Urban Design Report

28-34 Victoria St & 23-27 George St, Burwood

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Retail frontage along Victoria Street

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Quality Assurance

Reviewed by
Michael Harrison
Urban Design and Planning Director

Date
25 October 2017

This document is for discussion purposes only unless signed.

Aerial view looking south.

Executive Summary

The amalgamated site at 28-43 Victoria Street and 23-27 George Street provides the opportunity to fulfil the Metropolitan plan for Growing Sydney's goal to work with Council to provide capacity for additional mixed-use development in Burwood including offices, retail, services and housing. The opportunity for a through site link and space on the site offers a unique public benefit to Burwood town centre.

Purpose of this Report

This report has been prepared by Architectus for the site at 28-34 Victoria Street and 23-27 George Street, Burwood.

To support the planning proposal for the subject site, an urban design analysis and concept plan has been developed demonstrating the future potential of the site, ensuring adequate building separation and assessing solar impacts on the site and neighbouring properties.

To demonstrate that the subject site is feasible, a detailed architectural concept has been prepared that provides for ground level street address, non-residential uses in a podium, residential uses above, a mid-block through site link and open space.

Report objectives

The objectives for this report are to:

– Understand and present the site's strategic planning context, local character and existing planning controls.

– Demonstrate the potential of the site to consolidate the future role of Burwood Town Centre in the sub-region as the primary urban centre.

– Identify appropriate urban design principles for the site; and

– Prepare a master plan and indicative architectural concept for the site that demonstrates the development potential of the site and the most appropriate built form and public domain benefits.

The site

The site has a rectangular shape with a dog-leg, which allows vehicular and pedestrian access from two street frontages. The site fronts Victoria Street to the north, and George Street to the south. It is situated adjacent to, and across from the regional anchor of Westfield Shopping Centre in the north-eastern part of the main commercial and retail area of the town centre.

At present the site is occupied by four (4) 3-storey walk-up apartment buildings above at grade car parking, totalling approximately 71 dwellings. To the south, similar building typologies surround the site. On Victoria Street, to the west is a 20 storey apartment development with 4-storeys of commercial tenancy, and to the east is an 8-storey government housing development. On George Street, to the west there is a 20 storey residential building under construction, and to the east a 3 storey residential above ground level parking.

Currently there is a 20 storey approved DA on the 23-27 George Street site.

Strategic context

– Burwood is identified as a Strategic Centre. Other Strategic Centres include Chatswood, St Leonards, Green Square, Rhodes and Bondi Junction.

– Burwood is centrally located between Central Sydney and Sydney's second centre, Parramatta and has been identified as priority precinct. It is only a 15 minute express train ride in each direction.

– The Metropolitan Plan for Growing Sydney provides the following action for the Burwood Centre: "**Work with Council to provide capacity for additional mixed-use development in Burwood including offices, retail, services and housing**".

– Burwood provides a retail, services and entertainment focus for the western part of the Central subregion, where Strategic Centres are more sparse than in other subregions. Sydney Olympic Park is the closest Strategic Centre, but does not have the same attractions or catchment as Burwood.

– Burwood has excellent rail connectivity and high rail patronage – 35.9% of people living in the Burwood LGA travel to work by train or bus, compared to 19.6% of people living in the Greater Sydney area (2011 Census data, Profile.id).

Built form and the hierarchy of centres

– Central Sydney is the primary focus for infrastructure and jobs. The planning controls in the City allow for buildings up to 235m (75 residential storeys), with this height control currently under review for higher buildings up to 100 storeys.

– Parramatta: In Sydney's second CBD, Council and the State Government have provided initial support for a Planning Proposal to amend the controls to allow for a 90 storey (280m) development in Parramatta Square.

Highlights of the proposal

The subject site is ideally suited to more intensive uses being located in a strategic centre and in close proximity to the Burwood train station.

Key highlights of the proposal include:

– A consolidated site offers the opportunity for a well-considered proposal which would not be possible without consolidating sites, and which optimises building separation and public benefit;

– A mid-block through site link with direct sight lines between Victoria and George Streets can be delivered as part of the proposal and will offer excellent pedestrian amenity;

– A proposed vibrant mix of retail to activate the street frontage. The opportunity for retail at the rear of the Victoria Street sites to open onto a landscaped open space providing a new public domain benefit for the town centre.

– Taller more slender towers with wide separation distances maximise view sharing and minimise bulk on the skyline

– The Proponent will allocate 10% of proposed dwellings for acquisition by first home owners only. They will also be offer delayed settlement and reduced deposits.

Master Plan data

Site Area	5,450m²
Overall FSR	8.5:1
Non-residential FSR	1.9:1
Residential FSR	6.6:1
Non residential GFA	10,297m²
Residential GFA	35,908m²
Total GFA	**46,205m²**

Part 1.0

Introduction

Burwood is a strategic centre located between Strathfield and Ashfield within 20mins away from Central Sydney by train.

1.1 Context

OVERVIEW OF THE REGIONAL, URBAN AND LOCAL FEATURES TO PROVIDE AN INITIAL UNDERSTANDING OF THE SITE AND SURROUNDING CONTEXT.

1.1.1 Regional Context

The site is located on Victoria Street and George Street in Burwood, an inner-west suburb of Sydney approximately 12km west of Sydney CBD.

At a metropolitan scale the site is located within close proximity to the major centre of Burwood and adjoins the WestConnex Corridor, an important corridor connecting Parramatta and Global Sydney. The Plan for Growing Sydney has identified Burwood as a Strategic Centre with the focus on providing capacity for additional mixed-use development including offices, retail, services and housing.

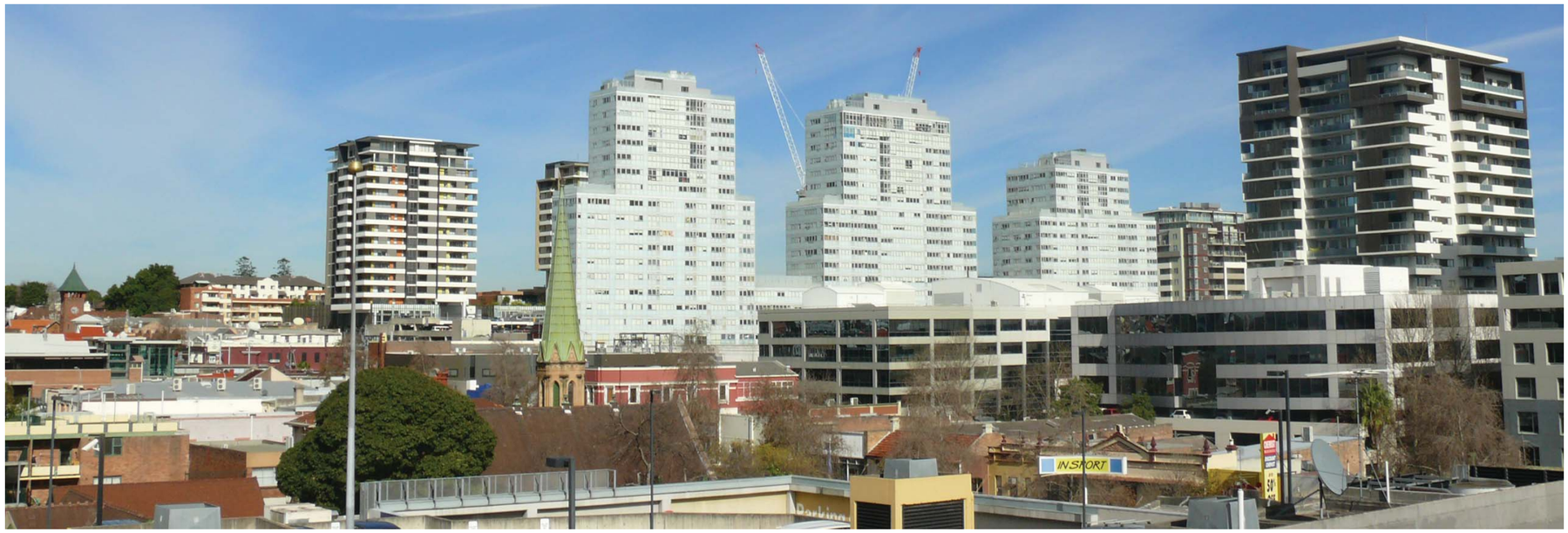
A range of important regionally and nationally significant institutions and precincts are situated within close proximity from the site, including Sydney Olympic Park, Australian Catholic University, Strathfield Campus, Sydney Markets and Tafe Western Sydney Institute.

The site is located north of Burwood railway station, which provides regular services to the CBD (within 15 minutes). Further to the west Strathfield Train Station, which is one of the most interconnected railway stations in Sydney, providing connections to the Bankstown, Inner-West, Southern, Northern, Western and Olympic Park suburban lines; and the Southern Highlands, Blue Mountains, Newcastle & Central Coast inter-city lines. Countrylink, a national train service connecting to Melbourne, Brisbane, Canberra and many other regional locations on the east coast of Australia, also services Strathfield station.

The entrance to the M4 is located to the west of the site, intersecting with Parramatta Road, which is the primary East- West movement corridor of Sydney. The delivery of M4 east, expected to open in 2019, will extend the existing M4 Motorway from Homebush to Haberfield, bypassing Parramatta Road and connecting to City West Links. The new extension will connect at the Concord Road intersection, and is predicted to accommodate an over 67,000 vehicles per day over three lanes of traffic.

KEY

- Arterial Roads
- Secondary Roads
- Railway Lines
- Train Stations



Context

1.1.2 Urban Context

Burwood has a mixture of residential, commercial, and light industrial developments. The main shopping strip runs along Burwood Road, beside Burwood railway station. Westfield Burwood is a large regional shopping centre, north of the railway line, on Burwood Road opposite Burwood Park. Burwood Plaza is a smaller shopping centre on Railway Parade, south of the railway line.

High rise residential and commercial buildings are also found in surrounding streets and along the railway line. Commercial and light industrial developments are located along Parramatta Road.

The Burwood Development Control Plan (BDCP) has divided the Burwood Town Centre (BTC) into 4 zoning areas;

- Commercial Core;
- Middle Ring Area;
- Perimeter Area; and
- Transition Area.

The Commercial Core and Middle Ring Areas are the inner parts of the BTC. It is envisaged that much of the commercial and retail development will be concentrated in these Areas. The objectives for these areas are to develop human-scale street environments and to facilitate higher density development while maintaining the existing character of street development fronting Burwood Road.

The Perimeter and Transition Areas are located around the boundary of the BTC. Residential development is expected to predominate in these Areas as it is not restricted.

Burwood Town Centre - site is part of the Middle Ring area of the Centre.

1.1.3 Site Context

Site location is between Wesfield and Burwood rail station.

34 Victoria Street Burwood

34 and 36-38 Victoria Street Burwood

Looking east along Victoria Street Burwood

Indicative visualisation of the proposed publicly accessible courtyard within the development surrounded by retail.

1.2 Planning Review

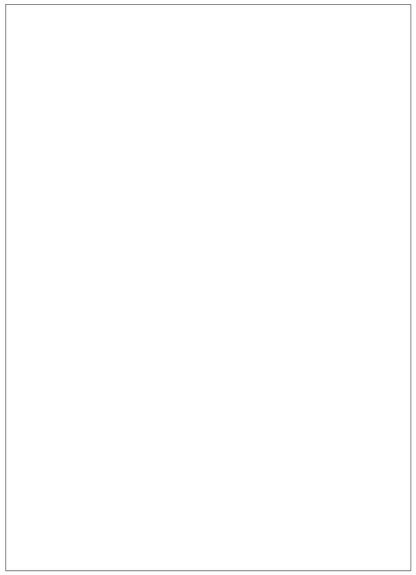
1.2.1 Literature Review

The Municipality of Burwood (LGA) has numerous planning documents to enable a strategic plan for future growth of the Regional area and Burwood Town Centre. Outlined below are prominent documents affecting state, regional and local planning policy and decision-making. Like other LGAs, a Local Environmental Plan (LEP) and Development Controls Plan (DCP) provides the foundation and framework in guiding future development.

A suite of strategic planning and research studies have been undertaken in recent years to inform and support the development of the regional area and the key strategic centres in particular. The implications of each of these documents has been drawn out in the following sections.

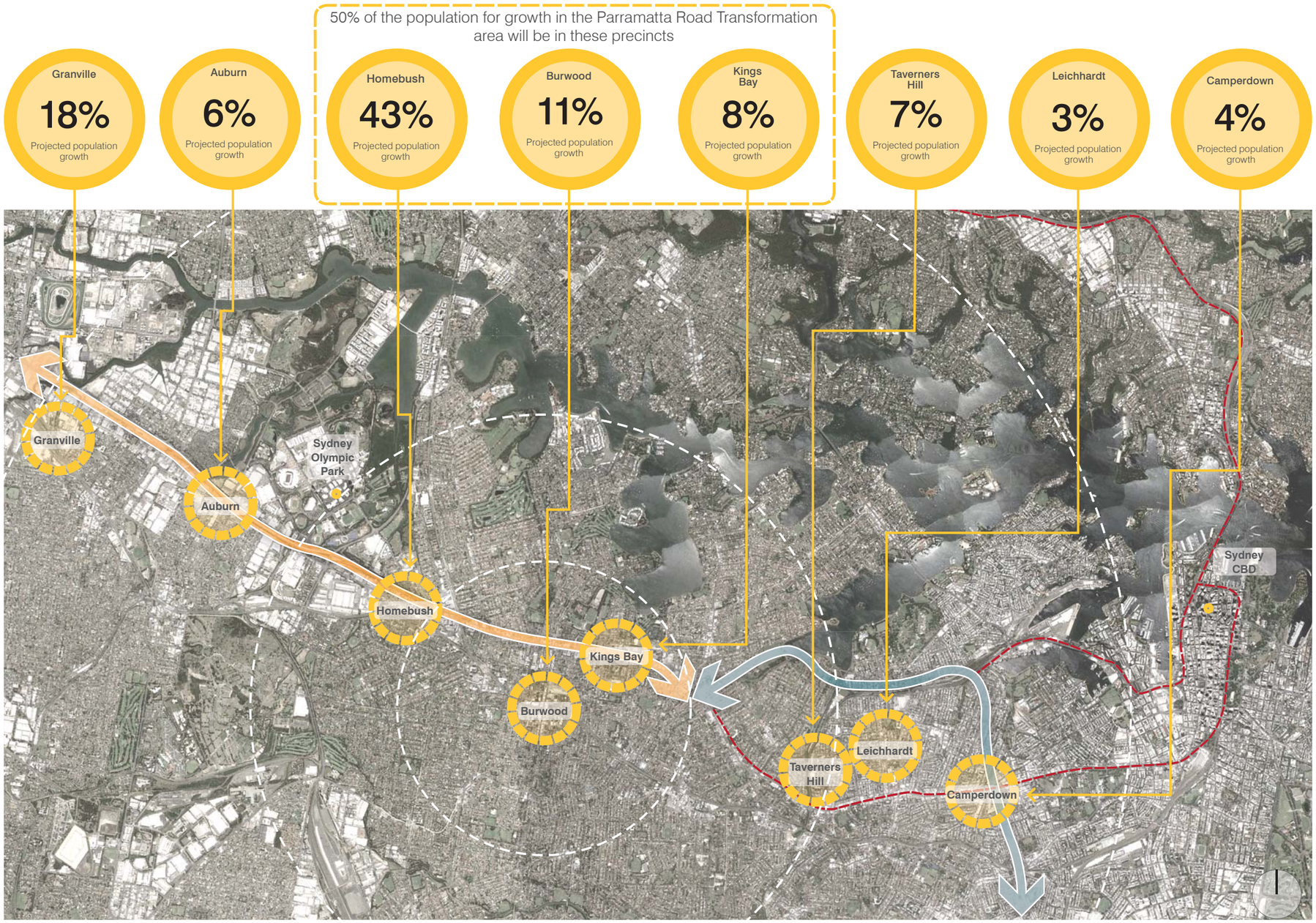
A Plan for Growing Sydney
– Department of Planning & Environment

Parramatta Road Corridor Urban Transformation Strategy
– UrbanGrowth



Burwood Local Environmental Plan 2012
– New South Wales Government

Burwood Development Control Plan 2013
– Burwood Council



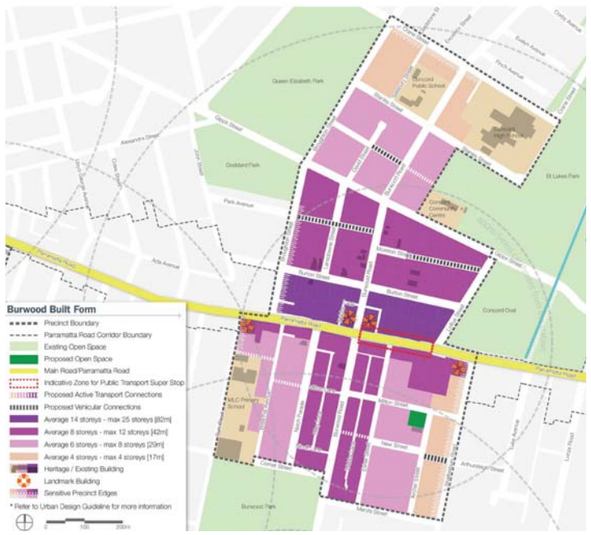
Parramatta Road Urban Transformation Precincts

1.2.3 Parramatta Road Urban Transformation

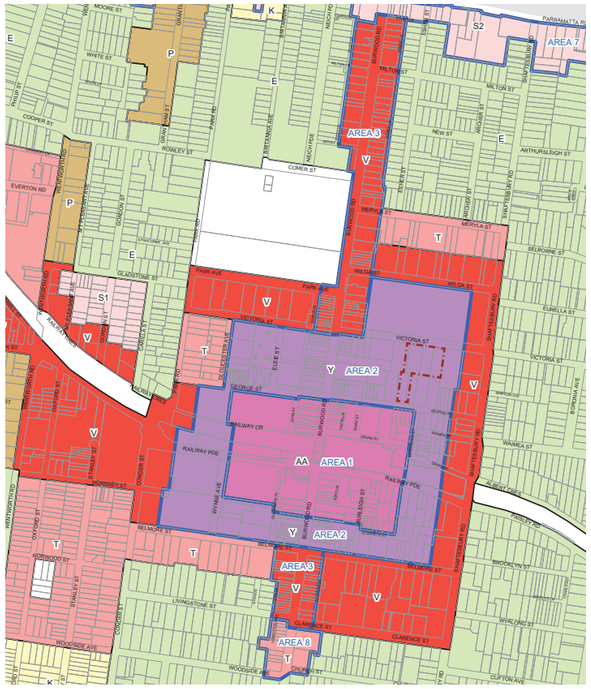
Western Sydney is currently going through major urban transformation. In 2012, the NSW Government released a State Infrastructure project to provide better and quicker connectivity between Western Sydney and Botany Bay, in order to support Sydney's urban freight task. The WestConnex project will encourage urban revitalisation throughout the corridor, including Burwood Town Centre Precinct.

The vision for Burwood Road is to create a new urban precinct that is supported by high density residential, commercial and retail activity. With the future influx of population growth expected in the area, it is anticipated that by 2031, the Burwood Precinct (located north of Burwood Town Centre) could accommodate 11% of the overall population in the Parramatta Road Urban Corridor.

As outlined in the Draft Parramatta Road Urban Renewal Strategy, Burwood Precinct's potential long term evolution (2050+) is calculated to be 4,300-6,400 new dwellings, with the precinct ear-marked to have up to 25 storeys. Although this precinct does not extend to the subject site, the strategy does mention that renewal in this precinct can support the growth of the existing Burwood Town Centre.



1.2.4 Burwood LEP 2012



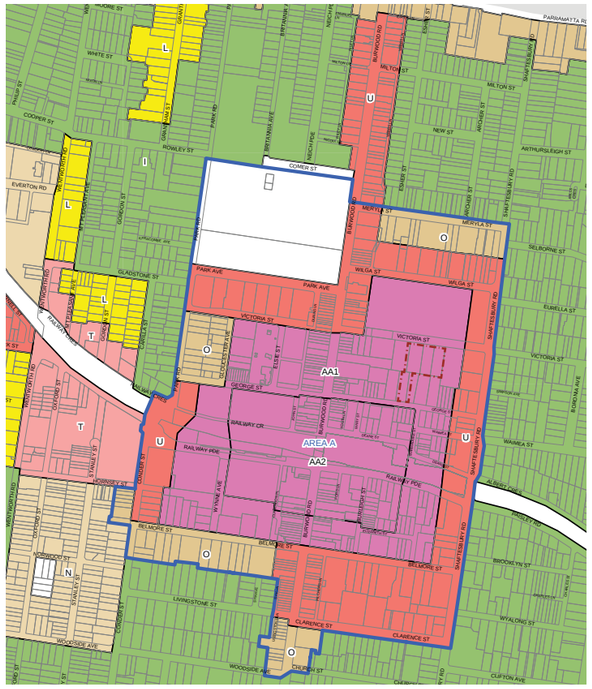
01_Floor Space Ratio

E	.55	T	2
K	.85	U	2.5
N	1	V	3
P	1.2	Y	4.5
S1	1.5	AA	6
S2	1.75		

Floor Space Ratio

The BLEP 2012 applies a **FSR control of 4.5:1** to the subject site.

The properties to the south (6:1) which is located within the Commercial Core offer higher FSR control and properties to the east (3:1) which area located within the Transition Zone offer a lower FSR control.



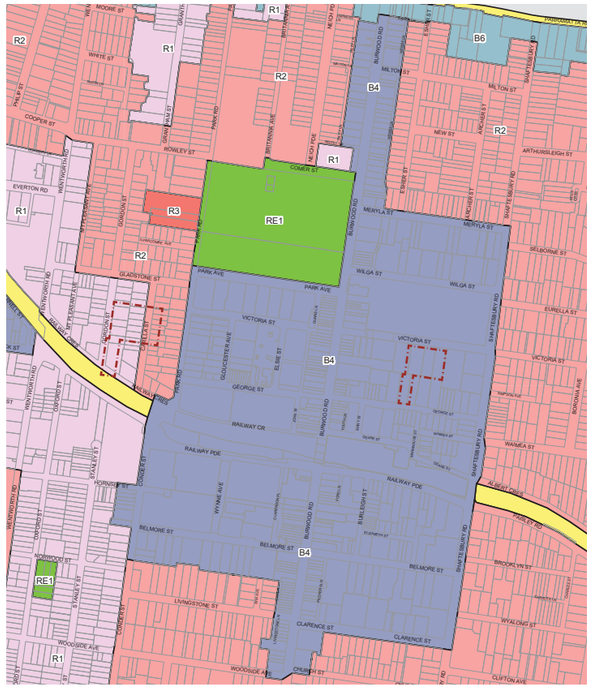
02_Building Height

I1	8.2	Q	20
J	8.5	T	26
K	10	U	30
L	11	AA1	60
N	14	AA2	70
O	15		

Building Height

The site has been allocated a **maximum building height of 60m**, which is approximately 19-20 storeys.

The areas to the south of the site have a maximum building height control of 70m, while the north and east of the site have a reduced building height of 30m.



03_Land Use Zoning

B1	Neighbourhood Centre	R1	Low Density Residential
B2	Local Centre	R2	Medium Density Residential
B3	Commercial Centre	RE1	Public Recreation
B4	Mixed Use	RE2	Private Recreation
B5	Business Development	RU4	Special Activities
IN2	Light Industrial	SP2	Infrastructure

Land Use Zoning

The BLEP 2012 applies a Mixed Use (B4) classification to the site, and throughout the entire town centre boundary. The majority of the surrounding areas are deemed as medium density residential along the outer boundaries of Burwood Town Centre.

According to the BLEP 2012, the objective for Mixed Use is to integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

04_Building Height Plane (BHP) Map

	BHP Line Height	*BHP Projected Angle*	*BHP General Orientation*
A	1.0m	54°	East of BHP line
B	1.8m	54°	East of BHP line
C	1.0m	36°	West of BHP line
D	1.0m	33°	North of BHP line
E	1.8m	33°	North of BHP line

Building Height Plane

The objectives of the Burwood BHP 2012 are; to limit building heights to facilitate adequate solar access to land adjoining the Burwood Town Centre, to provide a transition in heights to establish a height hierarchy which reduces heights and land use intensity towards the Burwood Town Centre boundary, and to mitigate any adverse effects on the amenity of existing and future residents living adjacent to the Burwood Town Centre.

There is no justification for the mismatched projection angles. For example, **Shaftesbury Rd (36° projection)** compared with Park Rd (54° projection).

1.2.5 Burwood DCP 2012 Summary

Heritage

The diagram above shows the heritage listed items and conservation areas within the town centre boundary as per Burwood LEP.

Street Front Setbacks

A **street front setback of 3m** is required along both Victoria Street East and George Street.

The DCP states;

- Setback areas are to be free of any projection or encroachments, except for approved awnings and at-grade landscape.
- All ground level setbacks are to be finished at-grade with Council's footpath and finished with materials to match Councils current public domain requirements.

Street Secondary Setbacks

Any development in the Commercial Core and Middle Ring Areas that exceeds 15 metres in height, the part of the development above 15 metres must be set back a minimum of **6 metres** from the street front boundary.

Pedestrian Links

As outlined in Council's DCP, the required pedestrian link is located on the adjacent developments west of the site.

This master plan proposes a new location of the pedestrian link and moves the north-south link eastward to define a better mid-way connection to the block. This location provides for a more generous link width which is open to the sky and has a better interface with the adjacent buildings, currently the DCP pedestrian link will have facing blank walls.

This master plan provides an active edge to this lane and a pedestrian entry to the ground floor retail from this lane.

1.2.6 SEPP65 Summary

Any new residential flat buildings proposed on the site will be subject to the requirements of State Environmental Planning Policy No. 65 (SEPP 65), which sets out ten urban design criteria for new build residential flat buildings.

The Apartment Design Guideline (ADG) is the supporting document to this policy which provides clear guidelines for best practice urban design in the development of new apartment buildings. The ADG is divided into three sections:

1. Local Context;
2. Site Design; and
3. Building Design.

The key guidelines of each section, which inform the early stages of a residential development are described in the following pages.

Part 01: Local Context

Building Depth
As a rule of thumb residential flat buildings should be between 10-18 metres internally from glazing line to glazing line. This ensures that satisfactory day lighting and natural ventilation can be achieved.

Building depths beyond 18m may be able to be achieved where appropriate access to light and ventilation can be demonstrated: for example in a corner location.

Building Separation
Building separation is an important factor in achieving high quality amenity. These controls vary depending on the overall height of the buildings in question. The separation dimensions are measured from the outer most edge of the building, i.e. from the balcony edge or the building wall.

Buildings to 12 metres in height (4 storeys)
– 12 metres between habitable rooms/balconies
– 9 metres between habitable rooms/ balconies and non-habitable rooms
– 6 metres between non-habitable rooms

Buildings to 25 metres in height (5 - 8 storeys)
– 18 metres between habitable rooms/balconies
– 12 metres between habitable rooms/ balconies and non-habitable rooms
– 9 metres between non-habitable rooms

Buildings over 25 metres in height (9 storeys and over)
– 24 metres between habitable rooms/balconies
– 18 metres between habitable rooms/ balconies and non-habitable rooms
– 12 metres between non-habitable rooms

Front Setbacks
Front setbacks are determined by the predominant building line established by the street. In denser local centres with non-residential uses at ground level, the setback is generally zero and built to the street edge.

Side and Rear Setbacks
These setbacks are determined by taking into account surrounding context and building relationships so as to respond to street-scape, sunlight, ventilation and privacy issues. These setbacks also help in achieving deep soil zones/ site coverage rations which are usually required under councils landscaping controls.

Part 02: Site Design

Deep Soil Zones
These allow for the natural penetration of storm water into the ground and the provision of substantial landscaping. A minimum of 25% of the open space area should be a deep soil zone.

Open Space
The inclusion of appropriate communal open space in residential developments. The area of common open space should generally be at least between 25 and 30% of the site area.

The minimum area of private open space for each apartment at ground level is 25 m^2, with the minimum dimension in one direction being 4 metres.

Landscape Design
To contribute to the overall amenity of residential developments particularly in regards to privacy, outlook and views. Landscape also greatly contributes to the ecological sustainability of our cities flora, fauna, air and water quality.

Fences and Walls
To allow for the appropriate definition between public and private spaces which encourage a comfortable and humane pedestrian environment. This is particularly important from a safety and security perspective.

Orientation
The optimisation of solar access to residential apartments and open space

Visual Privacy
Visual privacy within a new development protects residents ability to carry out private functions within all rooms and private spaces without compromising views, outlook, ventilation and solar outlook.
Visual privacy relates not only to the dwellings within the new development, but also those existing dwellings surrounding the site.

1.2.7 SEPP 65 Summary

Part 03: Building Design

Building Entry
The building entry should provide a clear identifiable entry point for the development. It should facilitate easy orientation for the visitor and contribute positively to the streetscape and building design overall.

Parking
The parking strategy for the development should take into account the site's proximity to public transport and minimise car dependency where possible.

The development should provide adequate car parking for the buildings users and visitors, and should integrate the location and design of parking into the design of the site and the building.

The impact of on-grade car parking should be minimised and preference to underground parking where possible. Design considerations should ensure that this does not impact the potential for deep soil zones and allows for safe and clear access to building entries.

Vehicle Access
The width of driveways should be limited to a maximum of 6 metres. Vehicle entries should be located away from main pedestrian entries and on secondary frontages.

Apartment Sizes
Apartment sizes are generally determined via a variety of factors including geographic location and market demands.

The Apartment Design Guideline has a number of 'rule of thumb' dimensions and internal areas, including;

- Single aspect apartments should be not greater than 8 metres in depth (from a window).
- The back of a kitchen should be no more than 8 metres from a window.
- The width of through apartments over 15 metres from glazing line to glazing line should be greater than 4 metres in width.

Minimum apartment sizes are approximately:

- 1 bed apartment: 50m^2
- 2 bed apartment: 70m^2
- 3 bed apartment: 95m^2

Apartment mix
Developments should incorporate a variety of apartment types so as to encourage cultural and social diversity. Councils often have desired mix targets.

Balconies
Balconies and private open space should be designed as 'outdoor rooms' so as to contribute usable spaces which contribute to the overall amenity of the living environment. The primary balcony is a natural extension of the primary living space.

Balconies should aim to be a **minimum of 2.4 metres** in depth to allow for outdoor dining, with an minimum of 2 metres in depth.

Minimum balcony sizes based on apartment area are given as follows: -

- 1 bed apartment: 6-10m^2
- 2 bed apartment: 11-33m^2
- 3 bed apartment: 24m^2

Ceiling Heights
Minimum ceiling heights measured from Finished Floor Level (FFL) to Finished Ceiling Level (FCL) are as follows:

- *Mixed use buildings*
  - Ground floor retail/commercial and for first floor residential/ retail/commercial so as to provide future flexibility 3.3 metres FFL to FCL.
- Residential Flat Buildings
  - 3.3 metres FFL to FCL for ground level in a mixed use area
  - 2.7 metres FFL to FCL for all habitable rooms
  - 2.4 metres FFL to FCL for all non-habitable rooms (2.25 is permitted)

As a rule of thumb this would require at a minimum:

- 4 metre floor to floor for ground level (4.2m desirable)
- 3 metre floor to floor for upper levels at a minimum. (3.2m desirable)

Storage
Some Councils have their own minimum requirements for separate private storage areas, the ADG suggests the following rules of thumb:

- Studio apartments: 6m^3
- One-bed apartments: 6m^3
- Two bed apartments: 8m^3
- Three + bed apartments: 10 m^3

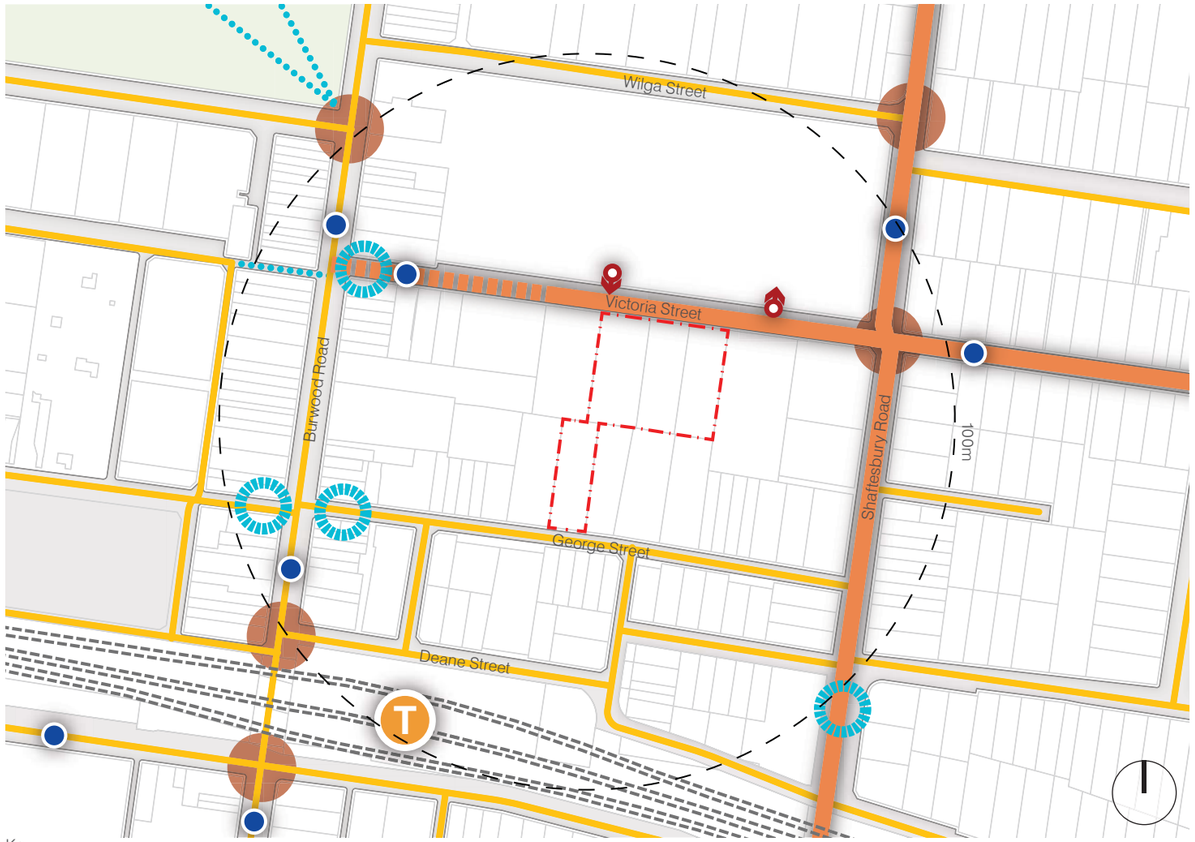
Daylight Access
- A maximum of 10% of the apartments are to be single aspect and south-facing.
- 70% of apartments in a development should receive a minimum of three hours direct sunlight between 9am and 3pm in mid-winter (may be varied to 2 hours in dense urban areas).

Natural Ventilation
- Building depths should be between 10 – 18 metres
- 60% of residential units should be naturally cross ventilated
- 25% of kitchens in a development should have access to natural ventilation.

Part 2.0

Analysis & Design Testing

2.1 Urban Analysis



2.1.1 Movement and Access

The local centre is divided by the east-west railway corridor. The primary vehicular access for the site is located to the east of the property from Shaftesbury Road, which is a heavily traffic arterial road, due to the roads significant function in directing traffic flows into, through, and out of the Burwood Town Centre.

The subject site has two street frontages, Victoria Street and George Street. Vehicular access to site is gained via Shaftesbury Road and Burwood Road to the east and west of site boundary.

Burwood is well serviced by public transport. Rail services are accessible via Burwood Train station located to the south of the site and offers frequent services to the City. The local bus network connects with the rail services and surrounding suburbs within the Inner West LGA.

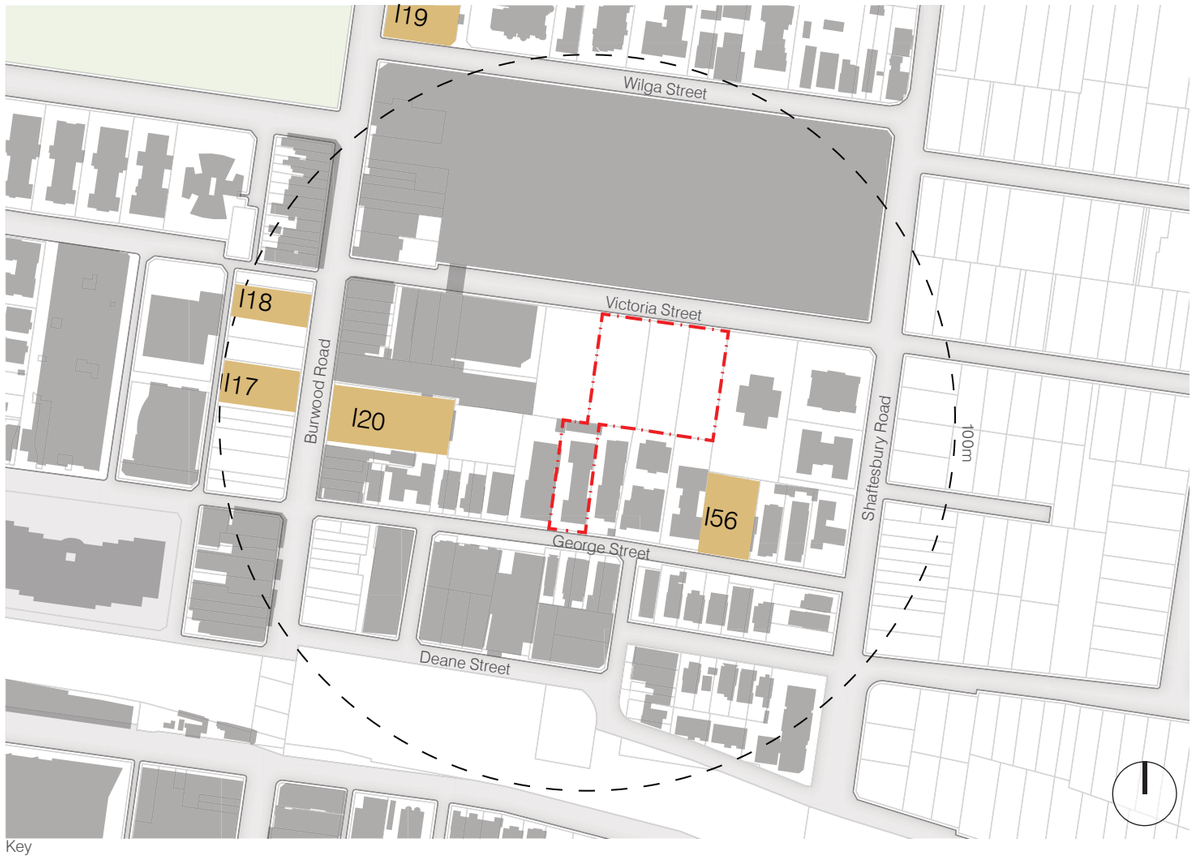
Pedestrian and cycle links through the suburb and local centre are moderate. A number of other factors affect the walkability of the suburb, including a lack of landscaping and separation from heavy traffic volumes along Shaftesbury Road.

2.1.2 Open Space & Vegetation

Burwood Park is a substantial passive recreational open space for the area. Besides the park, there are a limited number of local open spaces and recreation areas within close proximity to the site that provide opportunities for passive and active recreation.

The town centre consists mainly of fine grain commercial and retail development with few available spaces suitable for passive recreation and landscaping. The provisions for landscaped open space is limited to;

- Areas of existing vegetation concentrated within the public domain, open spaces and along street verges.
- Other areas of vegetation are isolated within private lands, typically with the rear gardens of the single-detached residential properties.



2.1.3 Urban grain and heritage

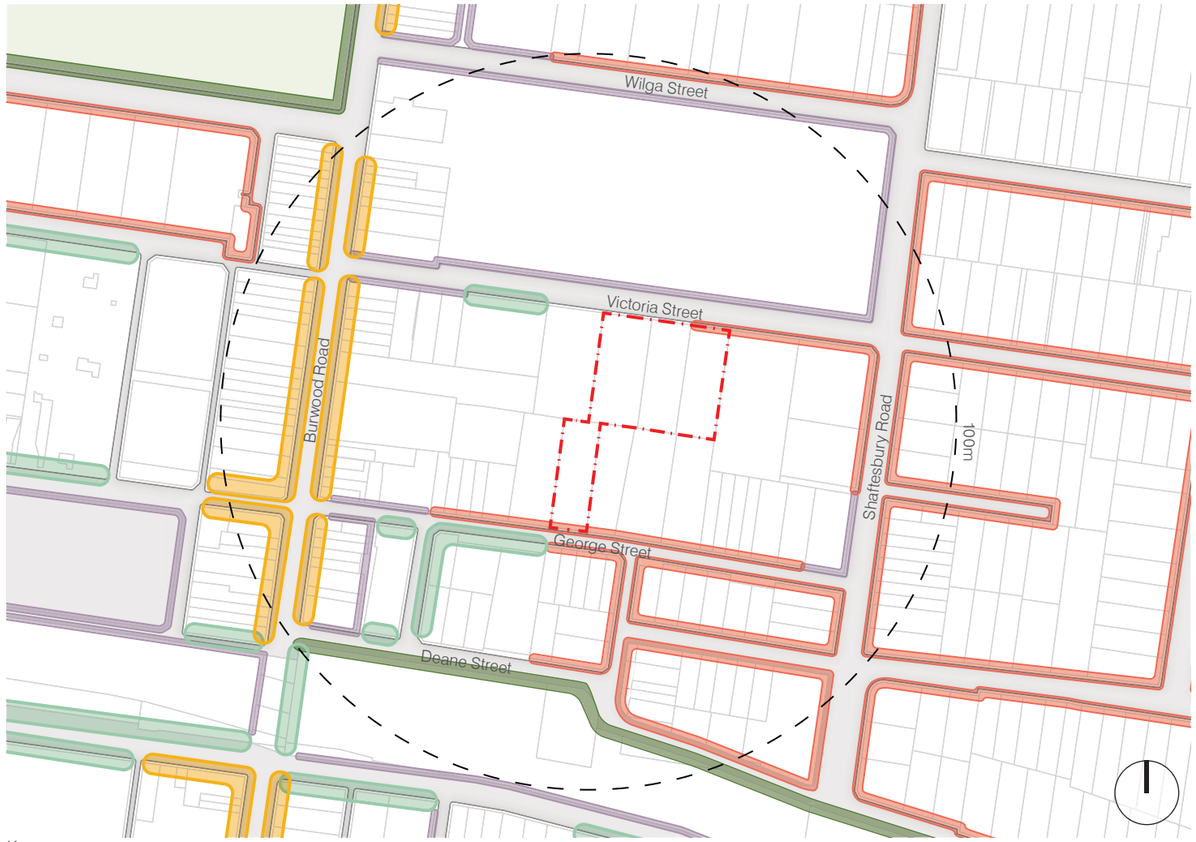
To ensure quality urban centres are preserved it's vital that future developments respect and consider their proximity to Local Heritage Items; not only to conserve these heritage items but also to enrich the diversity and quality of built form around the Burwood local centre.

Burwood has a valued collection of Victorian era buildings that ensure the history and diversity in built form is retained.

The site is well separated from surrounding heritage items.

Some relevant heritage items to note include;

- Victorian Shops—Along Burwood Road (I17 - I19)
- Congregational Church and Church Hall (I20)
- Victorian semi-detached houses (I56)



2.1.4 Edges and frontages

The internalised nature of Westfield Shopping Centre on the northern side of Victoria Street results in an expanse of inactive blank wall spanning the majority of the street block.

These existing features influence the character of the surrounding context, and have a considerable influence on the quality of the pedestrian experience.

An analysis of the street edges and frontages of the site and its immediate context reveals;

- Active frontages are mostly concentrated along Burwood Road through the inclusion of retail frontages and outdoor dining areas fronting the street.

2.1.5 Burwood Context - Heritage items

Relevant local heritage items are listed below and indicated on the adjacent map. A further visual impact study has been provided in the Assessment section.

Key

- Town centre boundary
- Site boundary
- Surrounding Parks and reserves

Heritage Items

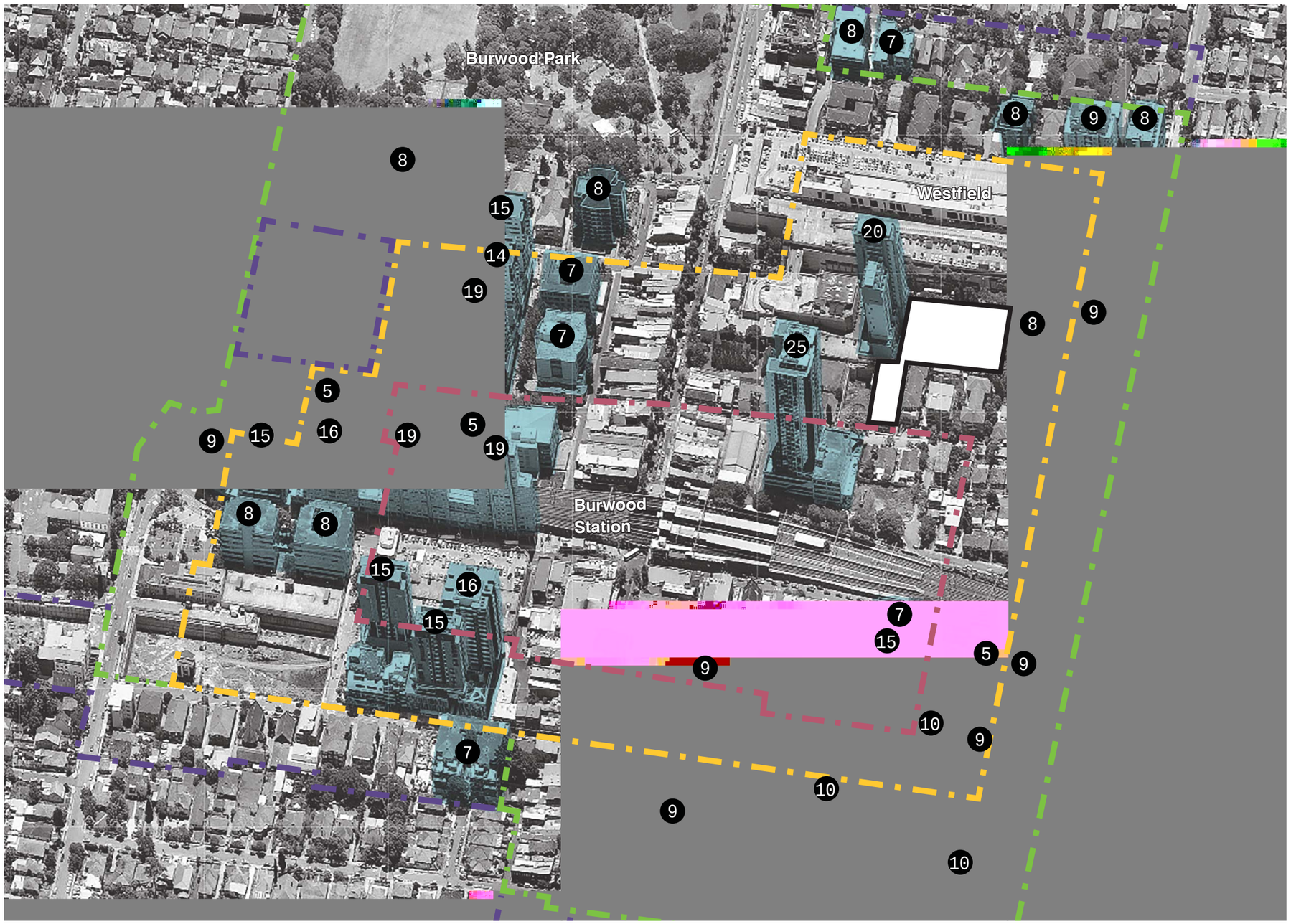
- Local Heritage Items- General

Heritage buildings

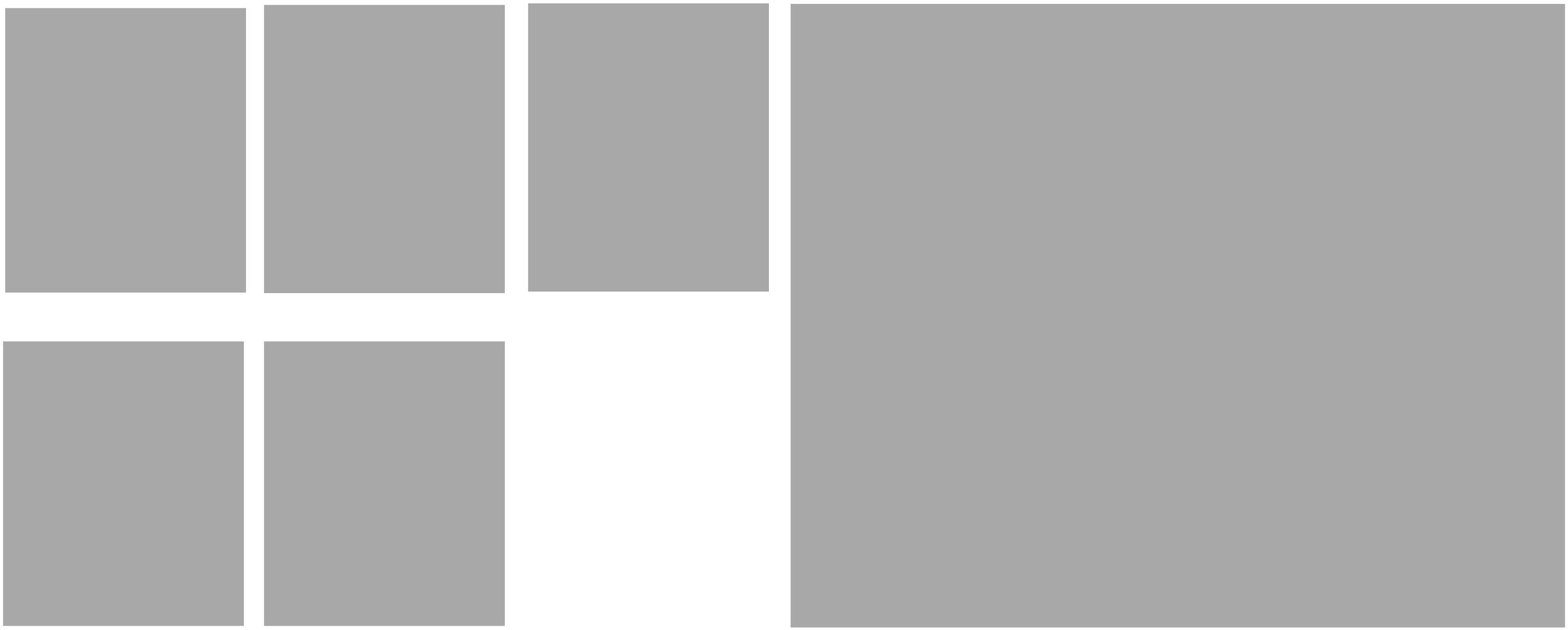
2.1.6 Existing building heights in Burwood

Existing tall building heights in Burwood Town Centre, as indicated in this image, consists of a range of different heights, with the maximum of 25 storeys on the northern side of the town centre.

Directly west of the site is a 20 storey mixed used development. Across George Street to the south-west of the proposal is a 25 storey mixed used development (the tallest existing building in the Town Centre).

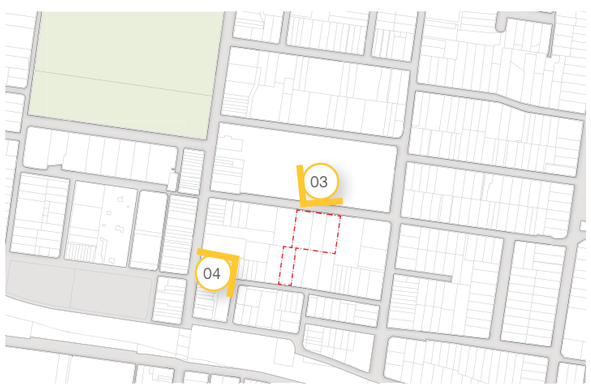


Existing tall building heights in Burwood Town Centre (view looking south), maximum height limits with the town centre at present is equivalent to 25 storeys residential.



View 03- Looking south-west towards the subject site from the westfield roof carpark

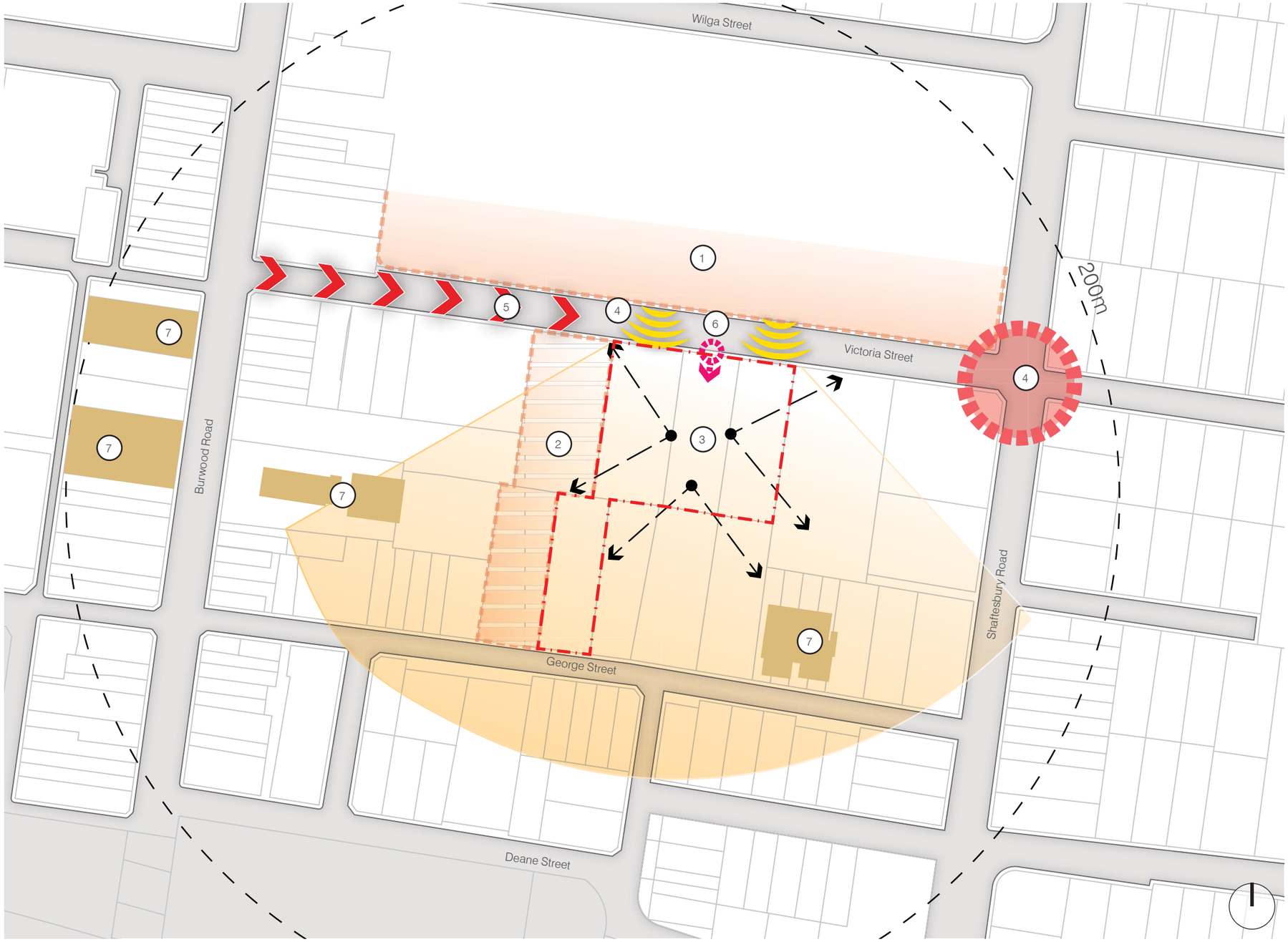
View 04-Looking north-east from George Street towards the neighbouring residential properties



2.1.9 Constraints

Following the urban and context analysis there are several key constraints that have been identified that will inform the preparation of the concept options. They include;

1. Interface: The site fronts a long blank street wall to the north
2. Building Separation: close proximity to neighbouring buildings will require careful consideration in achieving SEPP 65.
3. Amenity: The change in development character and scale will require sensitive transition with neighbouring properties. Potential overshadowing to residential development to the south and overlooking will be investigated.
4. Traffic and Noise: Increased vehicular movement generated by bus stand and driveways from Westfield.
5. Access: Limited vehicular access to the site as Victoria Street is a one-way street off Burwood Road.
6. Parking: Will require consideration to achieve car parking to service the retail offer, and the additional private parking required for future residential development;
7. Heritage: Local heritage items are well separated from the site.



Key
- One-way Traffic
- Inactive Edge
- Residential Edge Conditions
- Heritage Item
- Access Points
- Noise
- Overshadowing
- Overlooking
- Intersections

2.1.10 Opportunities

Following the urban and context analysis there are several key opportunities that will inform the preparation of the concept options. They include;

1. Public Transport: Close proximity to the bus services and Burwood train station within a 200m catchment from the site
2. Amenity: Close proximity to the town centre within a 100m catchment from the site;
3. Streetscape: Opportunity to provide an active edge along Victoria Street, to make a more positive contribution to the local character.
4. Views: Potential for unobstructed views to the north and east of the site, featuring distant views of Sydney City skyline and regional areas to the west and south of Burwood;
5. Vegetation: Significant trees along the north of the site provide visual separation and acoustic screening between the site and the blank street wall and traffic noise.
6. Potential to amalgamate the four (4) sites to achieve a more sensitive development solution for the town centre.
7. The opportunity to provide a mid-block pedestrian link and an area of open space on the site.

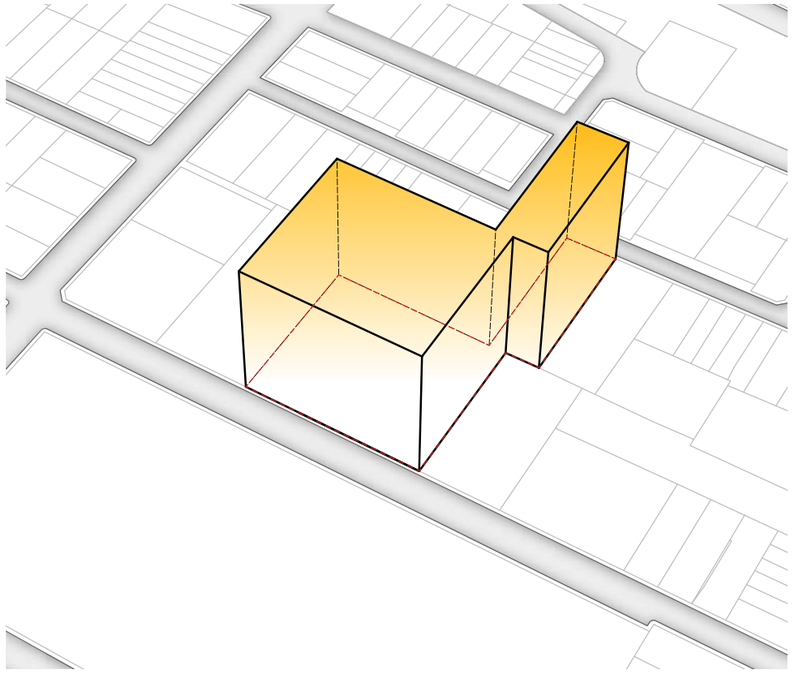
Key
- Pedestrian Access
- Proposed pedestrian link
- Landscaped Streetscape
- Local Retail Amenity
- Views to North
- Views to East
- Views to South West
- Mature Trees
- Bus Stops

Part 3.0

Developing the Master Plan

3.1 Design Parameters

The following diagrams demonstrate the building envelopes generated by applying the Burwood 2012 DCP controls.

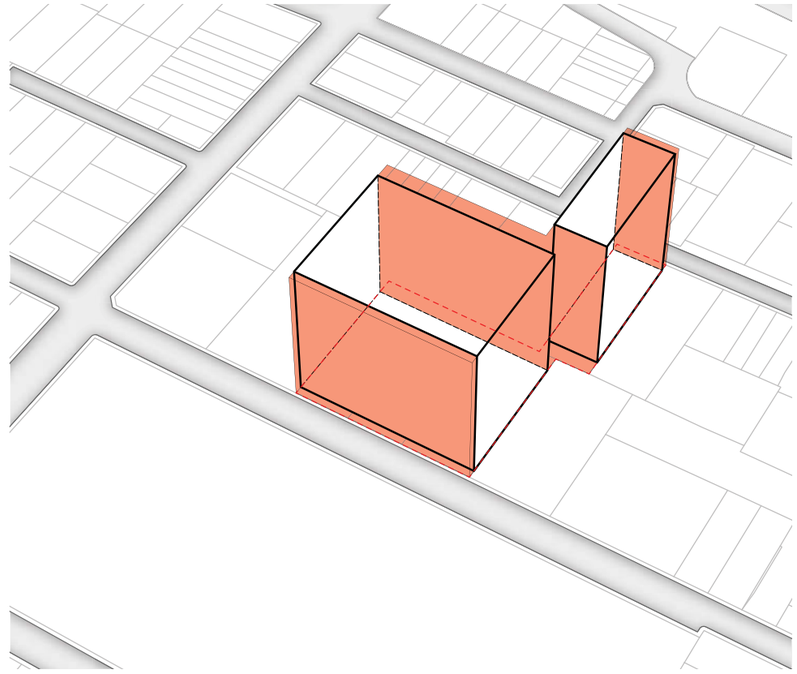


Key

Subject Site

Building Height

– As outlined in the BLEP, the site has a maximum height controls of 60 metres



Key

Subject Site

Building Setbacks

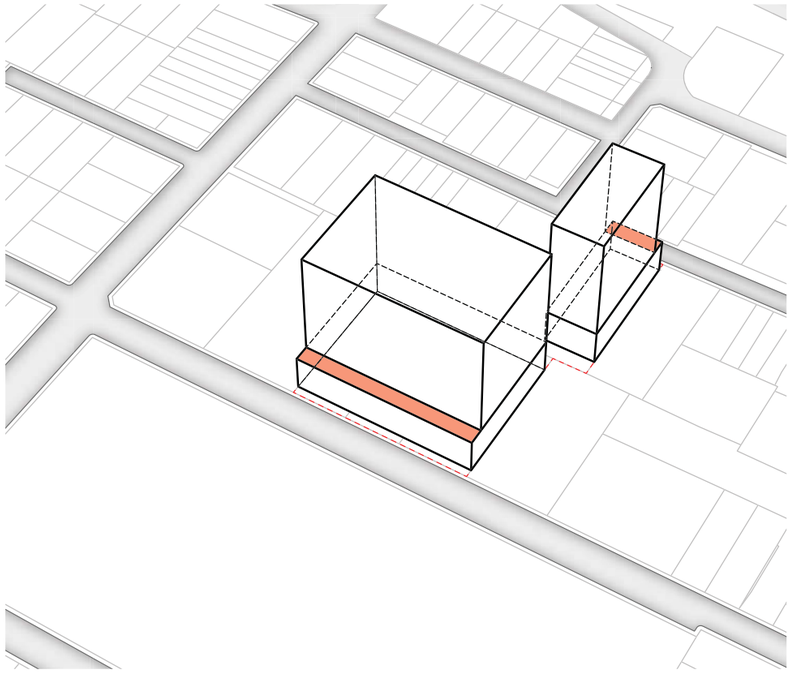
Front Street Setback

– 3 metre building setbacks from the street front are taken from the street boundary.

Side and Rear Setbacks

– 0 metre side setback.

– to be compliant with SEPP 65 requirements.



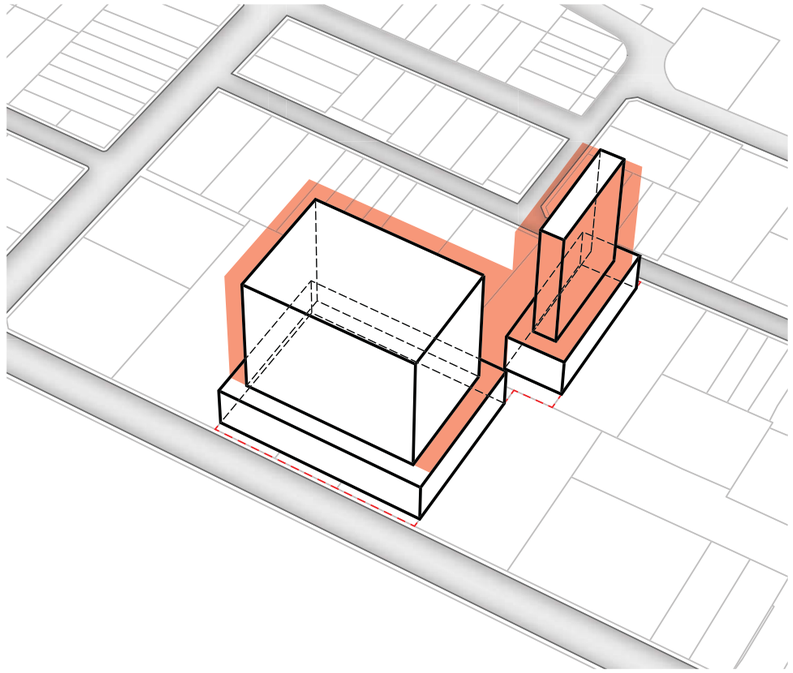
Key

Subject Site

Building Setbacks

Secondary Street Setback

– 6 metre building setback from the street front boundary above 15 metres.



Key

Subject Site

Building Separation

The BDCP requires the building separation to comply with SEPP 65 - Design Quality of Residential Flat Development. The separation dimensions are measured from the outer most edge of the building, i.e. from the balcony edge or the building wall .

Buildings over 25 metres in height (9 storeys and over)

– 24 metres between habitable rooms/balconies

– 18 metres between habitable rooms/ balconies and non-habitable rooms;

– 12 metres between non-habitable rooms;

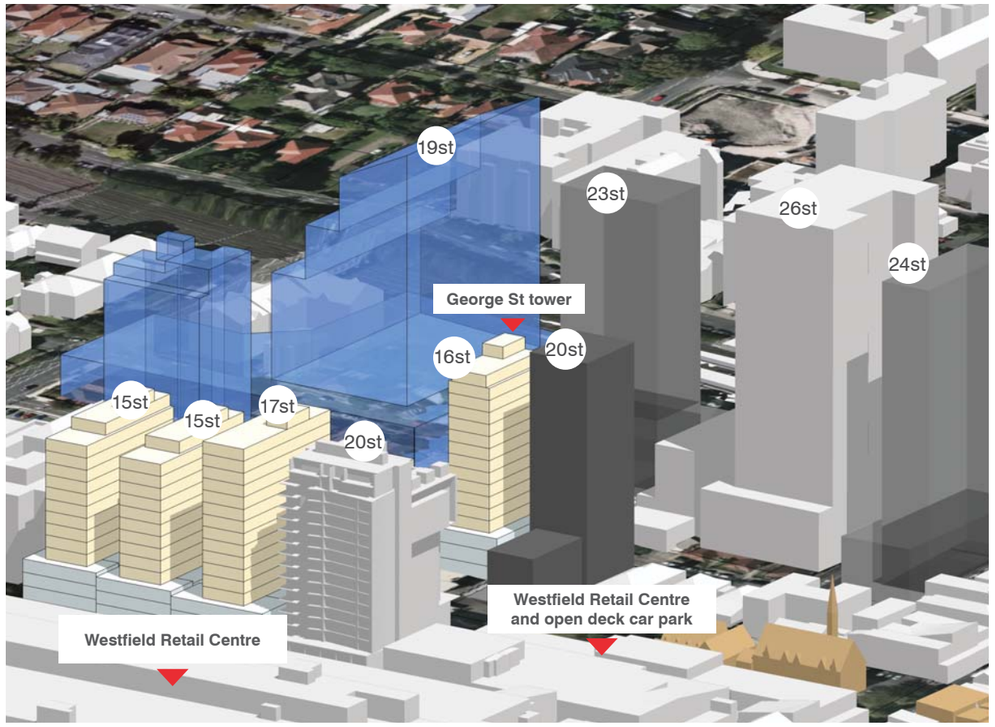
3.2 DCP Complying built form

IF SITES WERE DEVELOPED INDIVIDUALLY IN ACCORDANCE WITH THE DCP CONTROLS, THE OUTCOME WOULD RESULT IN UNACCEPTABLE TOWER SEPARATION

The likely development that could be achieved under the existing DCP controls over the four sites comprising 28-34 Victoria Street and 23-27 George Street has been modelled, with the assumption that sites are not amalgamated.

In complying with the DCP, the resultant built form and urban design outcome has the following weaknesses:

- Unacceptable tower separation
- Visual Tower Crowding on the skyline. The oblique view generates a continuous tower slab effect which obscures views to a from surrounding sites
- No through site link can be achieved
- No part of the site can be allocated to open space.
- Overshadowing to the developments to the south.
- Outlook poor to the developments to the south.



Perspectives

Plan view

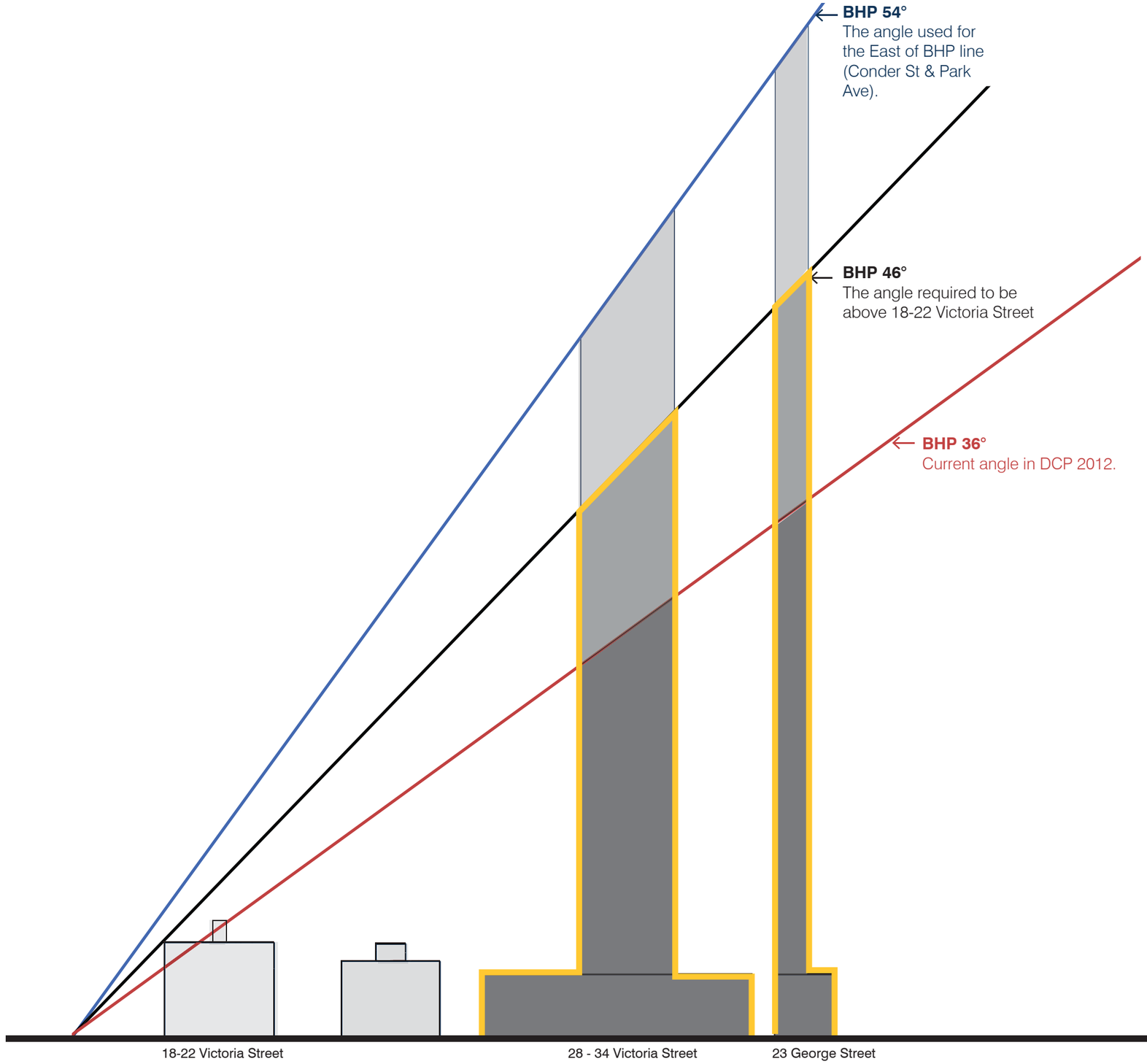
Key

- Proposed residential uses
- Proposed commercial uses
- Proposed retail uses

Complying scheme summary

Height of building:	55 metres
Storeys:	15, 16, & 17 storeys
Total commercial GFA:	8,136m^2
Total residential GFA:	16,493.2m^2
Total GFA:	24,629.2m^2
Total site area:	5,450m^2
FSR:	4.5:1

3.3 Building height plane



2010 BLEP: 4.3A Building height planes: The Building Height Plane (BHP) objectives include;

- to limit building heights to facilitate adequate solar access to land adjoining the Burwood Town Centre,
- to provide a transition in heights to establish a height hierarchy which reduces heights and land use intensity towards the Burwood Town Centre boundary,
- to mitigate any adverse effects on the amenity of existing and future residents living adjacent to the Burwood Town Centre.

Building Height Plane options

1. The current building height plane for the subject site is 36° set from the eastern boundary of Shaftesbury Road at a 1m datum.

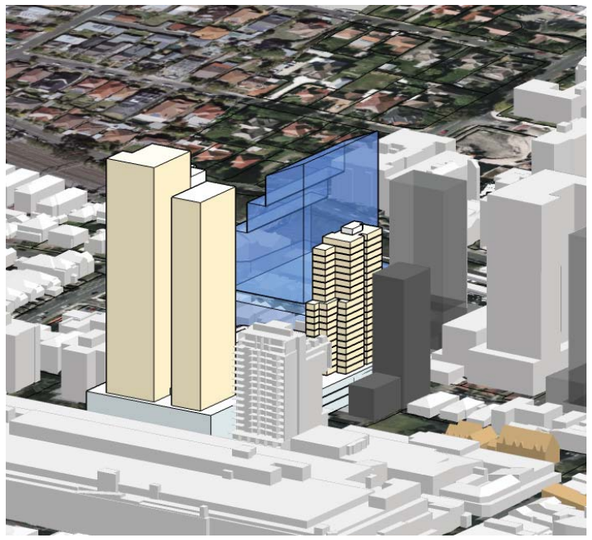
2. **Preferred BHP angle: 46°** is the angle generated by the existing building at 1-22 Victoria street which breaches the eastern Burwood Height Plane. As this building sets a height precedent, it is considered to be an appropriate angle to use in determining acceptable building heights for this proposal.

3. To ensure all possible options were considered, BHP A 54° (along Park Rd) was applied to the site however this option isn't appropriate in relation to the subject sites existing conditions.

3.4 Options tested summary

STARTING WITH A BASE CASE DESIGN SUPPLIED BY THE CLIENT; ARCHITECTUS BEGAN SIGNIFICANT BUILT FORM TESTING IN AN EFFORT TO FIND THE MOST APPROPRIATE DESIGN FOR THE SITE.

AS A RESULT OF THIS TESTING; OPTIONS 5 & 7 WERE FURTHER TESTED TO IMPROVE AMENITIES AND MINIMISE OVERSHADOWING.



Option 1: Original Client Scheme

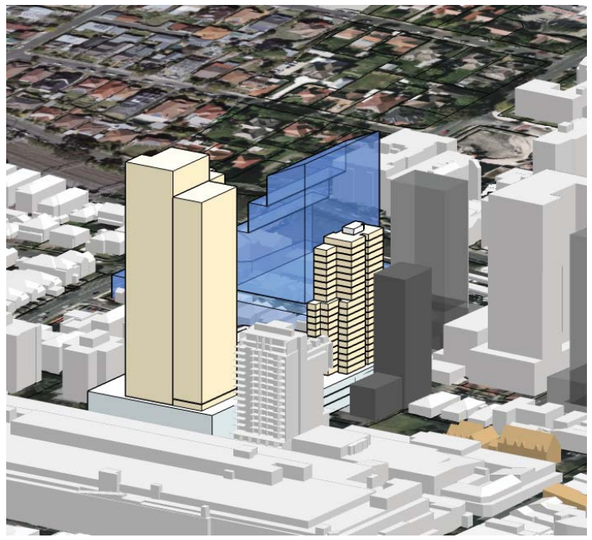
Storeys: 36 & 40
FSR: 10.2:1

Advantages

- SEPP65 compliant tower widths
- Significant apartment numbers
- Opportunity for cross ventilation

Disadvantages

- Non compliant tower separation
- Exceeds Building Height Plane
- Poor internal amenity for residents
- Overshadowing of adjacent residential buildings
- Solar access to apartments impacted by two tower design



Option 2: Original Scheme (1 tower)

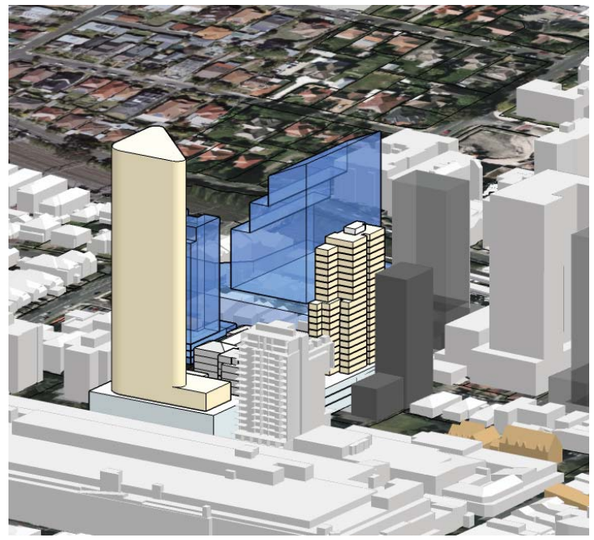
Storeys: 36 & 40
FSR: 10.2:1

Advantages

- Improved building separation between lots either side of the site
- Improved solar gains to tower

Disadvantages

- Bulky building envelope
- Wide building frontage
- Exceeds Building Height Plane
- Little opportunity for cross ventilation
- Overshadowing of adjacent residential buildings
- Building depth exceeds SEPP65 recommendation of 18 - 22 metres
- Difficult to achieve SEPP 65 solar access target



Option 3: Triangular Tower Scheme

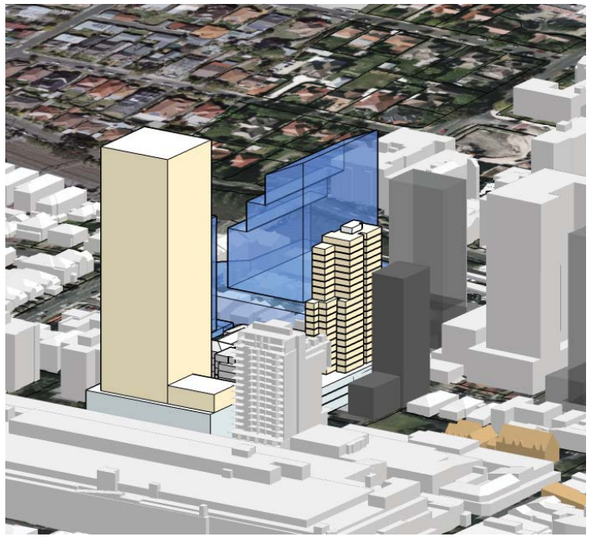
Storeys: 40 & 6
FSR: 8.4:1

Advantages

- Improved solar gains to tower
- Reduced building bulk
- Quality internal amenity for residents
- Opportunity for cross ventilation

Disadvantages

- Wide building frontage to Victoria St
- Reduction in apartment numbers
- Exceeds Building Height Plane
- Overshadowing of adjacent residential buildings



Option 4: Square Tower Scheme

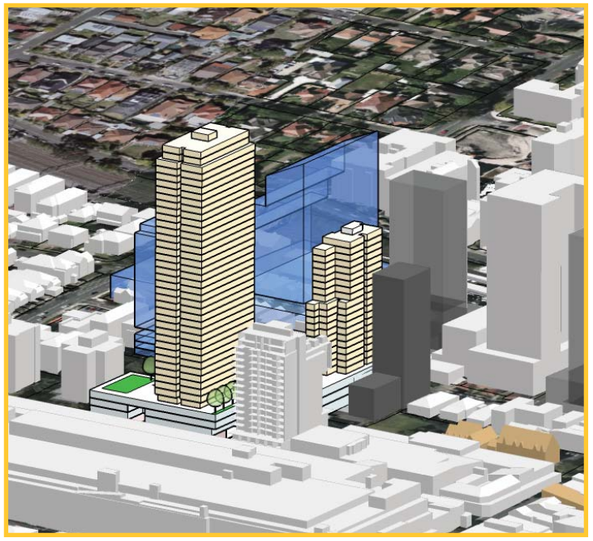
Storeys: 40 & 6
FSR: 9.1:1

Advantages

- Significant apartment numbers

Disadvantages

- Bulky building envelope
- Wide building frontage to Victoria St
- Exceeds Building Height Plane
- Little opportunity for cross ventilation
- Overshadowing of adjacent residential buildings
- Building depth exceeds SEPP65 recommendation of 18 - 22 metres
- Podium exceeds DCP Controls
- Insufficient separation from adjacent building to the east
- Difficult to Achieve SEPP65 solar access targets



Option 5: Architectus Single Tower Scheme

Storeys: 42
FSR: 8.5:1

Advantages

- Significant apartment numbers
- Improved solar gains to tower
- Opportunity for cross ventilation

Disadvantages

- Exceeds Building Height Plane
- Substantial overshadowing of adjacent residential buildings

Option 6: Architectus Two Tower Scheme

Storeys: 28 & 38
FSR: 8.5:1

Advantages

- Significant apartment numbers
- Improved solar gains to tower
- Reduced building height and breach of BHP
- Building height steps down toward Shaftesbury Rd
- Reduced building bulk with more slender towers
- Opportunity for cross ventilation
- Reduced visual impact to heritage item on Burwood Road (compared to Option 7).

Disadvantages

- Exceeds Building Height Plane, not conforming to the BHP character of Burwood Town Centre (which aims to locate taller building in the centre).
- Missing opportunity of potential height below the BHP
- Overshadowing of adjacent residential buildings
- Solar access to apartments impacted by Two tower design

Option 7: Architectus Two Tower Scheme

Storeys: 28 & 38
FSR: 8.5:1

Advantages

- Significant apartment numbers
- Improved solar gains to tower
- Reduced building height and breach of BHP
- Building height steps down toward Shaftesbury Rd
- Reduced building bulk with more slender towers
- Opportunity for cross ventilation
- Conforms to the BHP character of Burwood Town Centre (which aims to locate taller building in the centre).

Disadvantages

- Exceeds Building Height Plane (less breaching than Option 6).
- Overshadowing of adjacent residential buildings (though less than Single tower scheme).
- Solar access to apartments impacted by Two tower design
- More visual impact to heritage item on Burwood Road (compared to Option 6).

3.5 Urban design principles

IN DEVELOPING THE MASTER PLAN, PRINCIPLES OF PUBLIC BENEFIT AND BUILT FORM UNDERPIN THE APPROACH

Streetscape

- Contribute to the town centre amenity and character and promote day and night-time uses on the site.
- Provide fine grain active retail facing the street.
- Ensure that podiums are consistent with the prevailing height and scale of the street.
- Promote walking with high quality public domain including street tree planting.
- Minimise drive-way cross-overs and locate them away from pedestrian priority areas such as through-site link or open space.

Built form

- Street wall podium with fine grain ground floor uses, and awnings
- Flexible non-residential uses in upper podium levels with the opportunity for outdoor spaces accessed directly from tenancies
- Slender articulated towers of high architectural quality.

Building height

- Maximise the efficient use of land and test slender tower forms appropriate to this strategic site and comparable with other regional and strategic centres (Parramatta, Chatswood, Green Square, Epping).
- Any towers should be slender to minimise bulk and overshadowing.
- Height is preferred over lower, bulkier forms.
- Tower separation should be maximised to reduce the perception of ‘tower crowding’.
- Achieve a height transition from higher forms toward the town centre at Burwood Road to lower forms toward Shaftesbury Avenue to the east.

Through site link

- Should be surrounded by active edges on all sides (including coffee kiosks and other hole-in-the-wall' food and beverage tenancies).
- Blank edges to be limited to 30% of the overall perimeter of the link or open space.
- Should have clear sight lines from one street through to the other for accessibility and safety.
- Should be minimum of 6m wide.
- Must be open to the sky for a minimum width of 3m . Any building over hanging the remaining 3m must be a minimum of 7m (2 storeys) above the public domain.
- Should be landscaped with shade-trees and lighting.

Open space

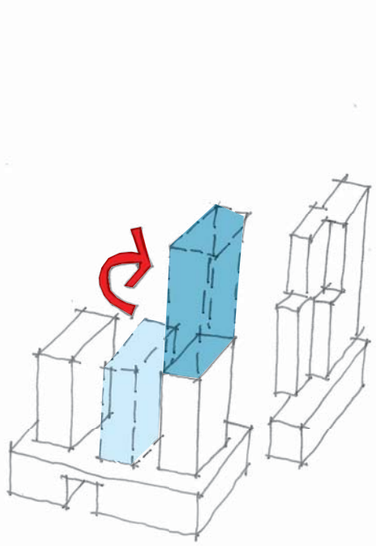
- Active edges with indoor-outdoor retail opportunities and food and beverage offers.
- Opportunity for large footprint tenancies behind the fine-grain street-facing retail facing/integrating with the outdoor spaces.
- Landscaped character offering respite from the street.

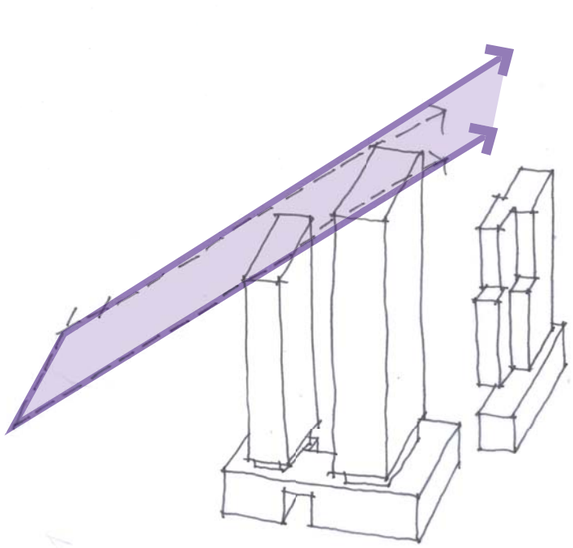
Community benefit - land use

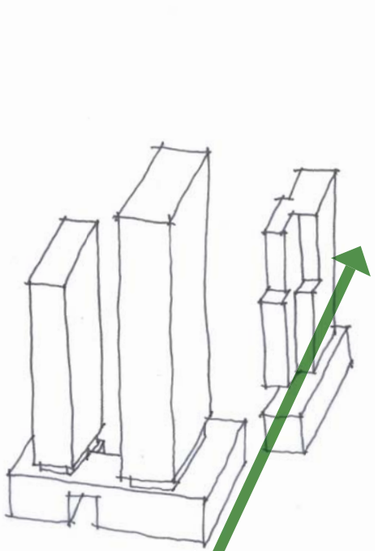
- Potential for necessary community uses such as a childcare.
- First home buyer incentives;
- Contribution towards improvement of intersection and public domain on Victoria Road
- Contribution towards a conservation management plan for heritage qualities of Burwood Croydon Uniting Church.

3.6 Key ideas

AMALGAMATING THE FOUR SITES CREATES A UNIQUE OPPORUNITY TO ACHIEVE TOWER SEPARATION, AN EXCITING SKYLINE AND PUBLIC DOMAIN BENEFITS.







The development has the opportunity to provide the best urban design and planning outcome for this strategically important site. A development complying with the existing controls would be a missed opportunity to maximise the site's potential and achieve public benefit for the town centre. It is recommended that the development capacity of the site be tested, based on the following key moves. These moves assume the amalgamation of the four sites, which presents benefits outlined in the following key moves.

Building separation and height

To improve upon the DCP complying outcome, the four sites are to be amalgamated. This presents the opportunity to distribute the built form in a more considered manner, including:

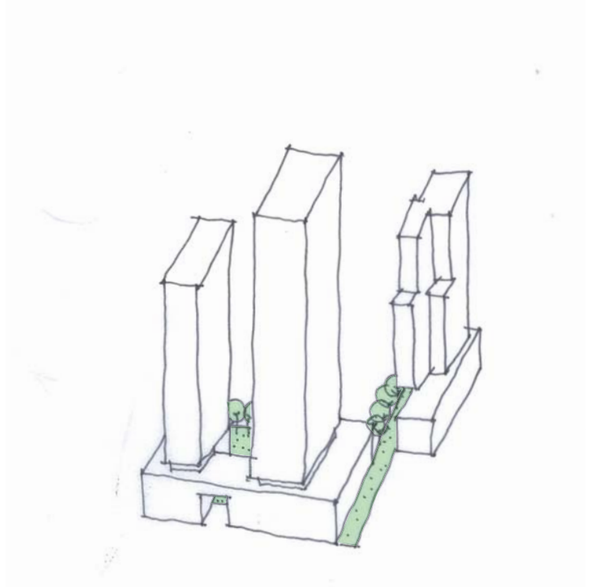
- Remove the central tower, to improve tower separation to a distance acceptable under the Apartment Design Guide (ADG), reduce tower crowding and bulk, and open up vistas from adjacent blocks.
- Redistribute the GFA on Victoria Street from three (3) bulkier buildings to two (2) slender tall towers. Accommodate the lost GFA in a tall, slender towers.

Height plane

Tower height steps down from higher forms at the Burwood Road end, to lower forms towards Shaftesbury Avenue and smaller scale residential to the east (See Section 3.7).

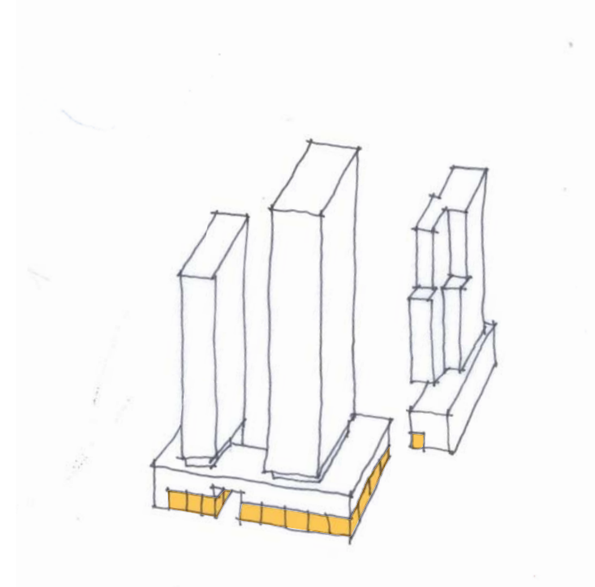
Through site link

A through site link is proposed on the site connecting Victoria and George Streets with a generous 6m wide link providing a direct line of sight between the two street blocks. The proposed link will have a significantly higher level of amenity than the currently proposed link between 28 Victoria Street and the Westfield Event Cinemas and 29 George Street, which would not have a direct line of sight, is not open to the sky, and does not have active edges.



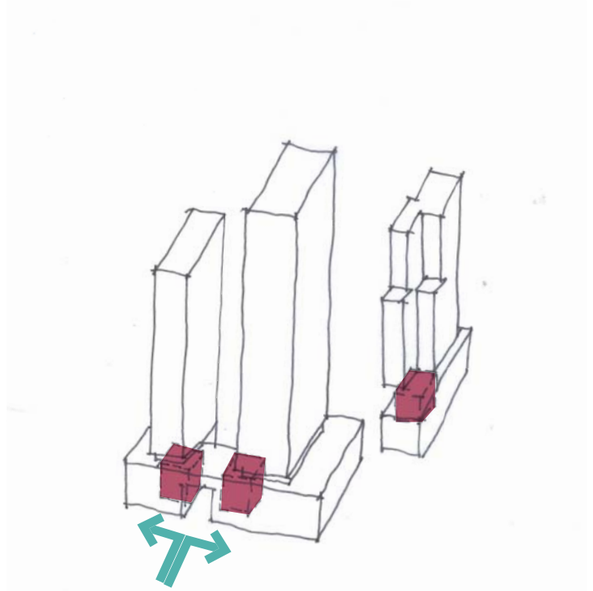
Open space

A landscaped open space at ground level offers an opportunity for open-air retail and connects with the through site link.



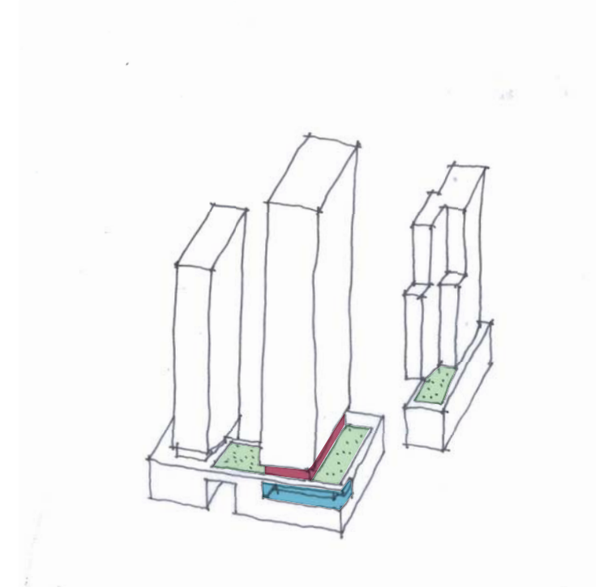
Fine grain retail

On Victoria and George Streets will activate the streetscape day and night.



Lobbies

Tower lobbies are located on a link through to the courtyard and provide passive surveillance to the space, which in turn connects to the through site link.



Public benefit and heritage

In addition to the public benefit provided in the through site link, the proposal will offer the following:

- First home buyer incentives;
- Contribution towards improvement of intersection/ public domain enhancements along Victoria Road
- Contribution towards a conservation management plan for heritage qualities of Burwood Croydon Uniting Church, noting that there are preliminary development plans for the church and surrounding vacant land;
- The podium has the potential to accommodate community uses such as a childcare facility. Landscaped podium roofs will provide communal open space for residents.

3.7 Opportunities for public benefit

A NEW THROUGH-SITE LINK WILL OFFER CLEAR SIGHT LINES BETWEEN VICTORIA AND GEORGE STREETS.

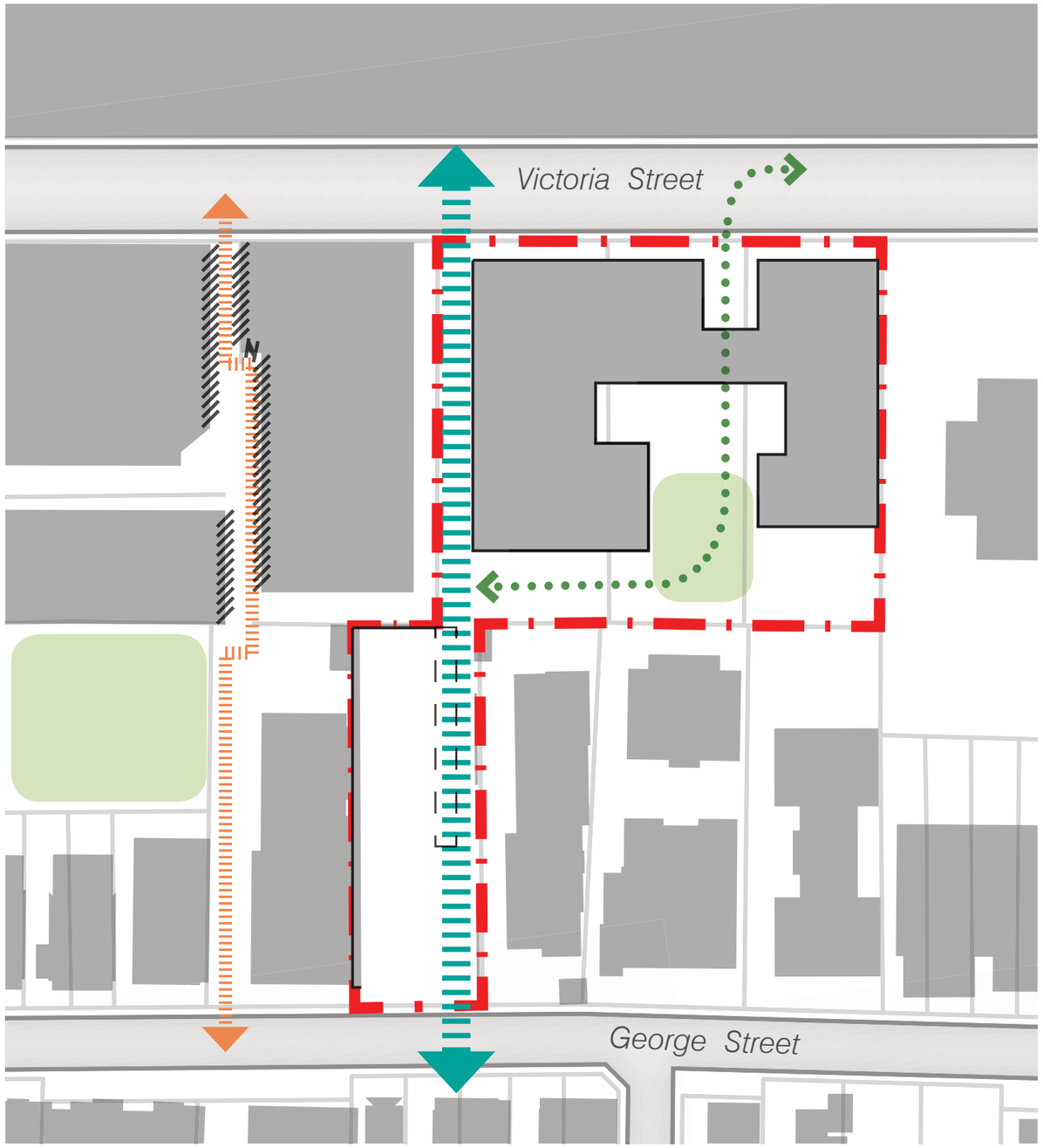
An easement for a through site link has been approved by Council from the Westfield Event Cinemas on Victoria Street to No. 29 George Street, which is currently under construction.

Weaknesses of Council DCP approved link: The following weaknesses have been identified with the proposed link:

- Timeframe: The link is located on the existing Westfield cinema driveway and is reliant on the re-configuration of this driveway which may not occur in a reasonable timeframe
- Edges: Being between the driveway entry of 38 Victoria Street and the cinema, there is little opportunity for active edges and passive surveillance
- Sight lines: The link re-aligns a number of times along its length, which prevents a clear line of sight from one street to the other
- Covered: The easement passes under the approved building at 29 George Street as well as 36-38 Victoria Street, resulting in low daylight and a poor pedestrian environment.
- Width: The proposed link is only 3m wide.

Benefits of proposed through-site link: In contrast, the link proposed in this planning proposal will:

- Be delivered as part of the development
- Provide active retail edges
- Ensure a clear line of sight
- Be open to the sky and daylight
- Be a generous 6m wide link, double the width of the current Council DCP approved link.

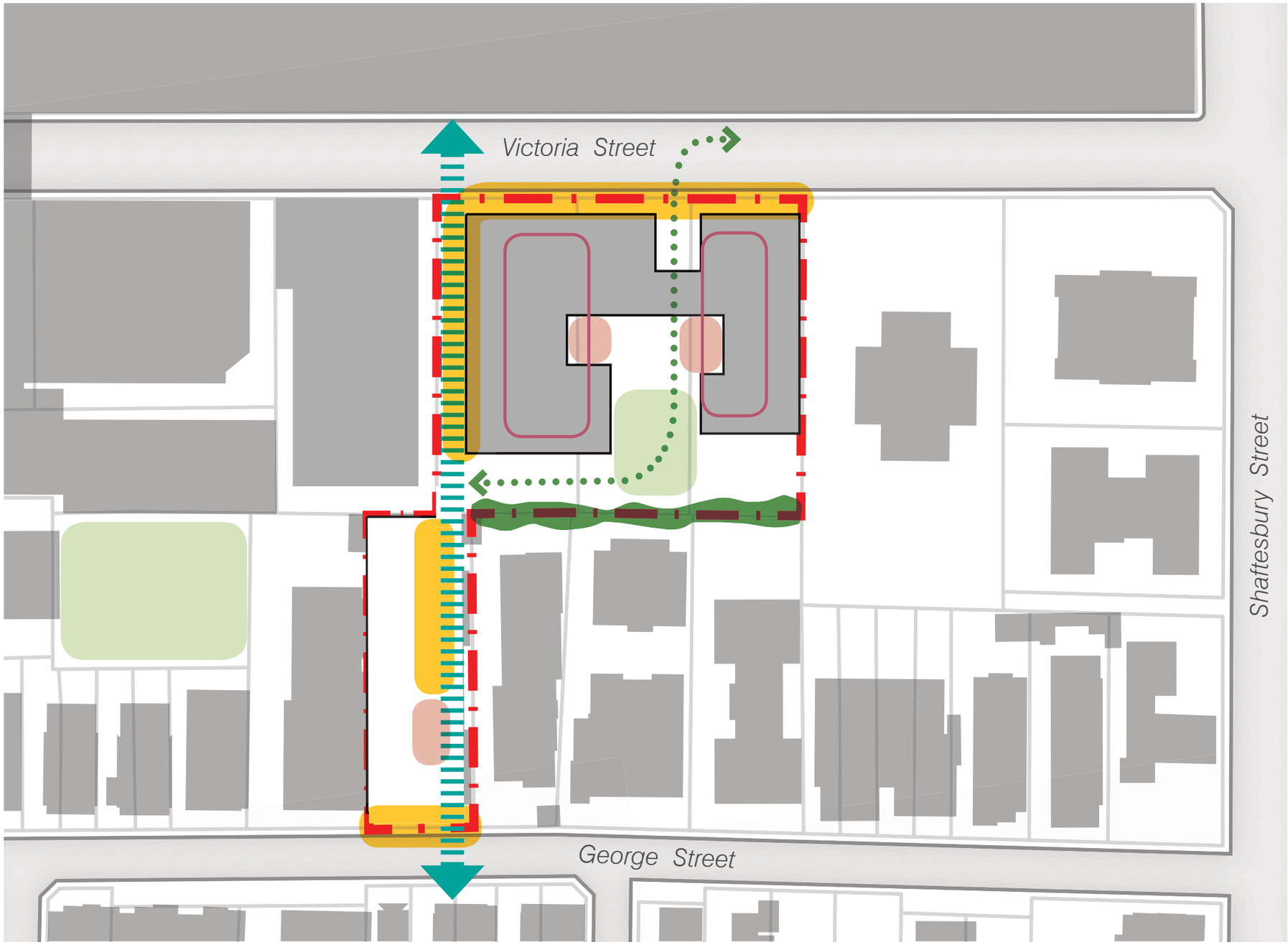


Illustrative sketch highlighting the activated through site link

Key

- Proposed pedestrian link
- DCP proposed link
- Secondary pedestrain link
- Blank wall facade
- Open spaces
- Proposed built form
- Built form overhang
- Existing built form
- Site boundary

3.8 Structure plan



THE LANDSCAPED OPEN SPACE WILL BE A FOCAL POINT OFFERING RESPITE FROM THE BUSY TOWN CENTRE.

The key moves of the structure plan:

- A generous and direct mid-block pedestrian link through the site connecting Victoria and George Streets.
- A secondary link is provide through the activated retail ground level.
- Active street frontage with fine grain retail
- Well separated towers and integrated lobby areas
- Pocket open space provides a benefit for the area.

Key

- Proposed pedestrian link
- Secondary pedestrain link
- Green buffer
- Open space
- Fine grain retail
- Location of towers
- Lobby locations
- Proposed built form
- Existing built form
- Site boundary

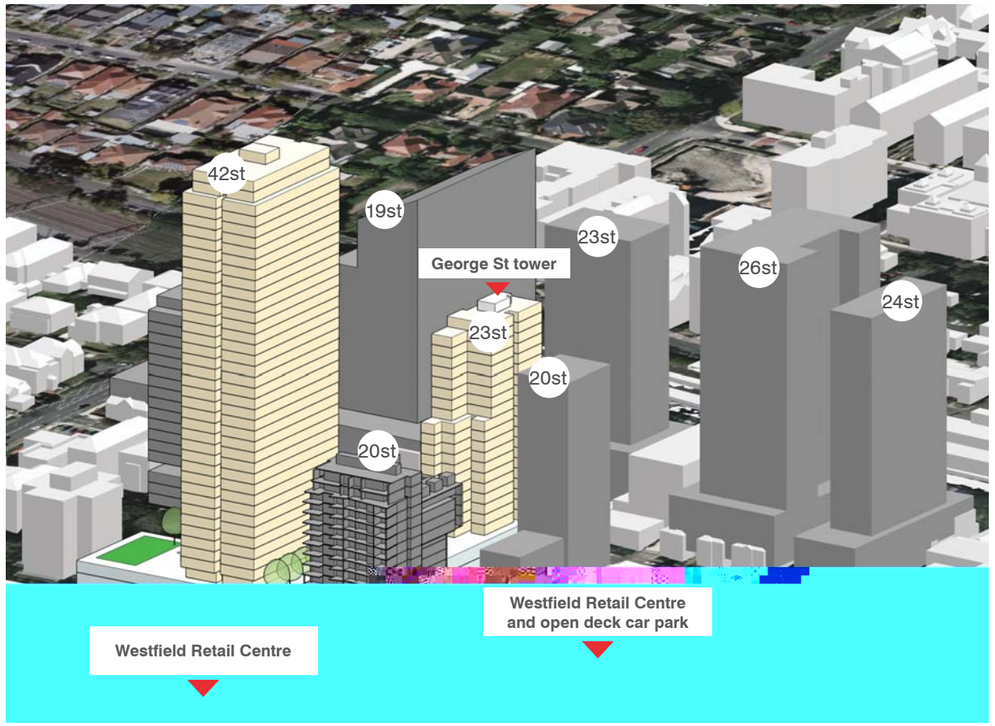
Option 1: Single Tower Scheme

Two options were tested to improve on the DCP built form out come and achieve the established urban design principles. Both options were based on achieving an FSR of 8.5:1.

Single Tower Option

The FSR is distributed in a single tower over a 4 storey podium, resulting in a total of 42 storeys.

For more details on the single tower option, refer to the Appendix (Section 6.1).

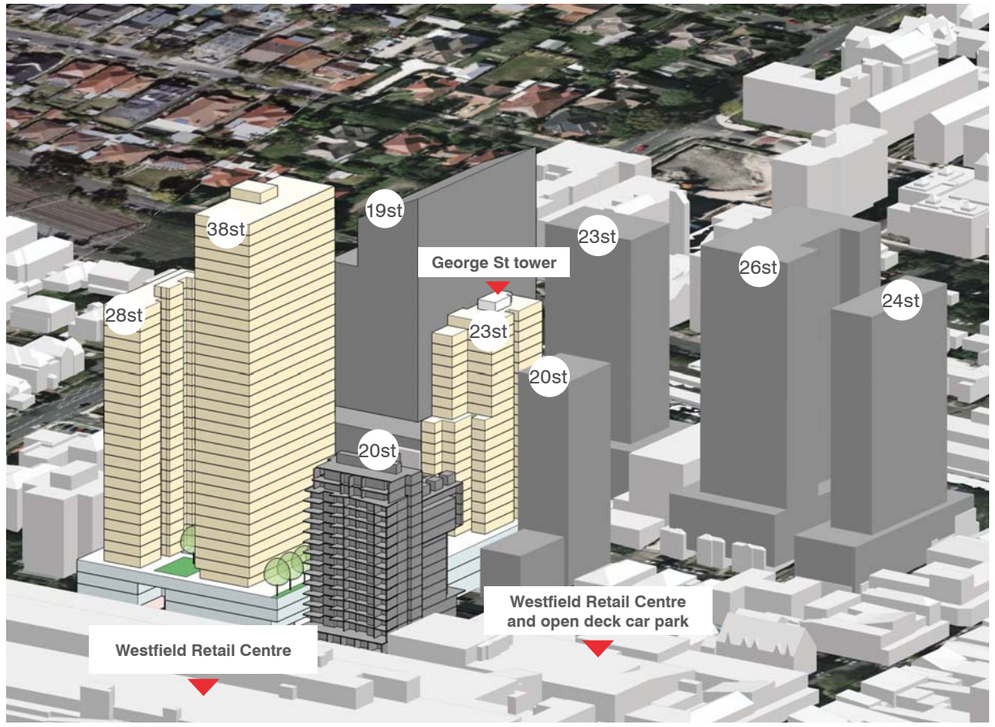


Perspectives

Plan view

Single tower scheme summary

Height of building	135 metres
Storeys:	42 storeys
Commercial GFA:	10,530m^2
Residential GFA:	35,900m^2
Total GFA:	46,430m^2
Site area:	5,450m^2
FSR:	8.5:1



Perspectives

Plan view

Key

- Proposed residential uses
- Proposed commercial uses
- Proposed retail uses

Two Tower scheme summary

Height of building	128.2 metres
Storeys:	28 & 38 storeys
Commercial GFA:	10,297m²
Residential GFA:	35,908m²
Total GFA:	46,205m²
Site area:	5,450m²
FSR:	8.5:1

Option 2: Two Tower scheme

In this option the FSR is distributed into two towers over a 4 storey podium, resulting in total tower heights of 28 and 38 storeys.

The two tower scheme has a number of advantages over the single tower scheme, which include:

- Shorter towers at 28 and 38 storeys rather than 42 storeys (less breach of the DCP BHP)
- Tower height decreases towards Shaftesbury Road and the residential area to the east.
- Towers are more slender
- Two tower results in a more dynamic looking skyline
- Overshadowing affects fewer properties. For detailed shadow analysis refer to the Assessment section (Section 5.0).

The two tower option was therefore selected as the preferred and recommended option.

Part 4.0

The Proposal

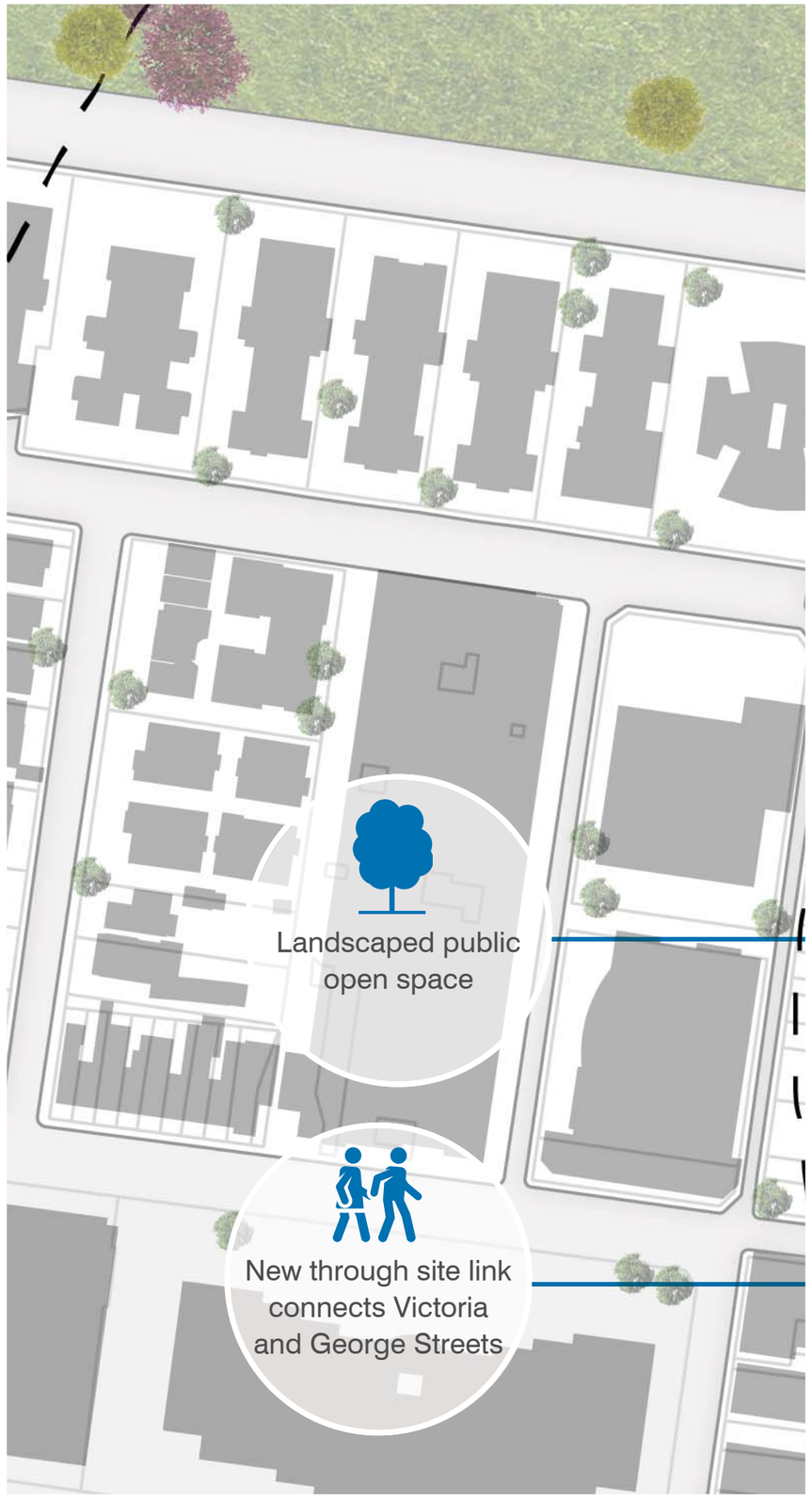
4.1 Preferred master plan

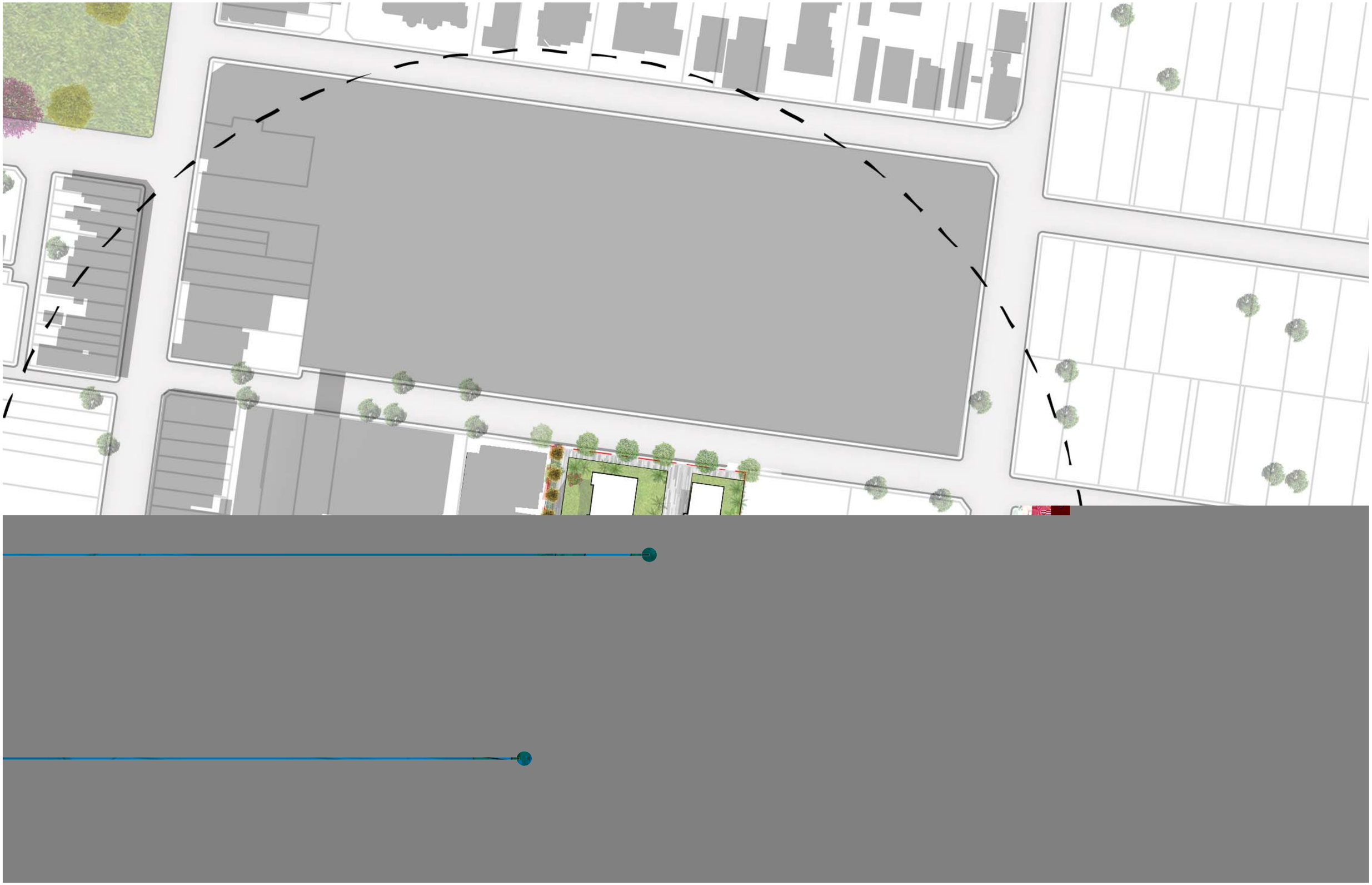
4.1.1 Public domain plan

436 apartments

10,200 sqm GFA
non-residential space

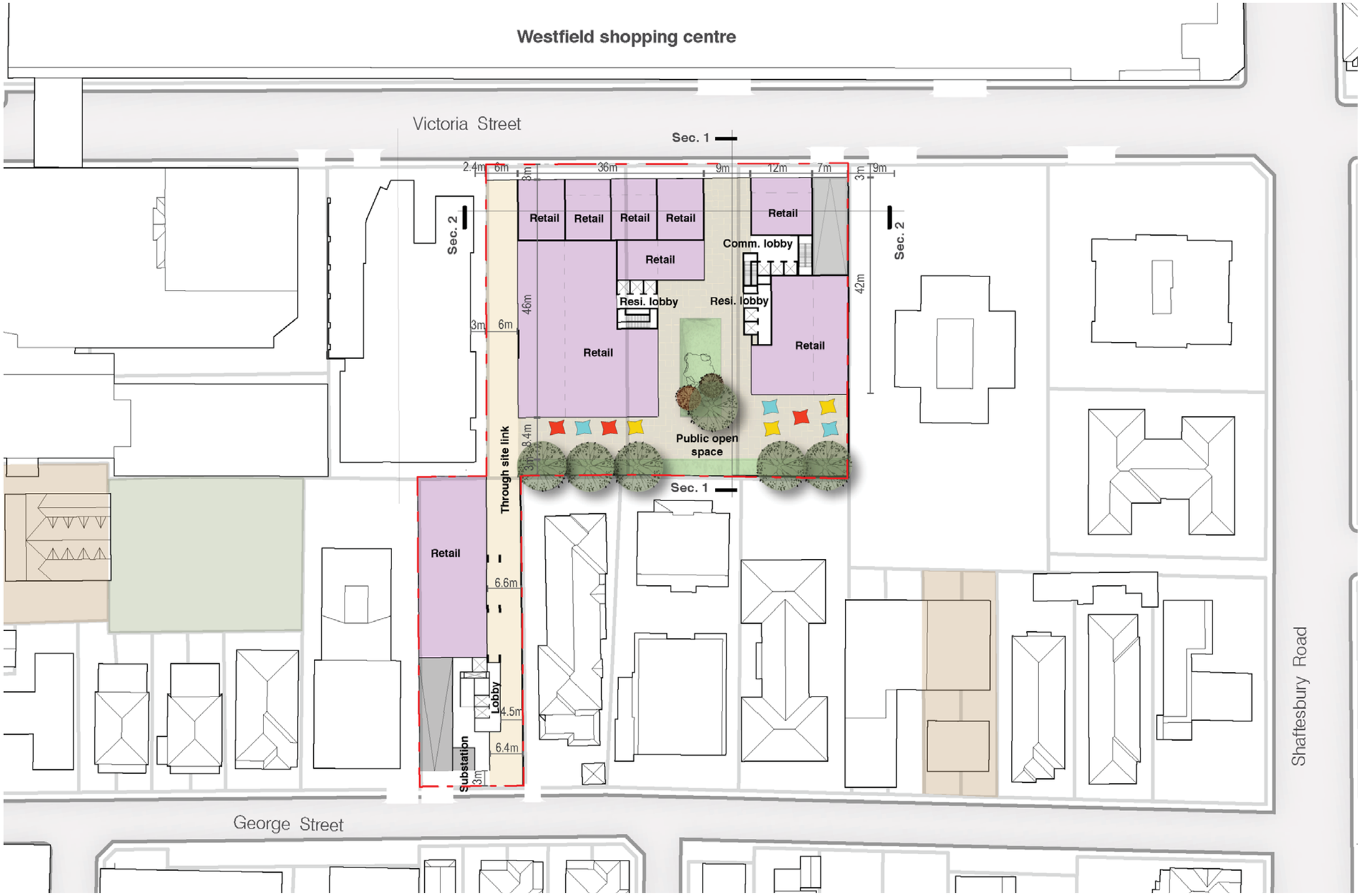
3,000 sqm
publicly accessible
open space



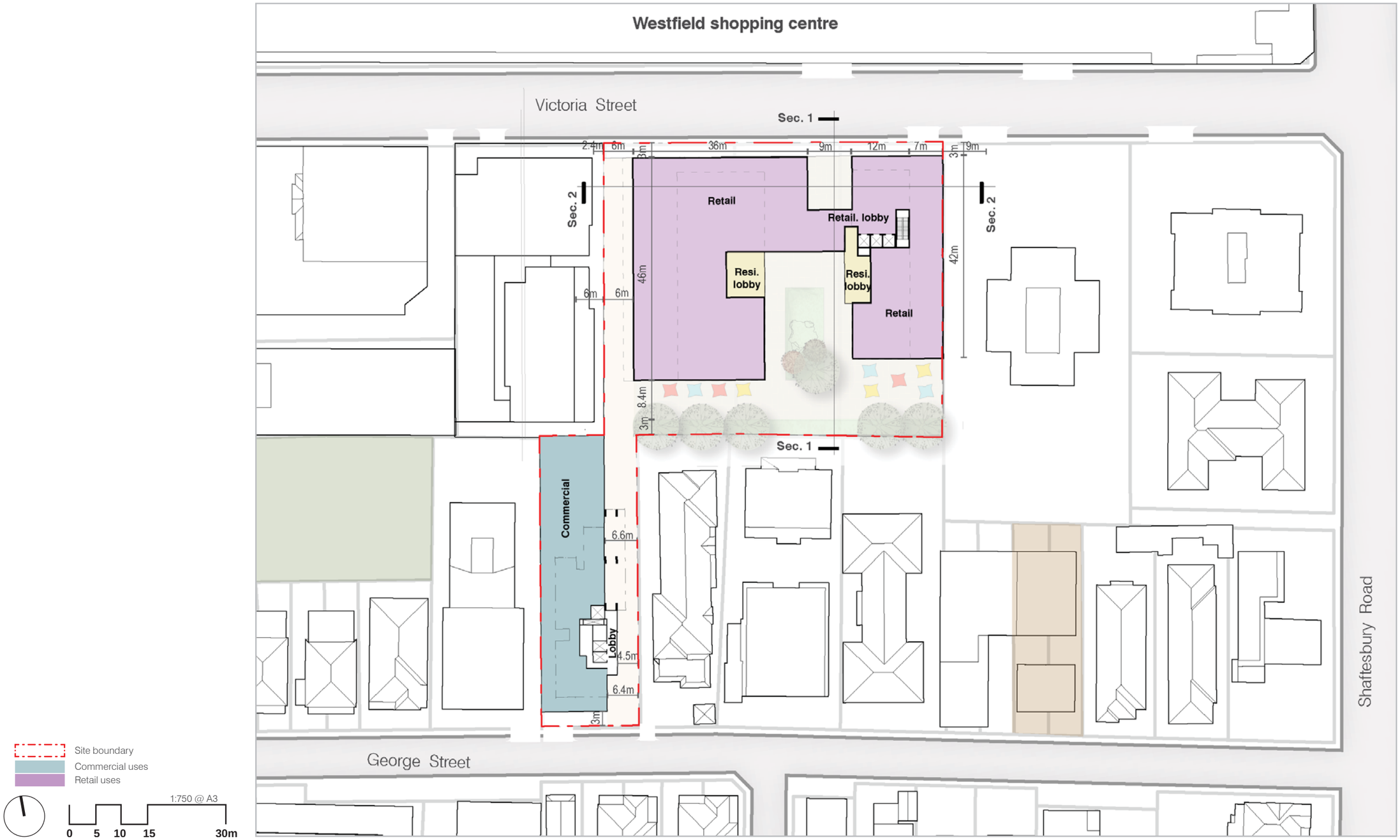


Illustrative visualisation of the publicly accessible pedestrian link with activated ground level retail.

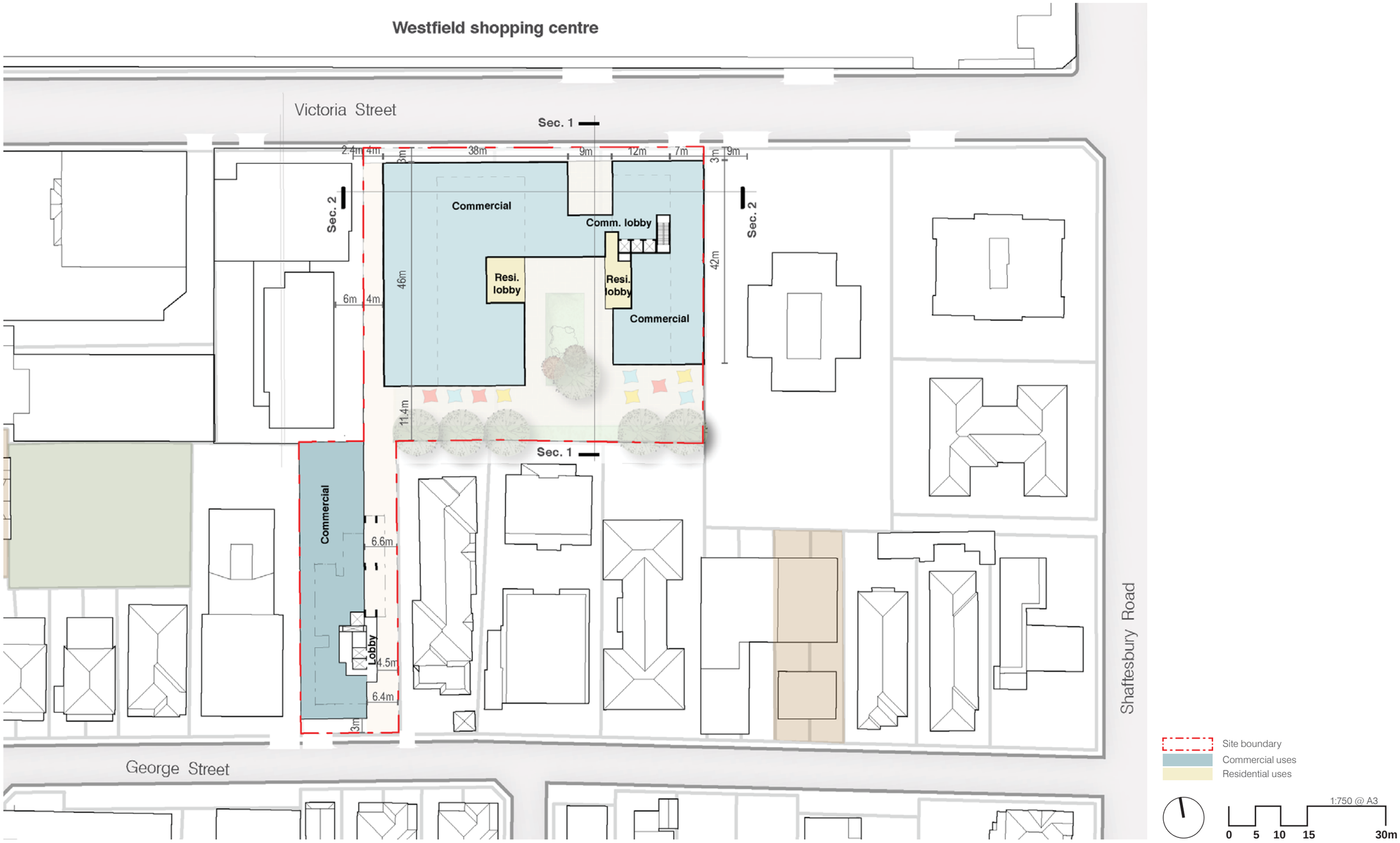
4.1.2 Indicative Plans - Ground Floor



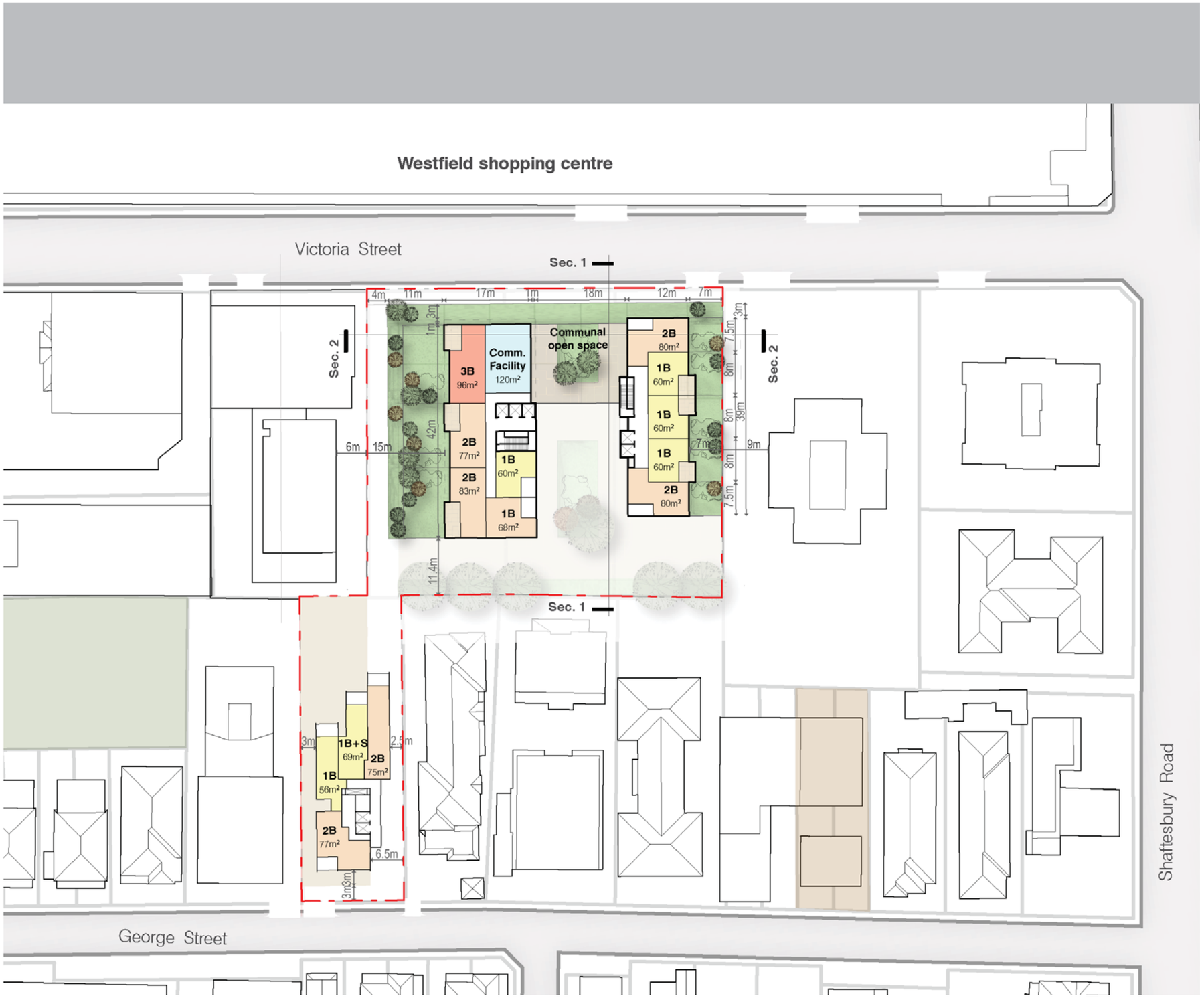
4.1.3 Indicative Plans - Level 3 Commercial Podium



4.1.4 Indicative Plans - Level 4 Typical Podium



Illustrative visualisation of the courtyard surrounded by activated ground level retail.



4.1.5 Indicative Plan - Level 5

Apartment mix

6 x 1 bed
7 x 2 bed
1 x 3 bed

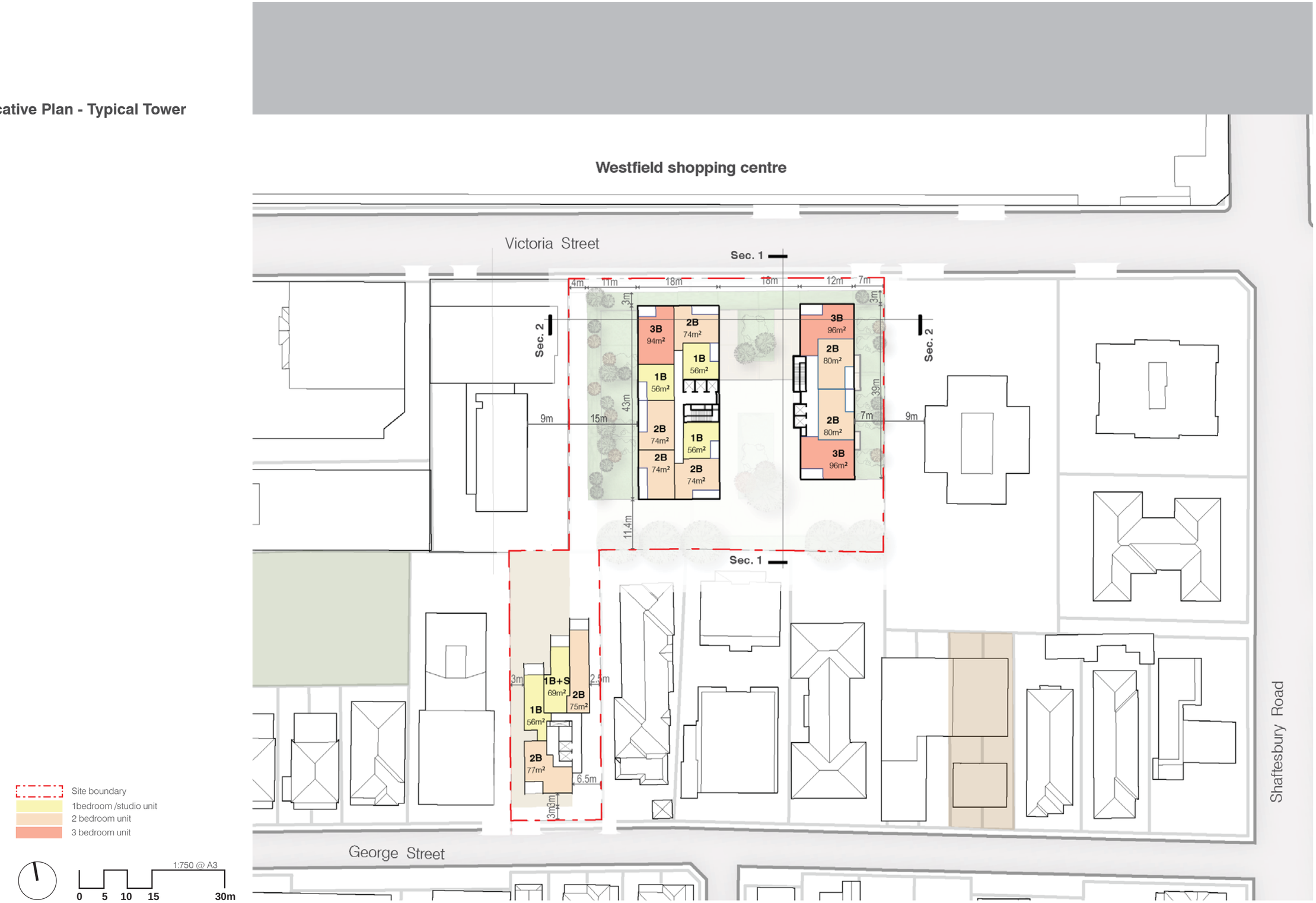
Total:
14 apartments

4.1.6 Indicative Plan - Typical Tower

Apartment mix

5 x 1 bed
8 x 2 bed
3 x 3 bed

Total:
16 apartments



28 - 34 VICTORIA STREET

Victoria St. S.A. only **4,243** sqm

Storey	GFA (sqm)	Apartment Mix 1B	2B	3B
L38	619	3	4	1
L37	619	3	4	1
L36	619	3	4	1
L35	619	3	4	1
L34	619	3	4	1
L33	619	3	4	1
L32	619	3	4	1
L31	619	3	4	1
L30	619	3	4	1
L29	619	3	4	1
L28	1,009	3	6	3
L27	1,009	3	6	3
L26	1,009	3	6	3
L25	1,009	3	6	3
L24	1,009	3	6	3
L23	1,009	3	6	3
L22	1,009	3	6	3
L21	1,009	3	6	3
L20	1,009	3	6	3
L19	1,009	3	6	3
L18	1,009	3	6	3
L17	1,009	3	6	3
L16	1,009	3	6	3
L15	1,009	3	6	3
L14	1,009	3	6	3
L13	1,009	3	6	3
L12	1,009	3	6	3
L11	1,009	3	6	3
L10	1,009	3	6	3
L9	1,009	3	6	3
L8	1,009	3	6	3
L7	1,009	3	6	3
L6	1,009	3	6	3
L5	950	5	4	1
L4	2,262			
L3	2,173	104	182	80
L2	2,090		366	
L1	1,880			

23 - 27 GEORGE STREET

George St. S.A. only **1,207** sqm

Storey	GFA (sqm)	Apartment Mix 1B	2B	3B
L23	209		1	1
L22	250	1	2	
L21	250	1	2	
L20	250	1	2	
L19	250	1	2	
L18	250	1	2	
L17	250	1	2	
L16	250	1	2	
L15	250	1	2	
L14	250	2	2	
L13	309	2	2	
L12	309	2	2	
L11	309	2	2	
L10	309	2	2	
L9	309	2	2	
L8	309	2	2	
L7	309	2	2	
L6	309	2	2	
L5	309	2	2	
L4	309	2	2	
L3	707	30	39	1
L2	707		70	
L1	477			

Total site Area 5,450

	GFA (sqm)	FSR
Total Residential	35,909	6.6
Total Commercial / retail	10,297	1.9
TOTAL	46,205	8.5

	Apartment Mix 1B	2B	3B
Subtotal	134	221	81
%	31%	51%	19%
TOTAL		436	

Assumptions	
GFA for Residential	80%
GFA for Commercial	90%

Key

- Residential uses
- Commercial uses
- Retail uses

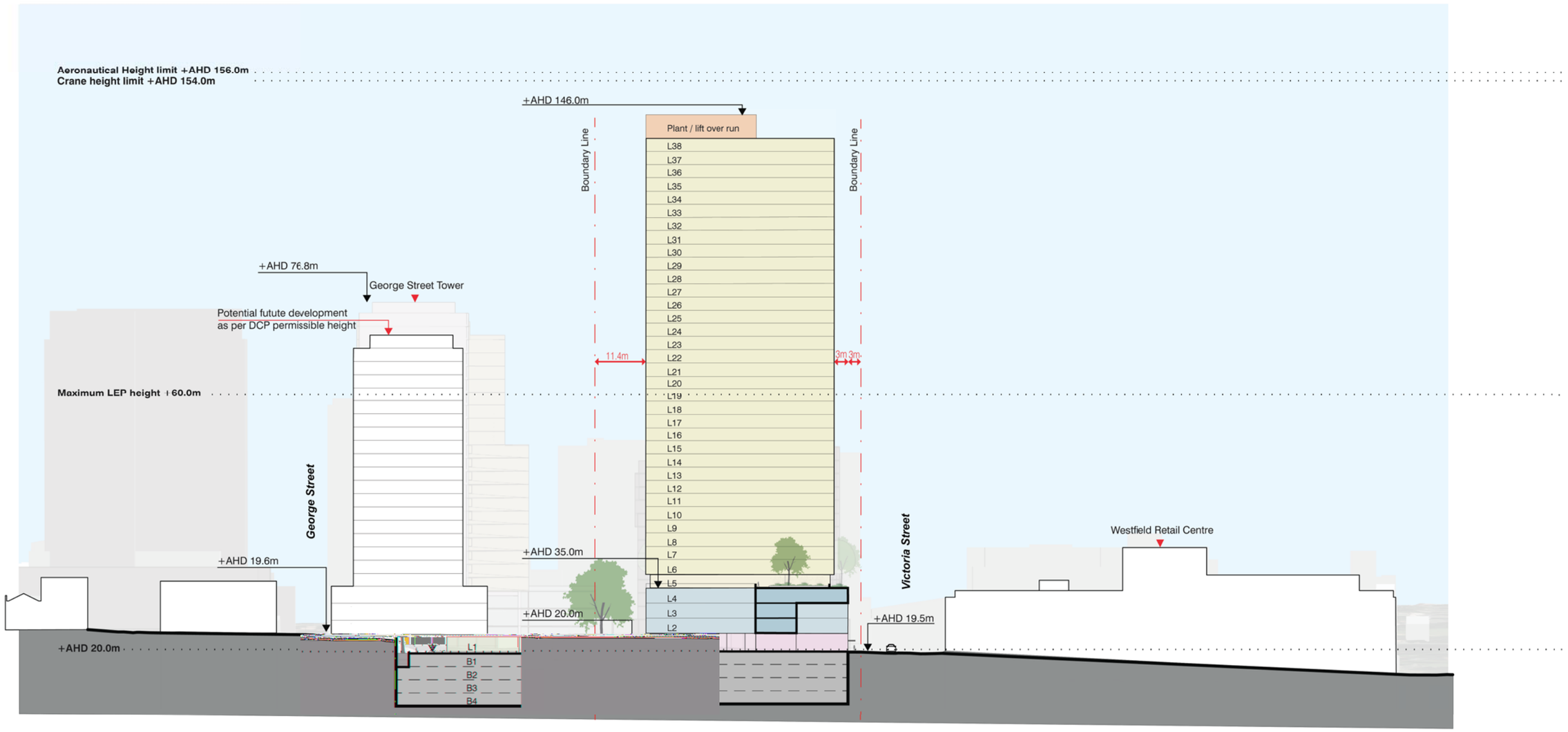
4.1.7 Yield calculations

The proposal has a total of 436 apartments, 70 apartments in the George St building and 366 apartments in the Victoria Street building.

The apartment mix breakdown is:

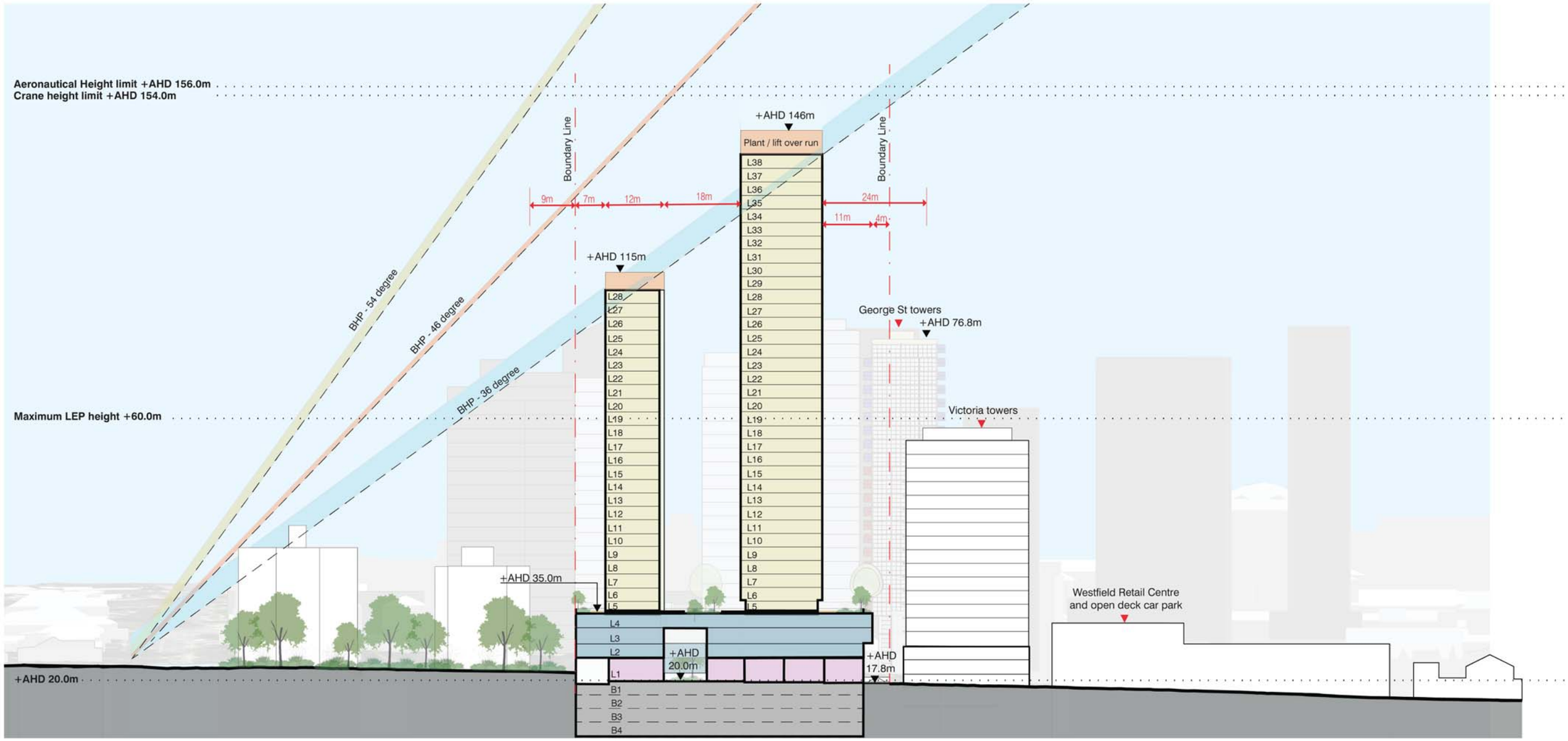
1br - 31%
2br - 51%
3br - 19%

4.1.8 Detailed Section - Two tower scheme



North-south section.

4.1.9 Detailed Section - Two tower scheme



Plant / upper penthouse
Residential uses
Commercial uses
Retail uses


VTs
VOGUE
SUIT
VOGUE
JEANS
EVERMOTION


coffeeparadise
RESTAURANT

Part 5.0

Assessment

5.1 Solar access testing to adjacent sites

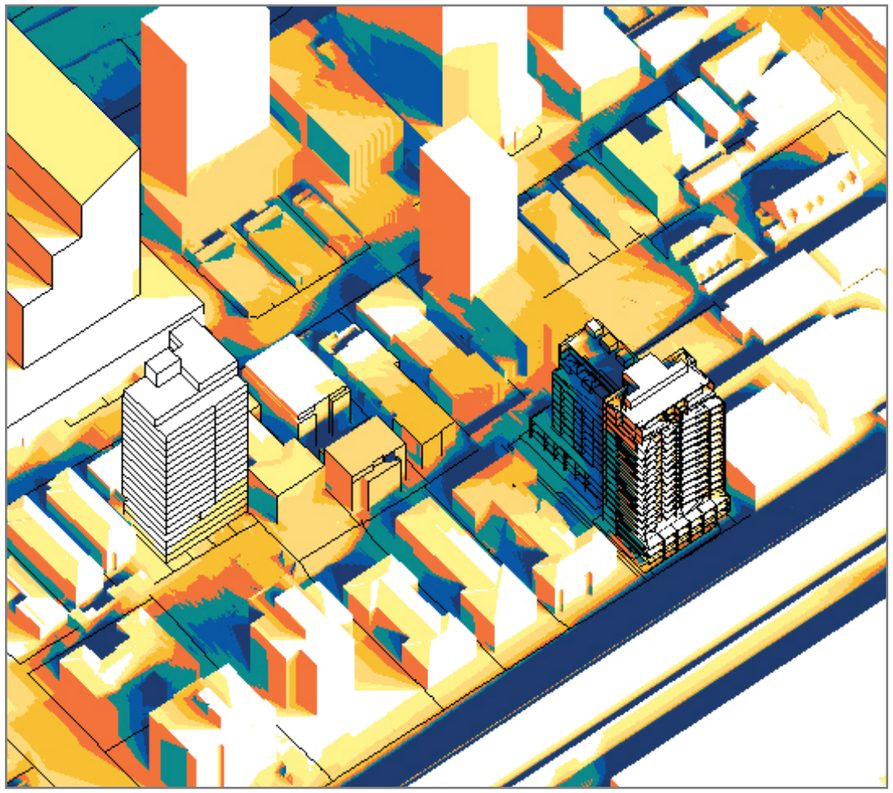
This section studies solar access to the adjoining developments south of the site. The solar access diagrams compares the overshadowing of the built form on the proposed site and it's impacts to the residential flat buildings directly to the south of the built form.

The analysis uses the plug-in "Solar Analysis for Sketch Up" software which synthesises solar/shadow information showing the amount of sunlight on a surface for periods of time during the day between 9am to 3pm.

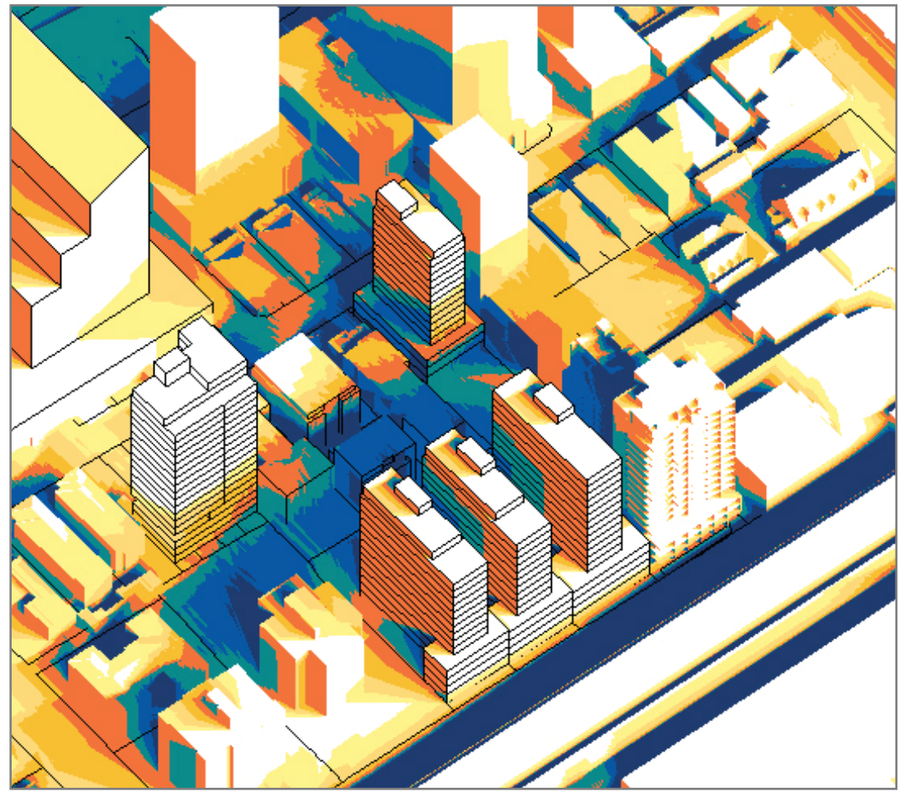
Key findings

The solar analysis demonstrates that:

- Comparative to the complying scheme (which assumes development to the existing DCP controls), the single tower and two tower schemes perform similarly to the complying scheme.
- The proposal's tower orientation, separation and slender proportions addresses the solar access to adjacent sites and supports the increase of density on the site without further increases to overshadowing in comparison to a complying scheme.



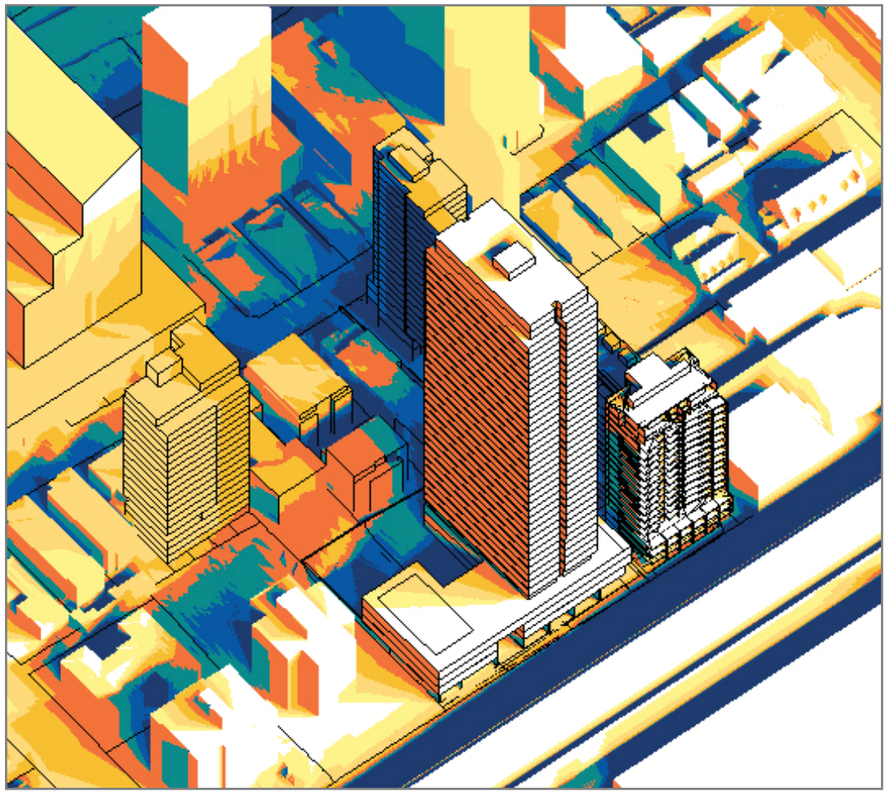
Original scheme



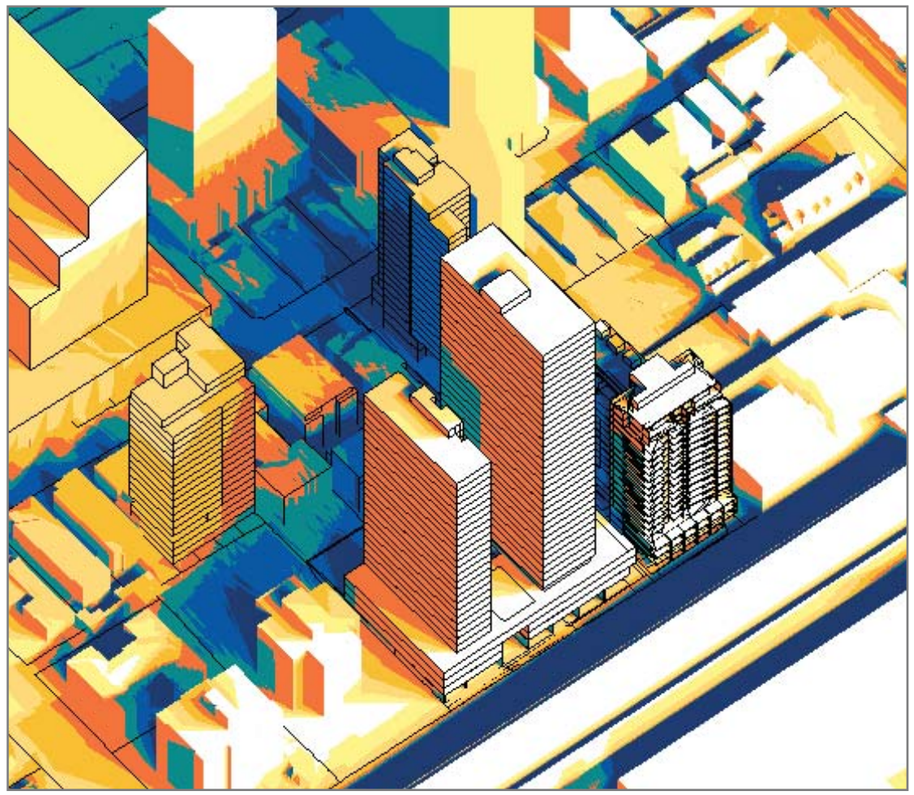
Complying scheme

Key

Hours of sunlight between 9am - 3pm during winter solstice



Single tower scheme



Two tower scheme (Preferred option)

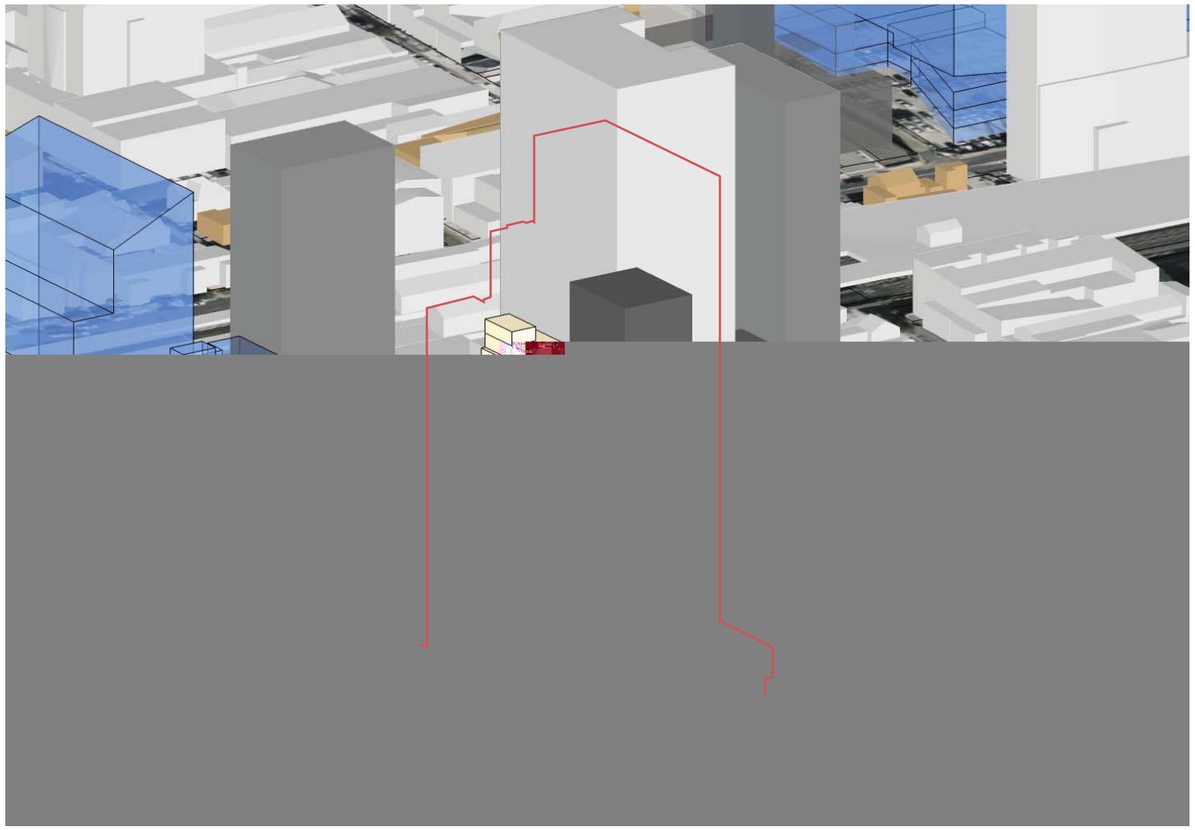
Key

0 | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6

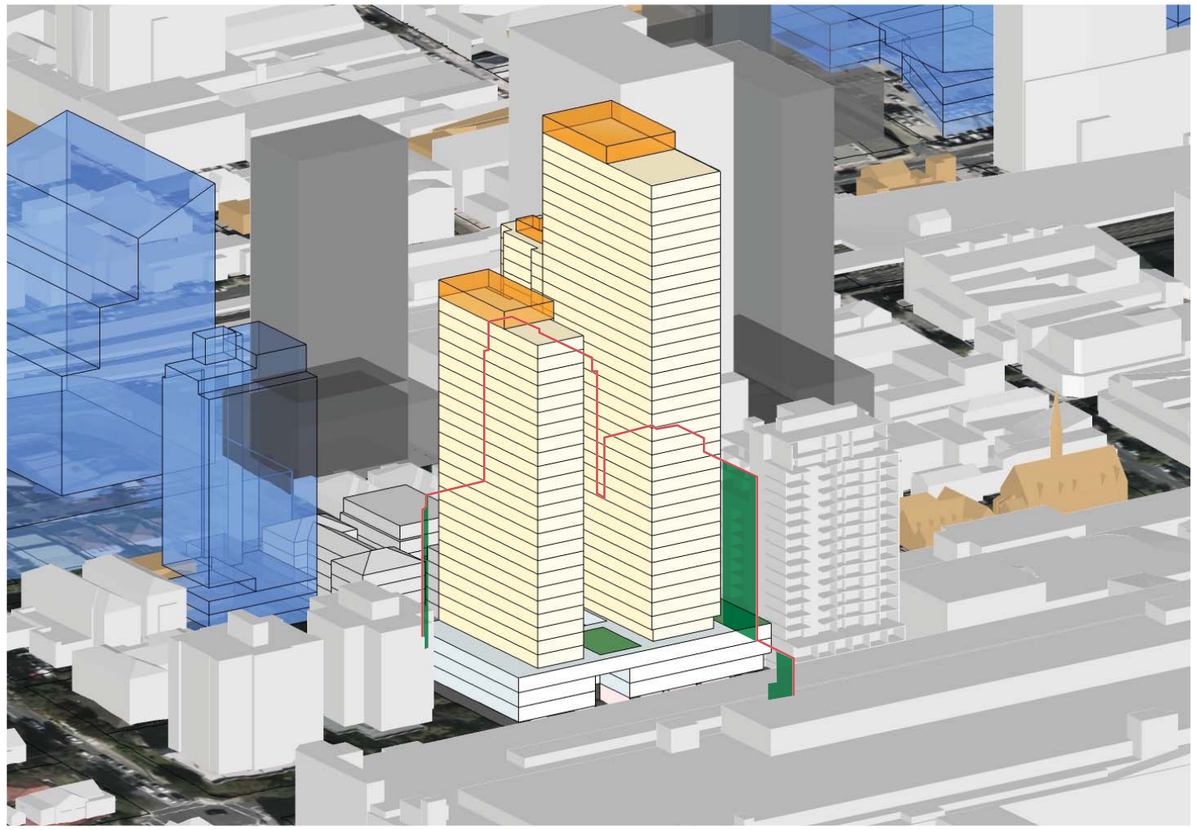
Hours of sunlight between 9am - 3pm during winter solstice

5.2 Views from the sun and shadow analysis

Views from the sun analysis - 9am



Complying scheme



Proposed Two tower scheme

The views from the sun are taken in 1 hour intervals from 9am to 3pm during the winter solstice. The following solar views compare solar access between a complying scheme and the proposed scheme, showing the potential additional number of properties impacted by overshadowing both of the proposal and future developments.

The solar access testing are estimate only and do not calculated additional and/or variation of shadows impacted by:

- Existing trees shadow impact
- Layout of apartments and location of windows; and,
- Surrounding existing built form

Key findings

The solar analysis demonstrates that:

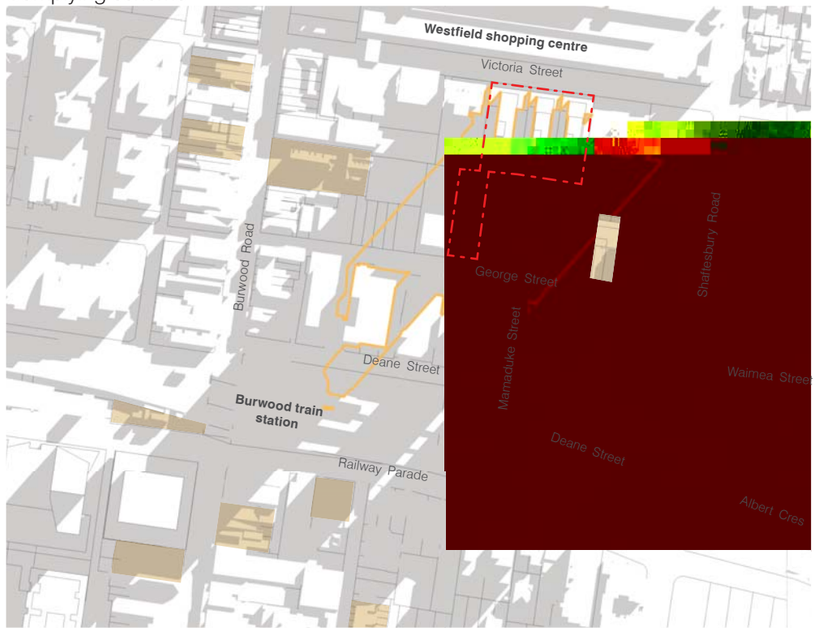
- There is no solar impact of the proposed development to the United Congregational church heritage item situated to the east.
- All residential properties to the east of Shaftesbury Road achieves the minimum requirements of 2 hours of solar access during the winter solstice.
- Although the proposal casts long shadows, the slenderness of the towers results in fast moving shadows.

Views from the sun and shadow analysis

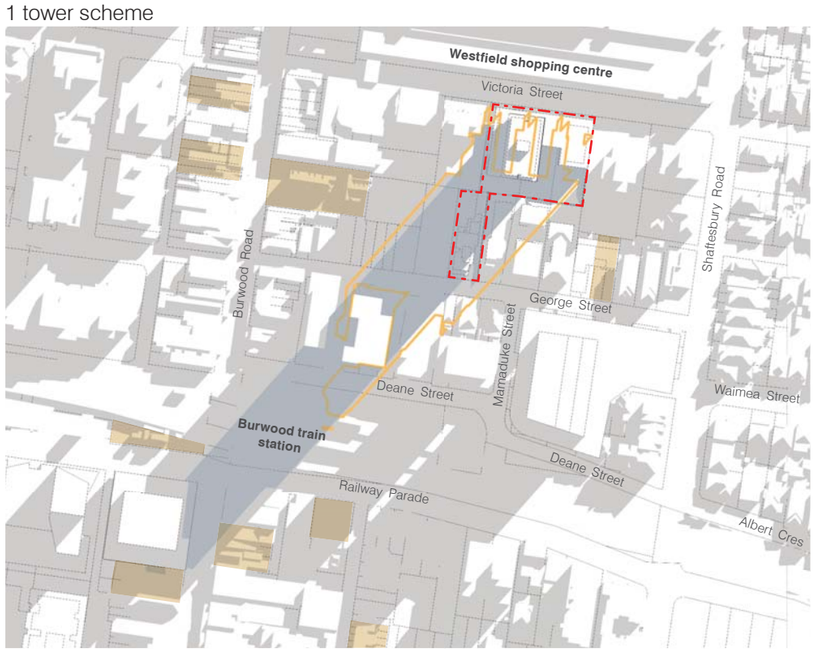
Winter solstice - 9am

Existing condition

Complying scheme



1 tower scheme

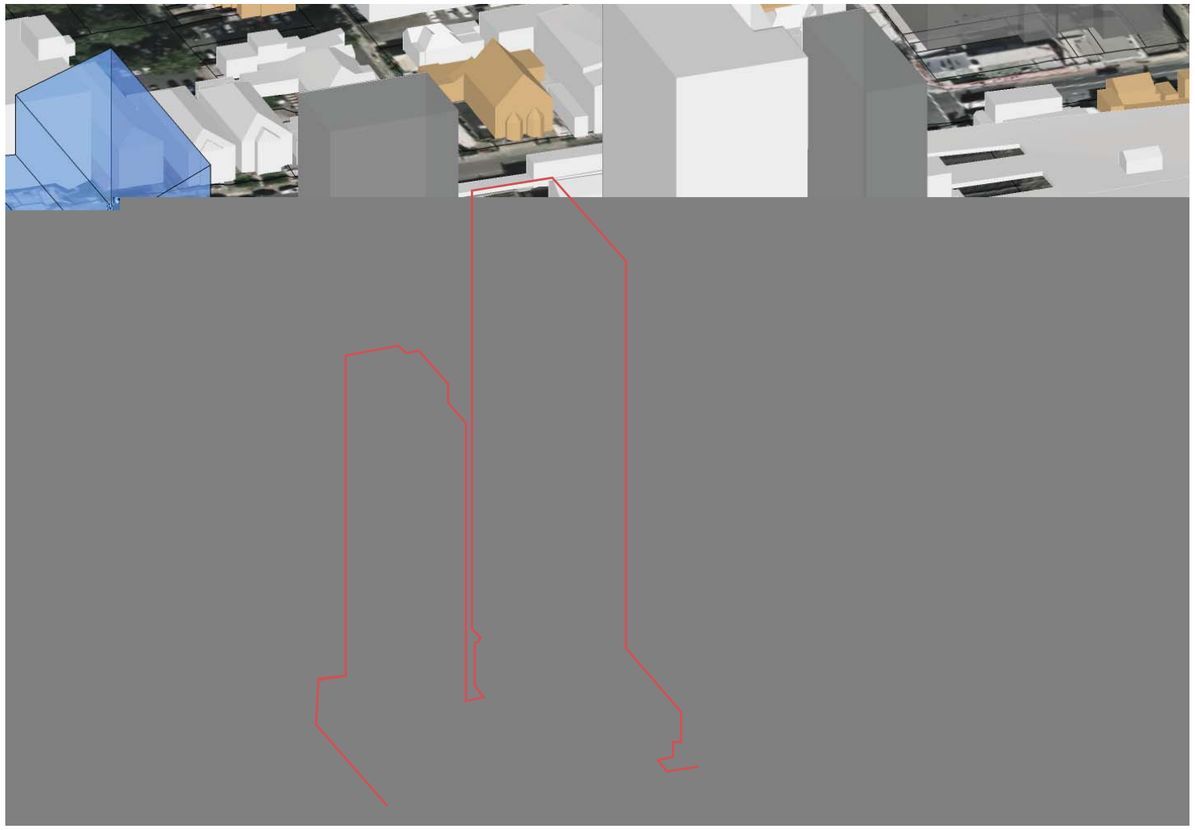


2 tower scheme

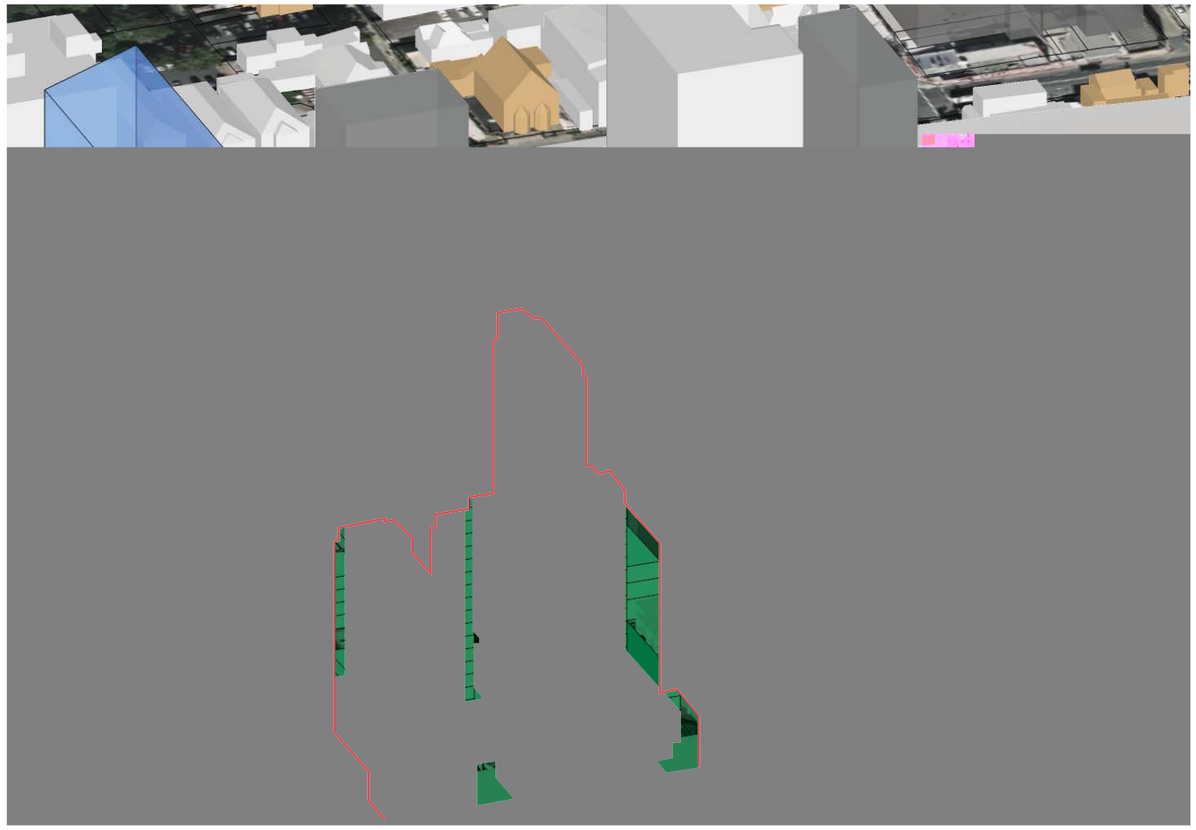
Site boundary
Complying scheme overshadowing
Building envelope overshadowing
Surrounding context shadows
Adjacent heritage listed items

Views from the sun and shadow analysis

Views from the sun analysis - 10am



Complying scheme



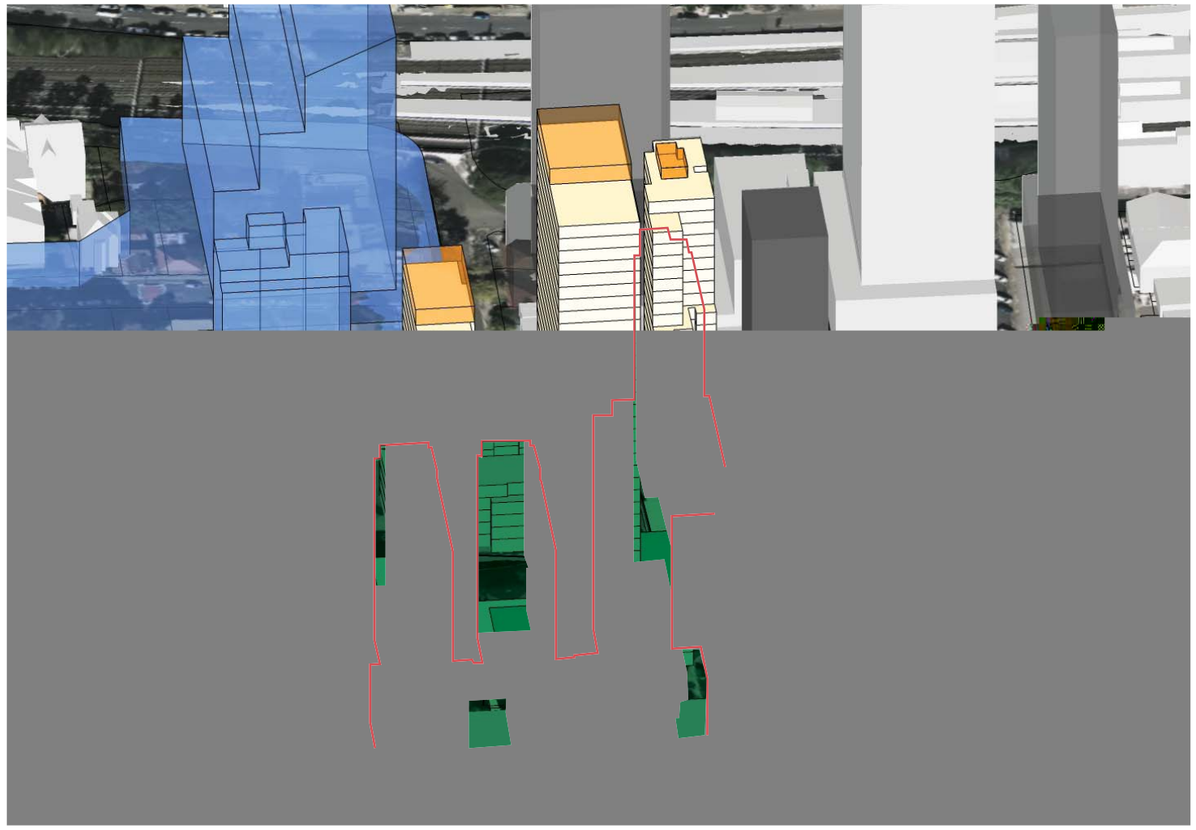
Proposed Two tower scheme

Key

- Outline of addition to complying scheme
- Proposed scheme improvements
- Proposed residential uses
- Proposed commercial uses
- Rooftop gardens
- DAs under assessment
- Developments under construction
- Surrounding context
- Adjacent heritage listed items

Views from the sun analysis - 11am

Complying scheme



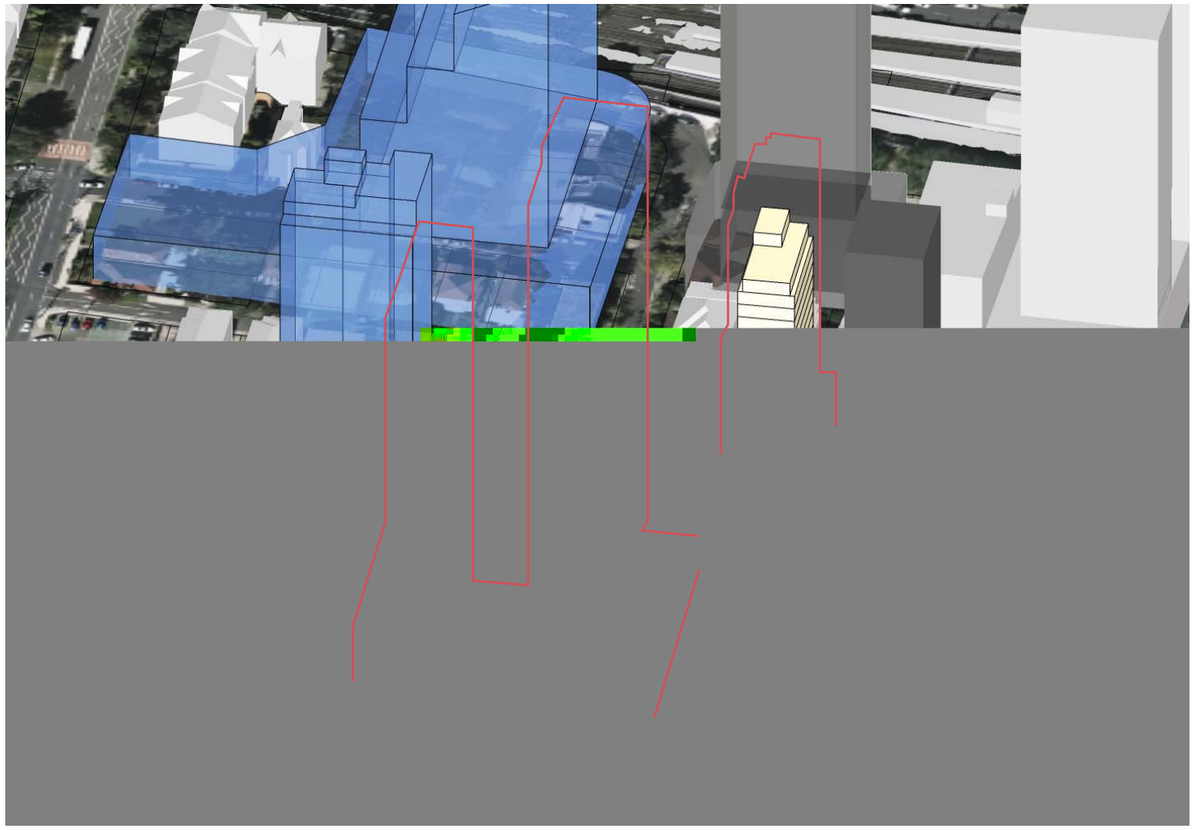
Proposed Two tower scheme

Key

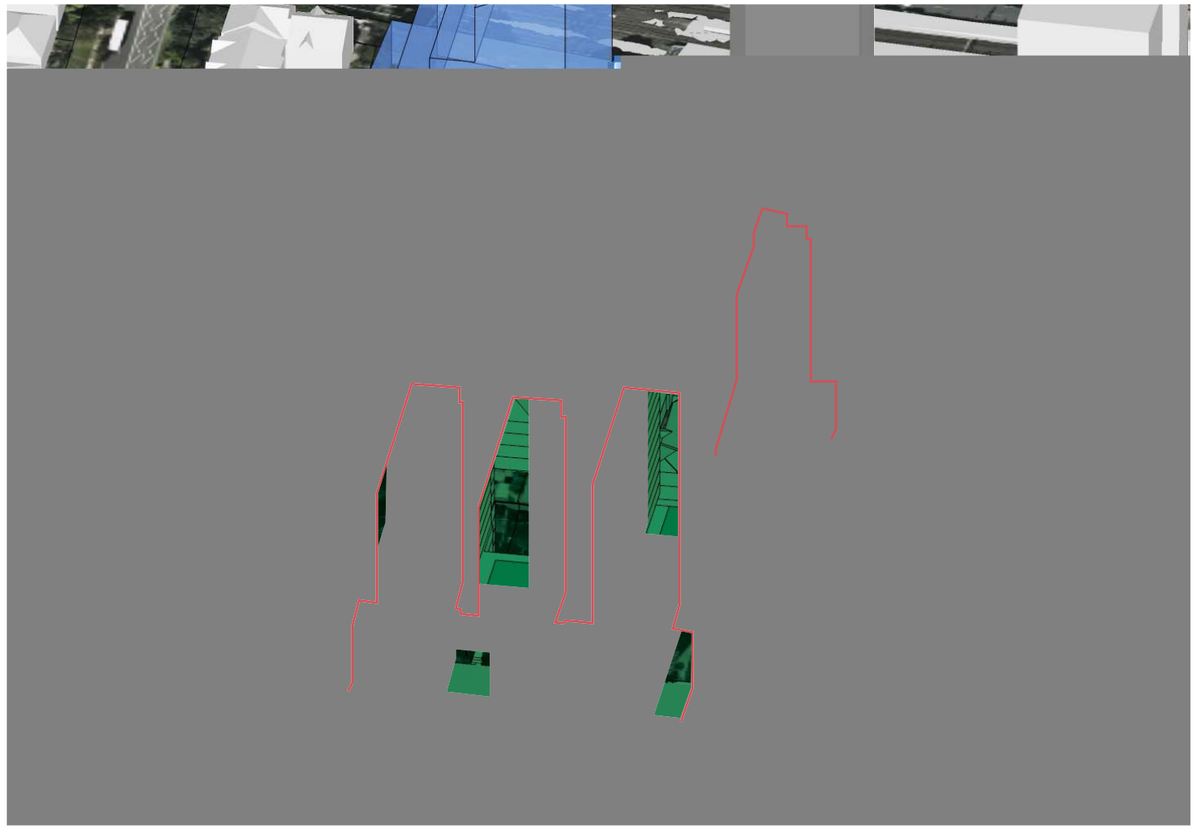
- Addition to complying scheme
- Proposed scheme improvements
- Proposed residential uses
- Proposed commercial uses
- Rooftop gardens
- DAs under assessment
- Developments under construction
- Surrounding context
- Adjacent heritage listed items

Views from the sun and shadow analysis

Views from the sun analysis - 12pm



Complying scheme



Proposed Two tower scheme

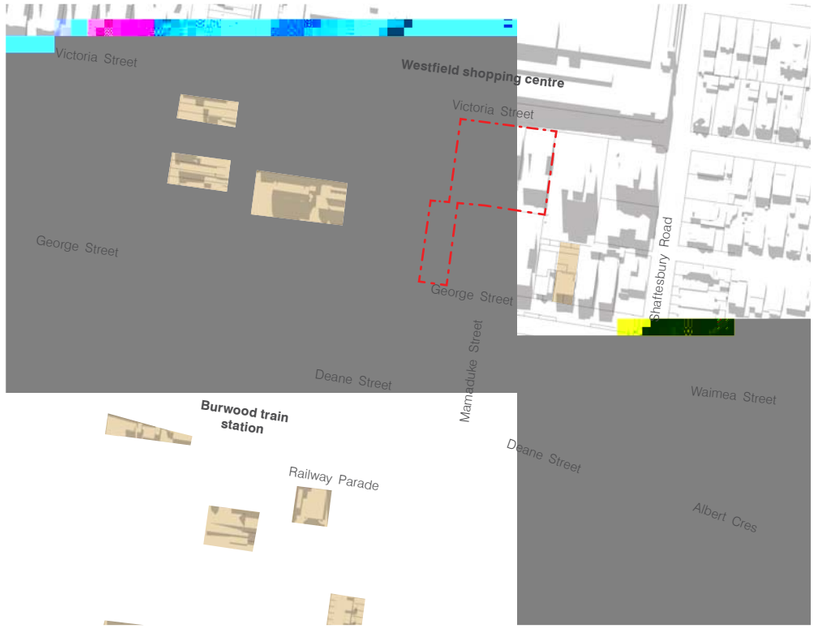
Key

- Outline of addition to complying scheme
- Proposed scheme improvements
- Proposed residential uses
- Proposed commercial uses
- Rooftop gardens
- DAs under assessment
- Developments under construction
- Surrounding context
- Adjacent heritage listed items

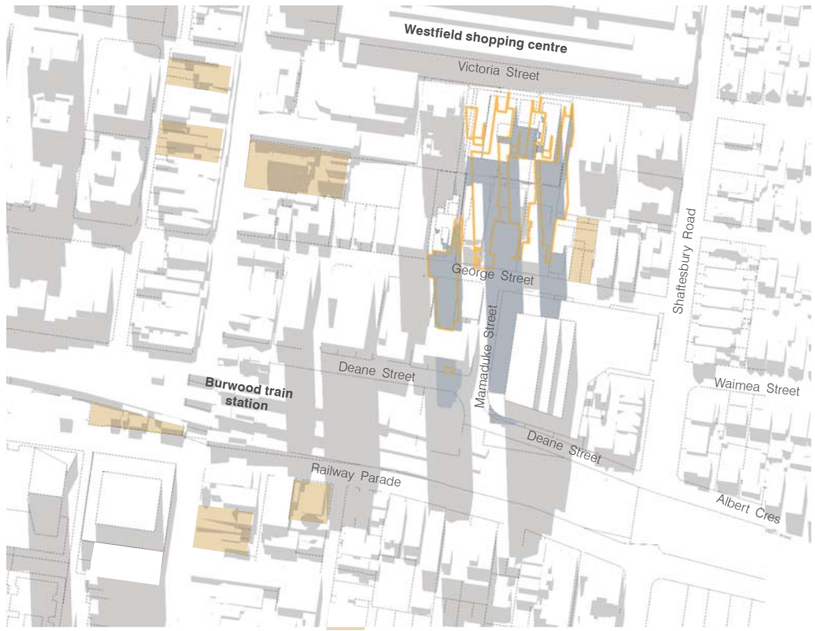
Winter solstice - 12pm

Complying scheme

1 tower scheme

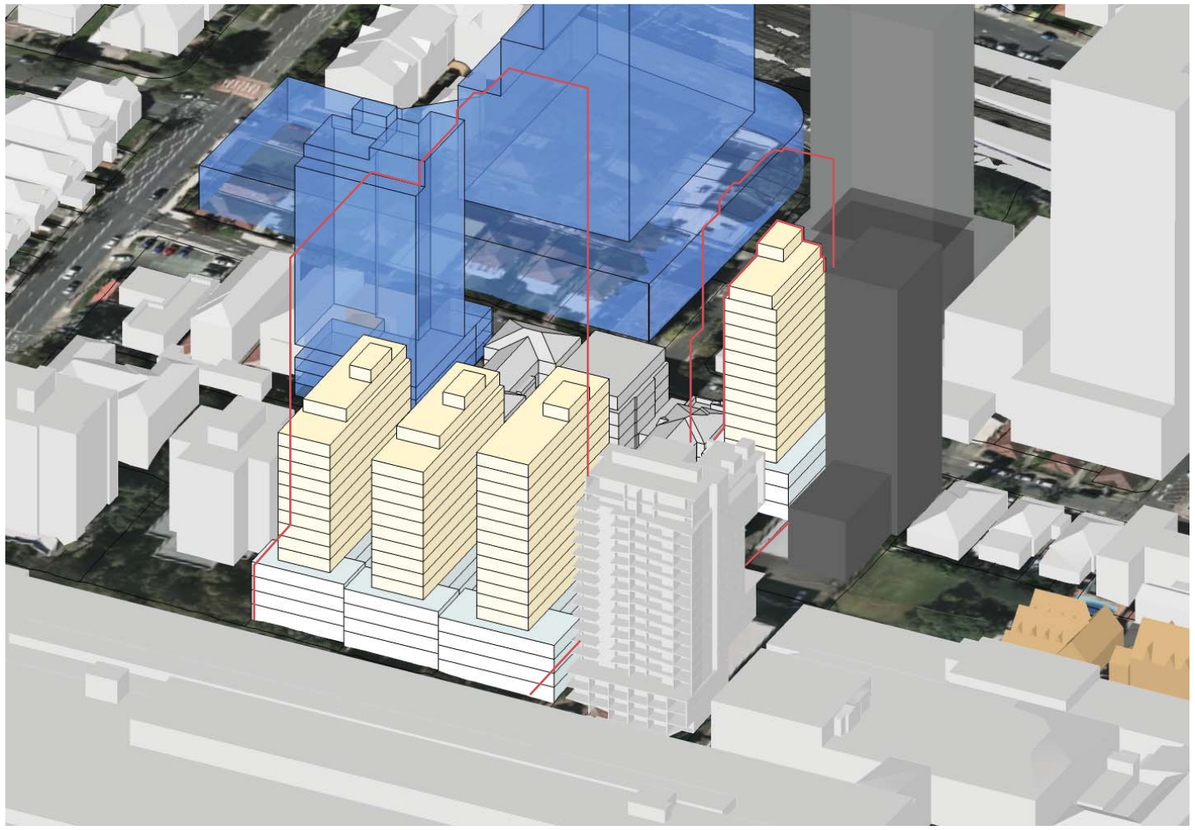


2 tower scheme

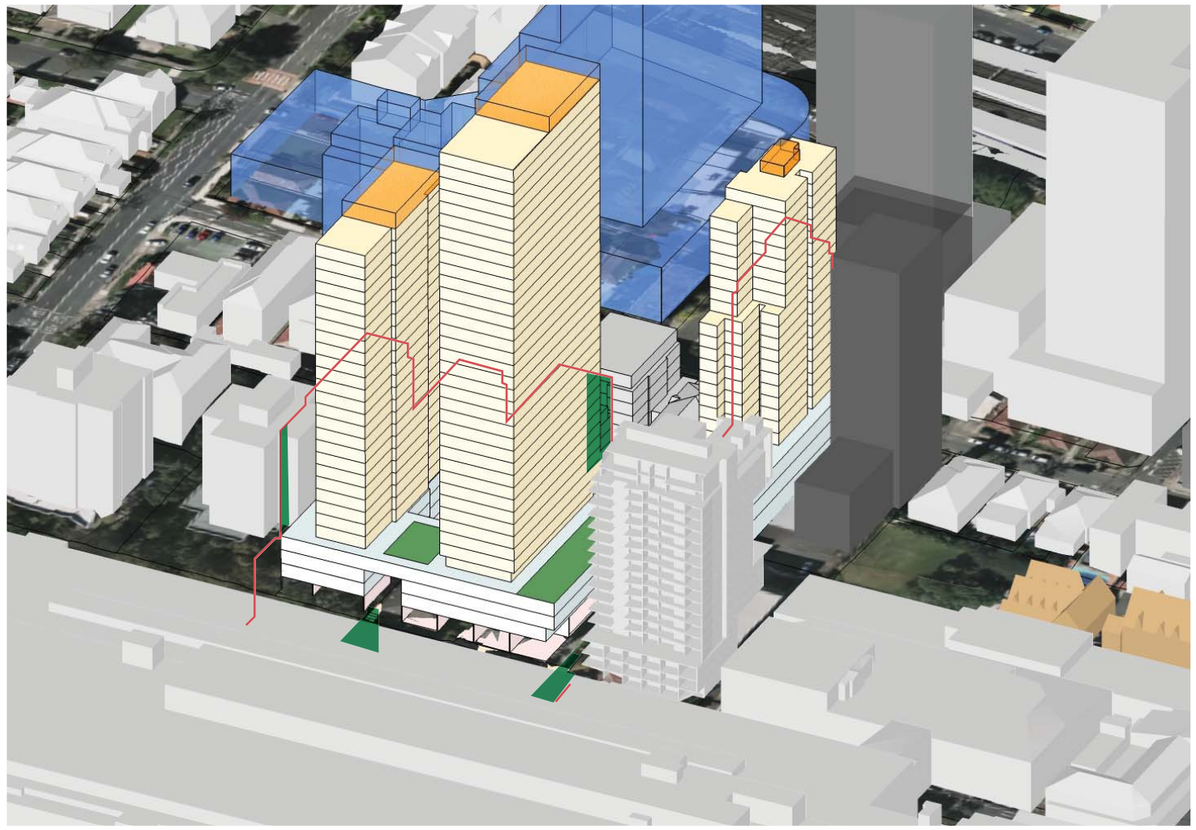


Views from the sun and shadow analysis

Views from the sun analysis - 1pm



Complying scheme



Proposed Two tower scheme

Key

- Outline of addition to complying scheme
- Proposed scheme improvements
- Proposed residential uses
- Proposed commercial uses
- Rooftop gardens
- DAs under assessment
- Developments under construction
- Surrounding context
- Adjacent heritage listed items

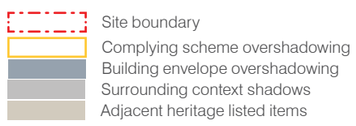
Winter solstice - 1pm

Existing condition

Complying scheme

1 tower scheme

2 tower scheme



Views from the sun and shadow analysis

Views from the sun analysis - 2pm

Complying scheme

Proposed Two tower scheme

Key

- Outline of addition to complying scheme
- Proposed scheme improvements
- Proposed residential uses
- Proposed commercial uses
- Rooftop gardens
- DAs under assessment
- Developments under construction
- Surrounding context
- Adjacent heritage listed items

Views from the sun and shadow analysis

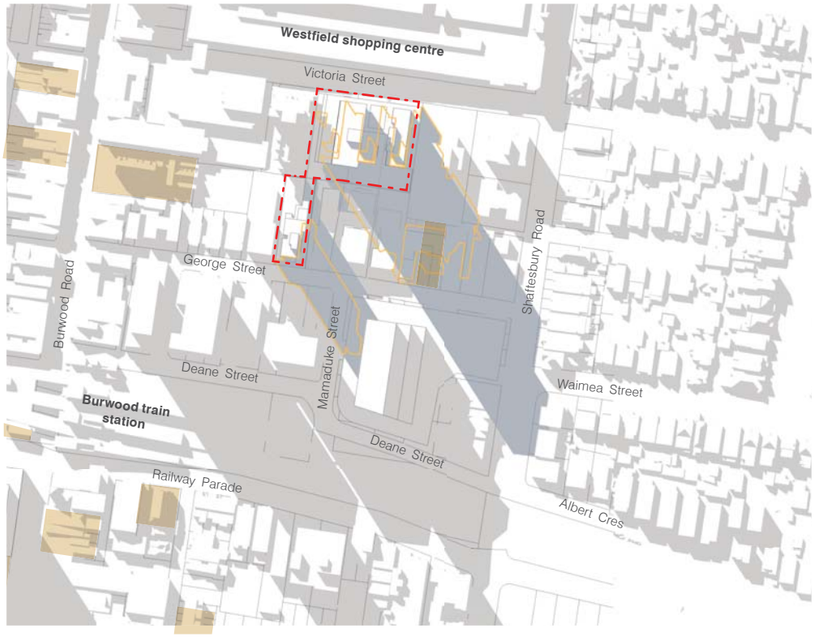
Winter solstice - 2pm

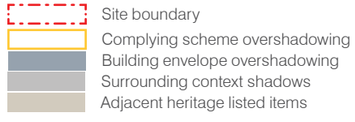
Existing condition

Complying scheme

1 tower scheme

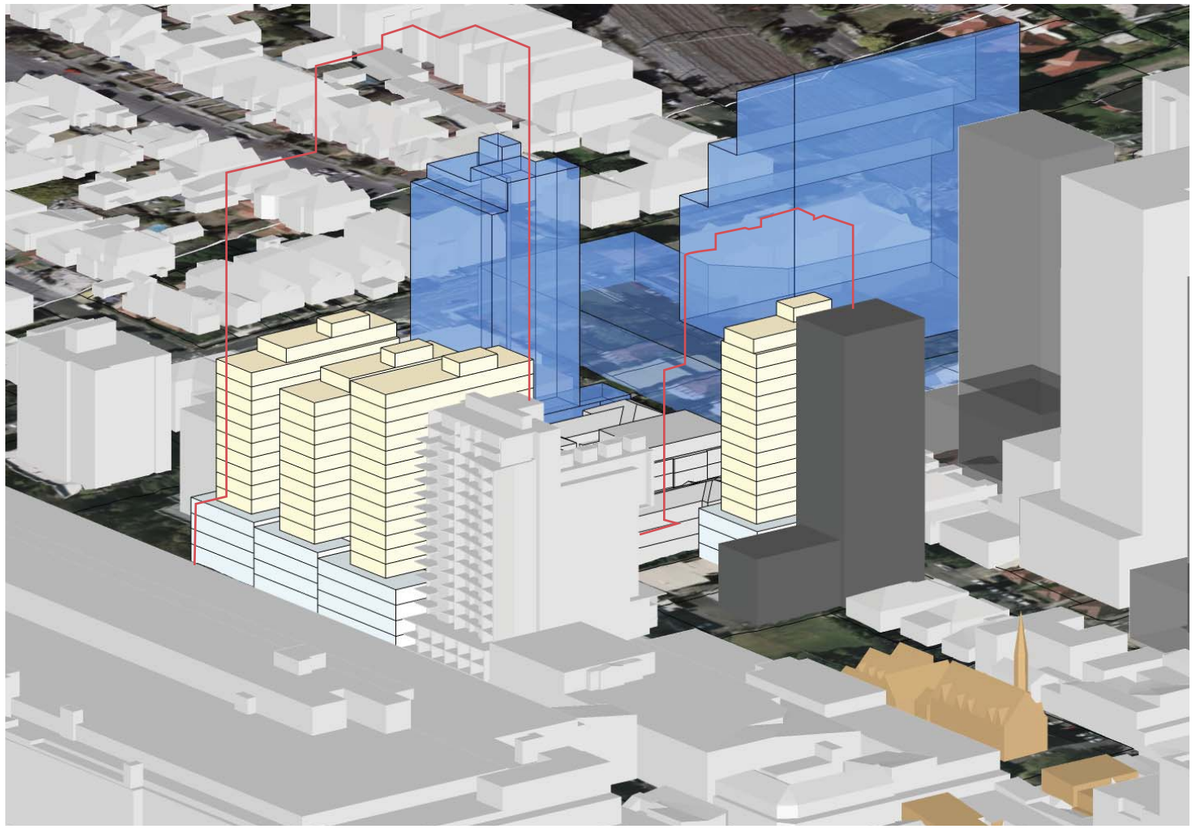
2 tower scheme



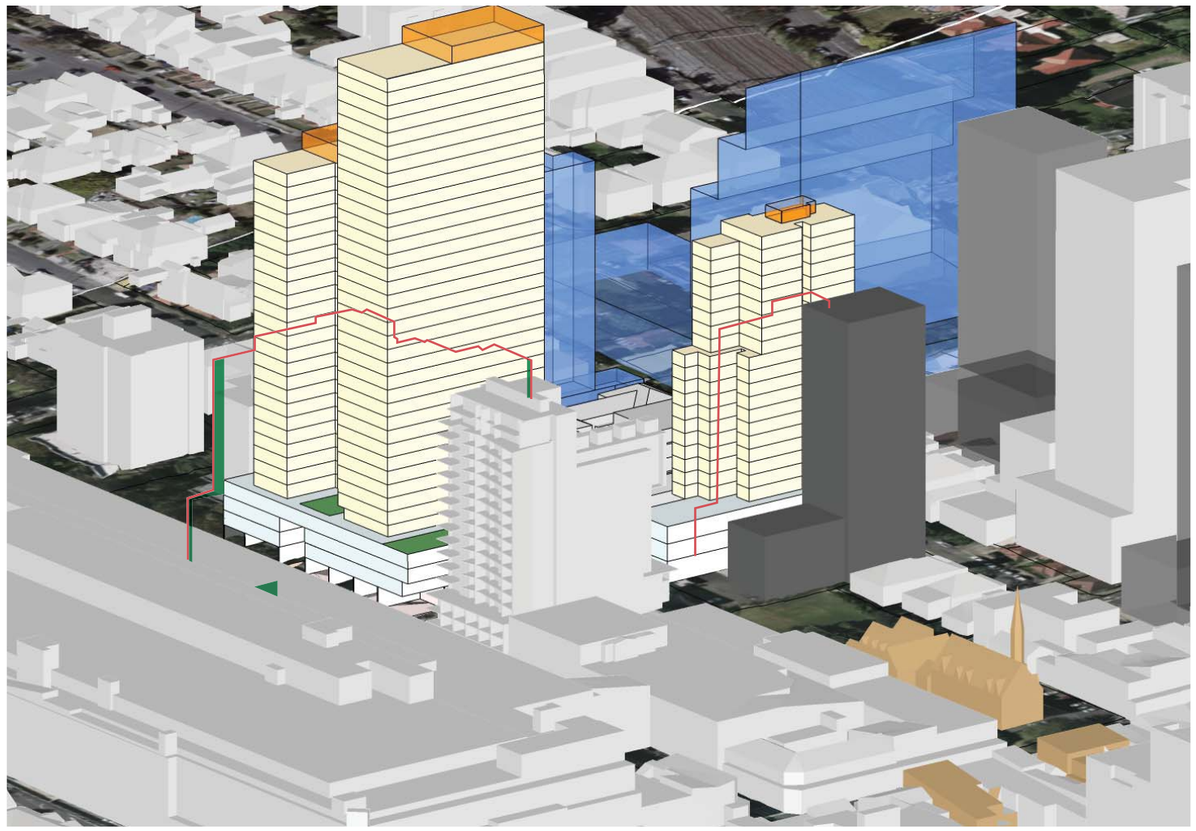


Views from the sun and shadow analysis

Views from the sun analysis - 3pm



Complying scheme



Proposed Two tower scheme

Key

- Outline of addition to complying scheme
- Proposed scheme improvements
- Proposed residential uses
- Proposed commercial uses
- Rooftop gardens
- DAs under assessment
- Developments under construction
- Surrounding context
- Adjacent heritage listed items

Views from the sun and shadow analysis

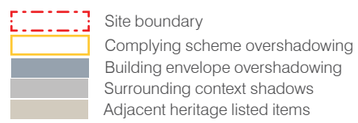
Winter solstice - 3pm

Existing condition

Complying scheme

1 tower scheme

2 tower scheme



5.3 SEPP 65

Solar access and cross ventilation

Daylight Access
- A maximum of 10% of the apartments are to be single aspect and south-facing.
- 70% of apartments in a development should receive a minimum of three hours direct sunlight between 9am and 3pm in mid-winter (may be varied to 2 hours in dense urban areas).

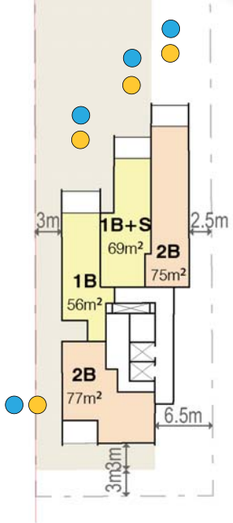
Natural Ventilation
- Building depths should be between 10 – 18 metres
- 60% of residential units should be naturally cross ventilated
- 25% of kitchens in a development should have access to natural ventilation.

With careful apartment layout planning and orientation, the development should achieve the SEPP 65 requirements for both solar access (86%) and cross-ventilation (61%).

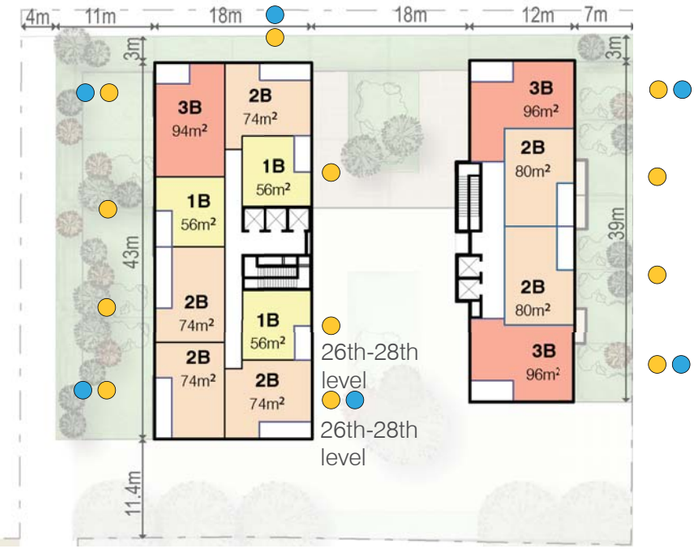
Level 5

Level 6-15

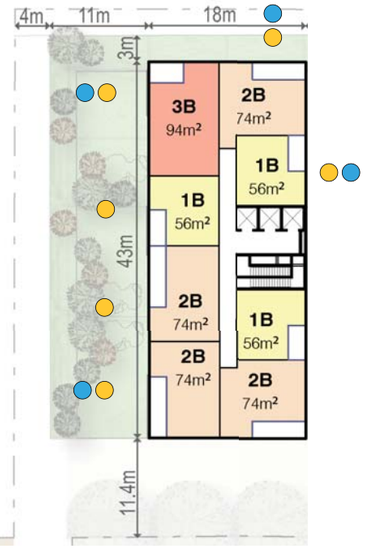
Level 16-23



Level 24-28



Level 29-38



Key

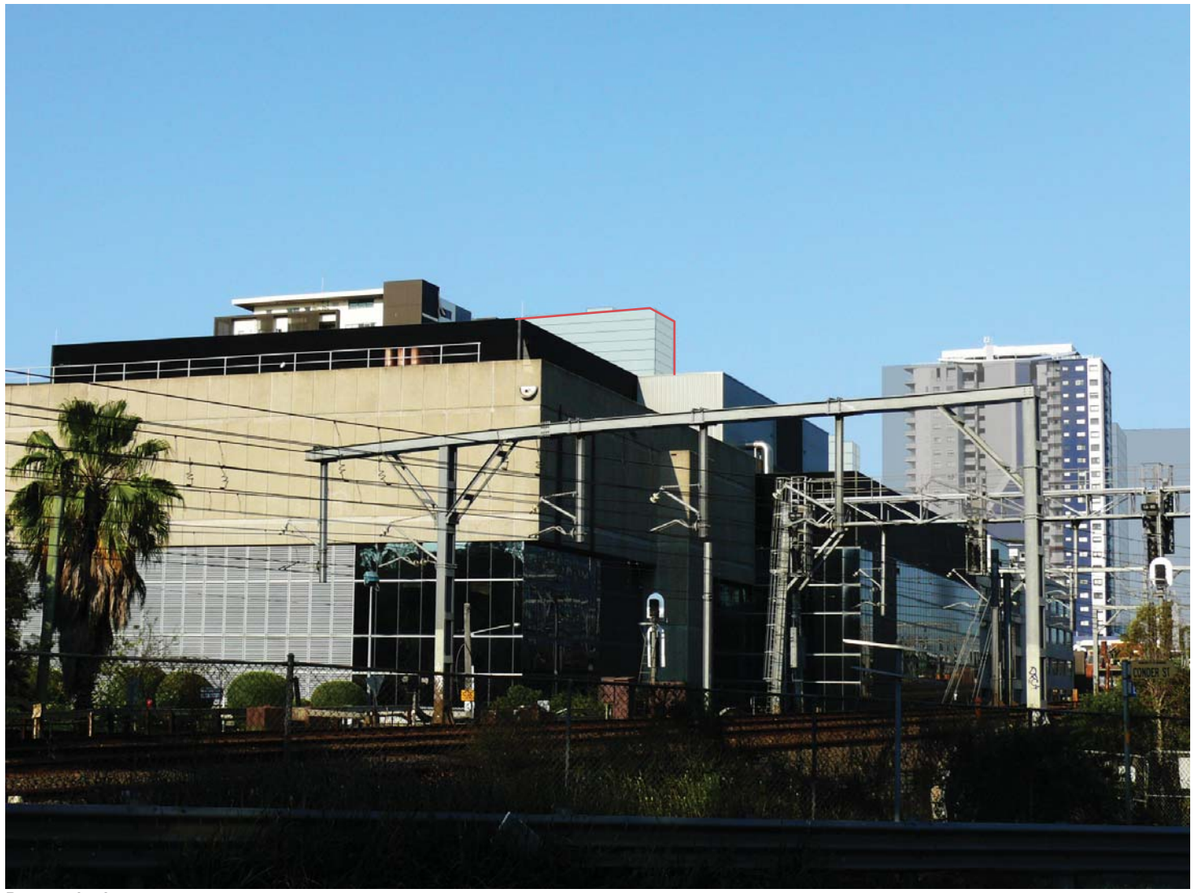
- Solar access to apartment >2hrs
- Cross-ventilated apartment

	Apartments	Cross ventilation	Solar access
Level 5	14	9	7
Level 6-15	160	99	124
Level 16-23	128	79	112
Level 24-28	60	34	56
Level 29-38	80	49	80
Totals	**442**	**270**	**379**
		61%	**86%**

5.4 Visual Impact Assessment

View looking east from Railway Parade

Existing condition



Proposed scheme

Proposed building envelope
Adjacent approved DAs/under construction

Key plan

Site Boundary

View looking south-east from Burwood Park

Existing condition

Proposed scheme

Proposed building envelope
Adjacent approved DAs/under construction

Key plan

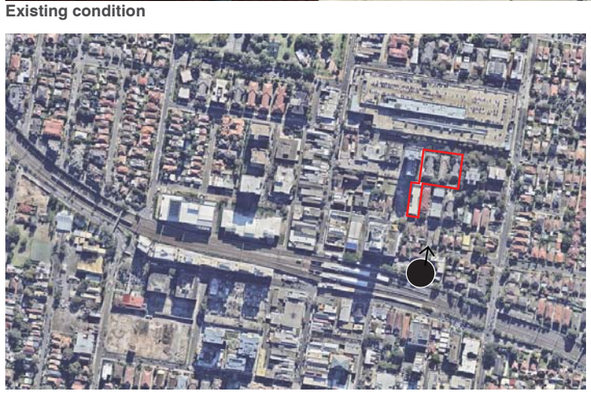
Site Boundary

View south of Burleigh Street

Existing condition

Proposed scheme

Proposed building envelope
Adjacent approved DAs/under construction



Key plan

Site Boundary

View looking east from the heritage item

Existing condition

Proposed scheme

Proposed building envelope
Adjacent approved DAs/under construction

Key plan

Site Boundary

View looking east along George Street

Existing condition

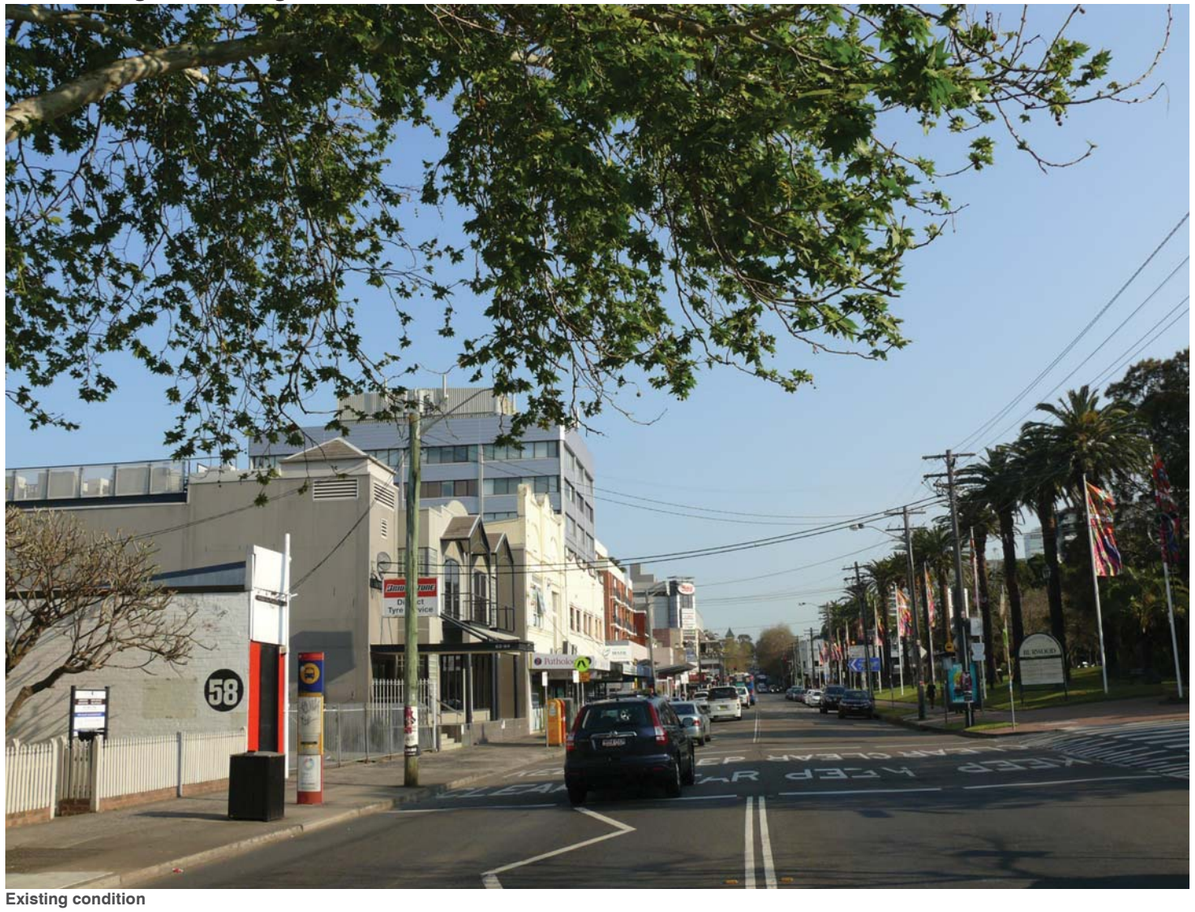
Proposed scheme

Proposed building envelope
Adjacent approved DAs/under construction

Key plan

Site Boundary

View looking south along Burwood Road



Existing condition

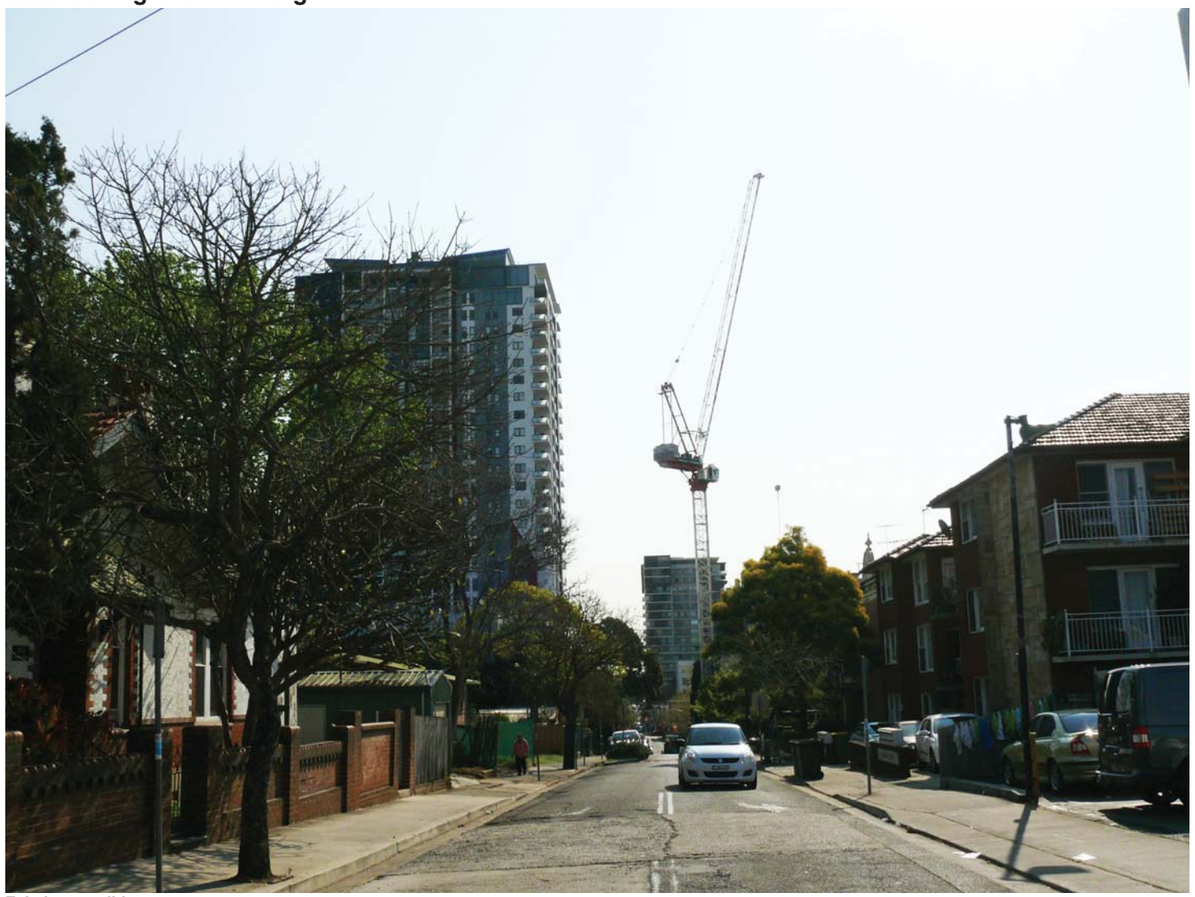
Proposed scheme

Proposed building envelope
Adjacent approved DAs/under construction

Key plan

Site Boundary

View looking east of George Street



Existing condition

Proposed scheme

Proposed building envelope
Adjacent approved DAs/under construction

Key plan

Site Boundary

View looking north-west from Croydon Station

Existing condition

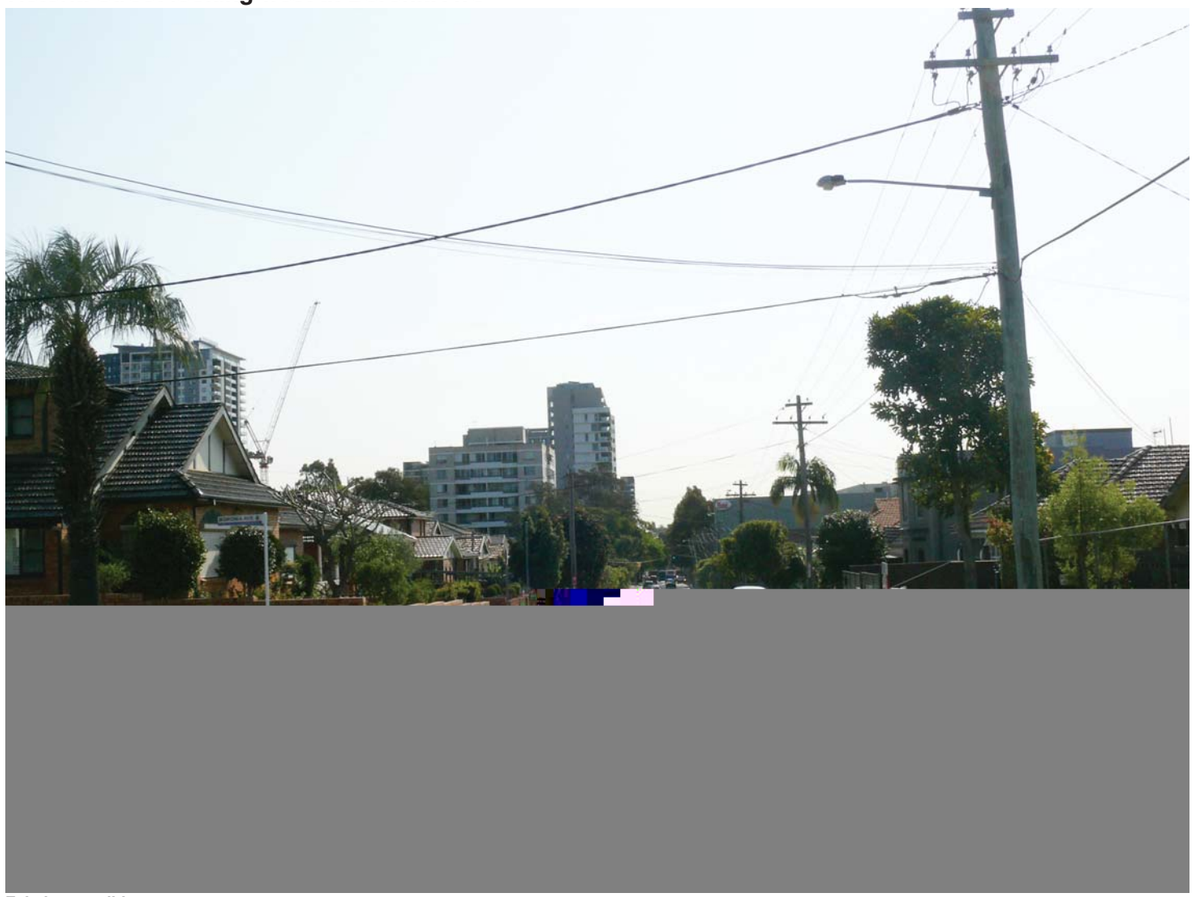
Proposed scheme

Proposed building envelope
Adjacent approved DAs/under construction

Key plan

Site Boundary

Victoria Street looking west at Boronia Ave



Existing condition

Proposed scheme

Proposed building envelope
Adjacent approved DAs/under construction

Key plan

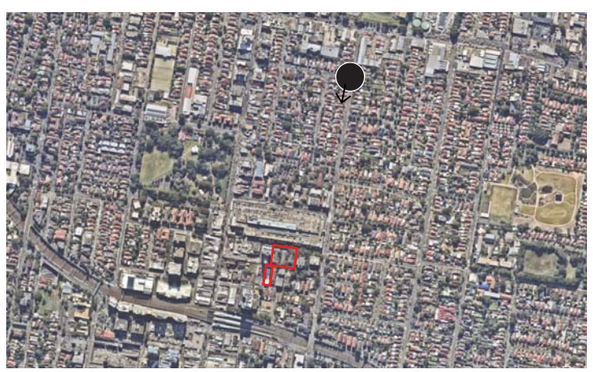
Site Boundary

View looking south along Shaftesbury Road

Existing condition

Proposed scheme

Proposed building envelope
Adjacent approved DAs/under construction



Key plan

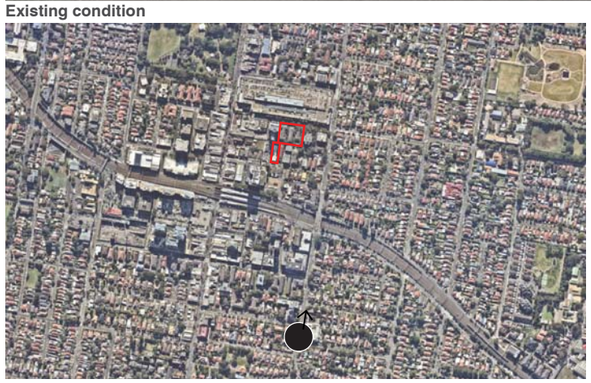
Site Boundary

View looking north along Shaftesbury Road

Existing condition

Proposed scheme

Proposed building envelope
Adjacent approved DAs/under construction



Key plan

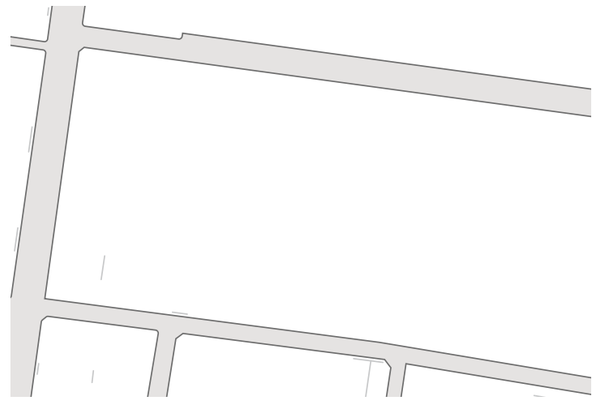
Site Boundary

Congregational Uniting Church - View 1

Key plan

Site Boundary

Congregational Uniting Church - View 2



Key plan

Congregational Uniting Church - View 3

Existing condition

Proposed scheme

Key plan

Site Boundary

Heritage terraces (9 & 11 George Street) - View 1

Existing condition

Proposed scheme

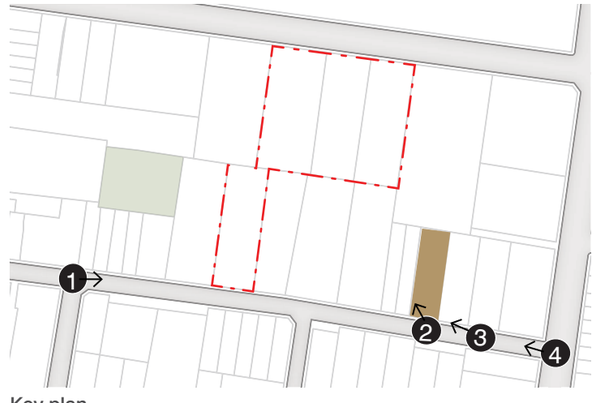
Key plan

Site Boundary

Heritage terraces (9 & 11 George Street) - View 2

Existing condition

Proposed scheme



Key plan

Site Boundary

Heritage terraces (9 & 11 George Street) - View 1

Existing condition

Proposed scheme

Key plan

Site Boundary

Heritage shop top buildings (90-98 Burwood Road) - View 1

Existing condition

Proposed scheme

Key plan — Site Boundary

In conclusion,

The majority of the views have a negligible to minor impact on the skyline. There will be some moderate impact on heritage items within the block, however these items are not located in close proximity to the site, being more than 100m away. It is felt that the proposal will provide an attractive slender tower form which will be consistent with the emerging Burwood skyline.

5.5 Conclusion and recommendations

THE PROPOSED PLANNING PROPOSAL FOR THE SITE PROVIDES THE OPPORTUNITY TO CREATE AN EXCITING NEW ADDITION TO BURWOOD FOR BOTH LOCAL RESIDENTS AND VISITORS. IT IS DESIGNED TO STIMULATE THE ECONOMY AND PROVIDE MUCH NEEDED QUALITY HOUSING CLOSE TO TRANSPORT, RETAIL AND OTHER KEY AMENITIES.

The subject site is ideally suited to a landmark development, being one of the rare opportunities to amalgamate four sites to create a unique and sensitive addition to Burwood town centre.

Key benefits of the proposal include:

1. **A unique town centre site** - having been identified as a strategic centre in A Plan for Growing Sydney, the site has the opportunity to achieve the priorities outlined in the plan to 'work with Council to provide capacity for additional mixed-use development in Burwood, including offices, retail, services and housing.' The proposal offers the opportunity to increase the capacity for mixed use and contribute to meeting Sydney's housing demand.
2. Improved public domain and pedestrian amenity for the town centre with a proposed **mid-block through site link** between Victoria and George Streets will improve connections between the retail centre at Westfield and Burwood train station.
3. An **open space** off the Victoria Street retail strip provides a respite from the busy town centre and an opportunity for outdoor food and beverage facilities in a landscaped courtyard setting.
4. The **four amalgamated sites** provide the opportunity to maximise tower separation with **slender tower** forms.
5. The opportunity for an **exciting addition to the evolving Burwood skyline**, near Burwood Road and the train station
6. **24 hour activation** and improved safety will be achieved by locating building lobbies and retail on both street frontages, as well as on the through site link and around the open space to maximise pedestrian patronage at all times of day
7. A **vibrant mix** of retail, child-care, community, commercial and residential uses will activate Victoria Street
8. **Design excellence**. Built form includes a podium which aligns with the podium of adjacent development, and towers which are set back from podium edges to reduce the apparent bulk and scale from ground level
9. Commitment to a wide range of **public benefits** to be further discussed with Council.
10. Commercial office floor space generates an increase of **employment** in the area.
11. The Council supports **amalgamated sites** for higher density development with the opportunity to provide improvements to the public domain.

In conclusion, having investigated the site and its context in detail, Architectus is confident that the proposal and Planning Proposal represents the best urban design and public domain outcome for the site.

Indicative visualisation of the activated retail street frontage on Victoria Street.

Part 6.0

Appendix

6.1 Single tower scheme

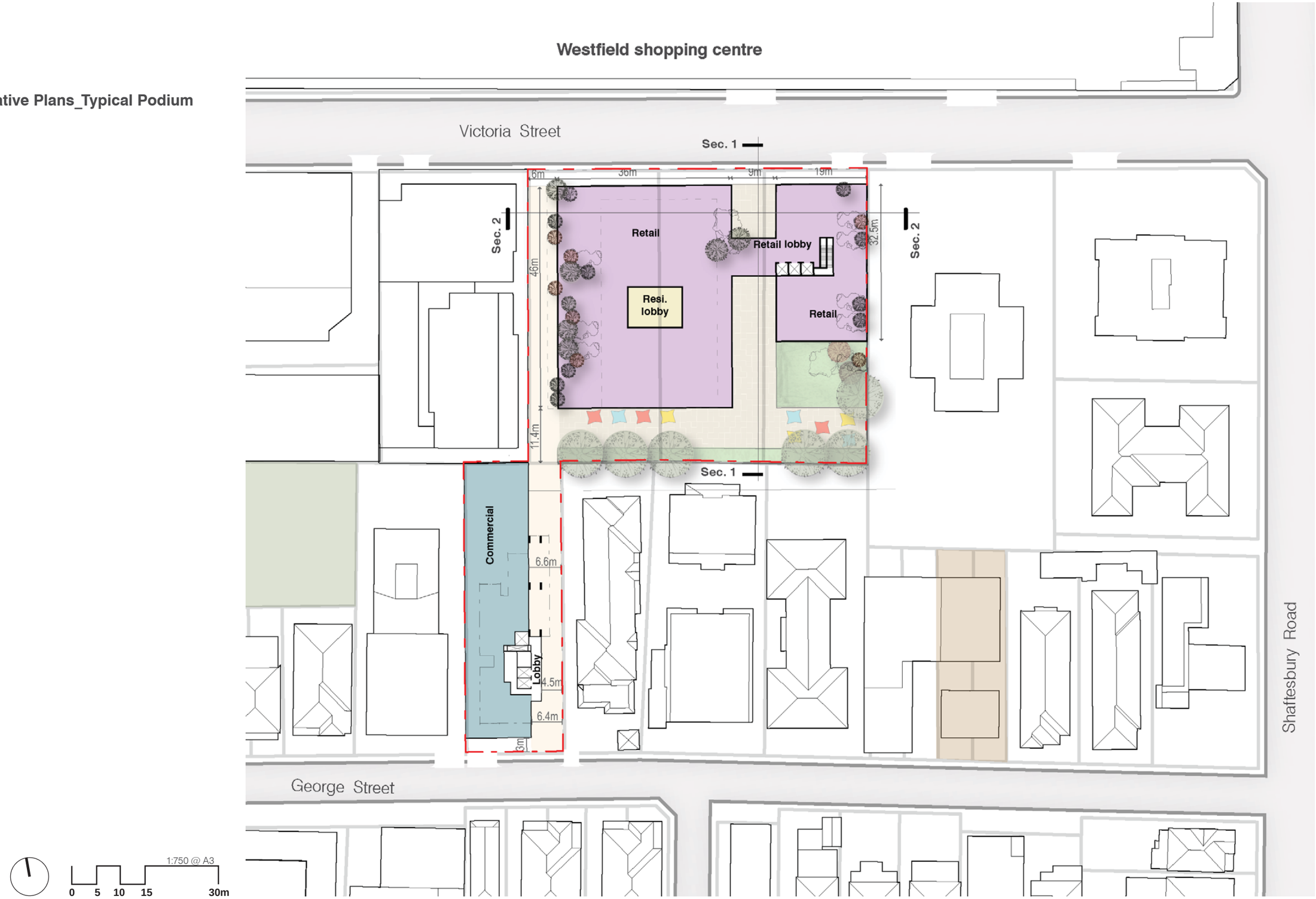
6.5.1 Indicative Plans_Ground Floor

6.1.1 Indicative Plans_Typical Podium

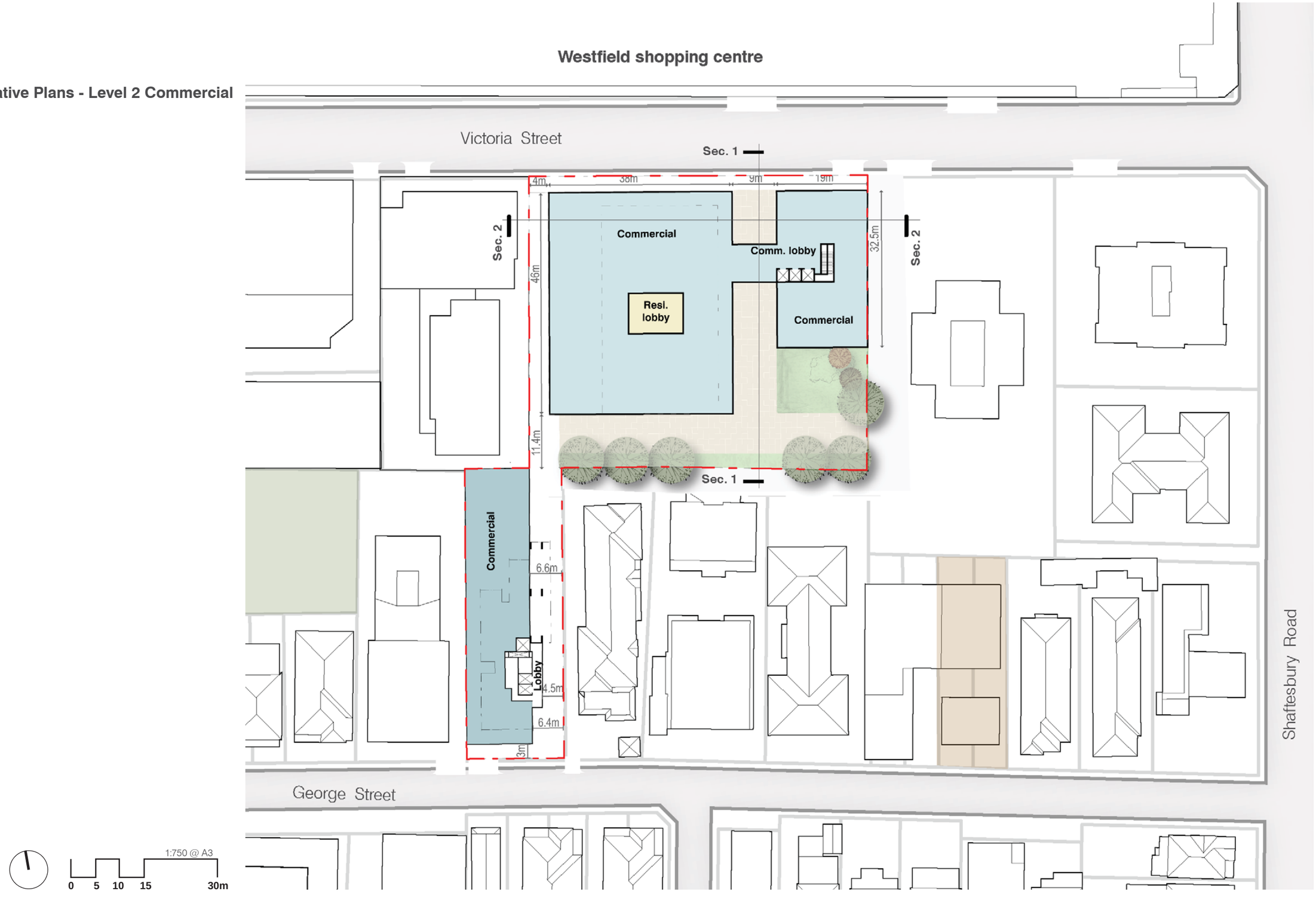
Apartment mix

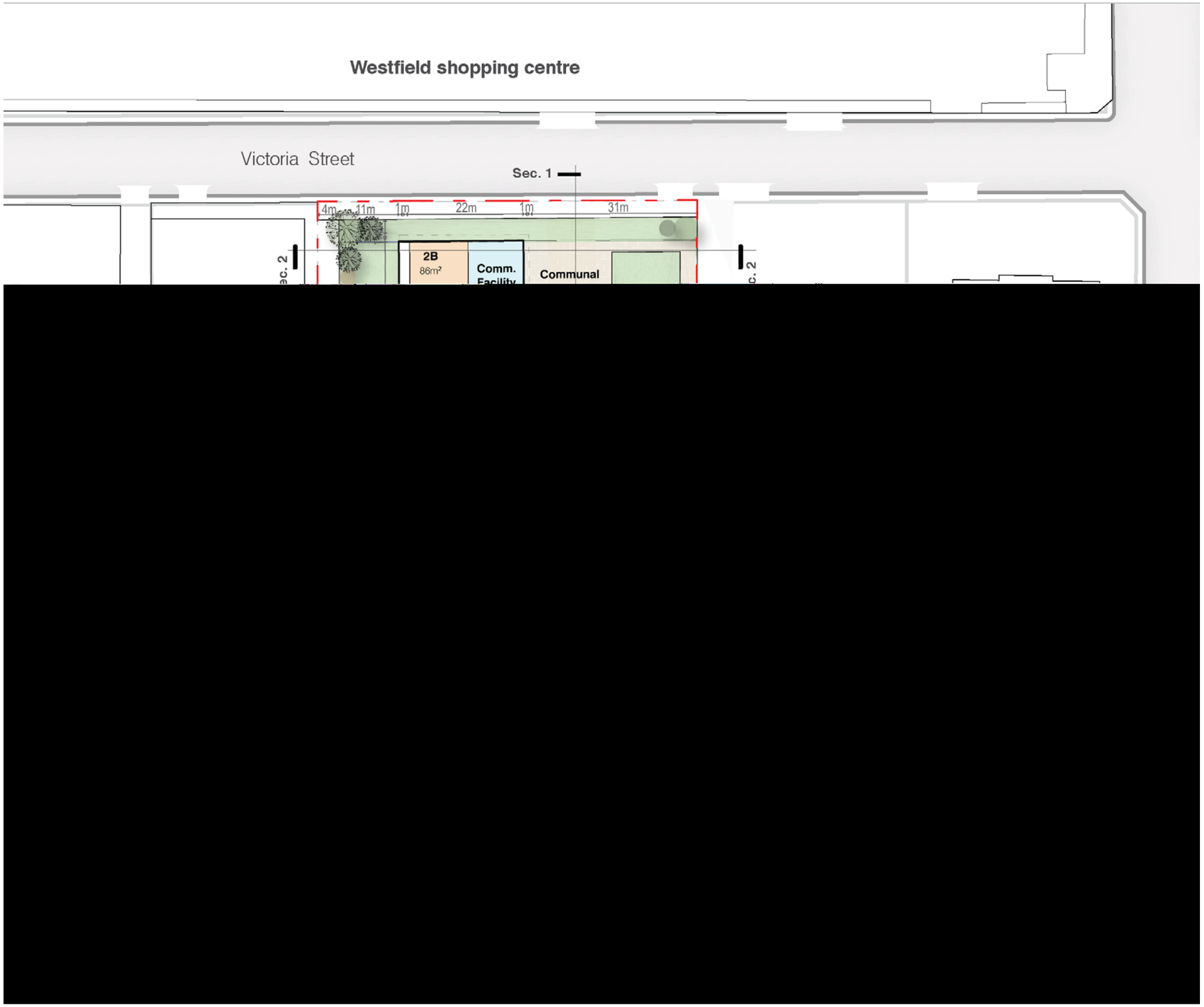
2 x 1 bed
2 x 2 bed

Total:
4 apartments



6.1.2 Indicative Plans - Level 2 Commercial





6.1.3 Indicative Plans - Level 5

Apartment mix

3 x 1 bed
5 x 2 bed
2 x 3 bed

Total:
10 apartments

1:750 @ A3

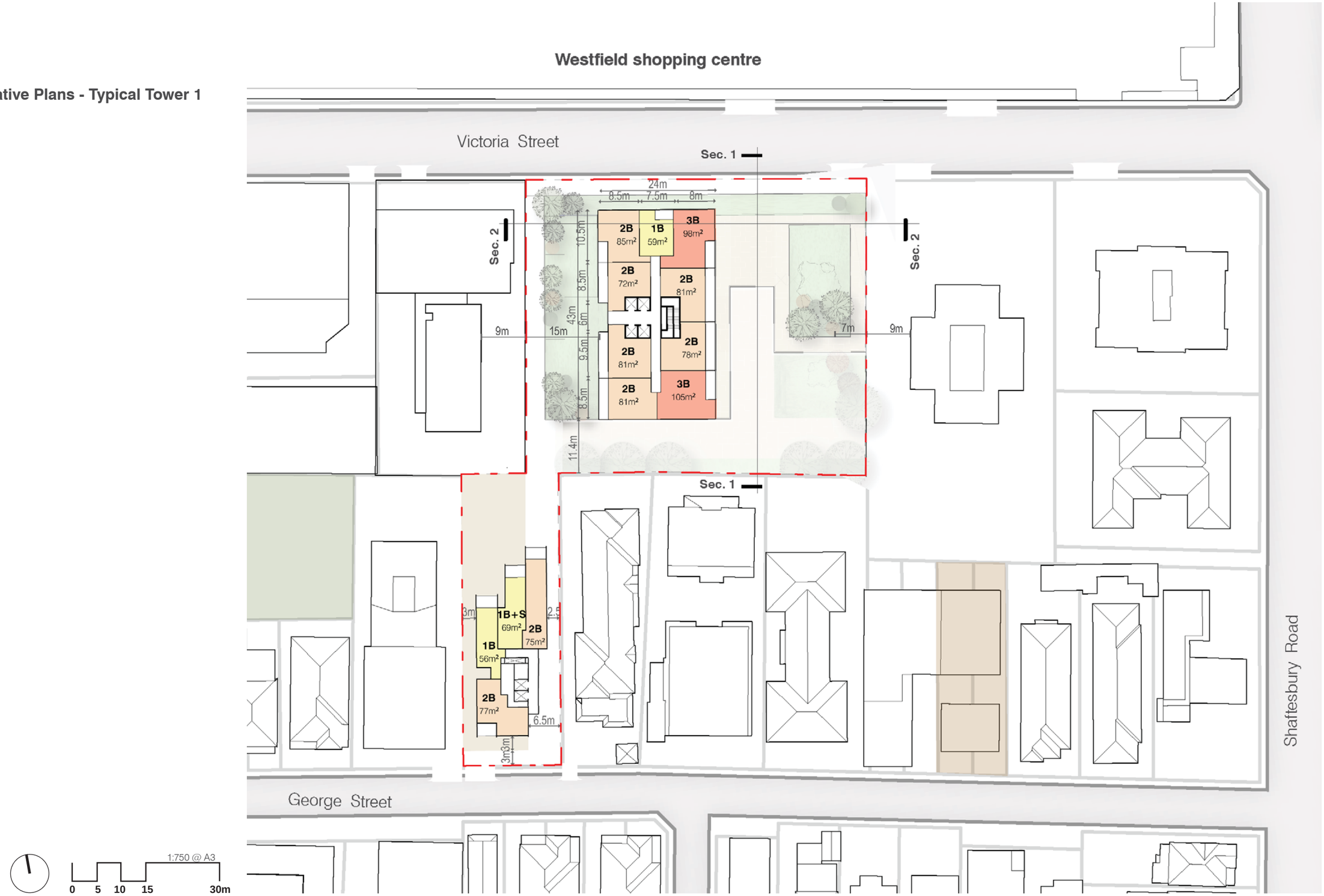
0 5 10 15 30m

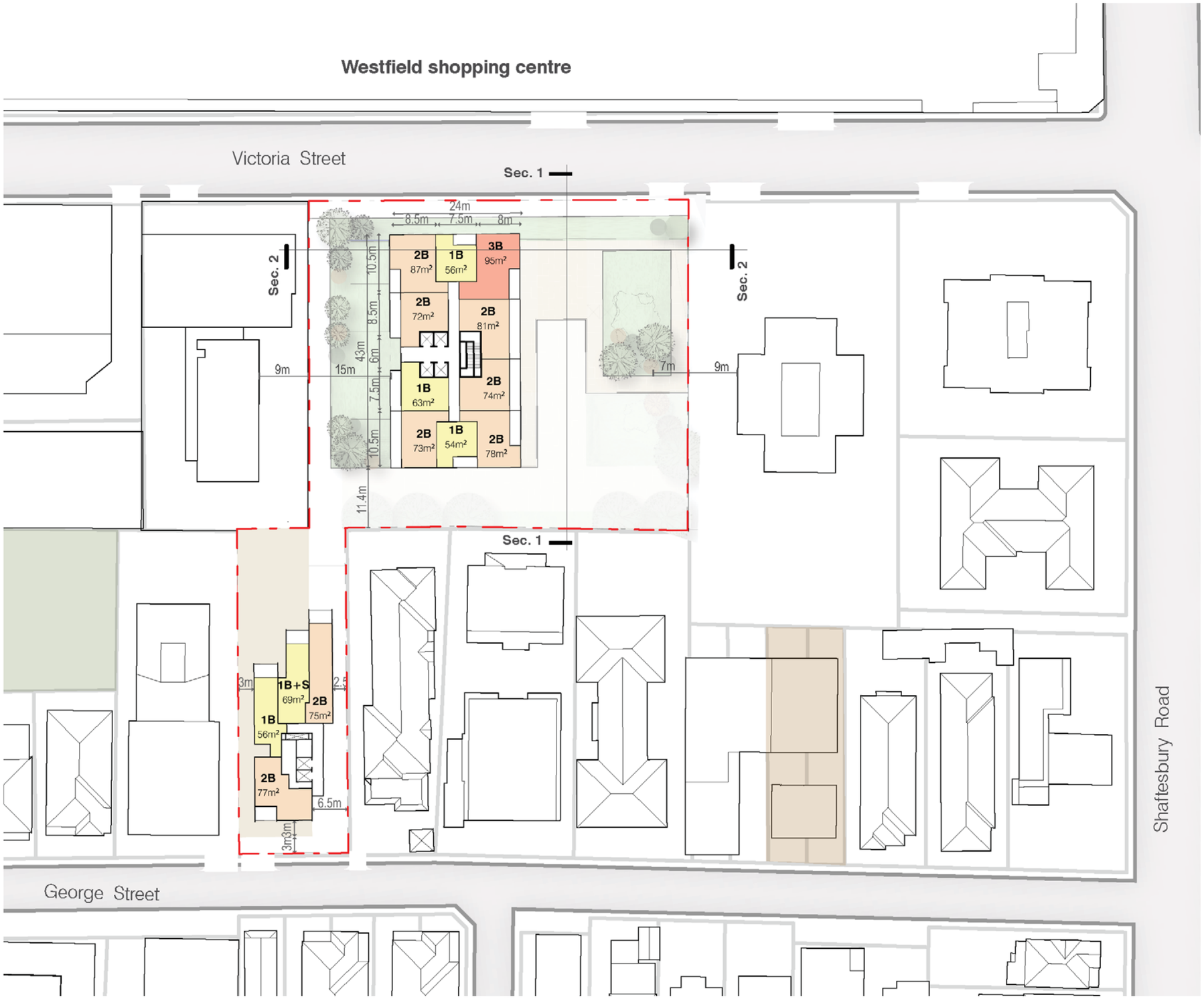
6.1.4 Indicative Plans - Typical Tower 1

Apartment mix

3 x 1 bed
8 x 2 bed
2 x 3 bed

Total:
13 apartments





6.1.5 Indicative Plans - Typical Tower 2

Apartment mix

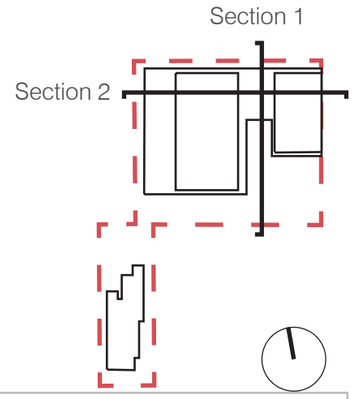
5 x 1 bed
8 x 2 bed
1 x 3 bed

Total:
14 apartments

1:750 @ A3

0 5 10 15 30m

Single tower scheme



6.1.6 Detailed Section - Single tower scheme

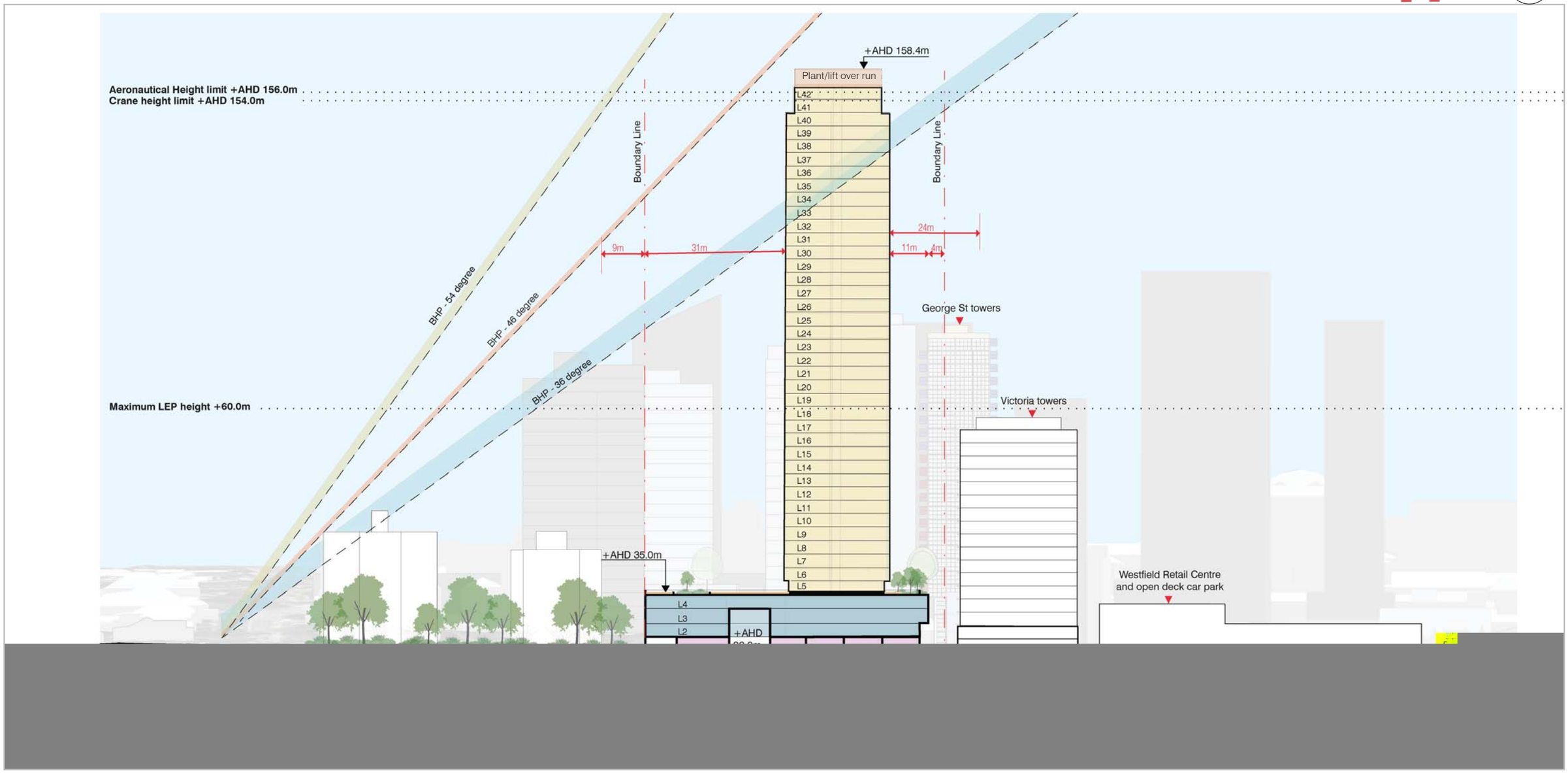
+AHD 158.4m
Plant / lift over run
Aeronautical Height limit +AHD 156.0m
Crane height limit +AHD 154.0m
Boundary Line
Boundary Line
L42
L41
L40
L39
L38
L37
L36
L35
L34
L33
L32
L31
L30
L29
L28
L27
L26
L25
L24
L23
L22
L21
L20
L19
L18
L17
L16
L15
L14
L13
L12
L11
L10
L9
L8
L7
L6
L5
L4
L3
L2
L1
B1
B2
B3
B4
George Street Tower
Potential futute development
as per DCP permissible height
11.4m
3m
3m
Maximum LEP height +60.0m
George Street
+AHD 35.0m
+AHD 20.0m
+AHD 20.0m
Victoria Street
+AHD 19.5m
Westfield Retail Centre

6.1.7 Detailed Section - Single tower scheme

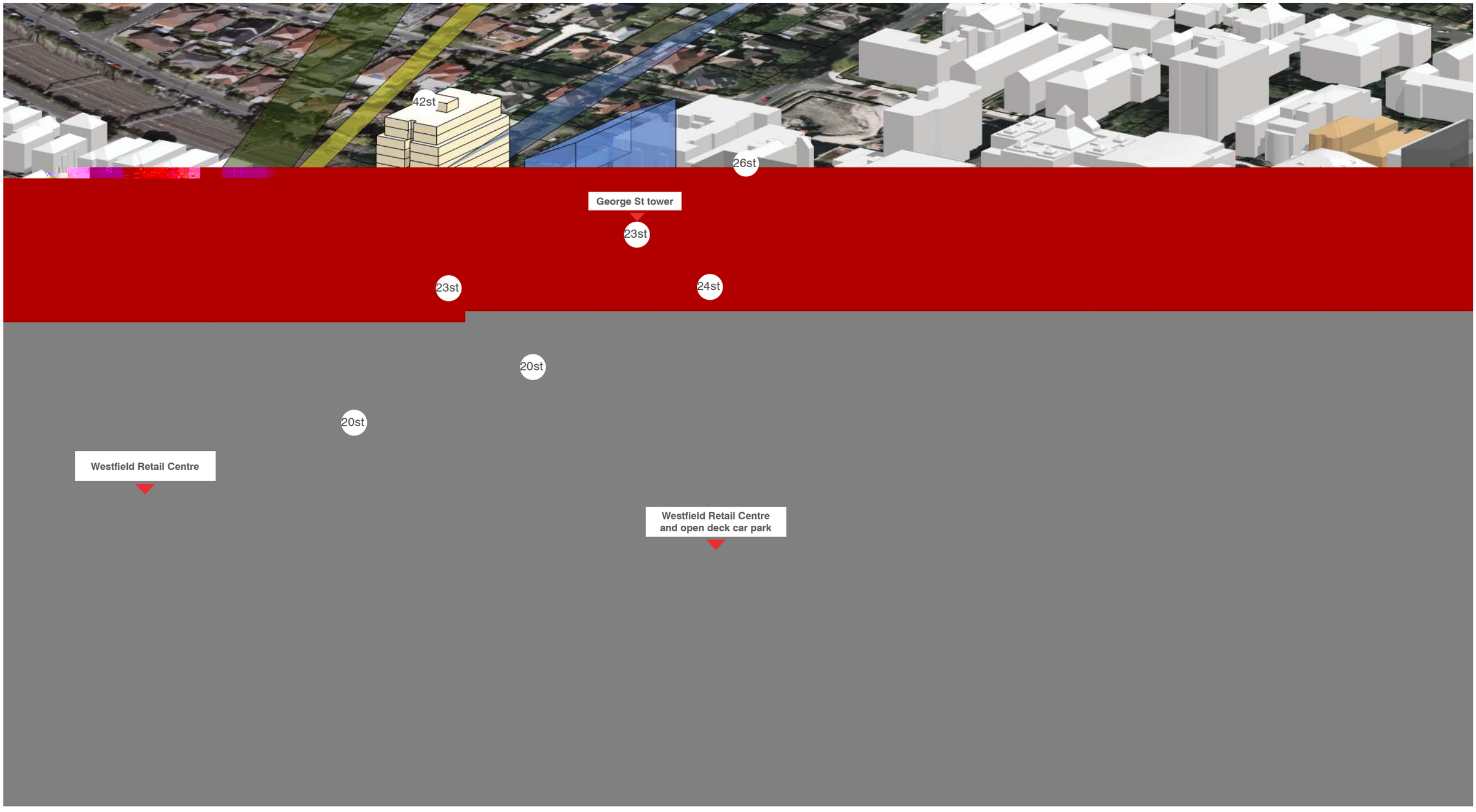
Single tower scheme

Section 1

Section 2



6.1.8 Built Form Massing - Single tower option



6.1.9 Yield calculations - Single tower option

28 - 34 VICTORIA STREET

Victoria St. S.A. only **4,243** sqm

Storey	GFA (sqm)	Apartment Mix 1B	2B	3B
L42	609	3	6	1
L41	609	3	6	1
L40	812	3	6	1
L39	812	3	6	1
L38	812	3	6	1
L37	812	3	6	1
L36	812	3	6	1
L35	812	3	6	1
L34	812	3	6	1
L33	812	3	6	1
L32	812	3	6	1
L31	812	3	6	1
L30	812	3	6	1
L29	812	3	6	1
L28	812	3	6	1
L27	812	3	6	1
L26	812	3	6	1
L25	812	3	6	1
L24	812	3	6	1
L23	812	1	6	2
L22	812	1	6	2
L21	812	1	6	2
L20	812	1	6	2
L19	812	1	6	2
L18	812	1	6	2
L17	812	1	6	2
L16	812	1	6	2
L15	812	1	6	2
L14	812	1	6	2
L13	812	1	6	2
L12	812	1	6	2
L11	812	1	6	2
L10	812	1	6	2
L9	812	1	6	2
L8	812	1	6	2
L7	812	1	6	2
L6	812	1	6	2
L5	713	1	3	2
L4	2,291			
L3	2,202	76	225	57
L2	2,119		358	
L1	2,026			

23 - 27 GEORGE STREET

George St. S.A. only **1,207** sqm

Storey	GFA (sqm)	Apartment Mix 1B	2B	3B
L23	209		1	1
L22	250	1	2	
L21	250	1	2	
L20	250	1	2	
L19	250	1	2	
L18	250	1	2	
L17	250	1	2	
L16	250	1	2	
L15	250	1	2	
L14	250	2	2	
L13	309	2	2	
L12	309	2	2	
L11	309	2	2	
L10	309	2	2	
L9	309	2	2	
L8	309	2	2	
L7	309	2	2	
L6	309	2	2	
L5	309	2	2	
L4	309	2	2	
L3	707	30	39	1
L2	707		70	
L1	477			

Total site Area 5,450

	GFA (sqm)	FSR
Total Residential	35,900	6.6
Total Commercial / retail	10,530	1.9
TOTAL	46,430	8.5

	Apartment Mix 1B	2B	3B
Subtotal	106	264	58
%	25%	62%	14%
TOTAL		428	

Assumptions	
GFA for Residential	80%
GFA for Commercial	90%

Key

- Residential uses
- Commercial uses
- Retail uses

6.1.10 Masterplan - Single tower option

architectus™