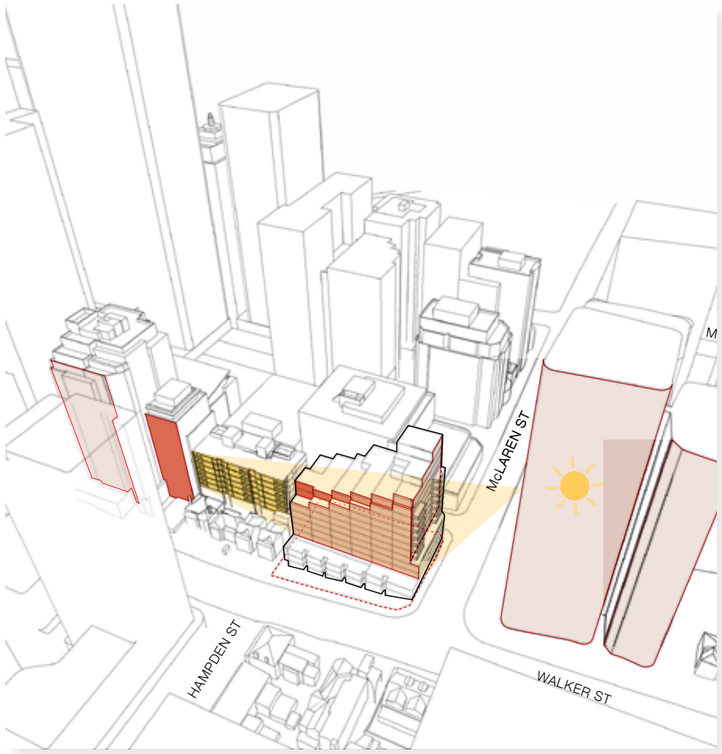
- Requirement for minimum 1:1 FSR non-residential
- Active frontages (retail, building entries, glazing etc) to streets and through site link
- Concept design priorities commercial uses in base of building with frontage to McLaren Street and Harnett St (adjacent existing commercial building)



Context, heritage + setback

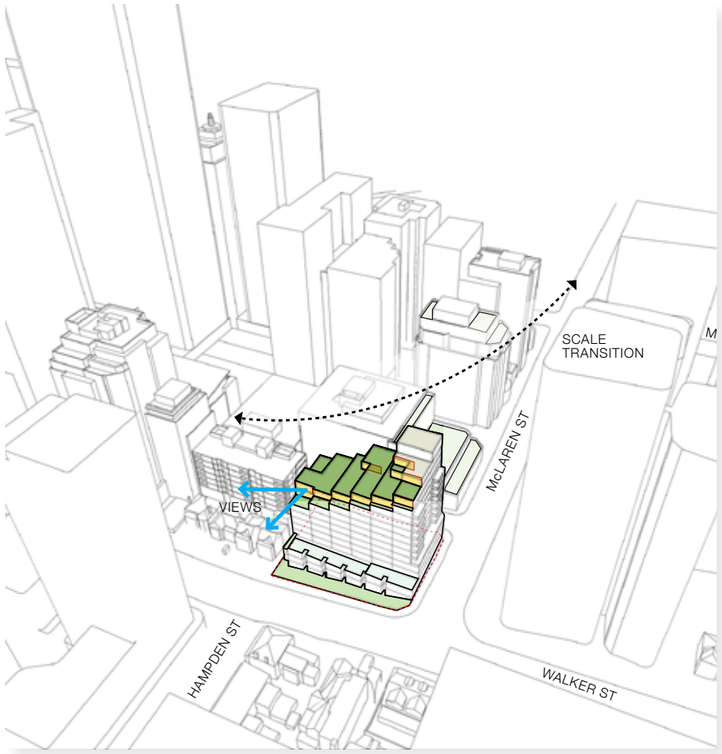
- Landscaped setback and building form to respond to adjacent heritage houses
- 2-3 storey podium required along Walker Street
- Provides opportunities for larger two-storey terrace homes with front gardens and street entries

3.1 Massing Approach



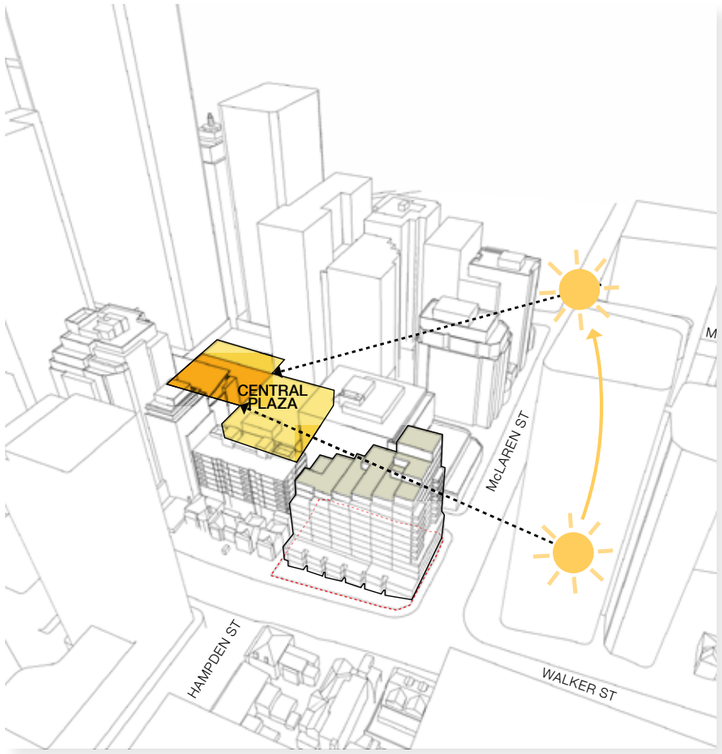
Setbacks and solar access

- Eastern facade is the only facade that can receive the 2hours of sun required by the ADG
- Facade alignment relates to varied streetwall along Walker Street
- Upper levels step back to allow solar access to adjacent apartment building



Stepped form, terraces and views

- Stepped form provides scale transition between lower-scale buildings and allows solar access to future Ward St Precinct Plaza.
- Opportunities for unique apartments with generous private landscaped terraces
- Upper level units oriented toward the better views to the east and south-east



Solar access to Ward St Plaza

- Council requirement that development preserves solar access to future Ward Street Precinct Plaza
- No overshadowing to Central Plaza after 9.05am at any time of the year
- Minor shadow increase to northern plaza
- This control substantially determined the maximum development envelope.

3.2 Overshadowing

As demonstrated through the following shadow diagrams, the building seeks to provide good solar amenity to the public spaces proposed in the Ward Street Masterplan.

The Central Plaza (highlighted in orange) has no additional overshadowing.

The Northern Plaza (highlighted in yellow) is partially overshadowed by the proposal between 9.00am-10.08am on the winter solstice, the lowest sun angle throughout the year.

Key

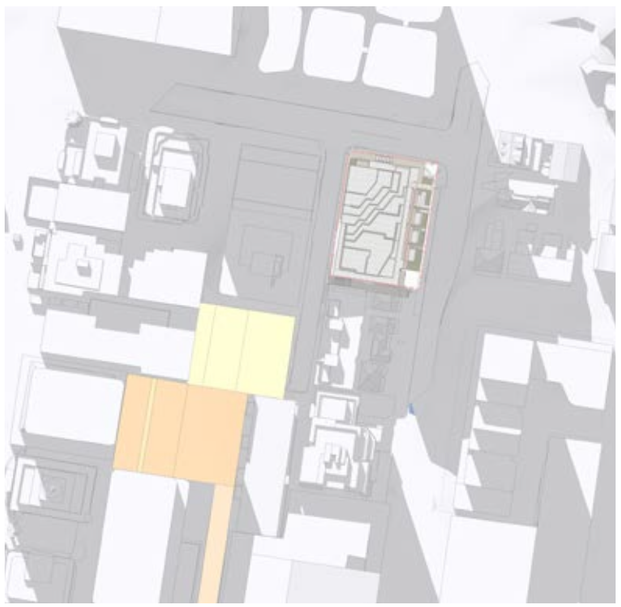
- Shadow cast by the proposed built form
- Existing shadow by surrounding building
- Proposed Public space (Northern Plaza)
- Proposed Public space (Central Plaza)

9am

10am

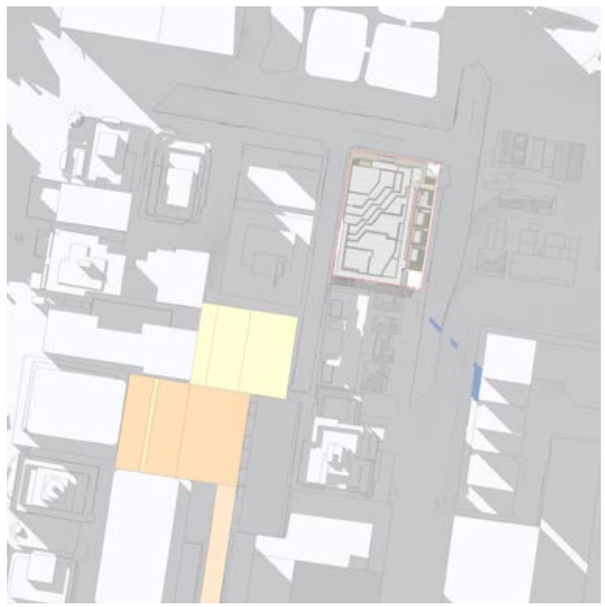
11am

12pm



1pm

2pm



3pm

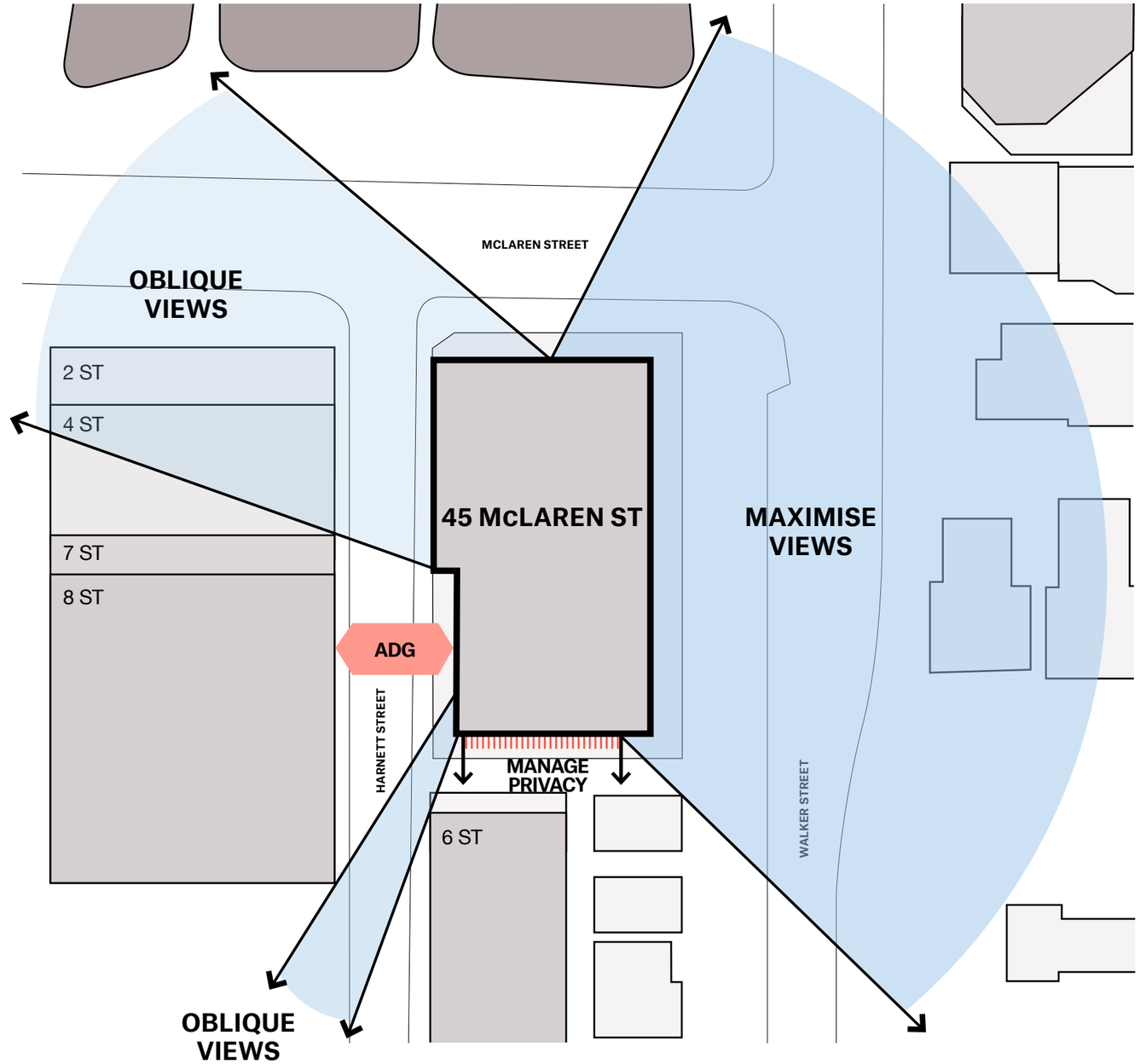
3.4 Views + Visual Privacy

The building design has been developed to ensure visual privacy between neighbouring buildings. The diagram to the right illustrates the main strategies to manage visual privacy.

To avoid having apartments with a primary aspect to the west, the facade has been designed to direct view towards north west and south west oblique views.

Within the apartments, the main living spaces have been located to have a primary aspect to the east and west, away from the neighbouring buildings.

The north and south elevations have a high degree of solidity. Where windows are proposed on the north and south façades, incorporation of reeded glass help to mitigate overlooking and provide visual privacy between neighbouring properties. Angled louvre screens are also incorporated to direct views away from the neighbouring buildings.



4.0

Design Description

4.1 Overview

Consistent with Council's vision for the precinct, the design proposes a mixed-use building comprising boutique residential dwellings and a variety of non-residential uses to contribute to the commercial and public life of North Sydney.

The building form responds carefully to existing context, including significant level changes, adjacent heritage buildings, and the future Ward Street Precinct Plaza. The form is sculpted to ensure solar access to the future plaza whilst creating unique apartments with expansive landscaped terraces to the upper levels.

A total of 71 apartments are provided in three distinct segments of the building including

- Generous two-level terrace homes facing Walker Street, providing generous family homes that relate to the adjacent heritage houses
- A variety of 1,2 and 3 bedroom units ranging from 52 -152sqm in levels 1-6 of the tower;
- 14 unique homes in levels 7-12, providing dual aspect units, generous accommodation, views, and expansive terraces

Principle 2: 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. 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.

Pictured

Building Viewed from McLaren Street

4.2 Upper Ground

The primary address point to the building is located on McLaren Street at the Upper Ground Floor level.

Adopting a classic and timeless approach, the residential entry is elegant, understated, and integrated with the vision for up-market retail tenancies located on each corner.

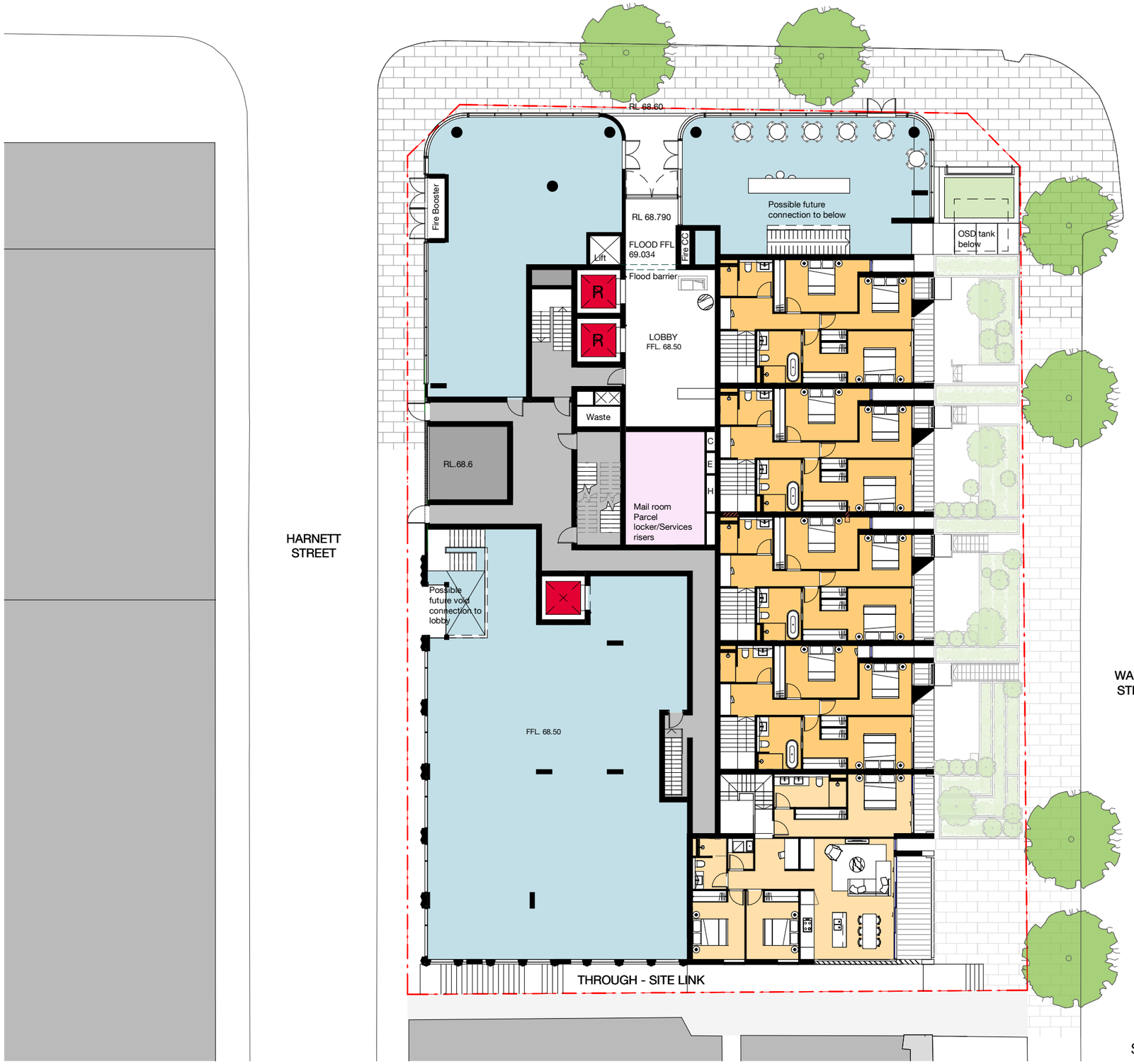
A continuous awning provides weather protection to the retail and lobby.

The building is setback 1m along Harnett Street, providing a more generous footpath and access to a modest commercial lobby providing access to commercial tenanices facing Harnett Street and stacked over three levels.

A new substation, egress, and fire booster are located along Harnett Street, carefully integrated into the façade design and located to meet regulatory requirements whilst prioritising high quality active frontages to primary streets.

Existing topography is such that the through site link and Walker Street fall away quickly and are accessed on the level below.

Principle 7: 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.
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.



4.2 Upper Ground
McLaren Street

On the McLaren Street frontage, the building presents as a 3 storey podium with the residential entry and small format retail tenancies providing a high quality street activation to McLaren Street.

Pictured

1. Residential Lobby
2. Residential Lobby front view

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4.3 Lower Ground
L00

Level 00 includes a large-format commercial tenancy located along Harnett Street (set down below the street level), four 2-storey terraces homes and one affordable unit facing Walker Street.

The commercial floorspace is nestled into the ground, with back-of-house areas located in the north-west and flexible commercial space in areas that benefit from good natural daylight from the west and south.

The four Terrace Homes recall the Victorian terrace houses still found in the locality, each enjoying a ‘walk-up’ entry from the street and generous front gardens. Their scale and modulation establish a strong contextual relationship with the heritage dwellings to the south. The lower levels of the terraces are dedicated to living areas to promote passive surveillance and activation along Walker Street.

4.3 Lower Ground
Harnett Street

Commercial space located over three levels with lobby and access from Harnett Street. The robust expression and warm coloration presents as a little gem to be found down this side street.

The lower commercial level can be accessed via an entry on the through-site link or through the commercial lift via the Harnett Street lobby.

Pictured

1. Commercial entry and canopy on Harnett St
2. Elevational view of the commercial space

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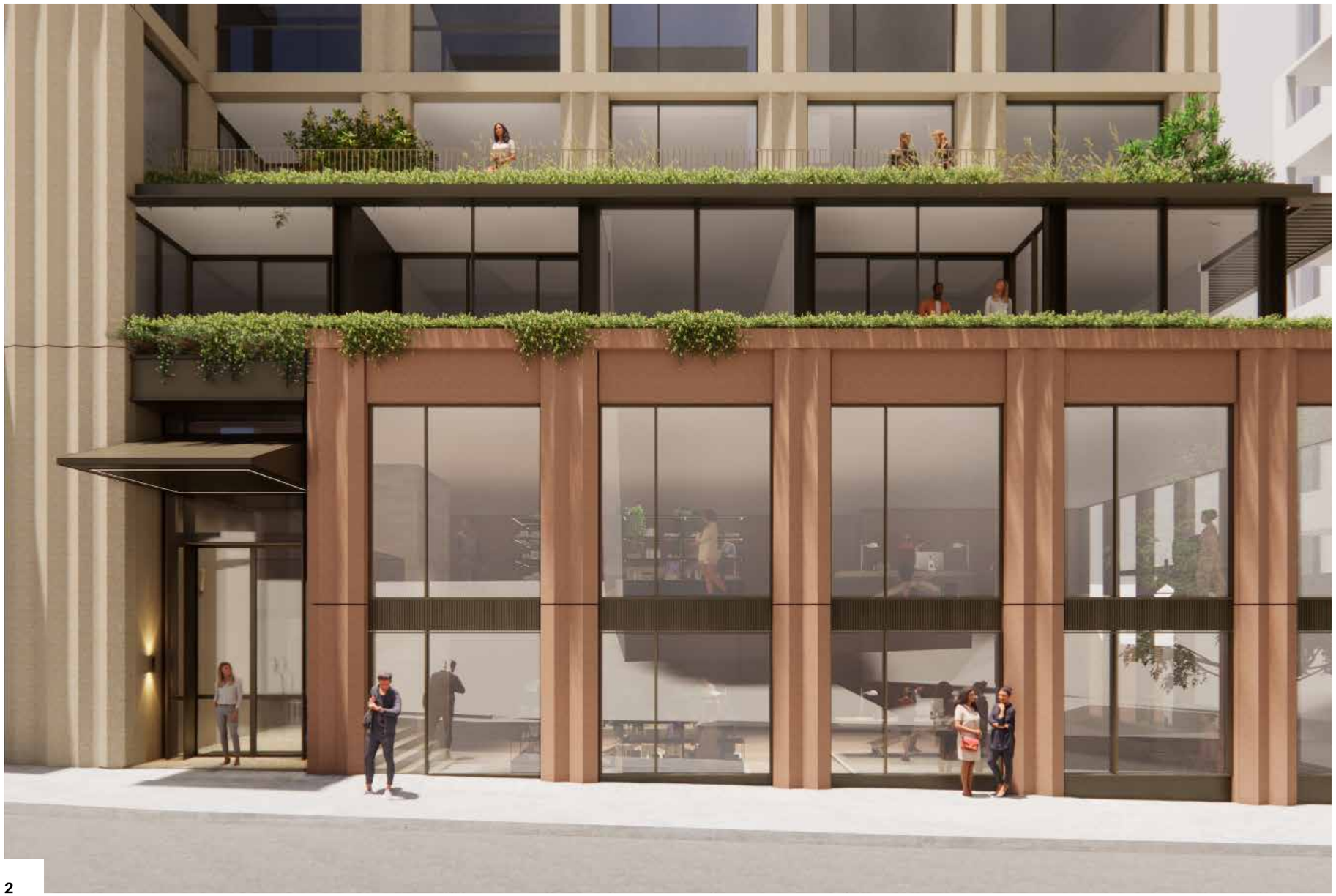

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4.3 Lower Ground
Walker Street
Terrace Homes

The terrace homes are a contemporary response that references the scale, proportions, detail, and materiality observed in Victorian homes found in the locality, specifically the adjacent heritage homes at 150 Walker Steet.

Pictured

1. Adjacent heritage homes
2. Terrace homes viewed from Walker Street

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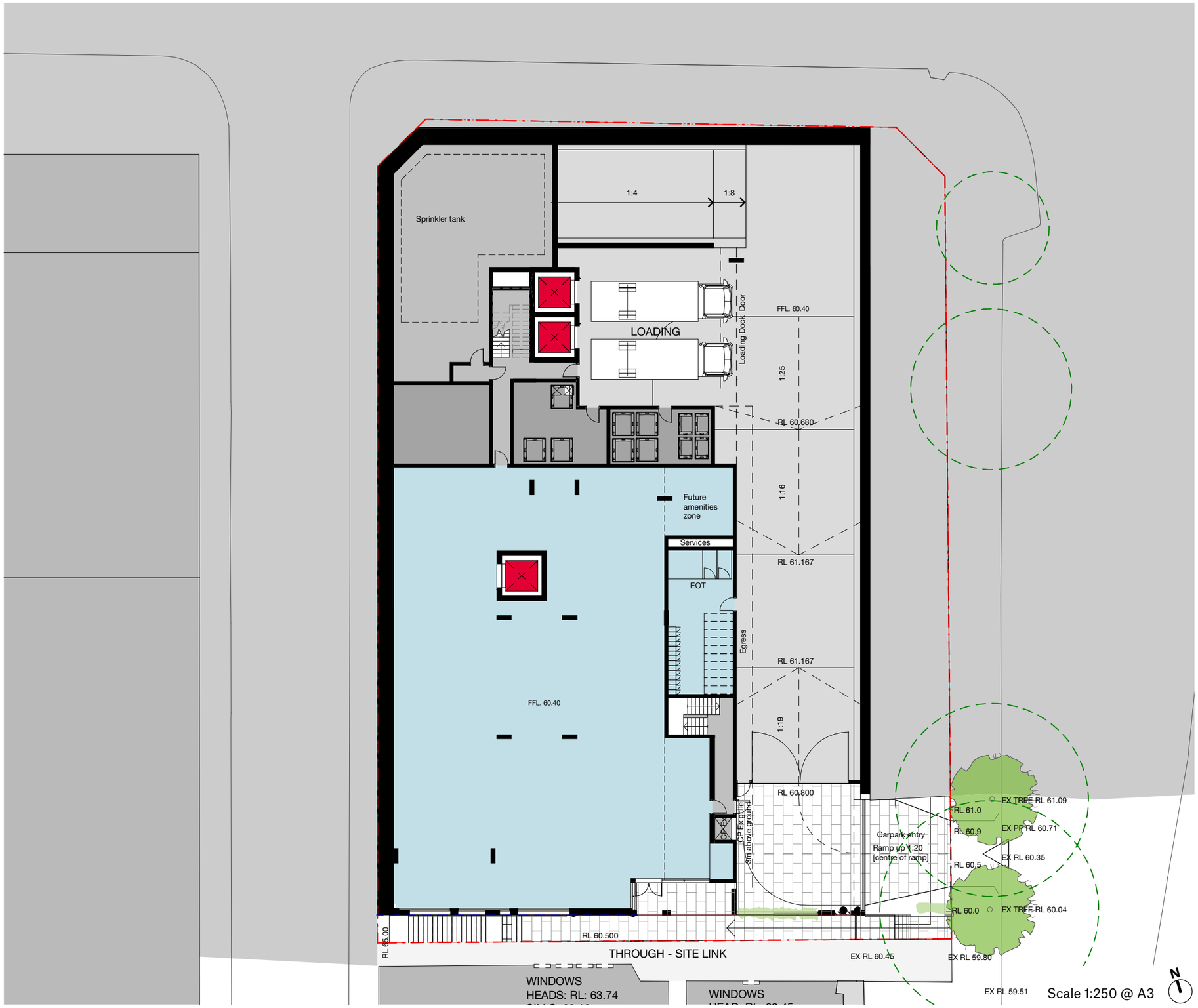
4.4 Lower Ground
L00 Lower

Level 00 Lower accommodates vehicle access, loading and services, and a commercial tenancy facing the through site link.

Vehicle access is provided from Walker Street – consistent with the preferred location nominated in the DCP and the logical location at the lowest point of the site. A single carriageway is located between the existing mature London Plane Trees.

A consolidated loading and waste collection area provides direct access to the bin-chutes, waste holding area, and lifts.

The existing through-site link located on the adjacent site (150 Walker Street) is widened and upgraded, providing improved pedestrian amenity to the future Ward Street Plaza as well as access to the commercial tenancy. The glazed frontage to the commercial tenancy provides improved passive surveillance and safety to an area that could be otherwise challenged.



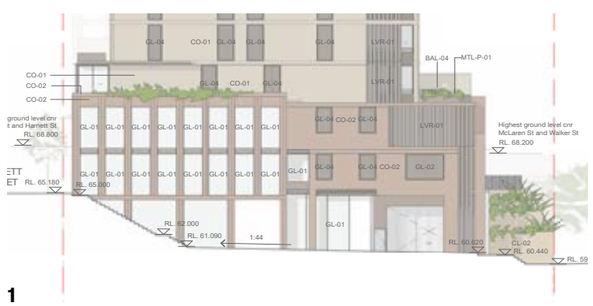
4.4 Lower Ground
Through-Site Link

The podium has been set back along the southern boundary in order to provide a more generous through site link that connects Walker Street to Harnett Street. At approximately double its existing width, the 3m wide link enhances the pedestrian network around the site and further promotes activation of the Ward Street Plaza.

The commercial tenancy and entry provide activation and passive surveillance to the upgraded and widened through site link.

Pictured

1. View of the through-site link and commercial entry
2. Cross section through through-site link



1

2

4.5 Residential Podium Levels

L01

Level 01 includes a podium extending to McLaren Street (north) and Harnett Street (west). Ten units per level are served by a pair of lifts and glazed corridor provide light and outlook to the north. The lifts are positioned in the north-west of the floorplan where they can be accommodated below the solar access plane.

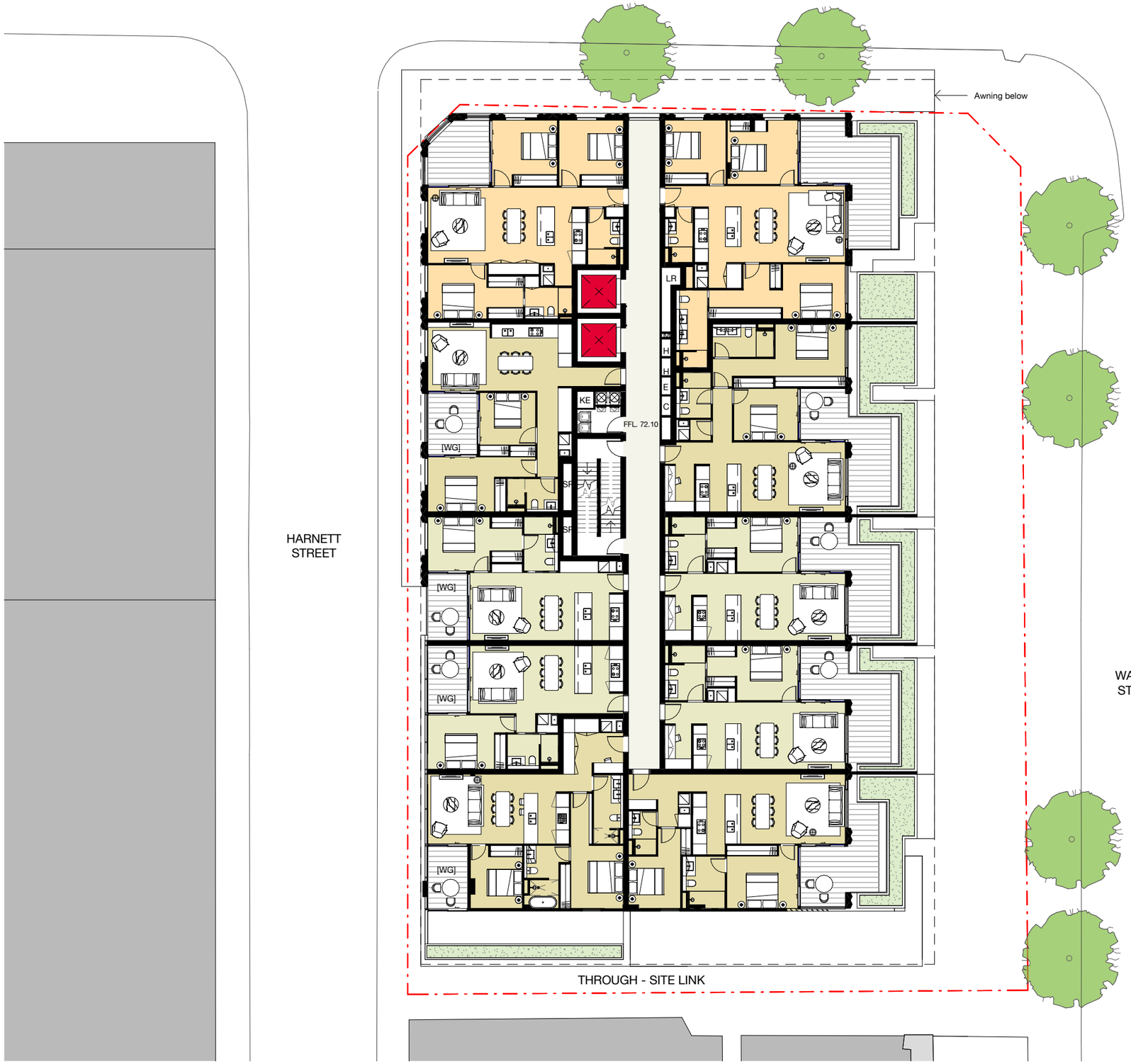
A variety of dwelling types and sizes are provided to ensure diversity in occupants and price-points. Smaller units are generally provided along Harnett Street, with more generous units located on corners as well as along Walker Street.

Level 01 units enjoy extended private open space on the roofs of the Terrace Homes facing Walker Street.

Pictured

1. Landscaped terraces on L01

1



Pictured

The proposal viewed from Walker Street

4.5 Residential Podium Levels
L02-03

Level Two and Three both include 9 units per floor, each including 5 cross ventilated dwellings and 5 dwellings that enjoy the favourable easterly aspect.

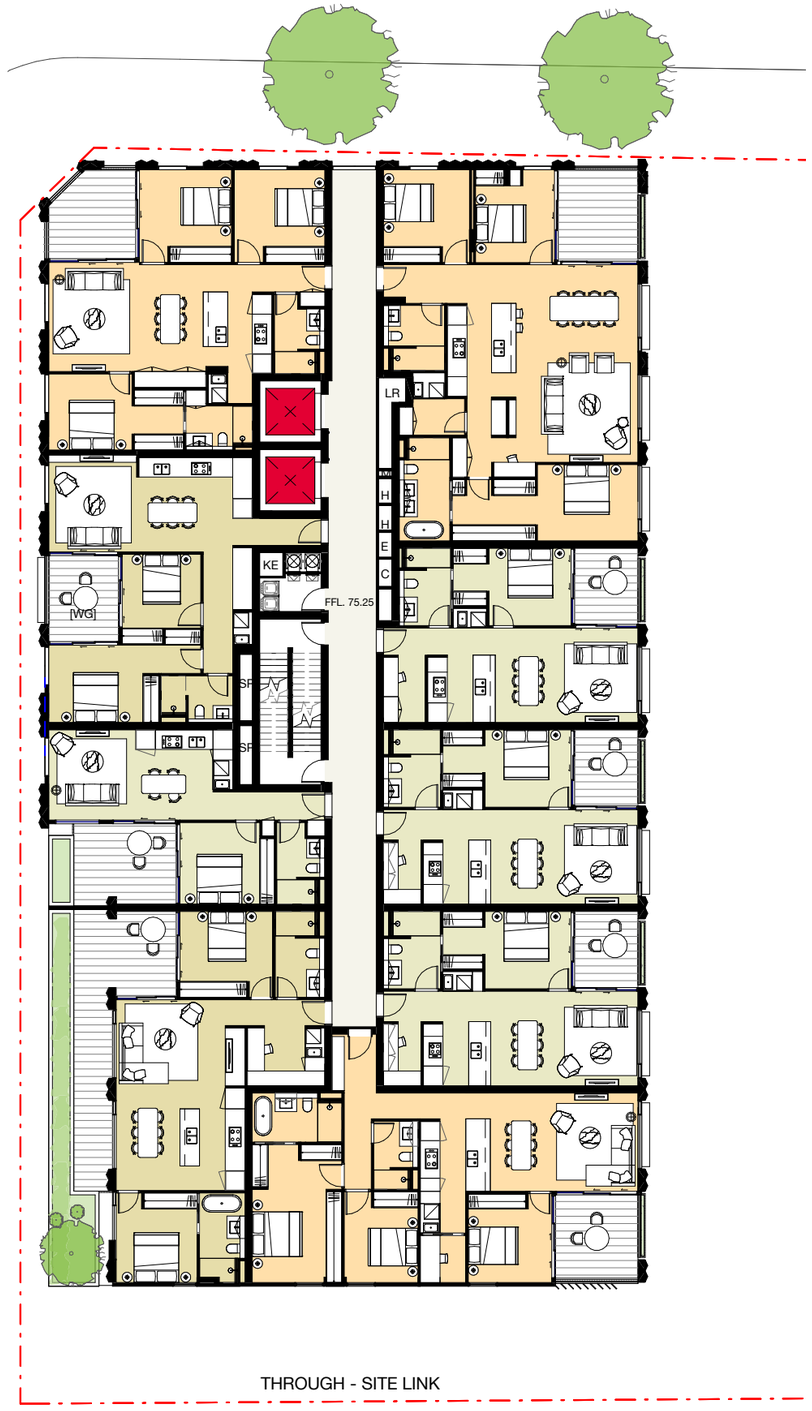
The floor plan is setback 3m to the south-west frontage of Harnett Street, providing increased building separation to the taller portion of the adjacent 41 McLaren Street non-residential building.

Level 3 includes a 3m setback to McLaren Street, with the two north facing units benefiting from landscaped roof terrace on the podium below.

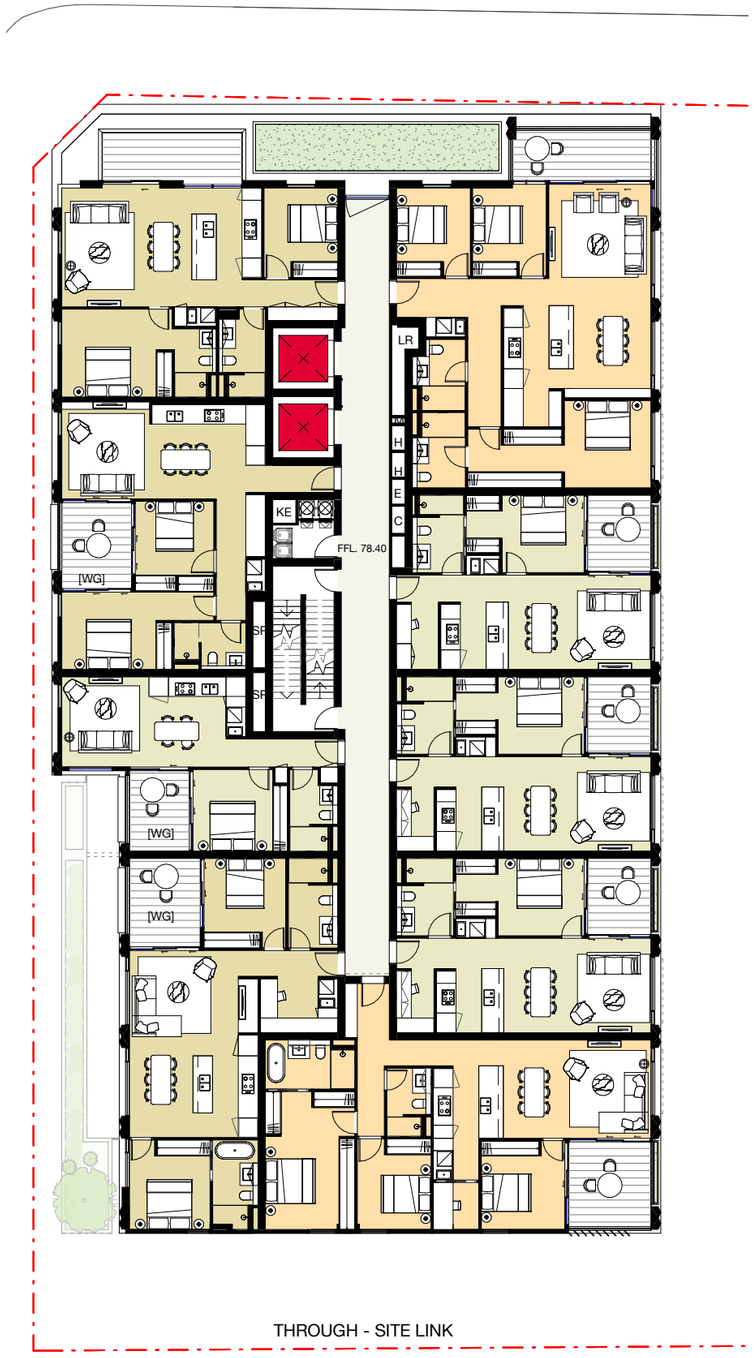
Pictured

1. Elevation view of podium north

1



L02 Floor Plan



L03 Floor Plan

Scale 1:250 @ A3

4.6 Residential Levels
L04-05

Levels 04 and 05 include 8 units per floor, each including 5 cross ventilated dwellings and 5 dwellings that enjoy the favourable easterly aspect. Smaller units found in the lower levels facing Harnett Street are replaced with two larger units that enjoy abundant natural light due to their wide frontages.

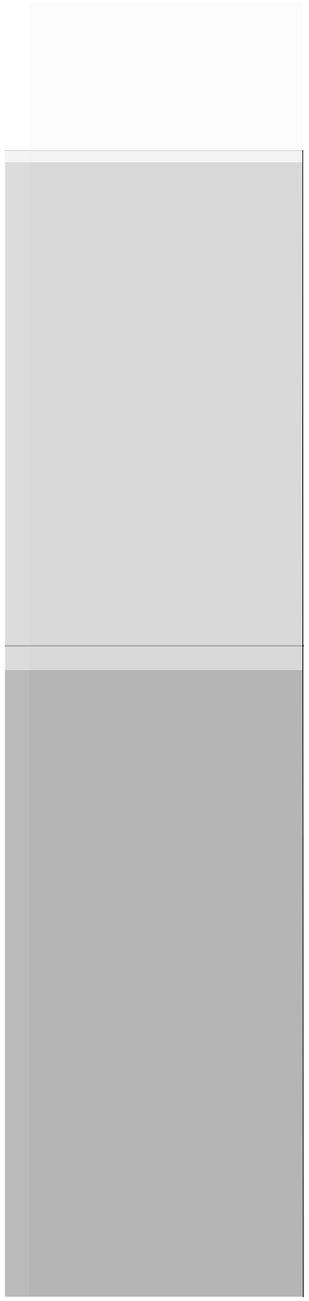
The stepped form along Harnett Street ensures that all units along the west benefit from dual aspect and opportunities for oblique views.

Units facing Harnett Street are provided with wintergardens in lieu of balconies. Balconies in these locations receive limited winter sun and do not enjoy views. The provision of wintergardens provide more flexible and useable private open space in these locations and distinguish these units from the rest of the building which have expansive landscaped terraces or balconies.

Pictured

1. Close up view of wintergardens being activated

1



Scale 1:250 @ A3

4.7 Residential Levels
L06-07

Levels 06 + 07 are the first of the upper levels sculpted by solar access considerations. The south eastern corner of the building is sliced back to minimise the overshadowing of dwellings at 150 Walker Street. This angled form creates a special corner unit oriented south-east with views to Sydney Harbour.

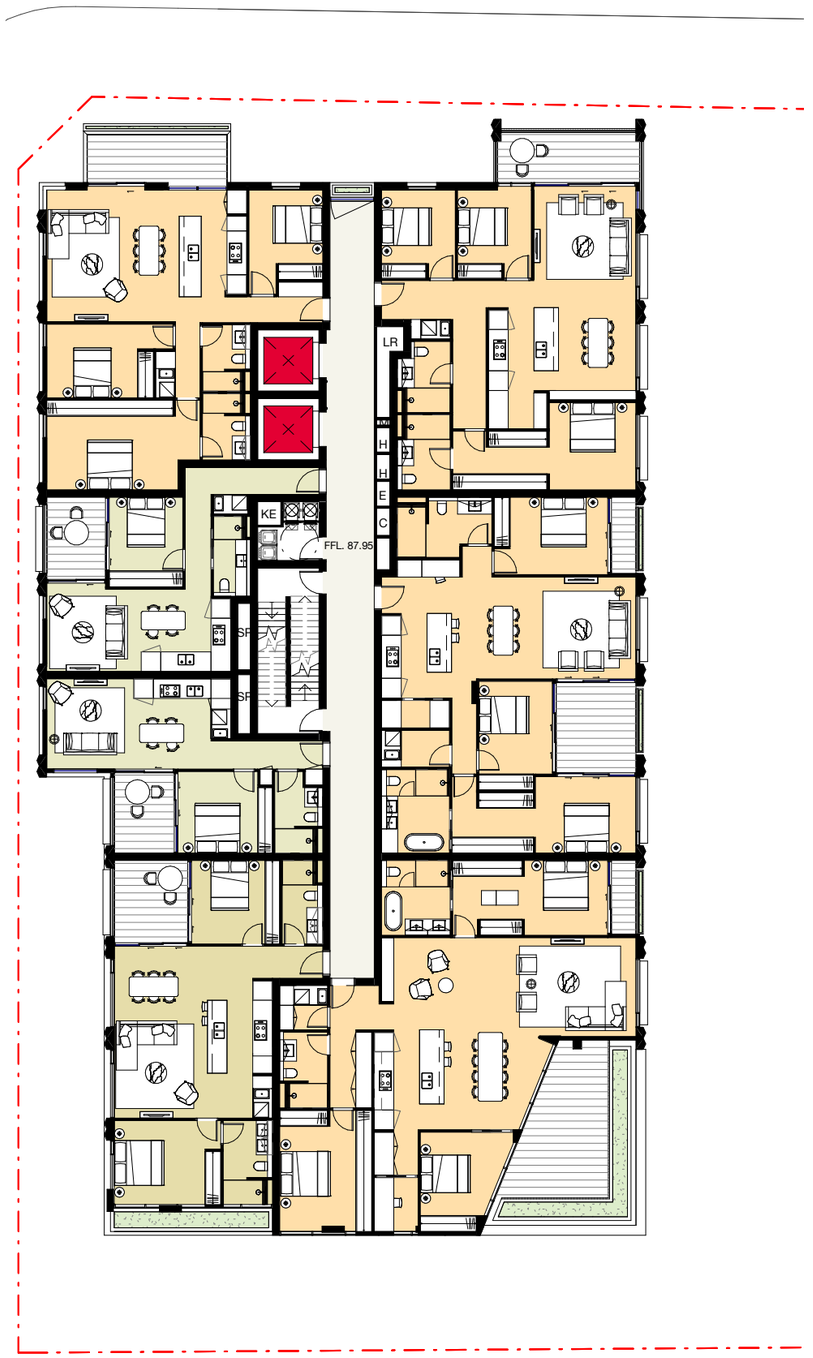
The south-west corner of Level 7 is setback from the southern boundary to maintain full solar access to the future Ward Street Plaza in accordance with the DCP requirements.

Four of the five units on this floor are dual aspect, with all units enjoying favourable outlook.

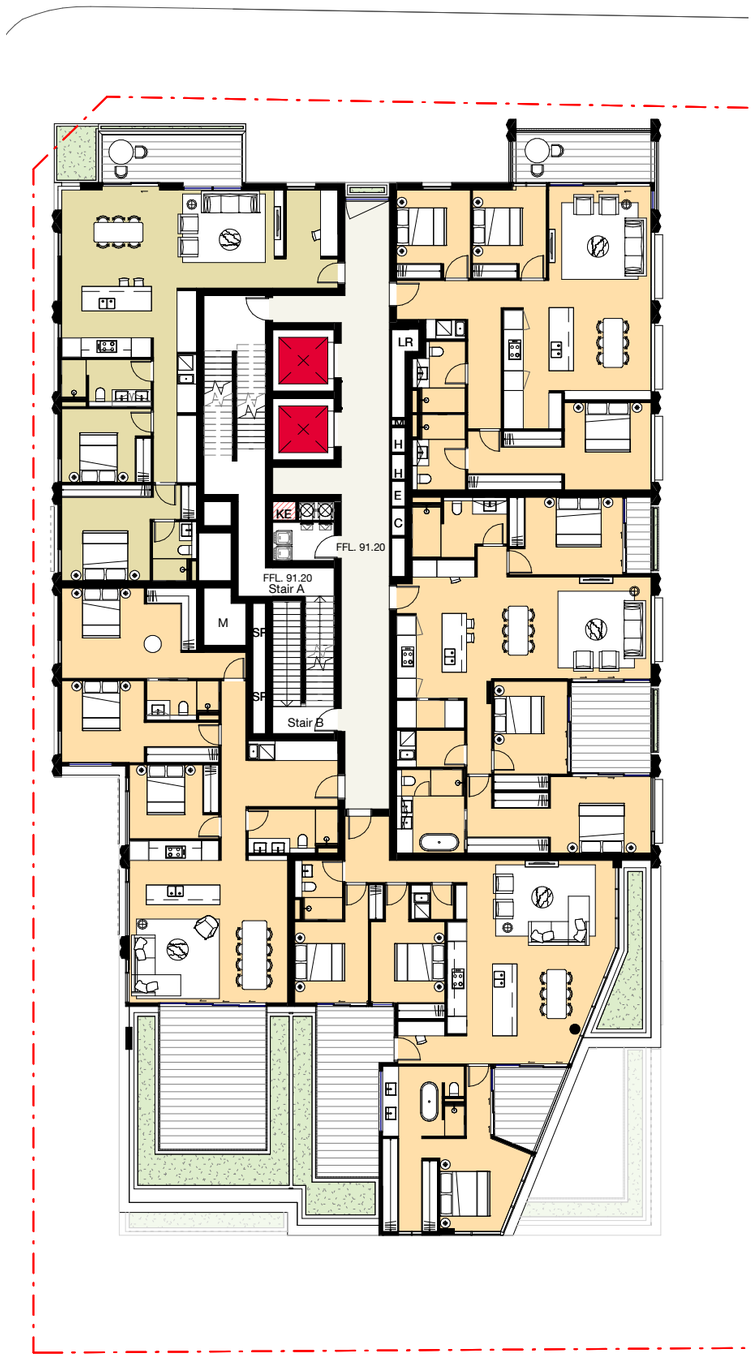
Pictured

1. Balconies to the north-west of the tower

1



L06 Floor Plan



L07 Floor Plan

Scale 1:250 @ A3

4.7 Residential Levels
L06-07

Upper levels are sculpted to improve solar access to adjacent properties and orient views toward Sydney Harbour.

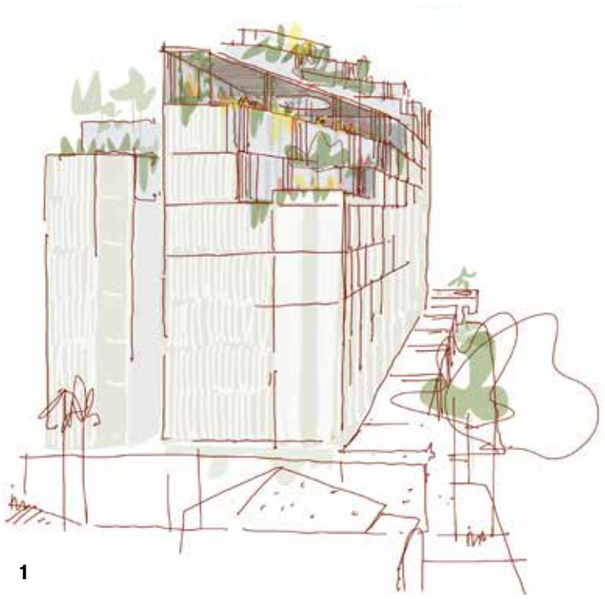
With building mass removed to accommodate the solar access to properties to the south, the apartments on L06 and L07 open up to enable expansive views across oversized terraces.

Unconstrained by privacy issues the apartments become more open with shadowbox incorporated within the glazing system to provide thermal comfort.

The primary grid frame returns on each level to form a consistent stepping language. Terraces are edged with a continuous green band off landscaping, both softening the facade and providing privacy.

Pictured

1. An exuberant roof top and a calm body of building
2. Stepped roof form



1

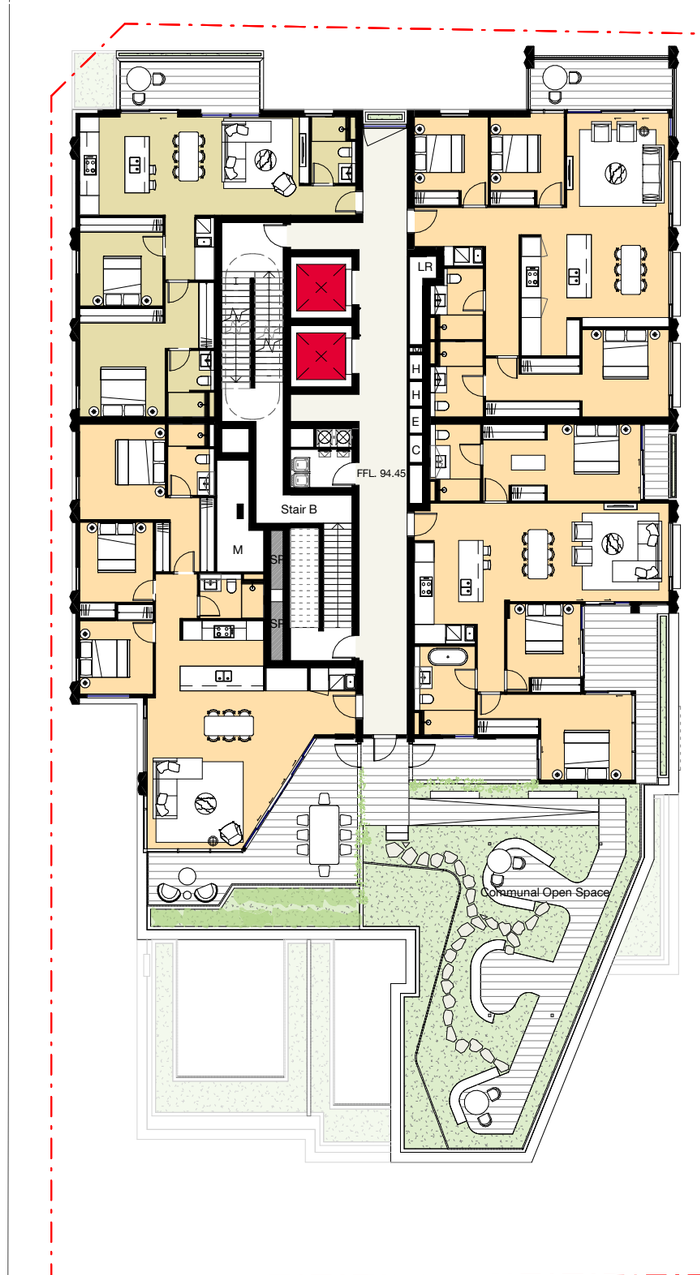
2

4.8 Residential Levels
L08 Communal Terrace

The significant setback to Level 8 is provided to maintain solar access and results in a compact tower form with four generous corner apartments, all cross ventilated with great district views.

A communal open space is provided in the south-east corner, providing all residents access to a beautiful garden with views across to Sydney Harbour.

The scissor stair servicing the lower levels transfers across to the north-west corner behind the core in an portion of the building unaffected by the solar access plane.



Pictured

1. Communal Terrace on Level 08

1

Scale 1:250 @ A3

Pictured

Elevation view of the terracing rooftop

4.9 Residential Levels
L09-10

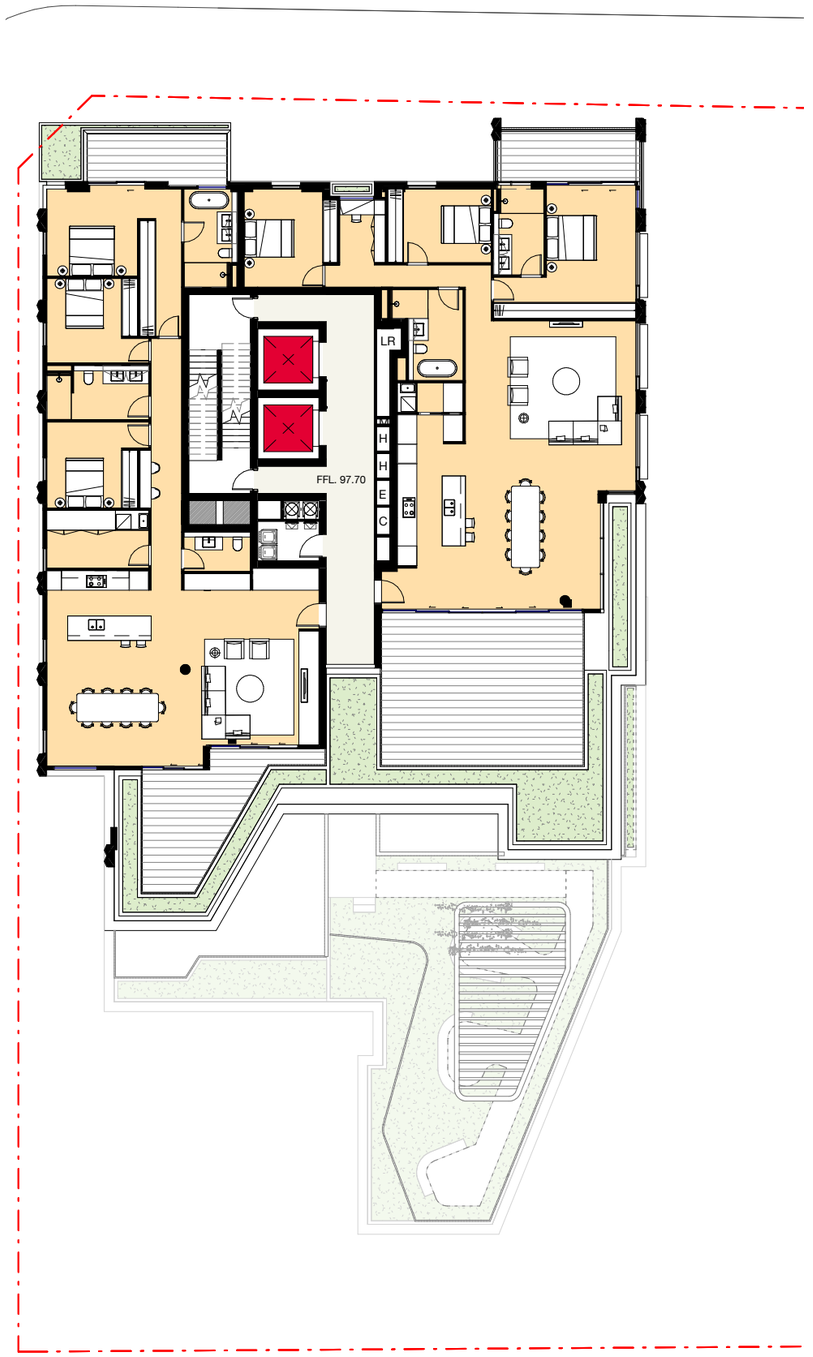
Level 9+10 both provide two 3-bedroom units, each enjoying three frontages. These generous units range from approximately 130m² to 180m², with each unit enjoying generous private roof terraces. Each terrace is set back from the perimeter with landscaped planters, softening the built form and creating an acoustic and privacy buffer.

These larger, family friendly apartments, contribute to the diverse housing being provided in the building.

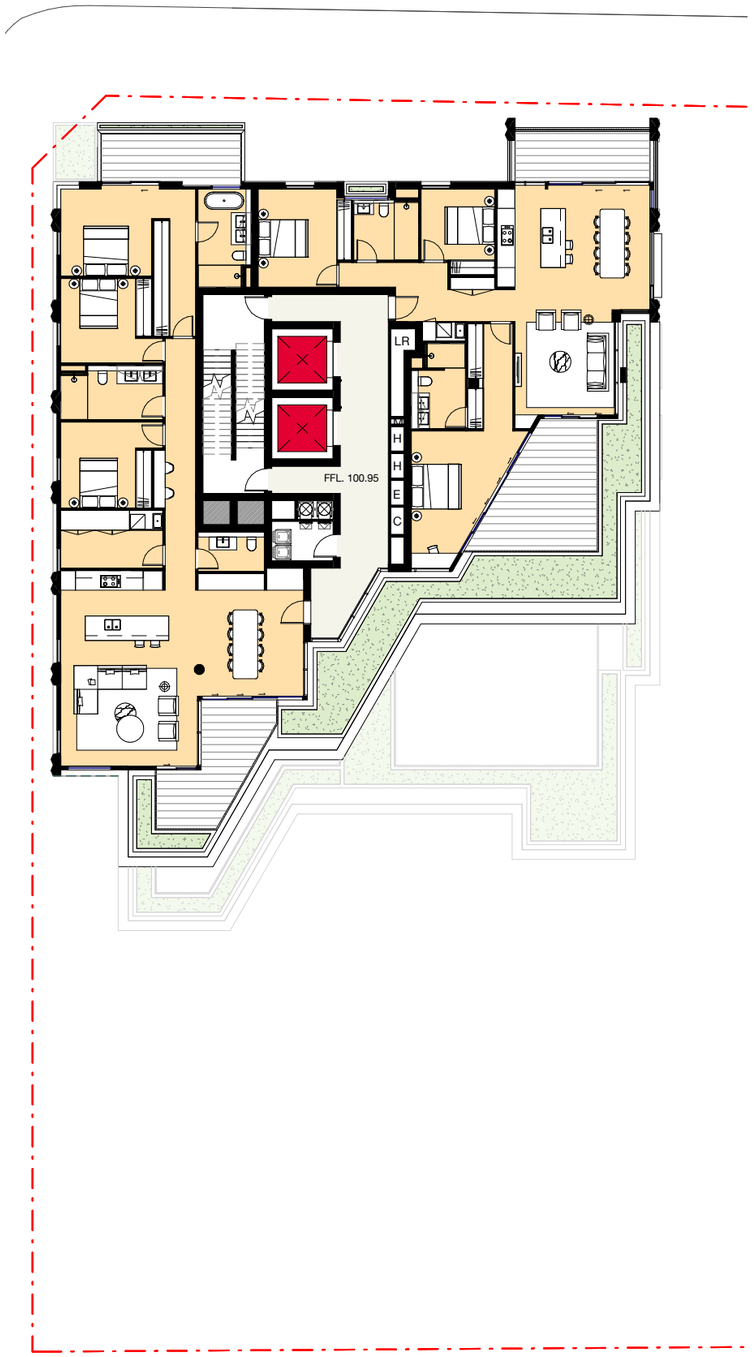
Pictured

1. Close up of the landscaped edge

1



L09 Floor Plan

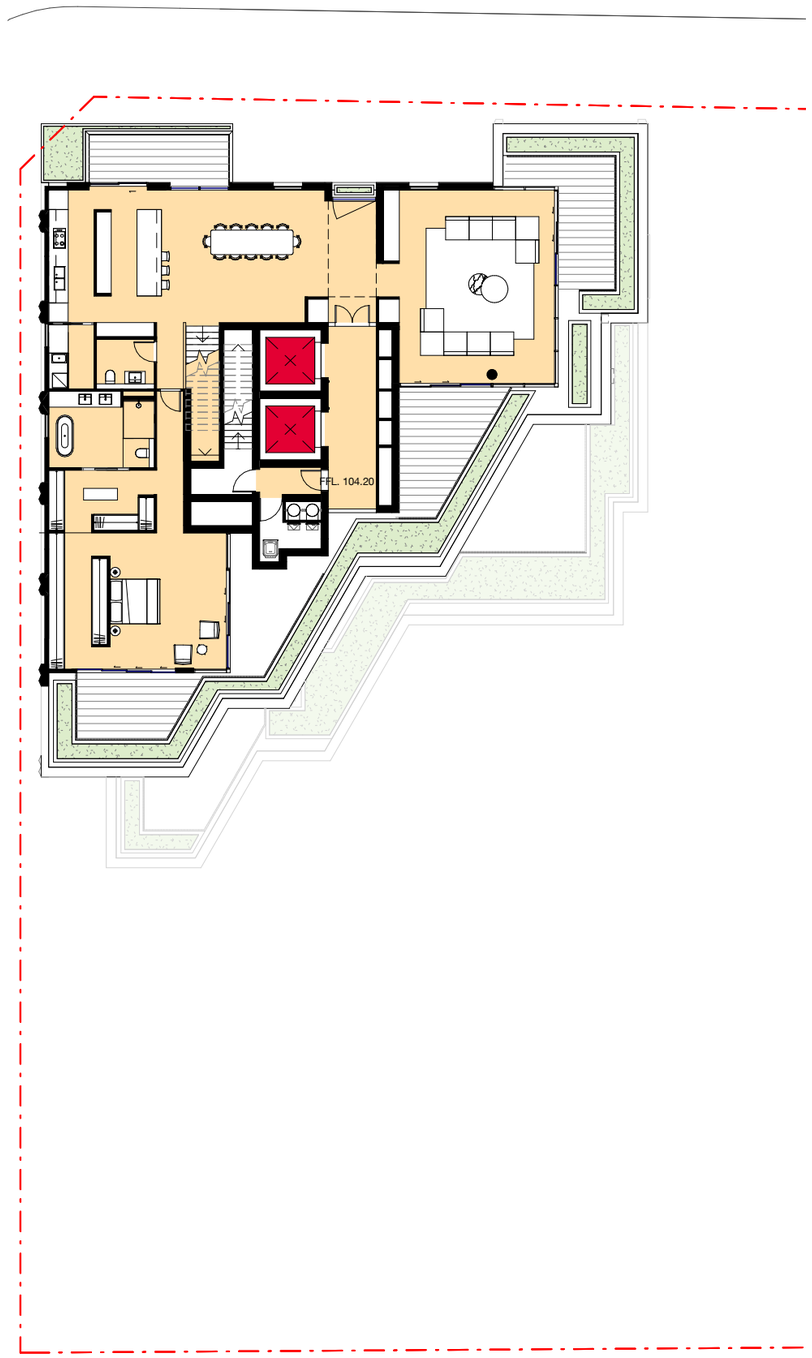


L10 Floor Plan

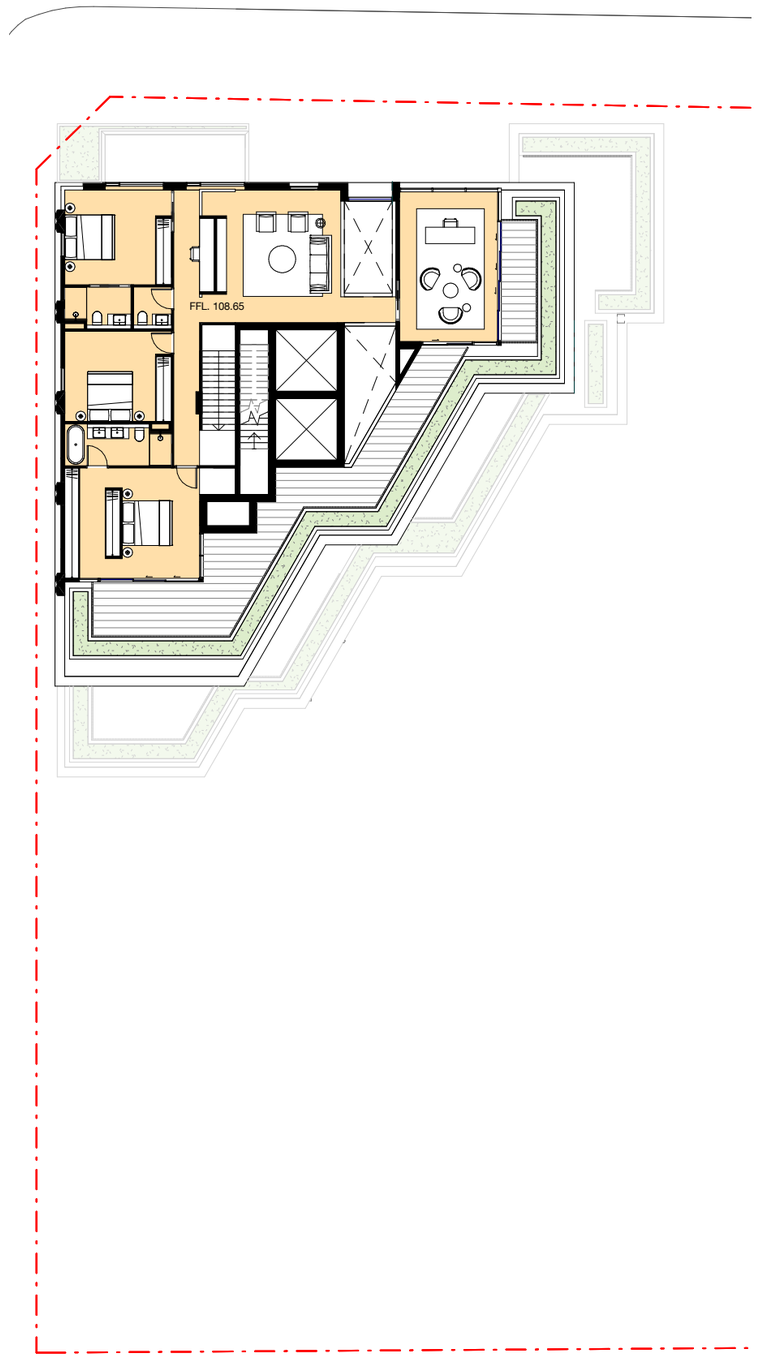
4.10 Residential Levels
Penthouse L11-12

The top two floors are dedicated to a penthouse apartment of approximately 375m². This apartment is in the round, with 360 degree outlook across North Sydney and beyond to Sydney Harbour.

Harbour views to south east on L11



L11 Floor Plan



L12 Floor Plan

Pictured

The proposal viewed from corner of Mclaren St and Walker St

4.11 Apartment Amenity
Solar Access

Objective 4A-1 of the NSW Apartment Design Guide seeks “To optimise the number of apartments receiving sunlight to habitable rooms, primary windows, and private opens spaces”.

This objective is supported by Design Criteria including the requirement that living rooms and private open spaces of at least 70% of apartments receive a minimum of 2 hours of direct sunlight between 9am and 3pm in mid winter.

The accompanying Design Guidance notes that “achieving the design criteria may not be possible on some sites” due to site specific considerations such as views, noise, topography, context.

Site specific conditions at 45 McLaren Street prevent the proposed development from strictly achieving the design criteria requirement. These conditions include:

- The substantial overshadowing from existing buildings - including AURA by Aqualand at 168 Walker Street to the north
- Setback controls to Walker Street that prevent the building form moving further east to improve solar access
- Site orientation, with the primary eastern street façade being oriented slightly south
- Favourable views to the south east
- Site sloping significantly to the south-east, exaccerbarting the overshadowing effects from adjacent buidings
- DCP Controls requiring upper levels to be setback from the eastern façade to preserve solar access to the future Ward Street Plaza.

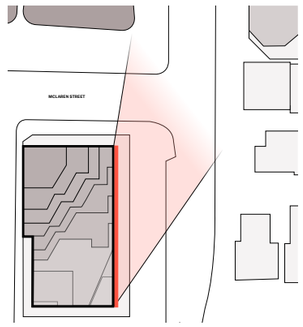
Together, these factors limit the portion of the façade that can theoretically achieve 2 hours of sun between 9am and 3pm to a localised area of the eastern façade. The western and northern facades cannot achieve the 2 hours.

In order to meet the Objective, the design has been optimised to achieve the best possible solar performance and overall high levels of amenity such as excellent daylight levels, cross ventilation, outlook, and views.

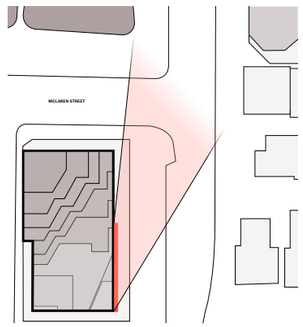
Our analysis demonstrates that 52% of units can achieve 2 hours of sun between the hours of 8:45am and 10:45am, and an additional 8% of units achieves greater than 1.5 hours of sun between 8:30am and 10:45am.

Further manipulation of the unit mix to introduce additional smaller eastern facing units could provide a minor improvement to the 52% achieving the solar access, however this would undermine the other

Given the site specific constraints, we consider this is consistent with the objective of ‘Optimisting the number of apartments receiving sunlight to habitable rooms, primary windows, and private opens spaces’.



Portion of facade that receives sun from **8:45-10:45am** in mid-winter.



Portion of facade that receives sun from **9:00-11:00am** in mid-winter.

Pictured

Sun eye view at 11am in mid winter

4.11 Apartment Amenity
Solar Access

Views from the Sun
Winter Solstice

2 hours from 8:45-10:45*

Key

45 McLaren St glazing to apartments

8:30am

8:45am

9:00am

9:30am

10:00am

10:30am

4.11 Apartment Amenity
Solar Access

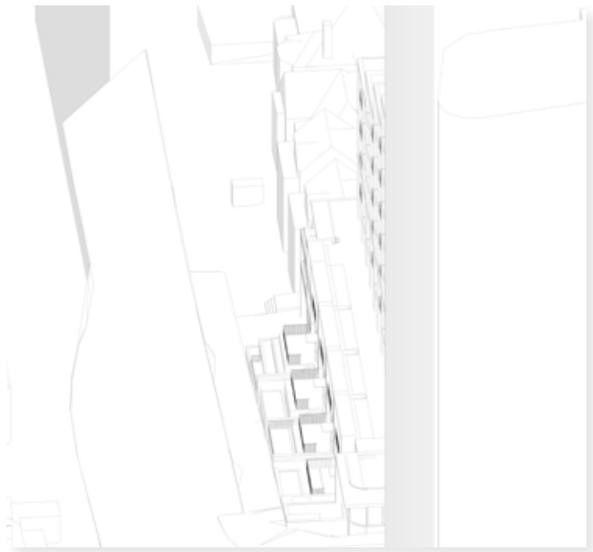
Views from the Sun
Winter Solstice

2 hours from 8:45-10:45*

Key

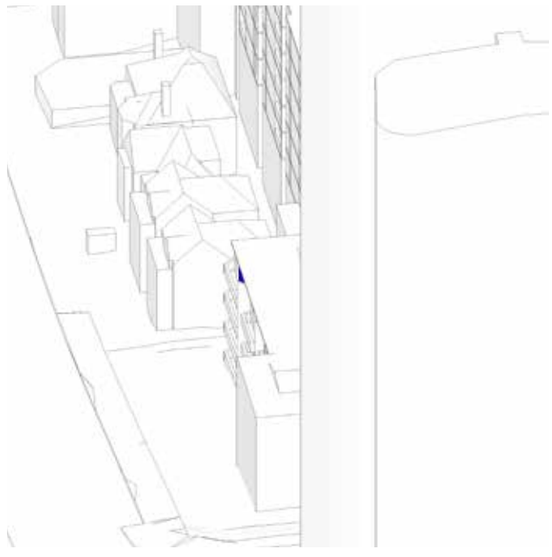
45 McLaren St glazing to apartments

10:45am



11:00am

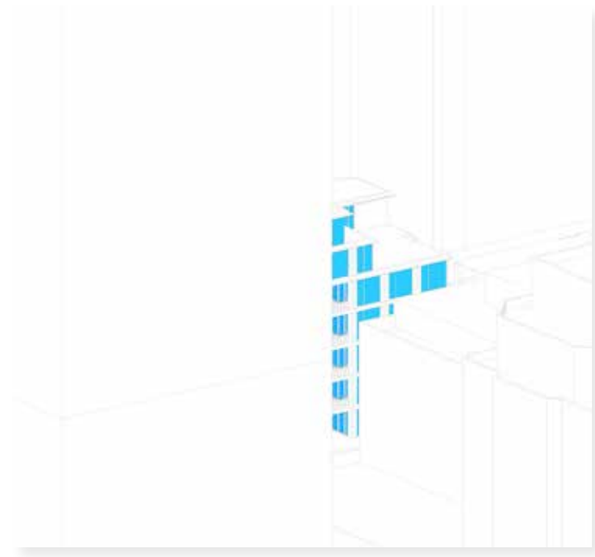
12:00pm



Sun eye view of the existing building at 10:45am

1:00pm

2:00pm



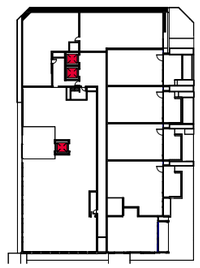
3:00pm

4.11 Apartment Amenity
Solar Access

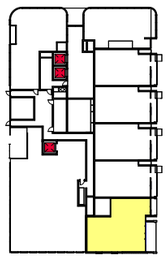
ADG Compliance Schedule

Total	Solar	Cross vent	Cross vent (L00-L08)
0			
0			
1	1	1	
2	1	2	
2	1	2	
4	2	4	4
5	3	4	4
7	3	5	5
8	5	5	5
8	5	5	5
9	5	5	5
9	5	5	5
10	5	4	4
1	1	1	1
5	0	1	1

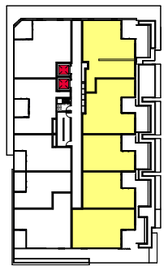
71	37	44	39
	71	71	66
	52%	**71%**	**59%**



Level 00

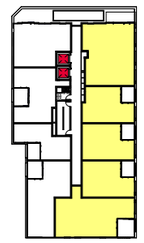


Level 00 Upper

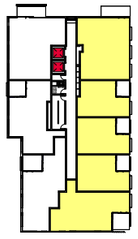


Level 01

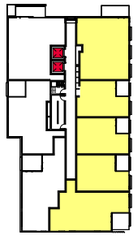
Level 02



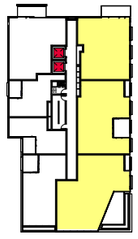
Level 03



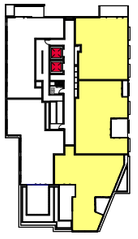
Level 04



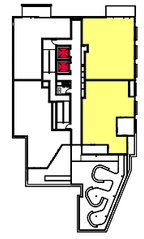
Level 05



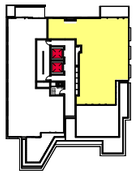
Level 06



Level 07



Level 08



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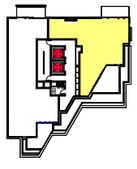
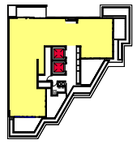


Level 10



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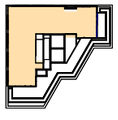


Level 12

Key

Apartments receiving 2hr sun between 8:45am-10:45am to living room

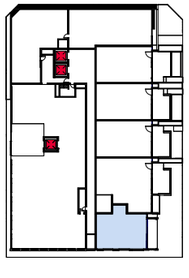
Apartments receiving 2hr sun between 8:30am-10:30am to living room

4.12 Apartment Amenity
Cross Ventilation

The Apartment Design Guide requires that at least 60% of apartments in the lower 9 levels of the building are naturally cross ventilated.

59% of the apartments in Levels 00 to Level 08 are naturally cross ventilated.

71% of the all apartments in the building are naturally cross ventilated.



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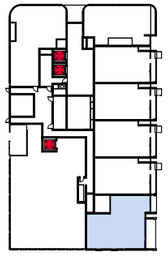
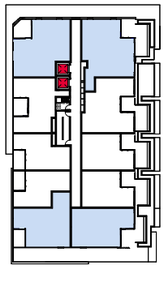
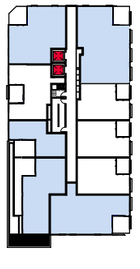


Level 00 Upper



Level 01



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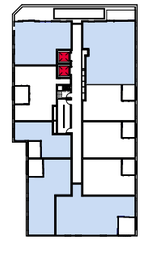
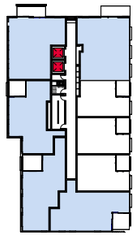


Level 03



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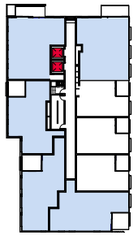

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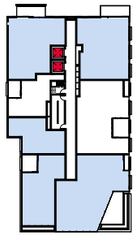
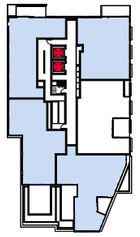


Level 06



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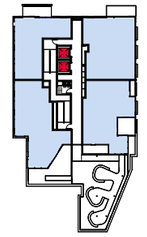
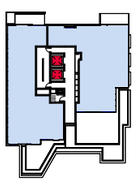
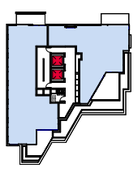


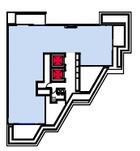
Level 08



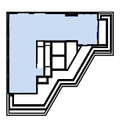
Level 09



Level 10



Level 11



Level 12

Key

Cross Ventilated Apartment

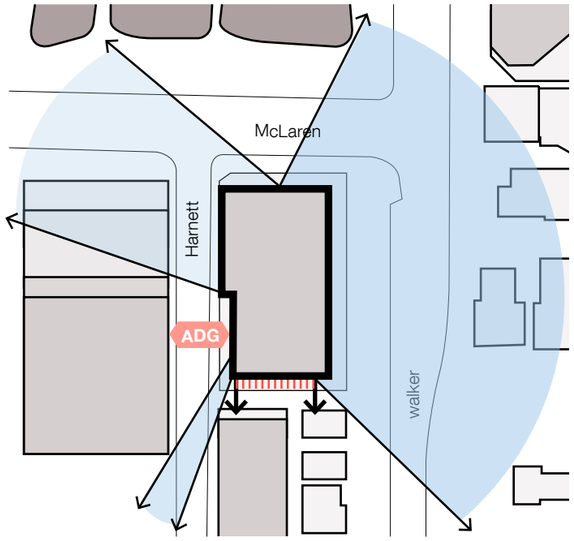
4.13 Apartment Amenity
Visual Privacy

Visual Privacy and Overlooking

To avoid having apartments with a primary aspect to the West, the facade has been designed to direct view towards North West and South West oblique views. The separation to the current site condition with the heritage building to the west meets the ADG distances.

Within the apartments, the main living spaces have been located to have a primary aspect to the east and west, away from the neighbouring buildings.

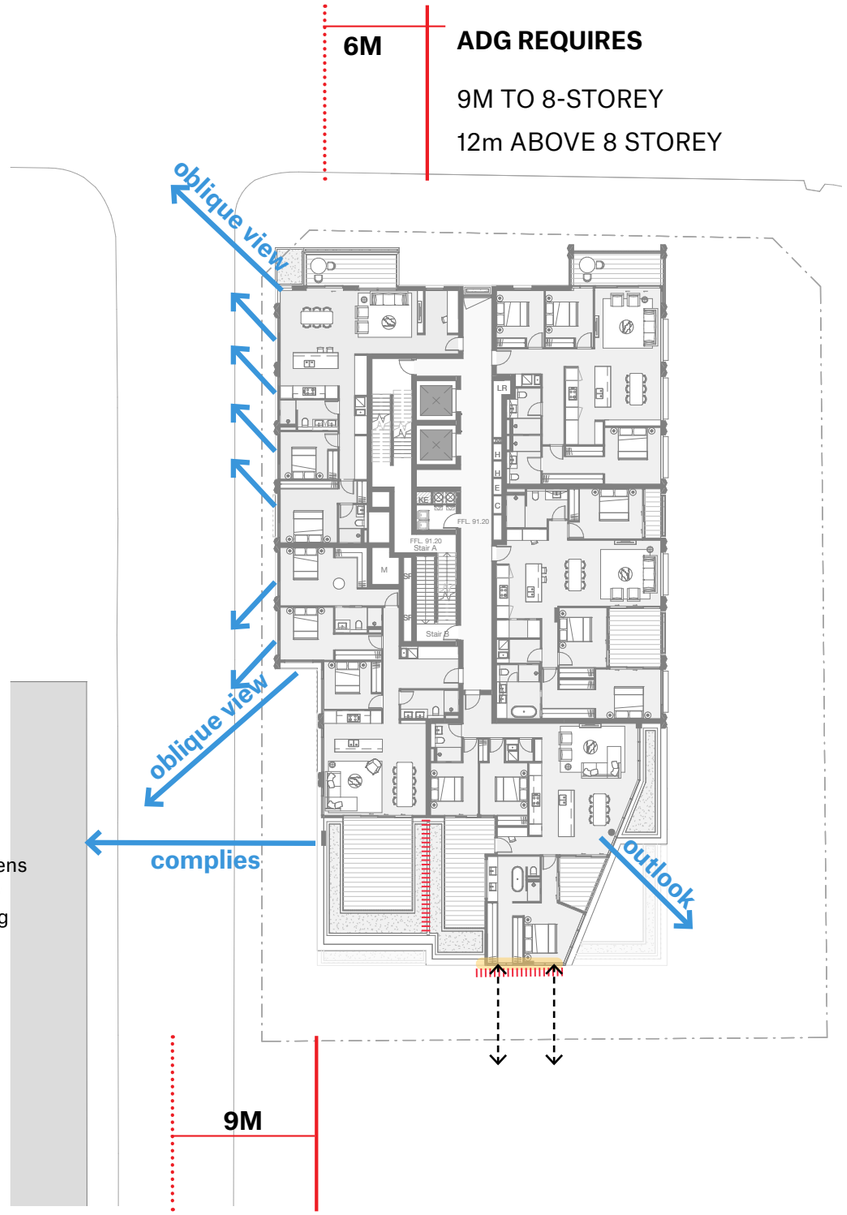
The north and south elevations have a high degree of solidity. Where windows are proposed on the north and south façades angled louvre screens are incorporated to direct views away from the neighbouring buildings.



Outlook and Oblique View

Lower Floor Plate (Level 6)

The angle of the screens direct views out away from the neighbouring buildings



Terraced Floor Plate (Level 7)

4.14 Apartment Design

Apartment Design

Apartments have been designed to maximise resident amenity, with the layouts seeking to optimise views, solar access and privacy.

The changing floor plate offers the opportunity to provide range of apartment types, from compact one bedrooms apartments, double storey townhomes and a penthouse occupying the two top levels.

Adaptable Apartments

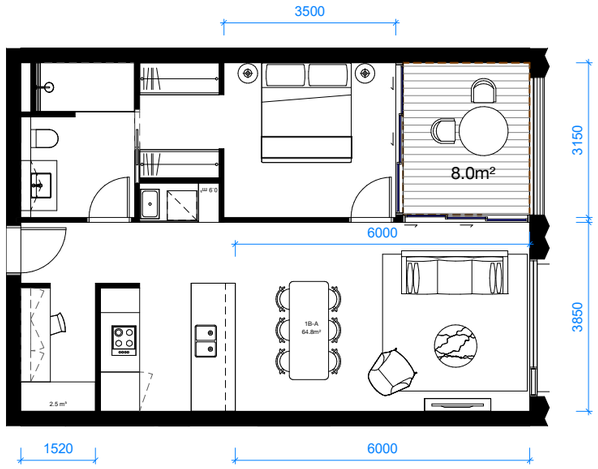
The proposed development provides 14 adaptable apartments, comprising 8 one-bedroom, 1 two-bedroom and 6 three-bedroom apartments.

Further details of pre and post adaption layouts are provided in the A13 series of architectural drawings.

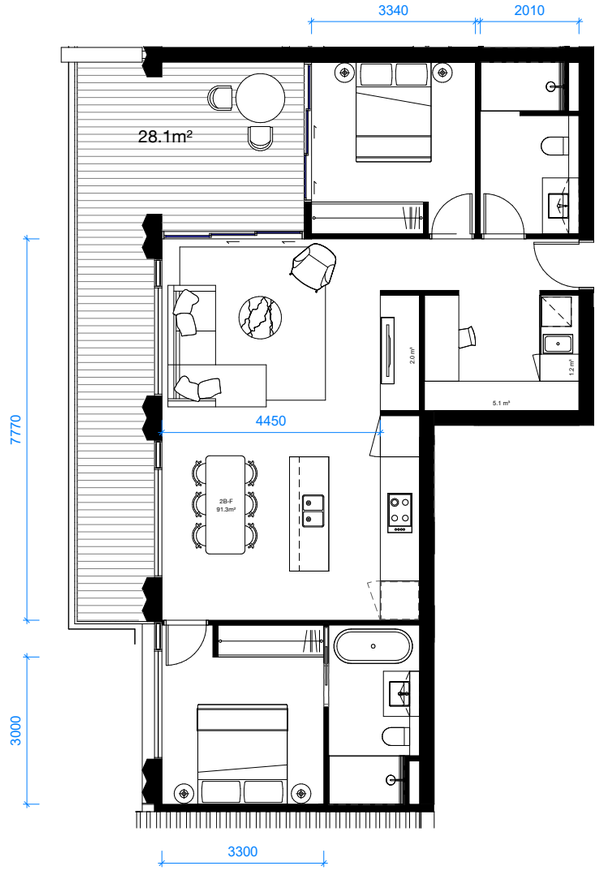
Pictured

1. Each apartment is designed to offer exceptional amenities

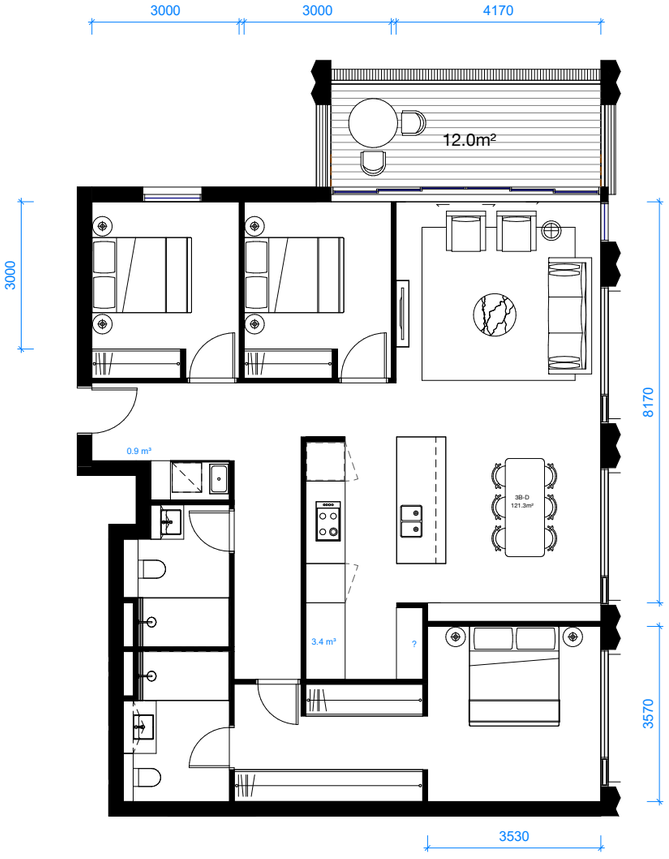
1



1 BED



2 BED



3 BED

4.15 Basement and Services

Consisting of two below ground levels, the basement contains car parking, loading space for service vehicles, waste collection, resident storage and plant and service spaces.

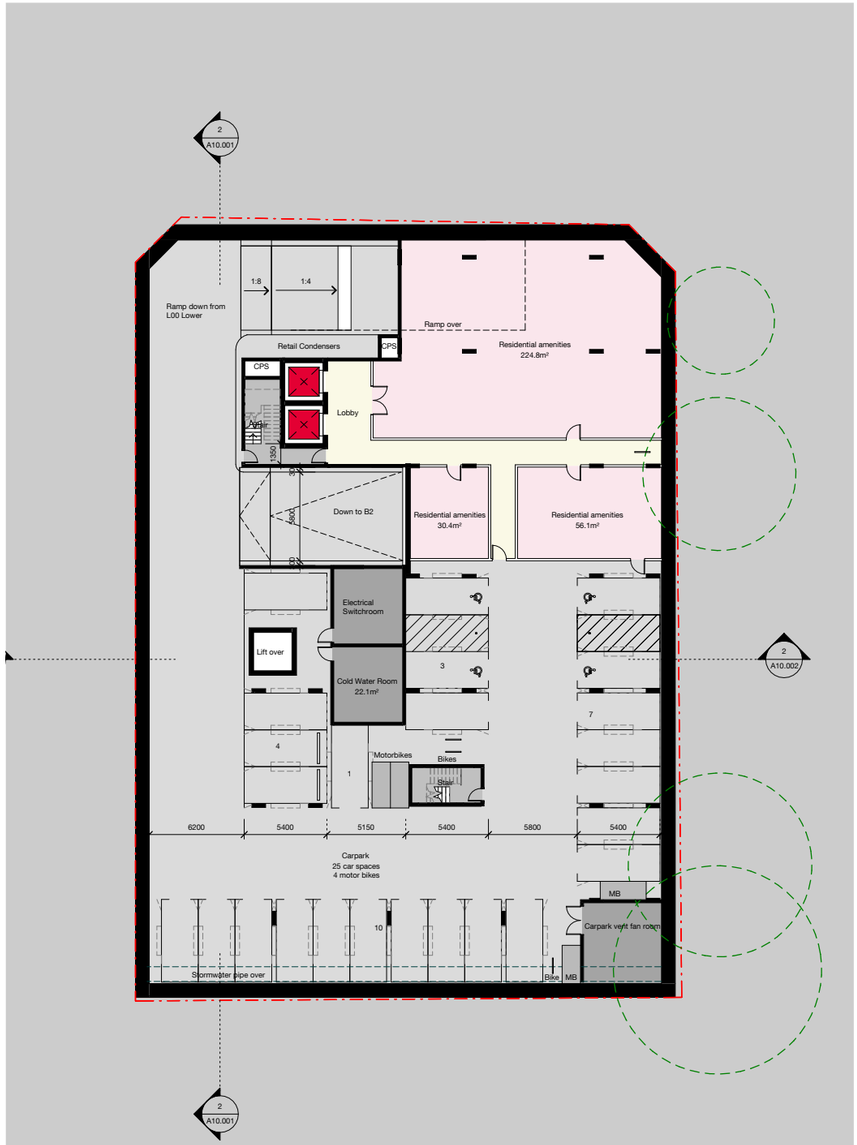
Basement Levels

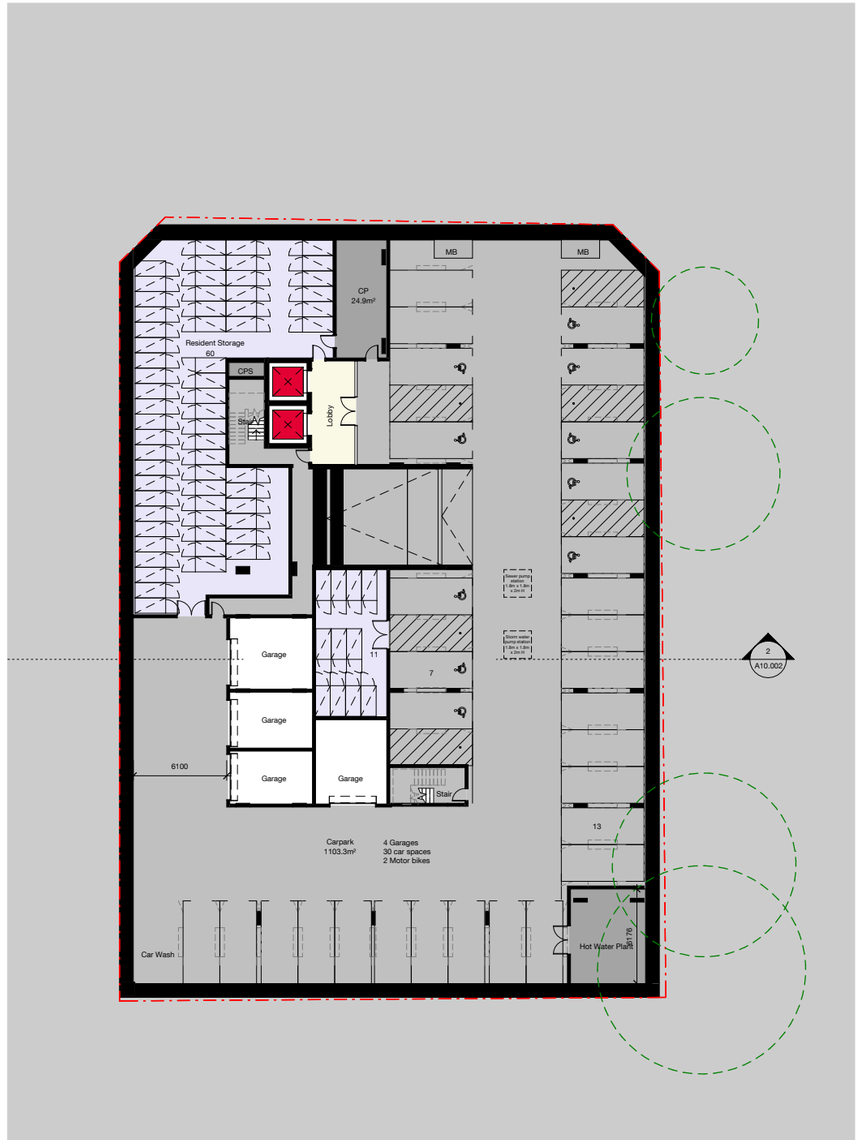
Parking is accessed by a discreet entry off Walker Street, minimised to blend with the scale of the street.

Loading vehicles peel off the entry driveway to a loading area on lower ground with storage for waste and access to lifts for removals. Residential vehicles bypass this area to a dedicated ramp accessing two levels of basement parking.

Fire services are located on Lower Ground with other services located on B1 and B2.

Oversized storage areas will allow residents storage for large items including bikes.





Scale 1:250 @ A3

Basement Summary:

Level	Car Spaces	Motorbike Spaces	Resident Storage Cage
LG			
B1	25	4	
B2	34	2	71
Total	**59**	**6**	**71**

4.16 Residential Facility

Communal Facilities

Providing an alternative to the landscaped external space on L08, Rresidents will have access to internal communal facilities on level B01.

In a cosy, luxurious environment, spaces for exercise, quiet reading and group activities will be provided.

The space is divided into a variety of sizes for flexibility of use and to make provision for the residents to customise the spaces.

1

2

3

4

5

6

Pictured

Reference images of potential resident amenity:

1. Lounge and library
2. Private dining and wine room
3. Movie lounge
4. Gym
5. Media room
6. Private dining

5.0

Facade and Materials

5.1 Facade Concept

The concept of the building as being in three parts is continued in the facade elements following the building break up of base, middle and top.

The base creates a permeable street interface with a sandstone edge and warm tones of pigmented concrete anchoring the building in its context.

The mid level is a regular grid of a lighter toned textured concrete providing a calm response to the surrounding apartment buildings.. The grid is populated with a combination of glazing and secondary system.

Top levels have have a lighter appearance with glazed panels framed in dark bronze powdercoat. Terraces are fringed by landscape, benefiting the residents and visually softening the top levels of the building.

Pictured

Facade Reference Images

5.2 Facade Design Principles

The facade concept comprises three key elements - the base, the calm body and the exuberant rooftop for a coherent building skin

1. The Primary Grid

The body of the building is wrapped within a regular masonry grid. This grid creates a clear expression of the primary built form and gives the buildings a calm and consistent order.

The grid is designed at the scale a typical room, giving the building a natural residential scale.

2. Terraces

The two-storey terrace homes are a contemporary response that references the scale, proportions, detail, and materiality observed in Victorian homes found in the locality, specifically the adjacent heritage homes at 150 Walker Steet.

3. Rooftop

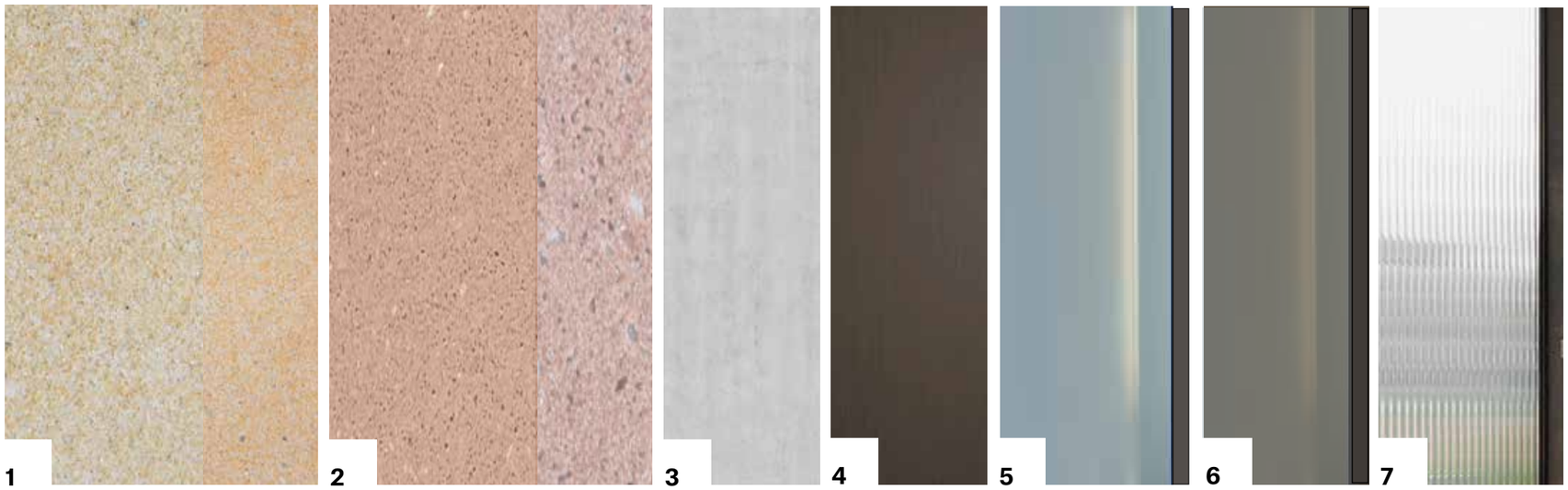
The setback glazing and angular geometry derived from the solar access plane allow for a more playful expression to the top levels.

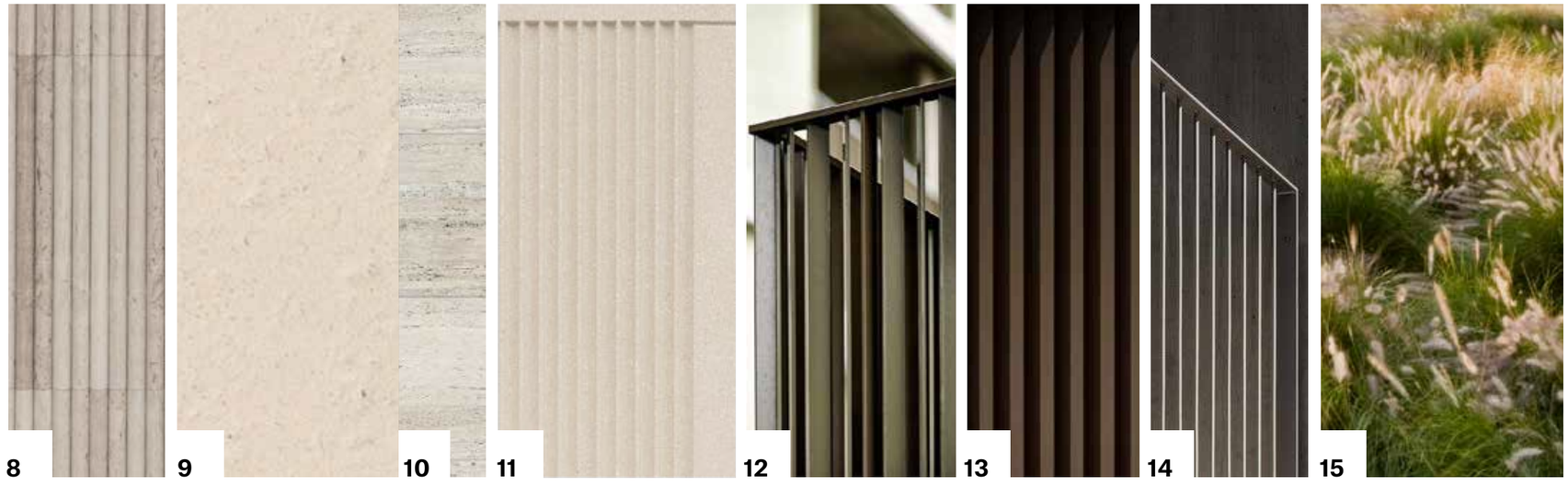
Glazed walls peel back from the regular grid facade opening large terraces with integrated planters and palisade balustrades. The landscaped edge allows minimal restriction to the views while still providing privacy.

5.3 Materials Palette

The materiality concept is focused around honest, natural surfaces and tones, centred around a humane scale and tactility. The refined palette proposes materials and finishes chosen for their enduring quality and elegance.

1. Sandstone Planters
2. Pigmented Precast Concrete “Terracotta” Tone
3. Precast Concrete
4. Solid Aluminium Finish to Planters and Balustrade “Medium Bronze” Colour
5. Performance Vision Glass with Aluminium framing in “Dark Bronze” Colour
6. Shadowbox Glass with Aluminium framing in “Dark Bronze” Colour
7. Reeded Glass for Visual Privacy
8. Ribbed Travertine Cladding
9. Pigmented Precast Concrete “Sandstone” Tone
10. Travertine Look Cladding
11. Textured Precast Concrete Panel “Sandstone” Tone
12. Metal Palisade Balustrades “Dark Bronze” Colour
13. Aluminium Louvres “Dark Bronze” Colour
14. Fine Metal Rod Balustrades
15. Integrated Planting
    Plant Selection by Landscape Architects





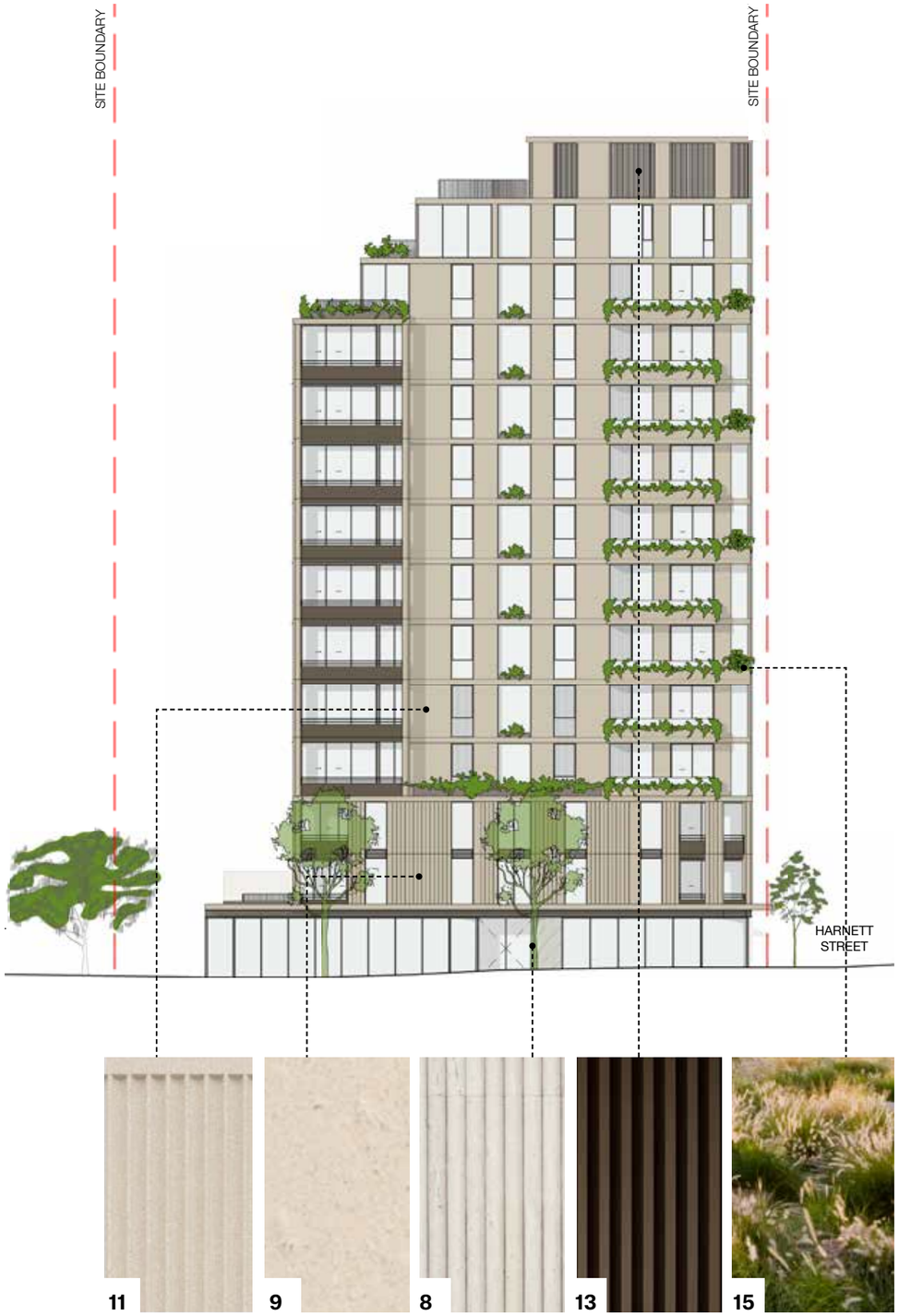
5.4 Elevations

East Elevation (Walker Street)

5.4 Elevations

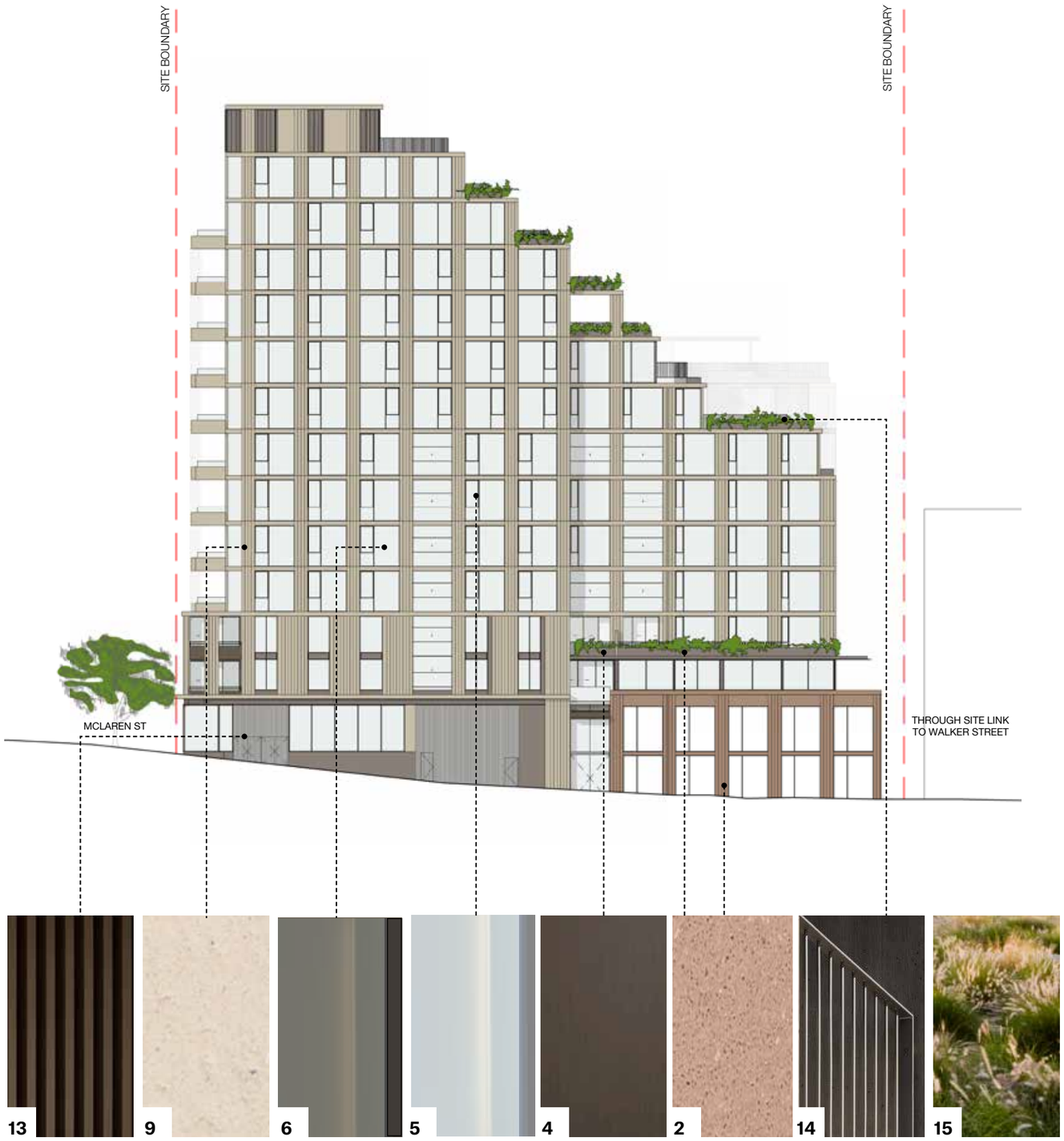
South Elevation (Through Site Link)

North Elevation (McLaren Street)



5.4 Elevations

West Elevation (Harnett Street)



5.5 Facade Details

Terrace Homes

The podium along Walker Street is thoughtfully designed to harmonize with the character of the adjacent heritage houses, drawing inspiration from their materiality and intricate details.

The two-storey terrace homes features full-height glazing, allowing abundant natural light to flood the living spaces. An open slot and full-height glazing provide opening to Bedroom 3.

The metal balustrade, inspired by the cast iron balustrades found on typical terrace houses ensures privacy from the street through its angled palisade design. Terracotta toned pigmented concrete is selected as a subtle reference to the adjacent brick houses.

To create a visually appealing transition between the pedestrian footpath and the townhouses, a terraced sandstone planter is introduced, effectively reducing the height at the interface.

5.5 Facade Details

Primary Facade - East

The east façades have been designed to achieve good internal amenity while maximising outlook.

The pigmented concrete frame creates a grid that gives the facade order and a legible scale. The shaped concrete columns give depth to the facade which contributes to the shading of the facade during the warmer summer months.

Within the grid is an infill of full height glazing which maximises natural light penetration into the apartments and give the internal spaces a sense of generosity. An operable awning window is incorporated to allow for natural ventilation.

Horizontal sunshade positioned at ceiling level provides sun shading to reduce heat gain. Faceted metal balustrade with open top rail ensures privacy without compromising openess. Integrated planterbox creates a visually appealing element, adding depth and texture to the facade.

5.5 Facade Details

Western Facade

To mitigate solar heat gain and ensure privacy for neighboring units, the western facade provides more solidity and reduced transparency. Shadowbox glazing is integrated to create a more solid appearance while strategically allowing directional views within the room layouts.

The inclusion of wintergardens creates an external space that can be enclosed when needed and opened when desired. These versatile spaces provide flexibility and enhance user amenity. To activate, a guillotine-style glazing system is integrated into the main facade expression.

5.5 Facade Details

Commercial Facade

Commercial tenancies are housed within the building base. Warm masonry elements ground the building within the street context and provide a regular framework. Secondary elements within the the frame include large glazed panels creating activation with the street. Metal elements including glazing frames, and metal spandrel panels add a layer of detail which brings the facade a human scale.

The residential level above the commercial podium is expressed as a glazed box peeling back from the regular grid, facade similar to the roof top expression. Integrated planters and palisade balustrades provide privacy to the residential levels.

5.5 Facade Details

Terraced rooftop

The setback glazing and angular geometry derived from the solar access plane allow for a more playful expression to the top levels.

Glazed walls peel back from the regular grid facade opening large terraces with integrated planters and palisade balustrades. The landscaped edge allows minimal restriction to the views while still providing privacy.

The masonry grid extends up above these spaces to integrate plant spaces within the building envelope.

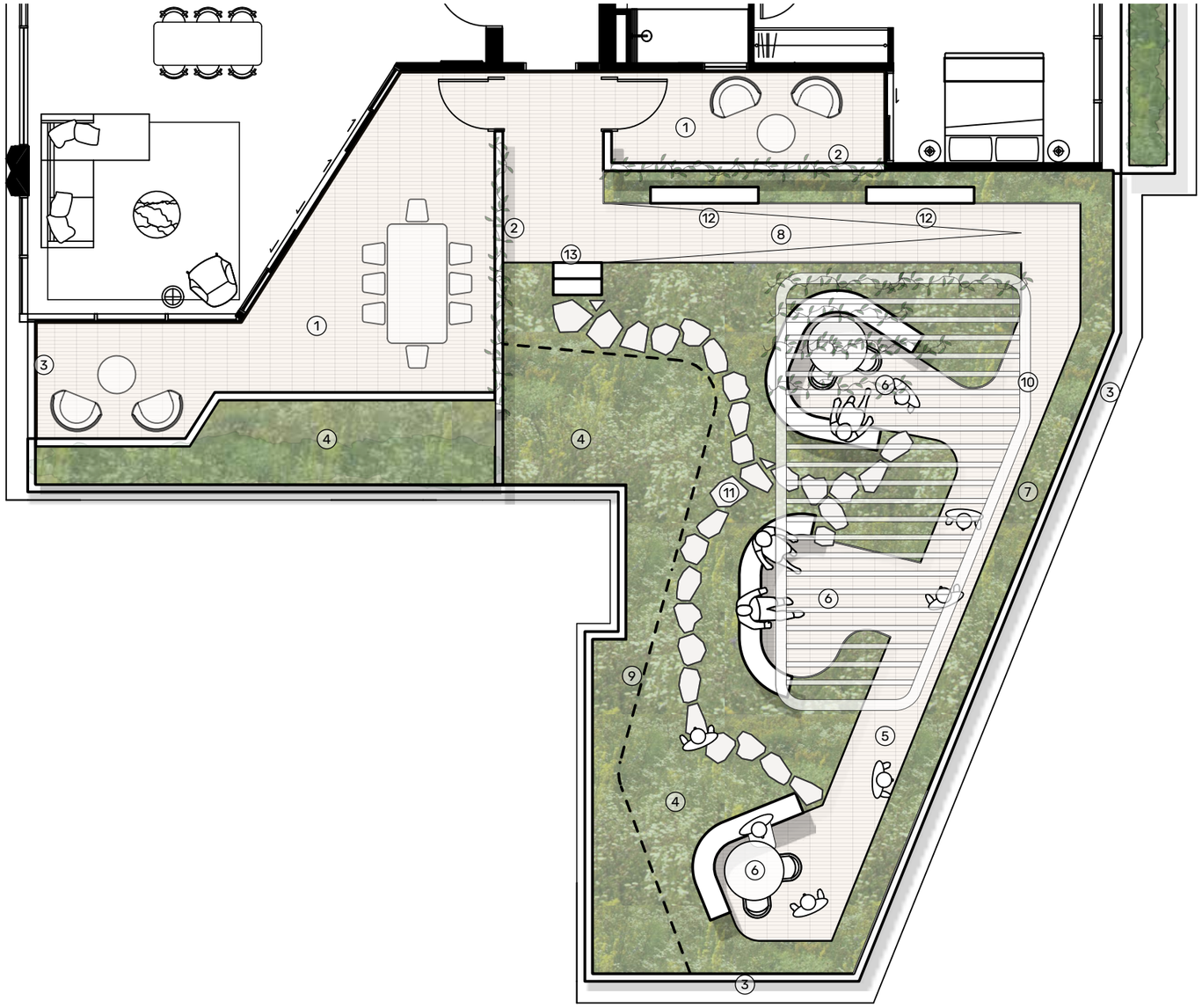
Pictured

View of proposal from Walker Street looking North

6.0

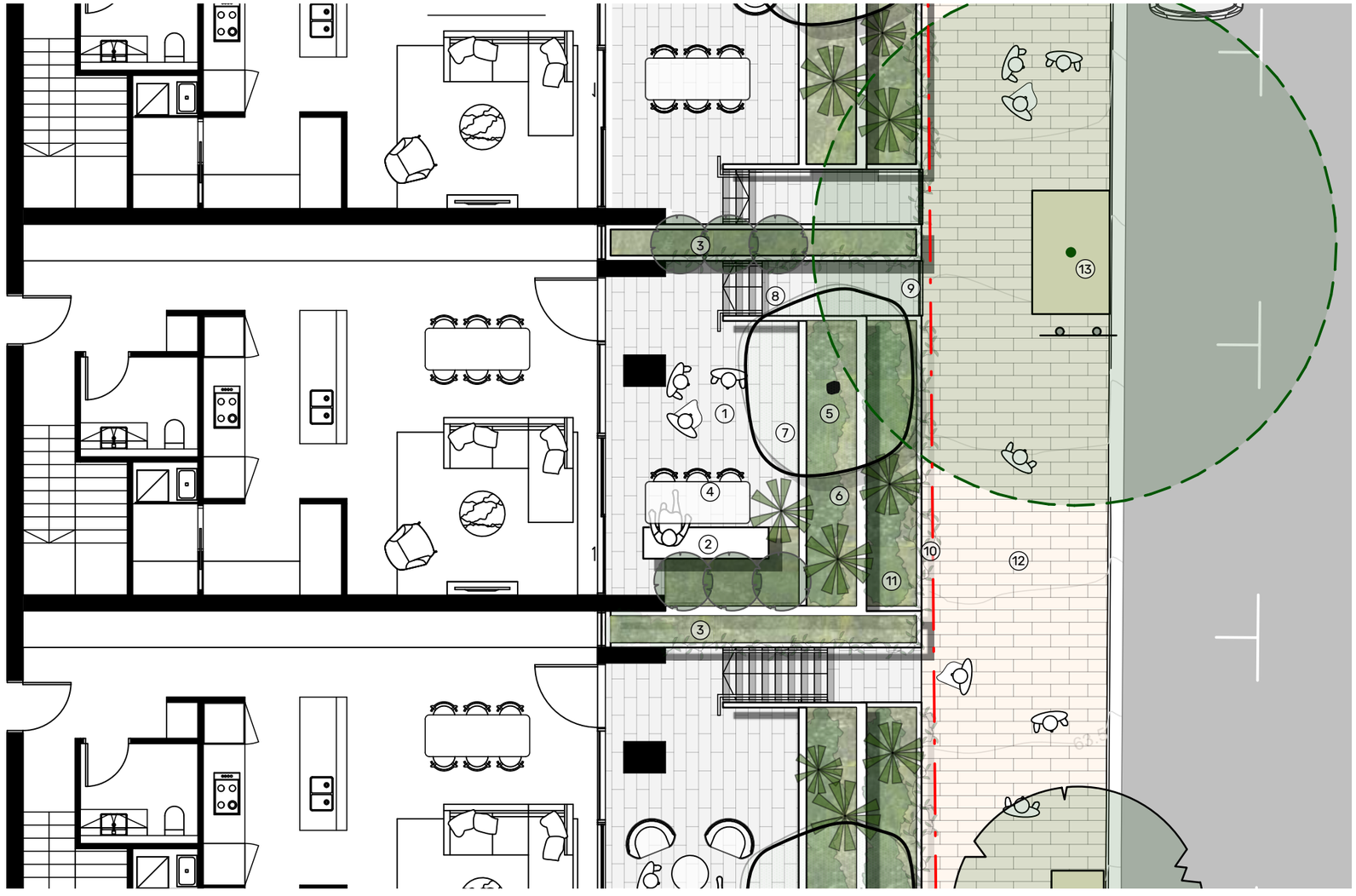
Landscape Design

6.1 Communal Terrace

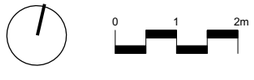


1 PRIVATE RESIDENTIAL COURTYARD WITH GATE ACCESS
2 PRIVACY SCREEN WITH CLIMBERS/VINES
3 PARAPET AND BALUSTRADE
4 ROOF TOP GARDENS
5 PEDESTRIAN PATH
6 PASSIVE / SOCIAL GARDEN 'ROOMS' WITH SEATING / FURNITURE
7 GARDEN ALONG PARAPET EDGE
8 1:20 RAMP UP TO ACHIEVE PATHWAY FLUSH WITH GARDEN
9 BALUSTRADE SET IN FROM PARAPET TO AVOID OVERSHADOW
10 PAVILION - SHADE/PRIVACY STRUCTURE WITH PLANTING
11 GARDEN PATH (STEPPERS)
12 SEATING
13 STEPS UP TO GARDEN PATH

6.1 Ground Floor



1 PRIVATE OUTDOOR TERRACE
2 INSITU BENCH SEAT
3 PRIVACY SCREEN PLANTING BETWEEN TERRACES
4 OUTDOOR DINING
5 SMALL TREE PLANTING
6 UPPER TERRACE PLANTING FLUSH WITH PAVING
7 PALISADE FENCE TO TOP OF TERRACE WALL
8 ENTRY STAIR
9 ENTRY GATE
10 STREET WALL
11 STREET FRONT GARDEN
12 PUBLIC DOMAIN FOOTPATH TO NORTH SYDNEY COUNCIL SPECIFICATION
13 EXISTING LONDON PLANE STREET TREE TO BE RETAINED



7.0

Environmentally Sustainable Design

7.0 Environmentally Sustainable Design

ESD Strategy

For a meaningful contribution to sustainability the project is targeting higher than minimum environmental performance.

Net Zero Carbon Ready

The building is designed to anticipate and achieve net-zero carbon and includes the following critical elements:

— High Performance Façade: Minimal HVAC use through integrated passive shading, solar optimisation, associated operational energy use and natural ventilation to reduce heating and cooling loads.

— Extensive perimeter insulated solid wall areas behind widened window shading fins and spandrels, which reduces cooling and heating energy needs

— All electric power to apartments: no fossil fuel use.

— Rooftop PVs, smart grid systems, facilitate renewable energy purchase and distribution.

— Provision for Electric Vehicle charging

Water Smart Building

Principle 4: Sustainability

Good design combines positive environmental, social and economic outcomes.
Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials and deep soil zones for groundwater recharge and vegetation.

— High performance facades greatly reduce cooling loads and water used by cooling towers

— Rainwater Tank

— Extensive green roofs provide water storage and filtration.

— Water Minimisation: Utilises water efficient fixtures

Healthy Building

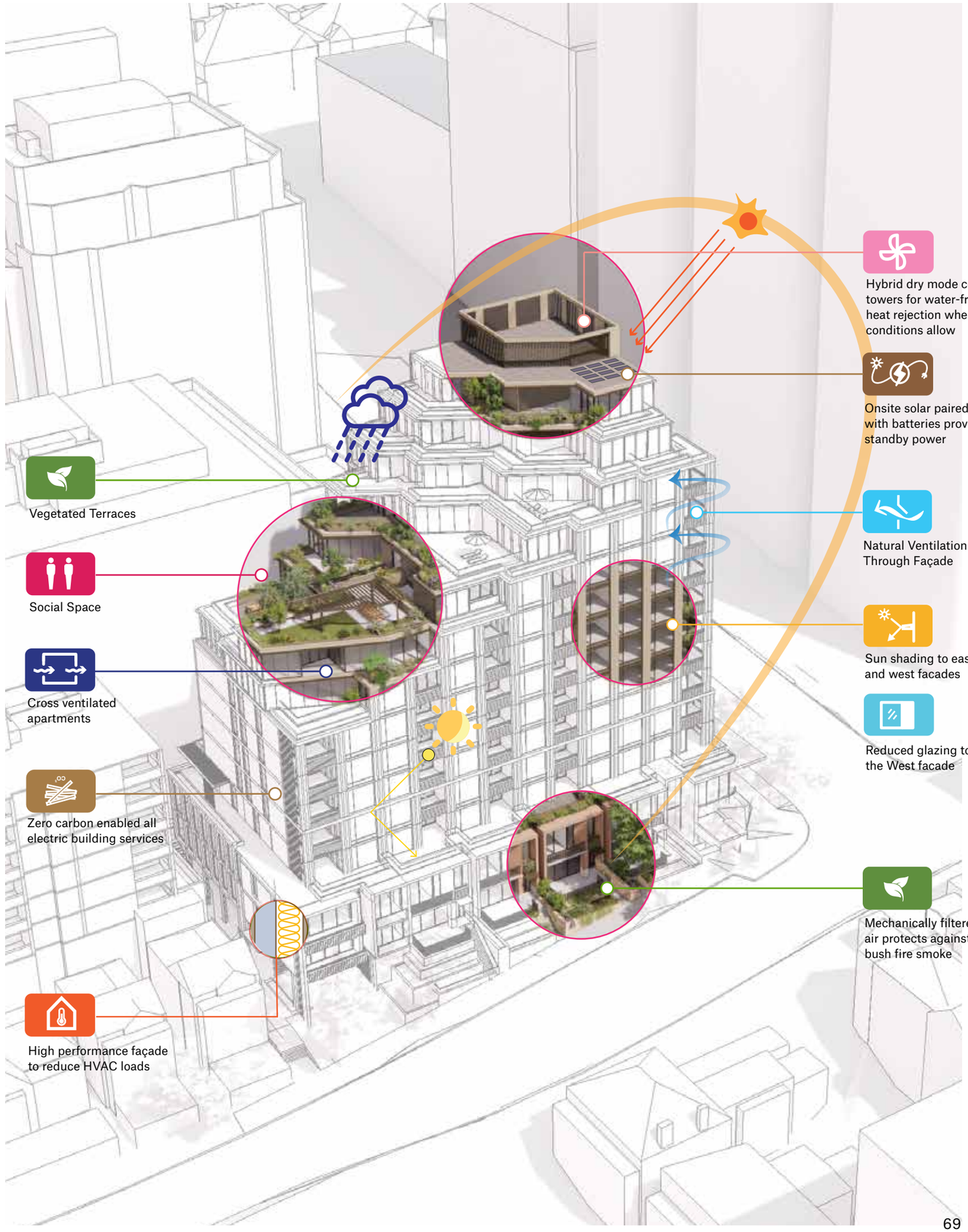
— Deliver an exceptionally healthy built environment, with high thermal comfort and air quality.

— Naturally ventilated corridors and apartments through louvres and operable windows

— Green Roofs throughout the project create restoring and rejuvenating spaces while combat the urban heat island effect, provides insulation and passive cooling, stormwater retention, improved outlook from the rooms and reduces pollution.

— Planting strategy utilises native planting to re-nature an otherwise highly man-made environment.

— Re-naturing strategy creates a cool, liveable space for ecosystems to flourish



8.0

Density and Yield

8.0 Density and Yield

8.1 Area Schedule

The Gross Floor Area (GFA) of the development has been calculated in accordance with North Sydney Local Enviroment Plan 2013 (NSLEP).

GFA Calculation plans are provided on sheet A22.001 of the architectural drawing set.

FLOOR TO FLOOR				GFA				Dwelling Mix				
LEVEL	USE	(m)	HEIGHT (AHD)	Residential (m^2)	Commercial (m^2)	Residential Amenities (m^2)	Total (m^2)	1-Bed (Adaptable)	2-Bed (Adaptable)	3-Bed (Adaptable)	4-Bed	Total
			114									
Roof	Plant/Lift Overrun	3.3	110.7									
12	Residential	3.25	107.45	150			150					
11	Residential	3.25	104.2	241			241				1	1
10	Residential	3.25	100.95	348			348			2		2
9	Residential	3.25	97.7	428			428			2		2
8	Residential	3.25	94.45	524			524		1	3		4
7	Residential	3.25	91.2	709			709		1	4		5
6	Residential	3.25	87.95	853			853	2	1	4		7
5	Residential	3.25	84.7	880			880	3	1	4		8
4	Residential	3.15	81.55	880			880	3	1	4		8
3	Residential	3.15	78.4	882			882	4	3	2		9
2	Residential	3.15	75.25	908			908	4	2	3		9
1	Residential	3.15	72.1	977			977	4	4	2		10
0-Upper	Commercial/Residential	3.6	68.5	502	560		1062			1		1
0	Commercial/Residential	3.5	65	538	720		1258		1	4		5
0-Lower	Commercial/Car Park	4.6	60.4		538		538					
B1	Car Park/Residential Amenities	3.4	57	64		315	379					
B2	Car Park	3	54	19			19					
				Total Residential GFA m^2	Total Commercial GFA m^2	Total Communal GFA m^2	Total GFA m^2	1-Bed	2-Bed	3-Bed	4-Bed	Total Dwellings
			Total (m^2):	8,903	1,818	315	11,036	20	15	35	1	71
			Resultant	5.0	1.0	0.2	6.2					

GFA
gross floor area means the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, including:
(a) the area of a mezzanine, and
(b) habitable rooms in a basement or an attic, and
(c) any shop, auditorium, cinema, and the like, in a basement or attic,
excluding:
(d) any area for common vertical circulation, such as lifts and stairs, and
(e) any basement:
(i) storage, and
(ii) vehicular access, loading areas, garbage and services, and
(f) plant rooms, lift towers and other areas used exclusively for mechanical services or ducting, and
(g) car parking to meet any requirements of the consent authority (including access to that car parking), and
(h) any space used for the loading or unloading of goods (including access to it), and
(i) terraces and balconies with outer walls less than 1.4 metres high, and
(i) voids above a floor at the level of a storev or storev above.

8.2 Density

The proposal delivers a total GFA of 11,036m² on a site area of 1,792m², resulting in an FSR of 6:16.

This total GFA is comprises of the following:

Residential GFA	8,903 m^2	4.97 FSR
Non-Residential GFA	1,818m^2	1:01 FSR
Residential Amenity	315m^2	0.18 FSR
Total GFA	**11,036** m^2	**6:16 FSR**

Principle 3: 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.
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.

8.0 Density and Yield

8.3 Dwelling Size and Mix

The development consists of a total of 71 dwellings comprising the following mix of dwelling types.

Unit Type	Quantity	Mix	Size
1-bed*	20	28%	52-65m^2
2-bed*	15	21%	74-110m^2
3-bed*	35	47%	102-184m^2
4-bed Penthouse	1	1.4%	387m^2

*Provision for 20% adaptable apartments within allocated mix.

8.4 Accessibility and Adaptable Housing

Accessibility has been well considered both across the site, as well as the provision of adaptable housing. Additionally, 100% of apartments are designed to achieve LHA 'Silver Liveable' standard.

All lobbies and commercial facility units on Ground Floor have a level threshold to their entries. Accessible, threshold free access is also provided to all apartments, and commercial facilities.

The scheme proposes 14 adaptable dwellings, made up of one 1-bed apartment, twelve 2-bed and six 3-bed apartments.

8.5 Car Parking

The scheme proposes a total of 59 (54 residential, 5 visitor) parking spaces across 2 basement levels. Accessible spaces have been provided for all adaptable units.

8.6 Apartment Storage

Apartment storage has been provided in accordance with the Apartment Design Guide. The minimum storage volumes required are as follows:

1 Bed Apartment	6m^3
2 Bed Apartment	8m^3
3+4 Bed Apartments	10m^3

The storage provision for each apartment is provided 50% within the apartment and 50% within the basement within storage cages designated to each unit.

The apartment plans on drawings A13.01 and A13.02 detail how the storage requirements are being achieved.

Principle 8: Housing diversity and social interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.
Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix.
Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.

Appendix A

ADG Compliance Assessment

Objective	Design Criteria	Bates Smart Commentary	Compliance
Part 3 Siting the development			
3A Site Analysis			
Objective 3A-1: Site Analysis illustrates that design decisions have been based on opportunities & constraints of the site conditions & their relationship to the surrounding context.		Detailed site analysis included in chapter 2.0 of this report	Yes
3B Orientation			
Objective 3B-1: Building types & layouts respond to the streetscape & site while optimising solar access within the development	-	The massing strategy has been carefully considered to maximise solar access to apartments and open space, and to optimize street activation. Refer to Sections 3 and 4 of this report.	Yes
Objective 3B-2: Overshadowing of neighbouring properties is minimised during mid winter.	-	Detailed solar access analysis of the surrounding development has been undertaken. Solar access to the plaza, in particular has shaped the envelope.	Yes
3C Public Domain Interface			
Objective 3C-1: Transition between private & public domain is achieved without compromising safety & security.	-	All four site boundaries provide activated frontage with retail, commercial, or residential entries creating an engaged public private transition.	Yes
Objective 3C-2: Amenity of the public domain is retained & enhanced.	-	As part of the proposal 3m is added to the through site link to the south of the site. This will allow safer, more pleasant pedestrian access. The through site link has also been activated by the entry to a commercial tenancy on that boundary.	Yes
3D Communal and Open Space			
Objective 3D-1: An adequate area of communal open space is provided to enhance residential amenity & to provide opportunities for landscaping.	Communal open space has a minimum area equal to 25% of the site	Communal open space is provided in the form of a roof terraces 129m^2 at level 08 and Common shared rooms on level B1 of 311m^2 . In total these two areas equate to 25% of the site area.	No
	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 9 am and 3 pm on 21 June (mid winter)	The L08 roof top terrace receives good solar access throughout the day in mid winter as well as an expansive outlook over the harbour.	Yes
Objective 3D-2: Communal open space is designed to allow for a range of activities, respond to site conditions & be attractive and inviting	-	The roof top terrace offers a quiet location with several distinct spaces so that the area can be used by several groups of people at the same time. In addition it is proposed to provide residents with internal spaces to allow for activities like dinning rooms or a gym. There are different sizes which will allow flexibility of use. Refer to the Landscape Architects documentation for detail of the Roof top.	Yes
Objective 3D-3: Communal open space is designed to maximise safety.	-	All rooftops terraces are access controlled for the residents and have appropriate fall and wind protection for the level at which they are situated.	Yes
Objective 3D-4: Public open space, where provided, responds to the existing pattern & uses of the neighbourhood.	-	The public through site link is to be expanded by 3m to encourage use by pedestrians.	Yes

<table>
<tr><th>Objective</th><th>Design Criteria</th><th>Bates Smart Commentary</th><th>Compliance</th></tr>
<tr><td colspan="4">3E Deep Soil Zones</td></tr>
<tr><td>Objective 3E-1 : Deep soil zones are suitable for healthy plant & tree growth, improve residential amenity and promote management of water and air quality.</td><td>Deep soil zones are to meet the following minimum requirements:
<table><tr><th>Site Area (sqm)</th><th>Minimum Dim. (m)</th><th>Deep Soil Zone (% of site area)</th></tr><tr><td>Less than 650</td><td>-</td><td rowspan="4">7</td></tr><tr><td>650-1500</td><td>3</td></tr><tr><td>Greater than 1500</td><td>6</td></tr><tr><td>Greater than 1500 with significant existing tree cover</td><td>6</td></tr></table></td><td>Generous planting depths are able to be achieved because of the street falls. The 5m front setback to Walker Street contains a large amount of planting, providing a landscape buffer between the building and the footpath.</td><td>No</td></tr>
<tr><td colspan="4">3F Visual Privacy</td></tr>
<tr><td>Objective 3F-1: Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external & internal visual privacy.</td><td>Separation between windows & balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side & rear boundaries are as follows:
<table><tr><th>Building Height (m)</th><th>Habitable Rooms & Balconies. (m)</th><th>Non-Habitable Rooms (m)</th></tr><tr><td>Up to 12 (4 storeys)</td><td>6</td><td>3</td></tr><tr><td>Up to 25 (5-8 storeys)</td><td>9</td><td>4.5</td></tr><tr><td>Over 25 (9+ storeys)</td><td>12</td><td>6</td></tr></table>Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room. Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties.</td><td>Visual privacy is achieved by a series of measures that work together to achieve a level of amenity for the apartments. This strategy is described in detail in Section 3.4 and 4.13</td><td>Yes</td></tr>
<tr><td>Objective 3F-2: Site & building design elements increase privacy without compromising access to light & air and balance outlook & views from habitable rooms & private open space.</td><td>-</td><td>Privacy has been carefully considered alongside access to views, light and air. Section 3.4,4.13 of this report describes in detail how the floorplate design, louvred screens, windows and facade articulation have been developed to achieve this.</td><td>Yes</td></tr>
<tr><td colspan="4">3G Pedestrian Access and Entries</td></tr>
<tr><td>Objective 3G-1: Building entries & pedestrian access connects to and addresses the public domain.</td><td>-</td><td>All four street boundaries are activated with pedestrian entries. The main residential entry is off McLaren street, flanked by permeable retail tenancies. Walker Street has a series of townhouse entries with gates and fences in a terraced landscape, which responds to the residential character of the street. It is proposed to enhance the use of Harnett Street by providing a warm entry to the commercial tenancy. It is intended that this will create a destination in Harnett Street which will drawn pedestrian traffic through it and the through site link which also is activated by entry to the Lower Ground commercial tenancy.</td><td>Yes</td></tr>
<tr><td>Objective 3G-2: Access, entries & pathways are accessible & easy to identify.</td><td>-</td><td>All entries are clearly identified by a an entrance canopy providing weather protection.</td><td>Yes</td></tr>
<tr><td>Objective 3G-3: Large sites provide pedestrian links for access to streets & connection to destinations.</td><td>-</td><td>N/A</td><td>N/A</td></tr>
<tr><td colspan="4">3H Vehicle Access</td></tr>
<tr><td>Objective 3H-1: Vehicle access points are designed & located to achieve safety, minimise conflicts between pedestrians & vehicles and create high quality streetscapes.</td><td>-</td><td>Vehicular access has been arranged to minimise impact on the road network and public domain, with all cars and service vehicles accessing the site from one entry point on Claude Street.</td><td>Yes</td></tr>
</table>

Objective	Design Criteria	Bates Smart Commentary	Compliance
Objective 3J-1: Car parking is provided based on proximity to public transport in metropolitan Sydney & centres in regional areas.	For development in the following locations: — On sites that are within 800m of a railway station or light rail stop in the Sydney Metropolitan Area; or — On land zoned, and sites within 400m of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre The minimum car parking requirement for residents & visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less. The car parking needs for a development must be provided off street.	All parking is provided off street in a two level below-ground basement. 54 car spaces are provided for the residential component of the development and 5 visitor spaces. The site is in close proximity (100m) to the proposed Victoria Cross Metro Station North Entry	Yes
Objective 3J-2: Parking & facilities are provided for other modes of transport.	-	Dedicated motorcycle spaces bike storage areas are proposed in the basement.	Yes
Objective 3J-3: Car park design & access is safe and secure.	-	The car park is secured via a vehicle door and designed in accordance with AS2890.1	Yes
Objective 3J-4: Visual & environmental impacts of underground car parking are minimised.	-	The car park entry has been integrated with the building and minimised by using a single vehicle crossing, setting back the entry and providing thoughtful landscape design to screen the entry where possible.	Yes
Objective 3J-5: Visual & environmental impacts of on-grade car parking are minimised.	-	N/A	N/A
Objective 3J-6: Visual & environmental impacts of above ground enclosed car parking are minimised.	-	N/A	N/A
Part 4 Designing the Building			
4A Solar and Daylight Access			
Objective 4A-1: To optimise number of apartments receiving sunlight to habitable rooms, primary windows & private open space.	Living rooms & private open spaces of at least 70% of apartments in a building receive a minimum of 2 hrs direct sunlight between 9am - 3pm at mid winter in Sydney Metropolitan Area and in Newcastle and Wollongong local government areas	Taking into account the constraints of the surrounding development the solar access to apartments has been maximised. Refer Section 3.3 of this report.	No
	In all other areas, living rooms & private open spaces of at least 70% of apartments in a building receive a minimum of 3 hrs direct sunlight between 9 am - 3 pm at mid winter	N/A	N/A
	A maximum of 15% of apartments in a building receive no direct sunlight between 9 am - 3 pm at mid winter	31% of proposed apartments will receive no solar access to living rooms and balconies at midwinter. Refer Section 3.3 of this report.	No
Objective 4A-2: Daylight access is maximised where sunlight is limited.	-	Where possible large windows maximise solar access to apartments	Yes
Objective 4A-3: Design incorporates shading & glare control, particularly for warmer months.	-	The facade is designed with depth to provide inherent shading. In addition a combination of hoods, blades and screens are used to provide shading and control glare.	Yes
4B Natural Ventilation			
Objective 4B-1: All habitable rooms are naturally ventilated.	-	Every habitable room has a window or is open plan connected with a living space.	Yes

<table>
<tr><th>Objective</th><th>Design Criteria</th><th>Bates Smart Commentary</th><th>Compliance</th></tr>
<tr><td>Objective 4B-2: The layout & design of single aspect apartments maximises natural ventilation.</td><td>-</td><td>The floor plates include a high proportion of corner apartments to maximise cross ventilation. Single aspect apartments have operable windows facing into their balcony as to the outside of the envelope to allow for natural ventilation.</td><td>Yes</td></tr>
<tr><td rowspan="2">Objective 4B-3: Number of apartments with natural cross vent is maximised to create comfortable indoor environments for residents.</td><td>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</td><td>59% of apartments from Level 0 to L08 are naturally cross ventilated with windows facing more than one aspect. Refer Section 3.3 of this report. 62% of all the apartments in the building are naturally cross ventilated.</td><td>No</td></tr>
<tr><td>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line</td><td>The proposal does not include cross-over or cross-through apartments</td><td>N/A</td></tr>
<tr><td colspan="4">4C Ceiling Heights</td></tr>
<tr><td>Objective 4C-1: Ceiling height achieves sufficient natural ventilation & daylight access.</td><td>Measured from finished floor level to finished ceiling level, minimum ceiling heights are:<table><tr><th colspan="2">Minimum Ceiling Height for apt and mixed-used buildings (m)</th></tr><tr><td>Habitable rooms</td><td>2.7</td></tr><tr><td>Non-habitable rms</td><td>2.4</td></tr><tr><td>For 2 storey apts</td><td>2.7 for main living area floor; 2.4 for second floor, where its area does not exceed 50% of the apt area</td></tr><tr><td>Attic spaces</td><td>1.8 at edge of room with 30deg minimum ceiling slope</td></tr><tr><td>Mixed-used areas</td><td>3.3 for ground and first floor to promote future flexibility of use</td></tr></table>These minimums do not preclude higher ceilings if desired</td><td>Floor to floor heights of 3.15m [levels 1 to 5] and 3.25m [levels 6-12] minimum will deliver habitable room ceilings of 2.7m and non-habitable room ceilings of 2.4m throughout.</td><td>Yes</td></tr>
<tr><td>Objective 4C-2: Ceiling height increases the sense of space in apartments & provides for well proportioned rooms.</td><td>-</td><td>-</td><td>Yes</td></tr>
<tr><td>Objective 4C-3: Ceiling heights contribute to the flexibility of building use over the life of the building.</td><td>-</td><td>-</td><td>Yes</td></tr>
<tr><td colspan="4">4D Apartment Size and Layout</td></tr>
<tr><td rowspan="2">Objective 4D-1: The layout of rooms within apartment is functional, well organised & provides a high standard of amenity.</td><td>Apartments have the following minimum internal areas:<table><tr><th>Apartment Type</th><th>Minimum Internal Area (sqm)</th></tr><tr><td>Studio</td><td>35</td></tr><tr><td>1 Bedroom</td><td>50</td></tr><tr><td>2 Bedroom</td><td>70</td></tr><tr><td>3 Bedroom</td><td>90</td></tr></table>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5sqm each. A fourth bedroom & further additional bedrooms increase the minimum internal area by 12sqm each</td><td>-</td><td>Yes</td></tr>
<tr><td>Every habitable room has 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 & air is not borrowed from other rooms</td><td>-</td><td>Yes</td></tr>
</table>

<table>
<tr><th>Objective</th><th>Design Criteria</th><th>Bates Smart Commentary</th><th>Compliance</th></tr>
<tr><td rowspan="2">Objective 4D-2: Environmental performance of the apartment is maximised.</td><td>Habitable room depths are limited to a maximum of 2.5 x ceiling height</td><td>-</td><td>Yes</td></tr>
<tr><td>In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window</td><td>-</td><td>Yes</td></tr>
<tr><td rowspan="4">Objective 4D-3: Apartment layouts are designed to accommodate a variety of household activities & needs.</td><td>Master bedrooms have a minimum area of 10sqm & other bedrooms 9sqm (excluding wardrobe space)</td><td>-</td><td>Yes</td></tr>
<tr><td>Bedrooms have a minimum dimension of 3m (excluding wardrobe space)</td><td>-</td><td>Yes</td></tr>
<tr><td>Living rooms or combined living/dining rooms have a minimum width of:
— 3.6m for studio & 1 bedroom apartments
— 4m for 2 & 3 bedroom apartments</td><td>-</td><td>Yes</td></tr>
<tr><td>The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts</td><td>The proposal does not include cross-over or cross-through apartments</td><td>N/A</td></tr>
<tr><td colspan="4">4E Private Open Space and Balconies</td></tr>
<tr><td rowspan="2">Objective 4E-1: Apartments provide appropriately sized private open space & balconies to enhance residential amenity.</td><td>All apartments are required to have primary balconies as follows:
<table><tr><th>Apartment Type</th><th>Minimum Area (sqm)</th><th>Minimum Depth (m)</th></tr><tr><td>Studio</td><td>4</td><td>-</td></tr><tr><td>1 Bedroom</td><td>8</td><td>2</td></tr><tr><td>2 Bedroom</td><td>10</td><td>2</td></tr><tr><td>3+ Bedroom</td><td>12</td><td>2.4</td></tr></table>The minimum balcony depth to be counted as contributing to the balcony area is 1m</td><td>-</td><td>Yes</td></tr>
<tr><td>For apartments at ground level or on podium or similar, a private open space is provided instead of a balcony. It must have minimum area of 15sqm & minimum depth of 3m</td><td>N/A</td><td>N/A</td></tr>
<tr><td>Objective 4E-2: Primary private open space & balconies are appropriately located to enhance liveability for residents</td><td>-</td><td>Balconies and terraces have been located in the sunniest positions.</td><td>Yes</td></tr>
<tr><td>Objective 4E-3: Private open space & balcony design is integrated into & contributes to the overall architectural form & detail of the building</td><td>-</td><td>Balconies have been designed as either integrated into the building mass or as expressed balconies, providing a semi solid interface to McLaren Street.</td><td>Yes</td></tr>
<tr><td>Objective 4E-4: Private open space & balcony design maximises safety</td><td>-</td><td>Balconies are designed free of climbable hazards.</td><td>Yes</td></tr>
<tr><td colspan="4">4F Common Circulation and Spaces</td></tr>
<tr><td>Objective 4F-1: Common circulation spaces achieve good amenity & properly service the number of apartments</td><td>The maximum number of apartments off a circulation core on a single level is eight</td><td>Level 1 has 10 apartments off a single core. Levels 2 and 3 have 9. These levels are served by two lifts and have wide corridors with full height windows at the end.</td><td>No</td></tr>
</table>

<table>
<tr><th>Objective</th><th>Design Criteria</th><th>Bates Smart Commentary</th><th>Compliance</th></tr>
<tr><td></td><td>For buildings of 10 storeys & over, the maximum number of apartments sharing a single lift is 40</td><td>Two lifts have been provided for 71 apartments</td><td>Yes</td></tr>
<tr><td>Objective 4F-2: Common circulation spaces promote safety & provide for social interaction between residents</td><td>-</td><td>A generous and well defined ground floor lobby is proposed with a lounge space for residents to meet and socialise.</td><td>Yes</td></tr>
<tr><td>4G Storage</td><td></td><td></td><td></td></tr>
<tr><td>Objective 4G-1: Adequate, well designed storage is provided in each apartment</td><td>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:
<table><tr><th>Apartment Type</th><th>Storage Size Volume (m3)</th></tr><tr><td>Studio</td><td>4</td></tr><tr><td>1 Bedroom</td><td>6</td></tr><tr><td>2 Bedroom</td><td>8</td></tr><tr><td>3+ Bedroom</td><td>10</td></tr></table>At least 50% of the required storage is to be located within the apartment</td><td>Apartments layouts include a good amount of storage, meeting or exceeding the minimum required to be provided within the apartment. Additional storage is located with in the basement with one storage locker for every apartment.</td><td>Yes</td></tr>
<tr><td>Objective 4G-2: Additional storage is conveniently located, accessible & nominated for individual apartments</td><td>-</td><td>Each apartment is provided with additional storage in the basement. The storage cages are contained within a secure room with access to a lift lobby.</td><td>Yes</td></tr>
<tr><td>4H Acoustic Privacy</td><td></td><td></td><td></td></tr>
<tr><td>Objective 4H-1: Noise transfer is minimised through the siting of buildings & building layout</td><td>-</td><td>Balconies have been located away from other balconies where possible. The majority of balconies are not adjacent to another balcony.</td><td>Yes</td></tr>
<tr><td>Objective 4H-2: Noise impacts are mitigated within apartments through layout & acoustic treatments</td><td>-</td><td>Where two balconies are adjacent solid barriers are proposed to provide acoustic privacy.</td><td>Yes</td></tr>
<tr><td>4J Noise and Pollution</td><td></td><td></td><td></td></tr>
<tr><td>Objective 4J-1: In noisy or hostile environments impacts of external noise & pollution are minimised through careful siting & layout</td><td>-</td><td>N/A</td><td>N/A</td></tr>
<tr><td>Objective 4J-2: Appropriate noise shielding or attenuation techniques for building design, construction & choice of materials are used to mitigate noise transmission</td><td>-</td><td>Glazing treatment to be as per Acoustic report</td><td>Yes</td></tr>
<tr><td>4K Apartment Mix</td><td></td><td></td><td></td></tr>
<tr><td>Objective 4K-1: A range of apartment types & sizes is provided to cater for different household types now & into the future</td><td>-</td><td>A range of apartment types are provided including 1 bedroom, 2 bedroom, 3 bedroom apartments. A two storey penthouse is proposed for the top levels and 3 and 4 bedroom townhouses are proposed for Walker Street.</td><td>Yes</td></tr>
</table>

Objective	Design Criteria	Bates Smart Commentary	Compliance
Objective 4K-2: The apartment mix is distributed to suitable locations within the building	-		Yes
4L Ground Floor Apartments			
Objective 4L-1: Street frontage activity is maximised where ground floor apartments are located	-	Two storey townhouses are located on Walker Street with courtyards and gates facing the street.	N/A
Objective 4L-2: Design of ground floor apartments delivers amenity & safety for residents	-	A terraced landscape creates a soft buffer to the street. Gates are proposed to the townhouses to define private space. Passive surveillance from the courtyard creates a safe entry to each townhouse.	N/A
4M Façades			
Objective 4M-1: Building façades provide visual interest along the street while respecting the character of the local area	-	Refer to chapter 5.	Yes
Objective 4M-2: Building functions are expressed by the facade	-	Refer to chapter 5.	Yes
4N Roof Design			
Objective 4N-1: Roof treatments are integrated into the building design & positively respond to the street	-	The stepping form of the building has provided an opportunity for a series of roof terraces. These terraces create a blurred green edge to the roof tops.	Yes
Objective 4N-2: Opportunities to use roof space for residential accommodation & open space are maximised	-	A Communal roof terraces is located on L08, a prime location within the building with excellent winter sun and expansive views over the harbour.	Yes
Objective 4N-3: Roof design incorporates sustainability features	-	Solar panels are proposed to be installed on the L13 roof top.	Yes
4O Landscape Design			
Objective 4O-1: Landscape design is viable & sustainable	-	Refer to chapter 6 and 360° Landscape Architects separate Design Report.	Yes
Objective: 4O-2 Landscape design contributes to streetscape & amenity	-	Refer to chapter 6 and 360° Landscape Architects separate Design Report.	Yes
4P Planting on Structures			
Objective 4P-1: Appropriate soil profiles are provided	-	ADG recommended soil profiles are met. Refer to 360° Landscape Architects separate Design Report.	Yes
Objective 4P-2: Plant growth is optimised with appropriate selection & maintenance	-	Refer to 360° Landscape Architects separate Design Report.	Yes
Objective 4P-3: Planting on structures contributes to the quality & amenity of communal & public open spaces	-	Refer to 360° Landscape Architects separate Design Report.	Yes

Objective	Design Criteria	Bates Smart Commentary	Compliance
4Q Universal Design			
Objective 4Q-1: Universal design features are included in apartment design to promote flexible housing for all community members	-	All units provide an accessible entry and access to living spaces	Yes
Objective 4Q-2: A variety of apartments with adaptable designs are provided	-	20% of apartments are designed as adaptable as defined by AS4299. 100% of apartments are designed to meet the Silver Livable housing requirements.	Yes
Objective 4Q-3: Apartment layouts are flexible & accommodate a range of lifestyle needs	-	Layouts include a range of flexible design solutions such as: dual master bedroom apartments with separate bathrooms; larger apartments with various living space options	Yes
4R Adaptive Reuse		Not Applicable to this project	
4S Mixed Use Objective 4S-1: Mixed use developments are provided in appropriate locations and provide active street frontage that encourage pedestrian movement	-	All four frontages provide activation, either retail, commercial or residential. The widening of the through site link is proposed to promote pedestrian movement between Harnett and Walker Streets.	Yes
Objective 4S-2: Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents	-	Security and safety is managed through a residential concierge and separated use access control.	Yes
4T Awnings and Signage			
Objective 4T-1: Awnings are well located and complement & integrate with the building design.	-	Awnings are proposed to provide shelter along the key commercial frontages of Walker Street, wrapping the corner into Harnett Street. Individual awning are proposed as markers for each of the commercial entries.	Yes
Objective 4T-2: Signage responds to context & desired streetscape character.	-		Yes
4U Energy Efficiency			
Objective 4U-1: Development incorporates passive environmental design.	-	The building envelope is designed to utilise the energy of the sun and natural ventilation to keep occupants comfortable whilst reducing the need for mechanical heating and cooling. Sustainability strategies are outlined in chapter 7.	Yes
Objective 4U-2: Passive solar design is incorporated to optimise heat storage in winter & reduce heat transfer in summer.	-	As above.	Yes
Objective 4U-3: Adequate natural ventilation to minimise the need for mechanical ventilation.	-	All apartments have operable windows providing for natural ventilation	Yes
4V Water Management and Conservation			

Objective	Design Criteria	Bates Smart Commentary	Compliance
Objective 4V-1: Potable water use is minimised.	-	Water efficient fittings and appliances will be specified and apartments individually metered. Rainwater will be collected, stored and reused on site. A mix of planting is specified within landscaped areas including drought tolerant, low water use plants.	Yes
Objective 4V-2: Urban storm water is treated on site before being discharged to receiving waters.	-	OSD is located below ground level on Walker Street.	Yes
Objective 4V-3: Flood management systems are integrated into site.	-	The building has been designed to meet the flood levels provided by North Sydney council.	Yes
4W Waste Management			
Objective 4W-1: Waste storage facilities are designed to minimise impacts on streetscape, building entry & amenity of residents.	-	A waste a management plan has been prepared which sets out the numbers of bins required. These have been incorporated as required in floor by floor waste rooms, the lower ground waste room, and a centralized collection area within the loading dock.	Yes
Objective 4W-2: Domestic waste is minimised by providing safe & convenient source separation & recycling.	-	Kitchens will be designed to accommodate appropriate recycling storage within the apartment.	Yes
4X Building Maintenance			
Objective 4X-1: Building design detail provides protection from weathering.	-	A range of design details have been developed to provide protection from weathering. Projecting horizontal slab edges will be detailed with drip lines to avoid staining. Planter boxes are designed separately from structure to reduce planter box leaching.	Yes
Objective 4X-2: Systems & access enable ease of maintenance.	-	Building maintenance is proposed to be achieved through a combination of operable windows cleanable from the inside, and safety line access from the roof provide maintenance access to all areas.	Yes
Objective 4X-3: Material selection reduces ongoing maintenance costs.	-	A robust palette of materials is pmainly self finished materials designed to patinate, requiring little ongoing maintenance.	Yes