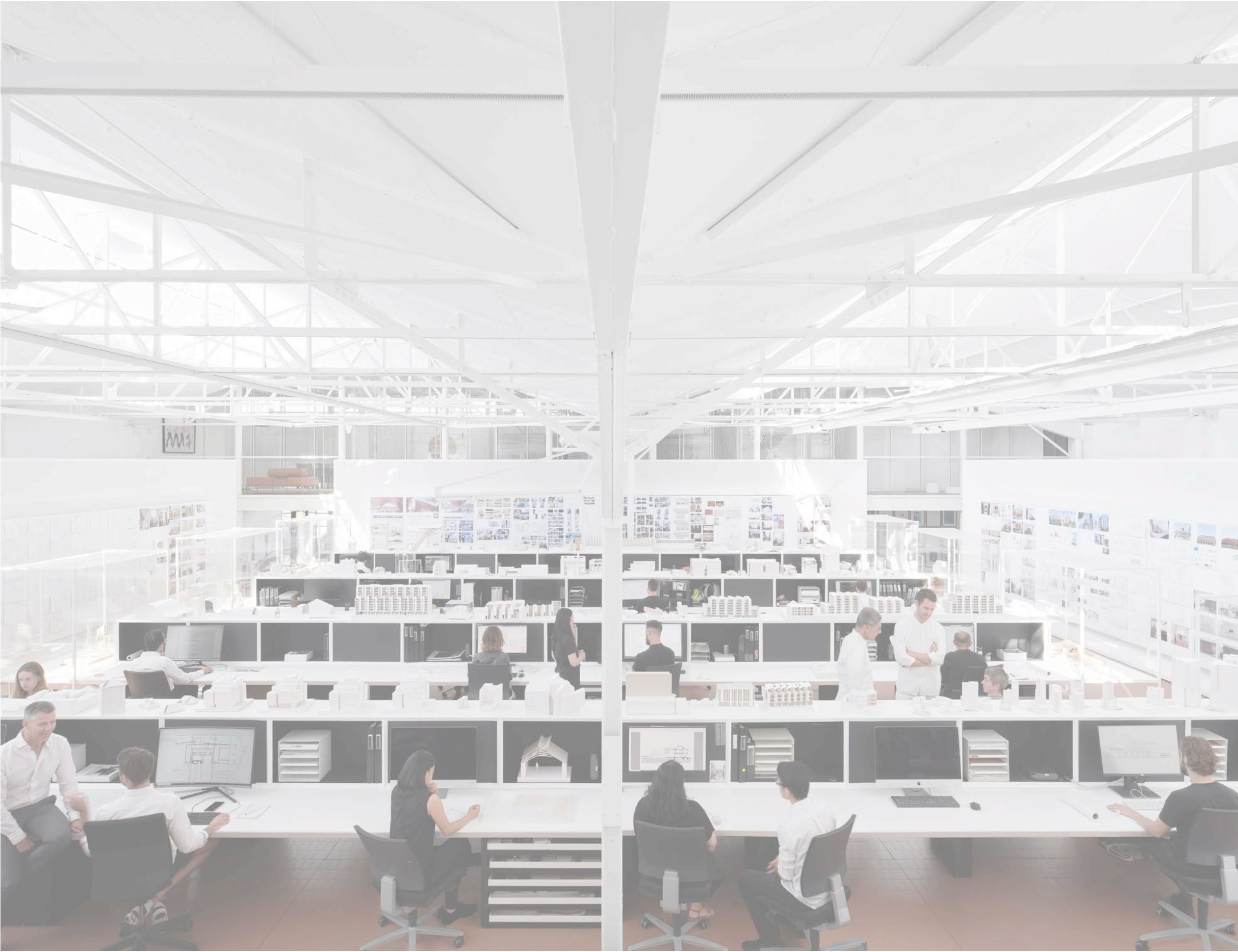


DISCLAIMER

Smart Design Studio (SDS) have been engaged to make amendments to the planning proposal for 71-89 Chandos St Originally prepared by Aplus Design Group.

SDS have amended the Urban Design Report, also originally prepared by Aplus Design Group, to reflect those changes to the Planning Proposal

Smart Design Studio acknowledges the Traditional Custodians of the land and pays respect to the Elders, past, present and future. We honour Australian Aboriginal and Torres Strait Islander peoples' primary cultural and spiritual relationship to place and their rich contribution to our society. To that end, all our work seeks to uphold that we care for Country, it will care for us.



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PREAMBLE

Smart Design Studio have been engaged to amend the Planning Proposal initially prepared by Aplus Group for the development of 71-89 Chandos Street & 58-64 Atchison Street, St Leonards. SDS have ammended the Urban Design Report, also originally prepared by Aplus group, to reflect changes to 7the Planning Proposal.

T This report provides a detailed analysis of the surrounding context of the site. The proposed
 d development references the parameters and guidelines such as setback controls, bulk and scale,
 s height and FSR controls, established in St Leonards & Crows Nest 2036 plan.

^C The proposed built form achieves the spatial separation controls under the Apartment Design Guide. It has been modulated to achieve the levels of solar access required to the apartments contained within the proposed developments.

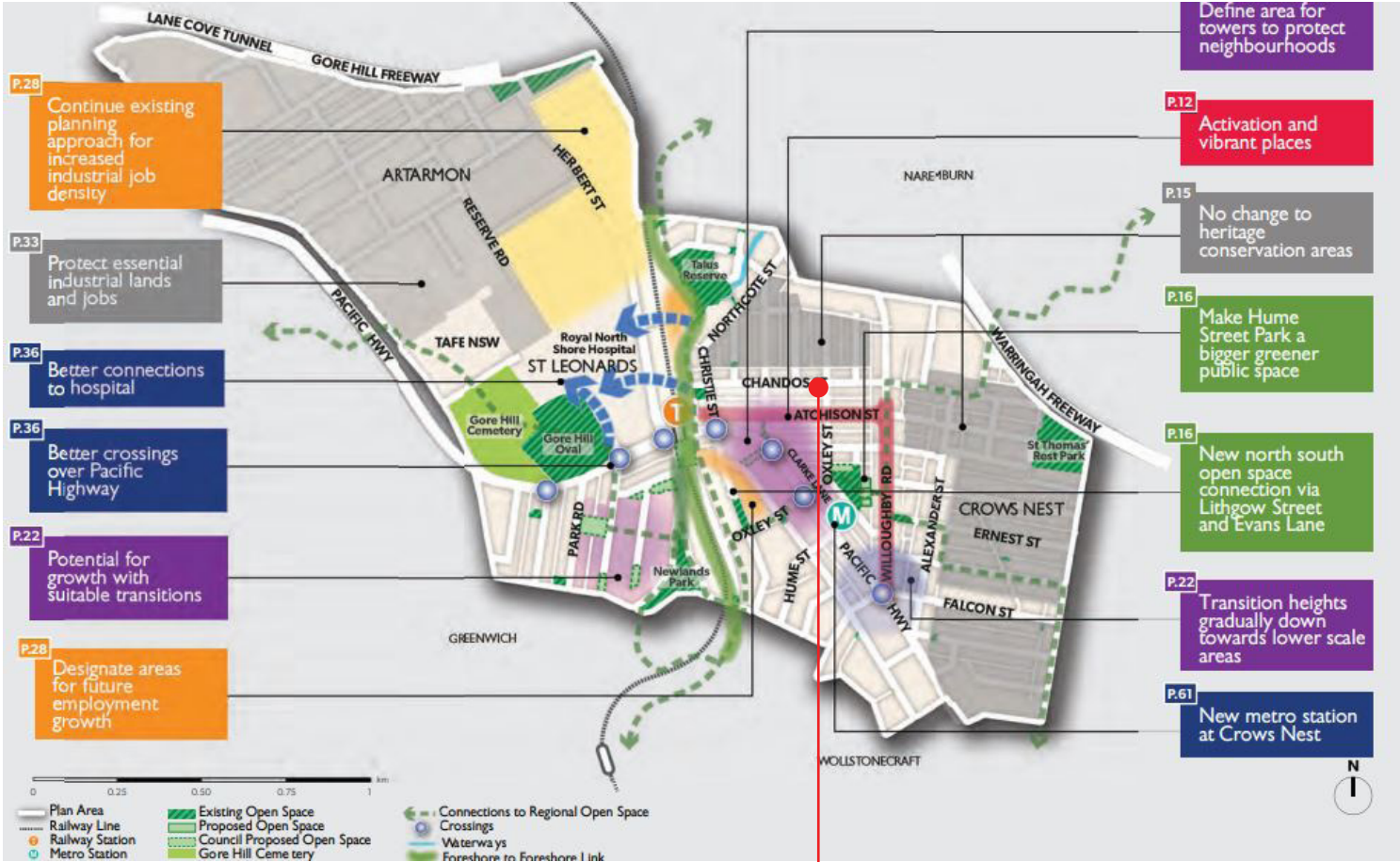
C(

CONTENTS

- 1.0 STRATEGIC PLANNING CONTEXT
- 2.0 SITE ANALYSIS
- 3.0 SETBACK ANALYSIS
- 4.0 ADG SEPARATION ANALYSIS
- 5.0 SHADOW ANALYSIS
- 6.0 ADG COMPLIANCE STATEMENT

ST LEONARDS AND CROWS NEST 2036 PLAN

ST LEONARDS AND CROWS NEST 2036 PLAN



SUBJECT SITE

St Leonards & Crows Nest Plan 2036

The Plan focuses on providing 16,500 additional jobs over the next 20 years, to reinforce greener spaces, create a vibrant community which is accessible for pedestrians and cyclists and well designed. This all has resulted in a change in development heights and a clear direction on how to design both St Leonards and Crows Nest.

As a vibrant community that caters for the needs of people of all ages, the St Leonards and Crows Nest area will have a diverse range of homes supported by open spaces, community services, cafes, restaurants and unique local retail experiences.

The village atmosphere of Crows Nest will be retained, with Willoughby Road continuing to be a vibrant high street that is valued by the community and an escape from the hustle and bustle of modern life. A connection to the past will be maintained by protecting heritage conservation areas in Naremburn and Holtermann Estate, celebrating the historic character of the area.

St Leonards Core will be revitalised through a balance of commercial and residential development, providing lively and active streets, safe and interesting laneways for people, and sunny tree-lined public spaces.

The best bits of the surrounding leafy neighbourhoods that locals love will be brought into the heart of St Leonards for residents, workers and visitors to enjoy.

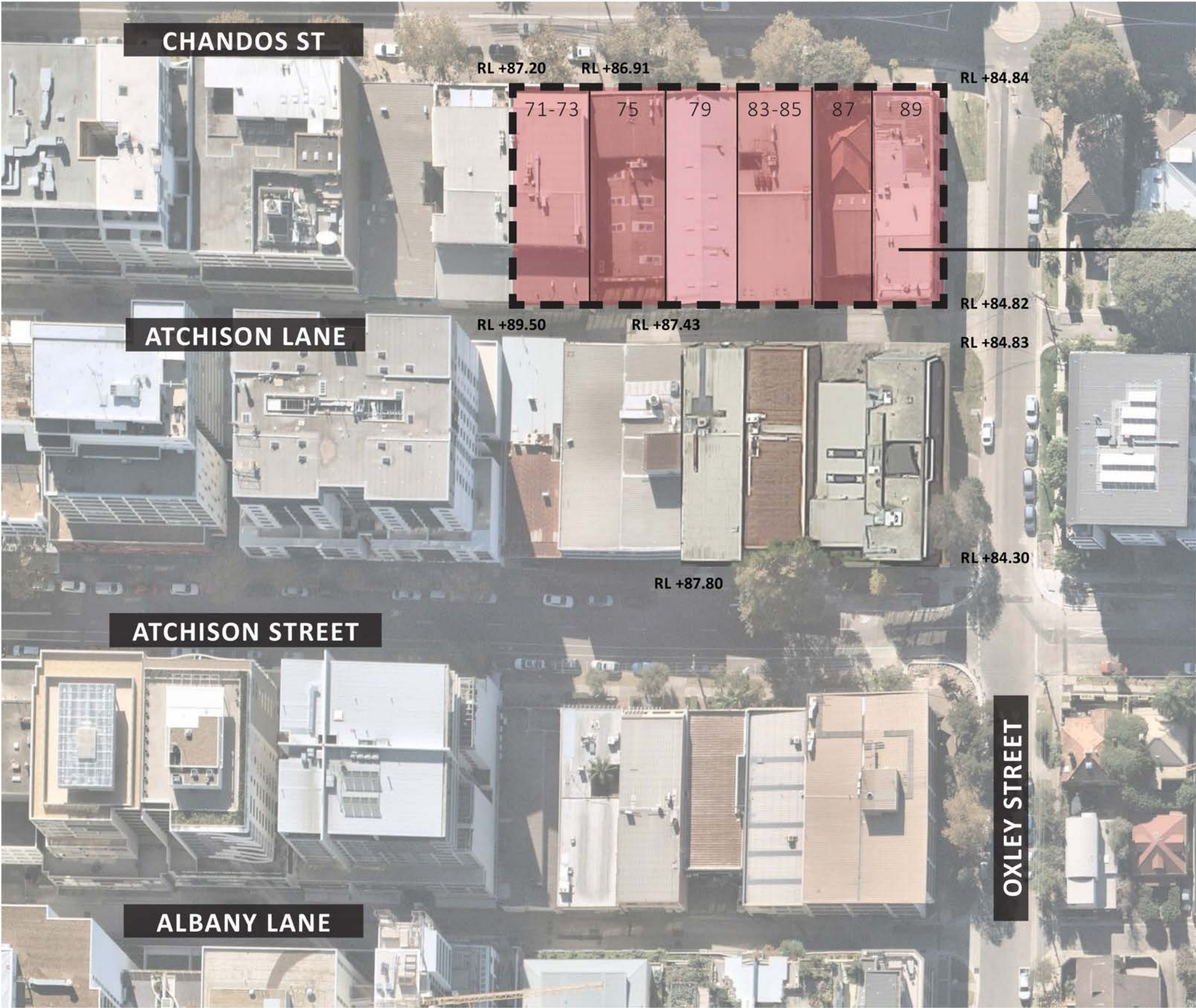
SITE CONTEXT

Subject Site



Train Station
 Major Road Network
 Hospital
 Shopping
 Open Spaces
 Willoughbv Rd: Eat Street

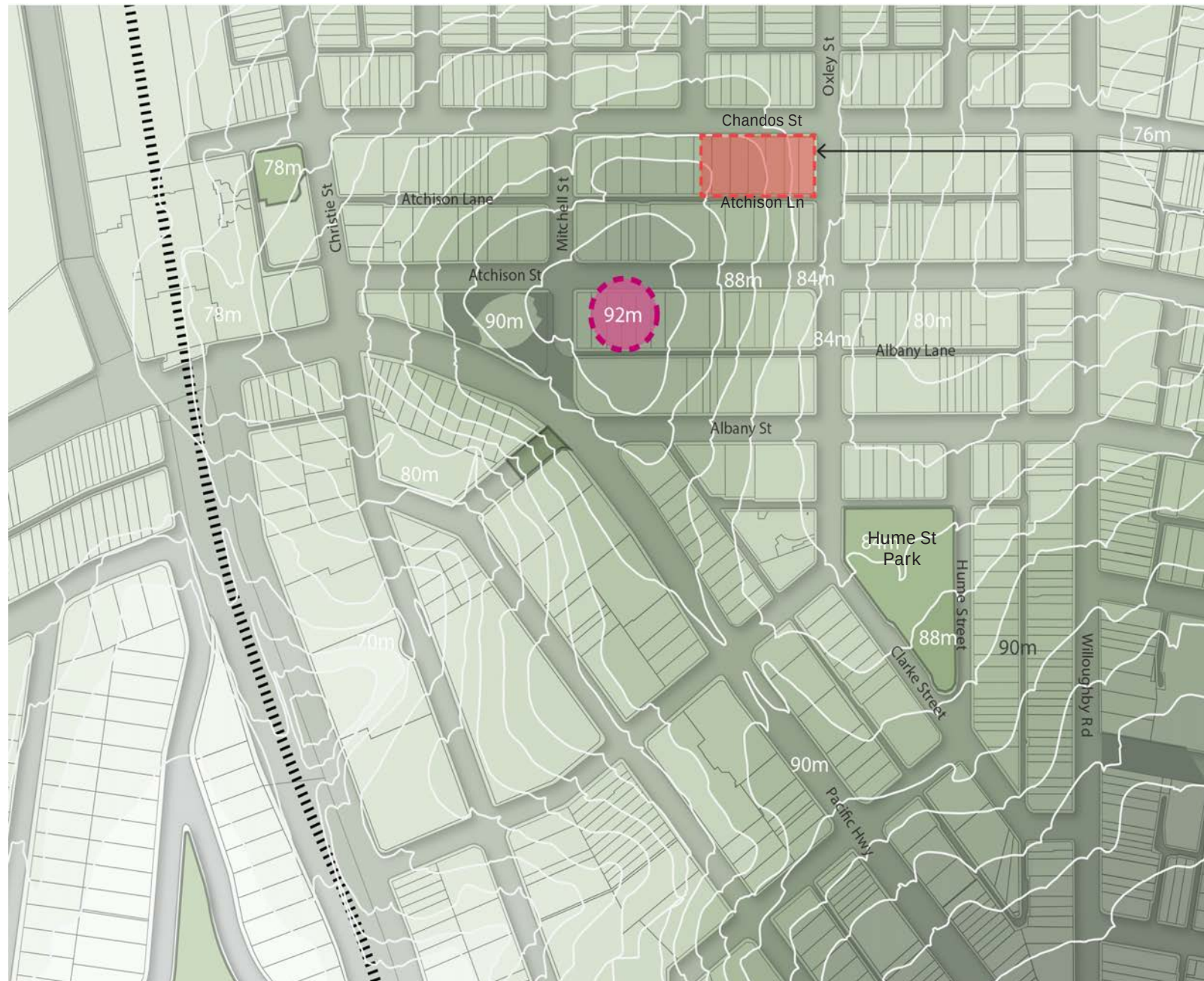
SITE LOCATION



71 - 89 Atchison St

SITE IDENTIFICATION

The subject site 71-89 Chandos Street, St Leonards is located at the north eastern periphery of a major commercial center in Sydney Metropolitan Area identified as a Strategic Center under the relevant regional and subregional strategies. The site is located in St Leonards center and is in a well serviced area suitable for a greater intensity of development.



71 - 89 Atchison St

The subject site 71-89 Chandos St sits at the intersection of Chandos St, Oxley St and Atchison Lane. The site slopes down from west to east with a significant drop from 88m to 83m of approximately 5 meters.

The Hume Street Park and the eastern side of the subject site are both located on the same RL of 84m. This allows the opportunity of creating accessible connectivity between both Hume Street Park and the proposed linear park along Oxley St. Due to approx flat topography along Oxley St, there is an opportunity to strengthen this linear park connection.

LOCAL CONTEXT AND STREET NETWORK



The subject site is located within St Leonards and Crows Nest Station Character Area, which falls into the North Sydney Council Municipal area characterised by high, mixed use densities with strong commercial focus and range of community infrastructure such as community arts, entertainment, galleries and retail.

The St Leonards railway station is approximately 400m away from the main site entry. The main bus exchange is also located in the same area. The metro line is within the town centre precinct and located south west from Hume Street Park.

There are two main road networks parallel to Chandos Street which are Atchison Street and Albany Street. Both are conveniently accessible for the subject site. The planned Crows Nest Metro Station, located to the south of the town centre, connecting St Leonards to the greater Sydney region is situated in Crows Nest Residential Area. New Metro rail access will improve accessibility and connectivity to local schools, businesses and Crows Nest Village. The Metro will provide services that connect to Central Station (11 min) and Sydney Metro's Martin Place Station (7 min).

Two local parks, namely Hume Street Park and Christie St Reserve are located within 400m walking distance from the subject site.

The proposal provides a through site link connecting Chandos St and Atchison Lane on the western boundary of the subject site. The proposed through site link will provide additional permeability and access throughout the neighbourhood.

Key

Site

Town Centre

Through Site Links

Proposed TSL

Open Space

Proposed Open Space

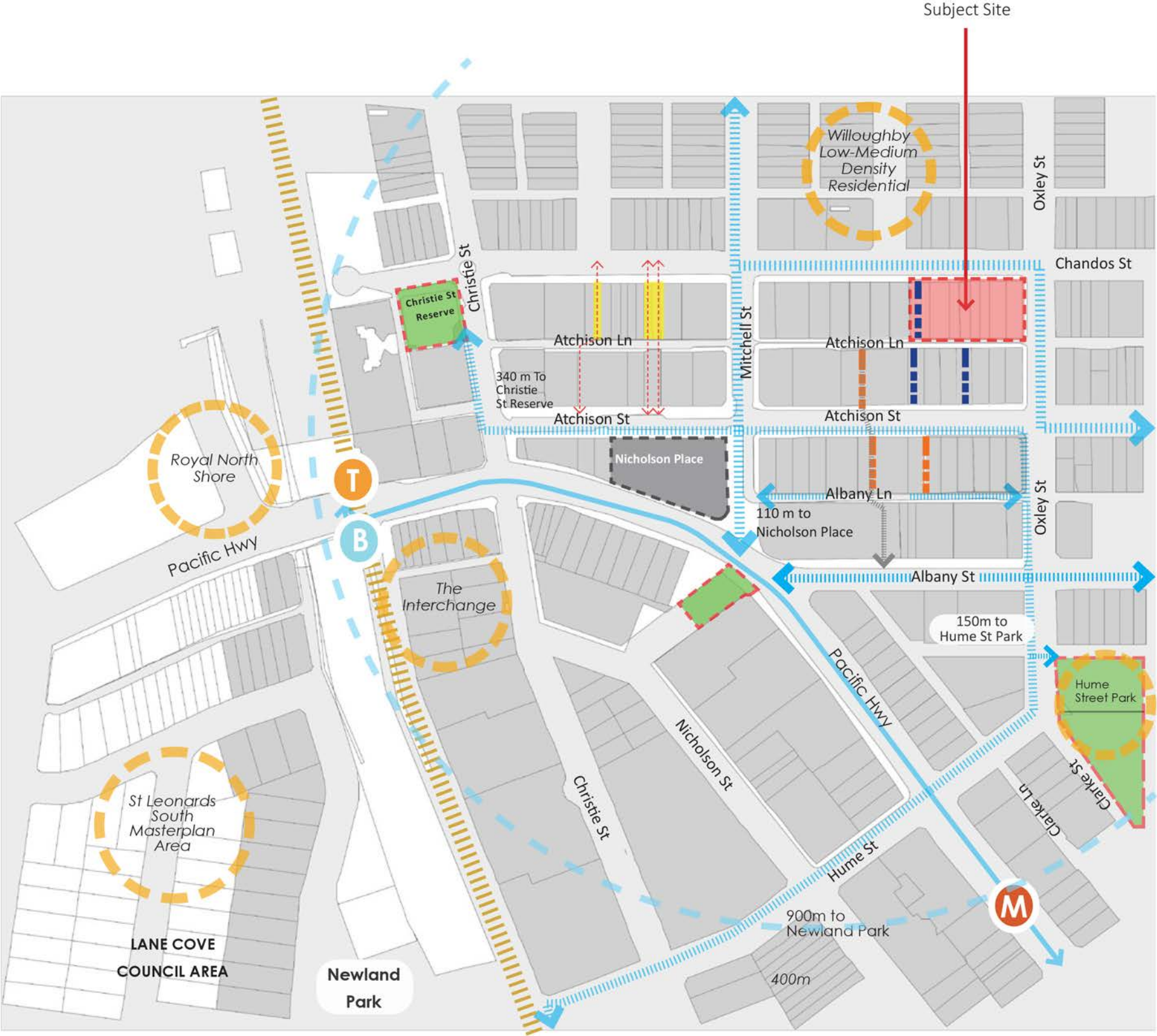
Hume St Park Extension

St Leonards Station

Bus Interchange

Metro Station

PUBLIC OPEN SPACES AND PEDESTRIAN LINKS



St Leonards is a high population density area with a low provision of parks and open spaces. There are number of primary pedestrian desire lines throughout the precinct, which could provide the connection to key attractions including the Christie Street Reserve, Mitchell Street Plaza, Hume Street Park, and Crows Nest Village along Willoughby Road. Pedestrian through site links throughout the precinct are very important as majority of east-west street blocks average around 150m in length.

With majority of through site links being north-south connections the proposal provides a through site link connecting Atchison Lane and Chandos St. The proposed through site link will provide additional permeability and access throughout the neighborhood. Opening up the site will also allow provision for a new north- facing public space which will achieve great sun access during the middle of the day.

St Leonards Railway Station connects to the northern end of Willoughby Road via footpaths along Chandos St and Atchison St. The trip length is approximately 600m with limited points of interest and no public open spaces along the way. The proposed through site link will provide a landscaped public space acting as a point of interest to break this pedestrian journey.

PEDESTRIAN ENVIRONMENT



The pedestrian environment within the subject site 71-89 Chandos Street is relatively free from high traffic volumes and noise experienced along the Pacific Highway.

Active street frontages in St Leonards generally run in the east-west direction. Some parts of the north-south street including parts of Willoughby Road, Pacific Highway also contains active street frontages.

It is important for the subject site to continue the prevailing active street frontage pattern particularly along Chandos Street to promote pedestrian traffic and draw activity along the streets.

Most footpaths are of standard width and tree-lined. The footpaths along Oxley Street and the southern sides of Chandos Street and Atchison Street (near Oxley Street) enjoy good solar access.

Some landscaped building frontages are well established along a segment of the southern side of Chandos Street in lieu of awnings. Oxley Street has a 5m wide landscaped zone from Chandos Street to Albany Lane which has the potential to create a well landscaped pedestrian boulevard. Atchison Lane and Albany Lane mainly serve vehicle access. Both of them are hard-edged with sporadic provision of footpaths. There is minimal solar access to both lanes.

Key

- Site
- Awnings
- Active Frontages
- Existing Arcades
- Proposed TSL
- Planned Links
- Indicative Laneways
- Grassed Open Space
- Paved Open Space
- Noise Issue
- St Leonards Station
- Bus Interchange
- Metro Station

TRAFFIC ENVIRONMENT



The Pacific Highway, as a part of state road network, accommodates very high traffic volumes. The streets within the local area to the east of Pacific Highway carry much less traffic while some streets and lanes, such as Atchison Lane and Albany Lane, carry a very low volume of traffic.

The site has good road access, with three frontages along Chandos Street , Oxley Street and Atchison Lane. Chandos Street is a collector road in St Leonards on the northern boundary of the site. It is a street that runs east- west with connections to St Leonards Station to the west as well as Christie Street and the Pacific Highway.

Oxley Street is located on the eastern edge of the site. Oxley Street is a local northsouth road providing connections from Crows Nest in the south-east to St Leonards Willoughby to the north.

Atchison Street is a local road which provides east-west connections to St Leonards Centre and Crows Nest. Atchison Lane runs parallel to the subject site, which is mostly used for servicing and access to basement car parking.

Based on existing servicing, with basement car park entries located along Atchison Lane an opportunity exists to provide access to the site via Atchison Lane, which will reduce vehicular activity along Chandos and Atchison Streets and create a safer pedestrian environment along these streets.

Key

Site

Very High

High

Medium

Low

Very Low

Street Parking

St Leonards Station

Bus Interchange

Metro Station

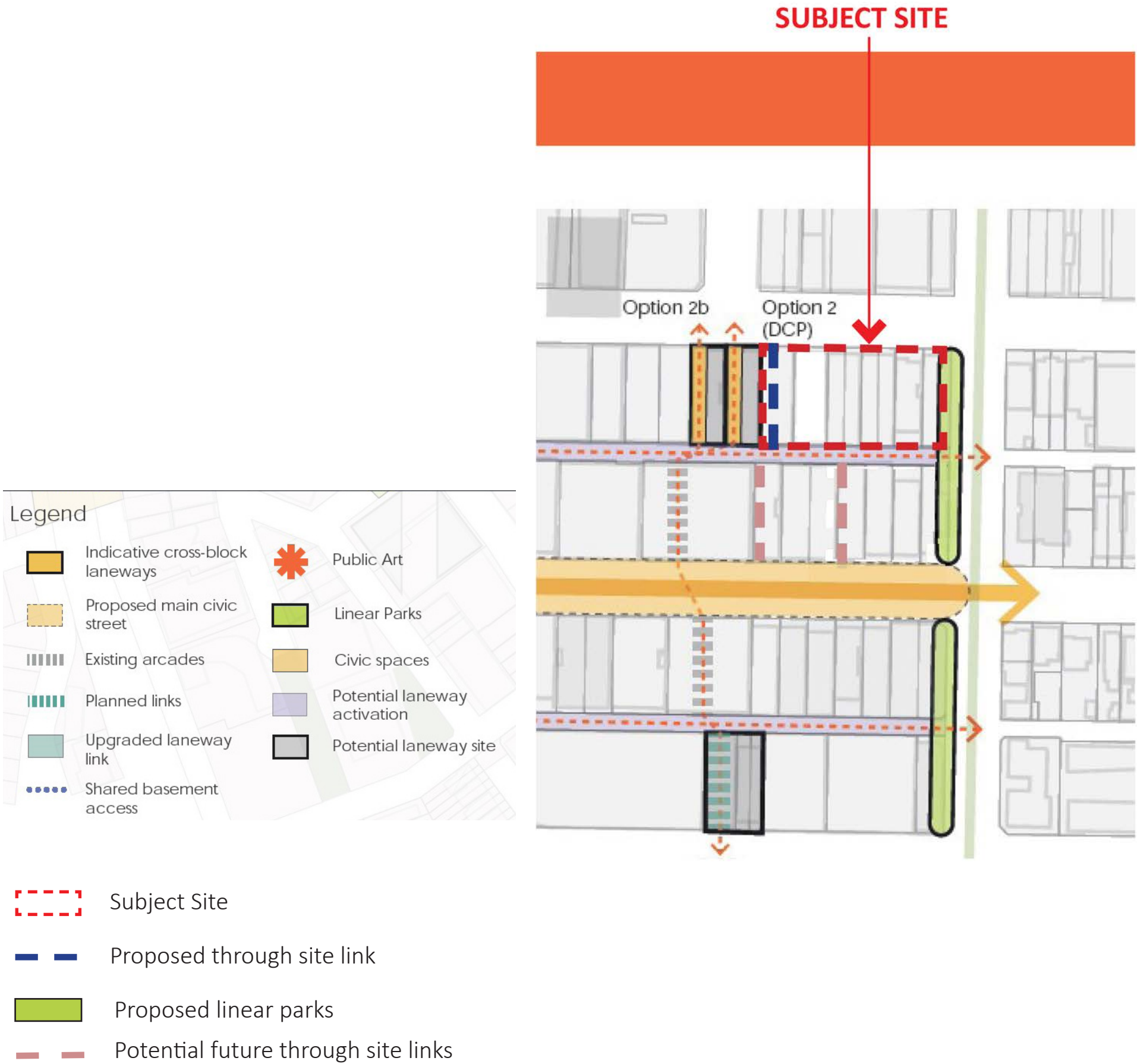
OPPORTUNITIES ANALYSIS



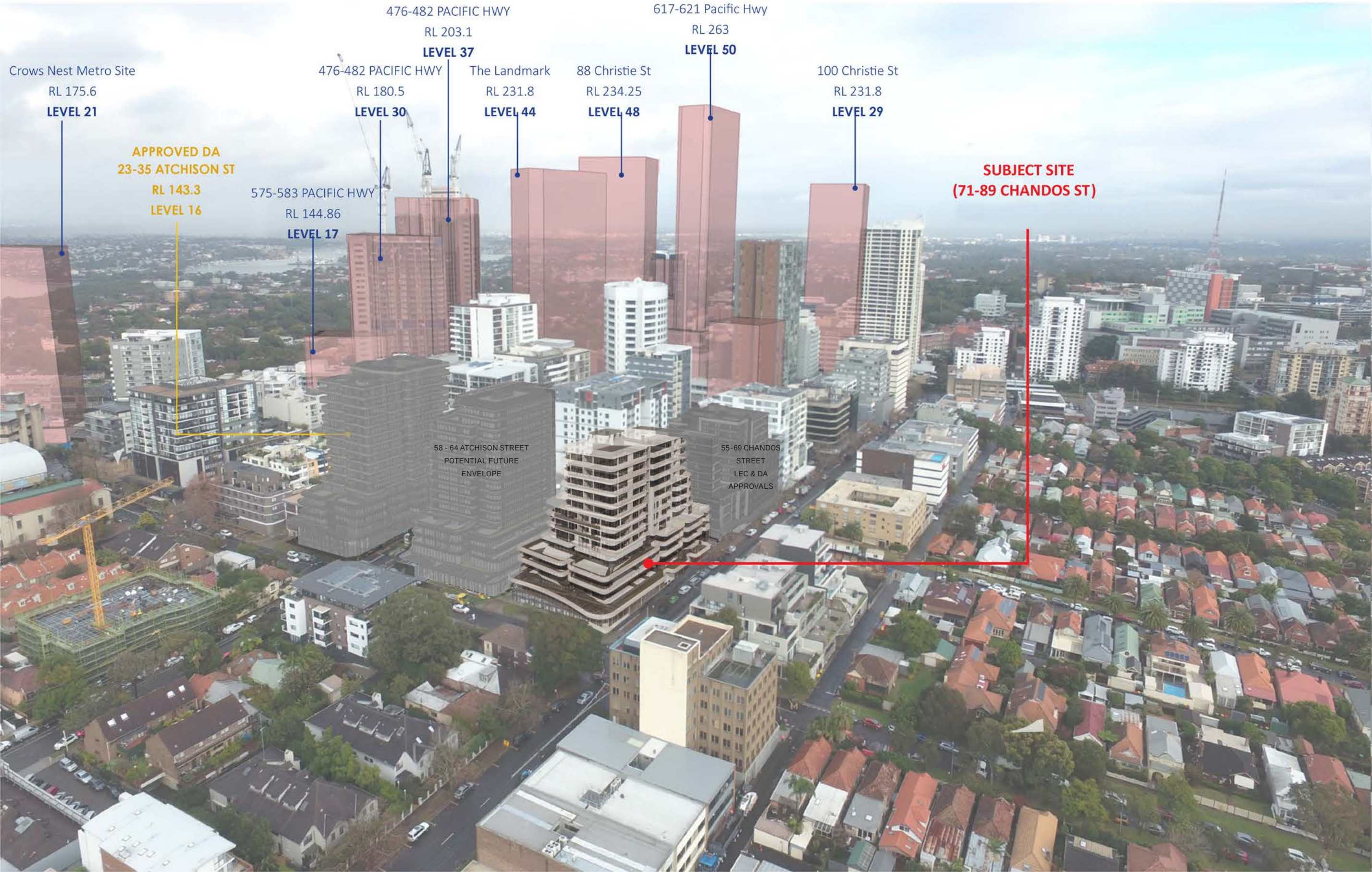
Opportunities

1. St Leonards CBD offers a mix of some of Sydney's oldest and most respected institutions with innovative small business and a young, well-educated community. It is the sixth largest employment centre in Sydney and the third largest north of the harbour. Close to the North Sydney CBD, it is in easy reach of Chatswood, the Sydney CBD and Macquarie Park
2. The site is located on the edge of the CBD facing North, benefiting from the change of scale from the large scale mixed use developments to the adjoining low scaled residential area, providing extensive district views.
3. The transformation of the Site recognizes the opportunity to provide new homes, mixed use activities, retail' and create new places and a laneway all with easy access to existing and planned public transport
4. The site is very well serviced by public transport and is in close proximity (within 400m) to public transport hubs including St Leonards Train Station, Metro Station and Bus Interchange.
5. Close to Royal North Shore Hospital and other health and education-related activities.
6. Improved critical circulation links and pedestrian amenities.
7. Potential for new linear parks.
8. Potential for lane way activation and new through site links providing better site permeability and activation threshold.
9. Access to existing open space.
10. Potential for street front activation.

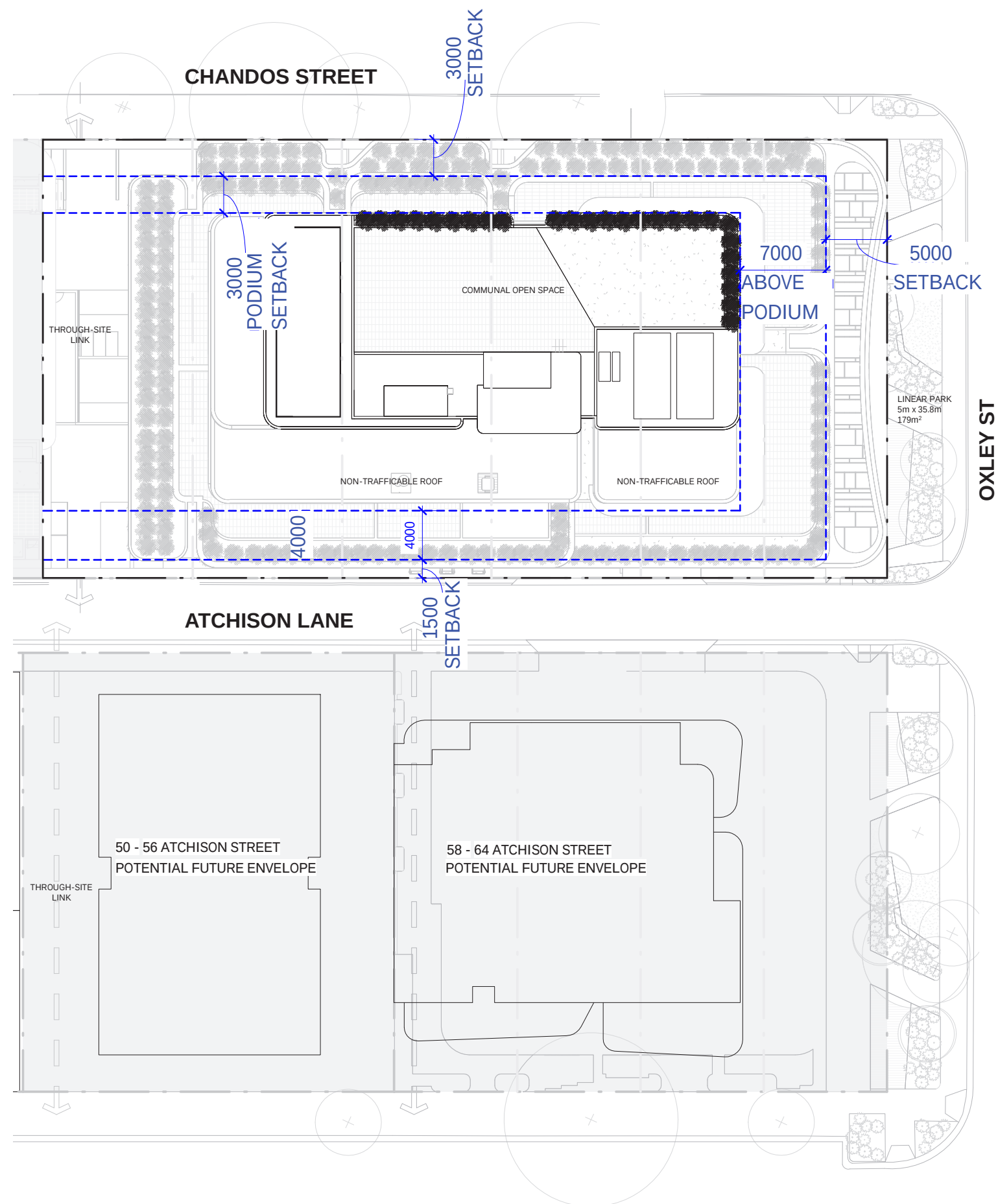
NORTH SYDNEY PLANNING STUDY 2015 PED. LINKS + LINEAR PARK



SURROUNDING DEVELOPMENTS



SETBACK ANALYSIS



SETBACKS:

71-89 Chandos St

Chandos St

- 3m setback upto 4 storey street wall
- 3m above podium setback

Atchison Ln

- 1.5m setback upto 4 storey podium
- 4m above podium setback

Oxley St

- 5m street setback
- 7m Above podium setback

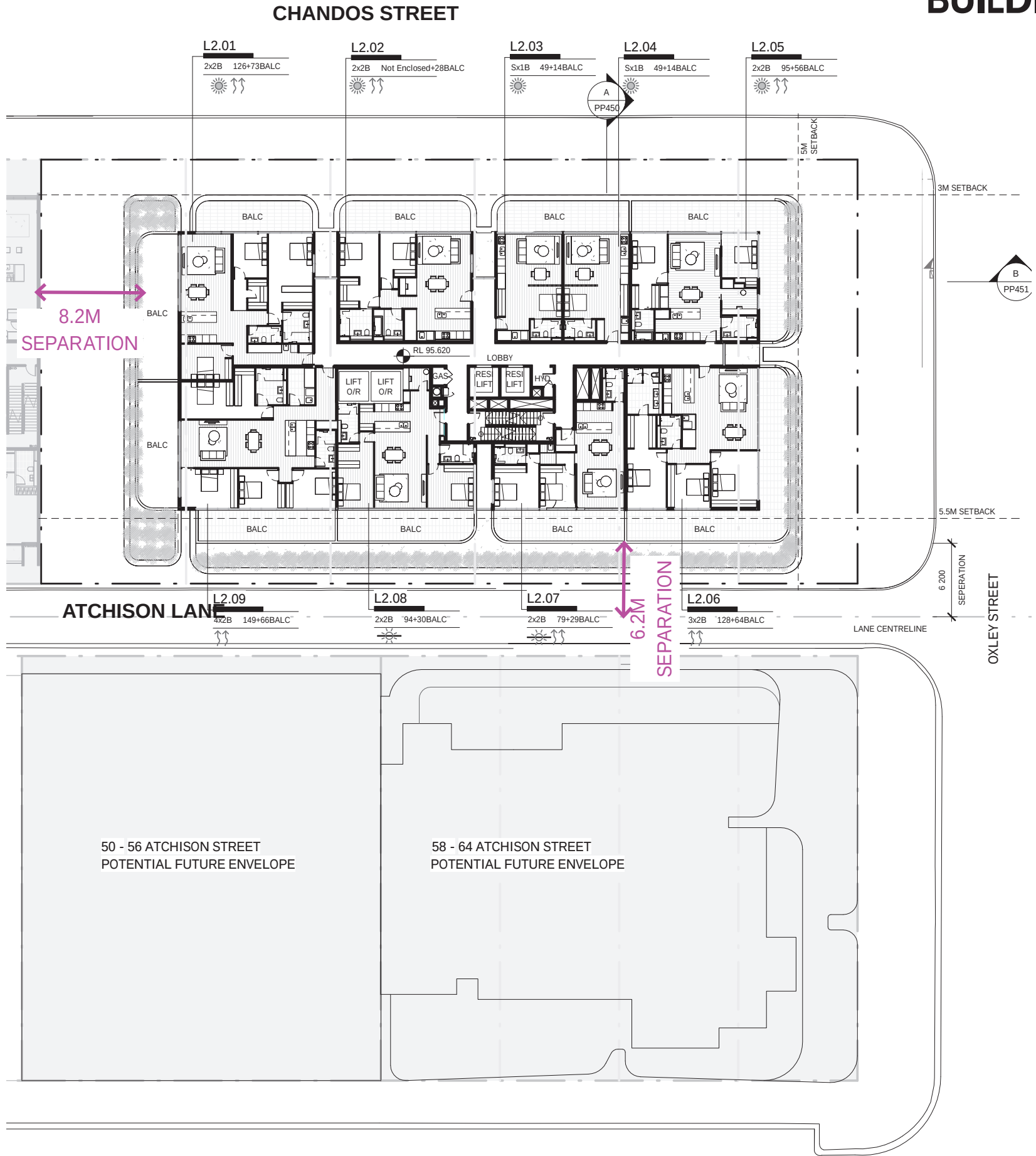
BUILDING SEPARATION : UP TO FOUR STOREYS

Apartment Design Guide 2015
Part 2F: Conditions in Setting Building Separation Controls

Minimum separation distances for buildings are:

Up to four storeys (approximately 12m):

- 12m between habitable rooms/balconies
- 9m between habitable and non-habitable rooms
- 6m between non-habitable rooms



LEVEL 02 FLOOR PLAN

BUILDING SEPARATION : FIVE TO EIGHT STOREYS

Apartment Design Guide 2015
Part 2F: Conditions in Setting Building Separation Controls

Five to eight storeys (approximately 25m):

- 18m between habitable rooms/balconies
- 12m between habitable and non-habitable rooms
- 9m between non-habitable rooms



LEVEL 05 FLOOR PLAN

BUILDING SEPARATION : NINE STOREYS AND ABOVE

Apartment Design Guide 2015

Part 2F: Conditions in Setting Building Separation Controls

Nine storeys and above (over 25m):

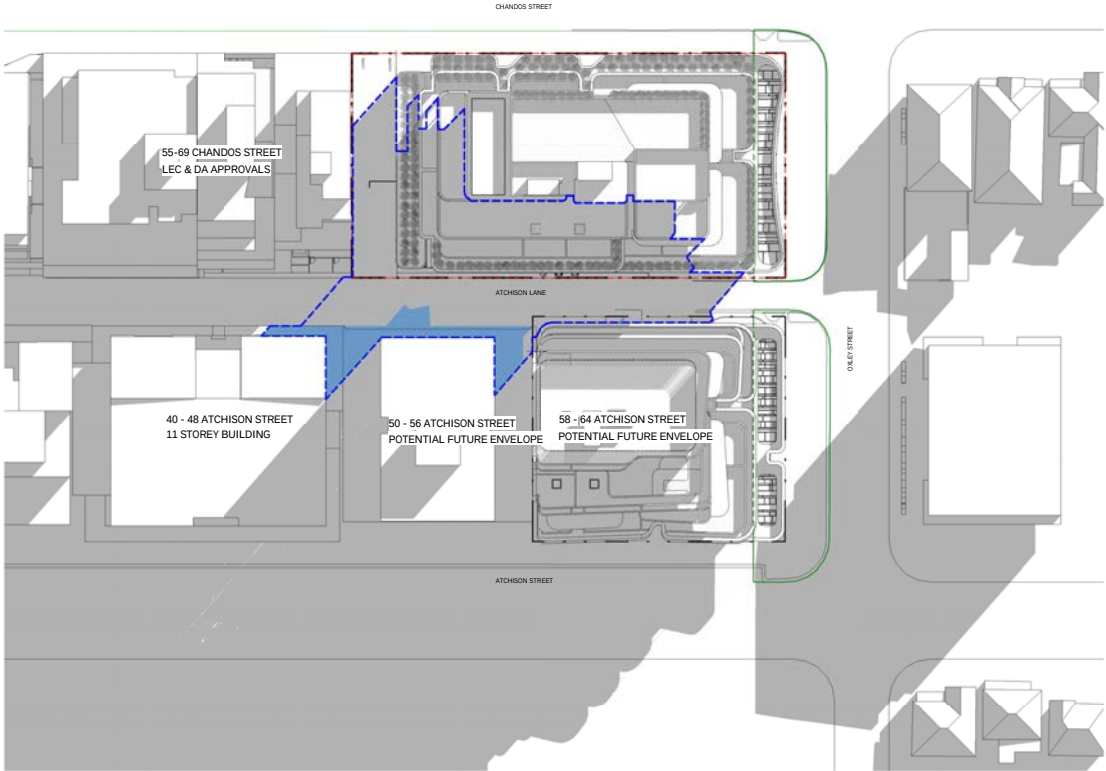
- 24m between habitable rooms/balconies
- 18m between habitable and non-habitable rooms
- 12m between non-habitable rooms



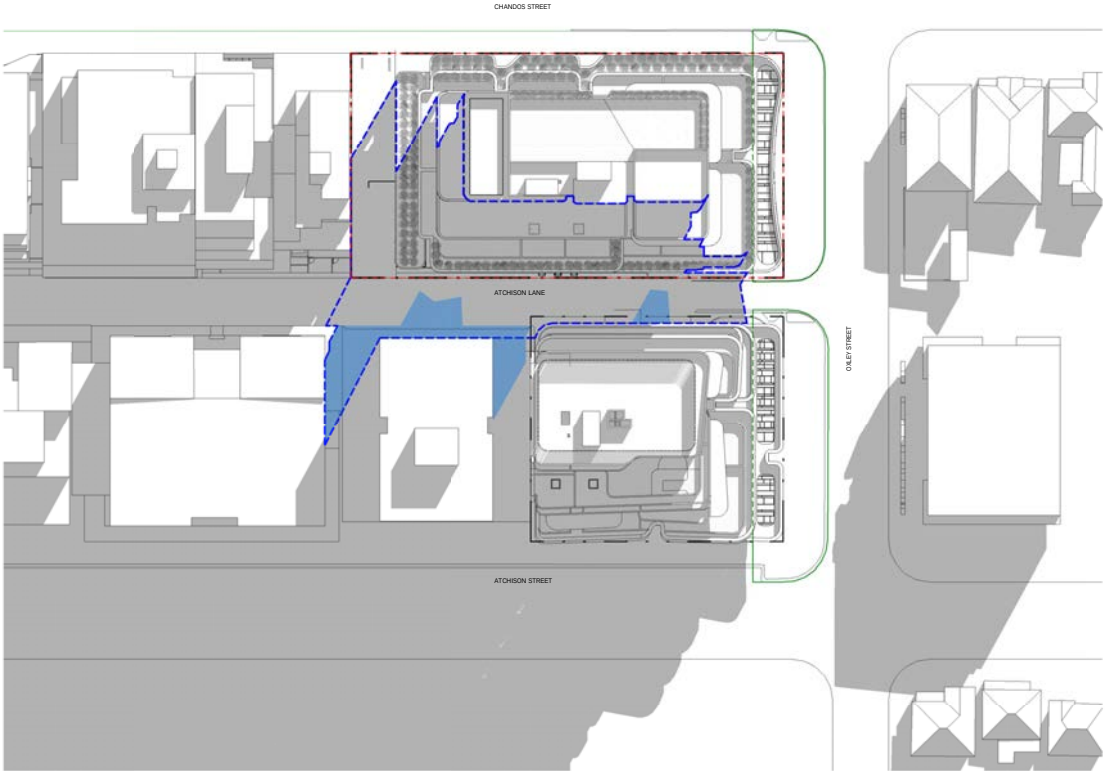
LEVEL 08 (L09-L11 SIM) - FLOOR PLAN

SHADOW ANALYSIS : 21ST JUNE

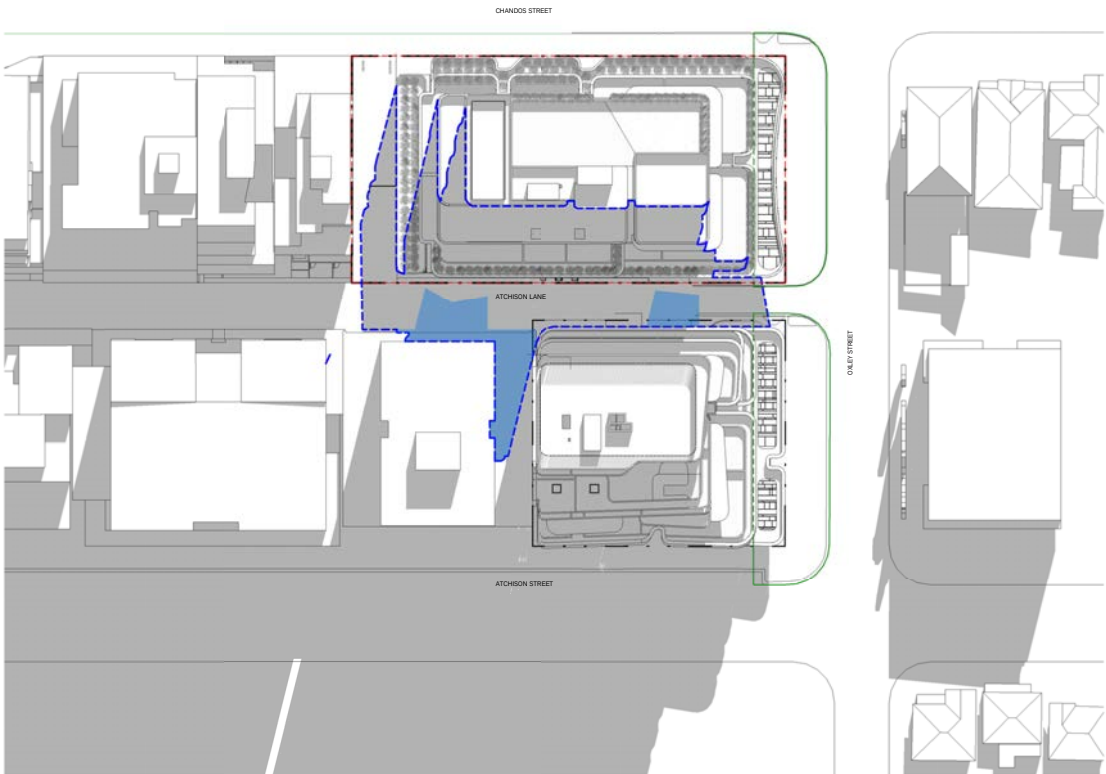
- LEGEND
- PROPOSED BUILDING SHADOW OUTLINE
 - SITE BOUNDARY
 - SHADOW ADDITION
 - SHADOW REDUCTION
 - OXLEY LINEAR STREET PARK



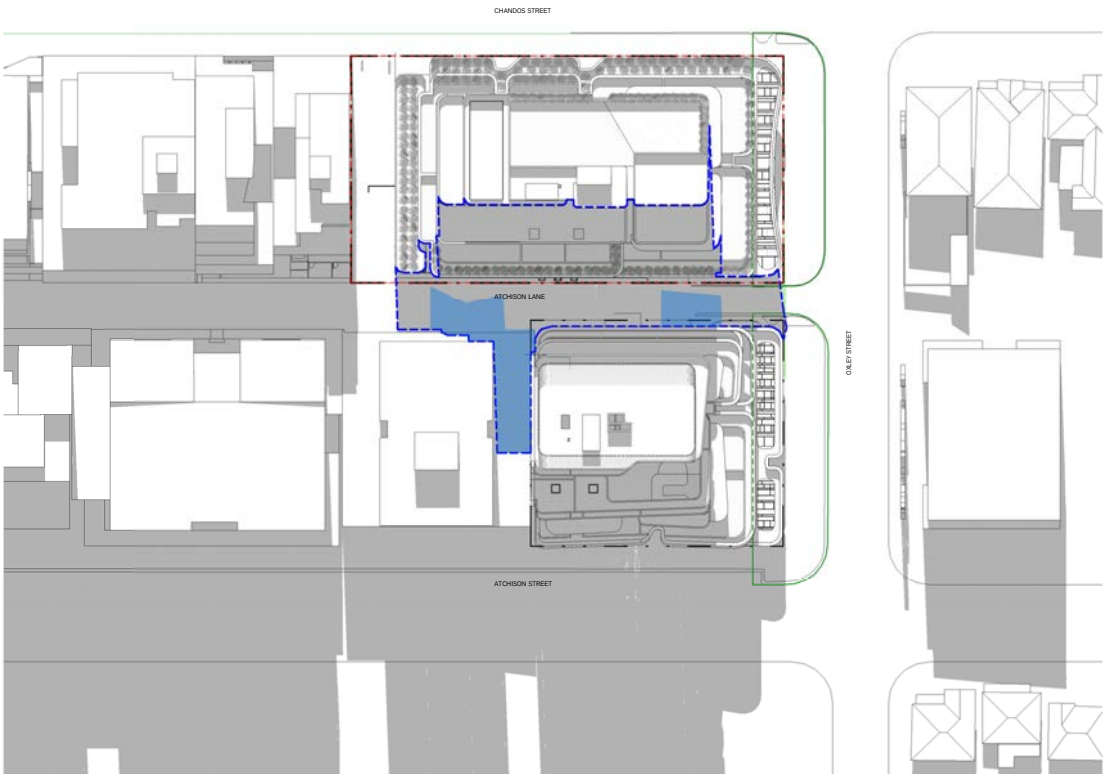
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2 JUNE 21 PROPOSED - 1000



3 JUNE 21 PROPOSED - 1100



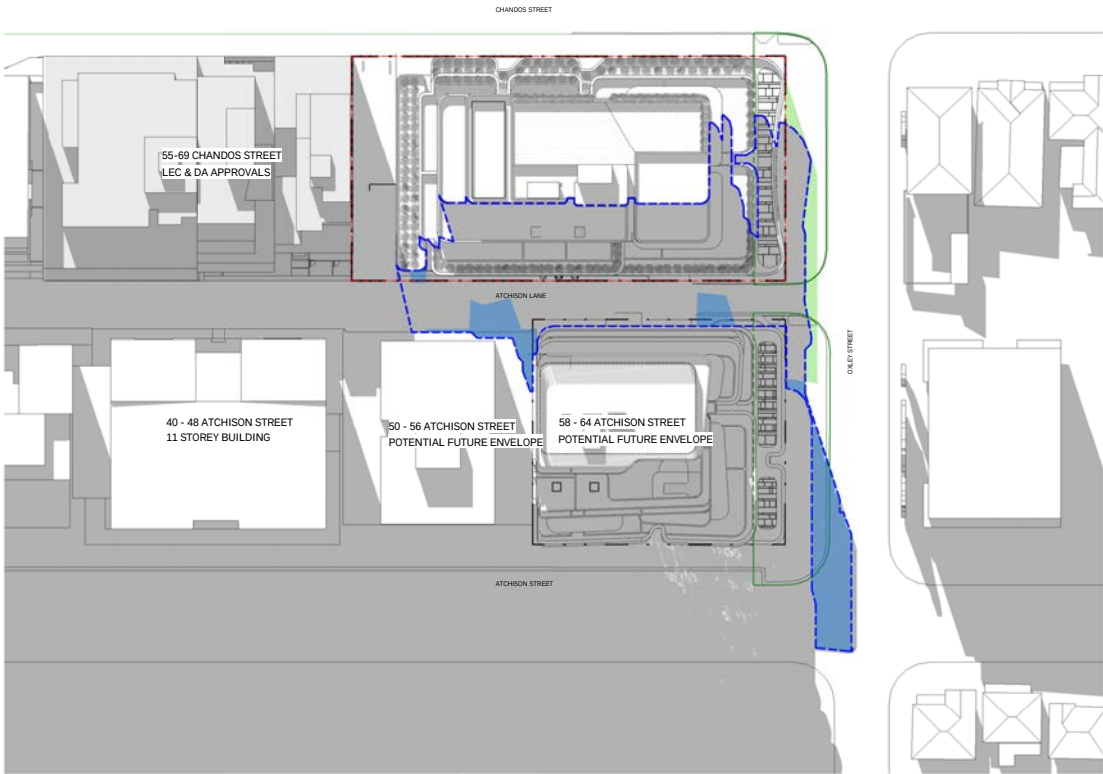
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B	AMMEND PP	07/07/2022

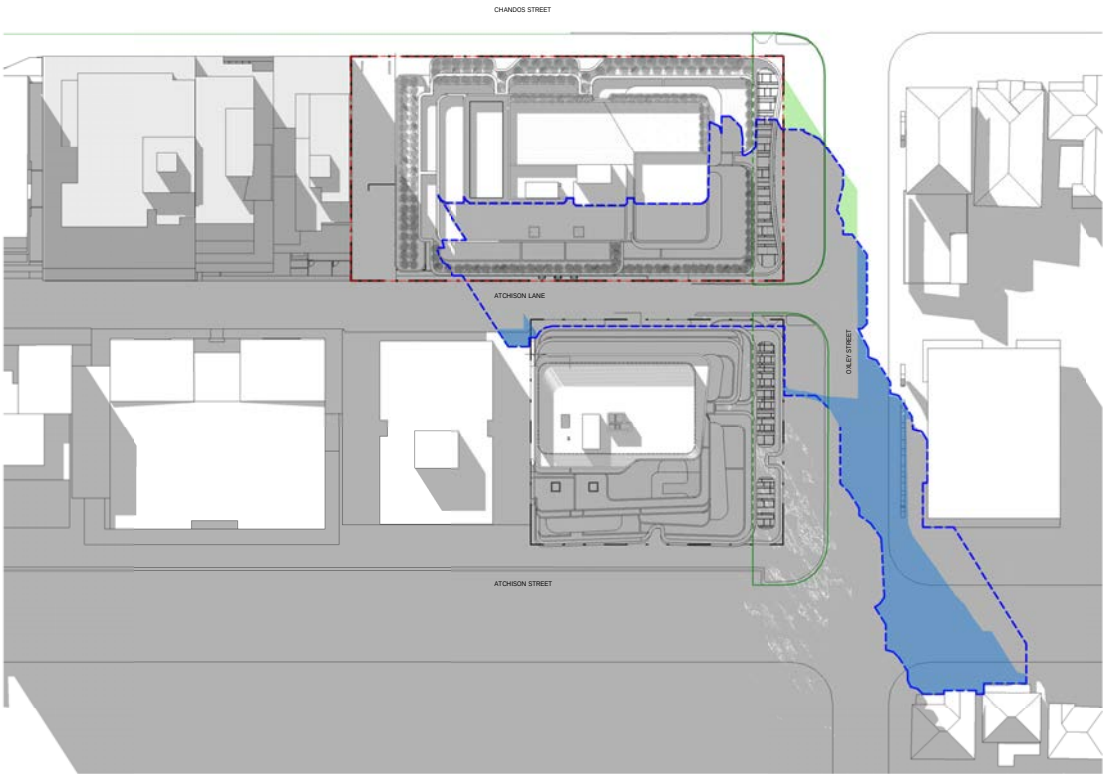


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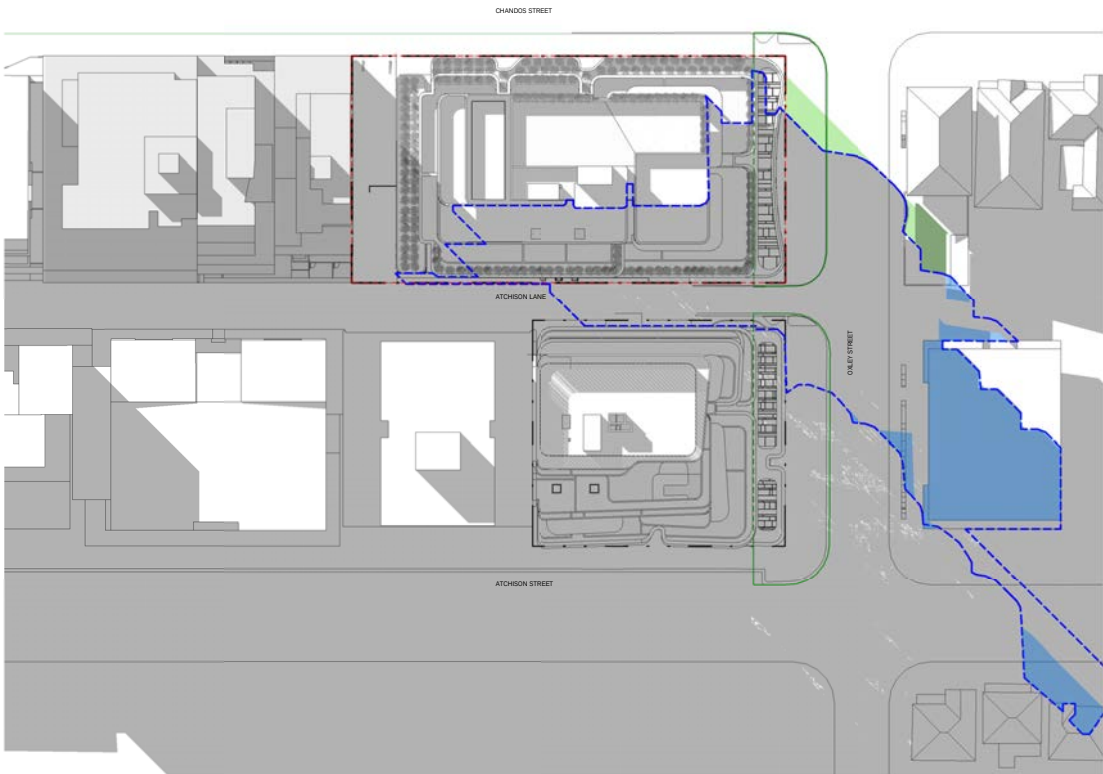
- LEGEND
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 - SITE BOUNDARY
 - SHADOW ADDITION
 - SHADOW REDUCTION
 - OXLEY LINEAR STREET PARK



1 JUNE 21 PROPOSED - 1300



2 JUNE 21 PROPOSED - 1400



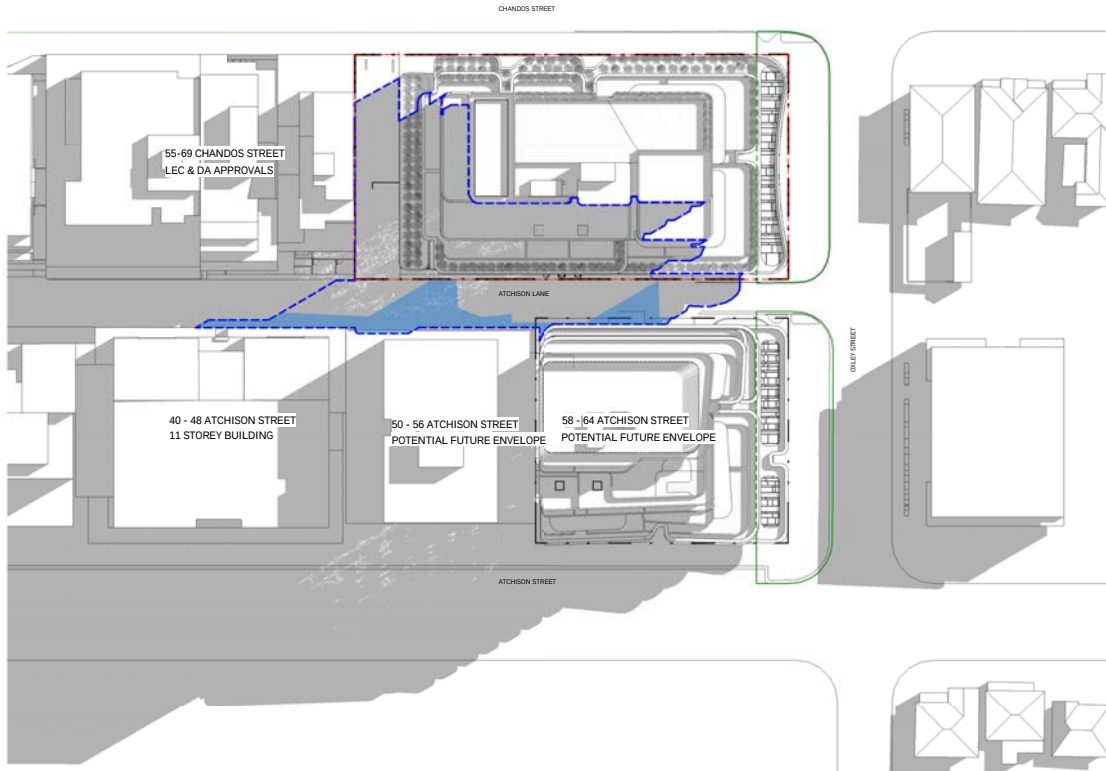
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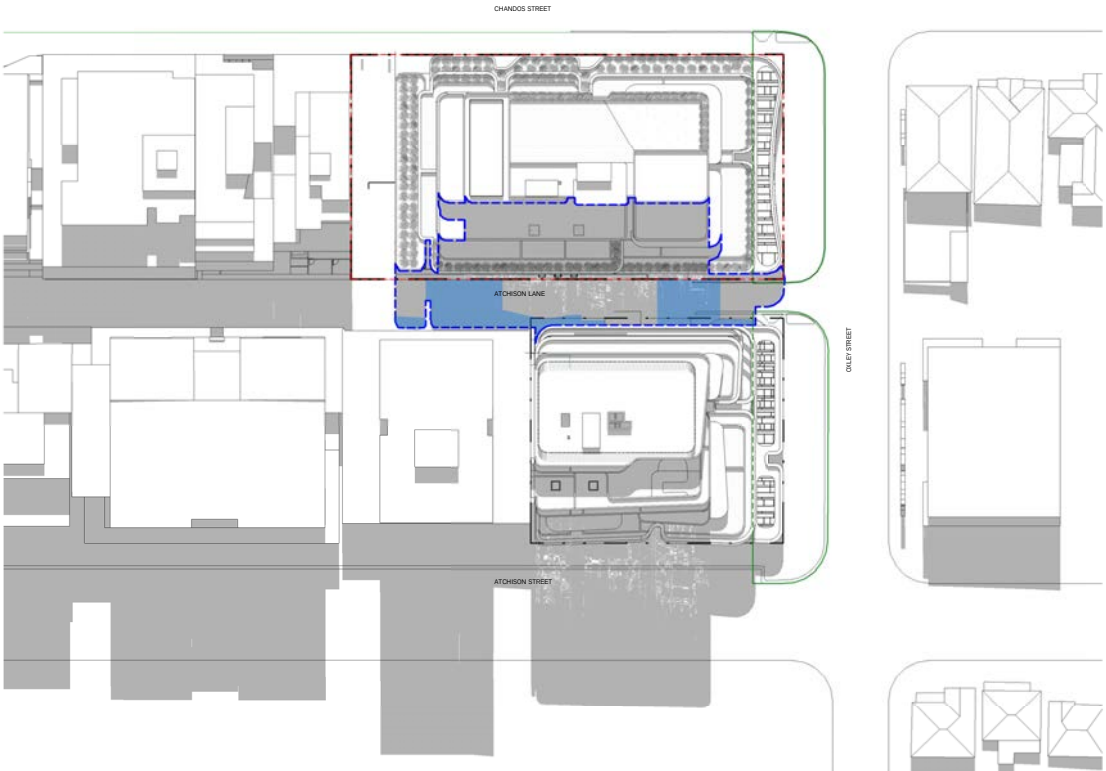
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B	AMMEND PP	07/07/2022

SHADOW ANALYSIS : 21ST MARCH

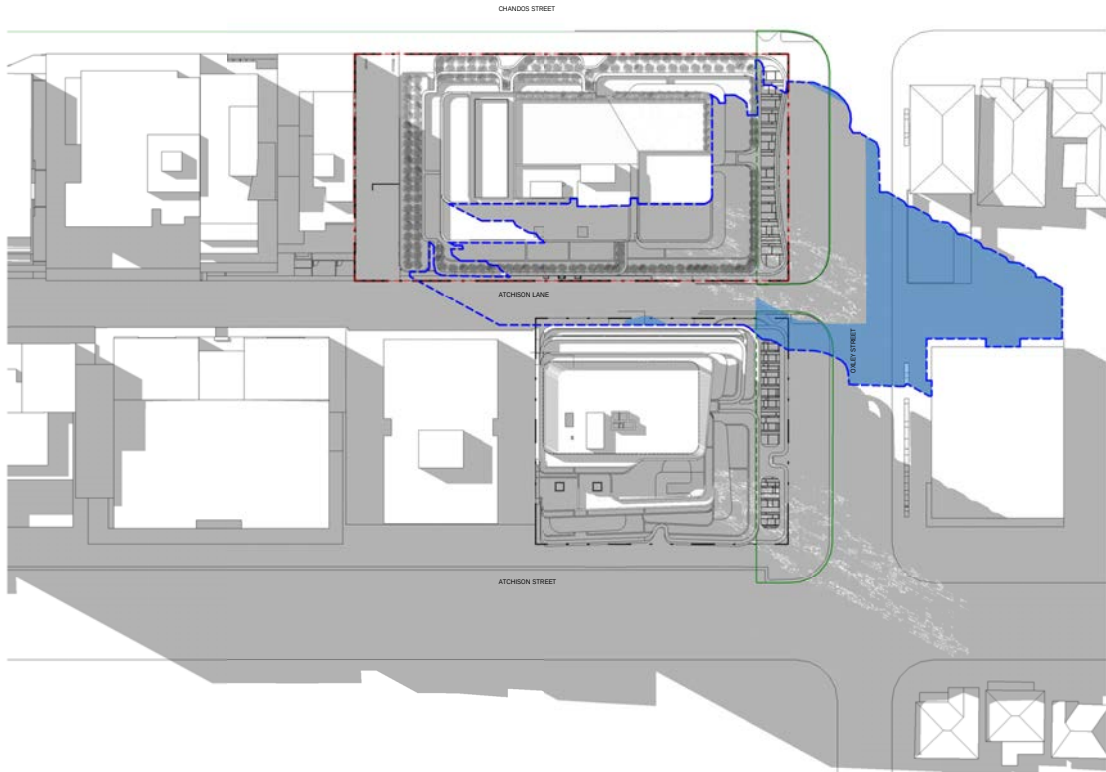
- LEGEND
- PROPOSED BUILDING SHADOW OUTLINE
 - SITE BOUNDARY
 - SHADOW ADDITION
 - SHADOW REDUCTION
 - OXLEY LINEAR STREET PARK



1 MARCH 21 PROPOSED - 0900



2 MARCH 21 PROPOSED - 1200



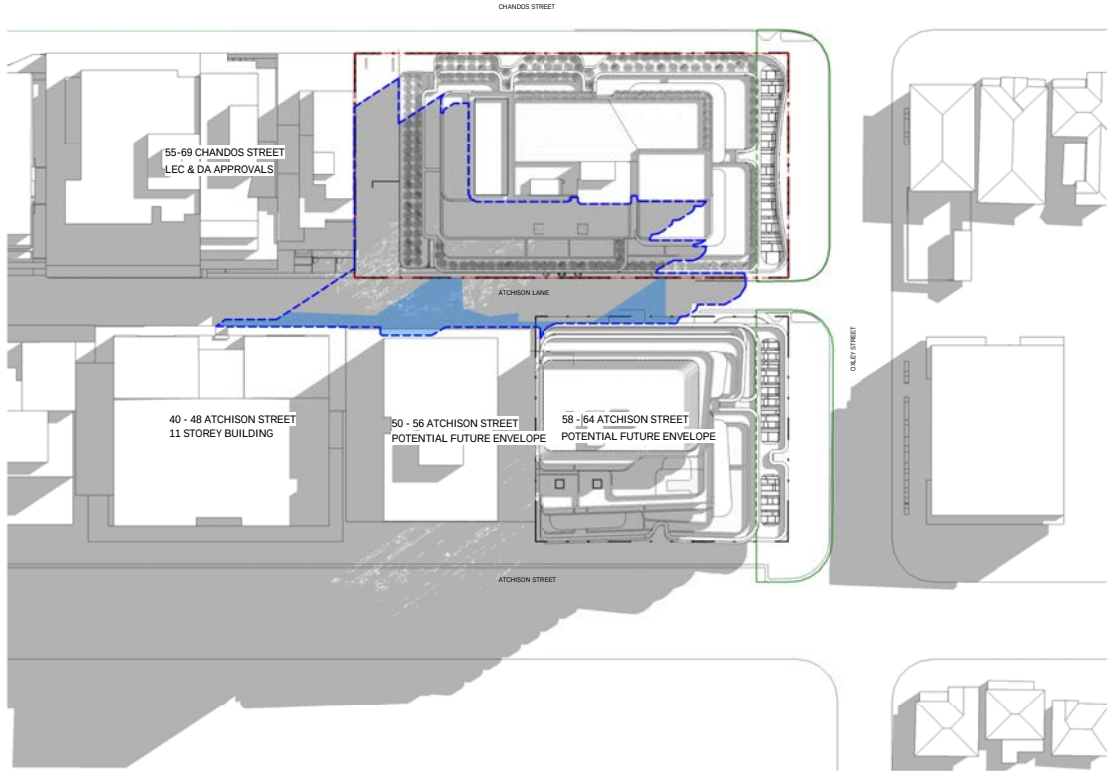
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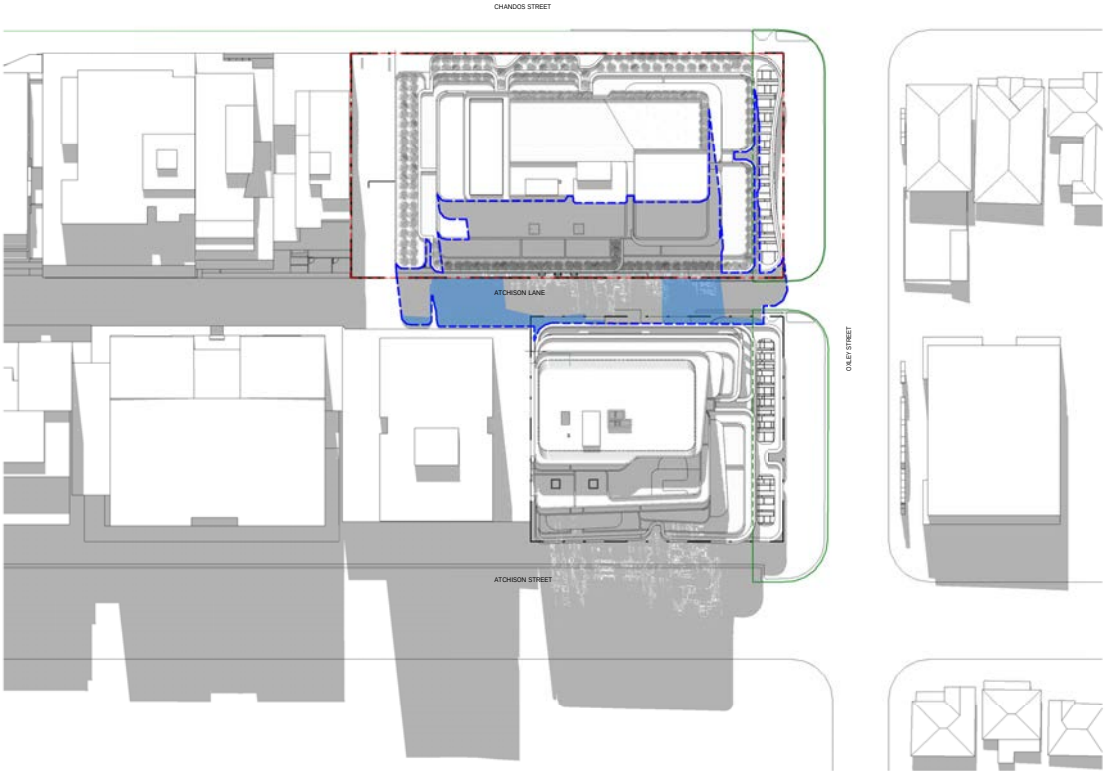


SHADOW ANALYSIS : 21ST SEPTEMBER

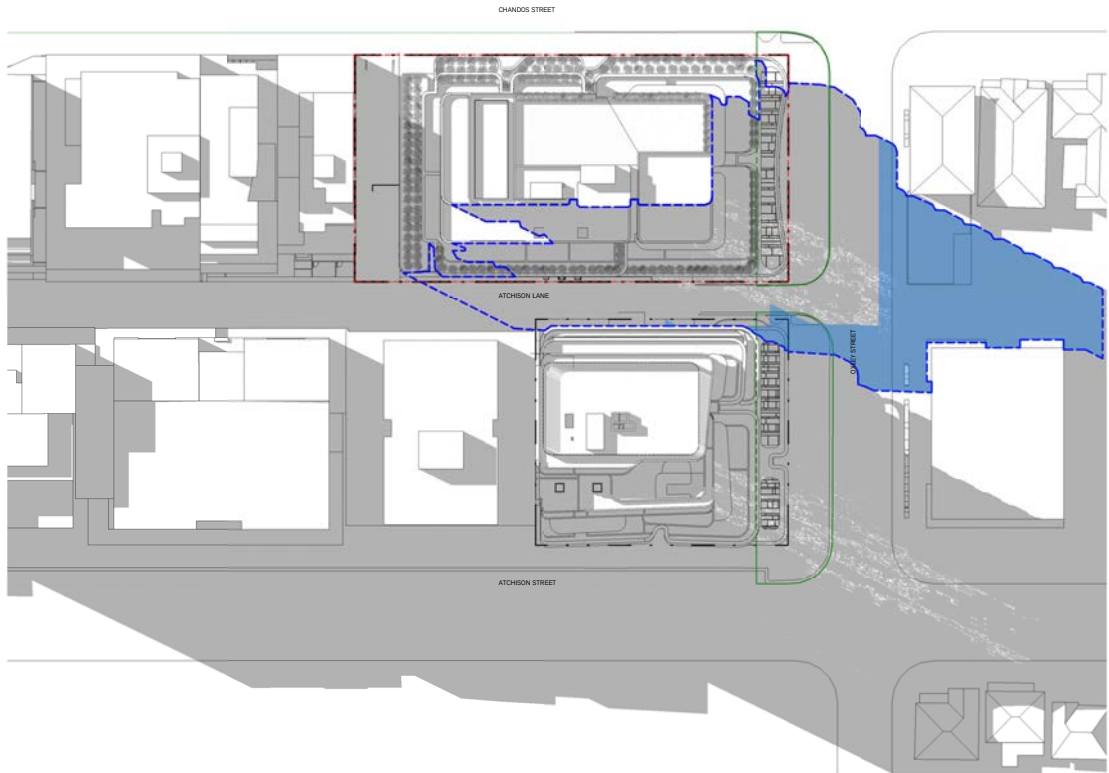
- LEGEND
- PROPOSED BUILDING SHADOW OUTLINE
 - SITE BOUNDARY
 - SHADOW ADDITION
 - SHADOW REDUCTION
 - OXLEY LINEAR STREET PARK



1 SEPT 21 PROPOSED - 0900



2 SEPT 21 PROPOSED - 1200



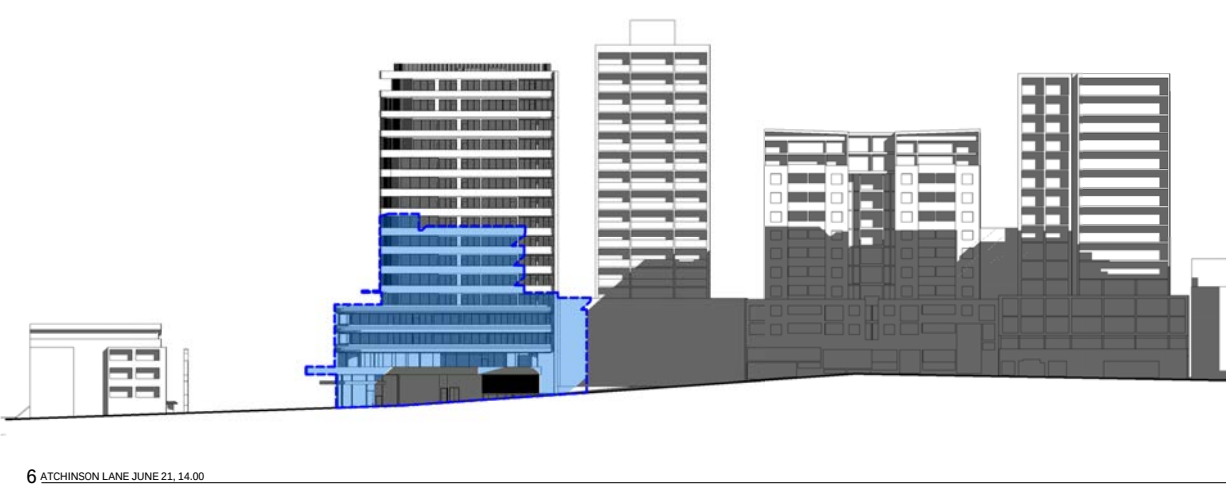
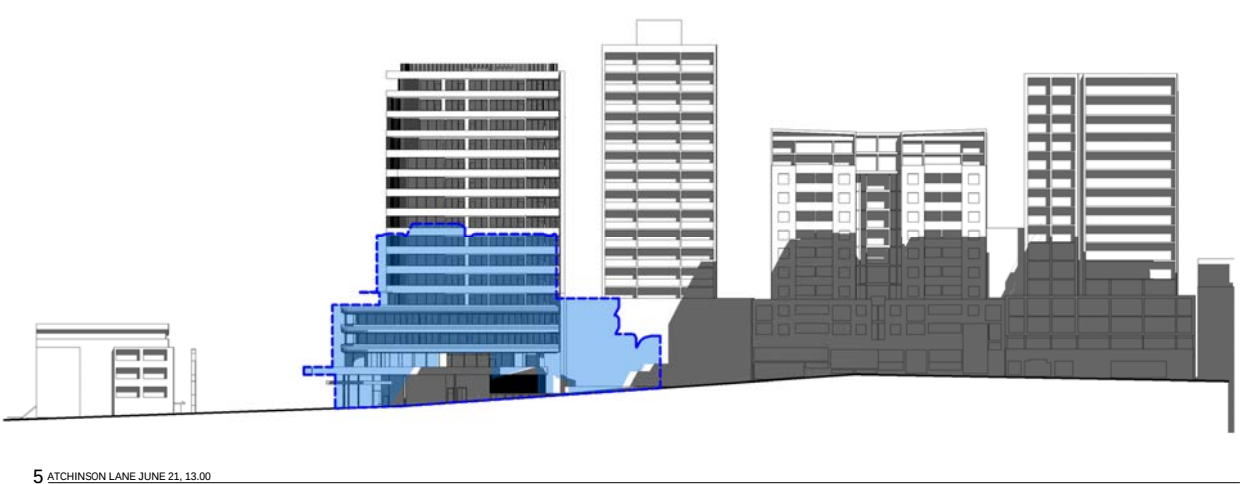
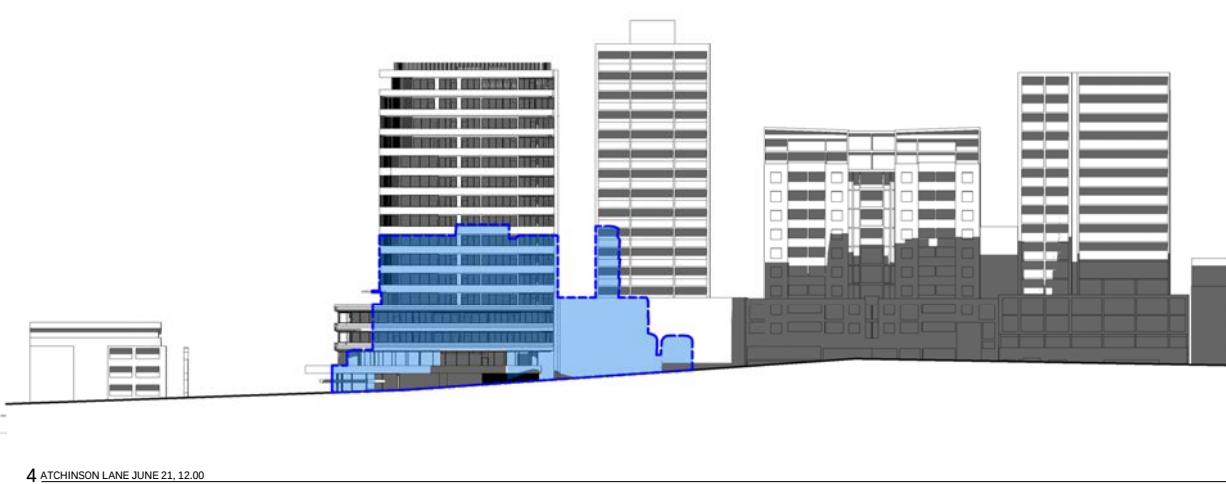
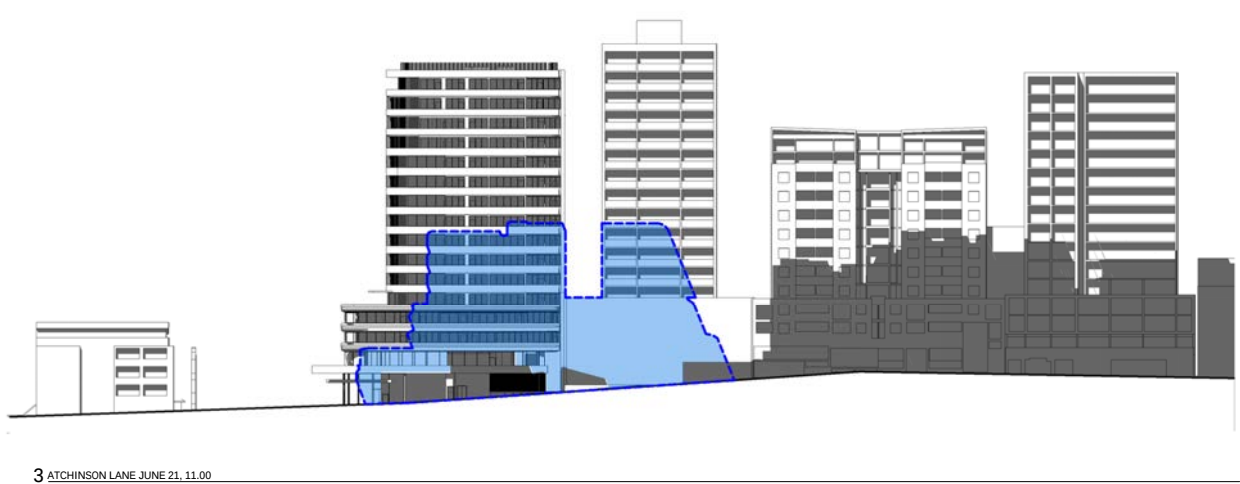
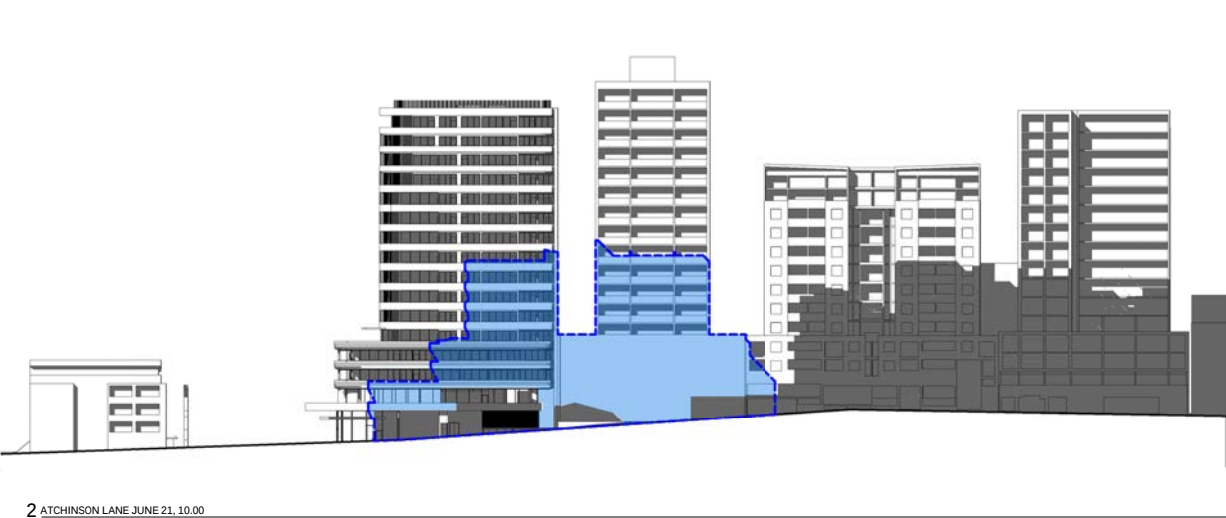
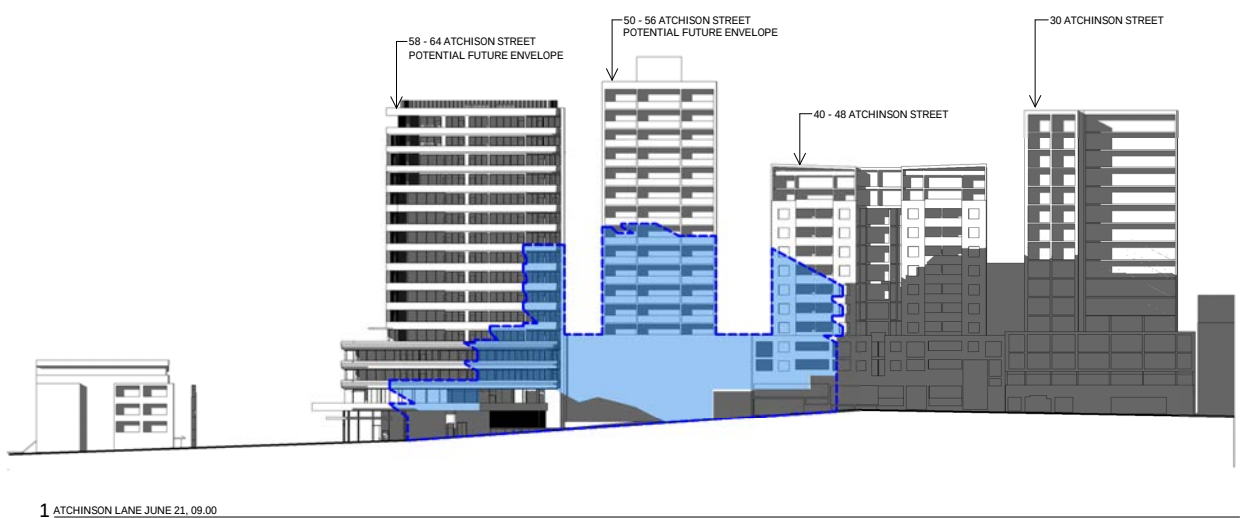
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ISSUE	REASON	DATE
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B	AMMEND PP	07/07/2022



SHADOW ANALYSIS : ATCHINSON LANE LINEAR PARK

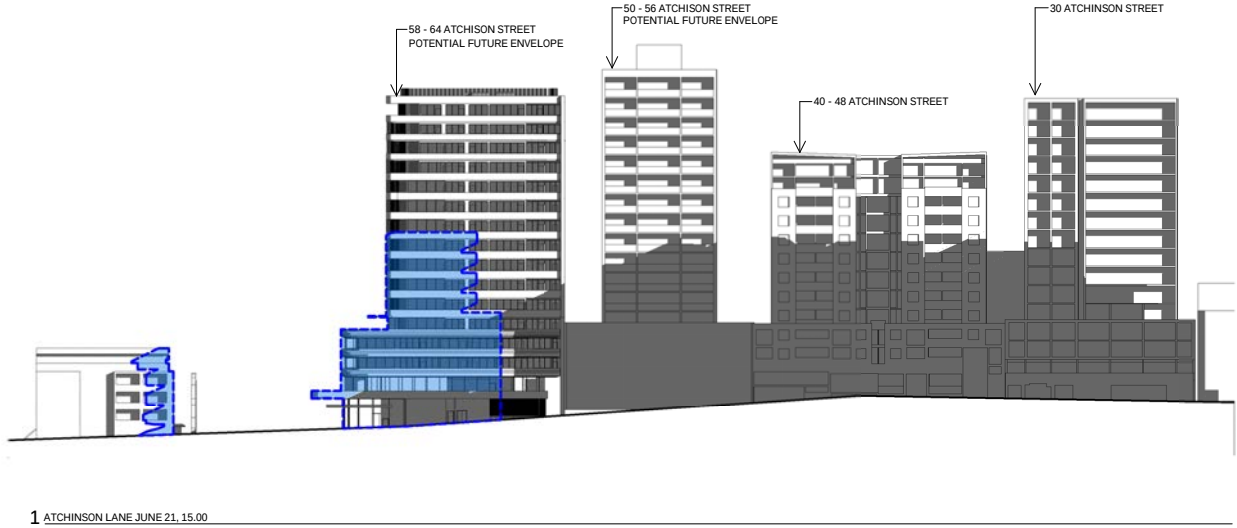
- LEGEND
- PROPOSED BUILDING SHADOW OUTLINE
 - SITE BOUNDARY
 - SHADOW ADDITION
 - SHADOW REDUCTION
 - OXLEY LINEAR STREET PARK



ISSUE	REASON	DATE
A	ISSUE FOR PP	16/03/2022
B	AMMEND PP	07/07/2022

SHADOW ANALYSIS : ATCHINSON LANE LINEAR PARK

- LEGEND
- PROPOSED BUILDING SHADOW OUTLINE
 - SITE BOUNDARY
 - SHADOW ADDITION
 - SHADOW REDUCTION
 - OXLEY LINEAR STREET PARK



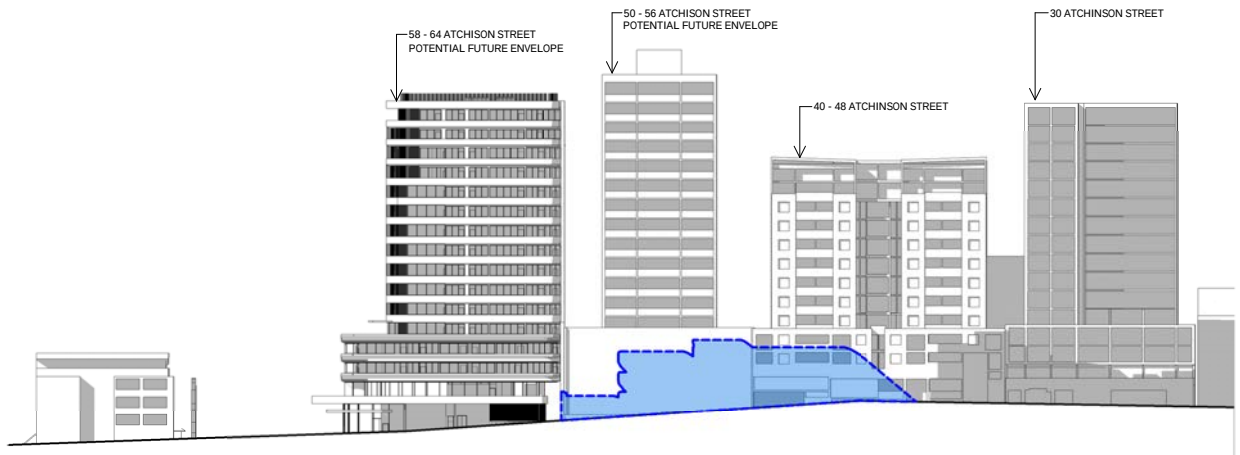
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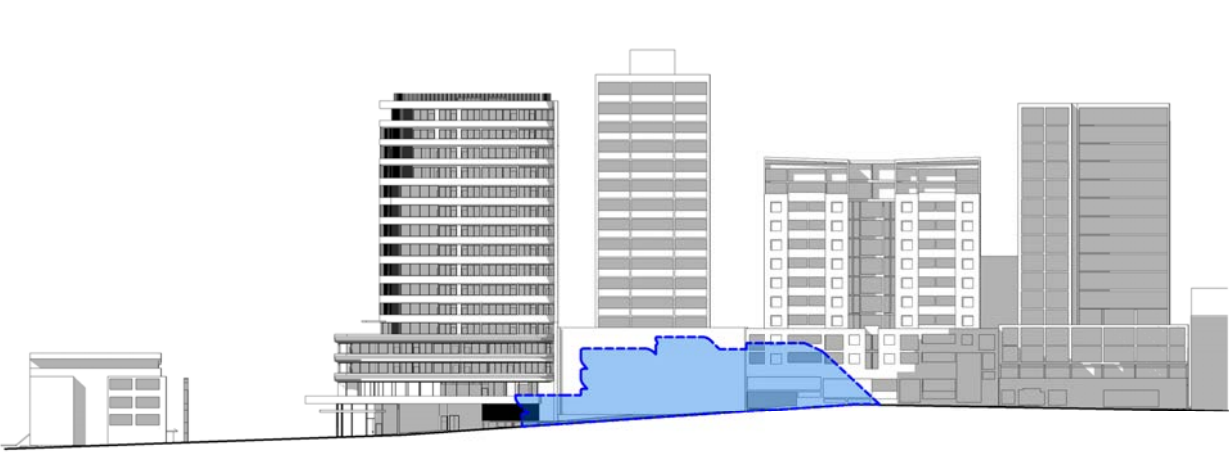
SHADOW ANALYSIS : ATCHINSON LANE LINEAR PARK

LEGEND

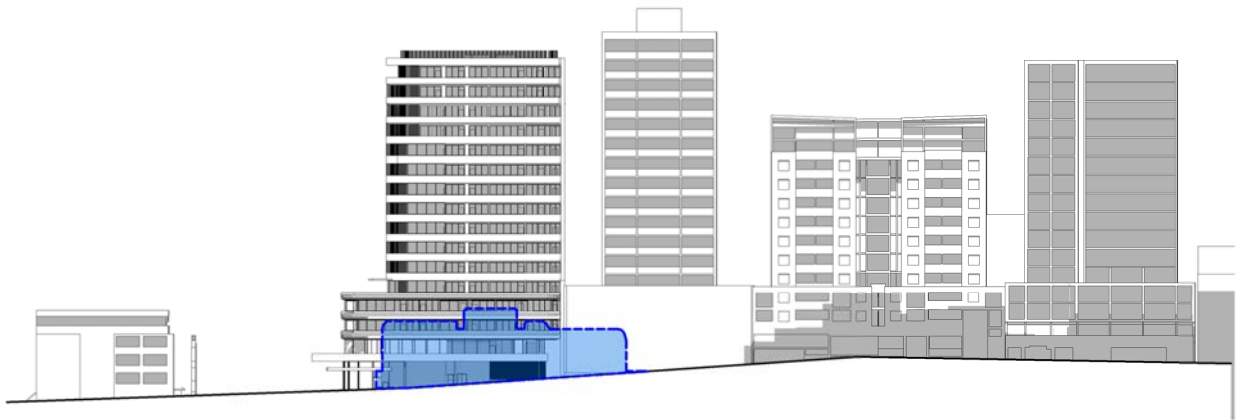
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- SITE BOUNDARY
- SHADOW ADDITION
- SHADOW REDUCTION
- OXLEY LINEAR STREET PARK



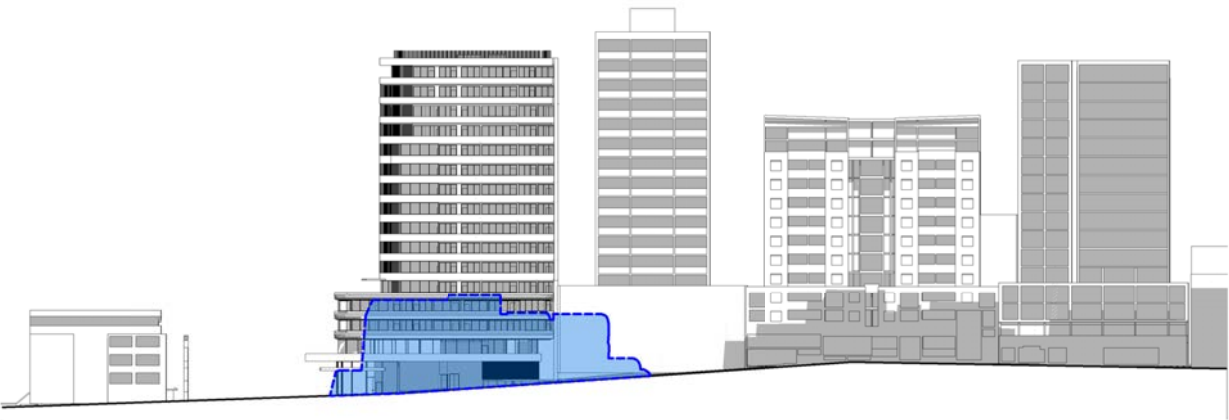
1 ATCHINSON LANE MARCH 20, 09.00



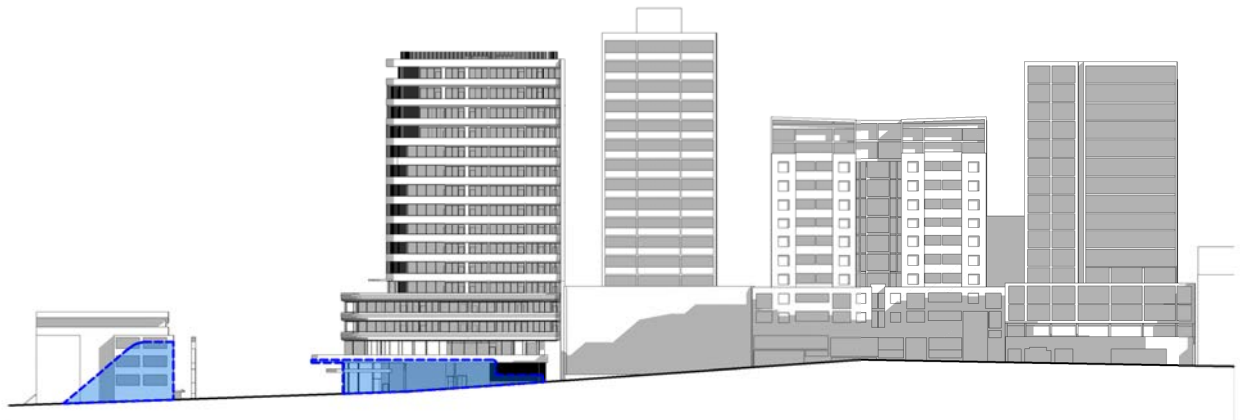
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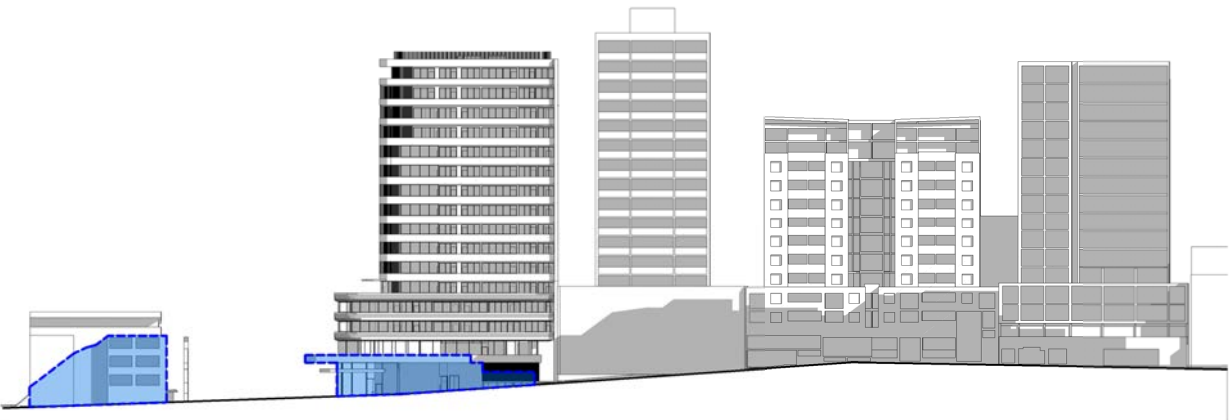
4 ATCHINSON LANE MARCH 20, 12.00



3 ATCHINSON LANE SEPTEMBER 22, 12.00



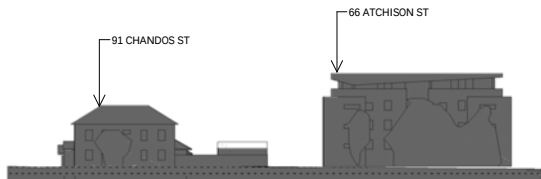
5 ATCHINSON LANE MARCH 20, 15.00



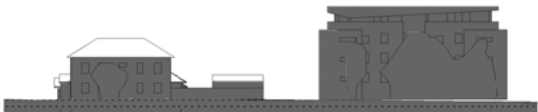
6 ATCHINSON LANE SEPTEMBER 22, 15.00



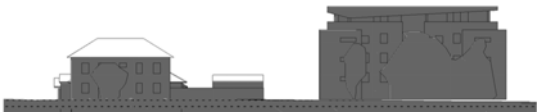
SHADOW ANALYSIS : OXLEY STREET LINEAR PARK



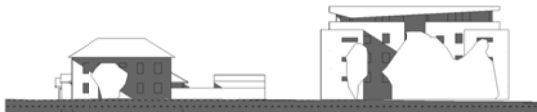
1 OXLEY ST JUNE 21, 09.00



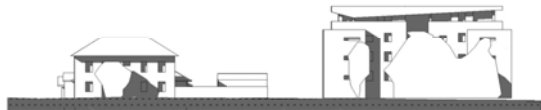
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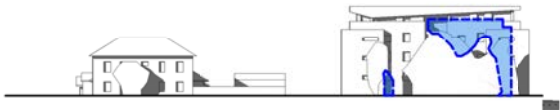
3 OXLEY ST JUNE 21, 11.00



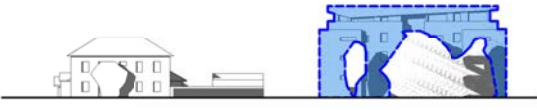
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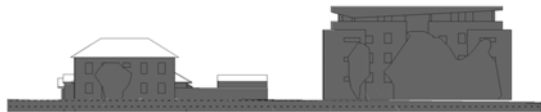
5 OXLEY ST JUNE 21, 13.00



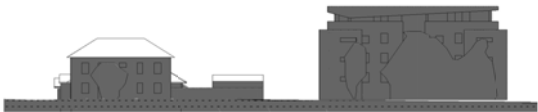
6 OXLEY ST JUNE 21, 14.00



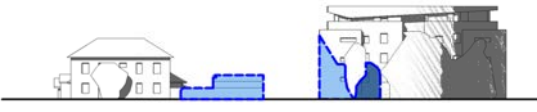
7 OXLEY ST JUNE 21, 15.00



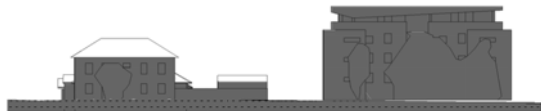
10 OXLEY ST MARCH 20, 09.00



11 OXLEY ST MARCH 20, 12.00



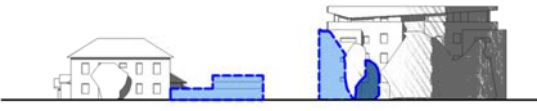
12 OXLEY ST MARCH 20, 15.00



14 OXLEY ST SEPTEMBER 22, 09.00



15 OXLEY ST SEPTEMBER 22, 12.00



16 OXLEY ST SEPTEMBER 22, 15.00



Note: Objectives and Criteria not relevant to a Planning Proposal level application have been omitted.

	OBJECTIVE	DESIGN CRITERIA		PROPOSED	COMPLIANCE	
Natural Ventilation	Objective 4B-1 All habitable rooms are naturally ventilated			All habitable rooms are naturally ventilated.	✓	
	Objective 4B-2 The layout and design of single aspect apartments maximises natural ventilation			All single aspect apartments are laid out to ensure natural ventilation is maximised. Habitable rooms are located along facades with large windows or doors facing accessible balconies. Building indentations are wide to allow effective air circulation but not at the expense of occupant privacy. Apartment depths are limited to assist in good natural ventilation.	✓	
	Objective 4B-3 The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents	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		60% of all apartments are naturally cross ventilated in the first nine storeys of the building. All habitable rooms are located along the building façade with large windows and doors to the perimeter. Apartment depths are limited to assist in good natural ventilation.	✓	
		2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line		N/A	N/A	
Ceiling Heights	Objective 4C-1 Ceiling height achieves sufficient natural ventilation and daylight access	Measured from finished floor level to finished ceiling level, minimum ceiling heights are:		All proposed apartment ceiling heights comply with the Design Criteria.	✓	
		Minimum ceiling height for apartment and mixed-use buildings				
		Habitable Rooms	2.7m			
		Non-Habitable	2.4m			
		If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use			
Apartment Size and Layout	Objective 4D-1 The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity	1. Apartments are required to have the following minimum internal areas:		All apartments exceed the minimum internal areas specified.	✓	
		Apartment Types				Minimum Internal Area
		Studio				35m³
		1 bedroom				50m³
		2 bedroom				70m³
		3 bedroom				90m³
		The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each. A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each.				

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	OBJECTIVE	DESIGN CRITERIA	PROPOSED	COMPLIANCE		
		2. Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms	All habitable rooms have a window to an external wall with a total minimum glass area greater than 10% of the floor area of the room. No daylight or air is borrowed from other rooms.	✓		
	Objective 4D-2 Environmental performance of the apartment is maximised	1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height.	Proposed habitable room depths comply to the Design Criteria.	✓		
		2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	The majority of apartments achieve the numerical Design Criteria of Objective 4D-2.2 whilst all apartments are designed to achieve the overall objectives. Apartments typically have open plan living spaces with a maximum room depth of 8m measured from the nearest window to the front of the rear kitchen joinery.	✓		
	Objective 4D-3 Apartment layouts are designed to accommodate a variety of household activities and needs	1. Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² (excluding wardrobe space)	All master bedrooms have a minimum area of more than 10m2, with generous additional robe allowances, with other bedrooms typically 9m2 or more.	✓		
		2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	All bedrooms have a minimum dimension of 3m excluding wardrobe space.	✓		
		3. Living rooms or combined living/dining rooms have a minimum width of: • 3.6m for studio and 1 bedroom apartments • 4m for 2 and 3 bedroom apartments	Proposed living rooms or combined living/ dining rooms comply with the Design Criteria and are planned to be easily furnished with desirable and useable layouts.	✓		
		4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	N/A	N/A		
	Private Open Space and Balconies	Objective 4E-1 Apartments provide appropriately sized private open space and balconies to enhance residential	1. All apartments are required to have primary balconies as follows:	All apartments have minimum useable depths or greater than the numerical figures under objective 4E-1. All apartments have minimum balcony areas greater than the numerical figures under objective 4E-1. All proposed balconies provide high levels of amenity and useability; they are well located relative to interior habitable spaces for seamless indoor-outdoor living.	✓	
			Dwelling type			Minimum Area
Studio			4m ²			-
1 bedroom			8 m ²			2
2 bedroom			10 m ²			2m
3+ bedroom			12 m ²			2.4m
The minimum balcony depth to be counted as contributing to the balcony area is 1m			N/A	N/A		

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	OBJECTIVE	DESIGN CRITERIA	PROPOSED	COMPLIANCE
Common Circulation and Spaces	Objective 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments	1. The maximum number of apartments off a circulation core on a single level is eight	The maximum number of eight apartments off a circulation core on a single level is only exceeded on levels 5 & 6, with nine apartments proposed. This is considered acceptable as it is below the maximum of 12 apartments off a circulation core on a single level, where Design Criteria 1 of 8 cannot be achieved. Apartments per core are as follows: L 2 9 L3- 4 8 L5-6 9 L7 5 L8-11 4 Good daylighting and natural ventilation are proposed for all common circulation spaces. The central circulation corridor is naturally lit from both ends and is designed to be naturally ventilated on Levels 4-11.	✓
		2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	Two (2) lifts have been provided for 68 apartments.	✓



