

47-55 Bunnerong Road Kingsford

Urban Design Report Rev. 3

July 2024

Prepared for LAHC

Nominated Architects
Simon Parsons NSW ARB 6098
Diane Jones NSW ARB 4778
Neša Marojevic NSW ARB 11274

Peddle Thorp & Walker Pty Ltd
ABN 23 000 454 624
Trading as PTW Architects

PTW



Acknowledgement of Country

We respectfully acknowledge the Traditional Custodians of the land on which we work and live; we honour their Elders, past, present and emerging, whose knowledge has cared for, and will continue to care for Country.

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EXECUTIVE SUMMARY

PTW was engaged by The NSW Land and Housing Corporation (LAHC) to show how the site at 47-55 Bunnerong Road, Kingsford could be redeveloped sensitively. This Urban Design Report (UDR), with its reference design, summaries this work.

The following report considers the need for an increase in residential development. This will comprise a community of apartments within taller and highly modulated built form grouped around a large communal open space. With a mix of social and affordable housing, this sustainable residential development located at the corner of Bunnerong Road and Anderson Street, is within walking distance of the light rail stop Juniors Kingsford and will provide an important visible and urban face to a new “housing growth area” identified by Randwick Council.

The proposal will provide a transition in scale from the taller mixed-use developments north on Anzac Parade to the existing lower scale residential developments to the south and west of the site. The proposal with much needed supply in housing will provide a transition in scale between the urban landscape of Anzac Parade and the suburban landscapes within the southern portions of Kingsford and to the west within Daceyville. By adopting a context responsive design approach new built form has been arranged to contribute positively within a well-established roadway pattern. To each street face, multiple entries will form part of a permeable ground plane that has residential amenity and community benefit.

With new street aligned and stepped built forms, the proposal will provide a large north facing communal open space with a deep soil provision of 19% of the site area. To the western edge of the site many mature trees are retained and these will provide amenity while helping to screen the development when viewed along the historic streets of Daceyville.

Current Controls:
The site is within the Kingsford South HIA. This is shown with an increase in height from 12m to 16.5m and an adjusted FSR of 0.75:1 to 1.6:1.

Proposed Heights:	5-8 storeys (up to 28m)
Proposed FSR:	2.7:1
Potential dwelling yield:	187 units
Deep Soil:	19%



View looking along Anderson Street

THE SITE AND ITS SETTINGS

Project Location

The subject site is flanked by Bunnerong Road to the west and Anderson Street to the south.

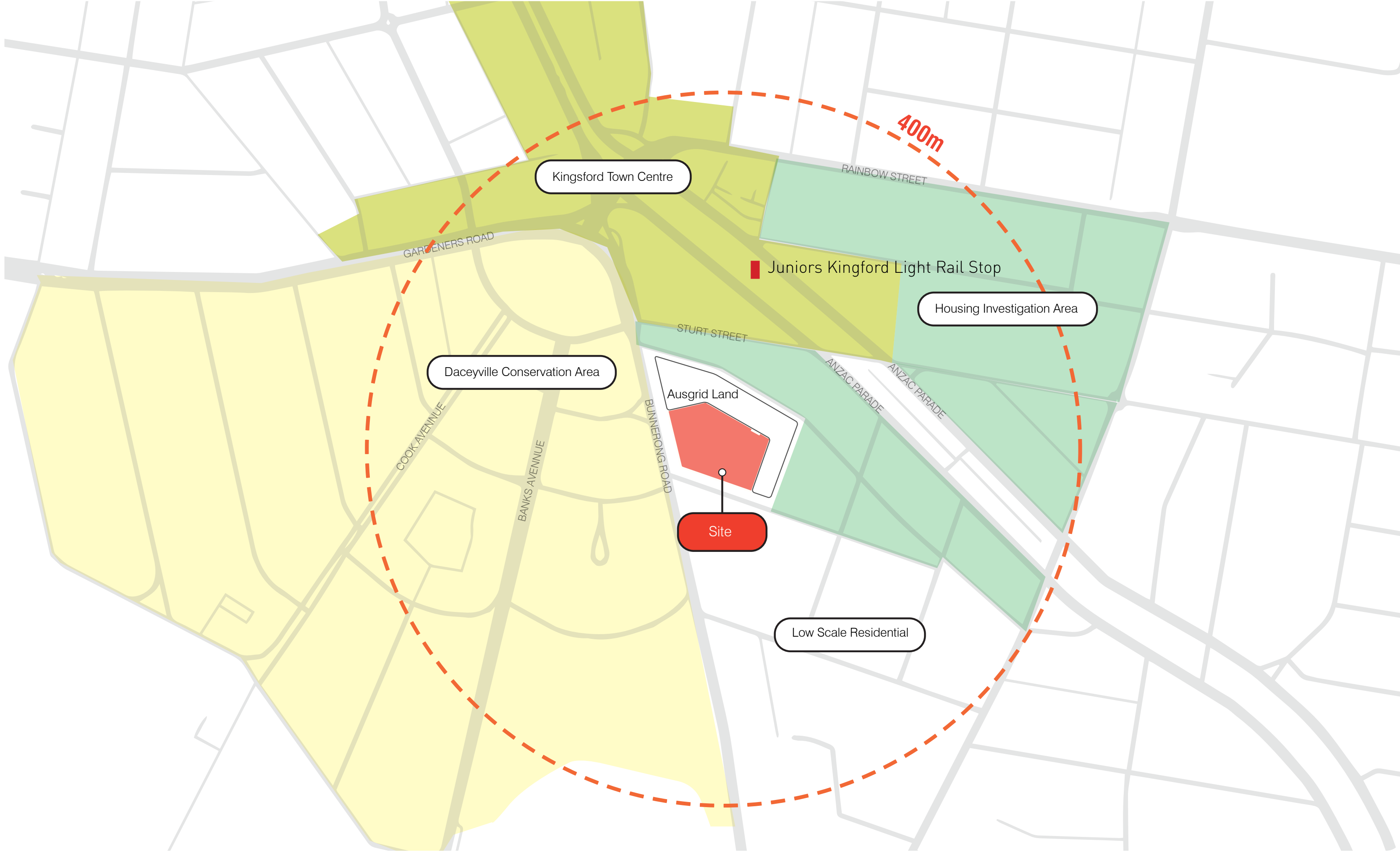
The site is bounded to the east and west by land owned by Ausgrid. This land is reserved for electrical infrastructure and incorporates two substations.

The site is surrounded by four distinctive built-up landscapes. These are:

- Daceyville, which includes the Daceyville Garden Suburb Heritage Conservation Area. This urban landscape is predominately low in scale comprising free-standing dwellings constructed in the early part of the 20th century.
- Kingsford Town Centre, an urban area which is experiencing a transformation into a mixed use town centre of high rise development up to 15 storeys currently under construction. This area is centred on Juniors Kingford light rail stop.
- Kingsford South HIA (Housing Investigation area) is an urban area identified by Randwick Council to provide an uplift in housing development. This change in building height and density is supported by an amended LEP and a site-specific Design Guideline.
- Existing suburban residential uses. located immediately south and west of the development site, this area is characterised by a mixture of single family dwellings and flats from 1 to 3 stories in height.

Key

- Kingsford Town Centre
- Housing Investigation Area (HIA)
- Daceyville Garden Suburb and Heritage Conservation Area



THE SITE AND ITS SETTINGS

Existing Buildings

An existing group of apartment blocks, known as “Coolabah Estate” was constructed for the NSW Housing Commission as social housing in 1949. Comprising eight blocks arranged to define three open ended courts, this development of three-storey buildings contains 54 apartments within a park-like landscape of open ended courts. These spaces were planted with a mixture of native and exotic trees in the 1970s. The buildings, constructed in red face brickwork, have distinct entries but overall the development has no private open space.

Importantly, the landscape character of the courts have informed the proposal.



View of the rear facing open ended court.

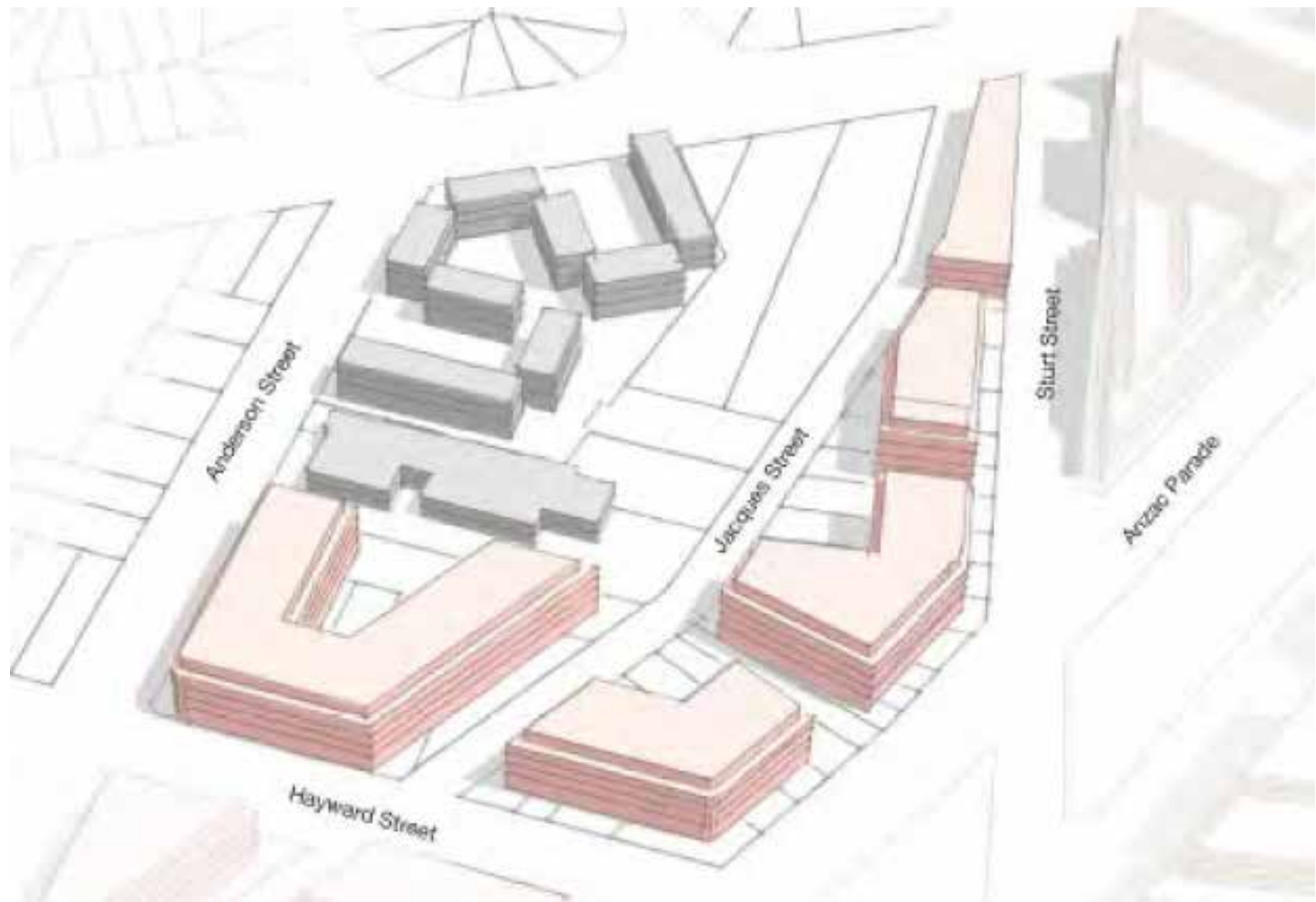
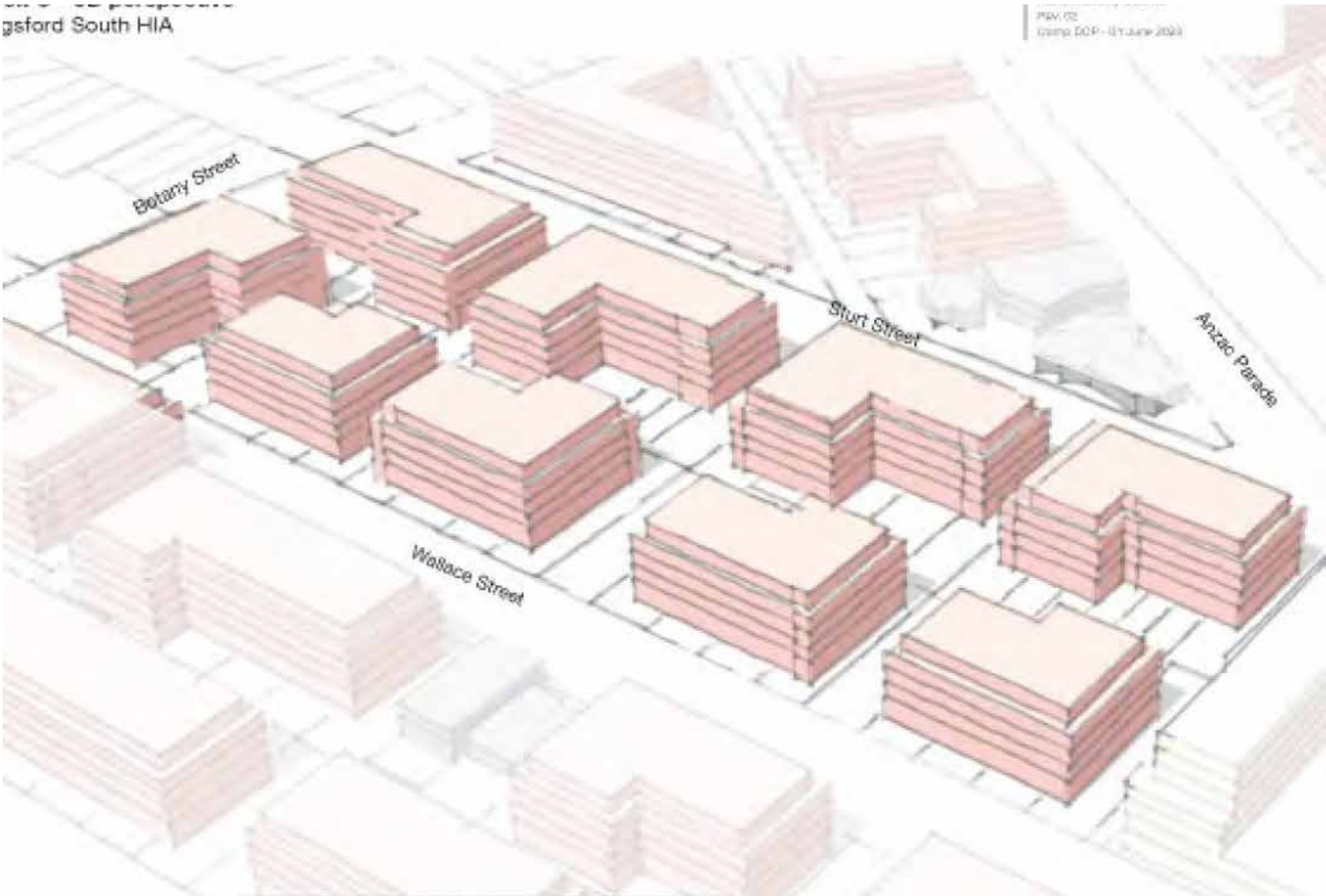
THE SITE AND ITS SETTINGS

Housing Investigation Area

The residential area to the north-east of the site is about to experience a change in scale from 1-3 storey single houses to a mixture of 5 storey apartment blocks on amalgamated sites.

Recent LEP changes along with a new Design Guideline for the HIA Kingsford South, have paved the way for a mid-rise neighbourhood with a focus on pedestrian links, local parks and communal open spaces.

Source: Randwick City council



THE SITE AND ITS SETTINGS

Housing Investigation Area

The HIA Kingsford South Design Guideline supports new development with an extensive network of communal open space areas with deep soil provisions.

This area has access to public transport including bus and light rail.



Corner cafe activation



Through site link

Source: Randwick City council

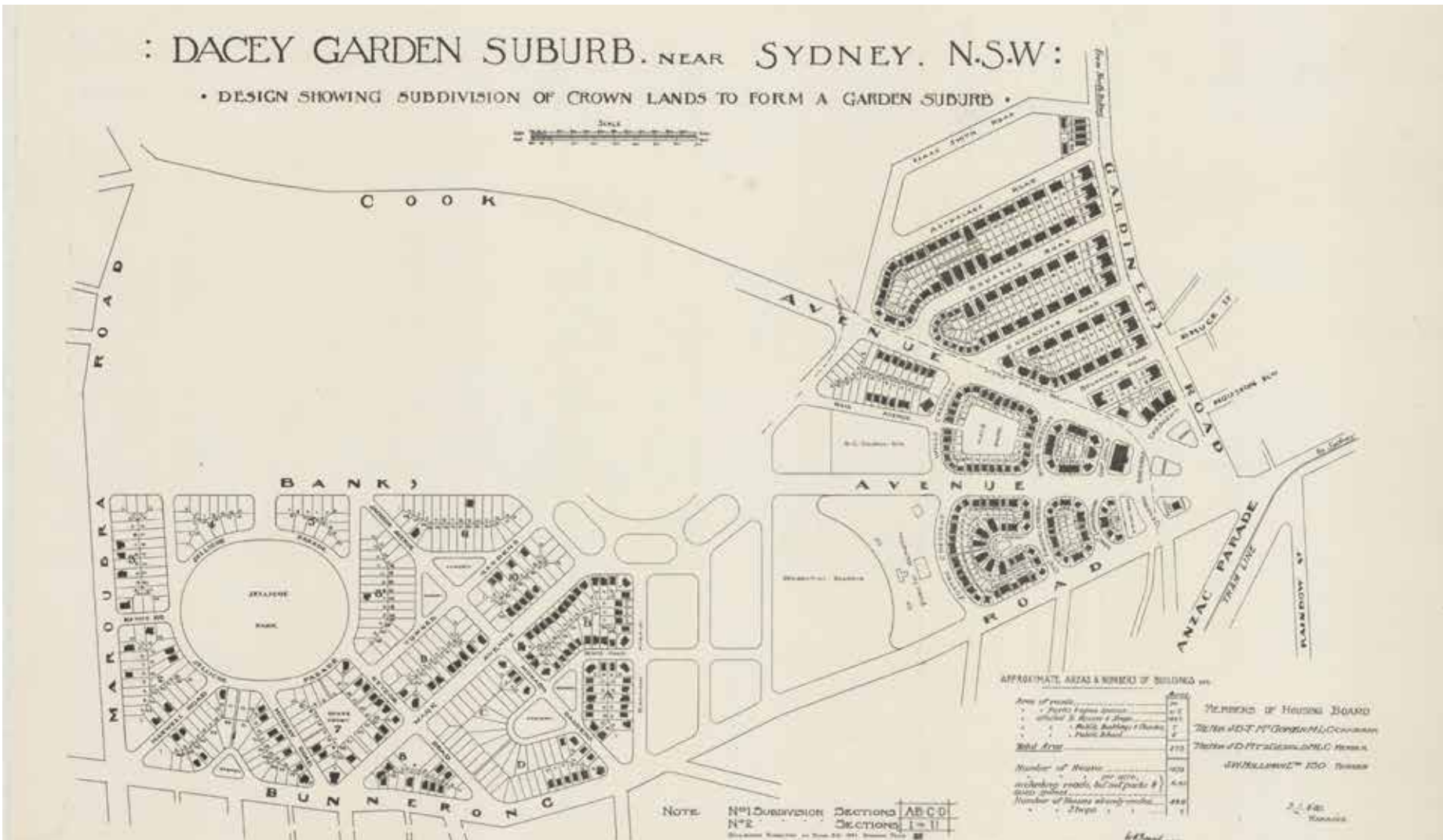
THE SITE AND ITS SETTINGS

Daceyville Heritage Conservation Area

Daceyville was constructed as a model suburb in 1912. Aimed to provide low cost housing within a garden setting, the development comprised a central nucleus of community open spaces and tree lined streets radiating out from a park called Darcey Gardens. Within this streetscape the envelopment was characterised by 1-2 storey free-standing cottages with no front fences.

Most of this suburb is designated as the Daceyville Heritage Conservation Area (HCA).

Daceyville has a picturesque quality defined by its curvilinear streets, mass street tree plantings and highly modulated bungalows.



THE SITE AND ITS SETTINGS

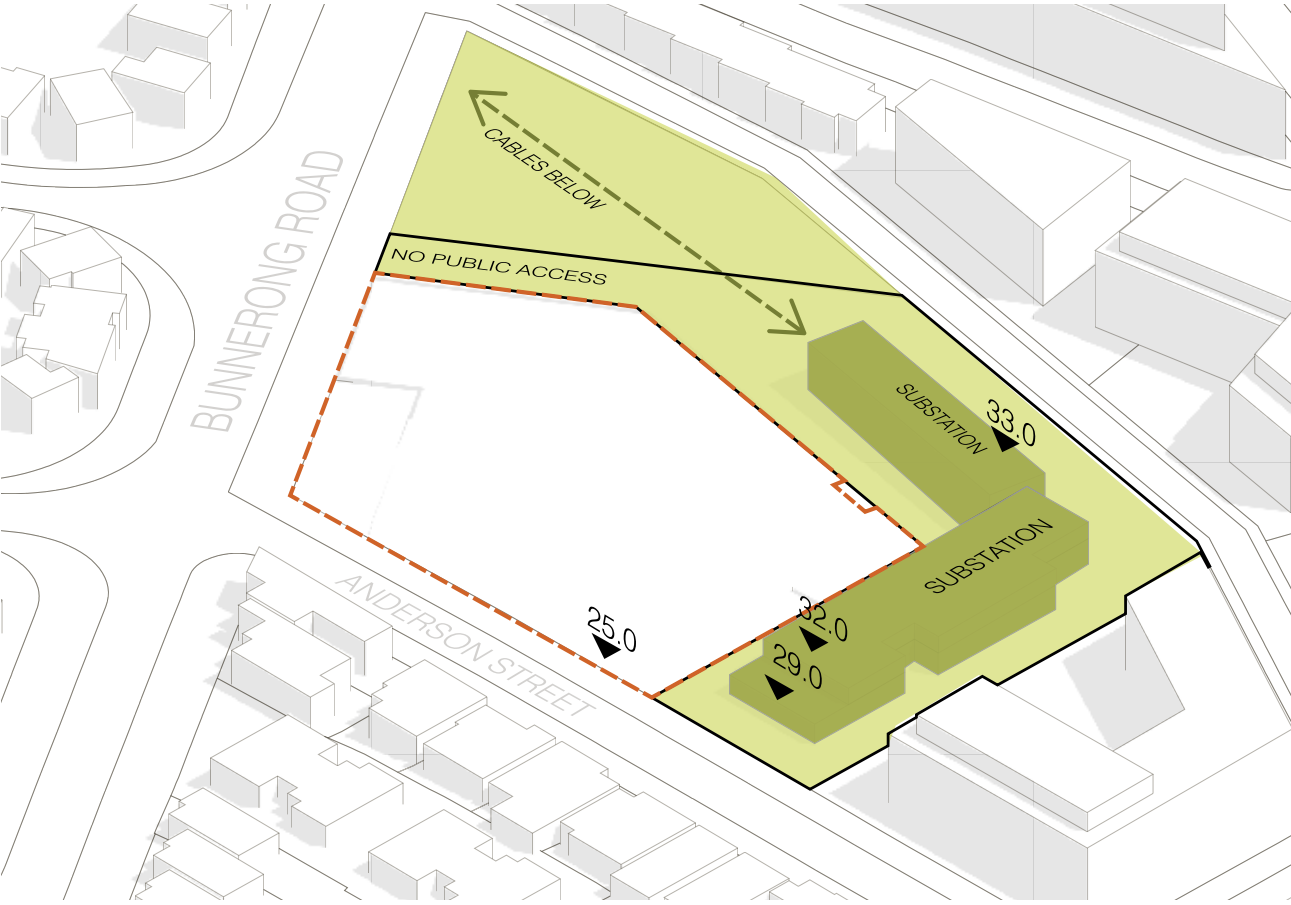
Ausgrid land

The Ausgrid land to the north and east of the site is reserved for electric distribution. The open character of this area, with access off Bunnerong Road and Anderson Street, has two low-rise substation buildings. These are located within the eastern sections of the site.

The north-western section of the Ausgrid land is a grassed area which is accessible by the public. This section adds to the visual outlook of the development site.

To the east is the recently constructed substation building. This is designed to resemble a small house.

The brick and metal substation structure to the north of the development site encloses three transformers. This low (7-8m) brick structure with no roof has minimal visual impact on the development site.



Substation Views Ausgrid Land Site

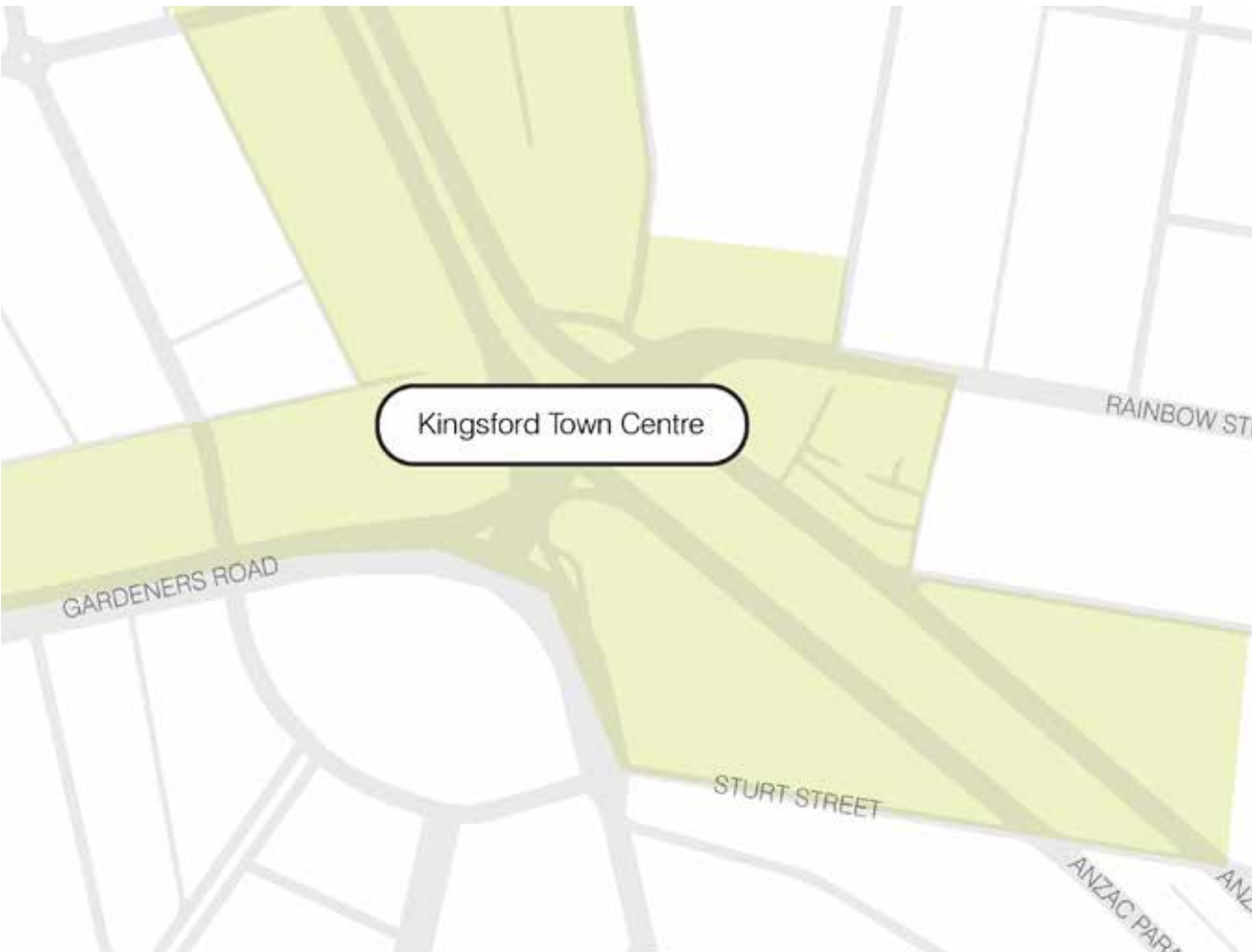
THE SITE AND ITS SETTINGS

Neighbour: Kingsford Centre

To the north of the site is Kingsford Town Centre. This area is currently undergoing a change into a vibrant mixed used residential area centred on Juniors Kingsford light rail stop. Along Anzac Parade and Bunnerong Road there are multiple bus stops.

Kingsford is destined to become a mixed use urban precinct with improved residential amenity and with access to public and community open space areas.

The proximity of the site to Kingsford Town Centre and public transport is the catalyst for an increase in residential density.



Aspect Entry - Southern Gateway Kingsford Circus



Kingsford Town Centre



PTW Architects - Scape, Kingsford - Student Accommodation

THE SITE AND ITS SETTINGS

Heights

The new light rail line has seen an increase in residential density along Anzac Parade. This is reflected in the Kingsford to Kensington Strategy (K2K), a strategy that will continue to inform how the area will become more urban in character.

The proposed development will provide an important transition in scale from the taller mixed use developments (up to 15 storeys) in the Kingsford Town Centre urban area to the lower scaled suburban residential uses (1-3 storeys) to the south and west.

The area of the site is 6,052 sqm. Being one of the largest development sites within the HIA area of the K2K Corridor, this development site will indeed provide an opportunity for an arrangement of taller built forms to provide new residential uses and the necessary transition in scale between urban and suburban forms.



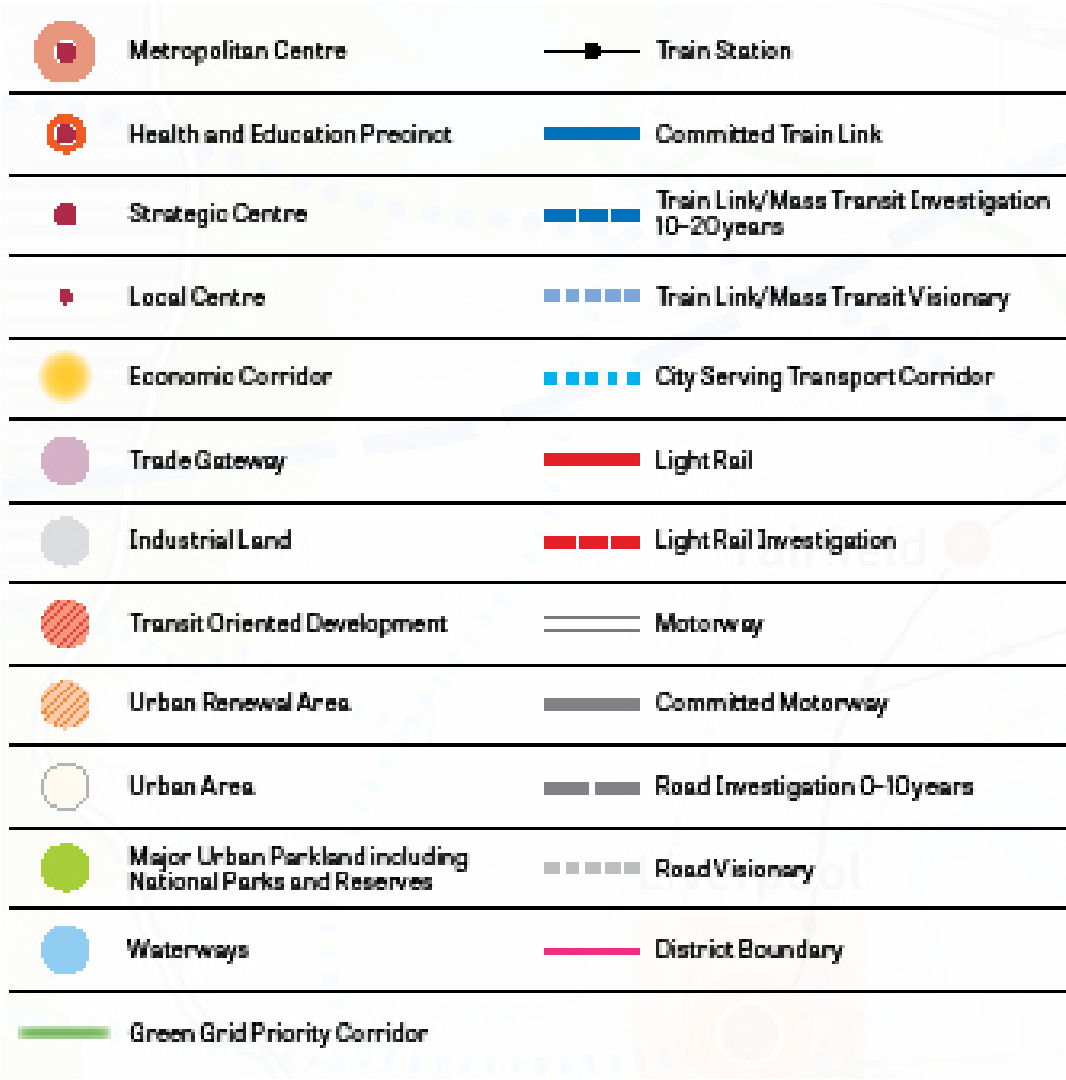
The site is set in its future urban context: Built form on land that is included in the HIA Kingsford South is shown as 5 storey HIA Design Guideline envelopes.

- Key**
- Housing Investigation Area
 - Daceyville Conservation Area
 - Kingsford Town Centre
 - Site

EASTERN CITY DISTRICT PLAN

The Eastern City District Plan outlines a 20-year strategy to manage growth within the Greater Sydney region. The focus of this planning strategy is to create well-connected walkable places integrated with new development having an urban character. Considering various economic, social, and environmental matters the document addresses planning priorities and actions for implementing the Greater Sydney Region Plan - A Metropolis of Three Cities - at the district level. The “30-minute city” concept seeks to place new housing near public transport, services, and places of employment.

- Some of the planning priorities of the Eastern City District Plan, are:
- Provide residential amenity and a 10-minute walkable public domain giving access to a mixed use centre via a pedestrian friendly public domain
 - Cerate a healthy and connected community
 - Provide access to public transport, regional cycling paths and neighbourhood community-based facilities
 - Use landscaped open space as a central organising design element within any proposed residential development.



tract from Eastern City District Plan (pg11)

POLICY AND STRATEGIES REVIEW

Guiding the design process are various documents prepared by the Government Architect of NSW. Three of these documents are: *Connecting with Country*, *Better Placed* and “*Greener Places*”.

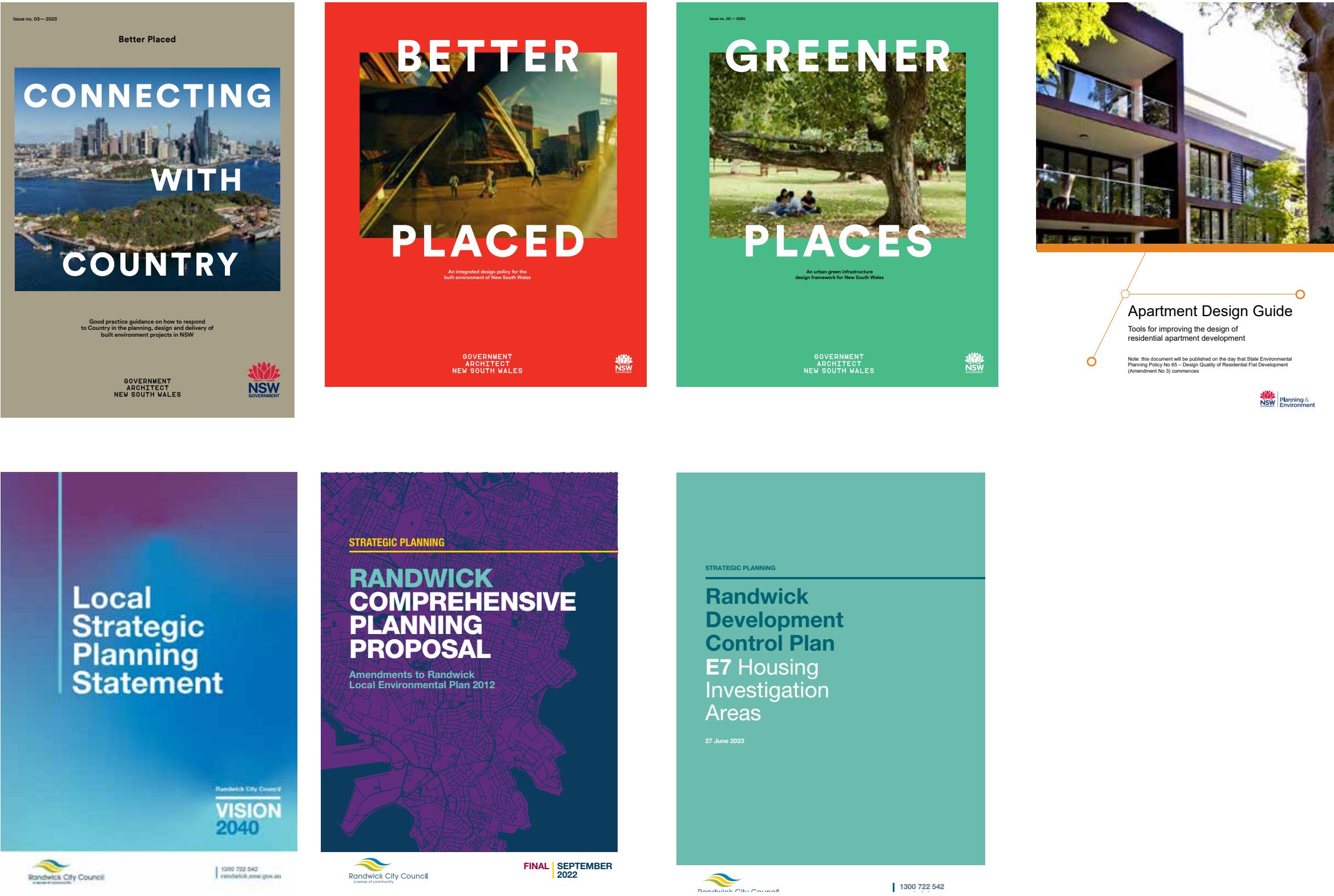
The proposed development is designed to meet the framework of caring for Country. Here the proposed design will improve the environmental sustainability of the place by leaving Country much improved.

The proposal is also guided by the principle of “good built environment”. This principle, described in *Better Placed*, gives importance to landscape open space and its integration with the natural and social networks of the neighbourhood. This network is clarified in *Greener Places*.

The built forms of the proposal have been developed following the design objectives of the Apartment Design Guidelines (ADG), as per Section 07 of this document.

Furthermore, the proposal recognises Randwik’s Strategic Planning Framework and Statutory Planning Controls. These include:

- The Randwick Local Strategic Planning Statement. This document establishes a framework for land use planning and growth over the next 20 years. It also identifies the potential housing growths areas, movement corridors and connections within the area.
- The Randwick Comprehensive Planning Proposal. This document includes information on proposed rezoning for the Housing investigation Areas (HIAs).
- The site-specific Design Guideline which supports new development within the HIA is a document which identifies controls particular to Kingsford South.



ANZAC PARADE CORRIDOR

The Kingsford to Kensington Strategy K2K facilitates sustainable growth along Anzac Parade. The vision is to develop Anzac Parade as a vibrant and viable city boulevard.

The K2K Planning Strategy allows for greater height and density along the recently constructed Light Rail route. At Kingsford Town Centre additional height and FSR are identified.



- ⬜⬜⬜ Kingsford Town Centre

51m (15 storeys)

31m (9 storeys)

25m (7 storeys)

19m (4 storeys)

Light Rail Station
- ⬜⬜⬜ Kingsford Town Centre

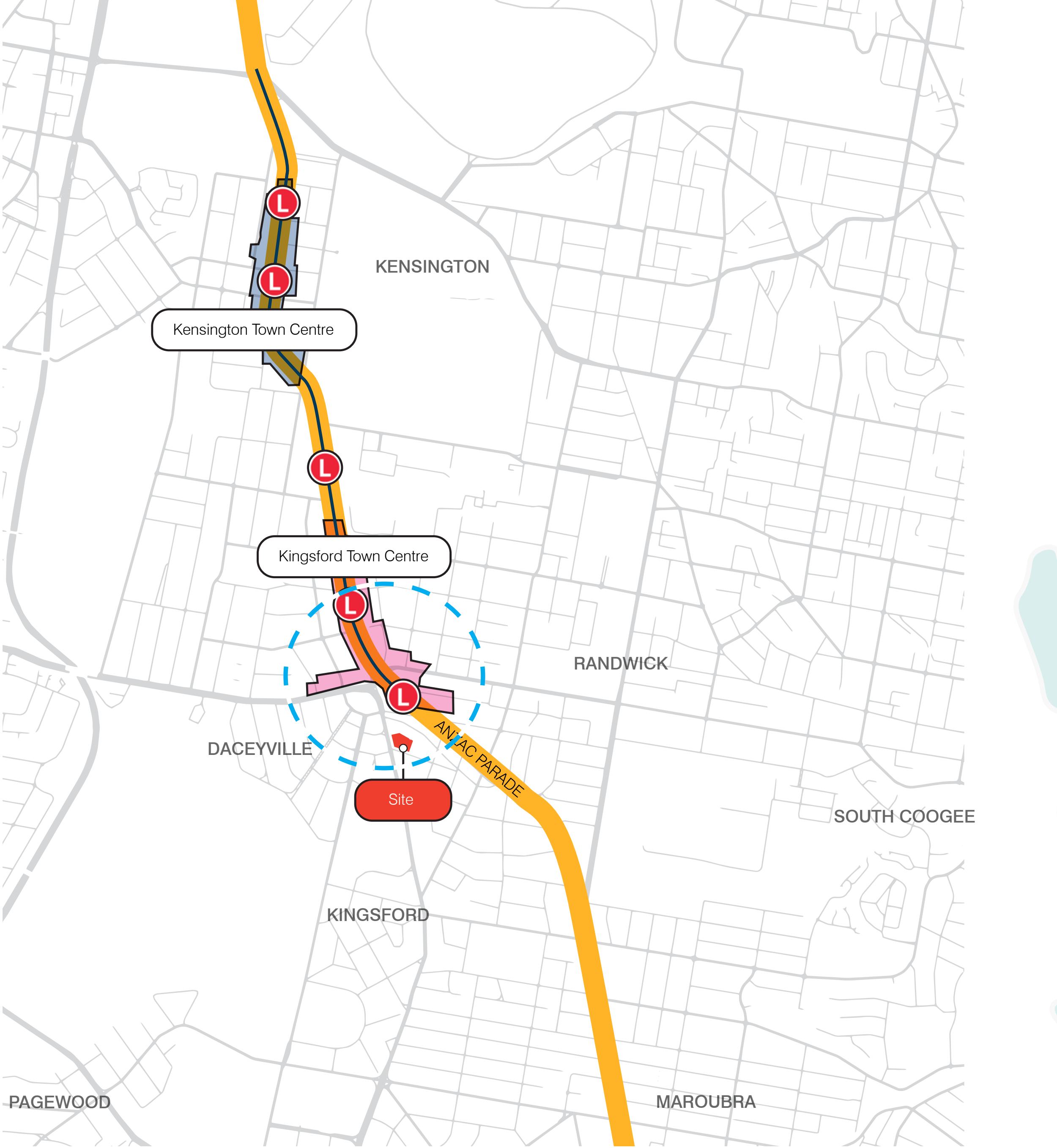
4.0:1

5.0:1

Light Rail Station

Height of building controls

Floor space ratio controls

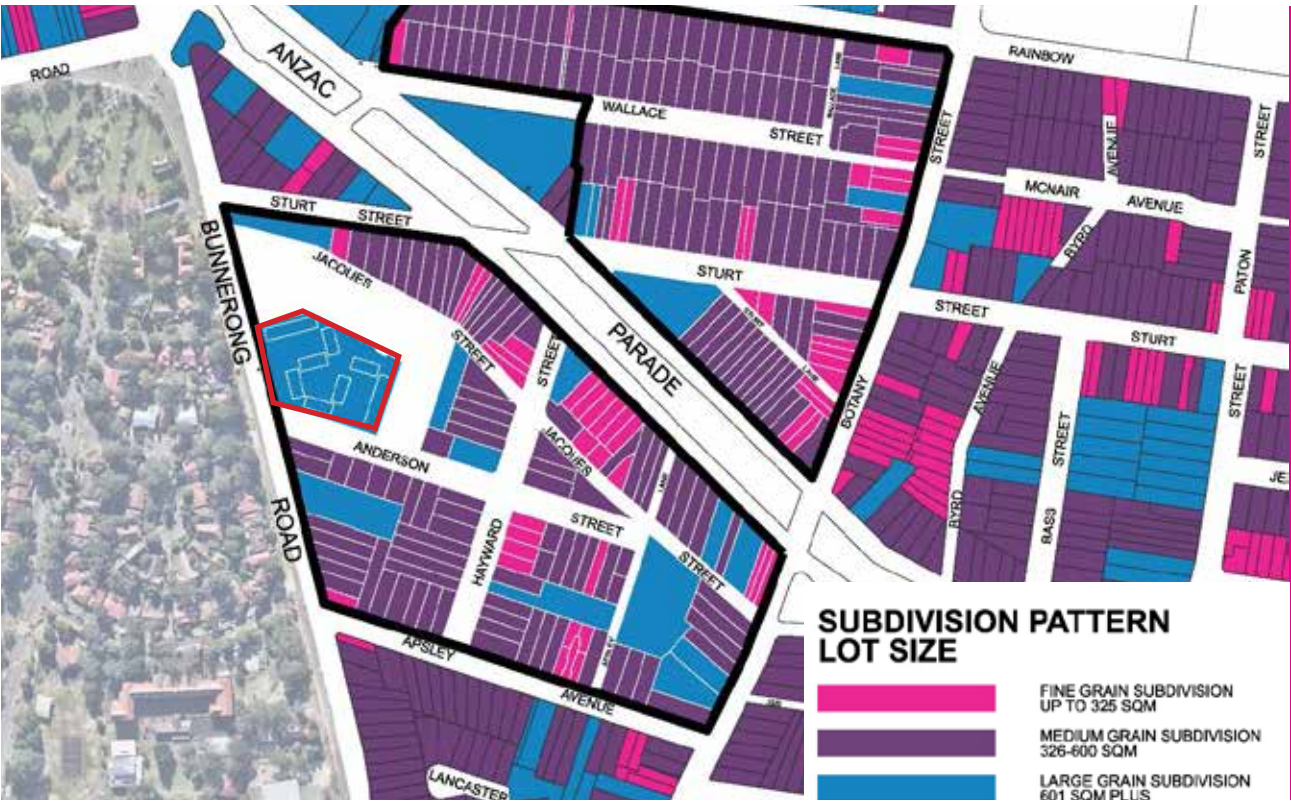


HOUSING INVESTIGATION AREA

The recent Randwick Comprehensive Planning Proposal contains various amendments to planning controls of the Randwick LGA , including, for example, the rezoning of four Housing Investigation Areas (HIA's) to support Council's 6-10 year housing targets in the LHS.

This site is within the Kingsford South HIA, and its determination was deferred to allow a site-specific response be prepared. Parts of the Kingsford South HIA was shown to have an increase in height from 12m to 16.5m (5 storeys) and an increase in FSR from 0.75:1 to 1.6:1.

The proposed development presents significant opportunity in comparison to the other parts of the Kingsford South HIA as it is the largest site in the area in single ownership.



Lots sizes
Source: Kingsford South HIA Urban Design Analysis report



Previous Height of Buildings (LEP 2012)



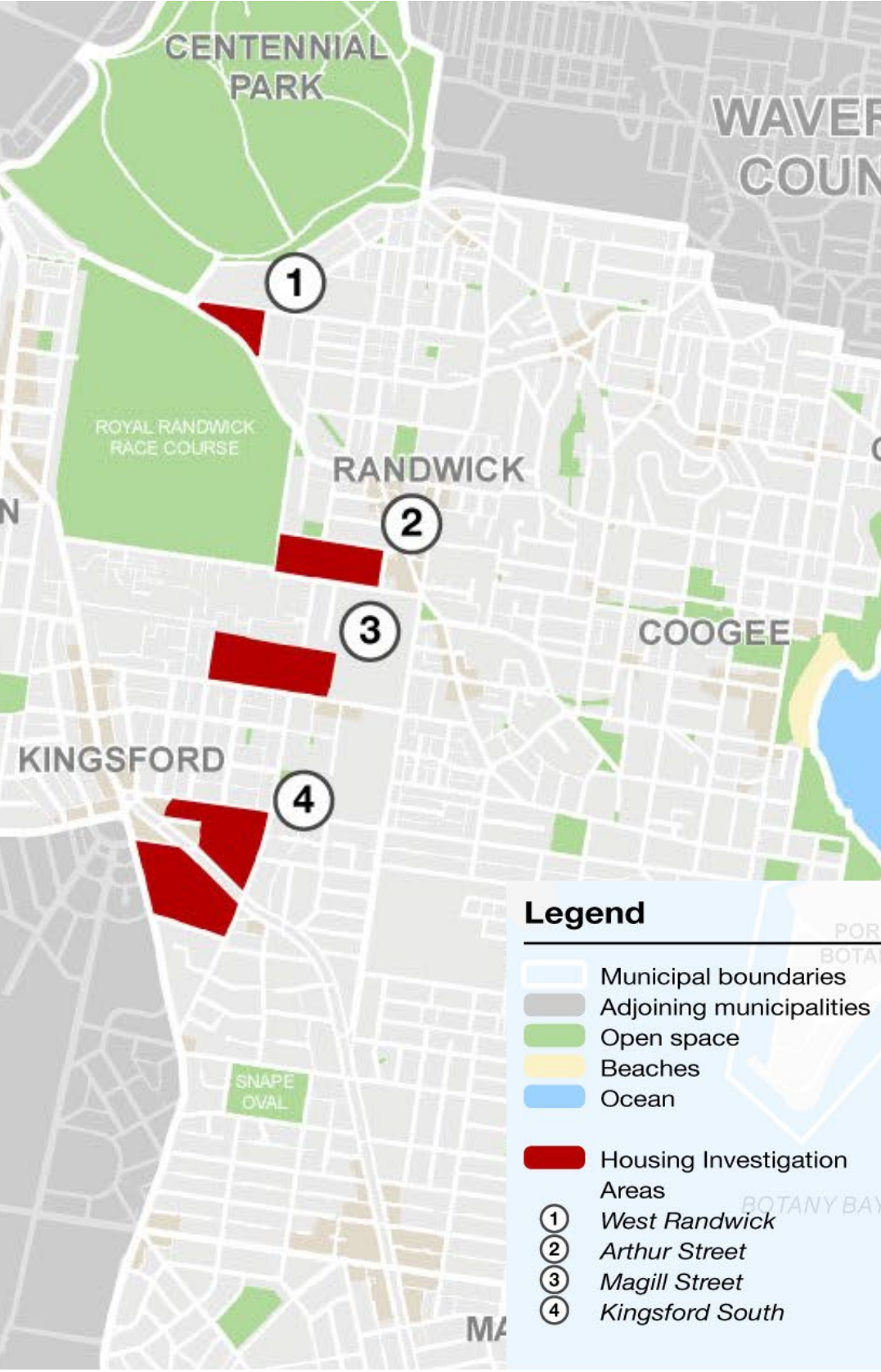
Previous FSRs (LEP 2012)



Current Height of Buildings



Current FSRs



Special provisions area map

CURRENT LEP MAPS

The LEP height FSR maps show the base controls for Kingsford Town Centre and the area adjacent to the site.



Height of building map

Height of buildings

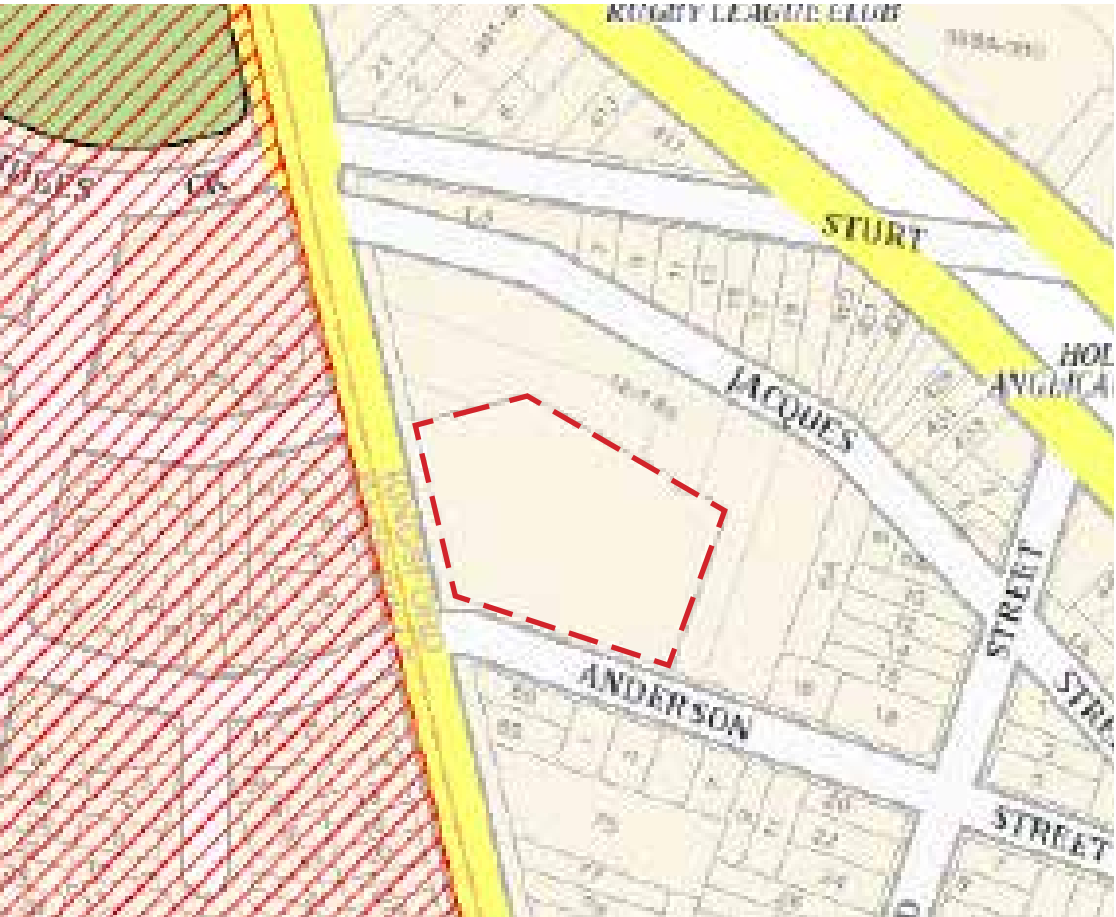
- 8 - 8.9 m
- 9 - 9.9 m
- 12 - 12.9 m
- 15 - 16.9 m
- 23 - 24.9 m



Floor space ratio map

FSR

- 0.5 - 0.54
- 0.75 - 0.79
- 1.5 - 1.99
- 3 - 3.49



Heritage map

Heritage

- Conservation Area - General
- Item - General
- Item - Landscape



Landzoning map

Zoning

- E1 - Local Centre
- E2 - Commercial Centre
- R2 - Low Density Residential
- R3 - Medium Density Residential
- RE1 - Public Recreation
- SP2 - Infrastructure

Source: NSW Planning Portal

CITY CONTEXT

The proposed development site addresses Bunnerong Road, an arterial road of four lanes which provides an important link between Kingsford, Botany and the airport.

Immediately to the north Bunnerong Road joins with Anzac Parade, a boulevard which links La Perouse to Sydney City via Kingsford. From here, Rainbow Street connects Kingsford Town Centre with the coastal beach suburbs of Coogee and Maroubra.

To the west are vast parklands which provide active and passive recreation.

There are view opportunities north to Sydney City and west to the various parklands. It is assumed that views east of the coast will be available from the proposed upper levels.

Key

01

Royal Randwick Racecourse

02

Randwick Environment Park

03

Coogee Beach

04

The Australian Golf Club

05

The Lakes Golf Club

06

Mutch Park

07

Maroubra Beach

Open Green Space / Park

View to Sydney CBD

View to Gardens

To Sydney CBD

To Sydney Airport

To Coast and Beaches



COMMUNITY INFRASTRUCTURE

The site is well connected to retail centres, education uses and health services.

The mixed use area of Kingsford Town Centre and schools are within a 5 minute walk. The University of NSW and Prince of Wales Hospital are further north still within walking distance from the proposed development site.

Key

01

UNSW Sydney

02

Prince of Wales Hospital

03

Randwick Girls' High School

04

Randwick Boys' High Schoo

05

Rainbow Street Public School

06

St Spyridon College

07

Daceyville Public

*

Sculptures, Monuments & Cultural Material

Education

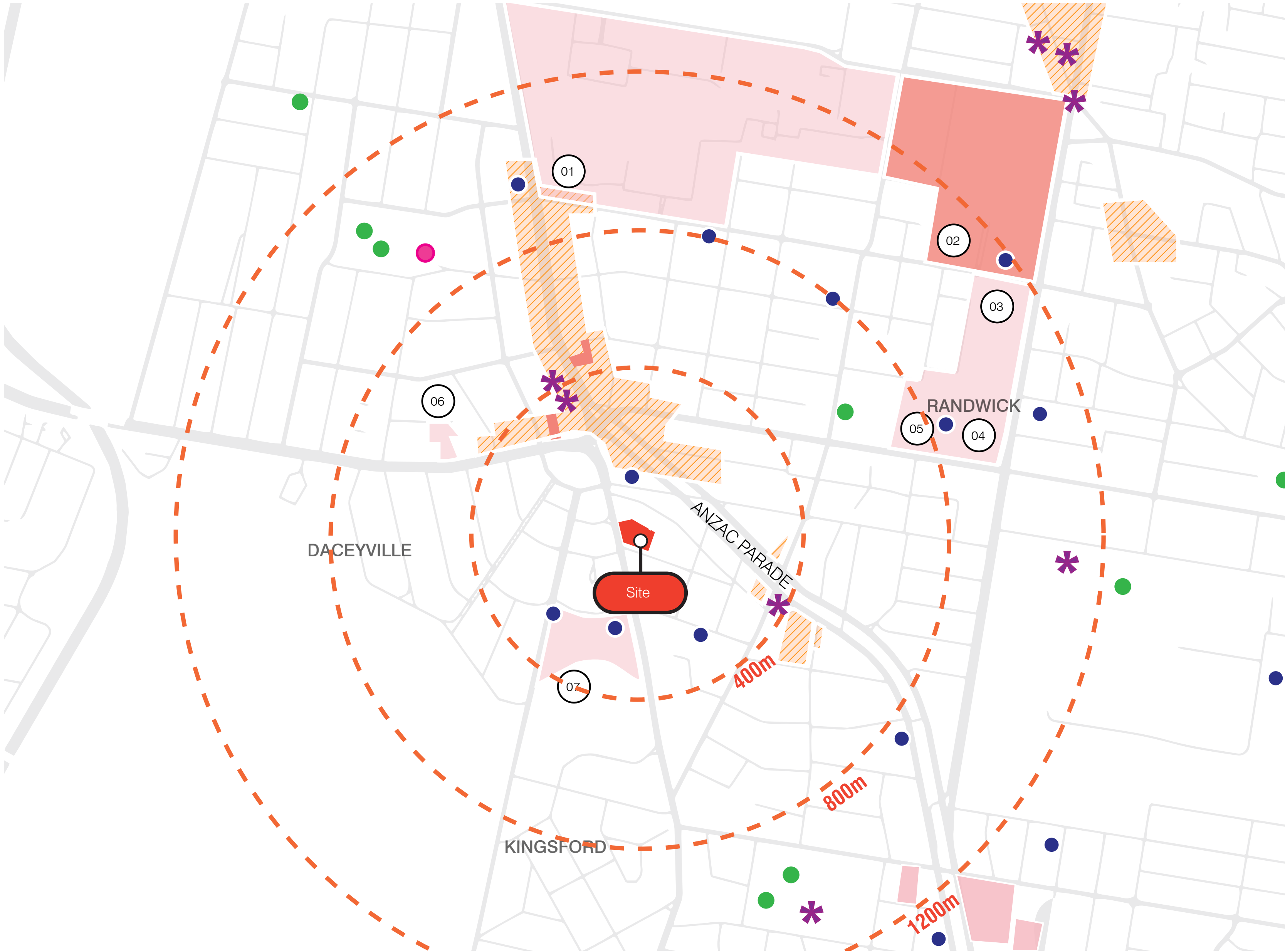
Health

Retail / Food Precinct

Childcare/Preschool

Sports Facilities/Skate Parks/Playgrounds

Council Facilities



TRANSPORT INFRASTRUCTURE

The development site is well served by public transport. Kingsford Juniors light railway station is merely 200m north of the site with bus stops on Bunnerong Road and Anzac Parade. The site is surrounded by a network of cycleways.

Light rail:

- Juniors Kingsford Light Rail Station provides a direct link with Sydney City via Randwick.

Bus:

- A bus stop, located on Bunnerong Road directly opposite the site, connects to Matraville and Botany.
- At Kingsford Town Centre, bus stops provide a service to Maroubra Beach, La Perouse and Sydney City.
- The Urban Design Report for the HIA identifies potential for a a future Rapid bus (SESTS) along Bunnerong Road.

Cycling:

- The site will benefit from a planned cycleway connection. This propsal will provide a 2.8km pathway which will connect Junors Kingsford with the Centennial Park cycleway.

Roads:

- Bunnerong Road is a a roadway configured with two lanes in each direction.
- Anderson Street is a tree-lined local roadway.

Key

Light Rail Stop

Light Rail Track

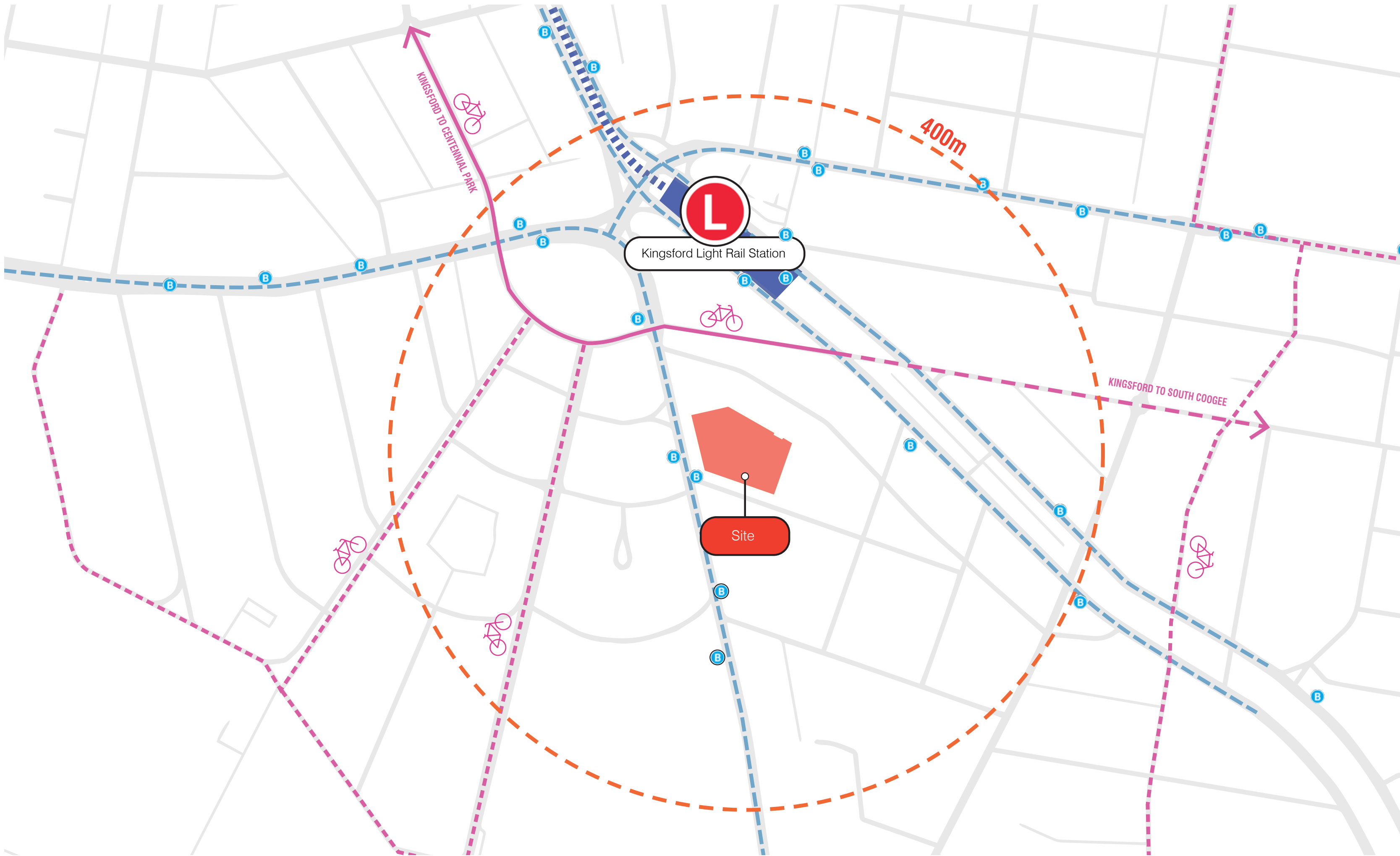
Bus Stop

Bus Route

Proposed Cycleway - Kingsford to Centennial Park

Proposed Cycleway - Kingsford to South Coogee

Existing Cycle Network



OPEN SPACE

The proposed development site is located within 400m of a large local park and within 800m of a regional park which contains sports fields. This proximity to parklands aligns with the 15minute neighbourhood concept as identified in the Strategic District Plan.

The current network of landscaped open space and tree lined streets is well established within the area including, for example, Daceyville Garden Suburb which is located to the west of the site. To the north and east of the site, new pedestrian links and thoroughfares are envisaged to form a permeable pedestrian network.

Additional street trees are proposed for Anzac Parade and Rainbow Street. This added greenery and associated public domain improvement meets the Randwick LSPS Vision of 2040 for a sustainable green grid in the area.

Bunnerong Road has some amenity but requires additional street tress. This street will become a well used pedestrian-based thoroughfare.

The landscape open space to the north of the site is currently owned by Ausgrid. While it contains two substations there is an opportunity to improve the visual amenity and green volume of the site, subject to Ausgrid’s approval.

Key

01

Paine Reserve

02

Dacey Gardens

03

Haig Park

04

Astrolabe Park

05

David Phillips Field

06

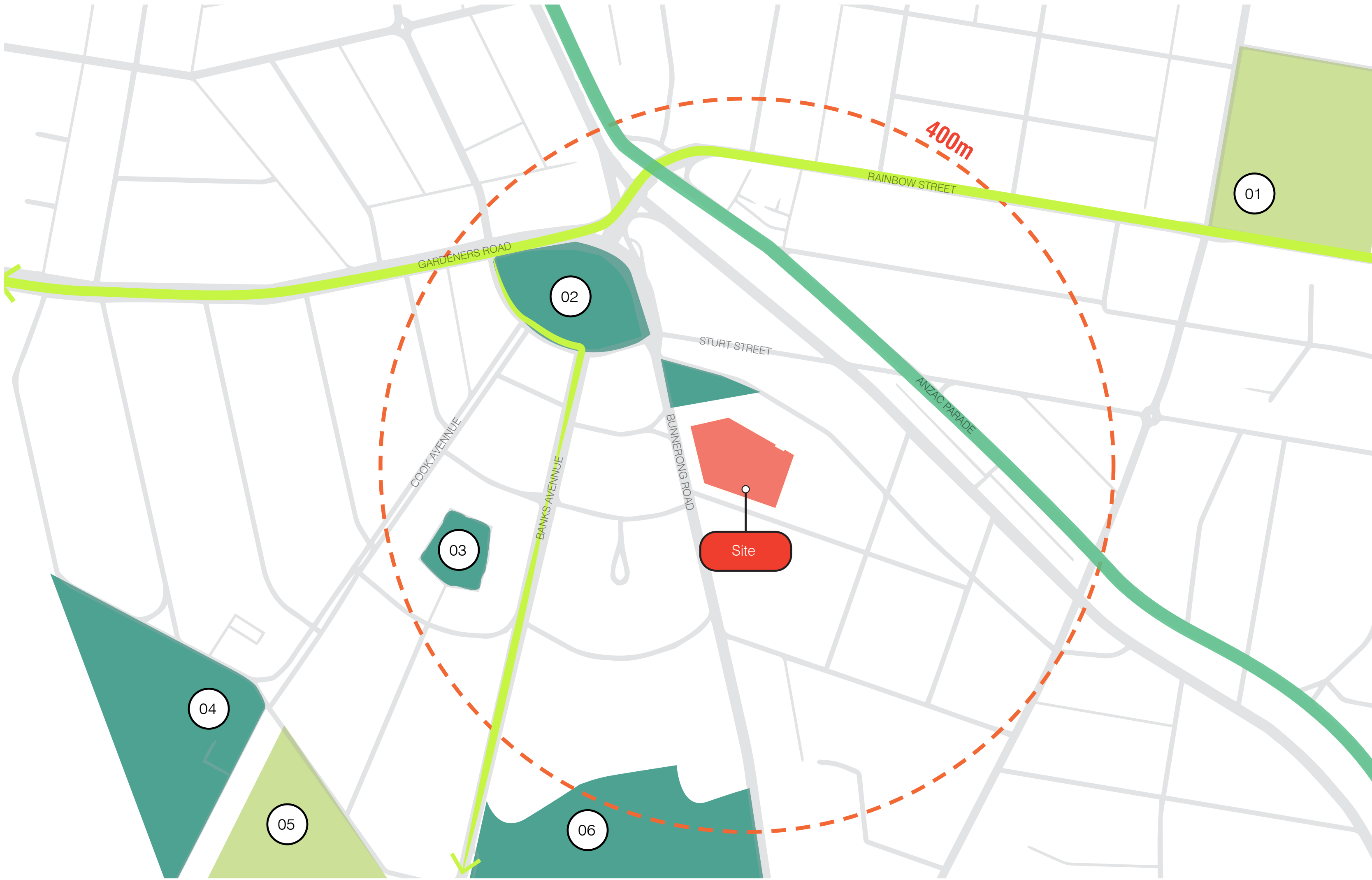
Rowland Park

Open Green Space / Park

Sports Field

Anzac Parade Primary Green Link

Green Grid Opportunities



TREE CANOPY

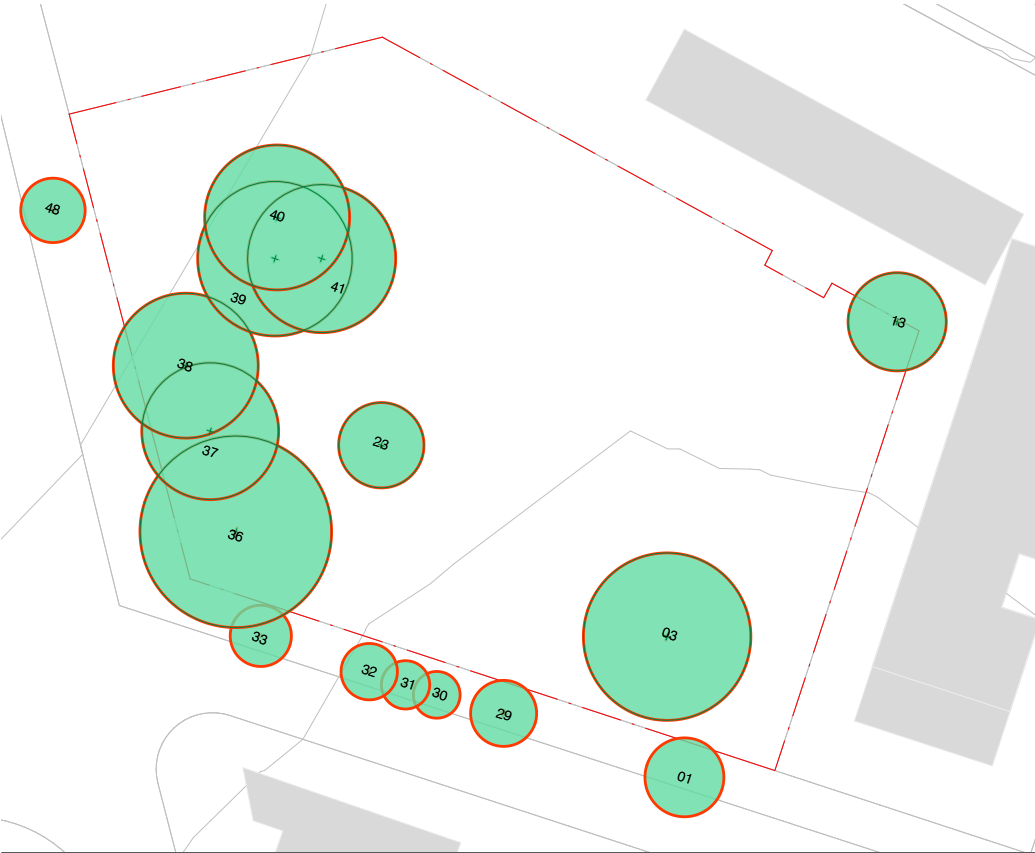
The adjacent diagram illustrates the extent of tree canopy within the immediate area.

Daceyville Garden Suburb, to the west of Bunnerong Road, has a tree canopy coverage of 30-40%. This provides a pleasant and appealing residential neighbourhood.

To the east of Bunnerong Road, and in the vicinity of the site, the tree canopy is limited mainly to street tree planting. Here, the tree canopy coverage in this part of Kingsford South HIA is 20% or lower.

This highlights the importance of tree retention and additional street tree plantings to Bunnerong Road.

The proposed development therefore meets the strategic planning priorities of the Eastern City District Plan, in that it will, **expand the urban tree canopy, both on site and within the public realm**, by retaining as many mature trees and by enhancing the proposed landscaped open space areas with new tree plantings.



ARBORIST INPUT

The Arborist Report identifies several high value trees which will be retained. Currently the site has a 20-30% tree canopy which is comparable with the tree cover of Daceyville.



Tree 36



Tree 39



Tree 13

TREE NO.	COMMON NAME
01	COTTONWOOD
03	BANGALAY
13	JACARANDA
23	JACARANDA
29	COTTONWOOD
30	COTTONWOOD
31	WEeping BOTTLEBRUSH
32	COTTONWOOD
33	COTTONWOOD
36	BANGALAY
37	BANGALAY
38	BANGALAY
39	BANGALAY
40	BANGALAY
41	BANGALAY
48	CANARY ISLAND DATE PALM

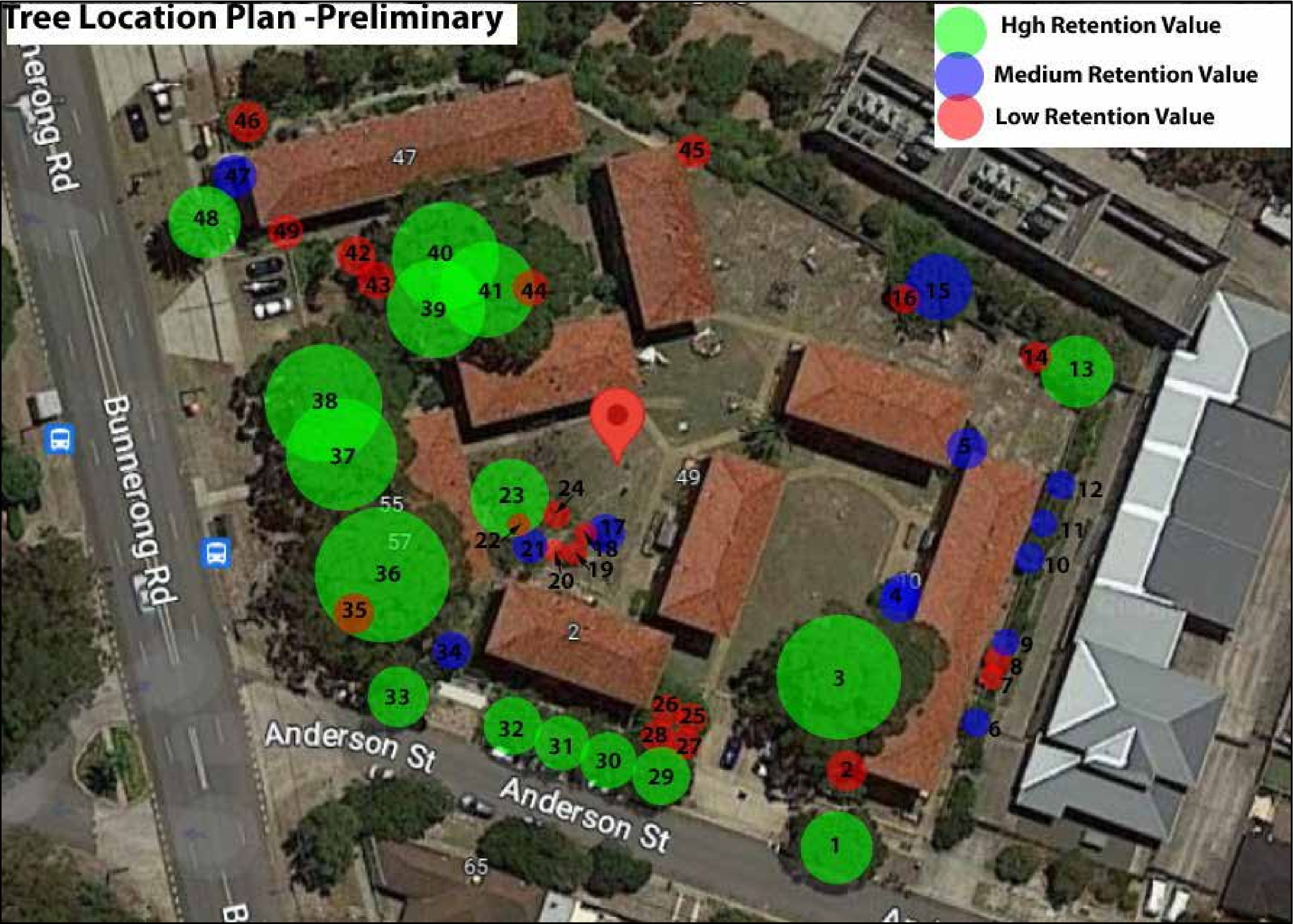


Figure B: Aerial image showing tree locations, numbering and retention values.

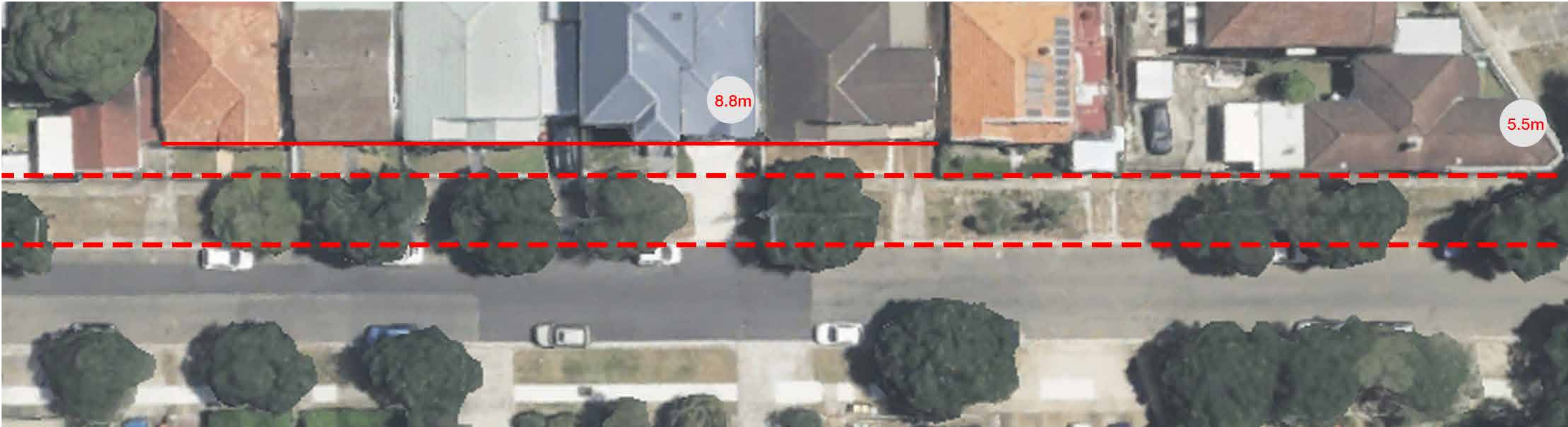
FRONTAGES ANALYSIS - BUNNERONG ROAD (CURRENT)

The streetscape shows tree lined streets with low rise detached residential housing to the west of the site. The tree canopy to the west of Bunnerong Road is mature and broad.

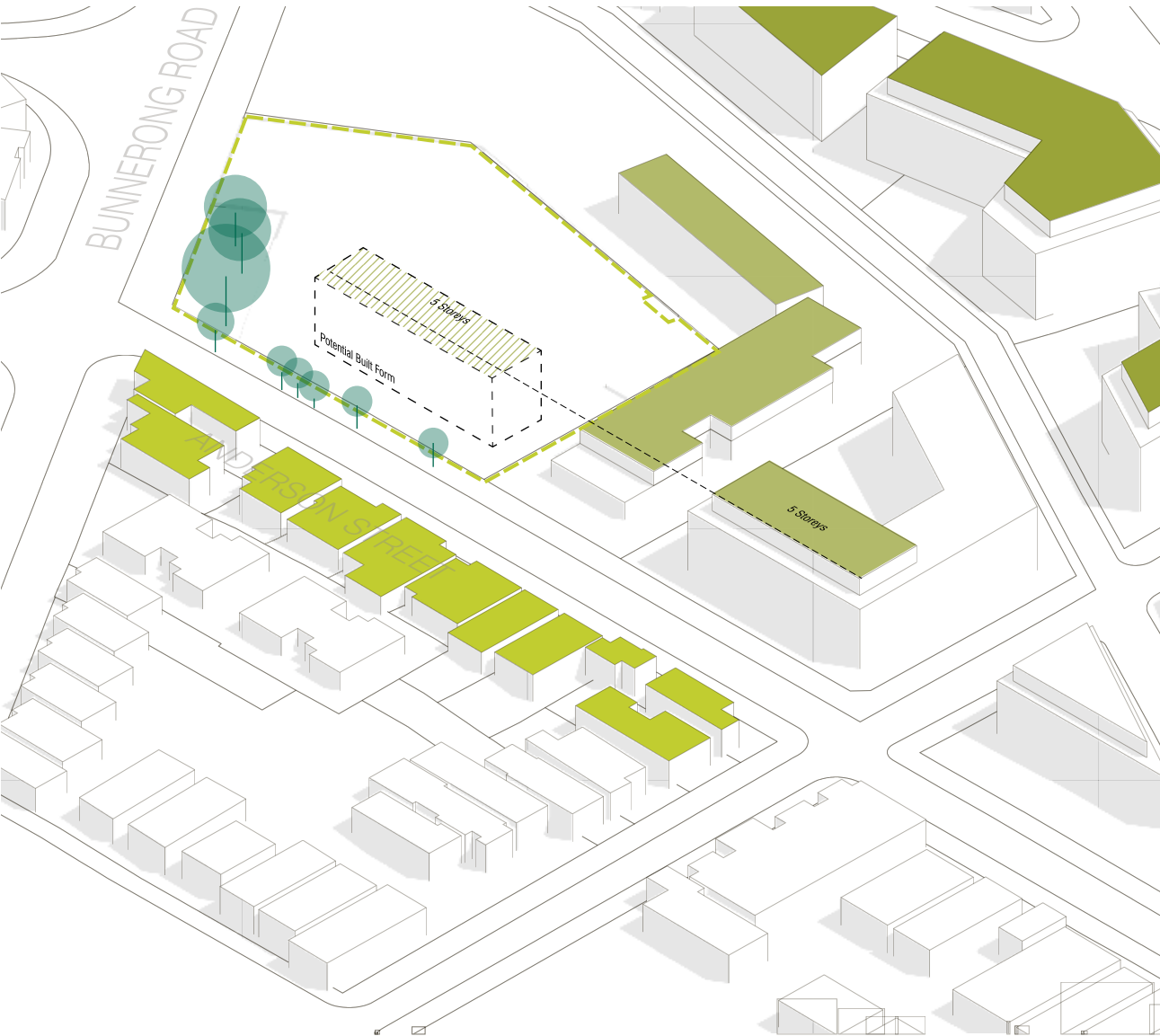


FRONTAGES ANALYSIS - ANDERSON STREET

The dense cotton trees lining Anderson Street give a unique character to the streetscape. On its southern side low rise detached residential houses with narrow front yard and garages face the street.



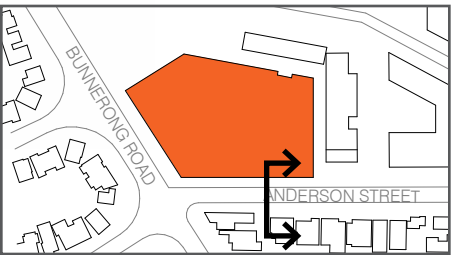
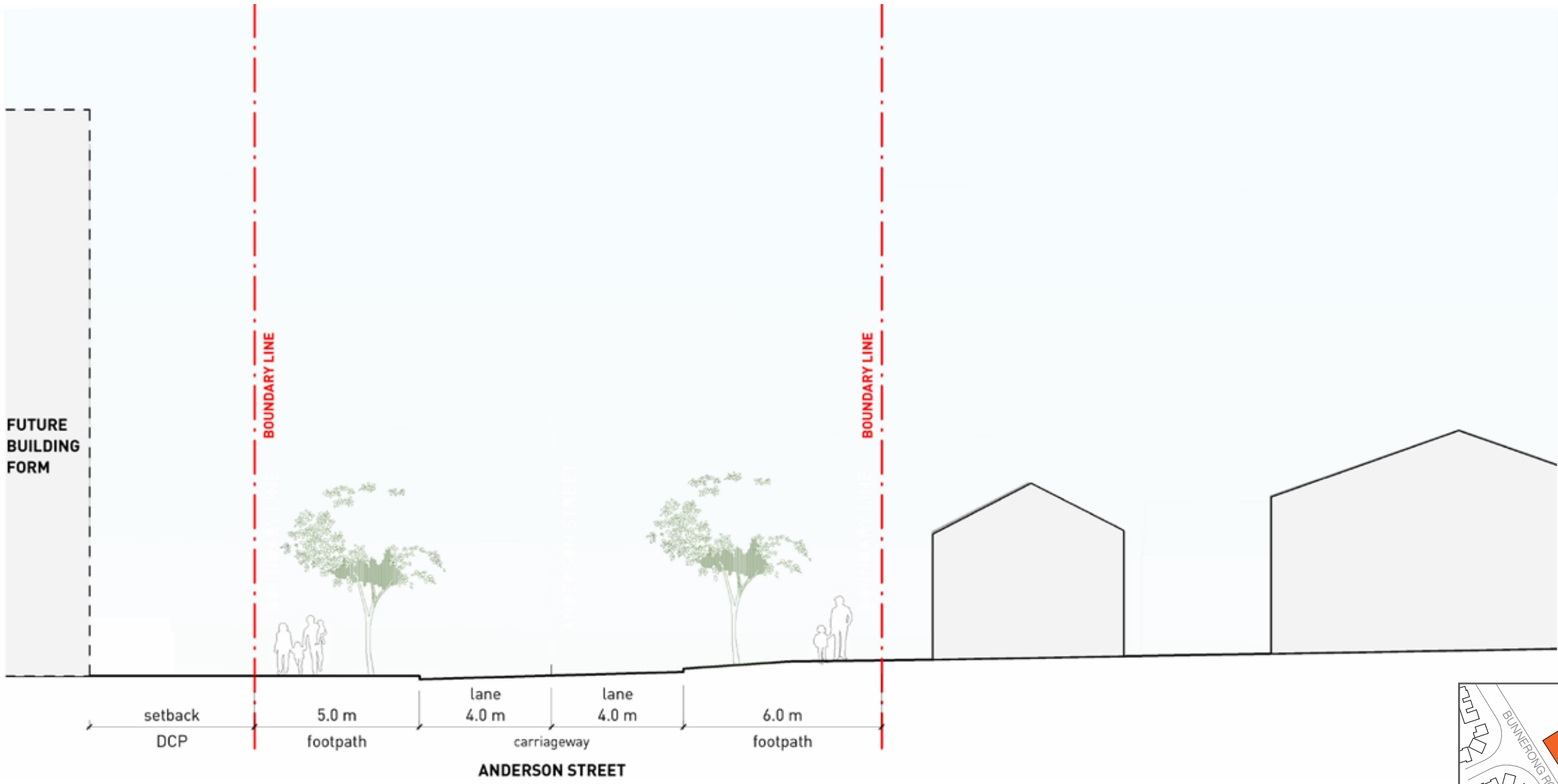
EXISTING STREET INTERFACE - ANDERSON STREET



■ ■ ■ Site

Anderson Street is local street planted with Cotton Trees. To the south is a mixture of free-standing dwellings 1-3 stories in height. Generally these dwellings are set back from the street by 6m. Within this setback is a mixture of driveways to rear garages and carports. The propped built form is carefully modeled to minimise any shadow impact on these sites.

Section AA - Anderson Street - Site Context

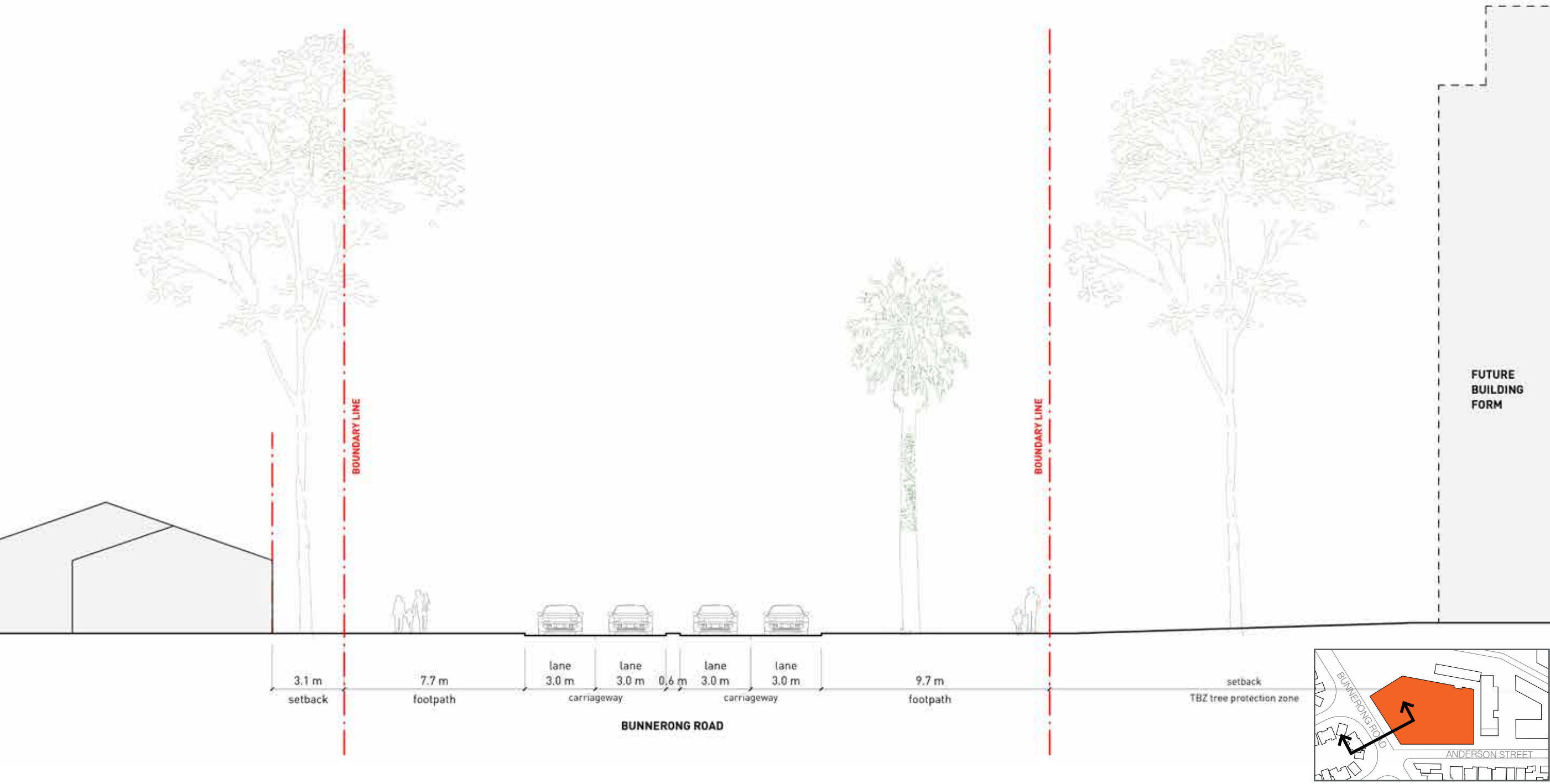


EXISTING STREET INTERFACE - BUNNERONG ROAD



Bunnerong Road, an arterial roadway with two lanes in each direction, with wide verge of limited amenity. There are few street trees except in the vicinity of Daceyville Garden Suburb.

Section BB - Bunnerong Road - Site Context



NEIGHBOURHOOD “PLACE BASED” REFERENCES



Kingsford Town Centre



A variety of built forms associated with residential uses in the area.



The urban character of the area is quite diverse. Comprising taller mixed uses on Anzac Parade, to the south is a mixture of residential built forms that reflect a change from multistorey flats to historic free-standing bungalows.

The proposed development will acknowledge differences in the streetscape character of Bunnerong Road and Anderson Street and will provides a transition from urban scale to residential.

SITE PARAMETERS

Topography and Flooding

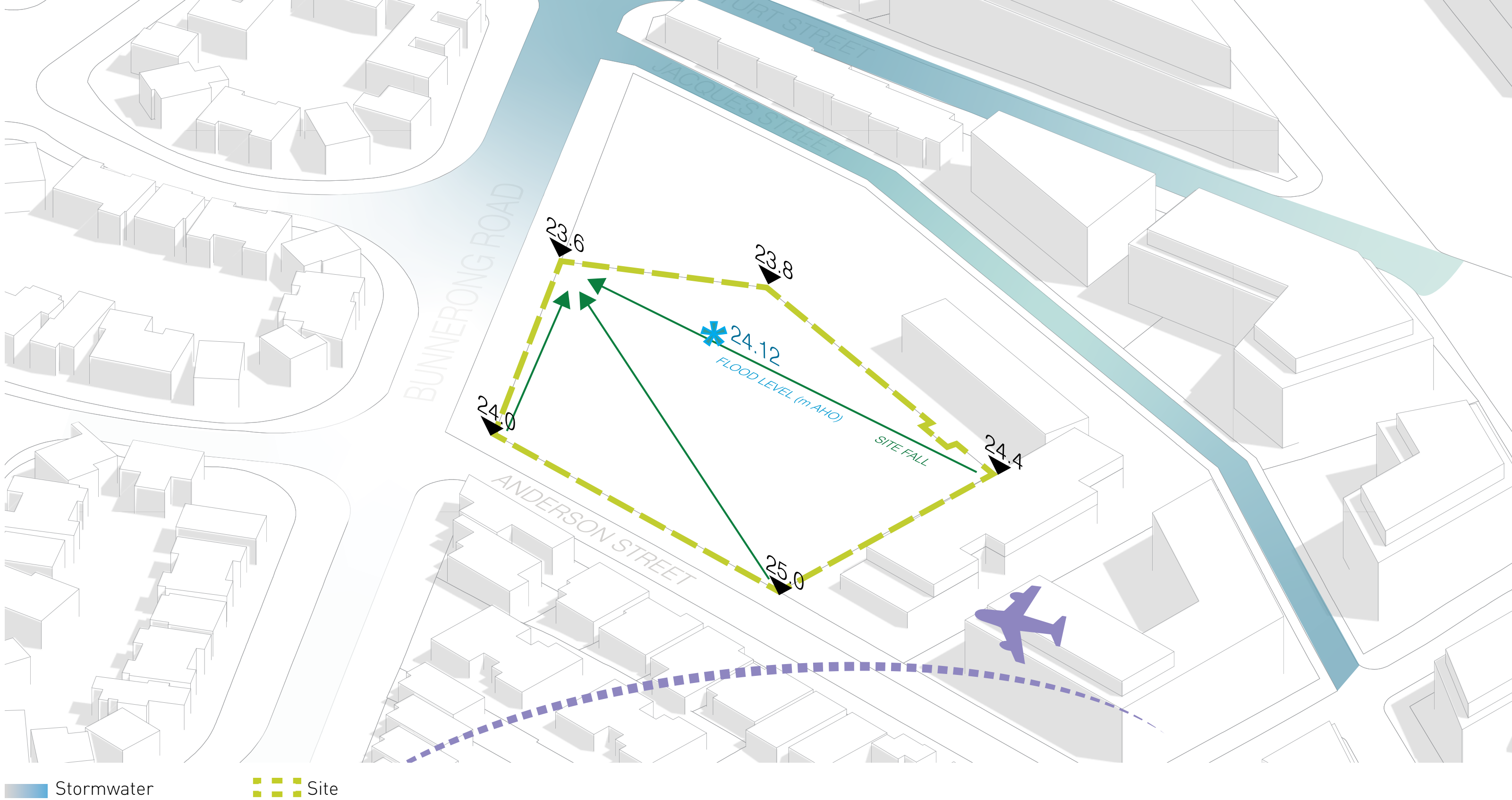
The site has a gentle fall from the south east to the north west.

While the site overall is not affected by the 1% AEP flood, a small portion on the Bunnerong Road frontage, however, is affected by the PMF flood levels. The PMF flood level (24.12mAHQ) was adopted as the minimum Floor Planning Level.

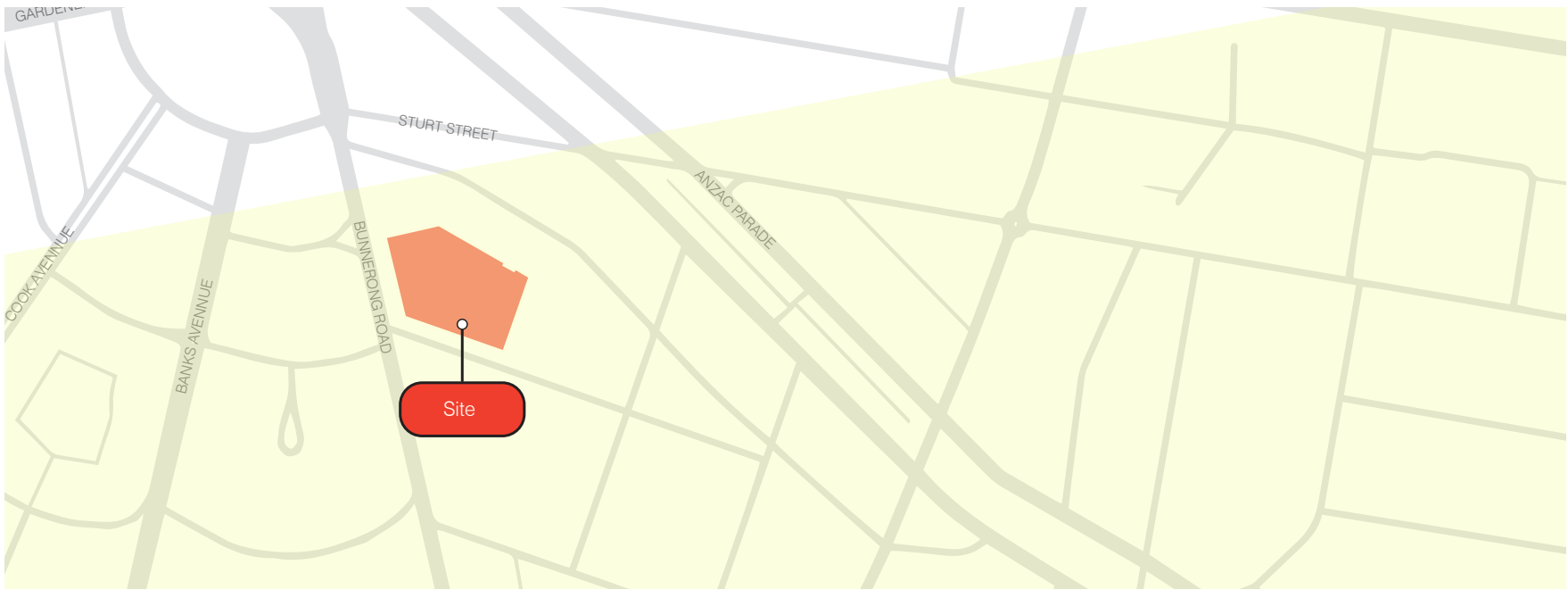
Noise

The site is impacted by aircraft noise and road traffic noise (from Bunnerong Road). There is ambient noise from the adjacent transformers within the Ausgrid site to the north and east. The least noise would be to the northern park and south along Anderson Street.

The Acoustic Report provides a selection of materials and glazing types which can insulate the proposed apartments.



PMF Flood map with Evacuation Route
Source: Flooding and stormwater Impact assessment report



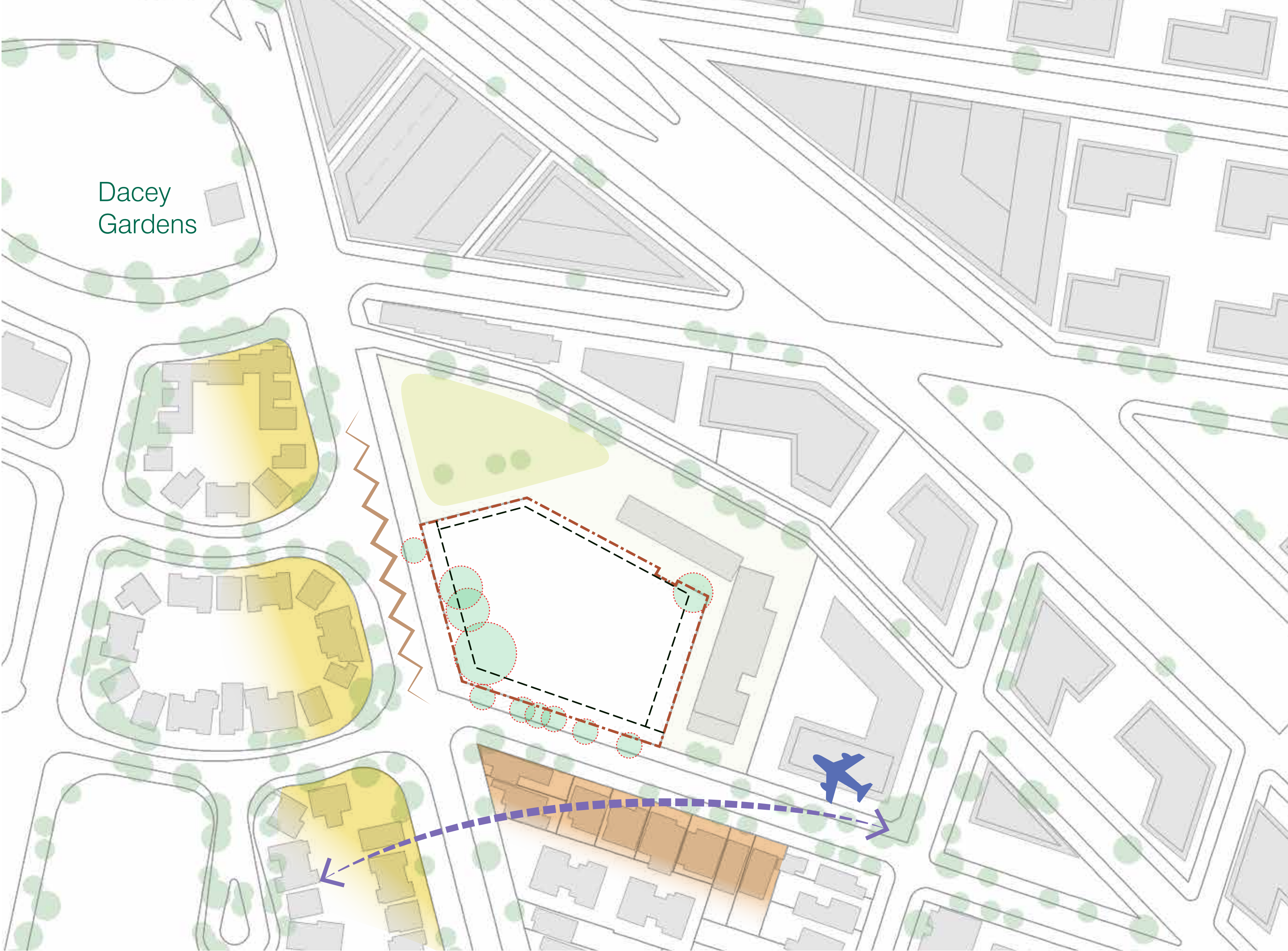
Aircraft Noise:
Sydney Airport is located to the west southwest. The East-West flight path passes about 75 metres to the south-south-east of the site. The site falls within an area bounded by the 2033 ANEF contour.

SITE CONSTRAINTS

The following constraints are identified:

- The noise and highest vehicle traffic along Bunnerong Road
- An irregular shaped site containing trees with a significant canopy
- Noise from aircraft
- Location of Ausgrid stations land with two active transformers.to the north and east.

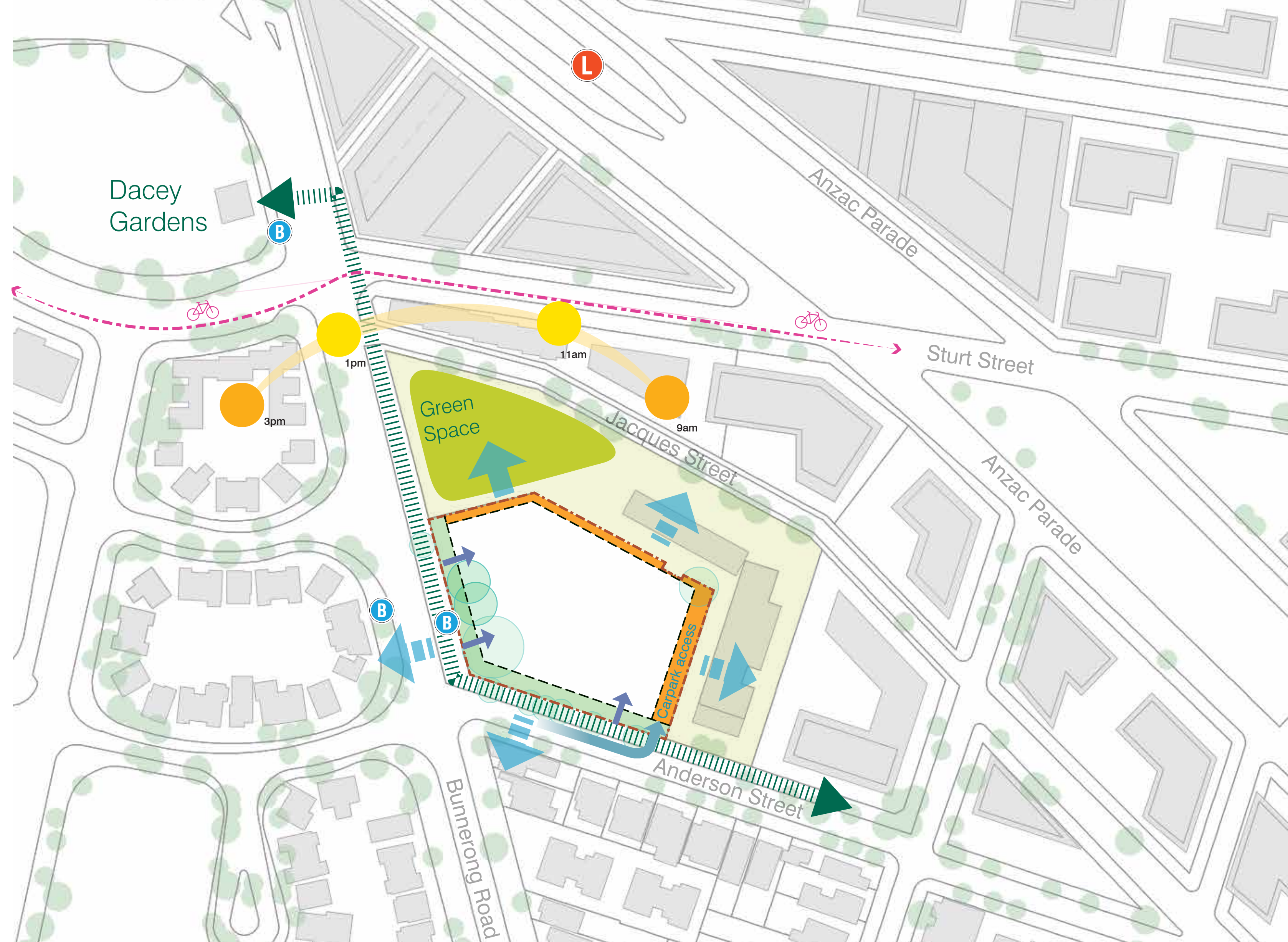
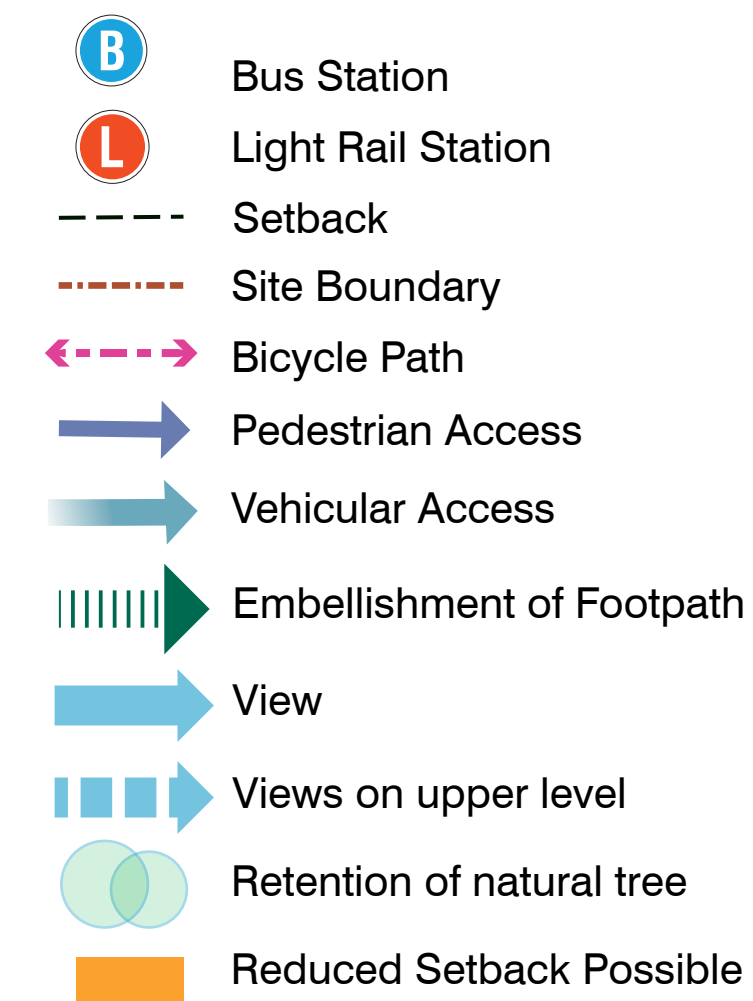
- Setback
- .-.- Site Boundary
- ↔ Aircraft Noise
- ⌞ Noise Impact
- Tree protection zone
- Low scale area
- Low scale conservation area



SITE OPPORTUNITIES

The following benefits are identified:

- Proximity to public transport and cycleways
- A level and walkable neighbourhood
- A site with good solar access
- Unobstructed views north and west
- Reduced setbacks to Ausgrid land
- Opportunity to retain many mature trees
- Two street frontages with an opportunity for multiple pedestrian access points
- The opportunity to position the vehicular access point away from the principal street.
- Proximity to the tree lined Darcy Gardens
- Proximity to Kingsford Town Centre
- Proximity to green space to north
- Transition of scale from north to south



VISION

In creating a sustainable and well connected development and an ideal place to live, the following principles form the basis of the proposal.



Existing Qualities integrated in New Characteristics of Future Development

Expand the sites assets by retaining mature trees where possible.

Reinvent the existing landscaped courtyards as new generous sunlit open spaces with selective tree-planting.



Community focus and social integration

Develop new communities where social housing blends in with private and affordable housing around improved communal open spaces.

Meet the different needs of future residents through a variety of inclusive communal landscaped areas.



Connectivity and Permeability

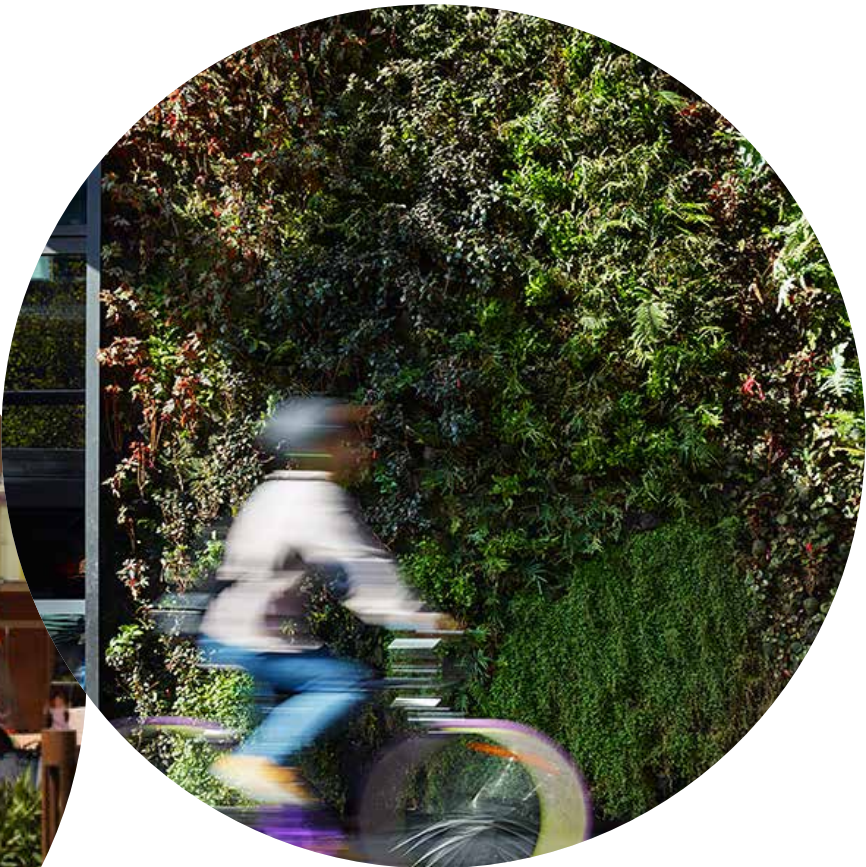
Create a connected community by linking the site meaningfully to surrounding green spaces, enhancing existing green links and making the site permeable at ground level. Promote sustainable use of public transport and cycle passes and contribute to a walkable local network



Quality Residential Amenities

Provide high quality residential amenity offering large landscaped communal spaces, apartments with views, above standard daylight access and cross ventilation amenities.

Propose suitably scaled design that provides a transition from the high density of proposed Kingsford centre to the surrounding residential areas.



Sustainability and Innovation

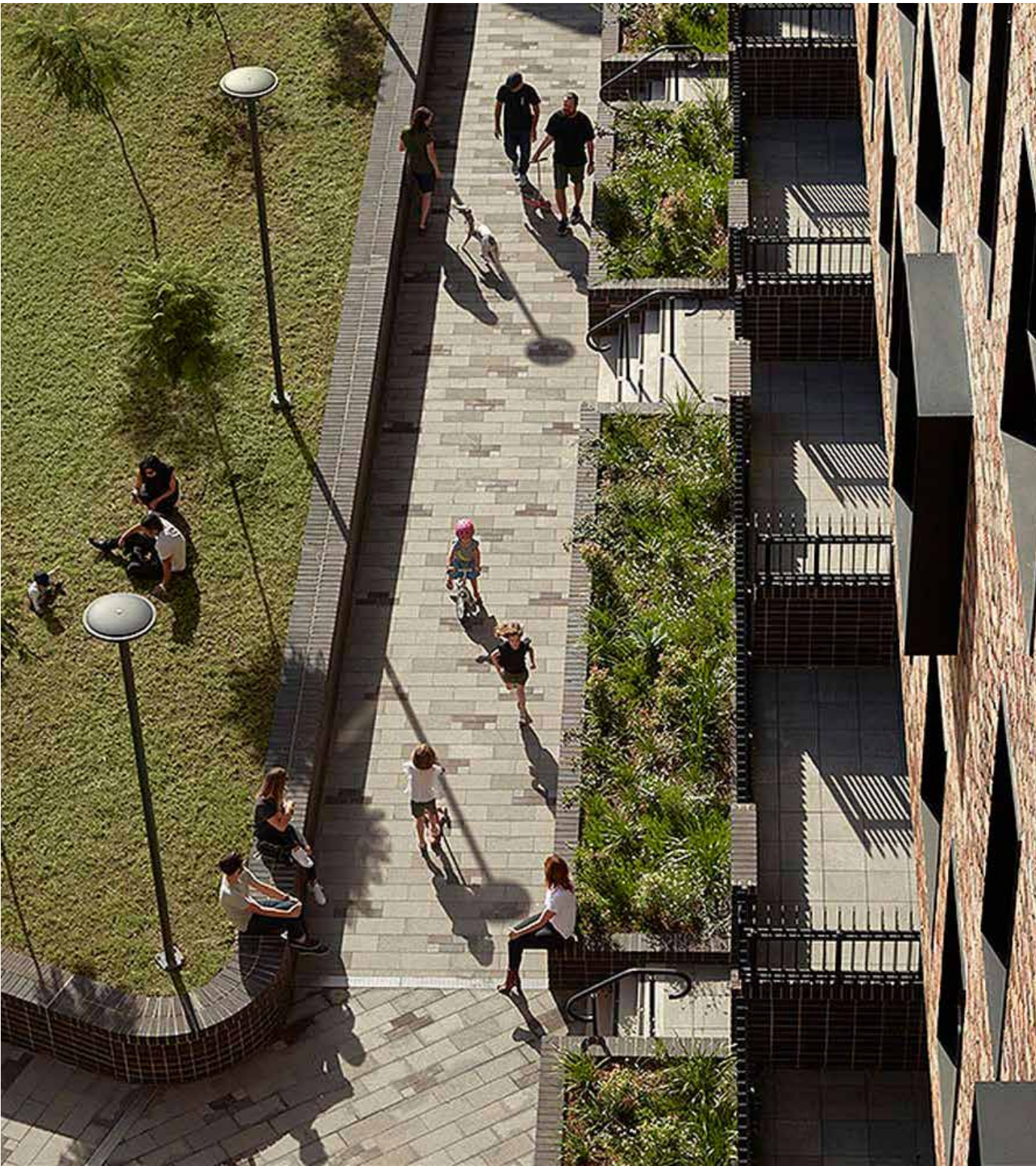
Incorporate environmentally sustainable design principles providing opportunities such as:

- 40% site canopy coverage through retention/ planting of trees
- WSUD
- PV solar system on roof/s
- Effective and varying types of sunshading to the facades and facade orientation

DESIGN QUALITIES

Improved residential amenity

High quality landscape which provides a communal focus for all



A vibrant and safe street interface

Multiple entry points via private courtyards and communal lobbies



A hierarchy of community open spaces

Various outdoor spaces which provide a range of healthy community activities



BUILT FORM AND SCALE

Modulated built form

Articulate each change through variation in facade expression, and materials selection and colour palette.



Variations in building height

Provides urban accent, solar access and view impacts

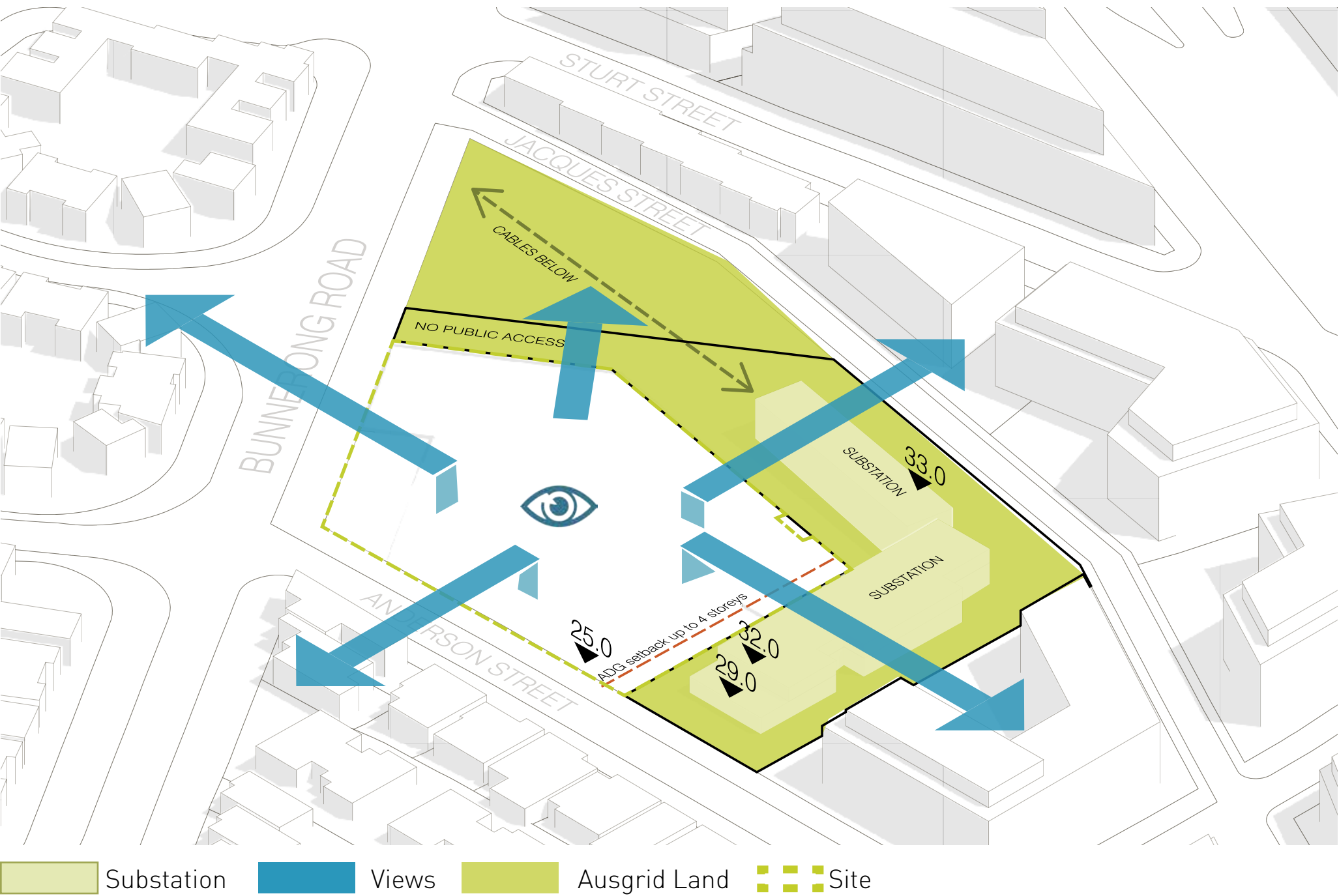


The human scale

Well detailed public, private and communal spaces



VIEWS AND AMENITY

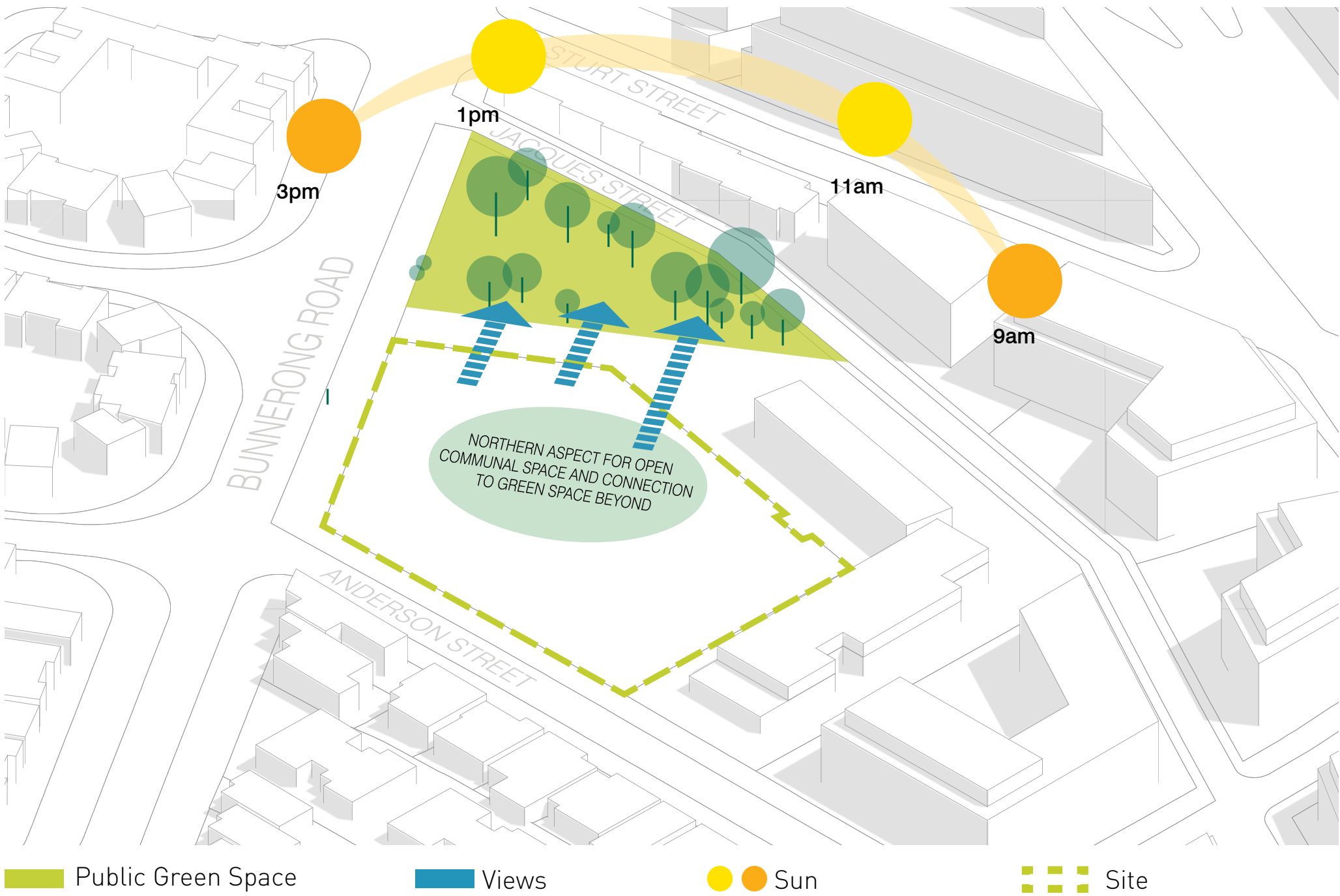


Opportunities for unobstructed views

The site is expected to remain low scale. The SP2 zoned land with its two substation structures cannot be used for any higher density developments such as residential or commercial. The grassy public accessible area along Jacques Street will remain an open space due to the electric cables below its surface.

These actors ensure that north east facing units will have ample views above 7-8.5m (above 2-3 storeys). Apartments along the northern boundary facing the access way and park will have views. There will be no impact of shadows from all levels.

Unobstructed views on the levels above ground in the south and west directions have views over low scale residential buildings and Daceyville to the west.

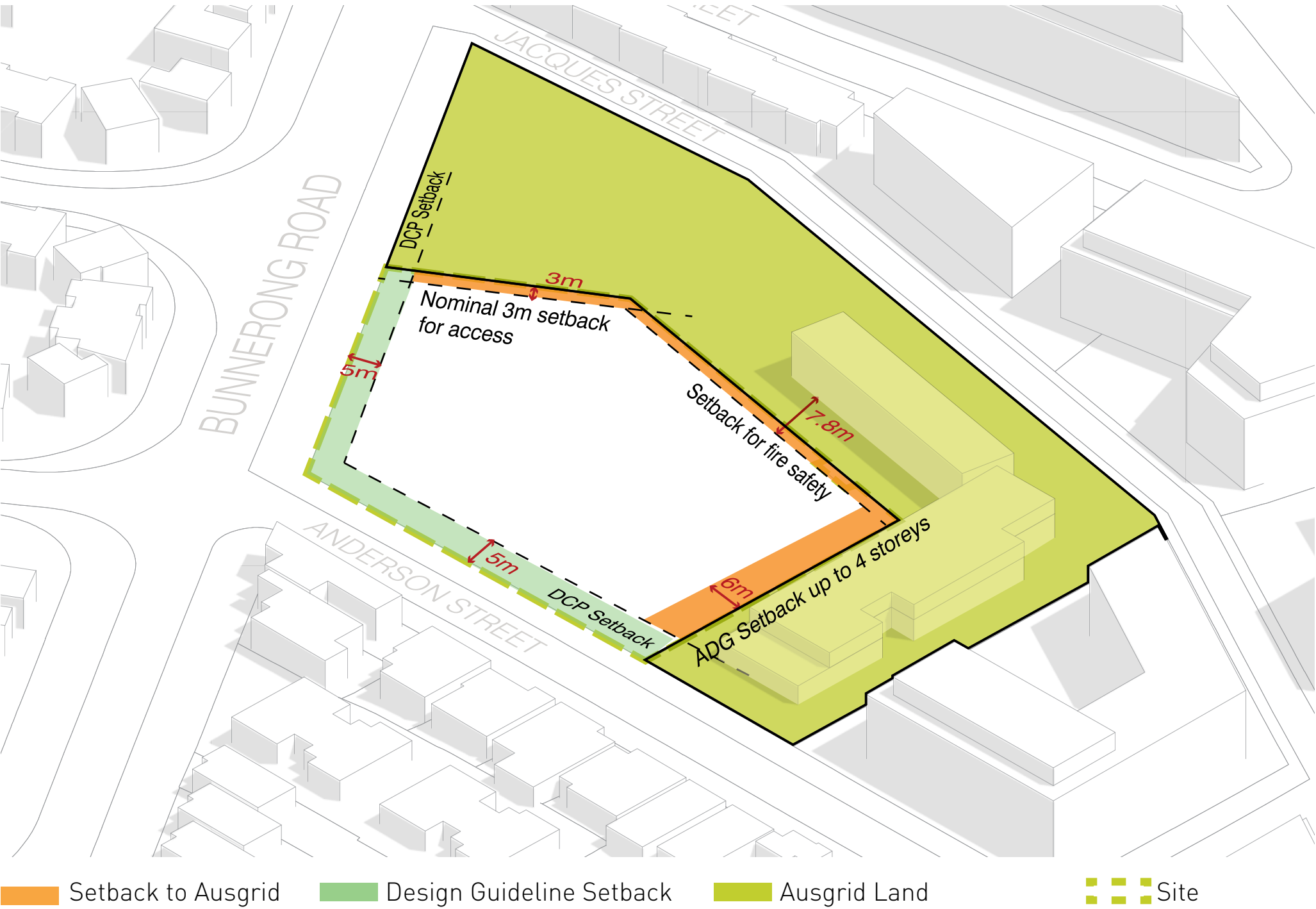


Opportunities for residential amenity

The open space to the north provides both solar access and a green outlook to all units facing it. There is a sunlit leafy communal open space for all residents to enjoy to the north of the site.

This approach increases the extent of the apartment windows and balconies benefit for the northern aspect and enjoyment of outlook onto the green leafy parkland beyond.

A SITE RESPONSE APPROACH TO SETBACKS

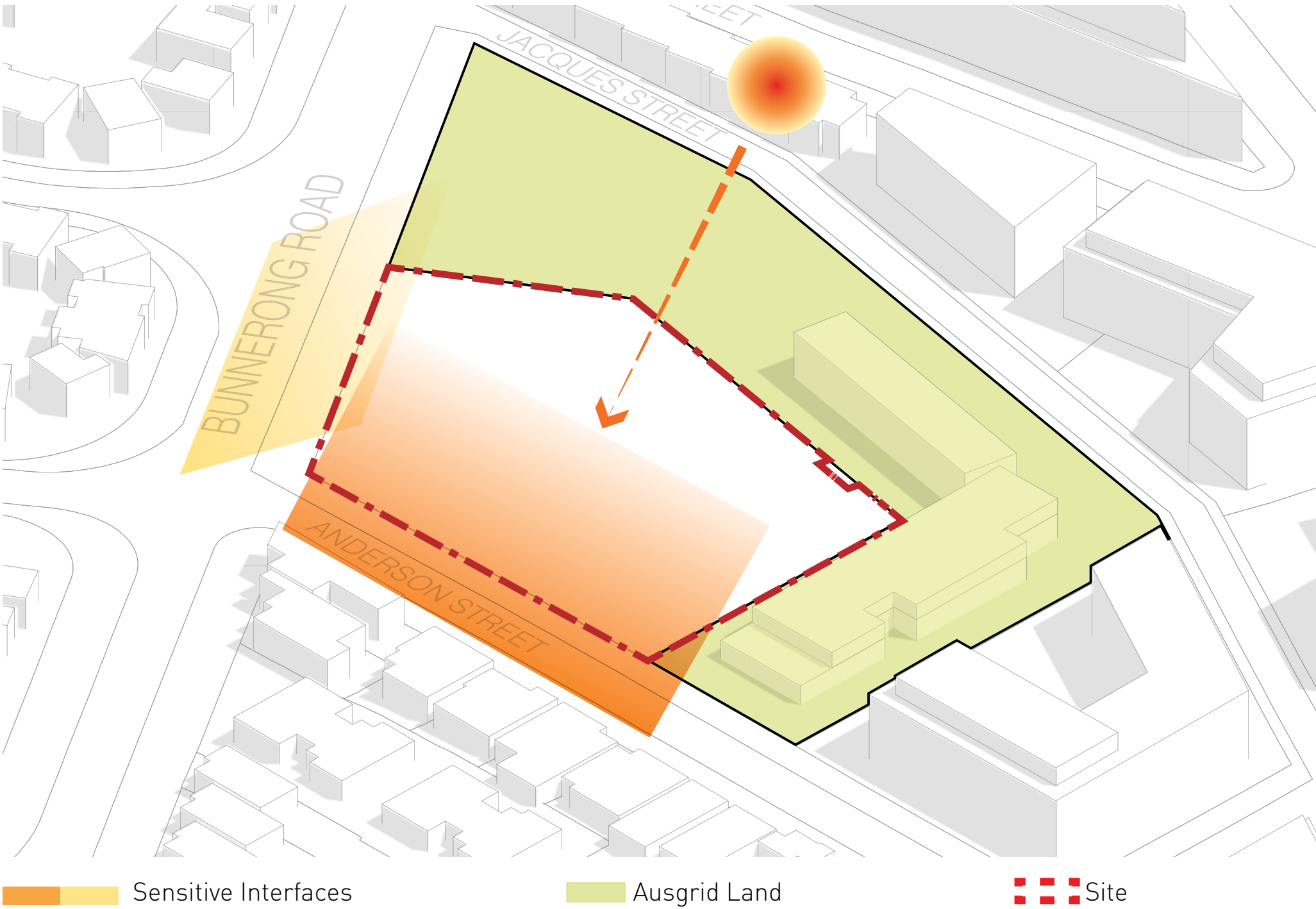


A fire engineering report concluded that a setback of a minimum of 7.5m from the substation structure (that is the line of the boundary) could make a proposal compliant with the NCC.

The substation has been investigated for noise and electromagnetic impact. No additional setback will be required due to the EMF readings being well below the Reference Levels across the whole site.

For fire safety an assumed 0 setback is proposed to the north. Applied setbacks in the reference design relate to access.

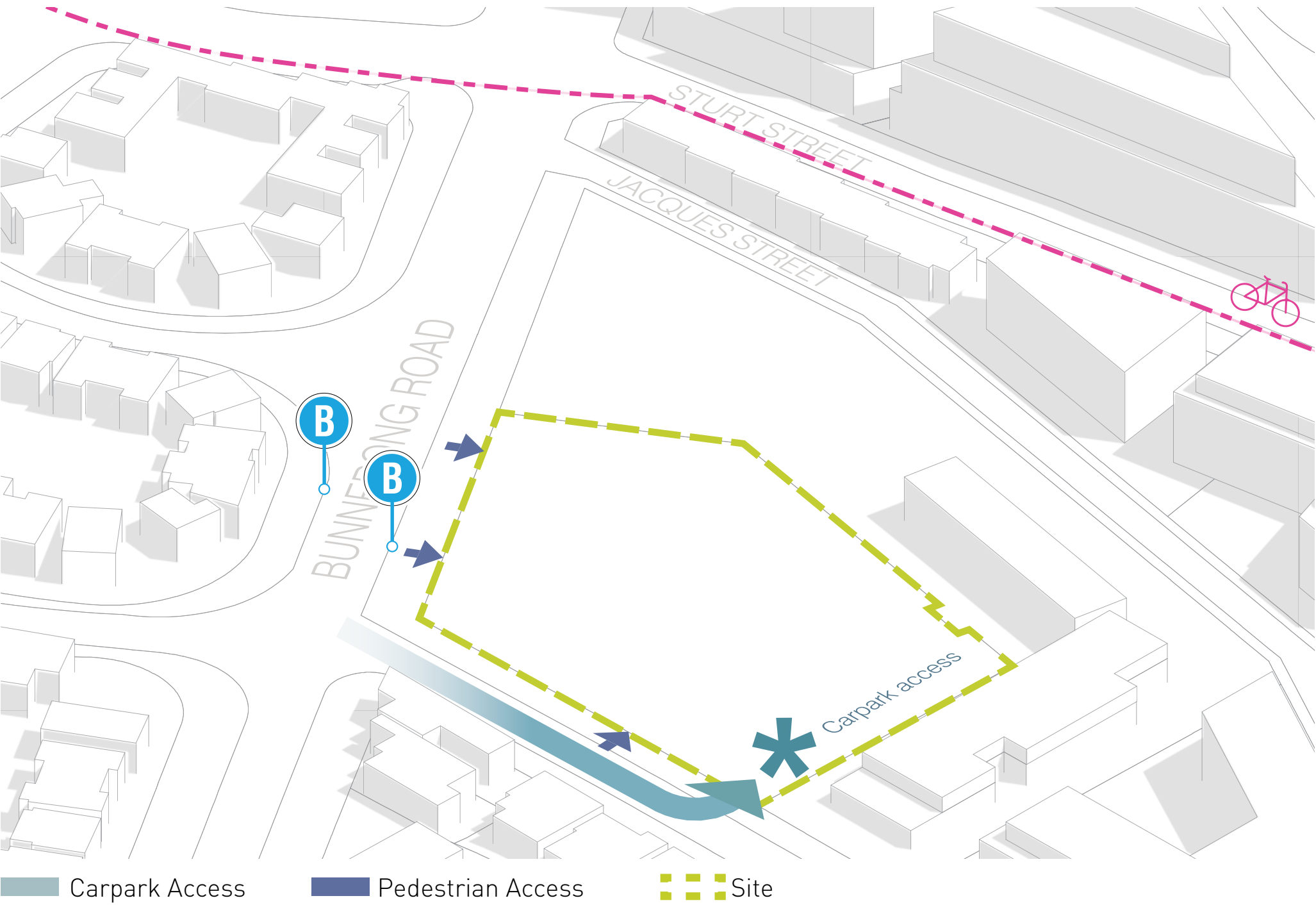
There is a nominal 6m setback to the east. This allows for the required ADG setback up to 4 storeys (12m). ADG setback requirements for above 4 storeys will not be required due to the adjacent SP2 zone and substation.



An upper level setback of a minimum of 2m will reduce the apparent scale/ height of the building when viewed from the lower scale residential areas south along Anderson Street and west along Bunnerong Road.

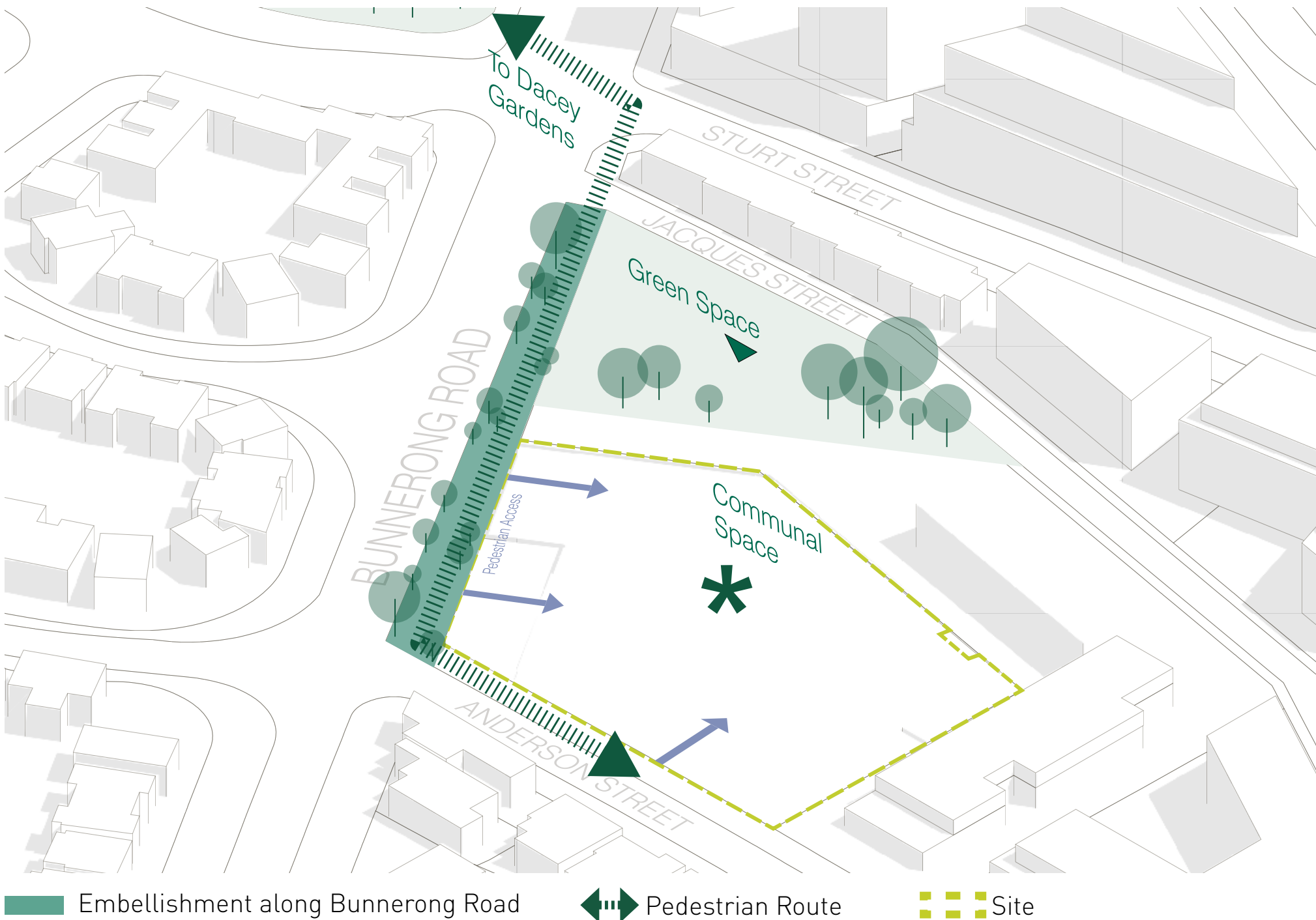
Overshadowing to the residences south of the site will be minimised.

ACCESS AND PUBLIC DOMAIN



Vehicle and loading access onto the site will be via Anderson Street. Vehicle parking and loading access will be by a combined driveway adjacent to the substation. This basement access point is on high ground which will eliminate any flooding impact.

A pedestrian access point to the site is located directly opposite the bus stop.



There is an opportunity to create an attractive green pedestrian network along the eastern edge of Bunnerong Road. Enhancement of the footpath will link leafy Anderson Street to Daceyville Park.

The proposal will connect its communal outdoor landscaped spaces with the existing public domain features.

RETENTION AND OF HIGH VALUE TREES



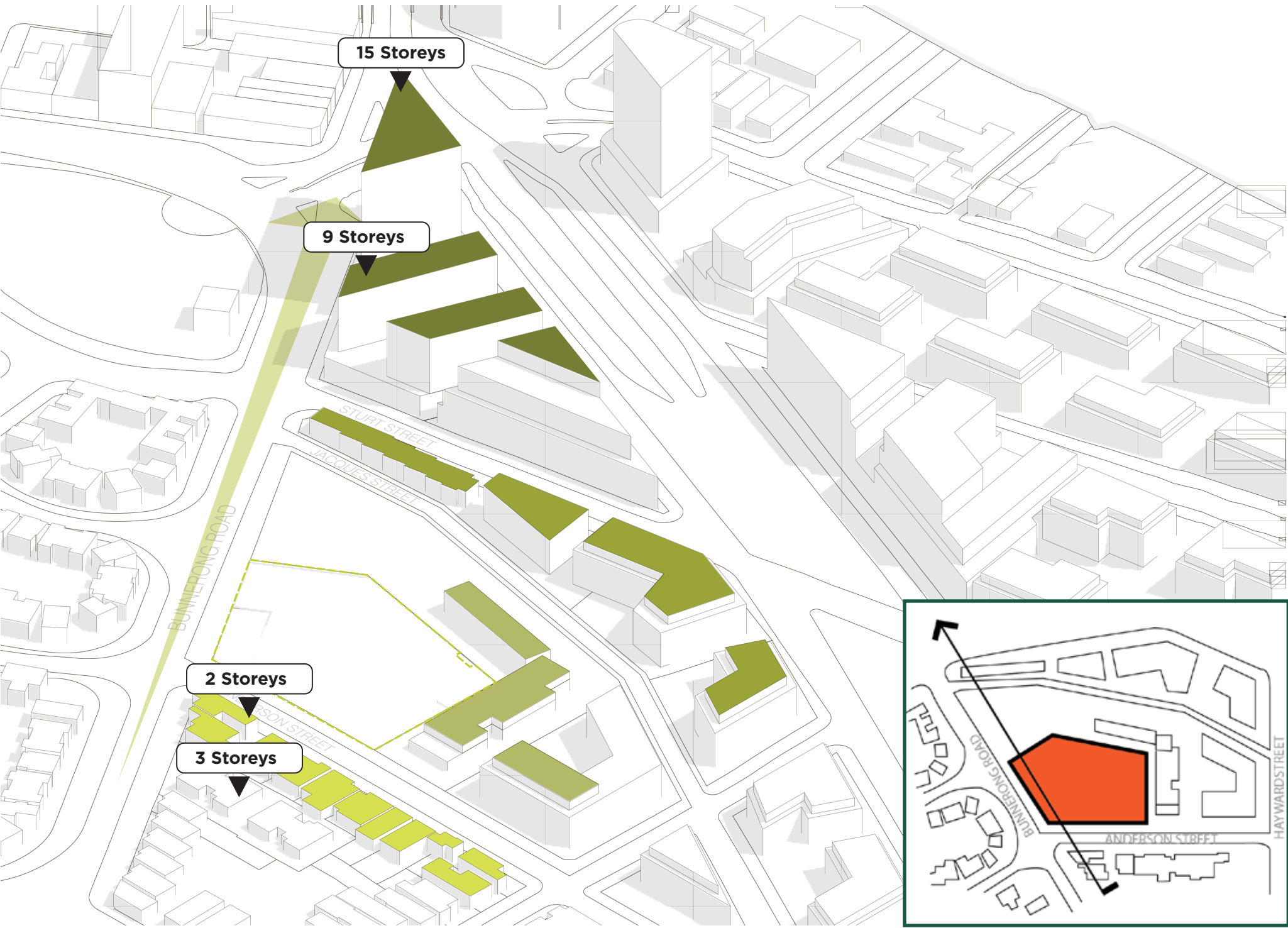
One of the main features of the site are the mature gum trees along Bunnerong Road. These form part of the leafy garden suburb of Daceyville opposite Bunnerong Road. They also enhance future taller buildings. Their heights are comparable to 7-8 storey buildings.

Along Anderson Street smaller dense cotton trees set the character and image of a local street. Maintaining both the tall trees along Bunnerong Road and smaller trees along Anderson Street is an opportunity to retain and build on the existing streetscape character.

Some exisintg high value trees will be removed to accommodate new built form. This loss will be offset by plantings of new trees in the large communal open space within the site.

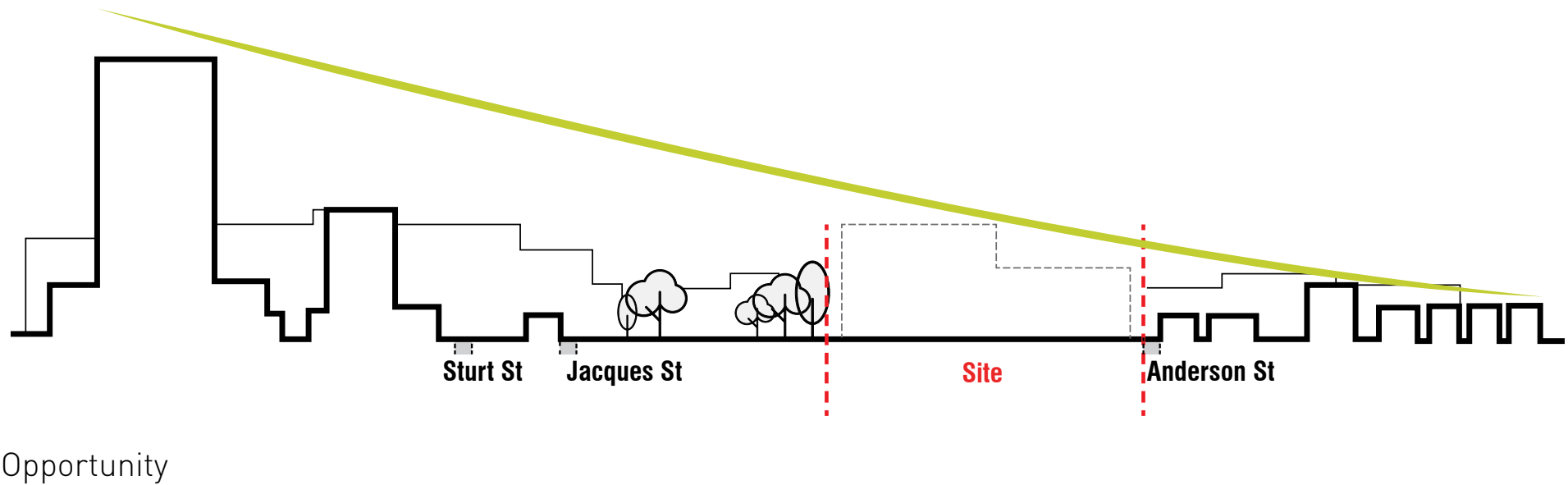
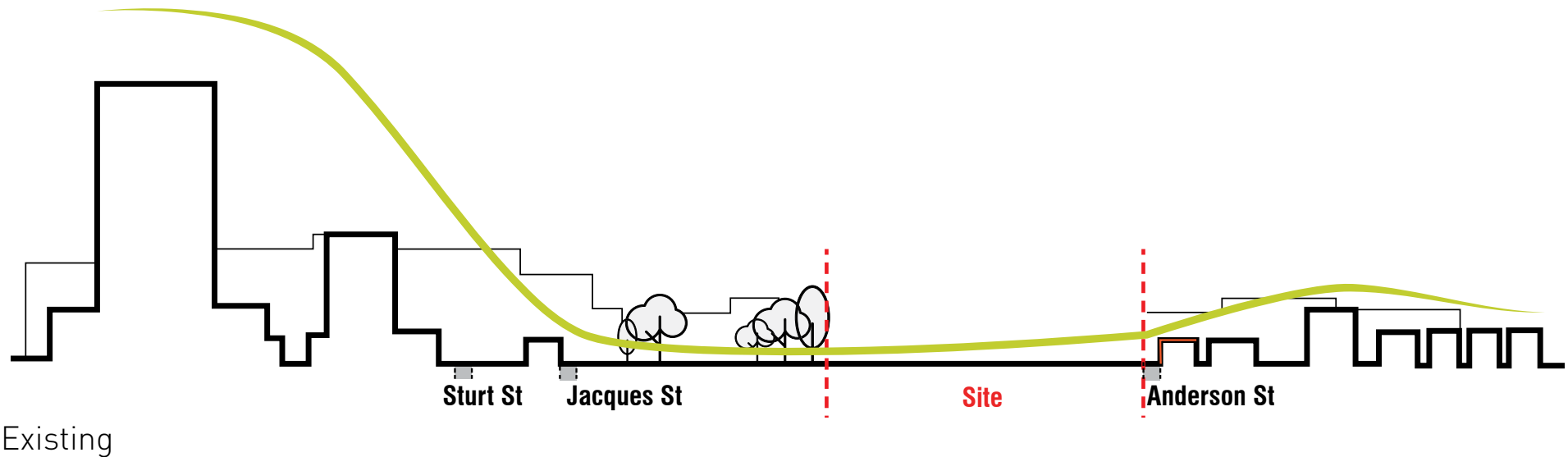


SCALE TRANSITION



It is envisaged that Kingsford Town Centre will contain new taller mixed use buildings. Currently these are 15-17 storeys in height. The proposed development at Bunnerong Road provides an unrbn transition with modulated built

form. Some taller and lower buildings will provide a scale transition to the lower buildings south of Anderson Street.

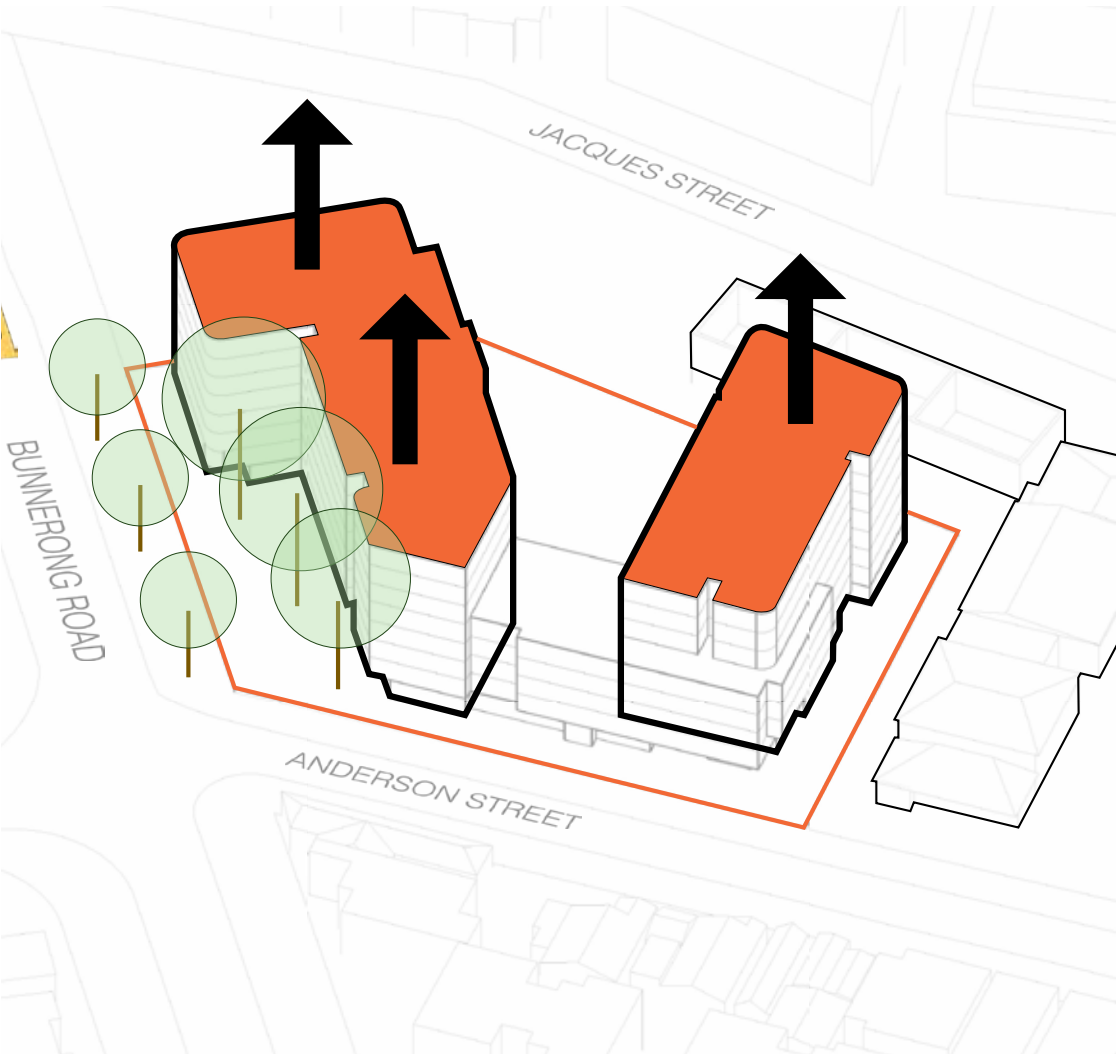


The proposed development will provide an urban transition from taller buildings on Anzac parade to lower buildings south of Anderson Street.

DESIGN PRINCIPLES

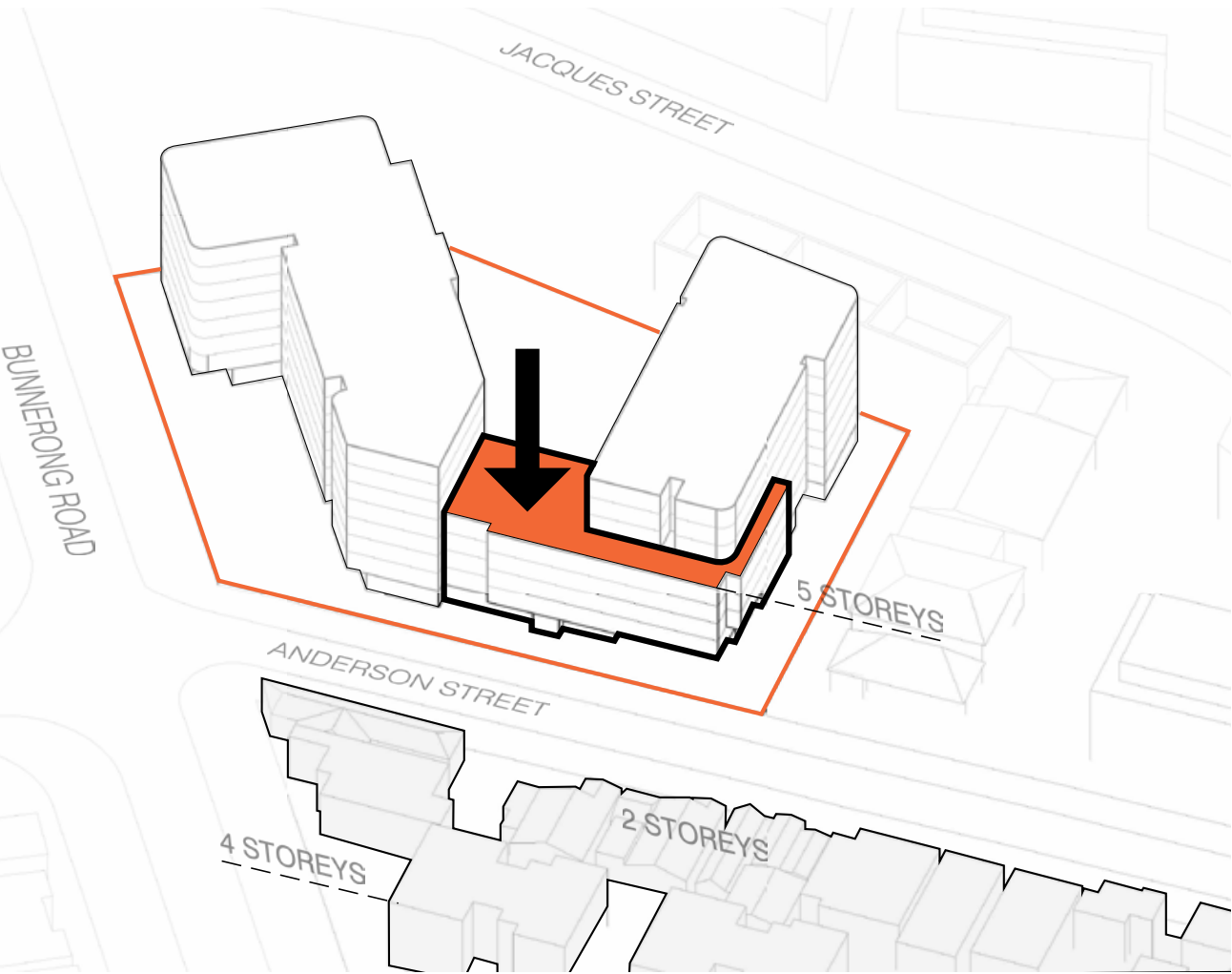
Articulation of Built Form

4. Urban accent



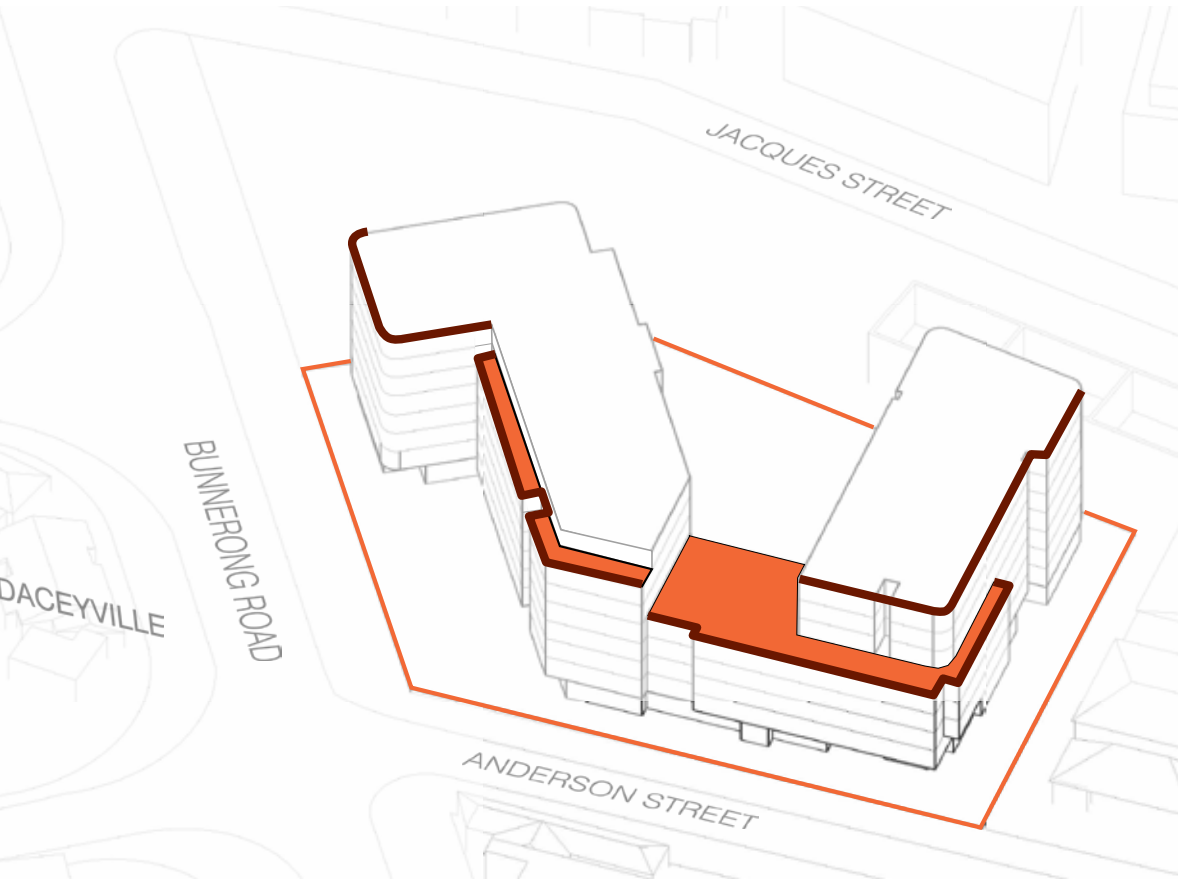
Building heights will increase towards Kingsford Town Centre to the north. Taller built form to the east (adjacent to the substation) will act as an urban buffer. Retention of many trees to the western edge of the site will act as a landscape screen and buffer to Bunneriong Road and connection to the Daceyville Garden Suburb opposite.

5. Contextual Response through modulation



Modulation of the built form is provided with lower heights massing along Anderson Street. This will provide a human scale response to Anderson Street and recognise the lower residential buildings opposite.

6. Refinement of and modulation of the built form

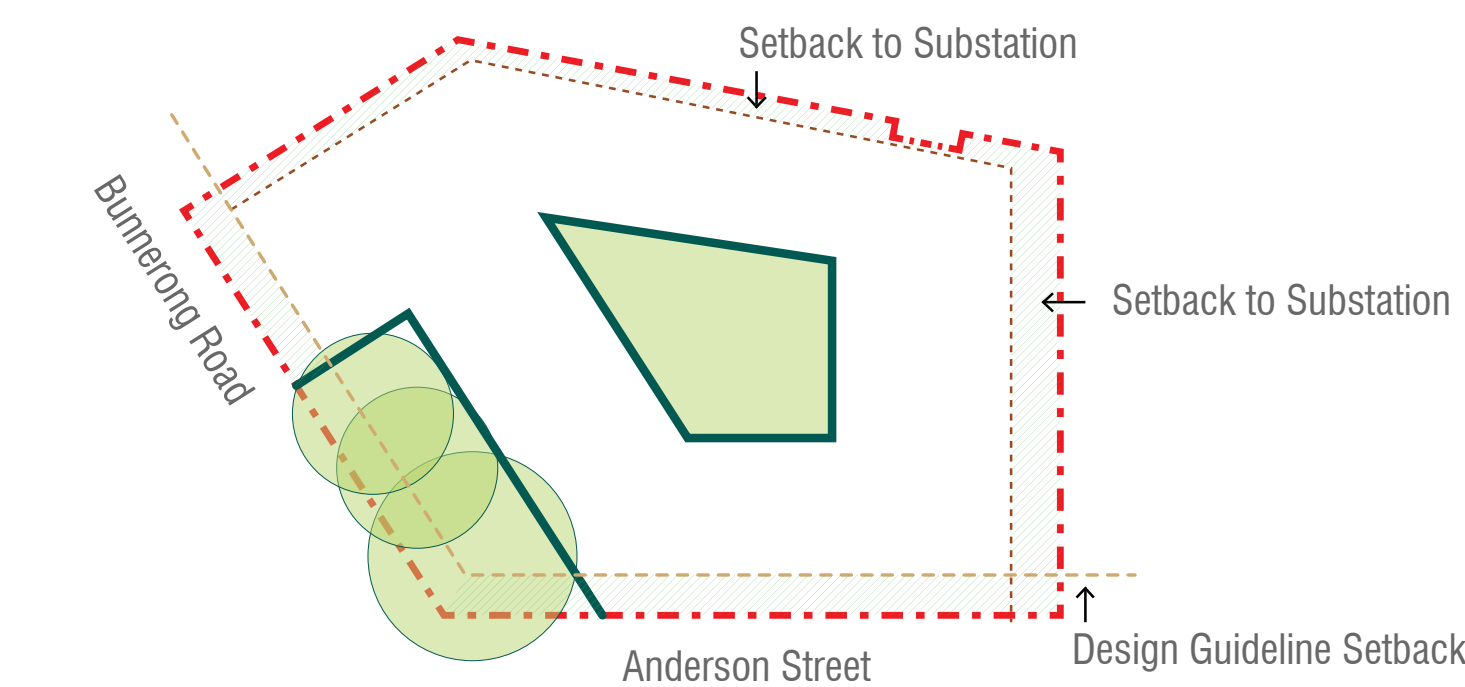


Further modulation and adjustments in height, including an upper storey setback of 2m, will enhance the overall character of the proposed development to Anderson Street and Bunnerong Road.

DESIGN PRINCIPLES

Composition of Built Form and Open Spaces

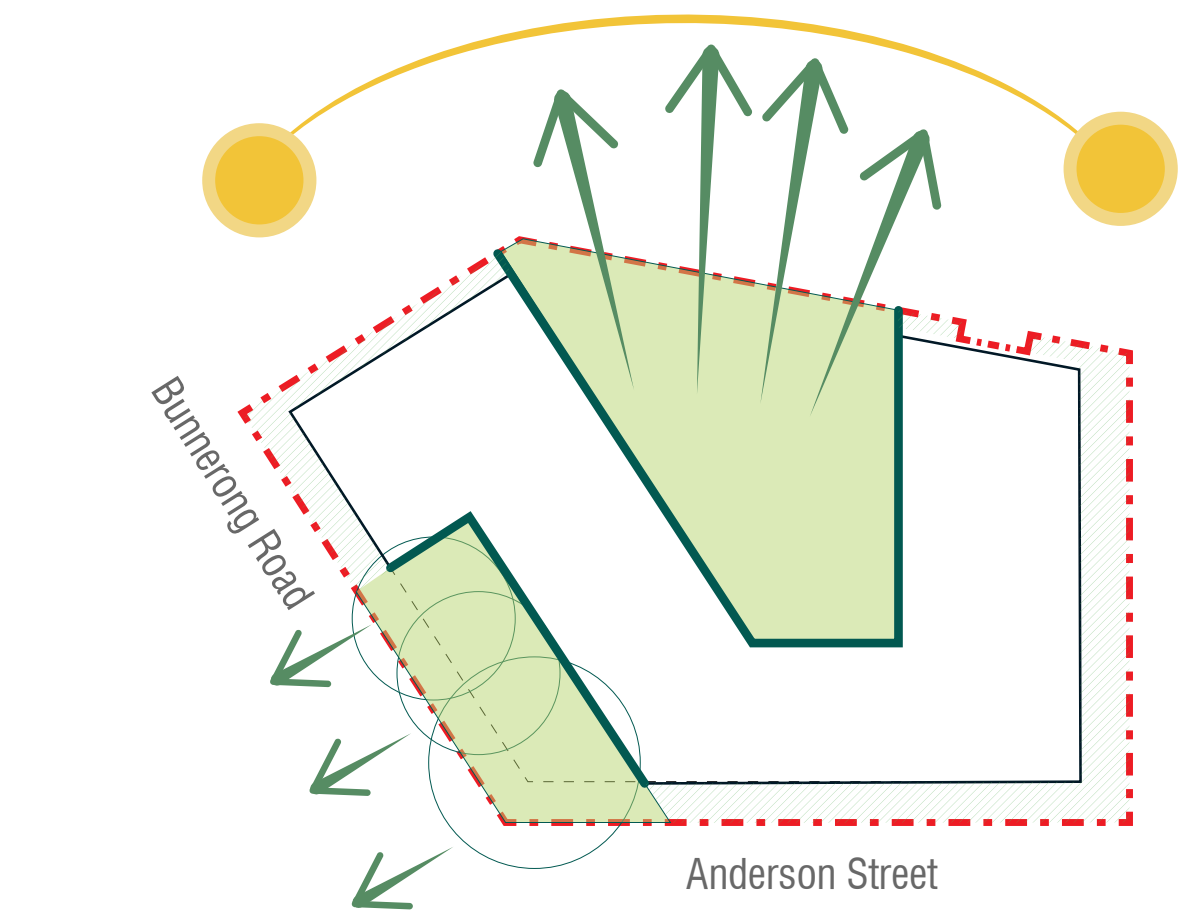
1.Setbacks and Location of Open Spaces define an area for the Building Footprint



Maintain mature trees along Bunnerong Road and provision of an internal landscaped courtyard.

- Key**
- Site Boundary
 - Setbacks
 - Trees
 - Open Green Space

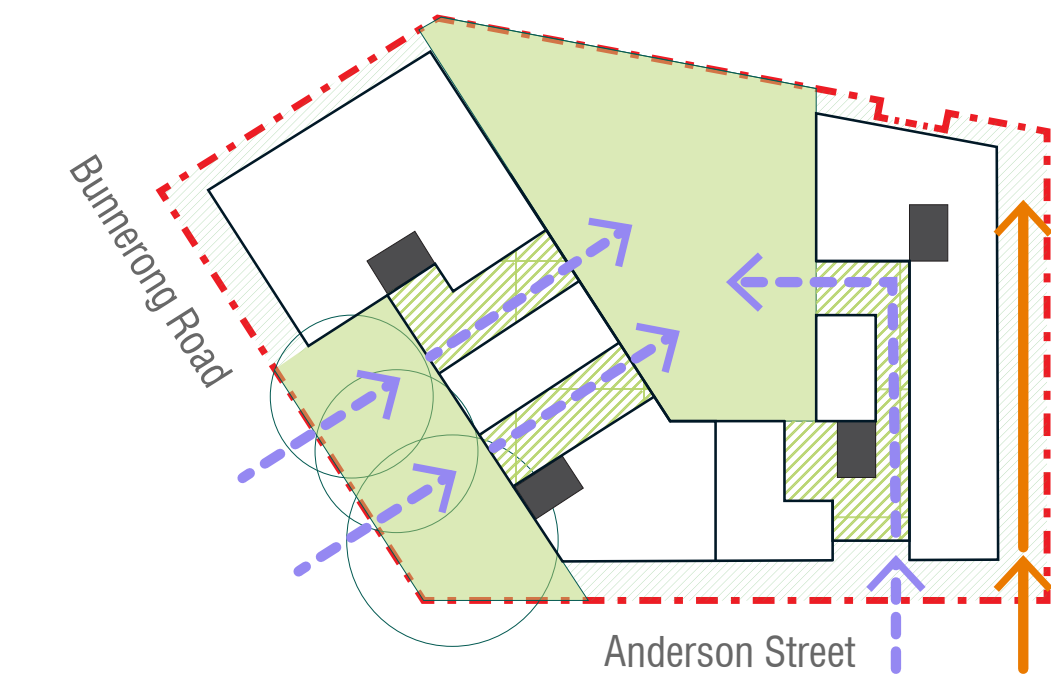
2. Built Form opens to north gives Solar Access to Open Spaces and Apartments



Open up the built form to create a large north facing communal open space. This will also provide optimum solar access to more apartments.

- Key**
- Site Boundary
 - Setbacks
 - Trees
 - Open Green Space
 - Building Footprint

3. Through site Lobbies provide Access and Permeability



Modulate the ground floor with openings and communal lobbies which provide a visual connection from the street to the communal courtyard. These communal lobbies will be naturally ventilated..

- Key**
- Site Boundary
 - Setbacks
 - Open Green Space
 - Pedestrian Access
 - Vehicular Access
 - Building Footprint

DESIGN PRINCIPLES

Landscape Areas and ESD Initiatives

7. Generous Diverse Communal Open Spaces



Provide a variety of north facing communal open spaces. These will be either deep soil courts or roof gardens.

- Key**
- Site Boundary
 - Sunlit Balconies and Living Rooms
 - Communal Open Spaces

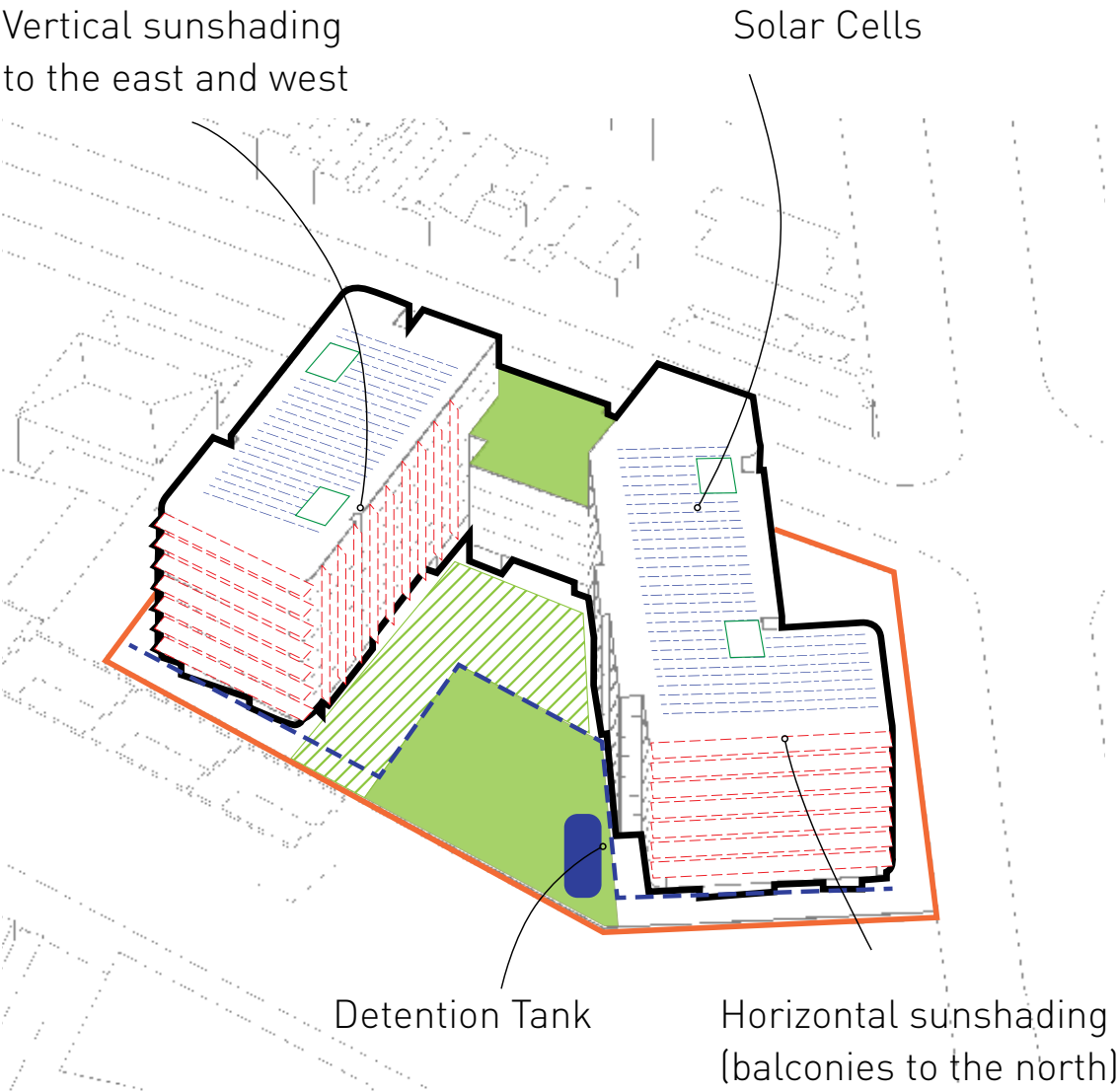
8.Large Deep Soil Zones within Communal Open Space



The extent of the basement carpark area will be set back from northern boundary to accommodate deep soil landscaped areas.

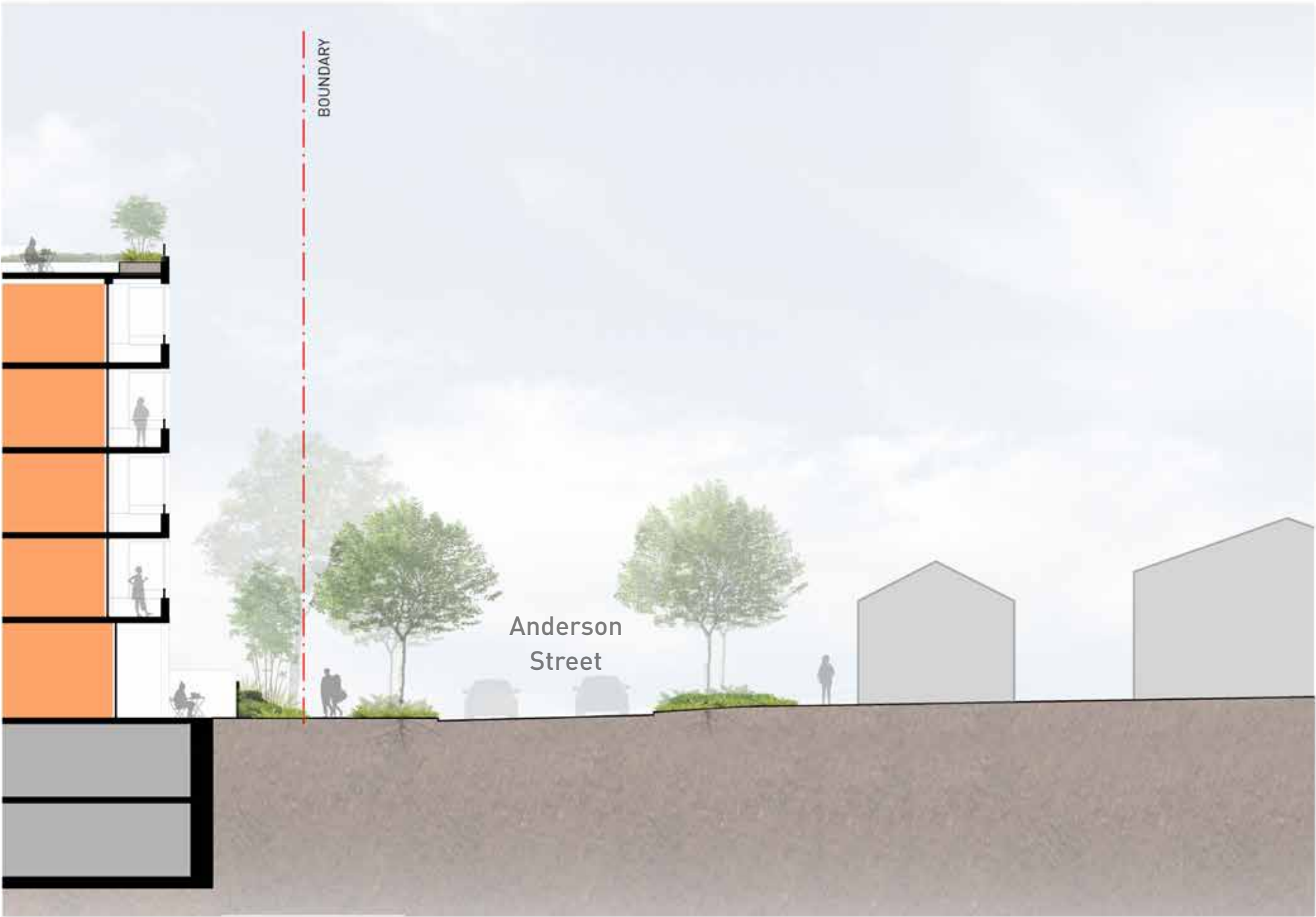
- Key**
- Site Boundary
 - Basement Line
 - Basement Below
 - Deep Soil

9. Provide a Sustainable Development



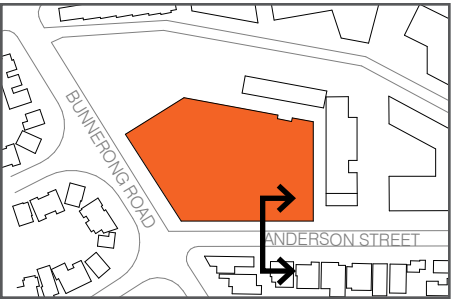
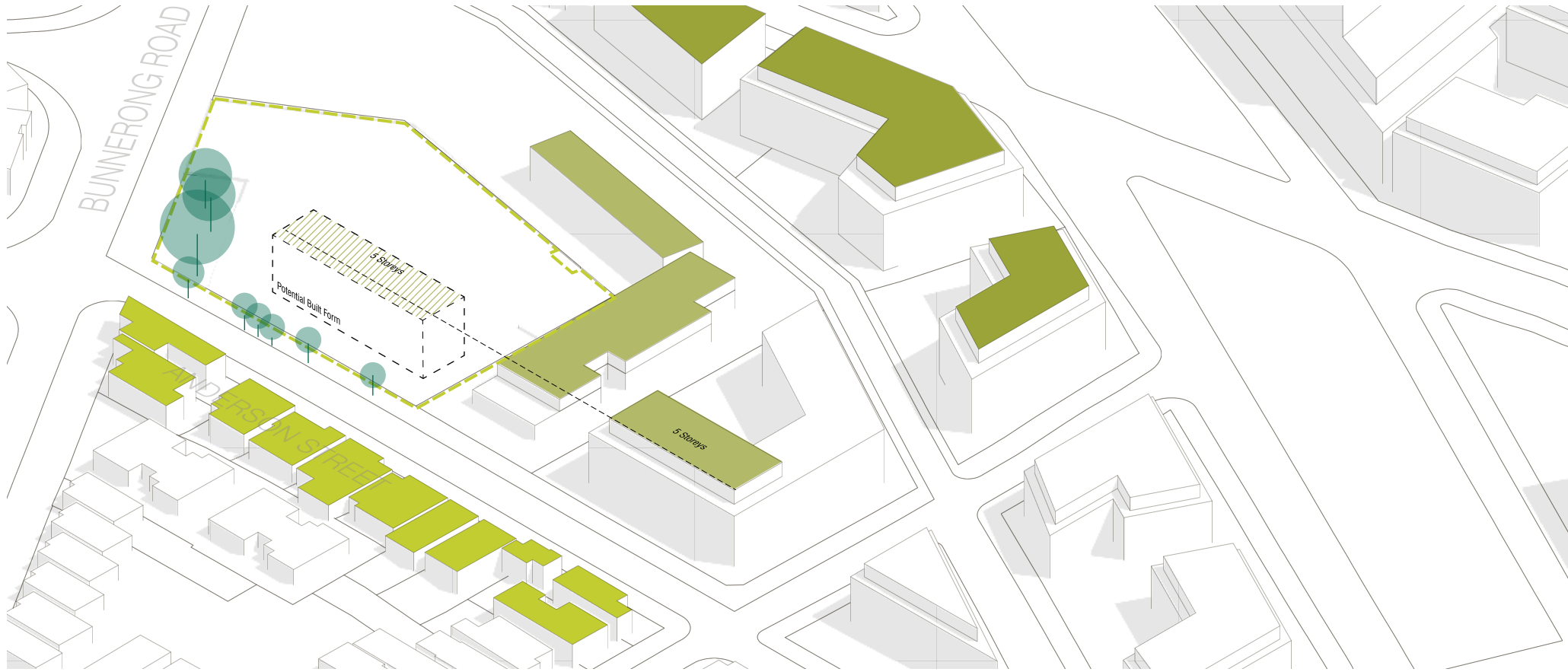
- ESD Initiatives includes:
- Cross ventilated communal lobbies
 - PV solar systems on the roof
 - Vertical and horizontal Sunshading suitable to the orientation of each facade
 - OSD (On-site Stormwater Detention), WQ (Water Quality) measures and RWT (Rainwater Tank).

RESIDENTIAL AMENITY TO ANDERSON STREET

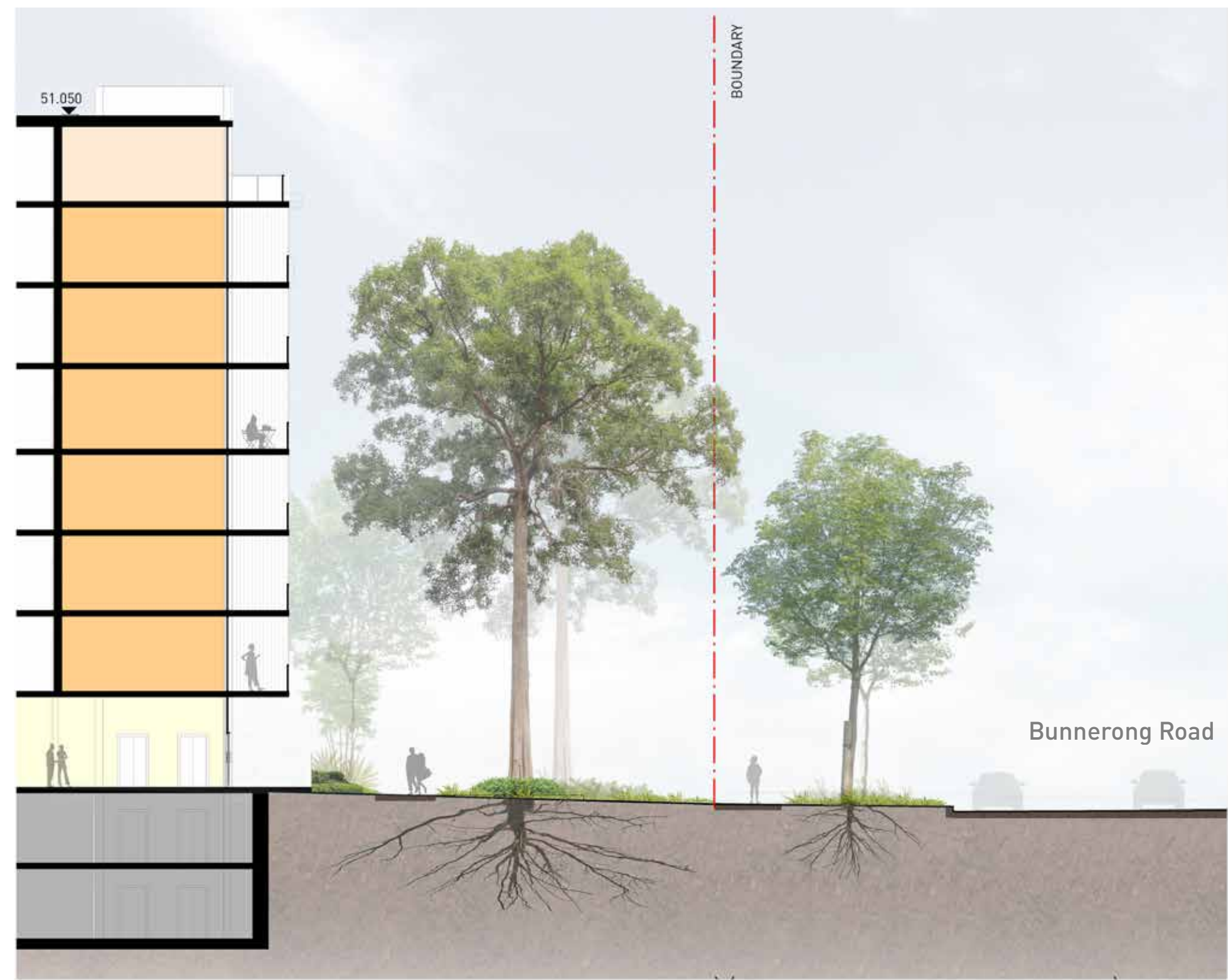


The proposal will create a coherent street frontage of 5 stories to Anderson Street. This height is consistent with the heights in the HIA.

Cotton trees will be retained along Anderson Street. New landscape within the front setback zone will further add to the amenity of the streetscape.

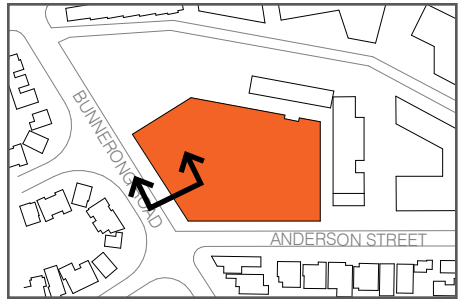


RESIDENTIAL AMENITY TO BUNNERONG ROAD



The proposed landscaping will mitigate the visual impact from vehicle traffic and provide a connection to Daceyville Garden Suburb opposite by retaining as many mature trees as possible.

The proposal will enhance the urban character of Bunnerong Road. Additional plantings will improve the residential amenity and public domain.

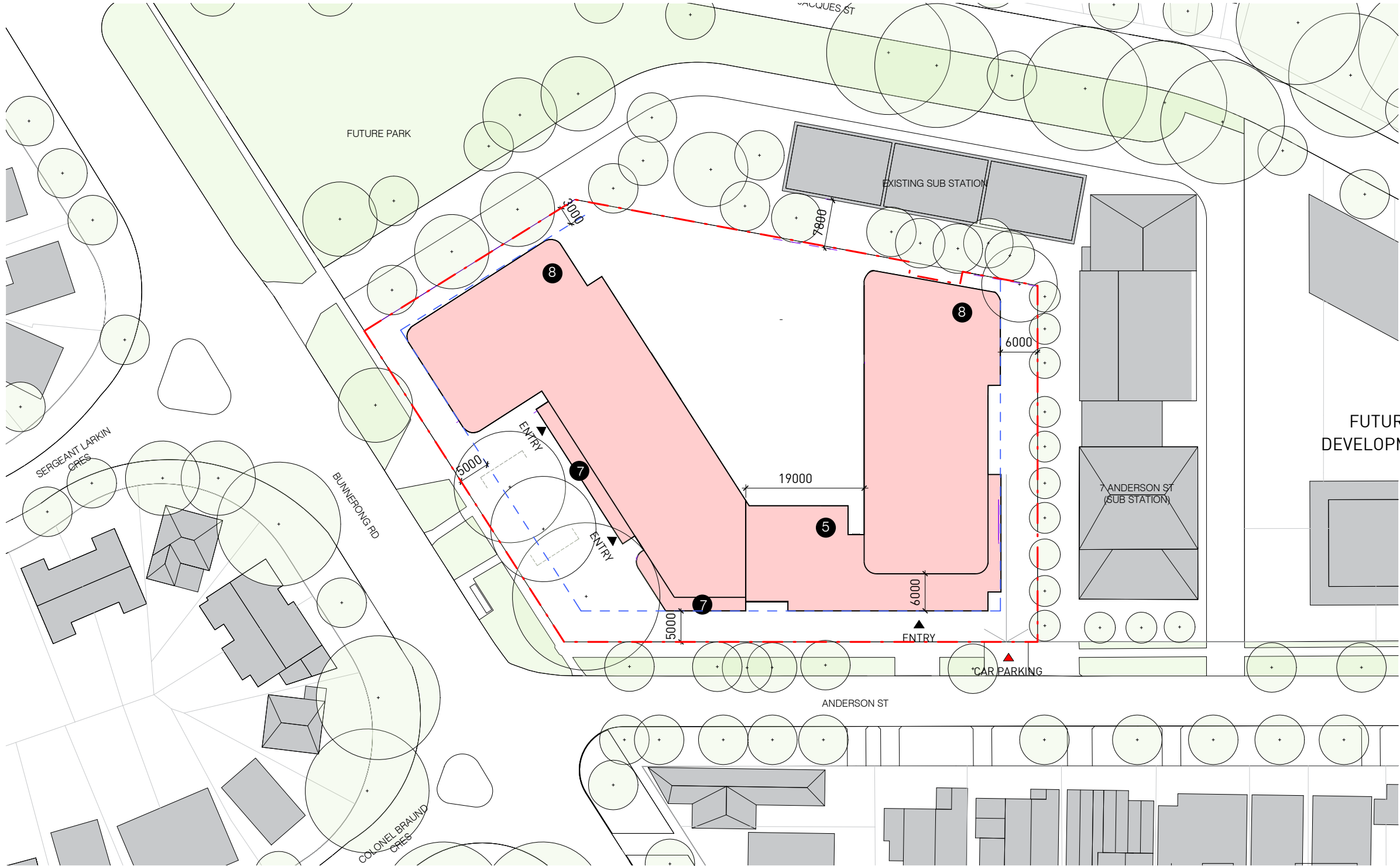


DESIGN CONCEPT



Site Plan - Indicative concept scheme with landscape

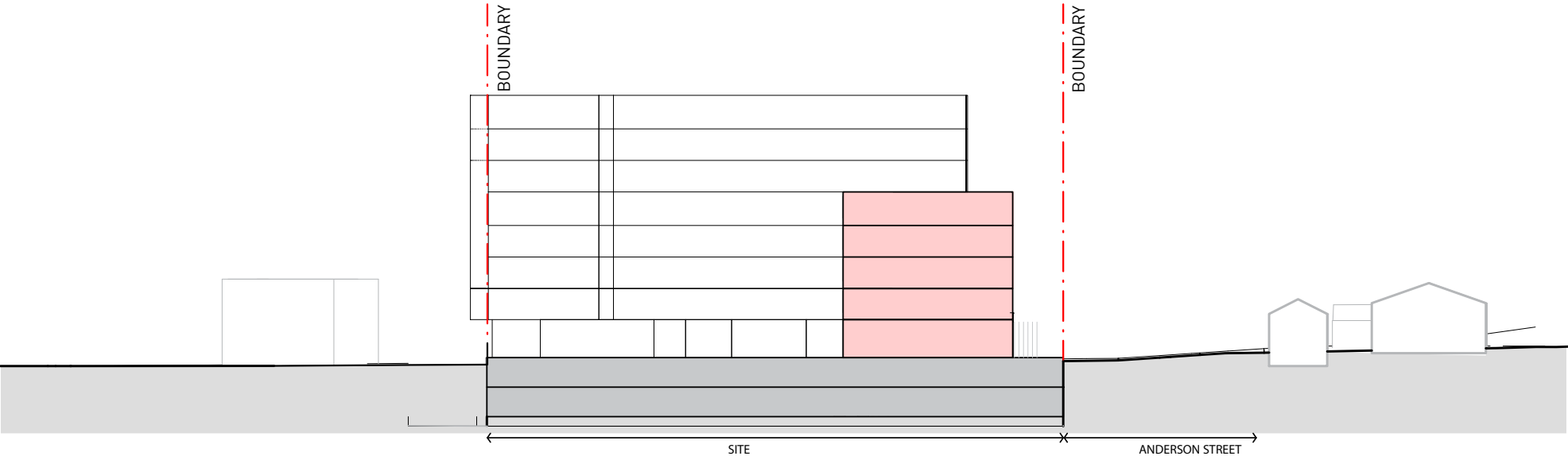
PROPOSED PLANNING SCHEME



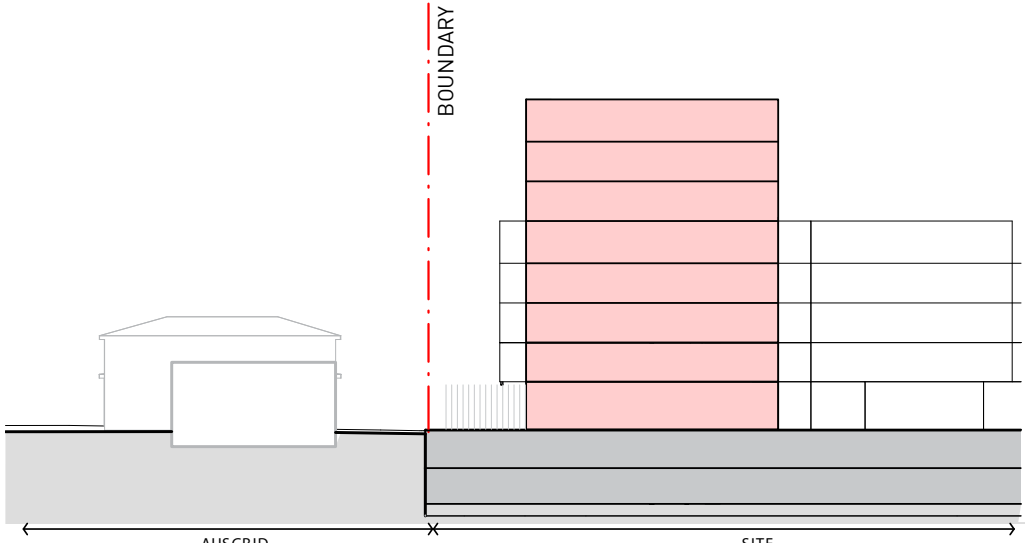
Site Plan - Indicative concept scheme

The site plan illustrates the transition in scale from 8 to 5 storeys, the highly modulated building form and the additional upper level setback to Bunnerong Road and Anderson Street.

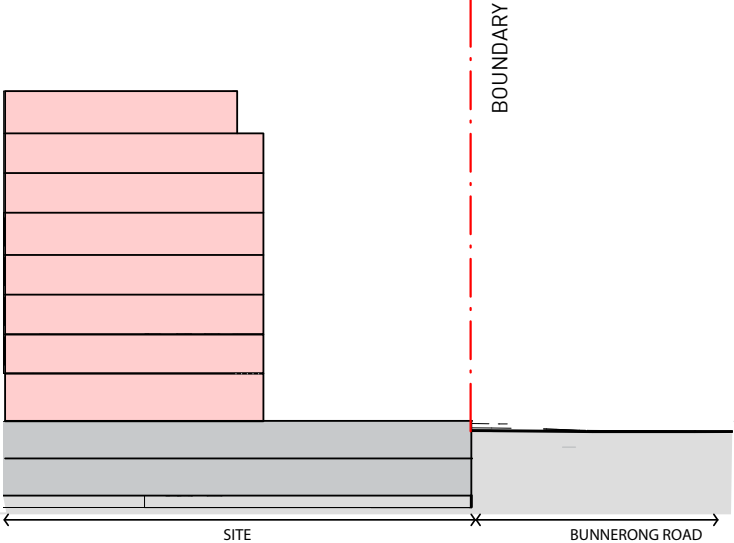
- Legend
- ⑧ Number of storeys



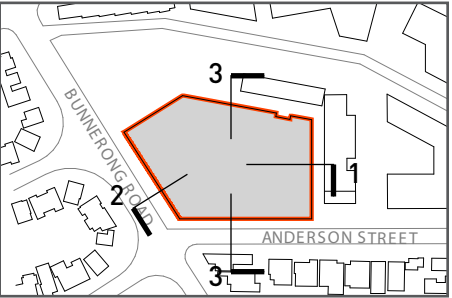
SECTION 3-3



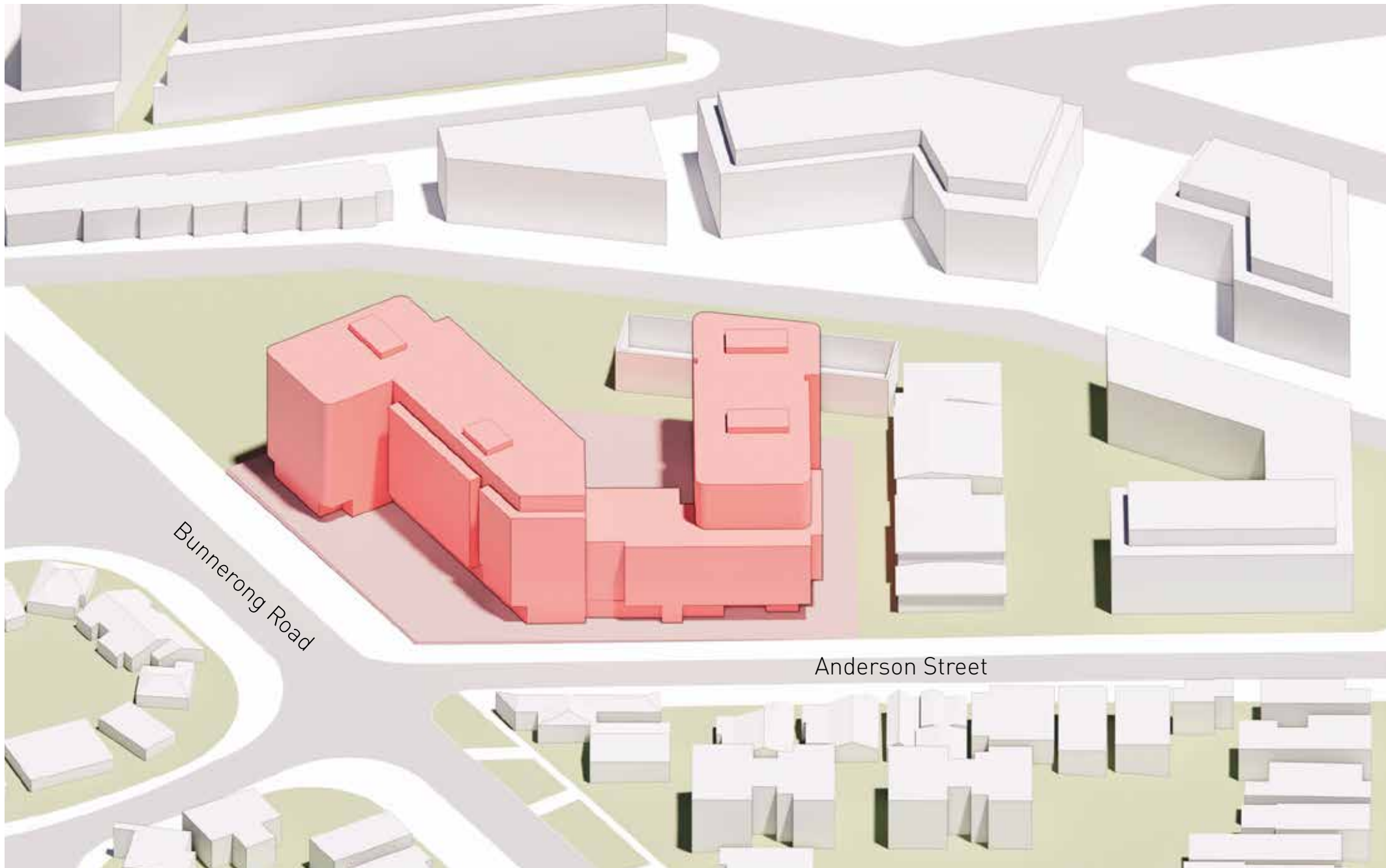
SECTION 1-1



SECTION 2-2



PROPOSED PLANNING SCHEME



Massing view from the south



Massing view from the north

MASSING ANALYSIS

View along Bunnerong Road looking south

CURRENT



PROPOSED



MASSING ANALYSIS

View along Anderson Street looking west

CURRENT



PROPOSED



MASSING ANALYSIS

View along Bunnerong Road looking north

CURRENT



PROPOSED



CONCEPT

View along Bunnerong Road looking south

CURRENT



PROPOSED



CONCEPT

View along Anderson Street looking west

CURRENT



PROPOSED



CONCEPT

View along Bunnerong Road looking north

CURRENT



PROPOSED



View along Anderson Street looking west



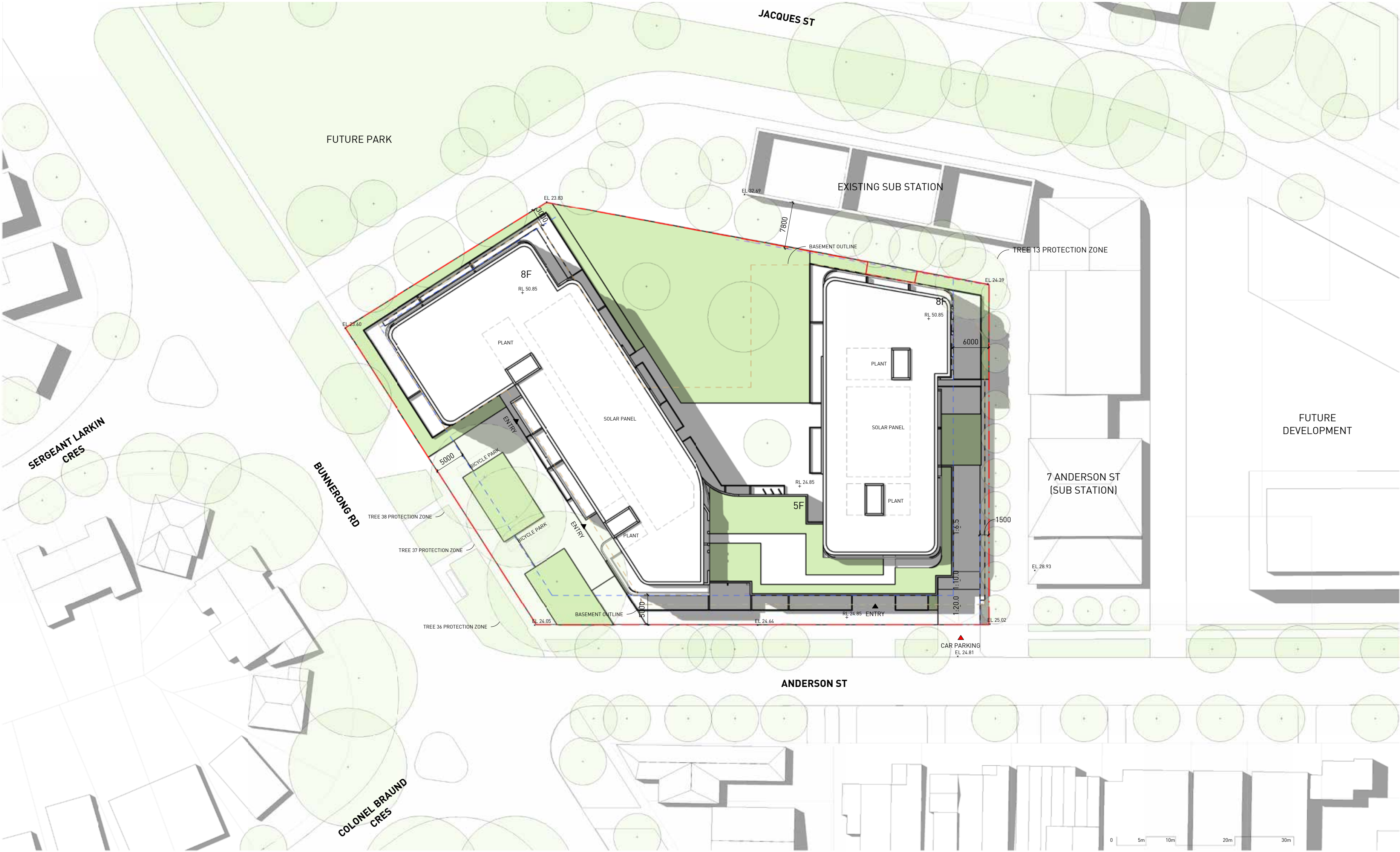
View along Anderson Street looking west



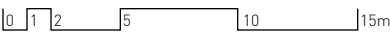
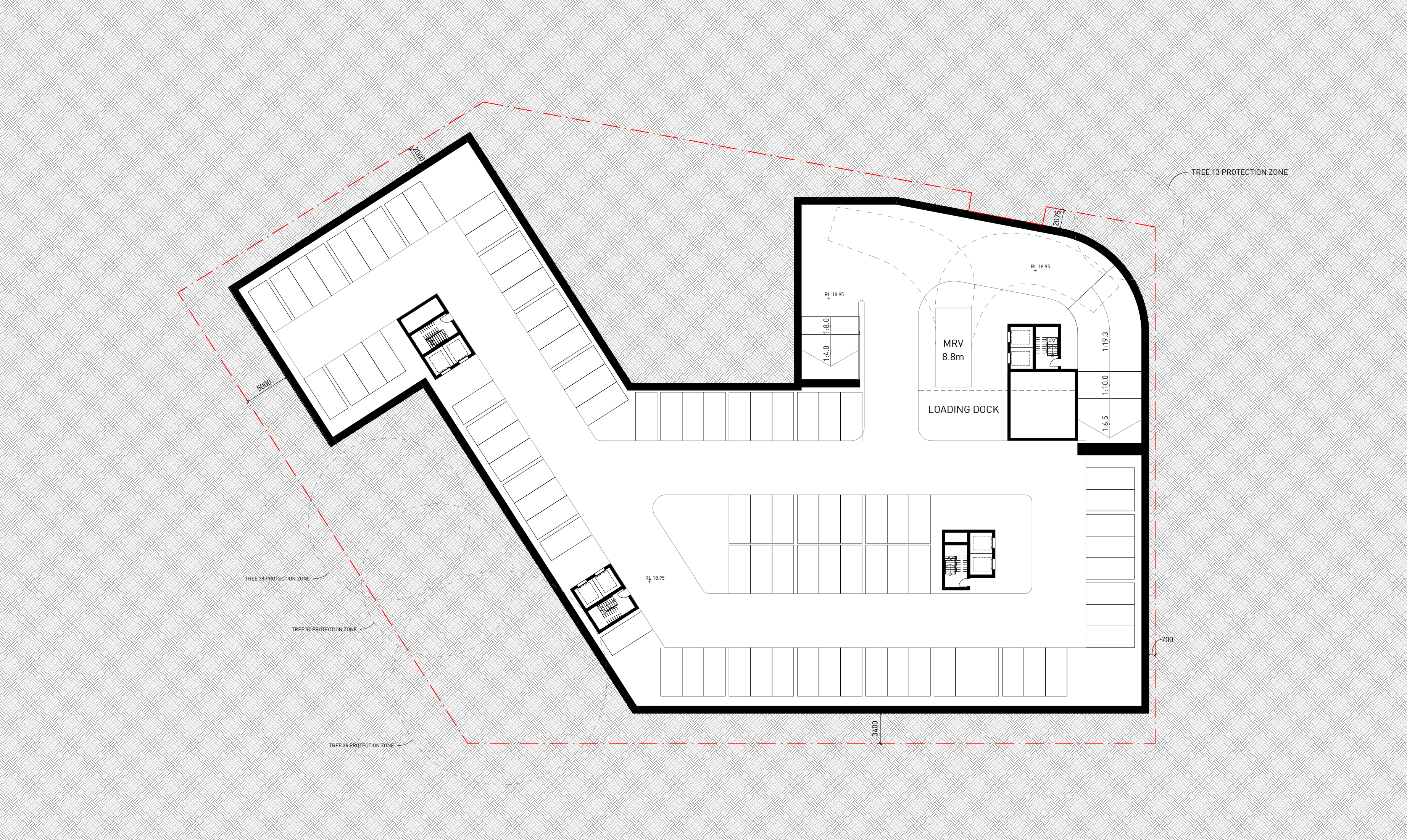
View from Bunnerong Road facing south



SITE PLAN



BASEMENT 02 PLAN



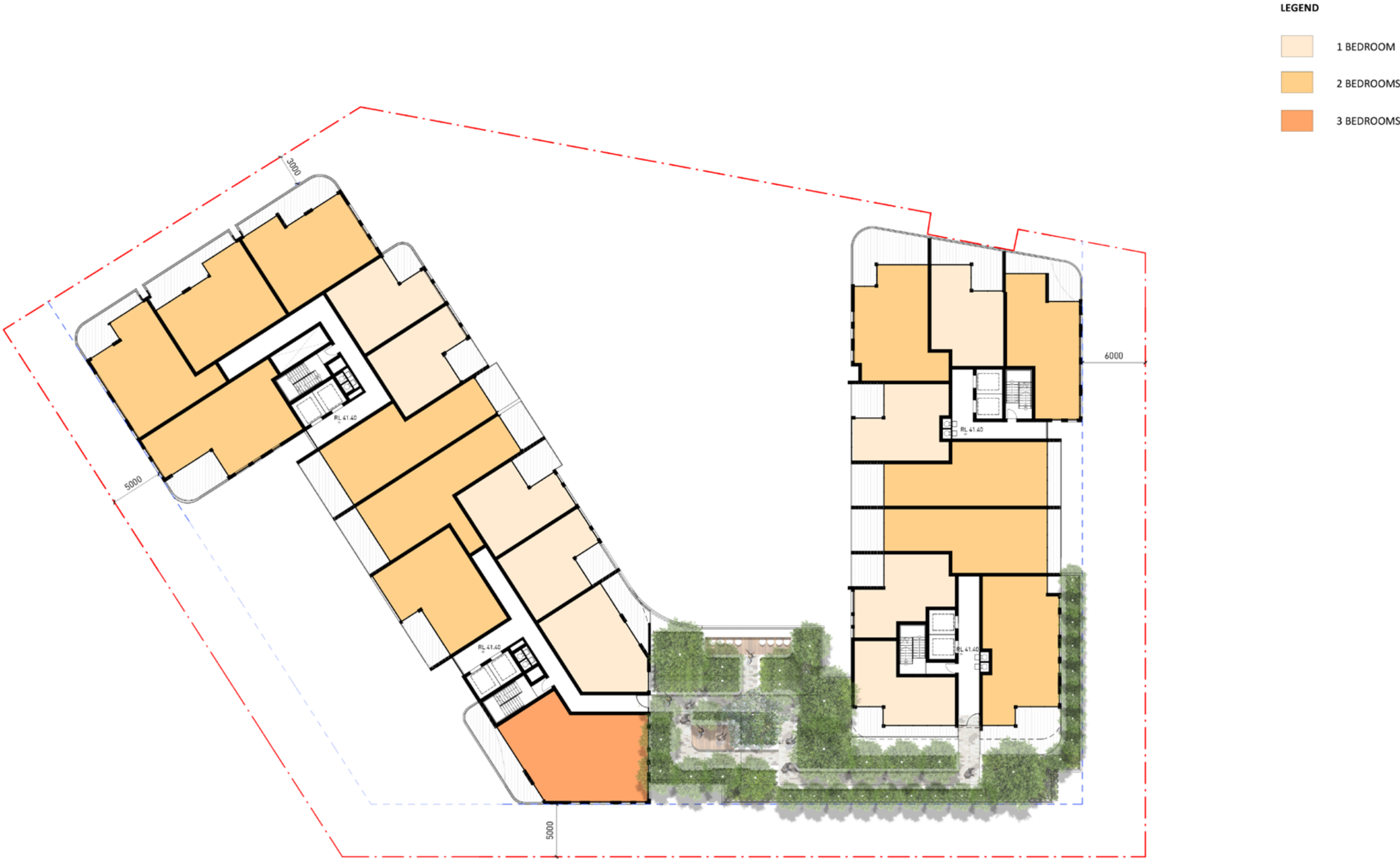
GROUND FLOOR PLAN



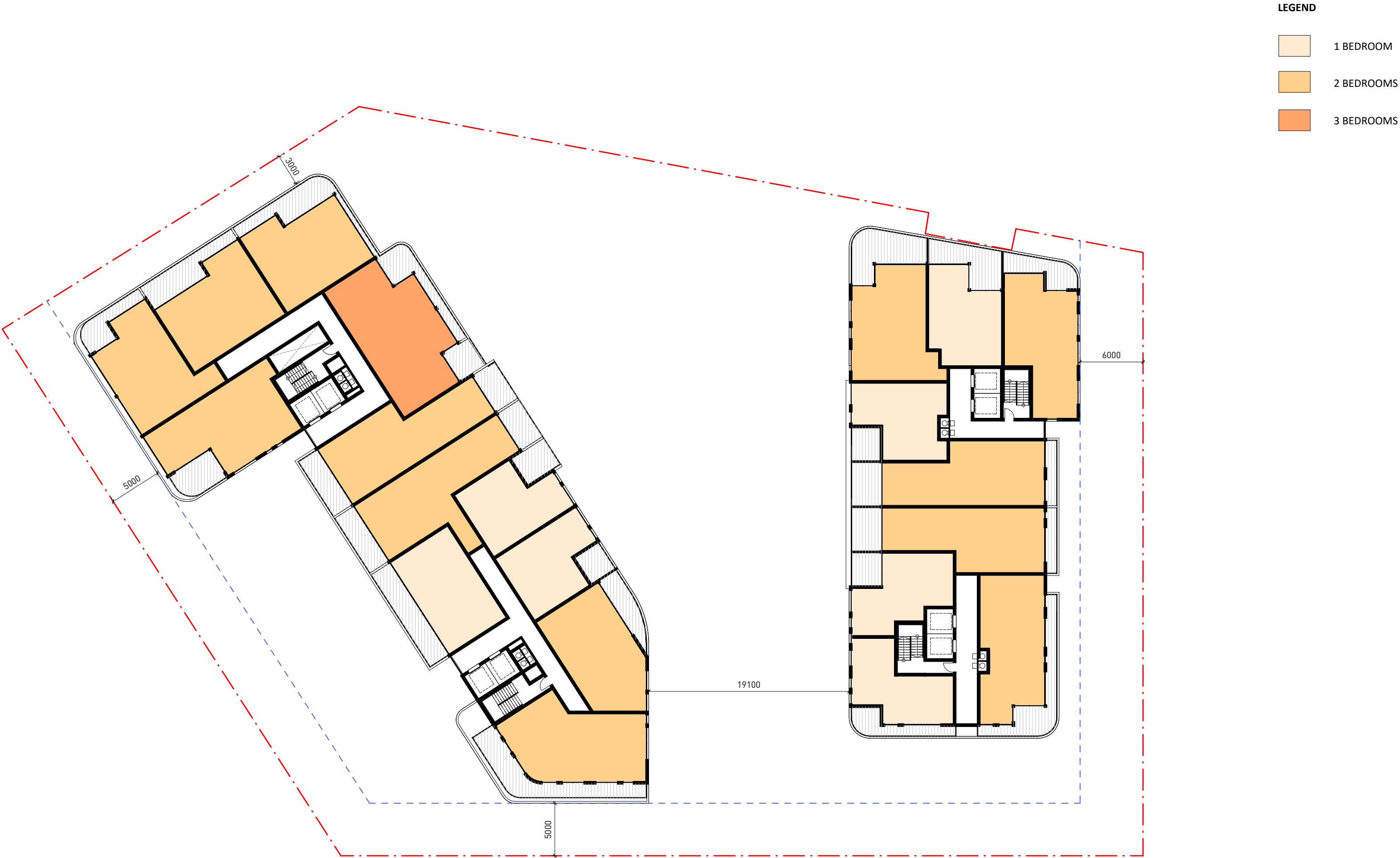
TYPICAL LEVEL 2-4



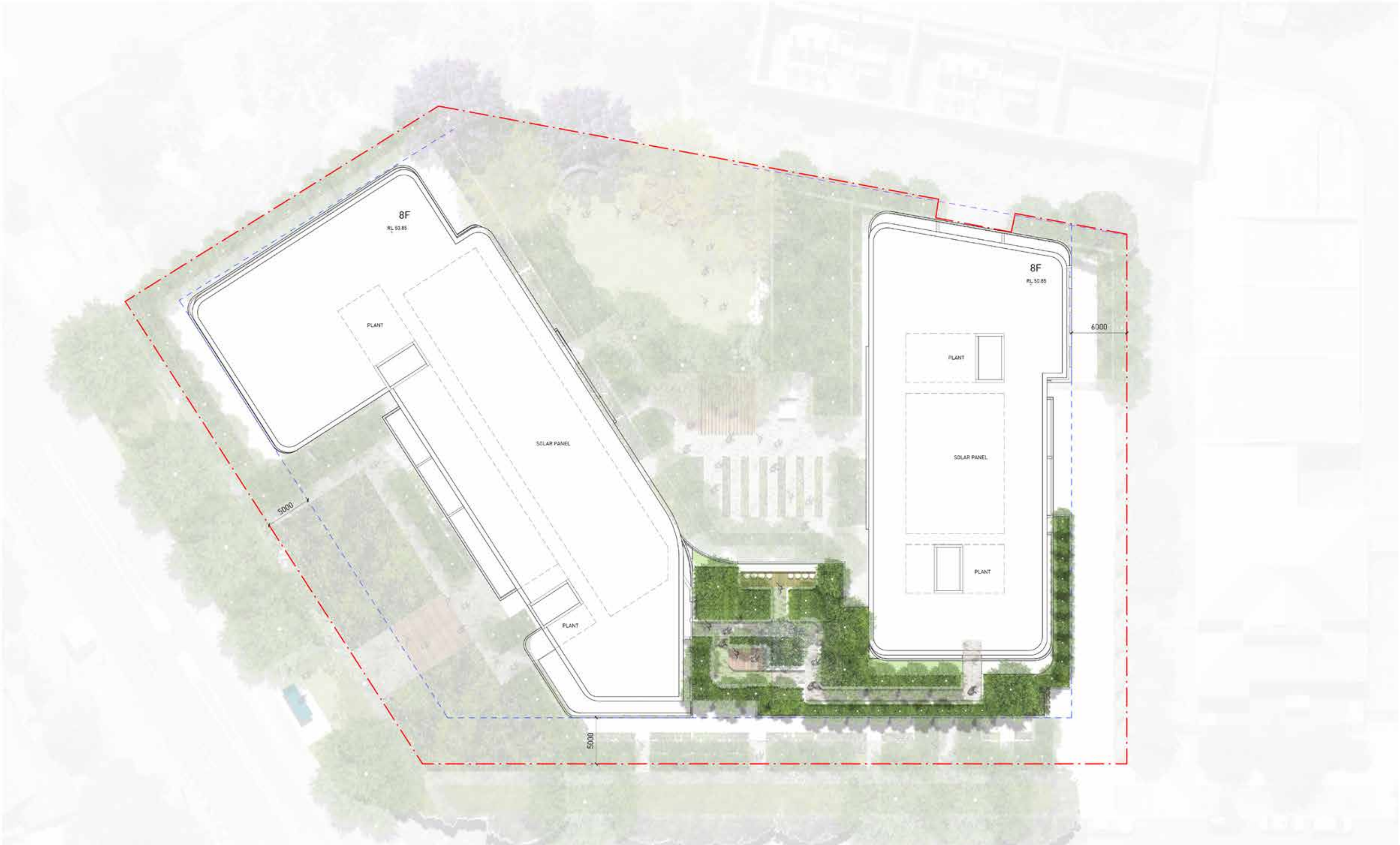
LEVEL 05



LEVEL 07

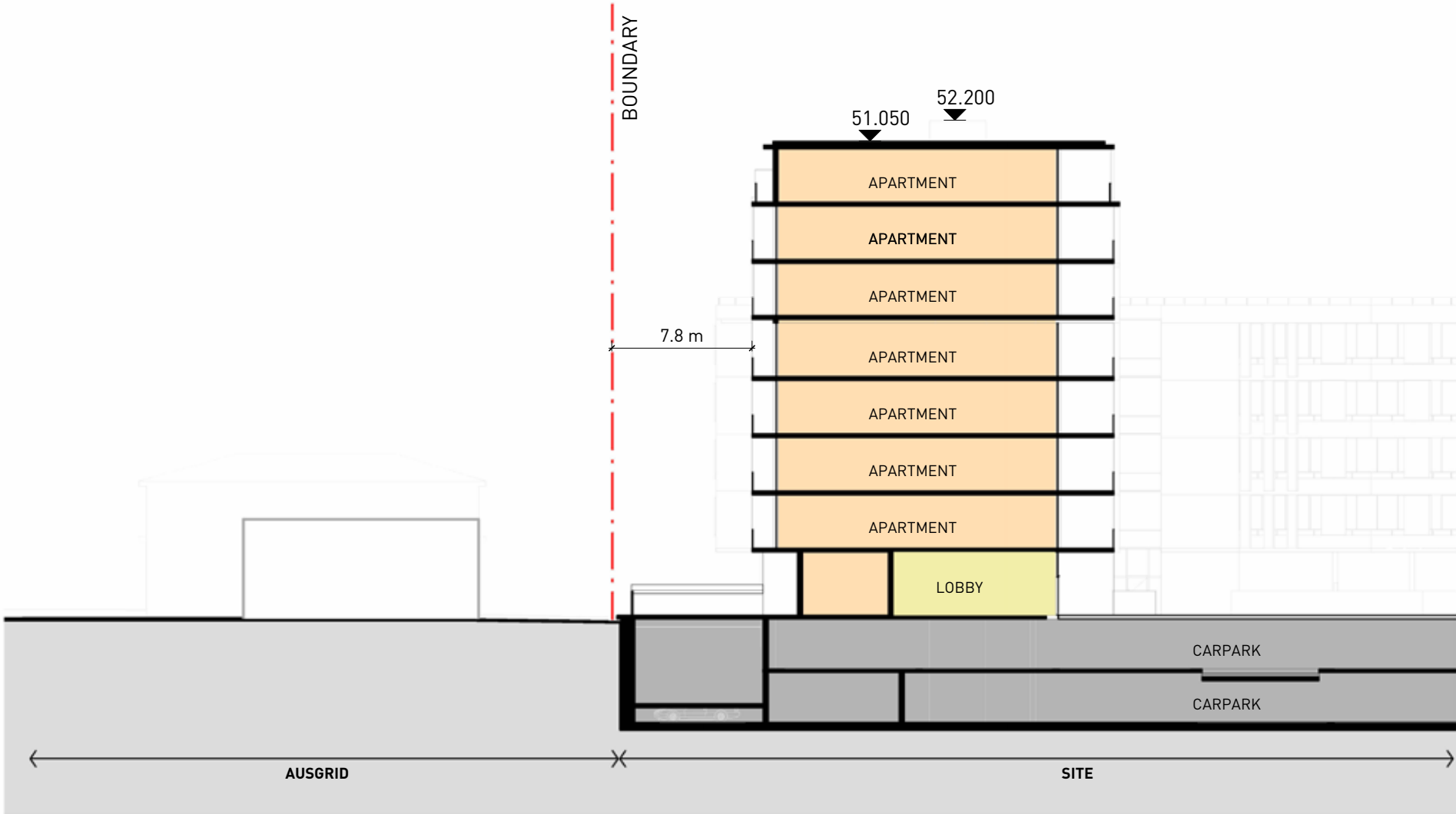


ROOF PLAN

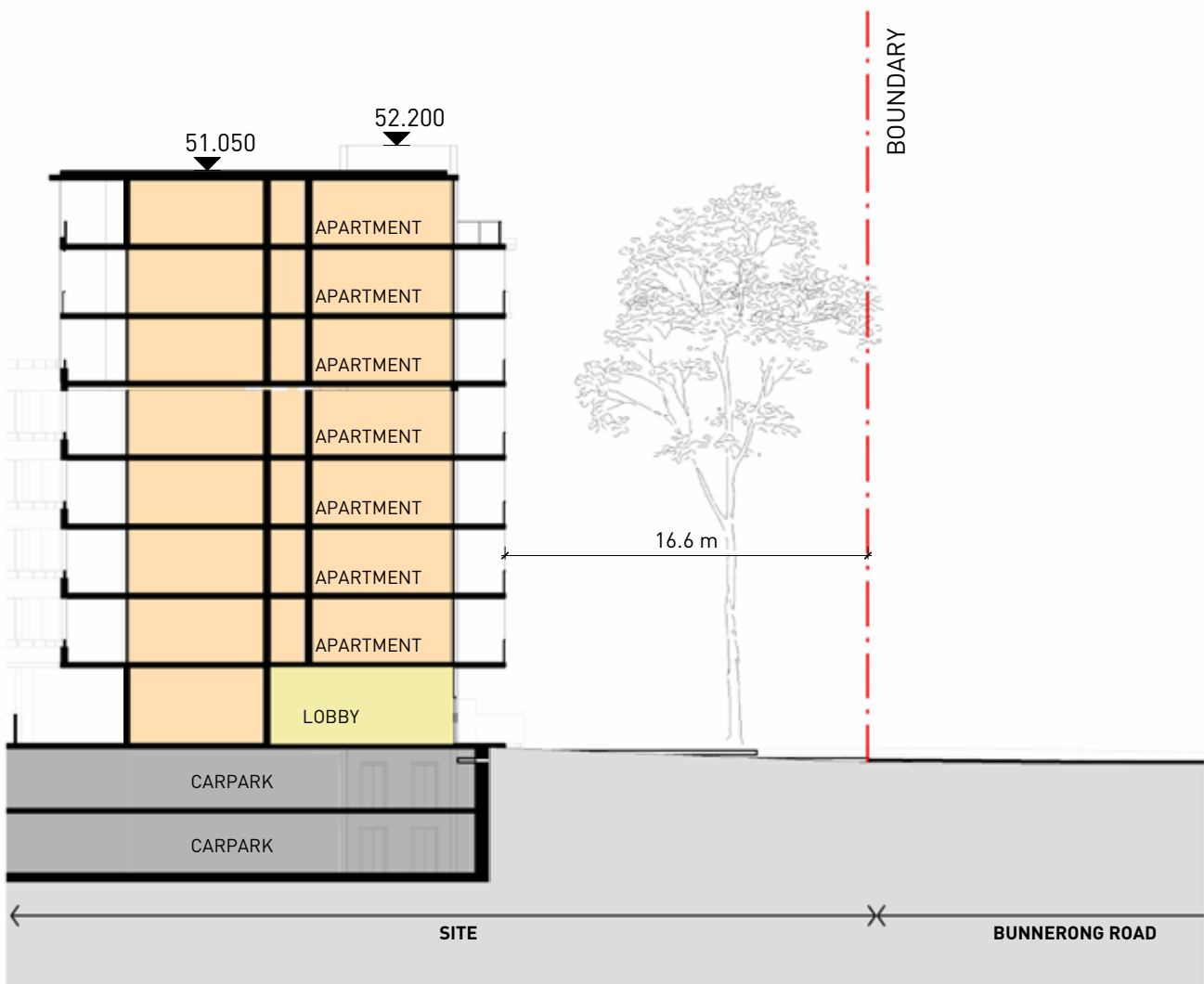


0 1 2 5 10 15m

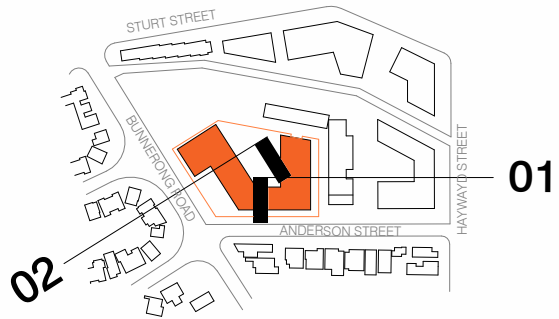
SECTIONS 1-1, 2-2



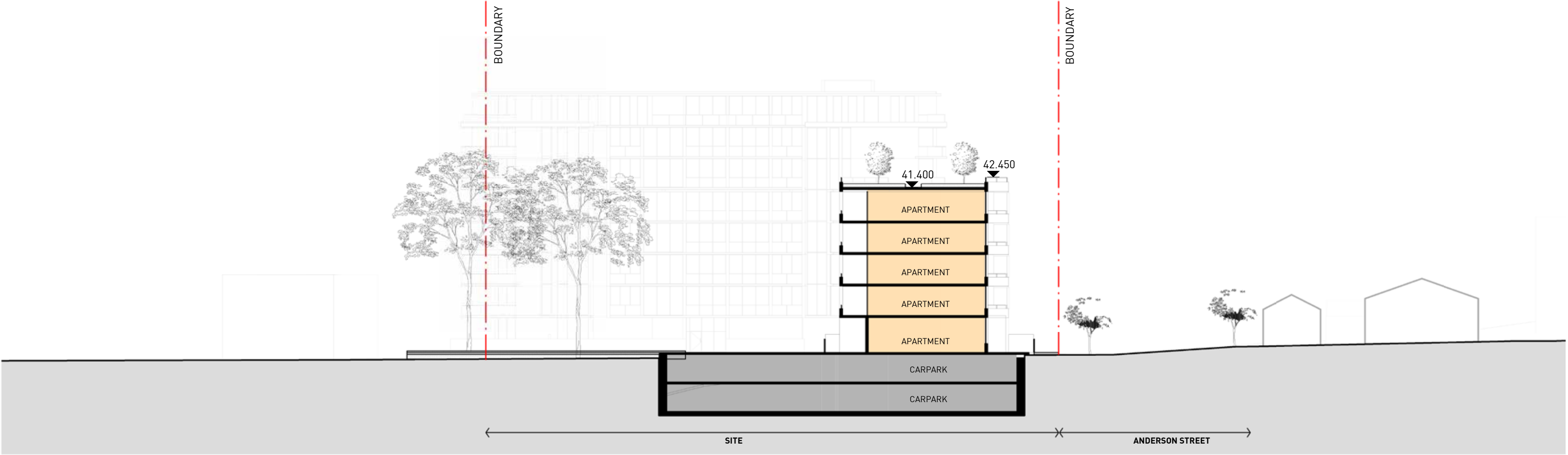
1 SECTION 1-1
1 : 200 @A1



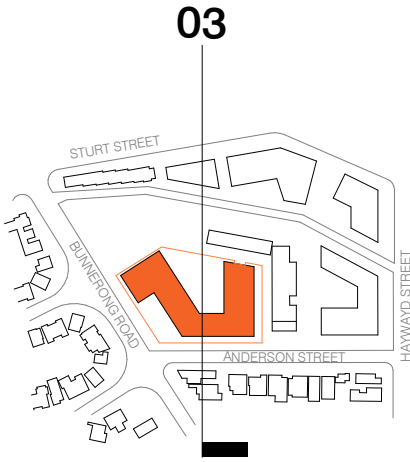
2 SECTION 2-2
1 : 200 @A1



SECTIONS 3-3

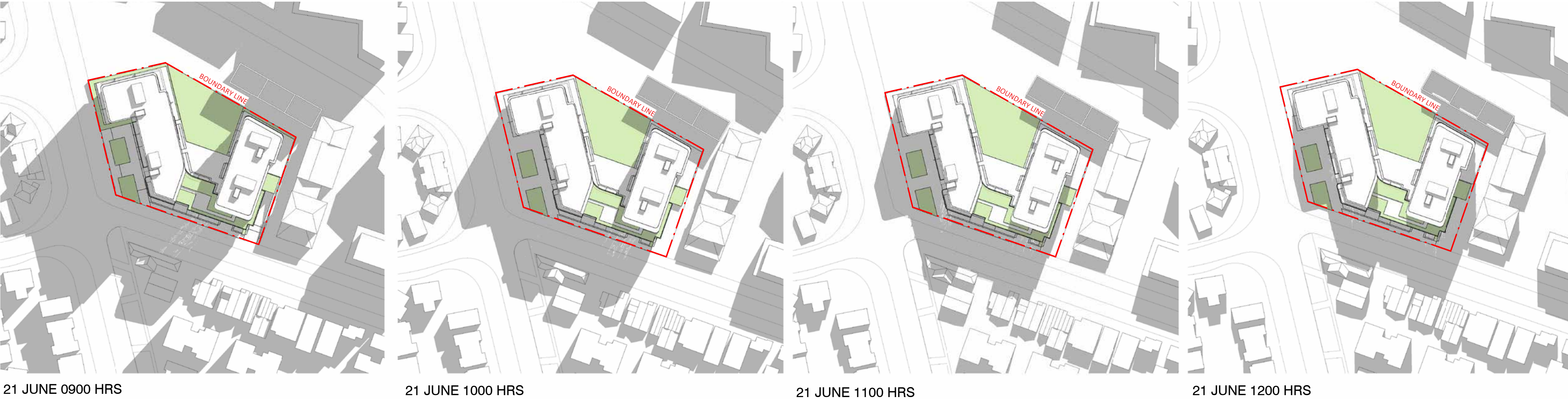


1 SECTION 3-3
1 : 200 @A1



0 1 2 5 10 15m

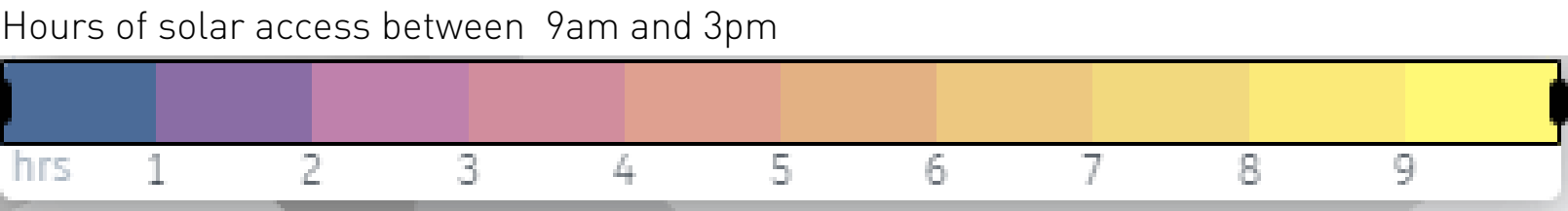
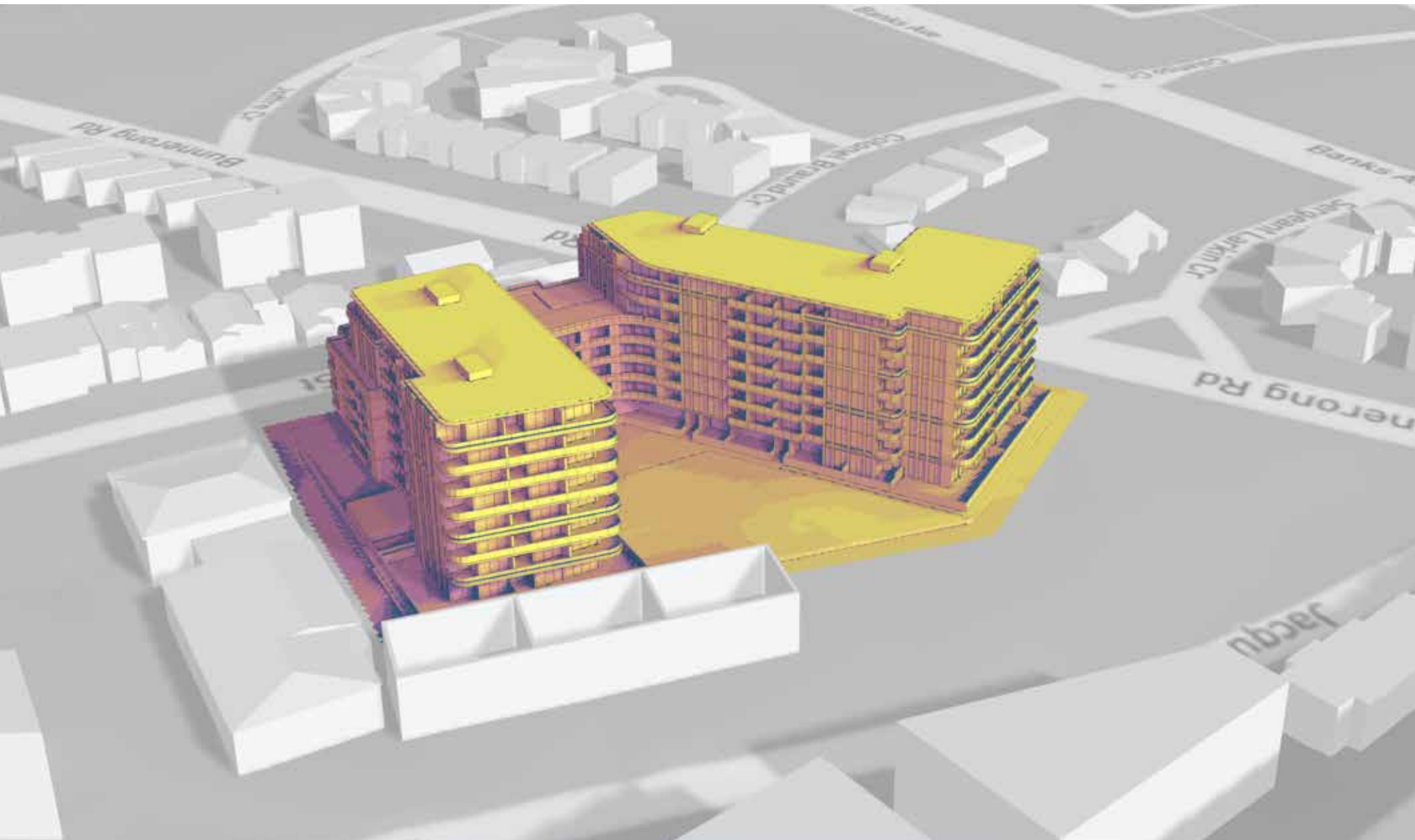
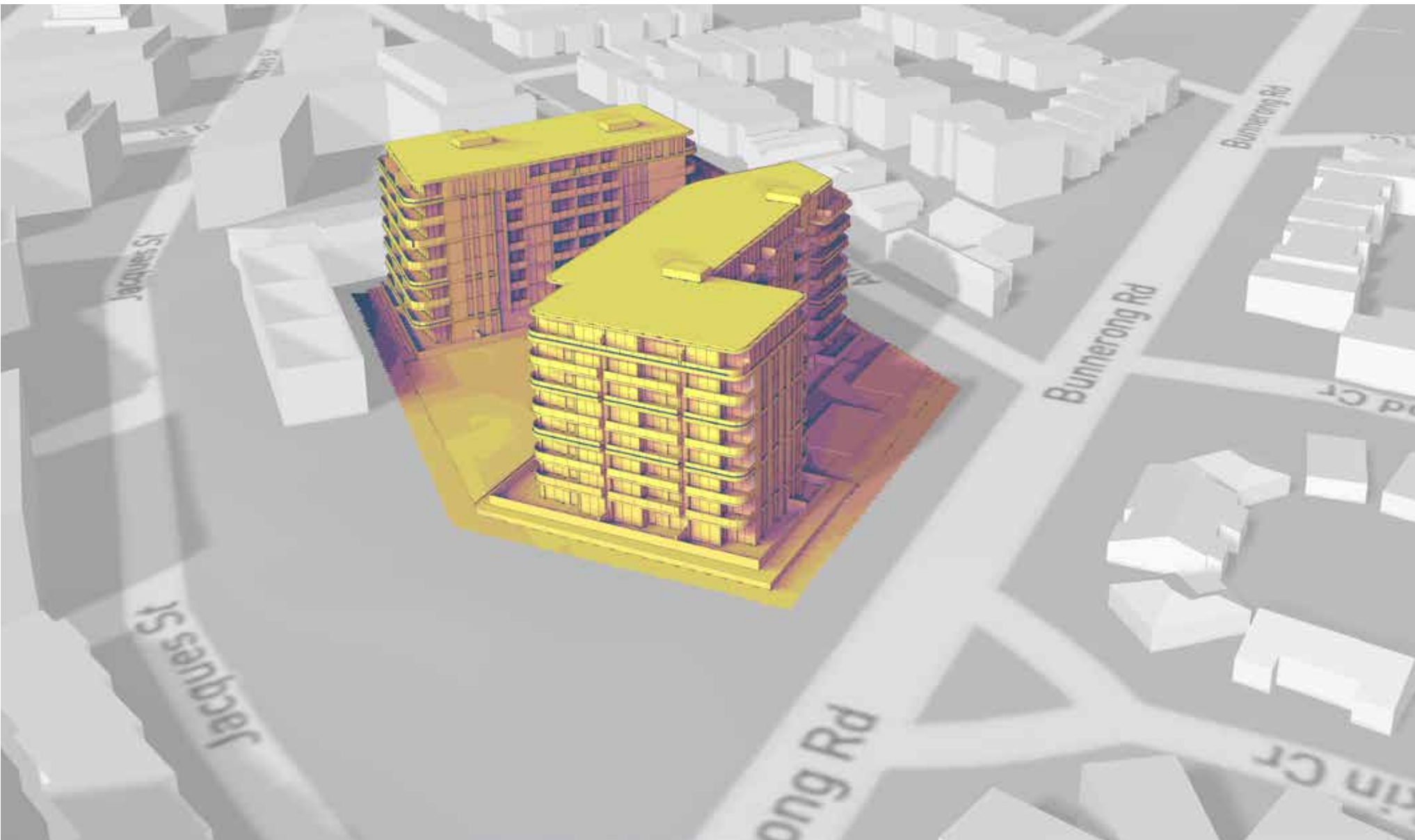
SHADOW DIAGRAMS



SHADOW DIAGRAMS



SOLAR ACCESS - HEATMAP



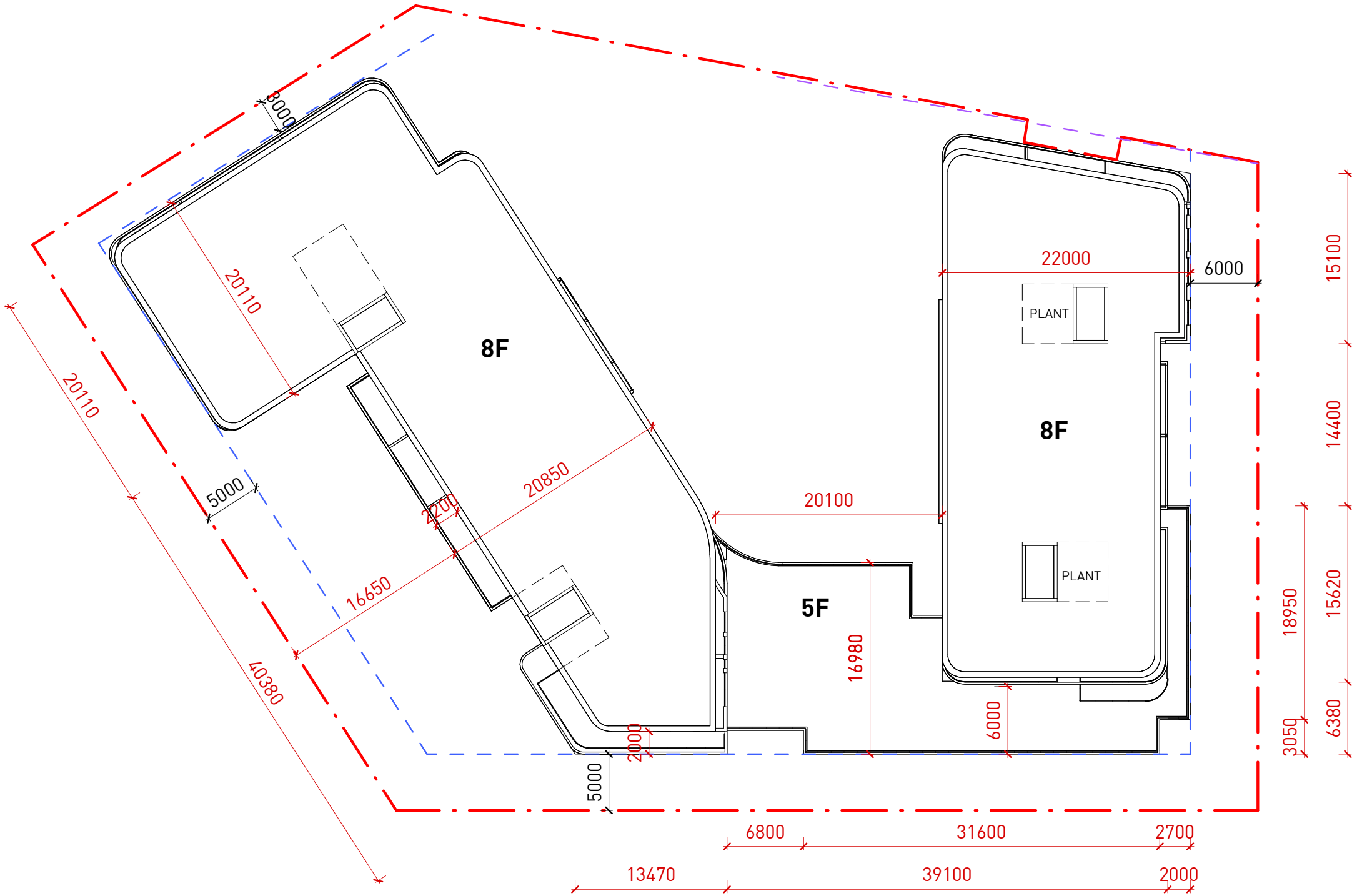
DEVELOPMENT YIELD

Site	6052 sqm
GFA	16328 sqm
FSR	2.7 :1
Height	5-8 storeys

Level	Heights	RLs	GFA	Units
Lift Overrun	1.15	52.20		
L7	3.35	51.05	1,761	21
L6	3.15	47.70	1,826	22
L5	3.15	44.55	1,824	22
L4	3.35	41.40	2,211	26
L3	3.15	38.05	2,211	26
L2	3.15	34.90	2,211	26
L1	3.15	31.75	2,193	25
GF	3.75	28.60	2,091	19
TOTAL	26.2		16,328	187

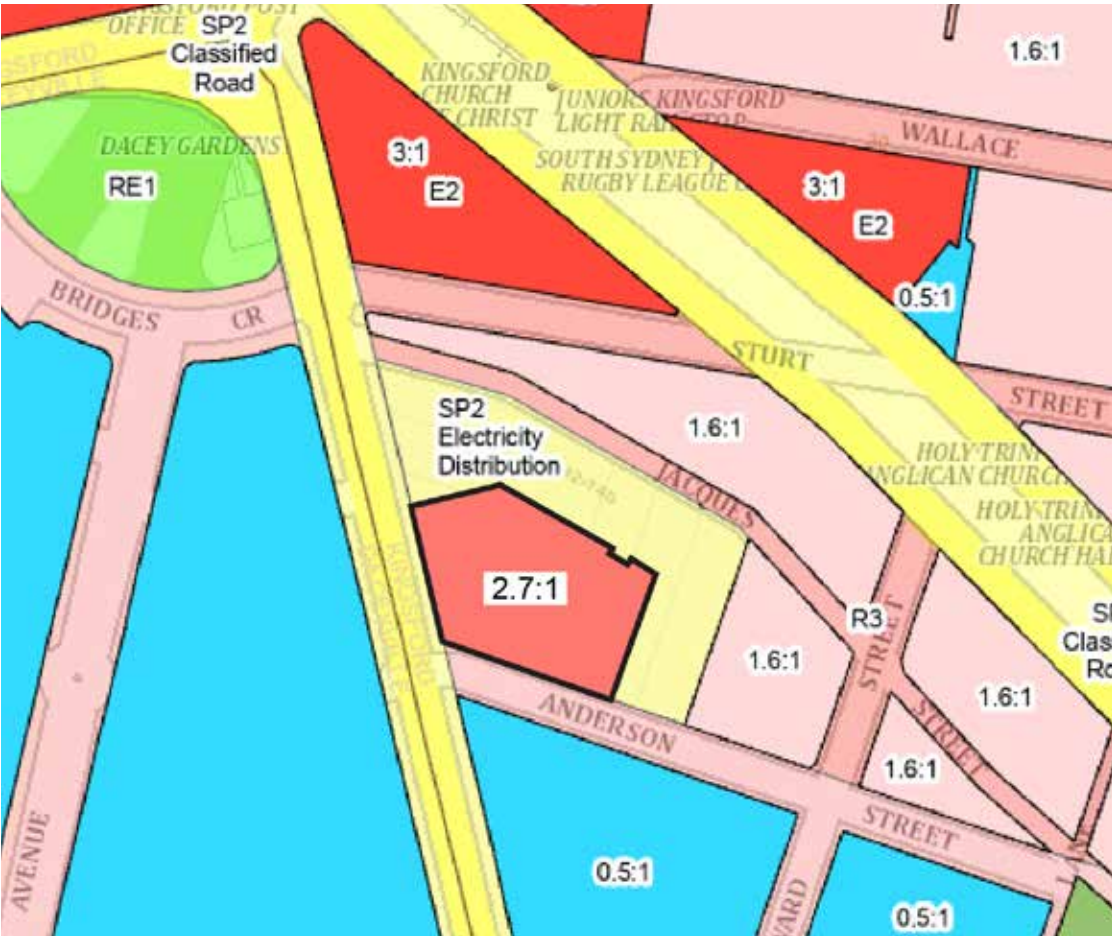
Adaptable apartments	
rate	20%
Number	38

Parking					
Rate	1 bed:	2 bed:	3 bed:	Visitor:	TOTAL
Number	34	90	20	37	181.0



Building separation and dimension plan

PROPOSED LEP MAPS



Proposed FSRs

2.5 - 2.99



Proposed Height of Buildings

25 - 29.9 m

ADG TABLE

table with objectives and controls and if proposal complies.

3D –Communal and public open space		Yes	No	Comment												
Objective	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping	✓														
Design Criteria	1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3)	✓														
	2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)	✓														
3E – Deep Soil Zones		Yes	No	Comment												
Objective	Objective 3E-1 Deep soil zones provide areas on the site that allow for and support healthy plant tree growth. They improve residential amenity and promote management of water and air quality	✓														
Design Criteria	1. Deep soil zones are to meet the following minimum requirements: <table><tr><th>Site area</th><th>Minimum dimensions</th><th>Deep soil zone (% of site area)</th></tr><tr><td>less than 650m²</td><td>-</td><td rowspan="4">7%</td></tr><tr><td>650m² - 1,500m²</td><td>3m</td></tr><tr><td>greater than 1,500m²</td><td>6m</td></tr><tr><td>greater than 1,500m² with significant existing tree cover</td><td>6m</td></tr></table>	Site area	Minimum dimensions	Deep soil zone (% of site area)	less than 650m²	-	7%	650m² - 1,500m²	3m	greater than 1,500m²	6m	greater than 1,500m² with significant existing tree cover	6m	✓		
Site area	Minimum dimensions	Deep soil zone (% of site area)														
less than 650m²	-	7%														
650m² - 1,500m²	3m															
greater than 1,500m²	6m															
greater than 1,500m² with significant existing tree cover	6m															
3F Visual privacy		Yes	No	Comment												
Objective	Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy	✓														
Design Criteria	Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows: <table><tr><th>Building height</th><th>Habitable rooms and balconies</th><th>Non-habitable rooms</th></tr><tr><td>up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr><tr><td>up to 25m (5-8 storeys)</td><td>9m</td><td>4.5m</td></tr><tr><td>over 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr></table>	Building height	Habitable rooms and balconies	Non-habitable rooms	up to 12m (4 storeys)	6m	3m	up to 25m (5-8 storeys)	9m	4.5m	over 25m (9+ storeys)	12m	6m	✓		
Building height	Habitable rooms and balconies	Non-habitable rooms														
up to 12m (4 storeys)	6m	3m														
up to 25m (5-8 storeys)	9m	4.5m														
over 25m (9+ storeys)	12m	6m														

ADG TABLE

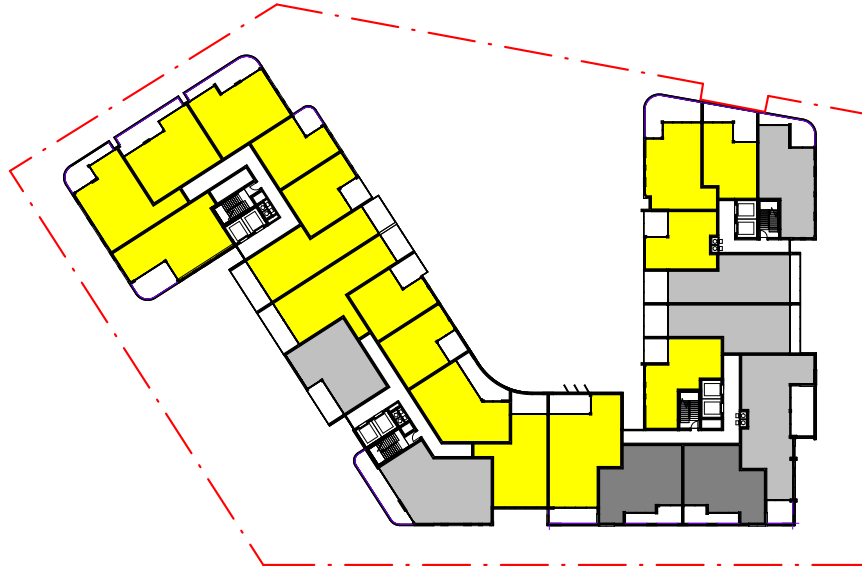
table with objectives and controls and if proposal complies.

4A Solar and daylight access		Yes	No	Comment															
Objective	To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space																		
Design Criteria	1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas	✓																	
	2. In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid winter	✓																	
	3. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter	✓																	
4B Natural ventilation		Yes	No	Comment															
Objective	The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents																		
Design Criteria	1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed	✓																	
	2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	✓																	
4E Private open space and balconies		Yes	No	Comment															
Objective	Apartments provide appropriately sized private open space and balconies to enhance residential amenity																		
Design Criteria	1. All apartments are required to have primary balconies as follows:																		
	<table><tr><th>Dwelling type</th><th>Minimum area</th><th>Minimum depth</th></tr><tr><td>Studio apartments</td><td>4m²</td><td>-</td></tr><tr><td>1 bedroom apartments</td><td>8m²</td><td>2m</td></tr><tr><td>2 bedroom apartments</td><td>10m²</td><td>2m</td></tr><tr><td>3+ bedroom apartments</td><td>12m²</td><td>2.4m</td></tr></table>				Dwelling type	Minimum area	Minimum depth	Studio apartments	4m²	-	1 bedroom apartments	8m²	2m	2 bedroom apartments	10m²	2m	3+ bedroom apartments	12m²	2.4m
	Dwelling type	Minimum area	Minimum depth																
	Studio apartments	4m²	-																
	1 bedroom apartments	8m²	2m																
	2 bedroom apartments	10m²	2m																
3+ bedroom apartments	12m²	2.4m																	
2. For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m2 and a minimum depth of 3m																			

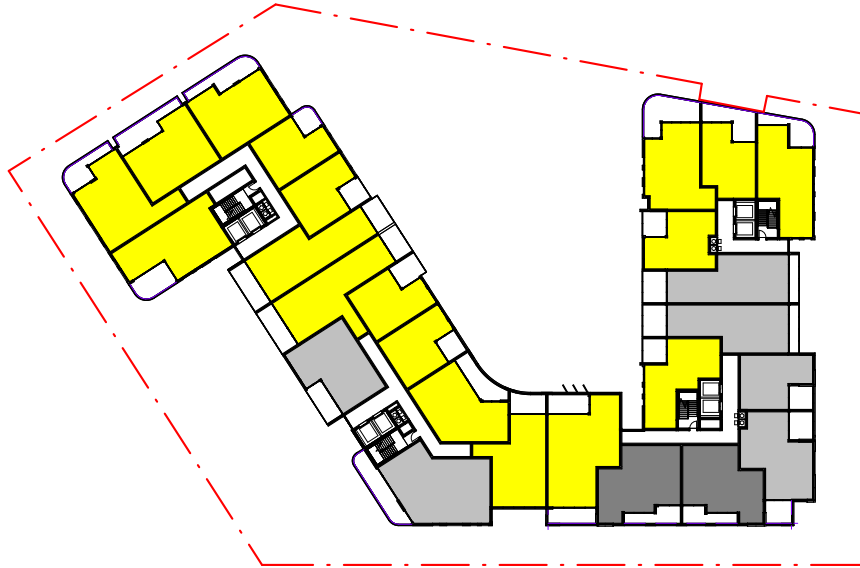
SOLAR ACCESS



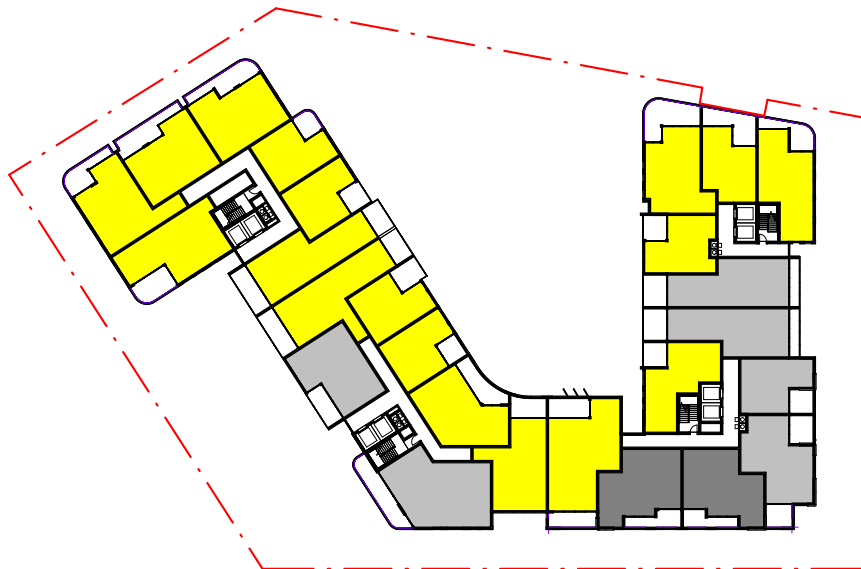
GROUND FLOOR



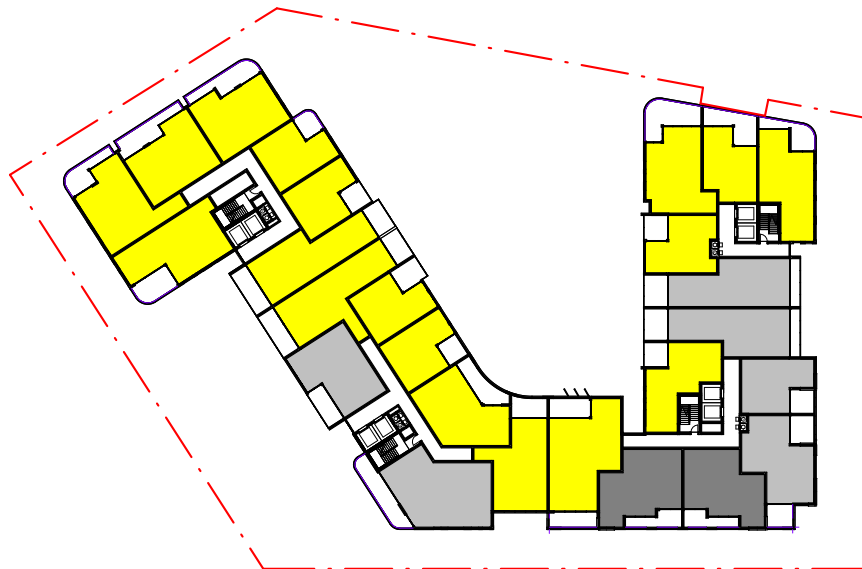
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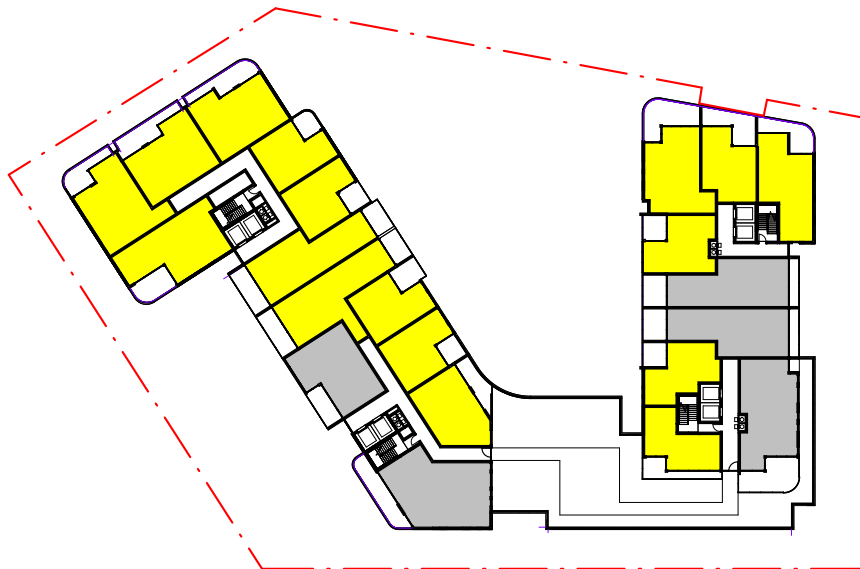
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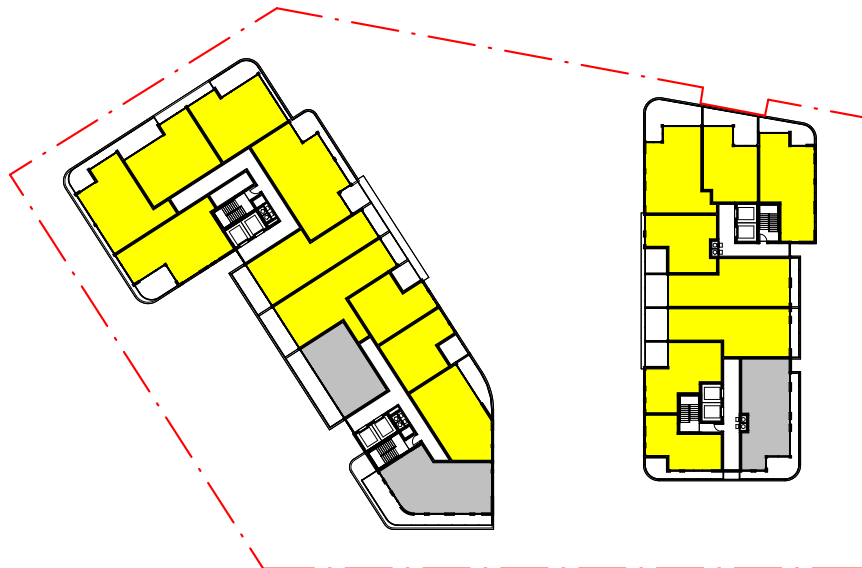
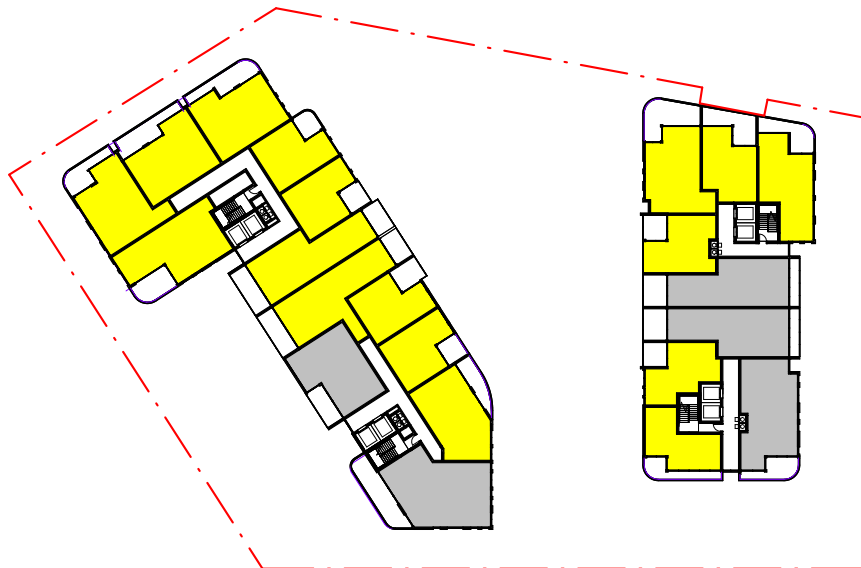
L03



L04



L05



SOLAR ACCESS COMPLIANCE		
SOLAR ACCESS	COUNT	%
>2HRS	135	72%
<2HRS	43	23%
0HRS	9	5%
Grand total: 187	187	100%

CROSS VENTILATION



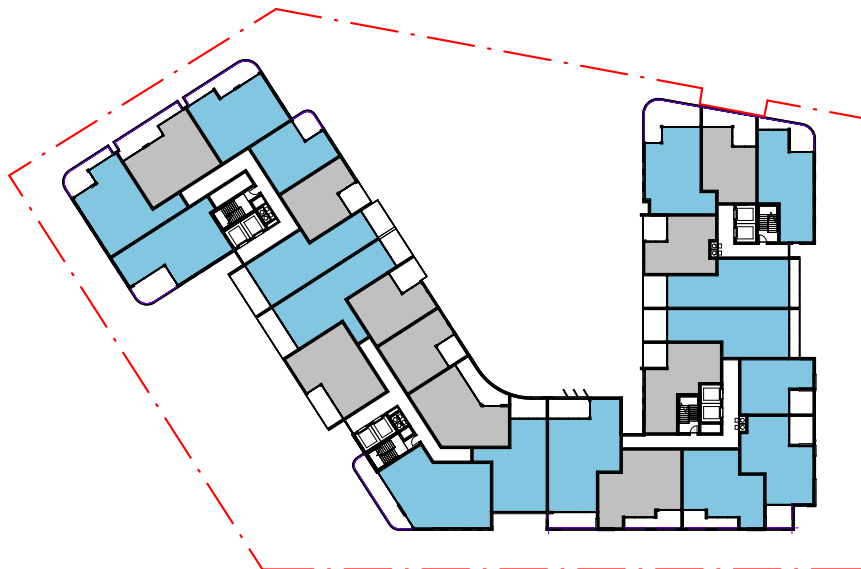
GROUND LEVEL



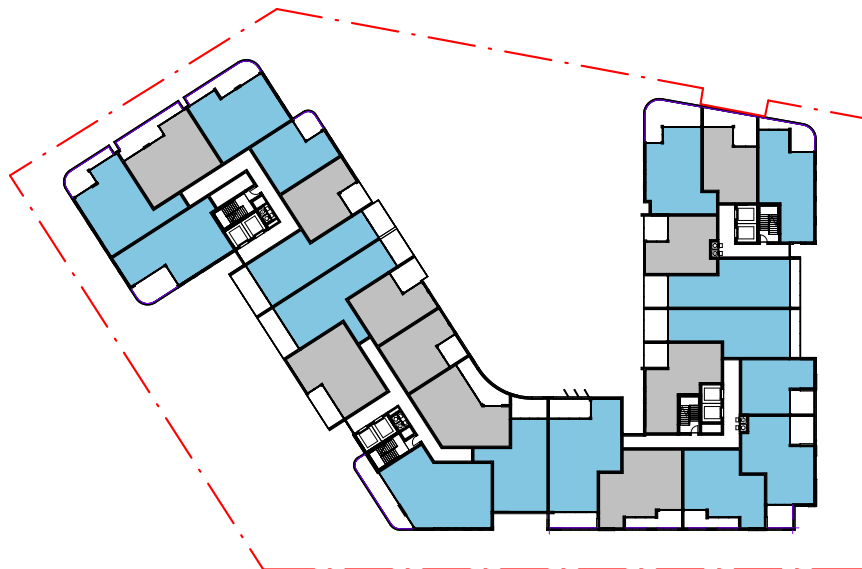
L01



L02



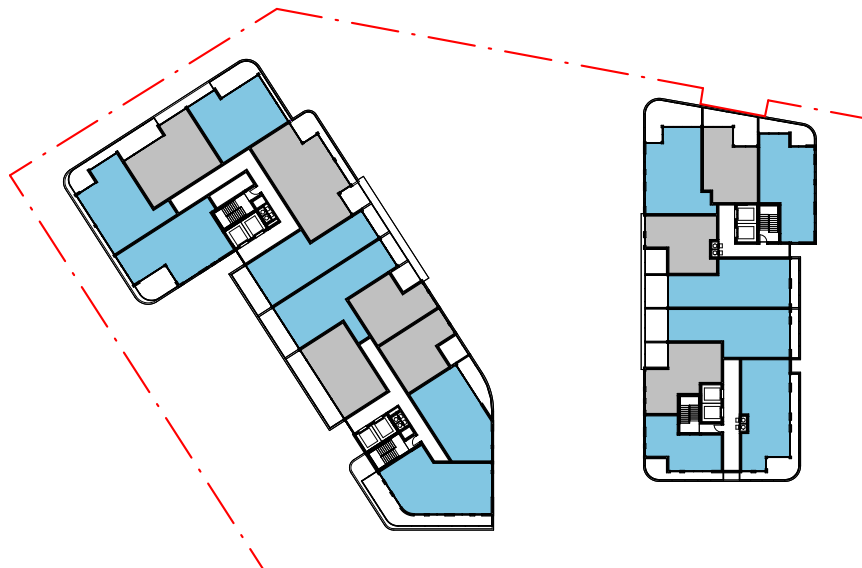
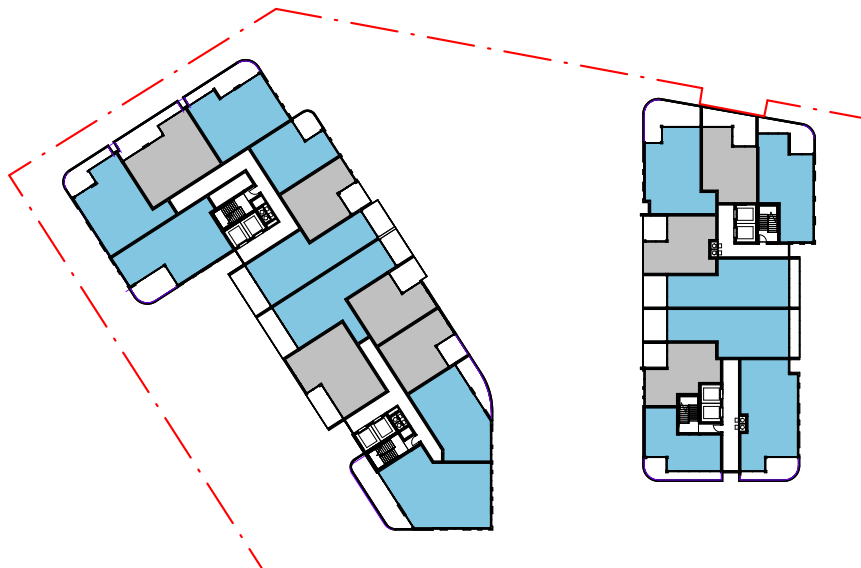
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L04

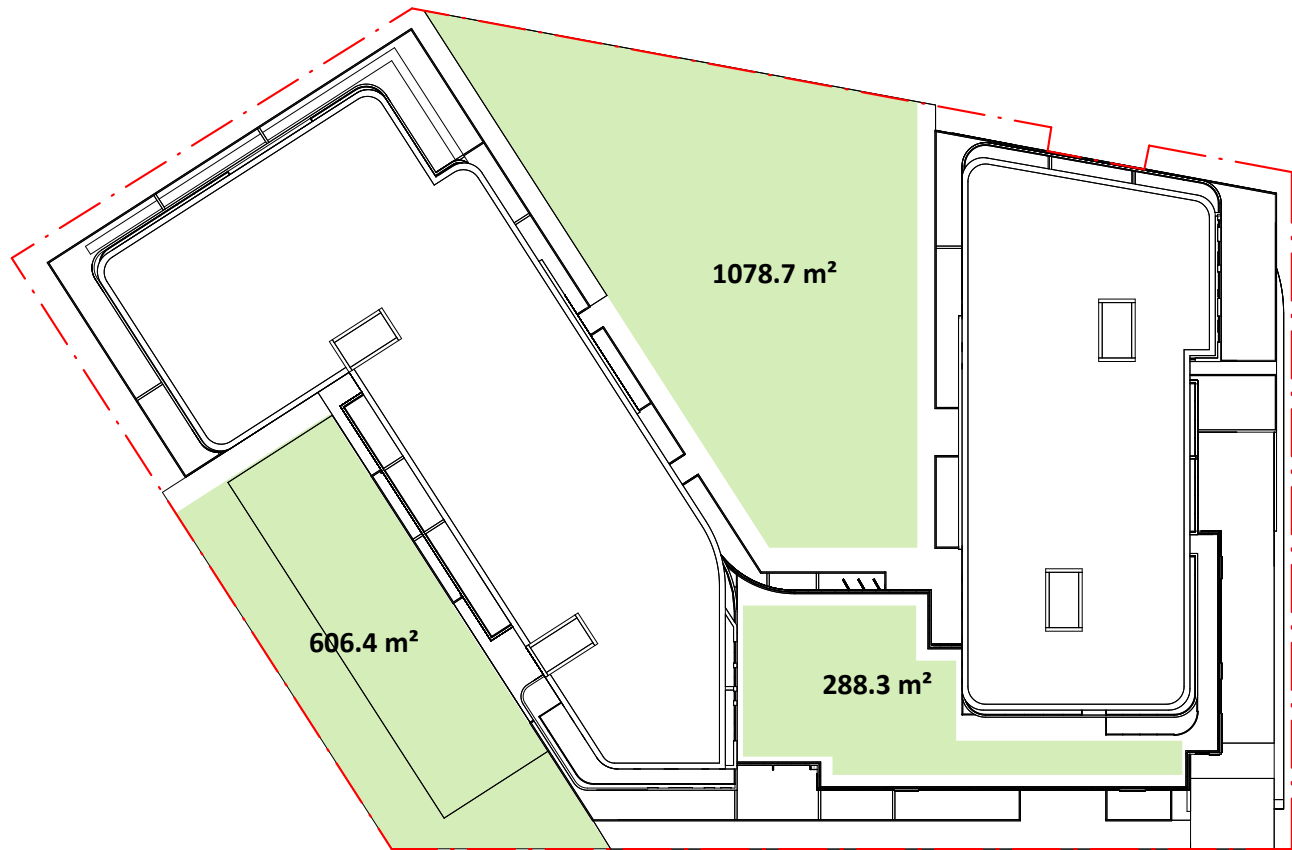


L05



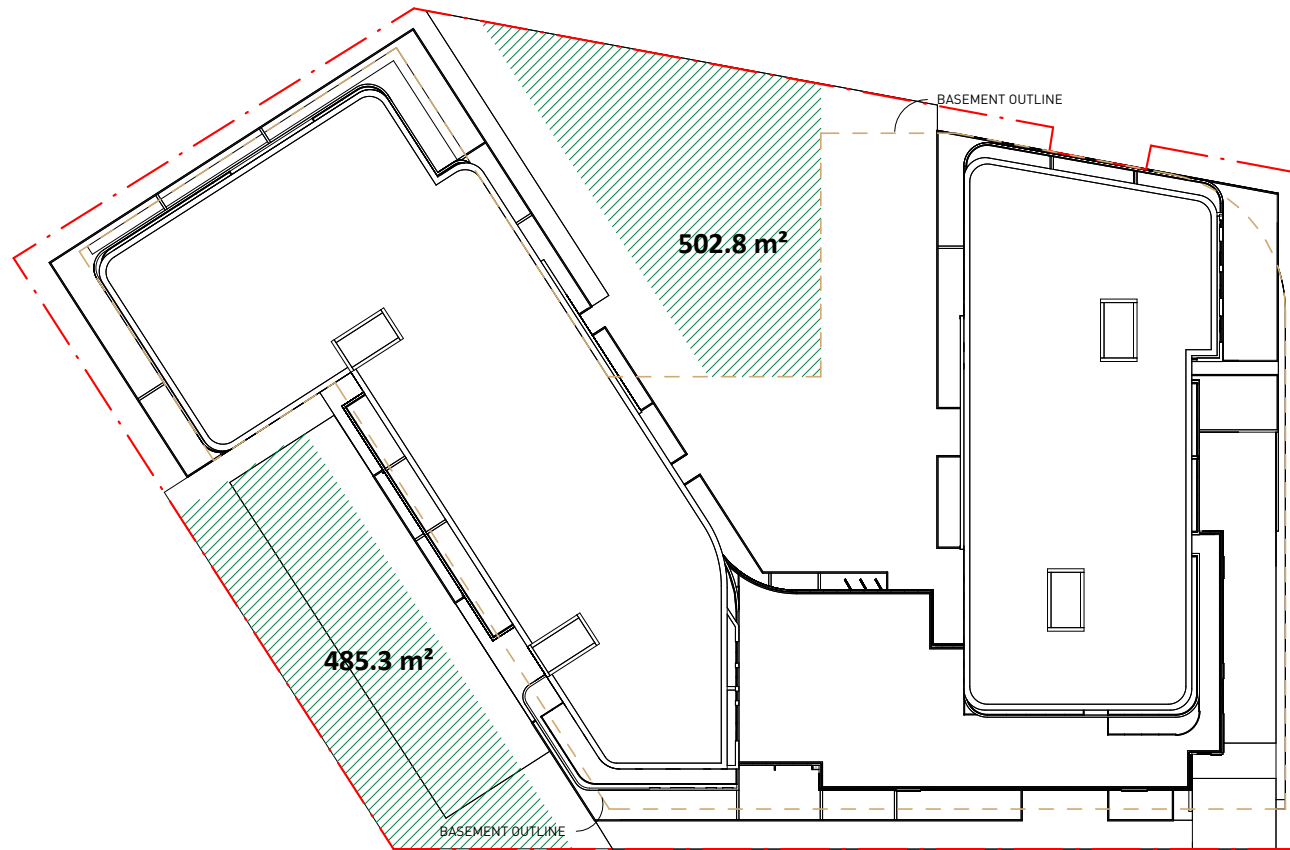
CROSS VENTILATION COMPLIANCE		
TYPE	COUNT	%
YES	116	62%
NO	71	38%
	187	100%

COMMUNAL OPEN SPACE AND DEEP SOIL



COMMUNAL OPEN SPACE

Area Schedule (ADG3D1-COS)		
Area		Target
1973.35 m²	32.6%	25%



DEEP SOIL

Area Schedule (ADG3E1-DEEP SOIL)		
Area		Target
988.09 m²	16.3%	7%

Contact

Catherine Love
Sector Lead & Director
NSW Architect No.5857
E clove@ptw.com.au
M 0447 543 898

Luise Palmer
Associate
NSW Architect No.12056
E lpalmer@ptw.com.au
M 0289 359 083

Document Control

Rev	Date	Approved by	Description
02	December 2023	Simon Parsons	Preliminary Draft
03	July 2024	Simon Parsons	Report

Gadigal Country
Level 11
88 Phillip Street
Sydney NSW 2000
Australia

T +61 2 9232 5877
ptw.com.au



Disclaimer

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