

Setbacks | Sydney DCP

Envelope | Setbacks

Sydney Development Control Plan 2012, Section 5.1.3 Provisions (2)

For development within a Special Character Area where the setback is not illustrated in Figures 5.12 to 5.19, setbacks above the street frontage height are to be a **minimum of 8m**. Smaller or weighted average setbacks are not acceptable.

Table 5.1: Street frontage heights and front setbacks for Special Character Area

College Street Hyde Park

LEP map reference : **D**

Maximum street frontage heght : **45m**

.....

The average setbacks above each street frontages and the parts of proposed envelope protrude into the 8m setback area is as following;

Elizabeth Street frontage

Average Setback : 10.3m

Less than 8m setback : 10.6%

Park Street frontage

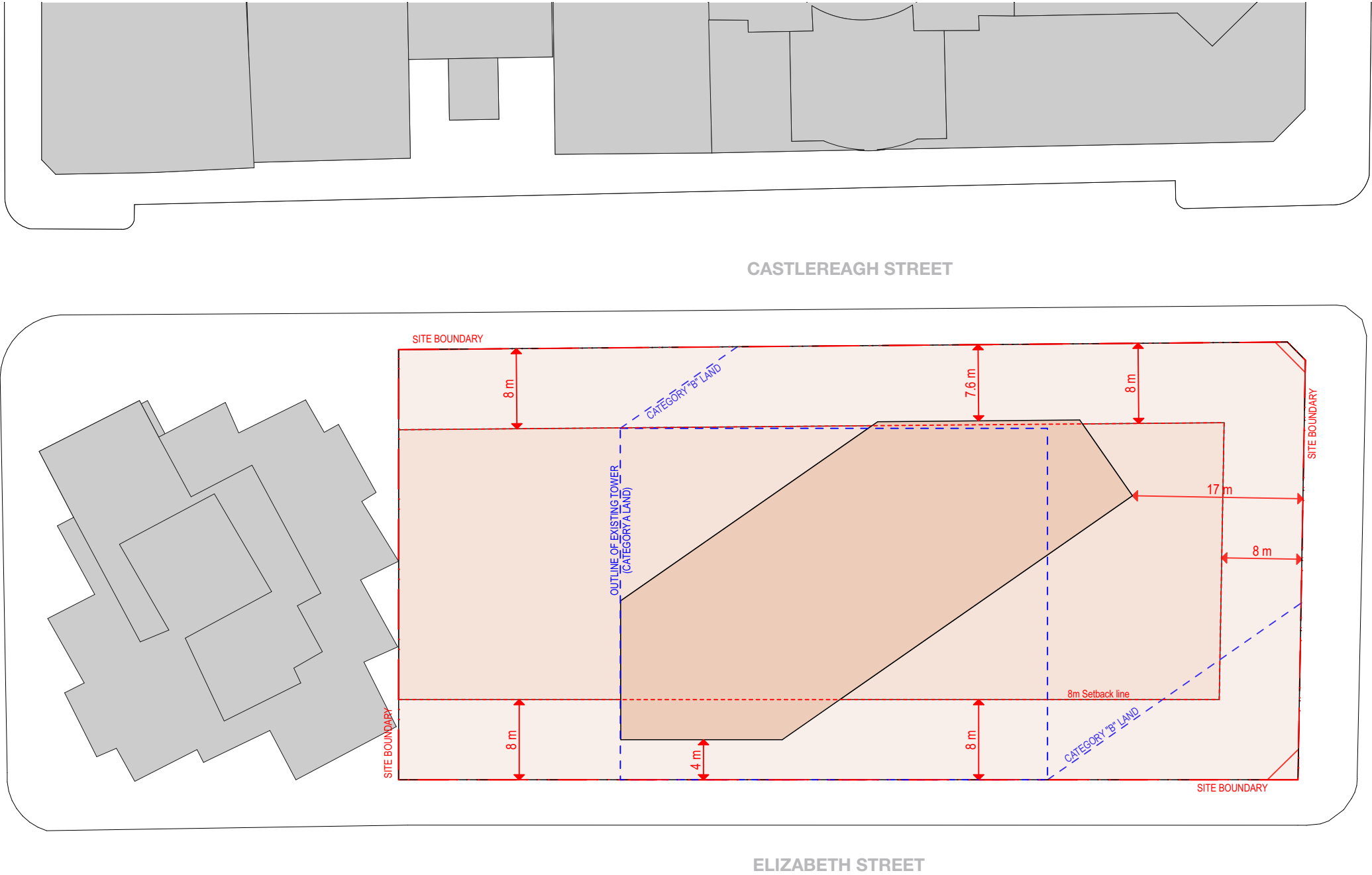
Average Setback : 33.0m

Less than 8m setback : 0%

Castlereagh Street frontage

Average Setback : 11.0m

Less than 8m setback : 1.1%



Category A and Category B Land | Sydney LEP

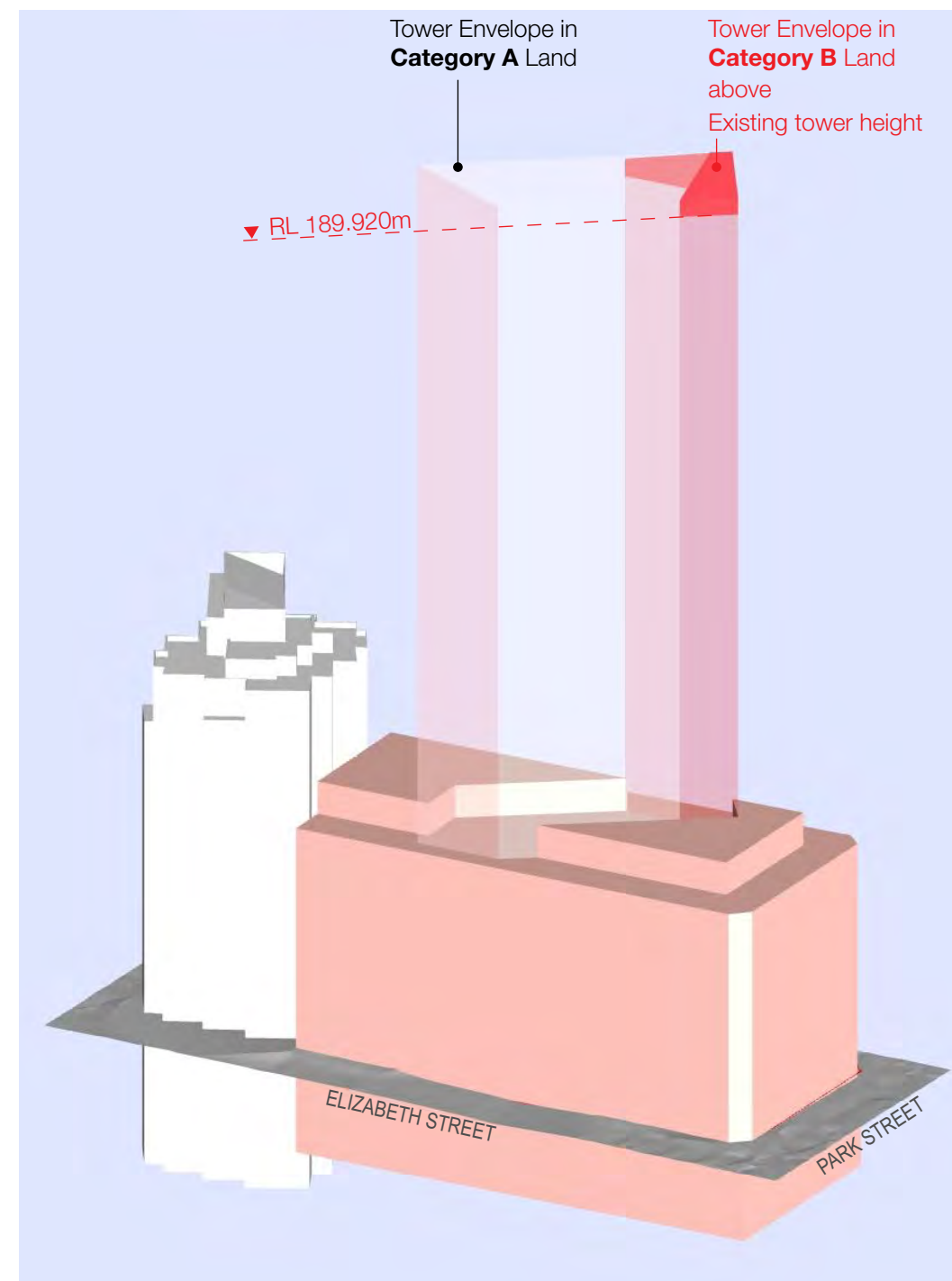
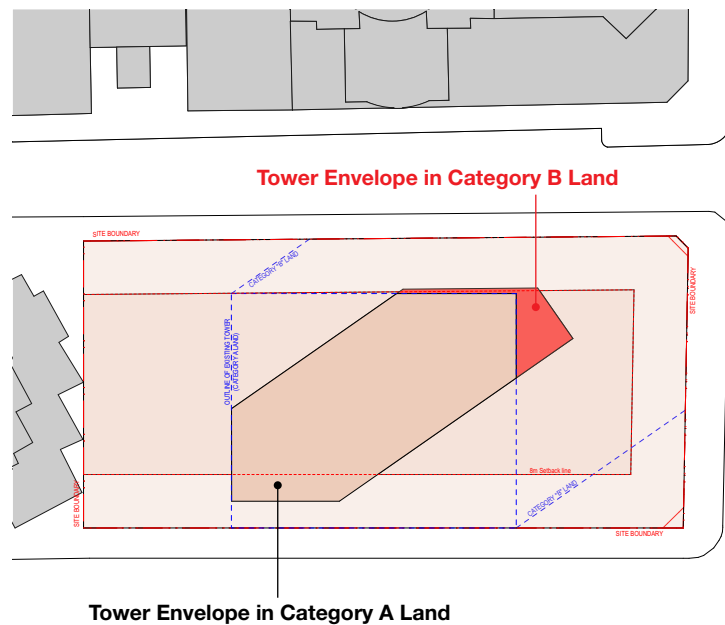
Category A and Category B Land

The tower envelope footprint size and the parts of proposed envelope in Category A Land and Category B Land are as following;

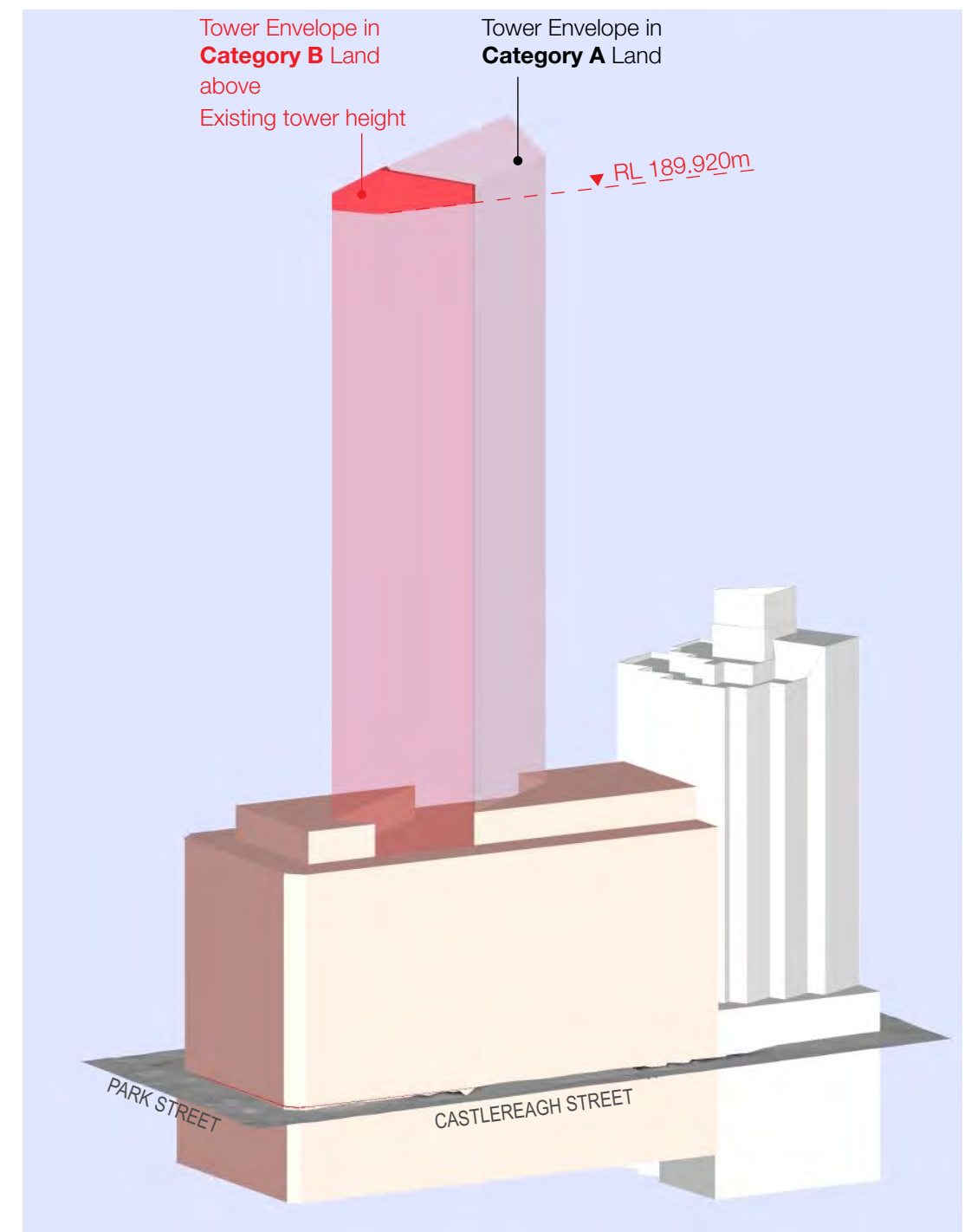
Tower Envelope Footprint : 950m²

In **Category A** Land : 868m² (**91.4%**)

In **Category B** Land : 82m² (**8.6%**)



North-East view



North-West view

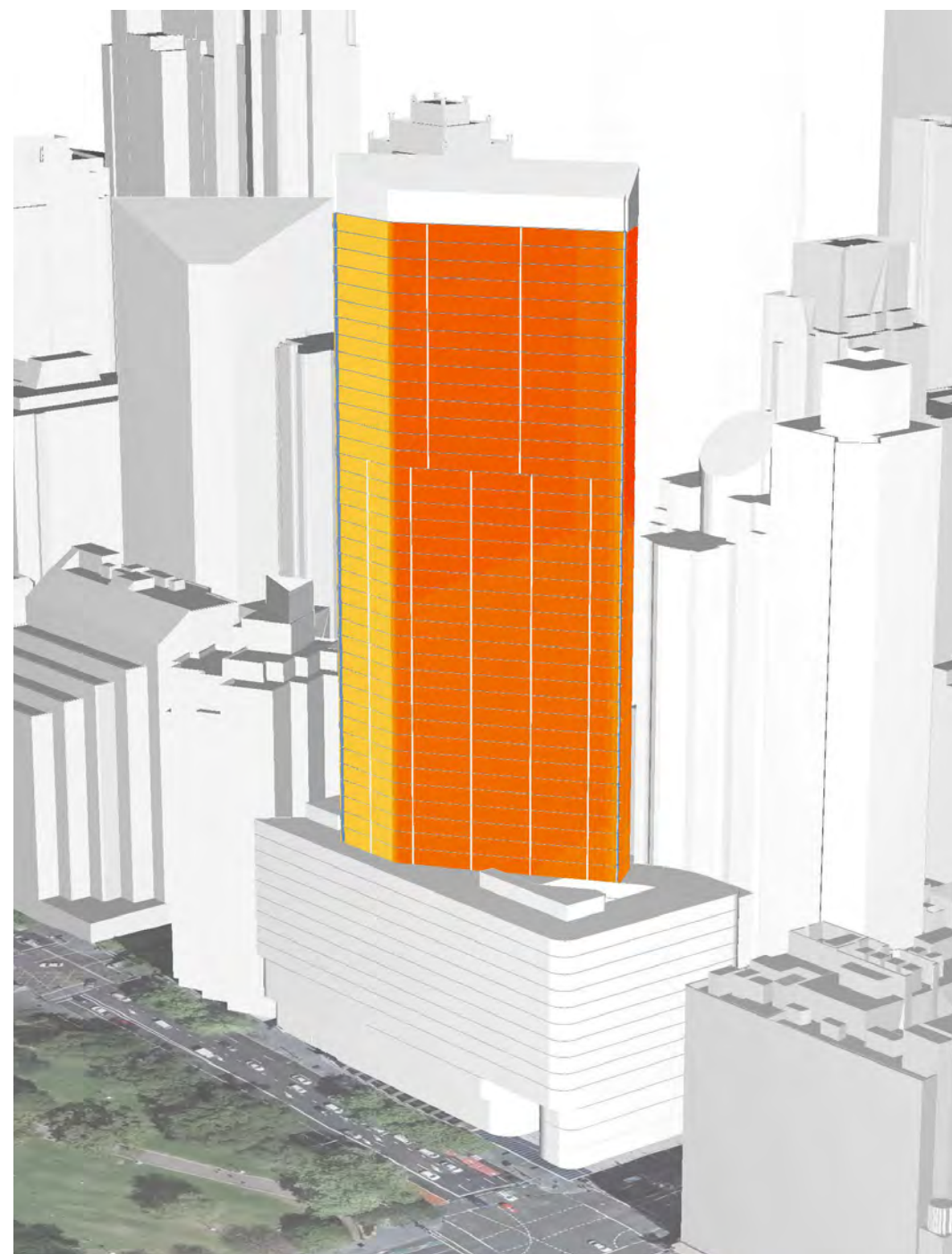
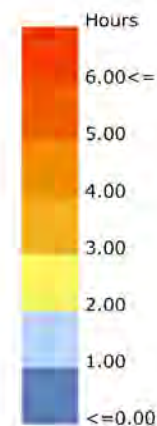
Residential Amenity

Sun Access

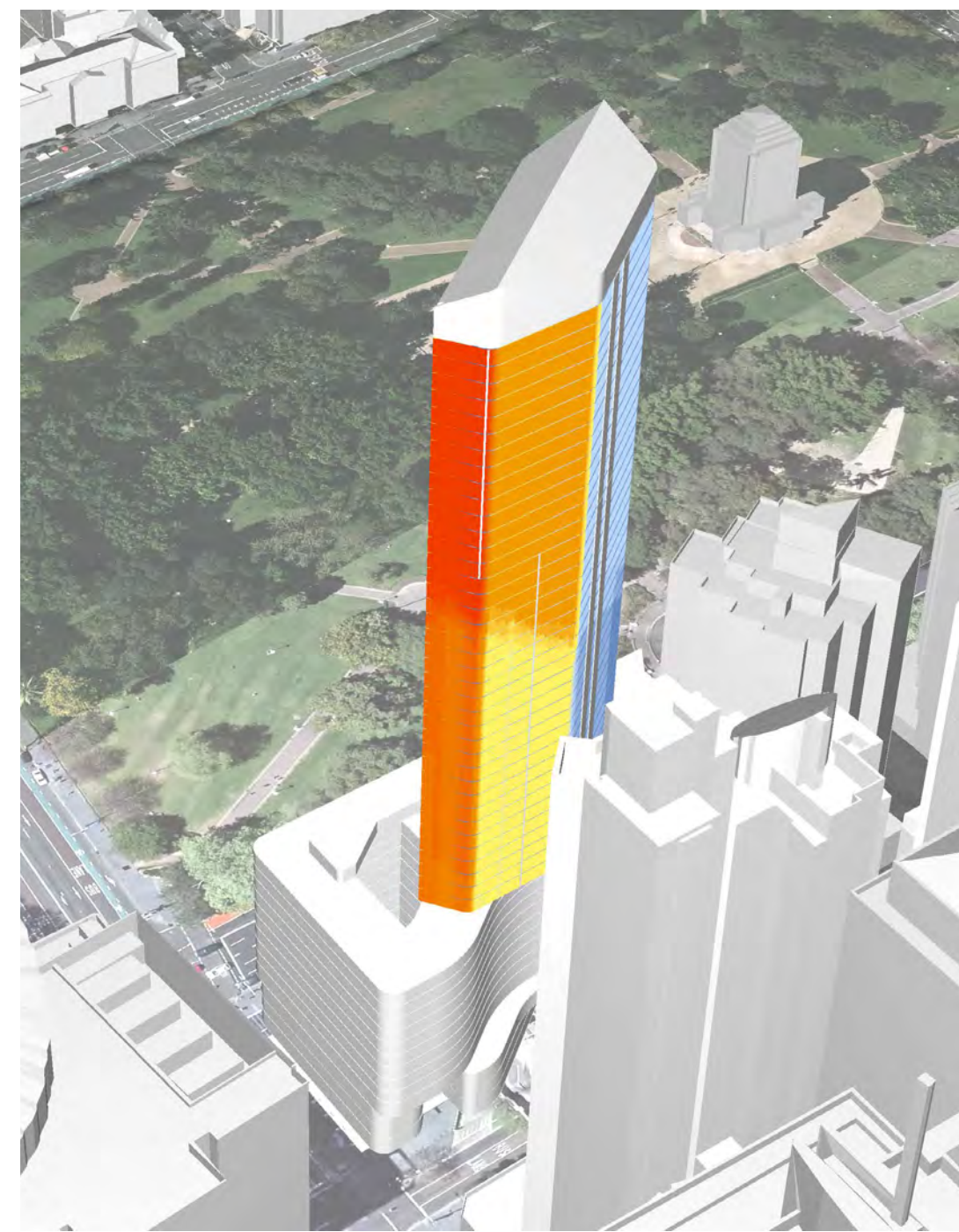
Apartment Design Guide Objective 4A-1 (1) & (3)

The key design criteria for solar access relates to **70% of living rooms and private open spaces** (balconies/winter gardens/loggias) receiving “a **minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter** in the Sydney Metropolitan Area”.

Indicative Concept Scheme : 85.5% (Compliant)



North-East View



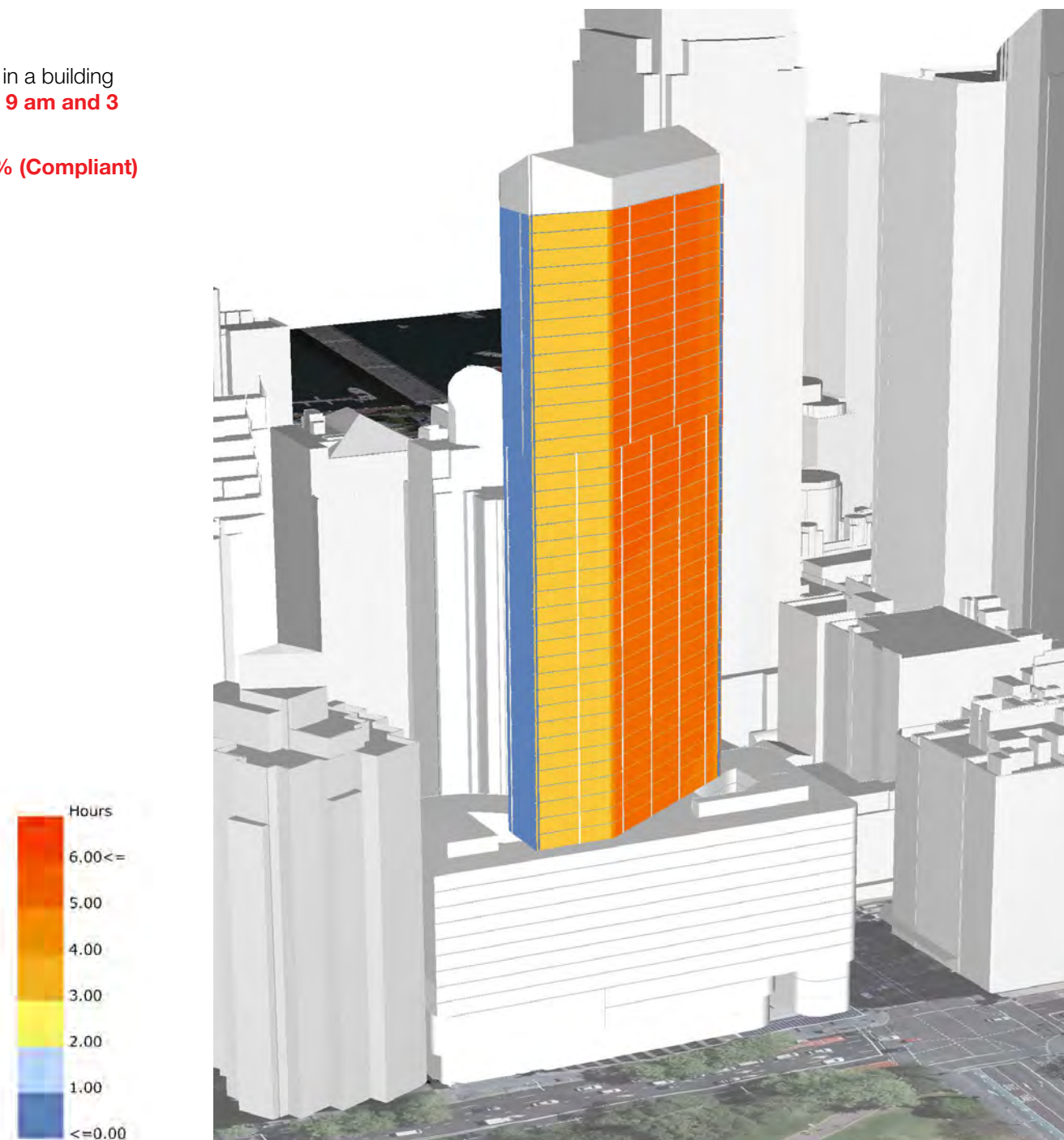
North-West View

Residential Amenity

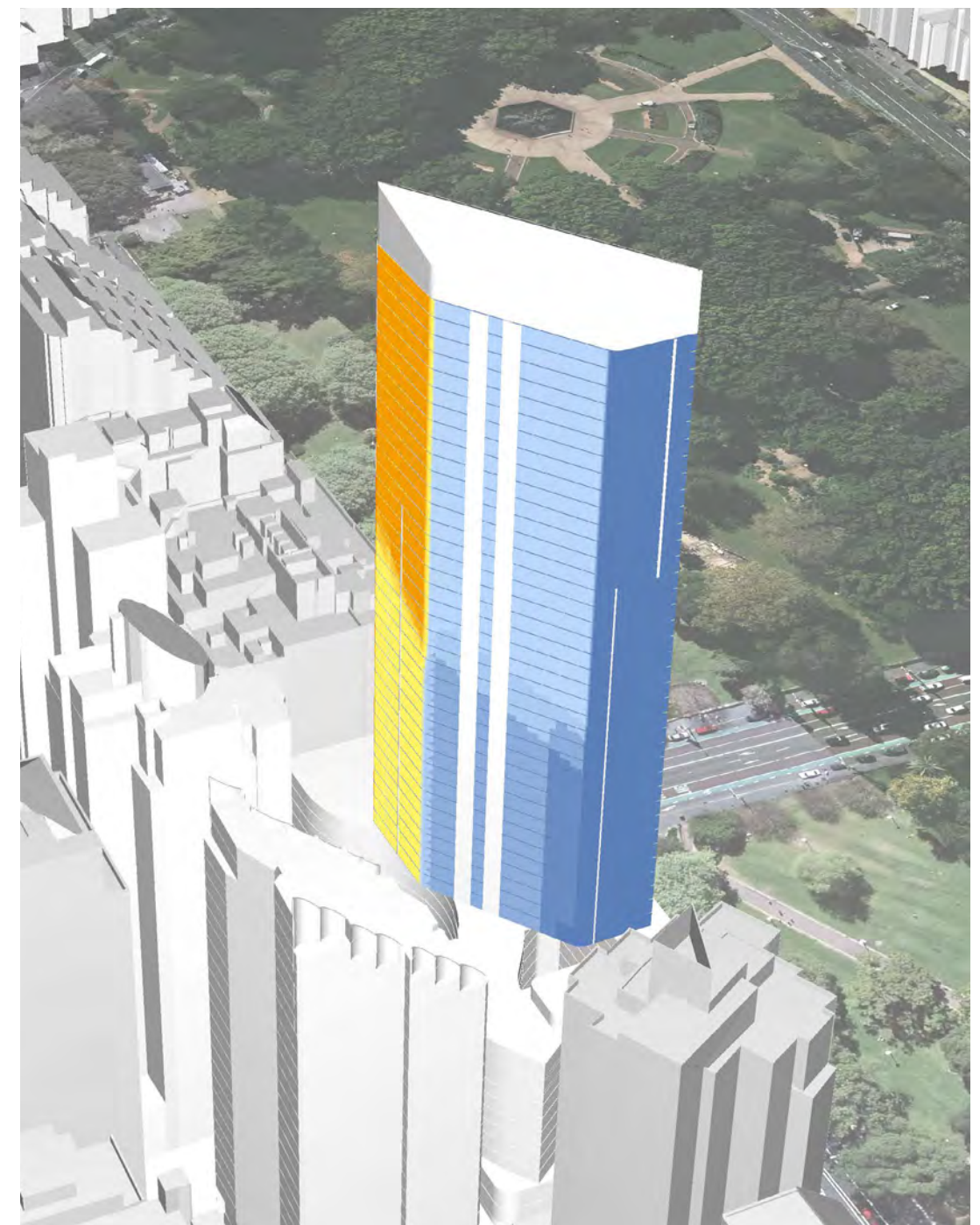
Sun Access

"A **maximum of 15%** of apartments in a building receive **no direct sunlight between 9 am and 3 pm at mid winter.**"

Indicative Concept Scheme : 6.1 % (Compliant)



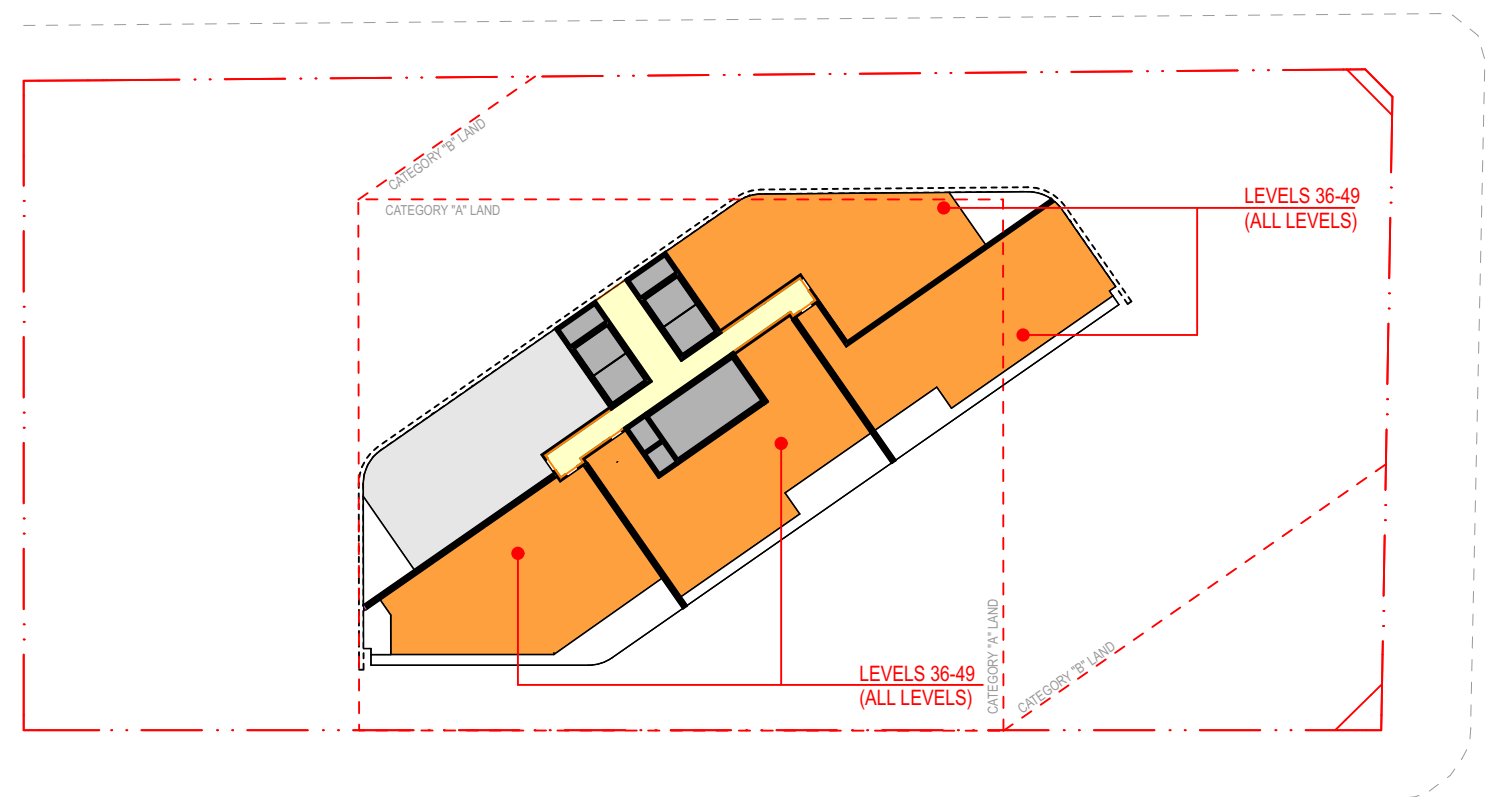
South-East View



South-West View

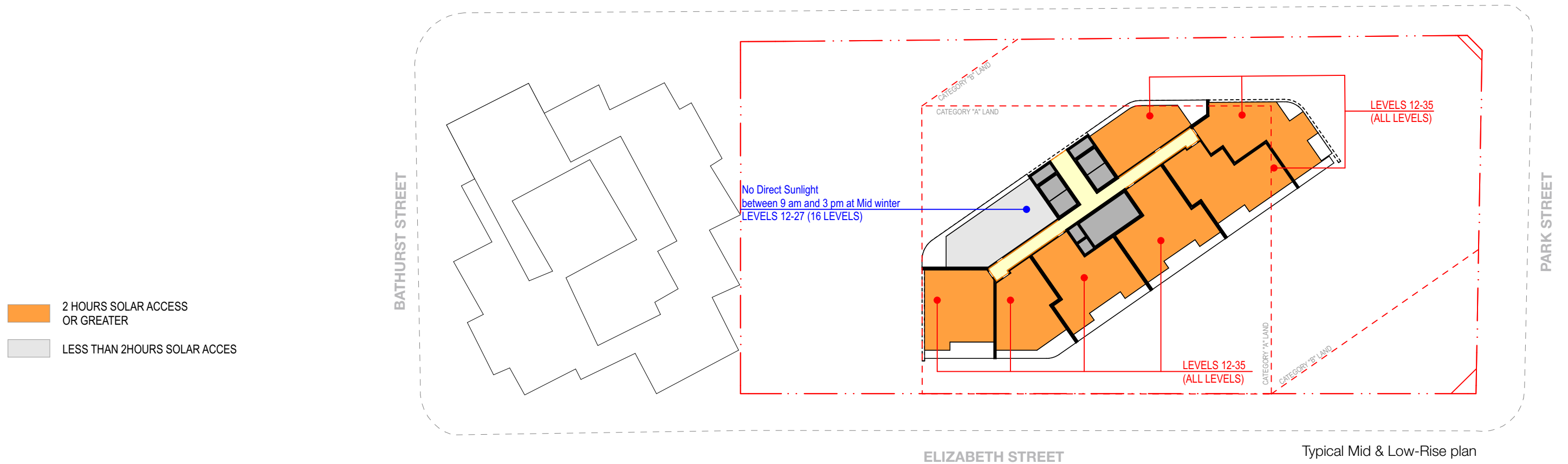
Residential Amenity

Sun Access - Residential Tower



Typical High-Rise plan

CASTLEREAGH STREET



Typical Mid & Low-Rise plan

2 HOURS SOLAR ACCESS OR GREATER
LESS THAN 2 HOURS SOLAR ACCESS

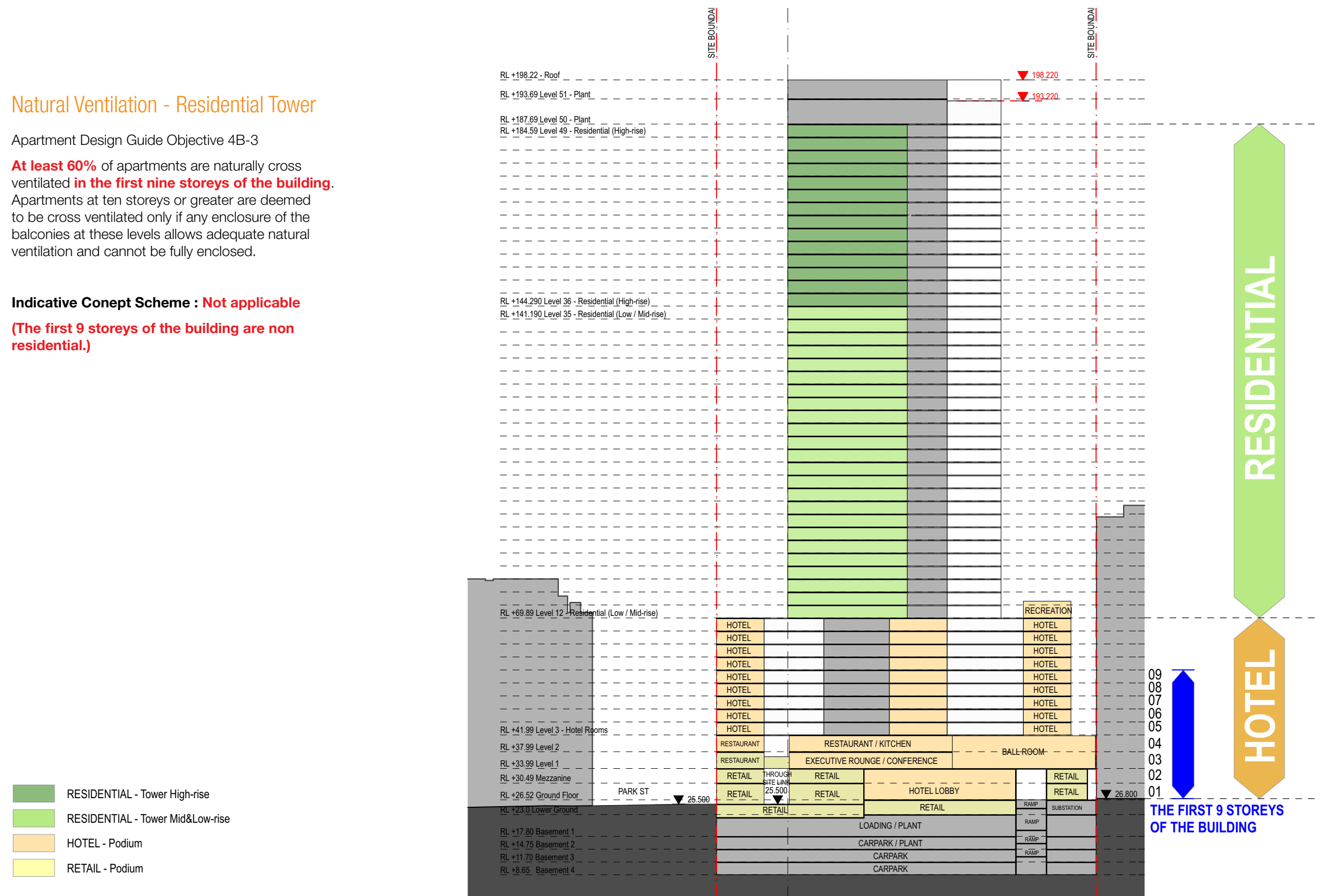
Natural Ventilation - Residential Tower

Apartment Design Guide Objective 4B-3

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.

Indicative Conept Scheme : Not applicable

(The first 9 storeys of the building are non residential.)



Residential Amenity

Building Separation

Apartment Design Guide Objective 2F

The key design criteria for the tower building the minimum separation increase proportionally to the building height as follow.

Minimum separation distances for buildings are:

Up to four storeys (approximately 12m):

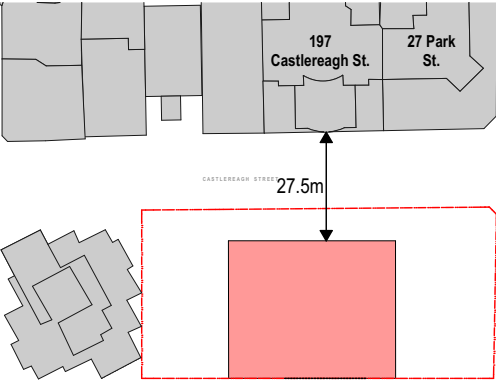
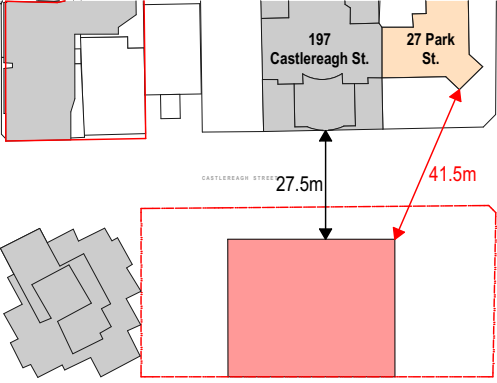
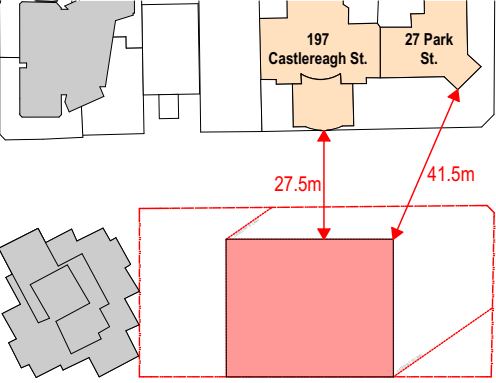
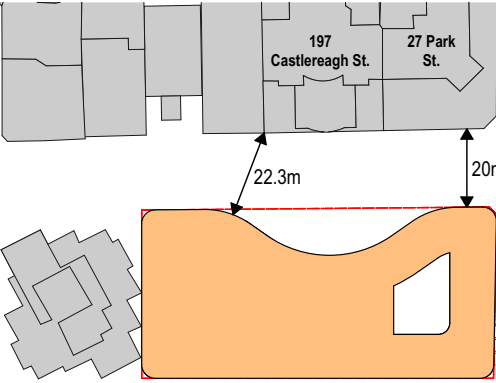
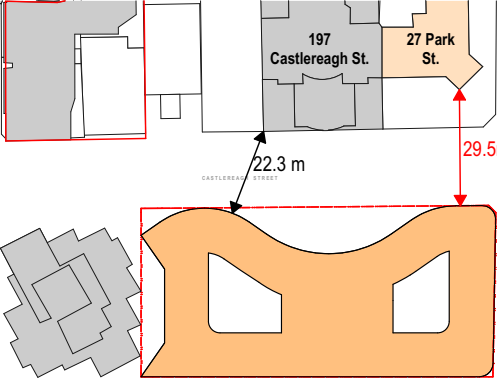
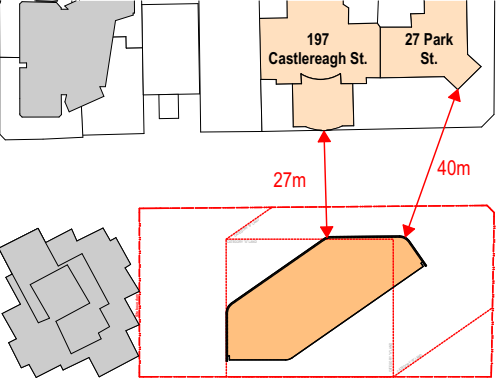
- 12m between habitable rooms/balconies
- 9m between habitable and non-habitable rooms
- 6m between non-habitable rooms

Five to eight storeys (approximately 25m):

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

Nine storeys and above (over 25m):

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

	Up to 12m	12m - 25m	Over 25m
ADG Requirement	12m between habitable rooms / balconies 9m between habitable and non-habitable rooms 6m between non-habitable rooms	18m between habitable rooms / balconies 12m between habitable and non-habitable rooms 9m between non-habitable rooms	24m between habitable rooms / balconies 18m between habitable and non-habitable rooms 12m between non-habitable rooms
197 Castlereagh Street (Residential from Level 8, approx.29m above ground)	Non Residential 27.5m from `Existing 201 Elizabeth St.` 22.3m from `Proposed 201 Elizabeth St.`	Non Residential 27.5m from `Existing 201 Elizabeth St.` 22.3m from `Proposed 201 Elizabeth St.`	Residential 27.5m from `Existing 201 Elizabeth St.` 27.0m from `Proposed 201 Elizabeth St.`
27 Park Street (Residential from Level 6, approx.20m above ground)	Non Residential 27.5m from `Existing 201 Elizabeth St.` 20.0m from `Proposed 201 Elizabeth St.`	Residential 41.5m from `Existing 201 Elizabeth St.` 29.5m from `Proposed 201 Elizabeth St.`	Residential 41.5m between `Existing 201 Elizabeth Street` 40m between `Proposed 201 Elizabeth Street`
201 Elizabeth Street Existing	 Non Residential	 Non Residential	 Non Residential
201 Elizabeth Street Proposed	 Non Residential	 Non Residential	 Residential

Residential Amenity

Apartment Mix - Residential Tower

Sydney Development Control Plan 2012, Section 4.2.3.12 Provisions (1)

Developments that propose more than 20 dwellings are to provide a mix of dwellings consistent with the following percentage mix:

- (a) Studio: 5 - 10%;
- (b) 1 bedroom: 10 – 30%
- (c) 2 bedroom: 40 – 75%; and
- (d) 3+ bedroom: 10 - 100%

The maximum percentage of 1 bedroom dwellings may be increased above 30% provided that the numbers of studio dwellings and 1 bedroom dwellings combined does not exceed 40% of the total dwellings proposed.

Indicative Conept Scheme :

- (a) Studio: **5.3% (Compliant)**
- (b) 1 bedroom: **13.0% (Compliant)**
- (c) 2 bedroom: **55.0% (Compliant)**
- (d) 3+ bedroom: **26.7% (Compliant)**

Apartment Design Guide Objective 4D-1

Apartments are required to have the following minimum internal areas:

Studio : 35m2

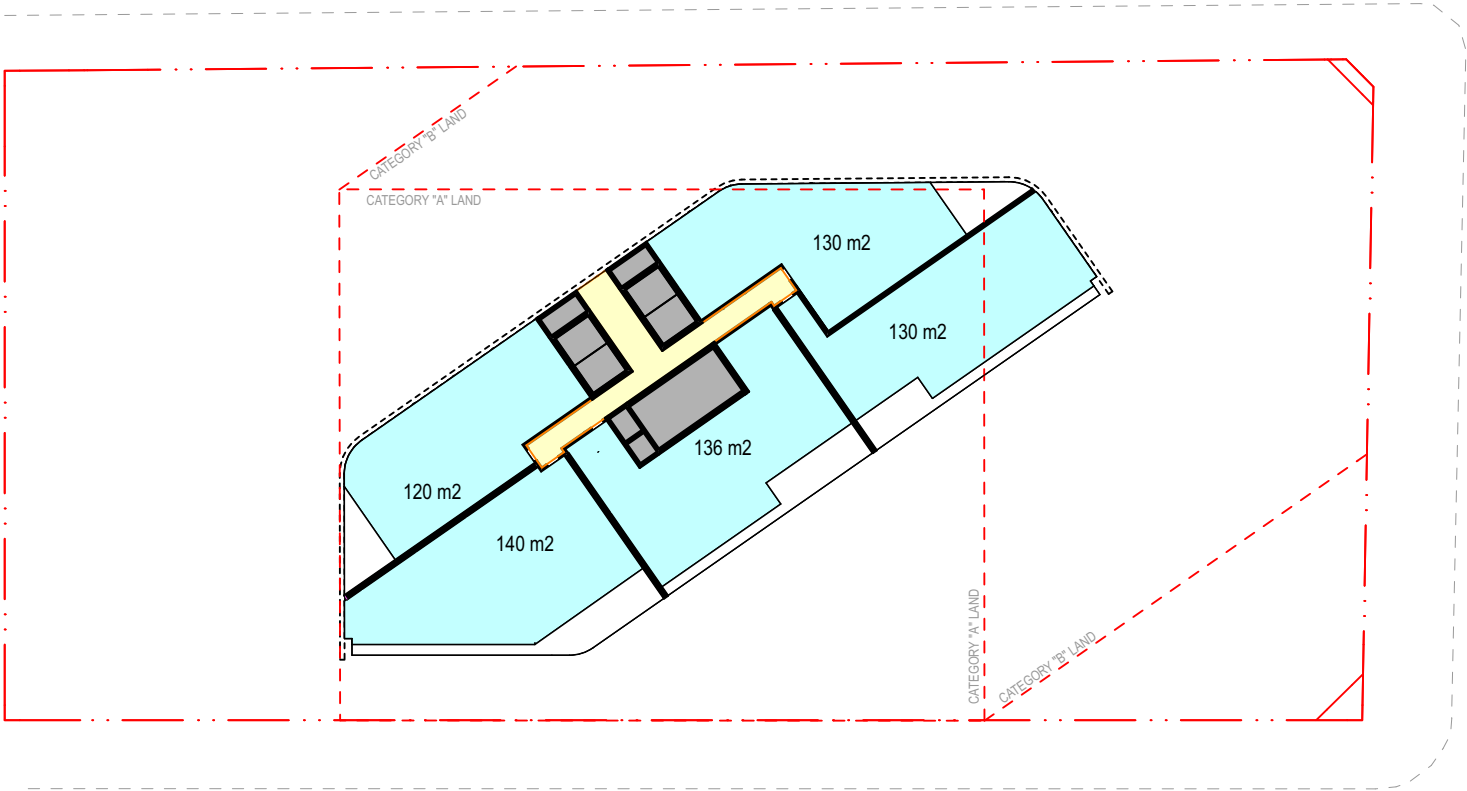
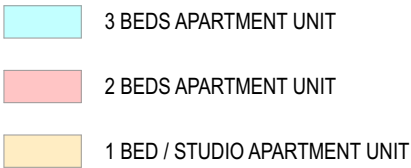
1 bedroom : 50m2

2 bedroom : 70m2

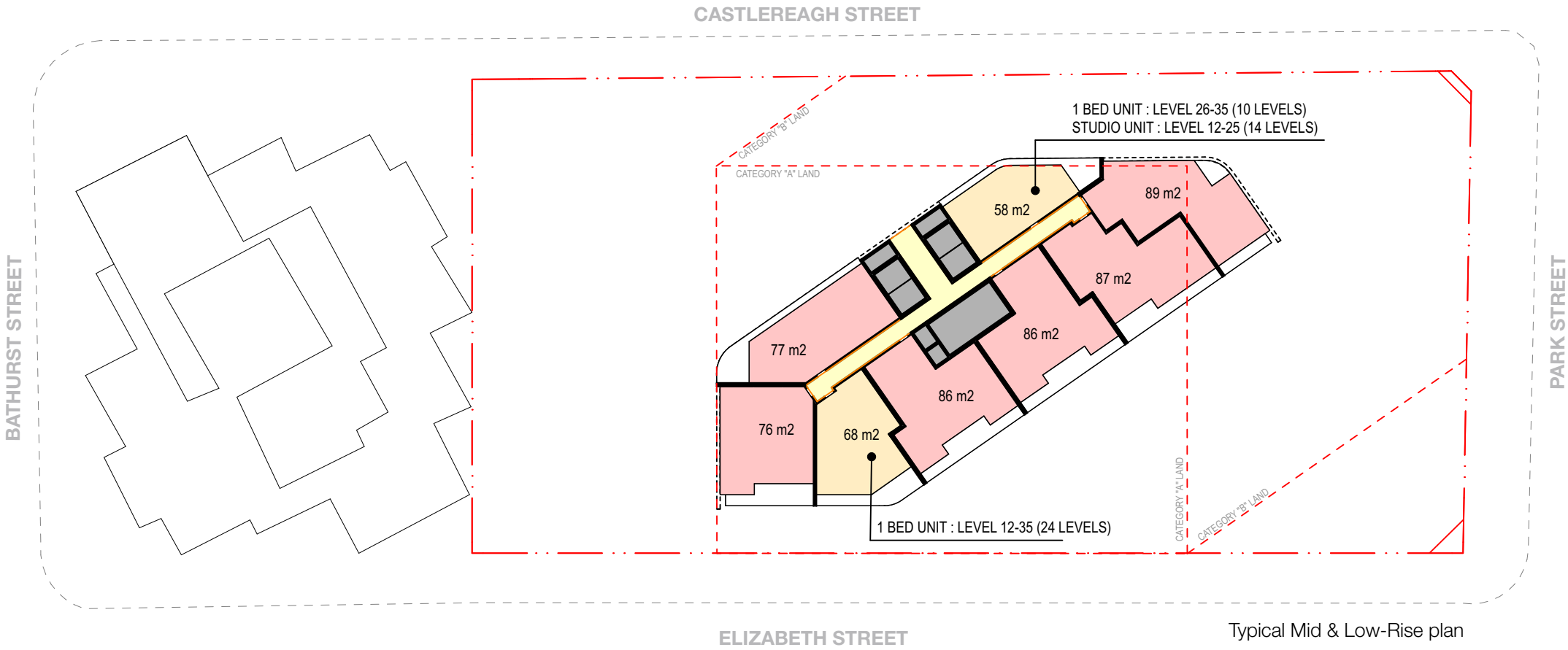
3 bedroom : 90m2

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.



Typical High-Rise plan



Typical Mid & Low-Rise plan

Residential Overshadowing Study

Residential Amenity | Solar Access

This study identifies the potential overshadowing impact of the proposed envelope on downstream residential buildings.

The methodology consists of 3 parts:

Part 1 - Facade sun analysis

- Measure facade solar access between 9 am and 3pm on 21st June for downstream residential buildings with the envelope in place
- Identify affected areas of residential building facades which have solar access reduced below 2 hours between 9 am and 3pm on 21st June as a result of the proposed envelope.
- Identify affected windows of living rooms and private open spaces which have solar access reduced below 2 hours between 9 am and 3pm on 21st June as a result of the proposed envelope.

Part 2 - Apartment Living Space Sun Access Analysis

- If affected windows are identified, they are further examined if they have effective solar access to the living rooms.

Part 3 - ADG compliance of proposed envelope relative to downstream residential buildings

- Determine existing building compliance with the ADG solar access requirements utilising methods in part 1 and 2 as required
- Determine the number of apartments who's compliance is affected by the proposed envelope using the methods in parts 1 and 2 above.
- If the existing building has less that 70% solar access to living room compliance - the maximum reduction in compliance permitted is 20%.
- If an existing building meets the 70% solar access compliance level, any reduction shall not reduce the solar access below 70%

Apartment Design Guide

Objective 3B-2

Overshadowing of neighbouring properties is minimised during mid winter

Living areas, private open space and communal open space should receive solar access in accordance with sections 3D Communal and public open space and 4A Solar and daylight access.

Solar access to living rooms, balconies and private open spaces of neighbours should be considered.

Where **an adjoining property does not currently receive the required hours of solar access**, the proposed building ensures solar access to neighbouring properties is **not reduced by more than 20%**.

Objective 3D-1 (2)

Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter).

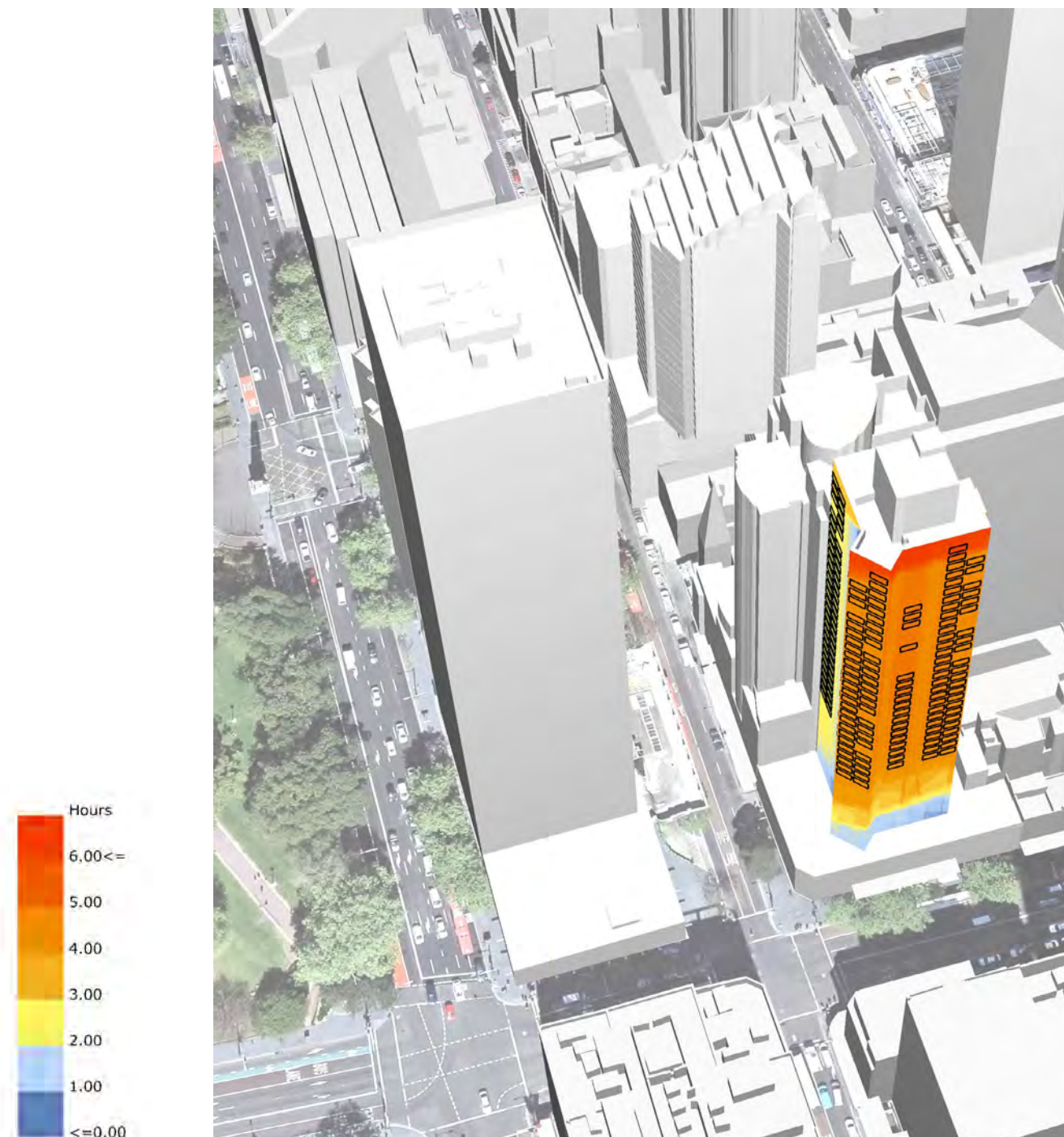
Objective 4A-1 (1)

Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas

Residential Overshadowing Study - **Proposed Central Tower** | 27 Park Street

27 Park Street

Facade Sun Access Analysis



27 Park Street - Sun Access | North-east view

Existing



27 Park Street - Sun Access | North-east view

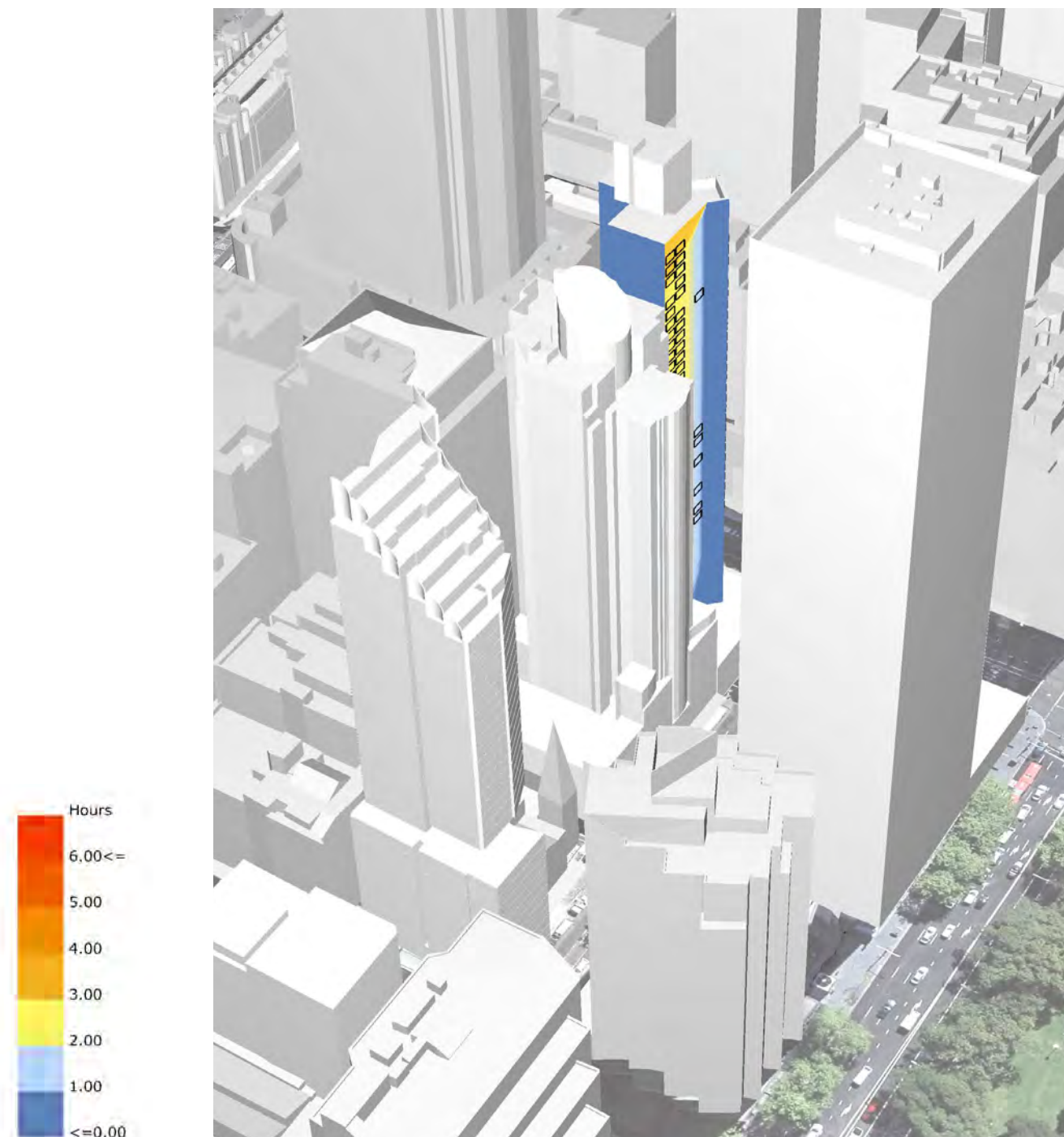
Proposed Central Tower

Living room window
(source provided by Sydney City council)

Residential Overshadowing Study - **Proposed Central Tower** | 27 Park Street

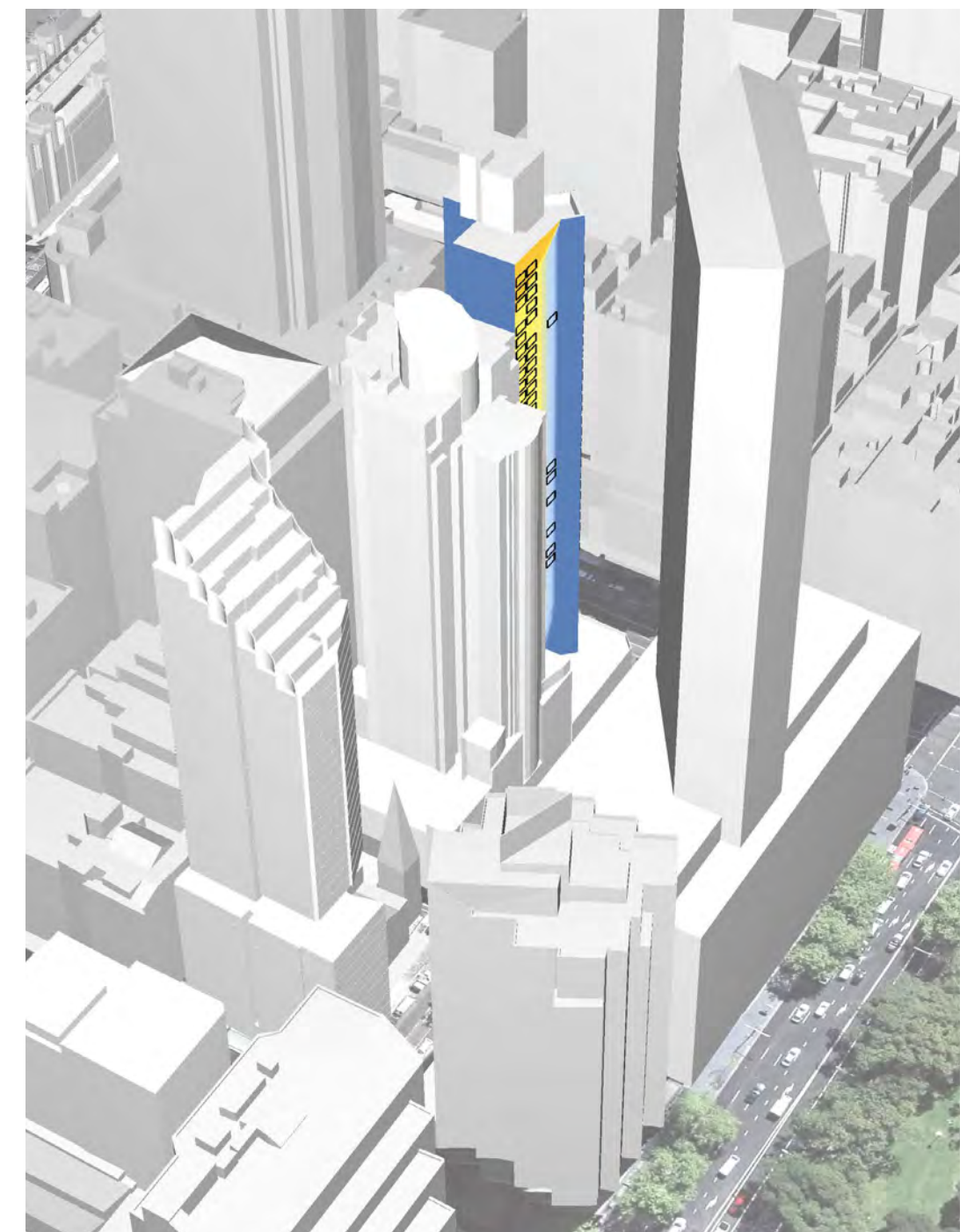
27 Park Street

Facade Sun Access Analysis



27 Park Street - Sun Access | South-east view

Existing



27 Park Street - Sun Access | South-east view

Proposed Central Tower

Living room window
(source provided by Sydney City council)

Residential Overshadowing Study - **Proposed Central Tower** | 27 Park Street

27 Park Street

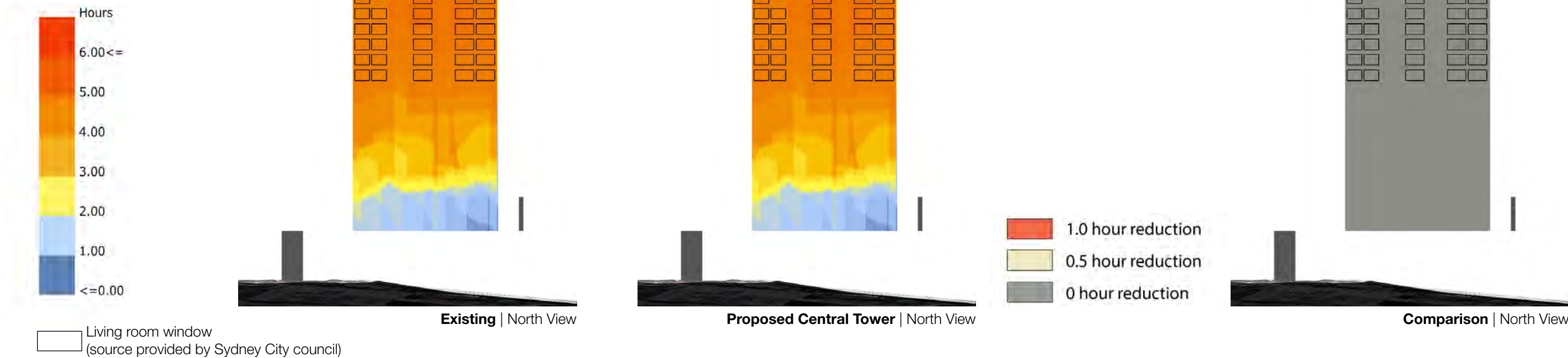
Facade Sun Access Analysis

*Total 184 apartments

0 apartment will lose 2 hours sun access between 9 am and 3pm on 21st June as a result of the proposed Central tower envelope.

Comply

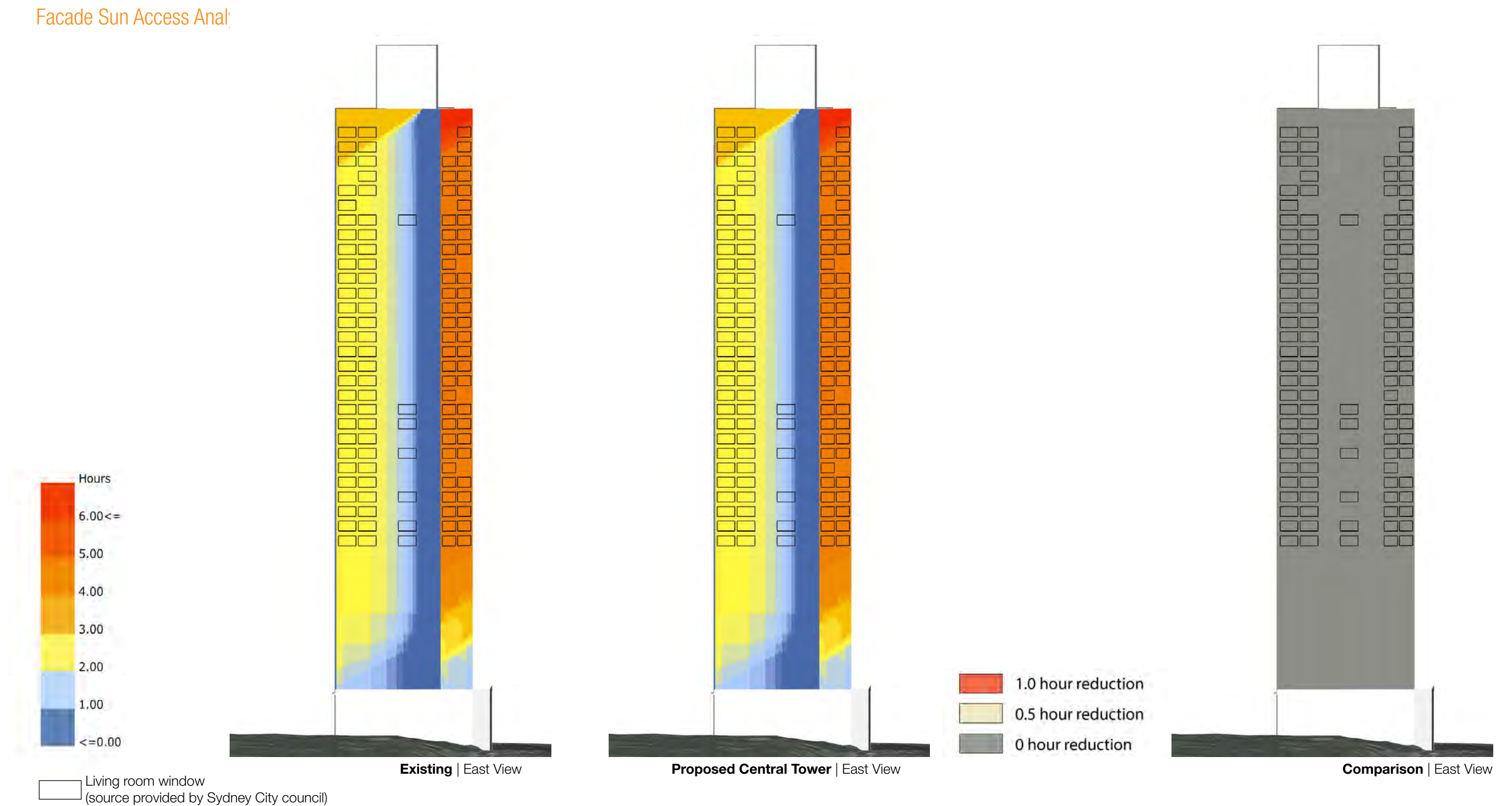
Total	184 apartments
Existing Solar access	175 apartments (95.1 %)
Proposed Solar access	175 apartments (95.1 %)



Residential Overshadowing Study - **Proposed Central Tower** | 27 Park Street

27 Park Street

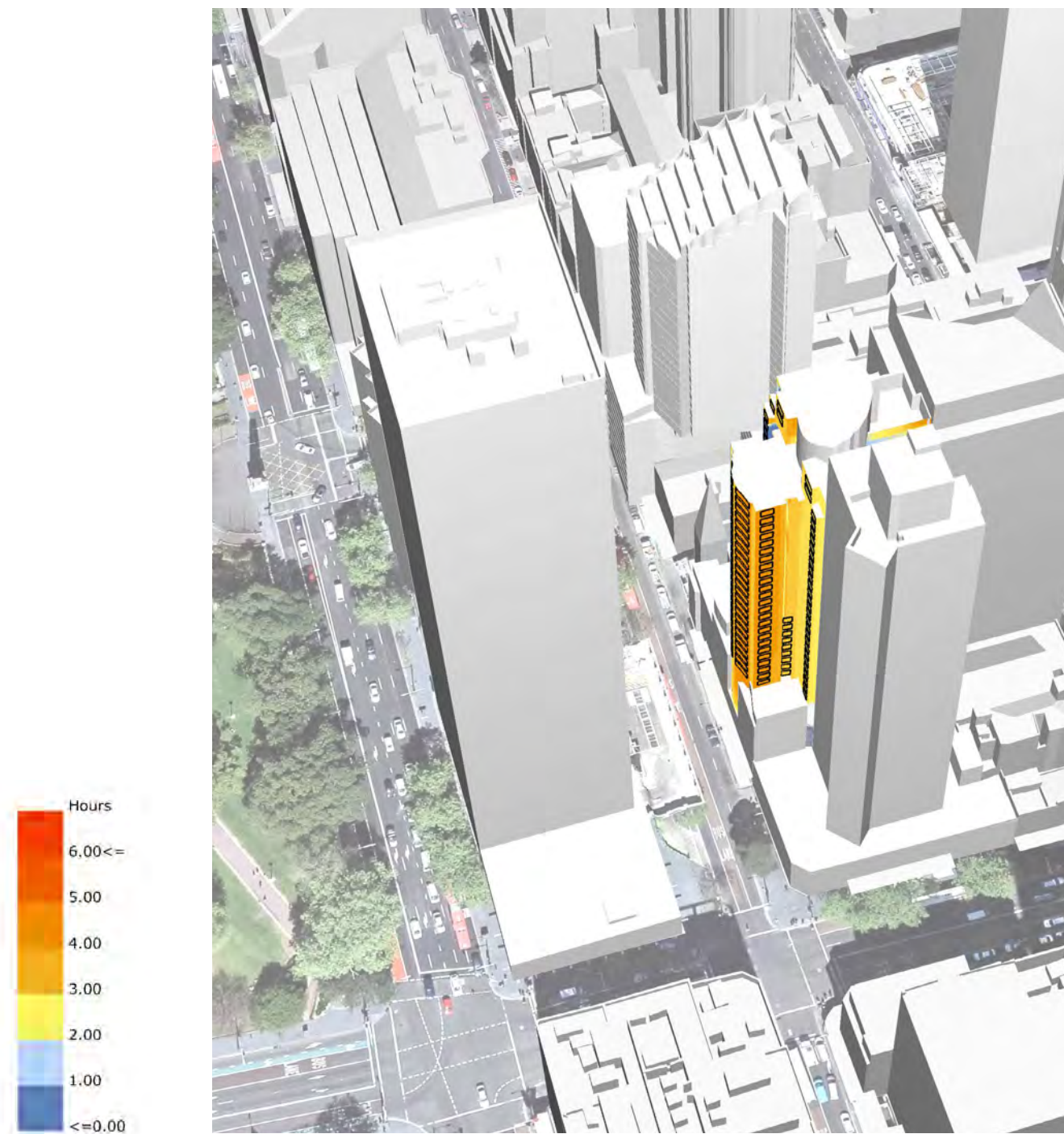
Facade Sun Access Anal



Residential Overshadowing Study - **Proposed Central Tower** | 197 Castlereagh Street

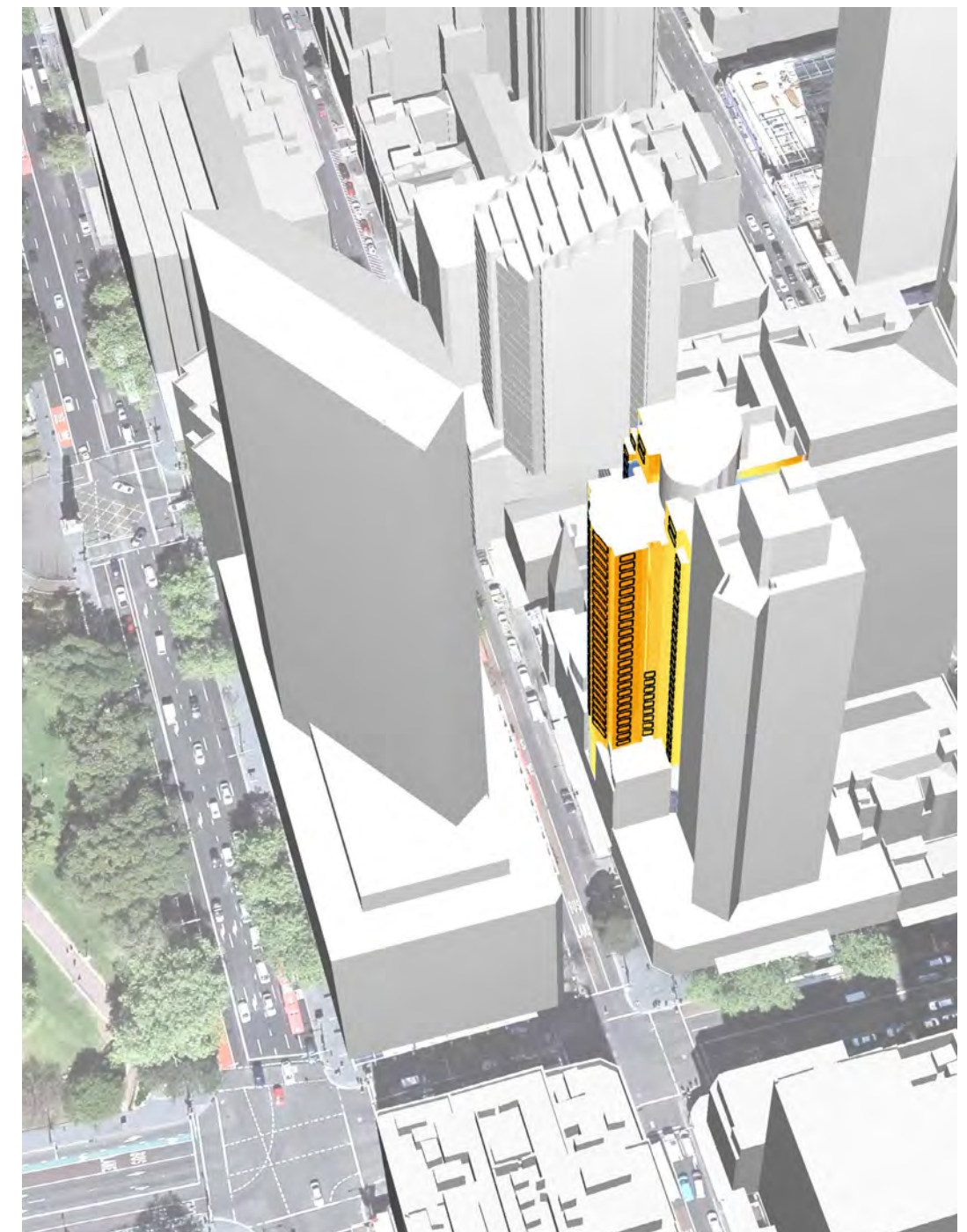
197 Castlereagh Street

Facade Sun Access Analysis



197 Castlereagh Street - Sun Access | North-east view

Existing



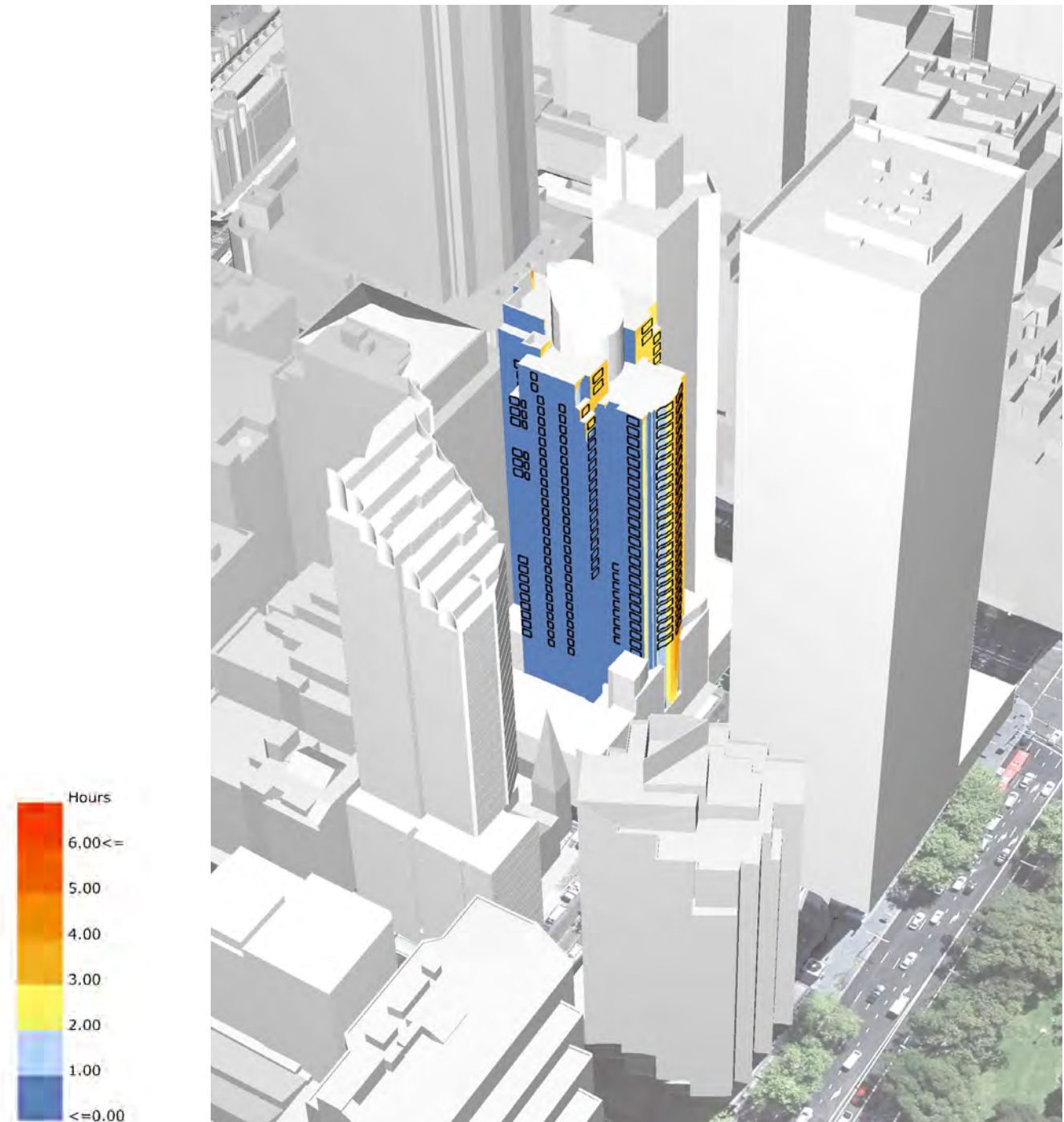
197 Castlereagh Street - Sun Access | North-east view

Proposed Central Tower

Living room window
(source provided by Sydney City council)

Residential Overshadowing Study - **Proposed Central Tower** | 197 Castlereagh Street

197 Castlereagh Street
Facade Sun Access Analysis



197 Castlereagh Street - Sun Access | South-east view

 Living room window
(source provided by Sydney City council)

Existing



197 Castlereagh Street - Sun Access | South-east view

Proposed Central Tower

Residential Overshadowing Study - Proposed Central Tower | 197 Castlereagh Street

197 Castlereagh Street

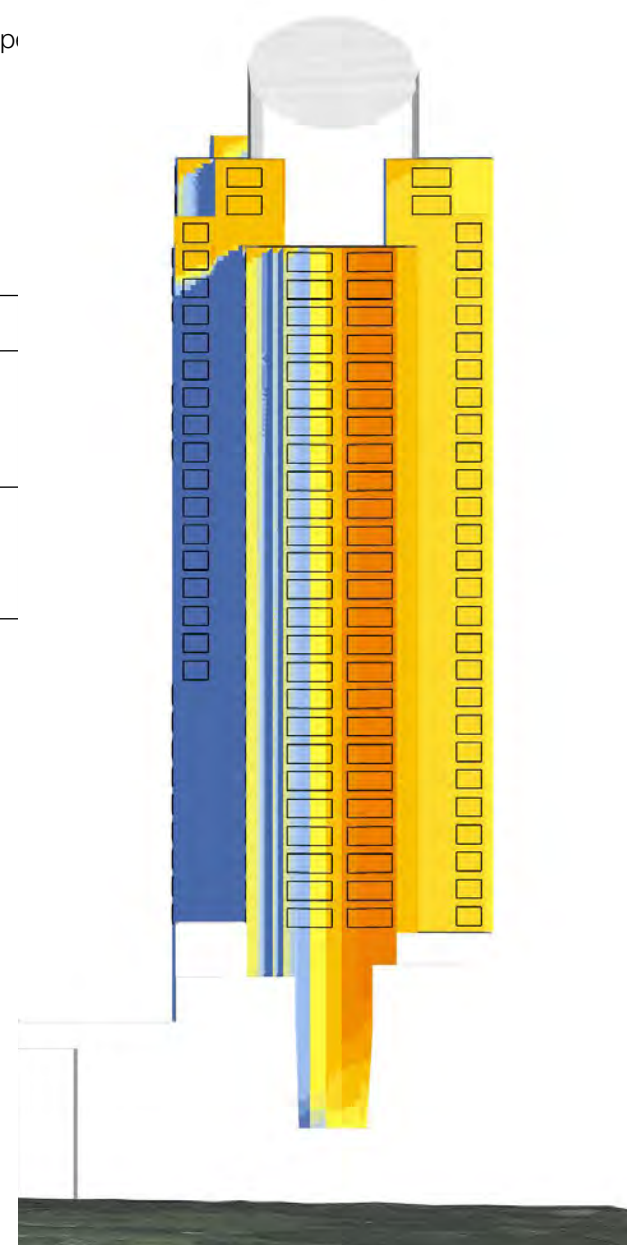
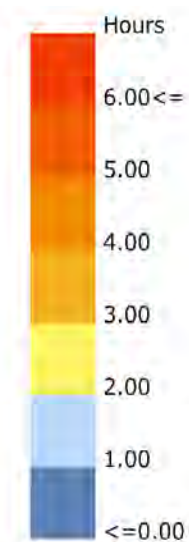
Facade Sun Access Analysis

*Total 251 apartments

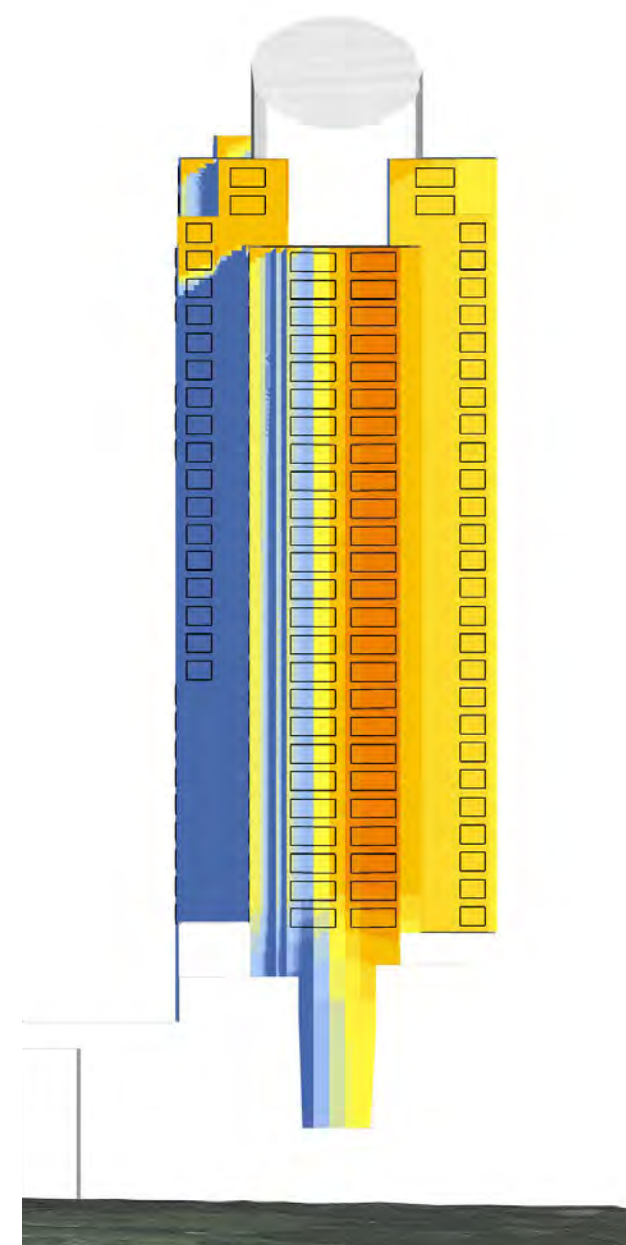
0 apartment will lose 2 hours sun access between 9 am and 3pm on 21st June as a result of the proposed Central tower envelope

Comply

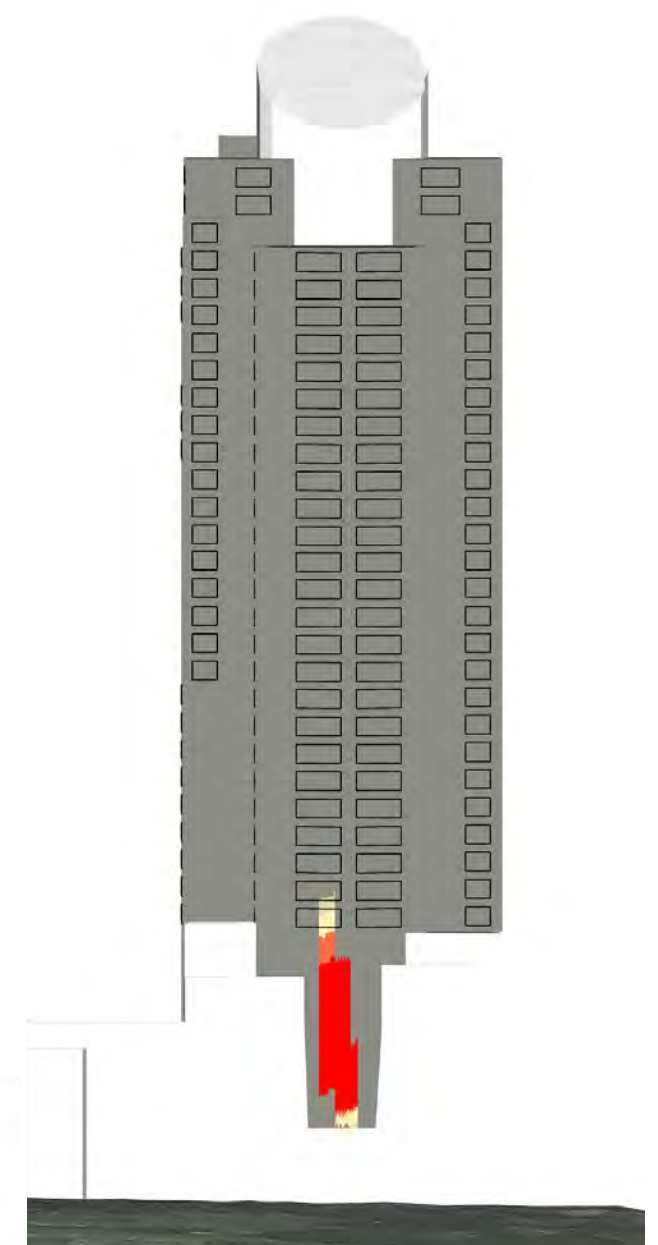
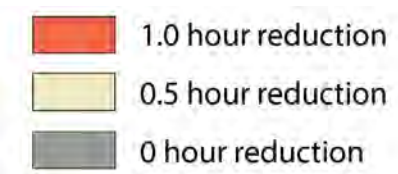
Total	251 apartments
Existing Solar access	96 apartments (38.2 %)
Proposed Solar access	96 apartments (38.2 %)



Existing | East View



Proposed Central Tower | East View



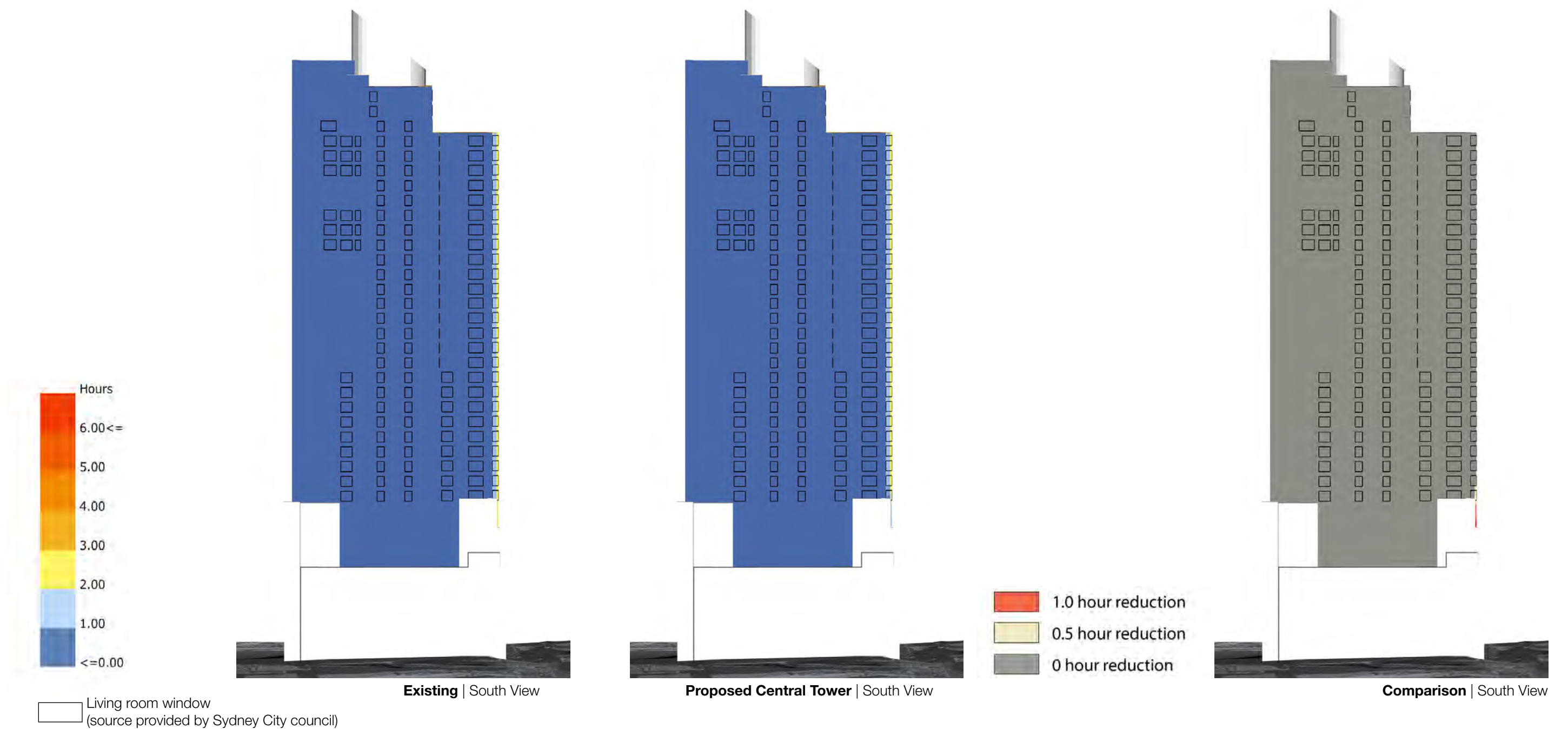
Comparison | East View

Living room window
(source provided by Sydney City council)

Residential Overshadowing Study - **Proposed Central Tower** | 197 Castlereagh Street

197 Castlereagh Street

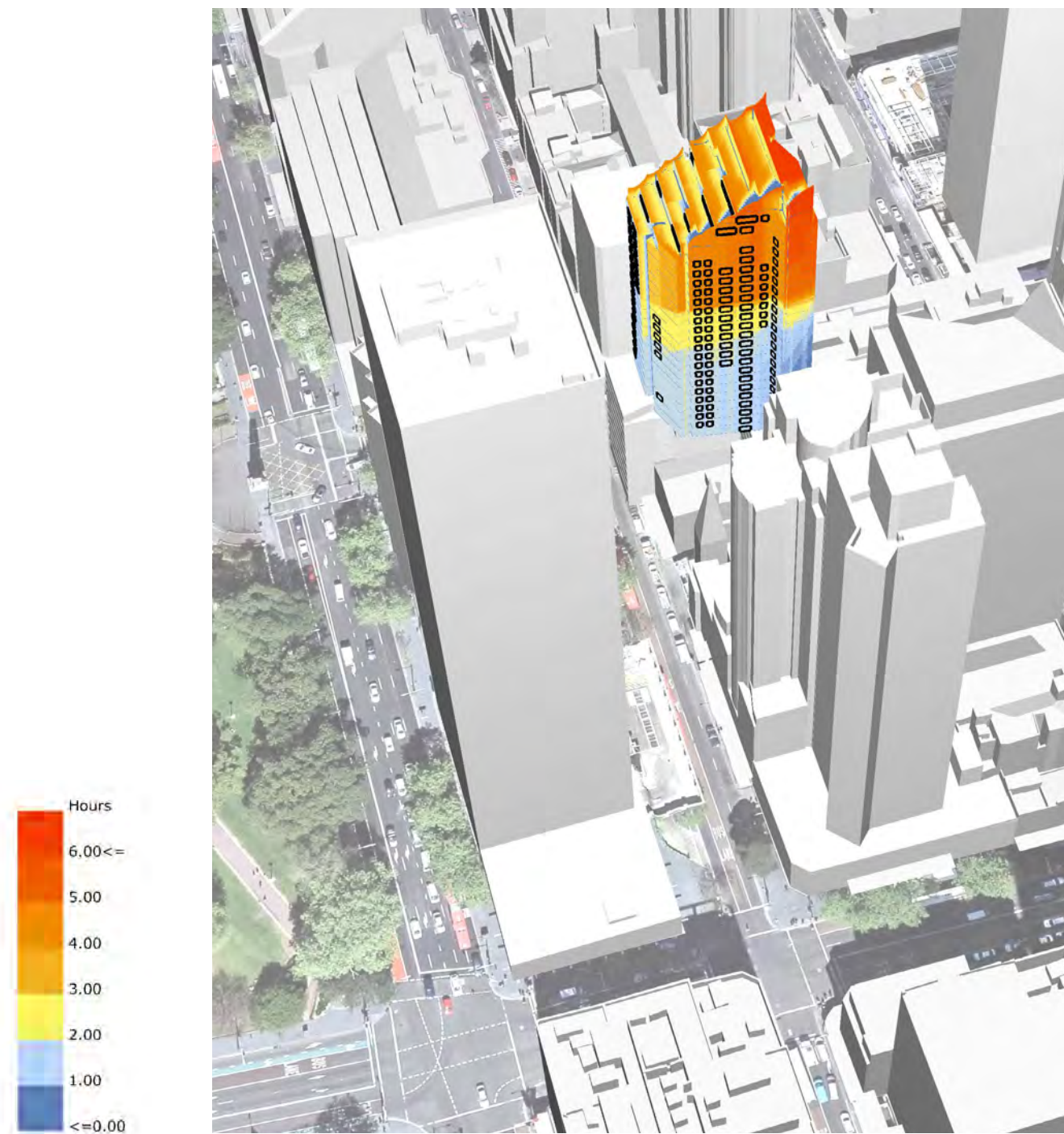
Facade Sun Access Anal



Residential Overshadowing Study - **Proposed Central Tower** | 116 Bathurst Street

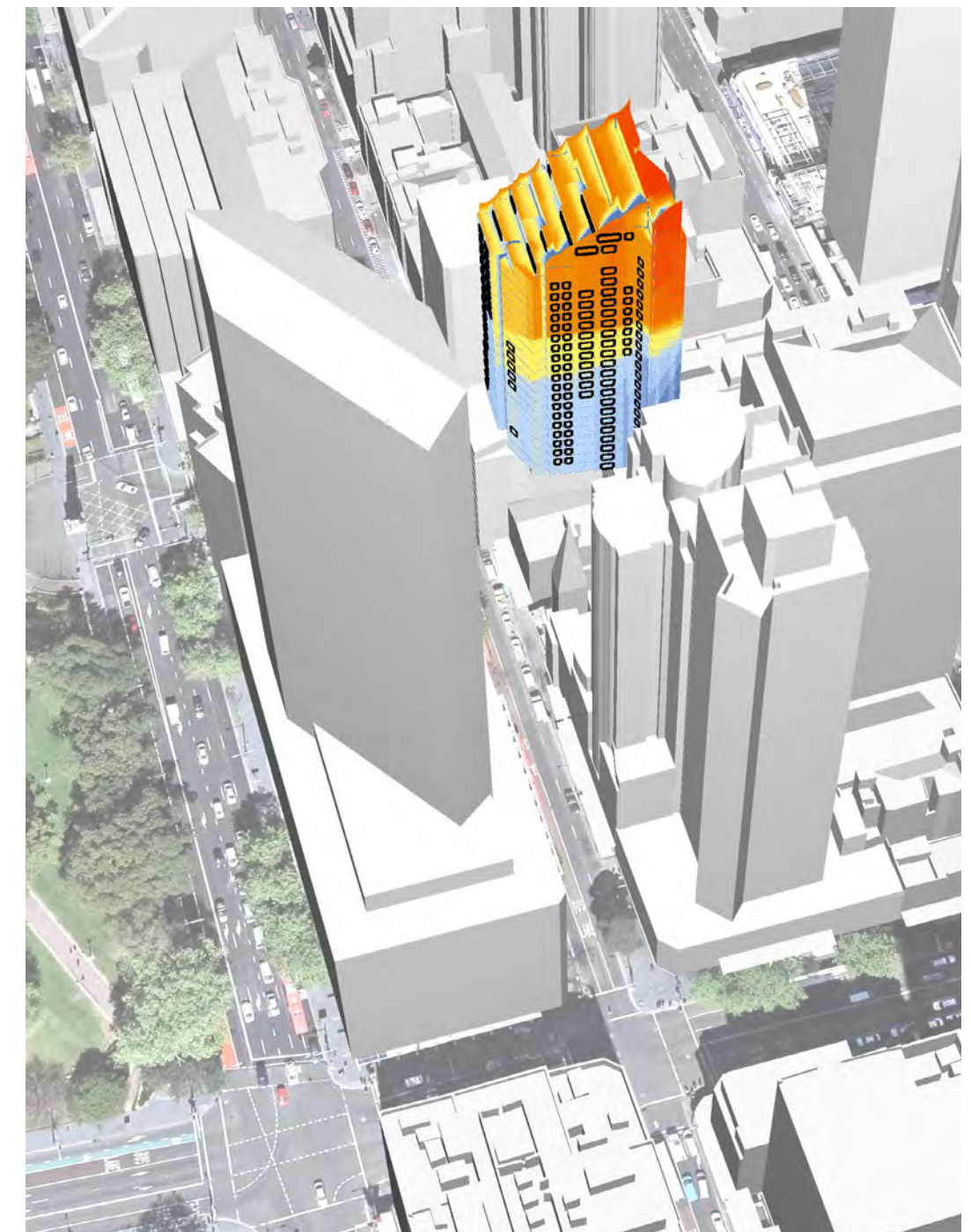
116 Bathurst Street

Facade Sun Access Analysis



116 Bathurst Street - Sun Access | North-east view

Existing



116 Bathurst Street - Sun Access | North-east view

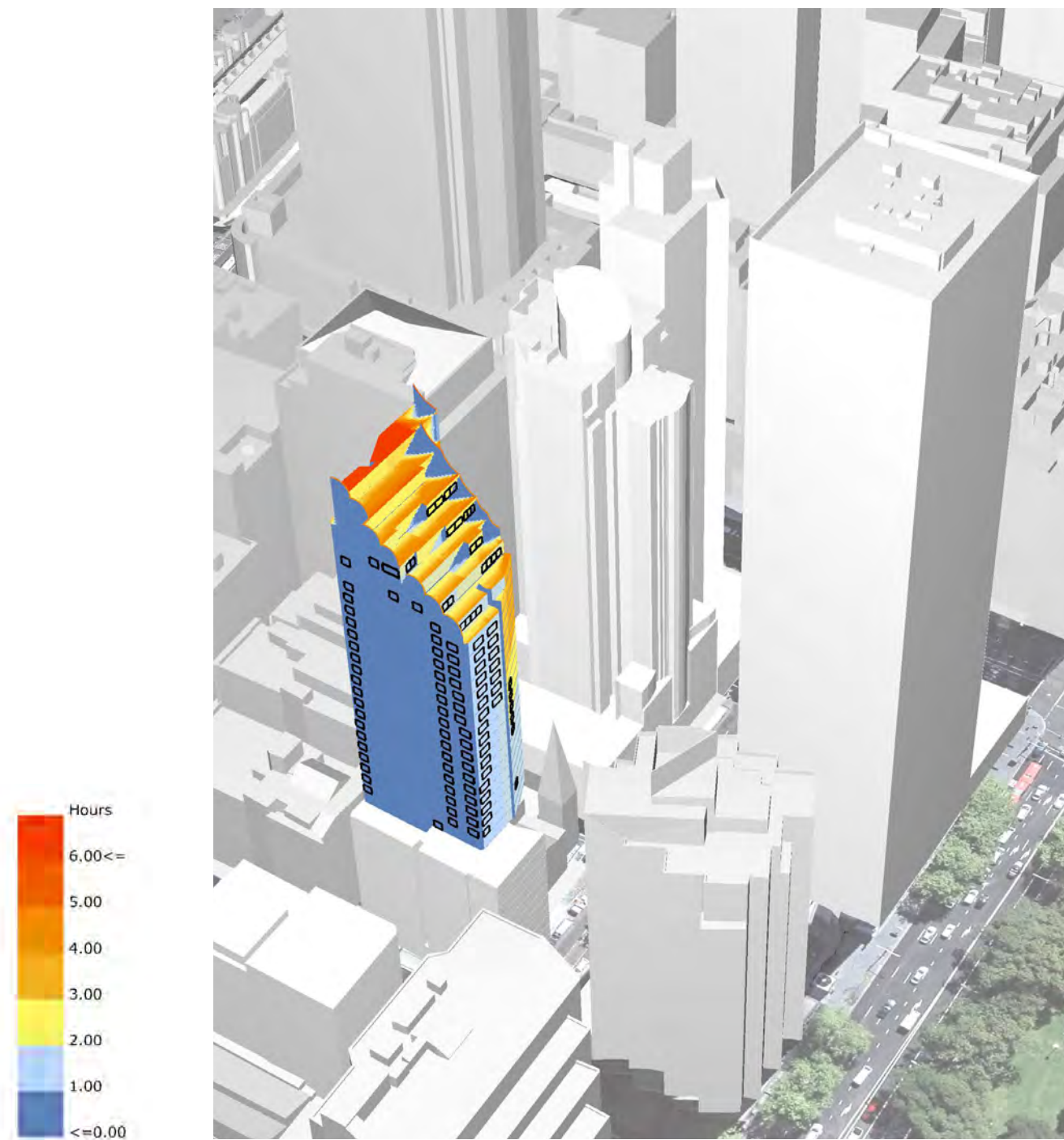
Proposed Central Tower

Living room window
(source from Section 96 exhibition at Sydney City website)

Residential Overshadowing Study - **Proposed Central Tower** | 116 Bathurst Street

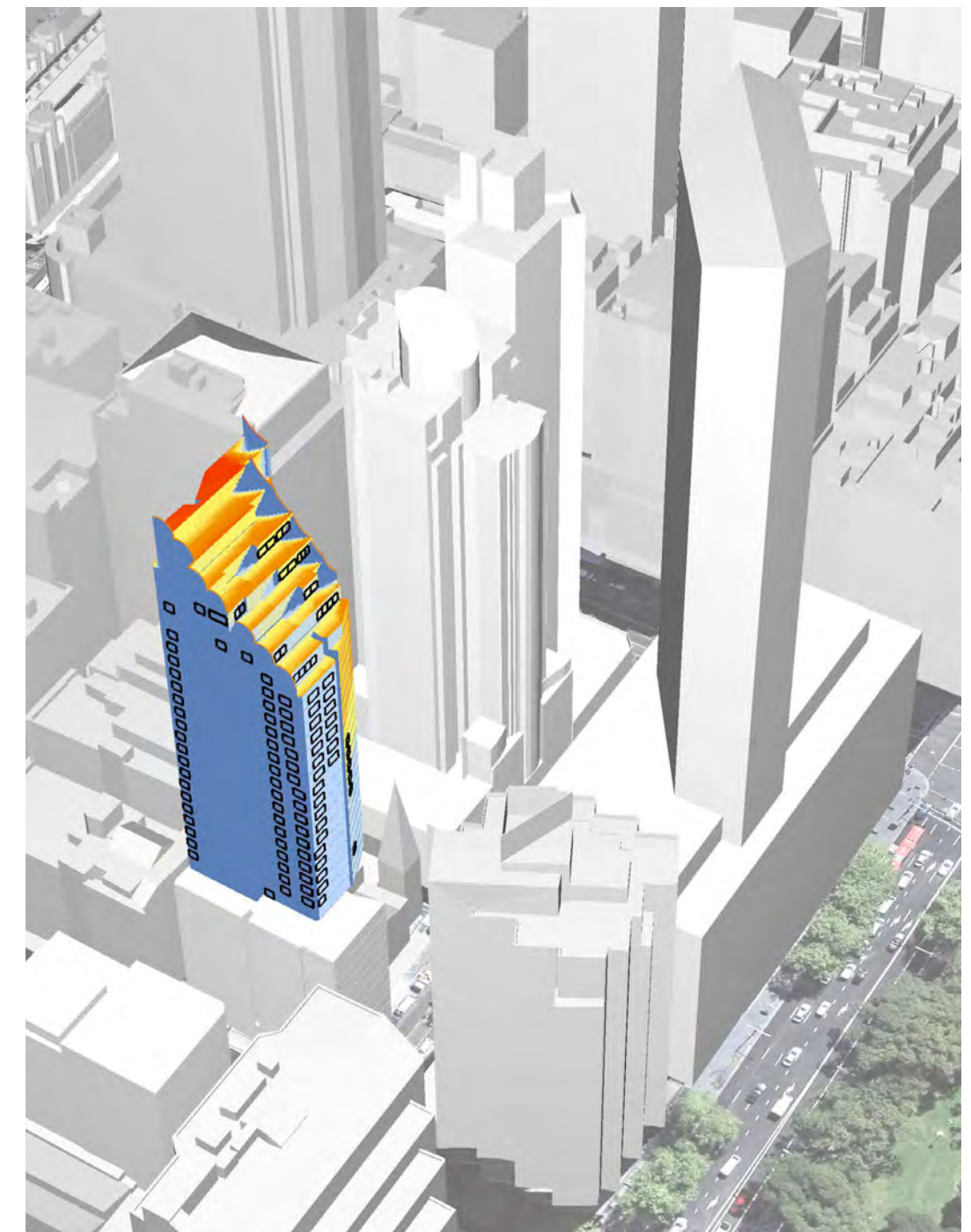
116 Bathurst Street

Facade Sun Access Analysis



116 Bathurst Street - Sun Access | South-east view

Existing



116 Bathurst Street - Sun Access | South-east view

Proposed Central Tower

Living room window
(source from Section 96 exhibition at Sydney City website)

Residential Overshadowing Study - **Proposed Central Tower** | 116 Bathurst Street

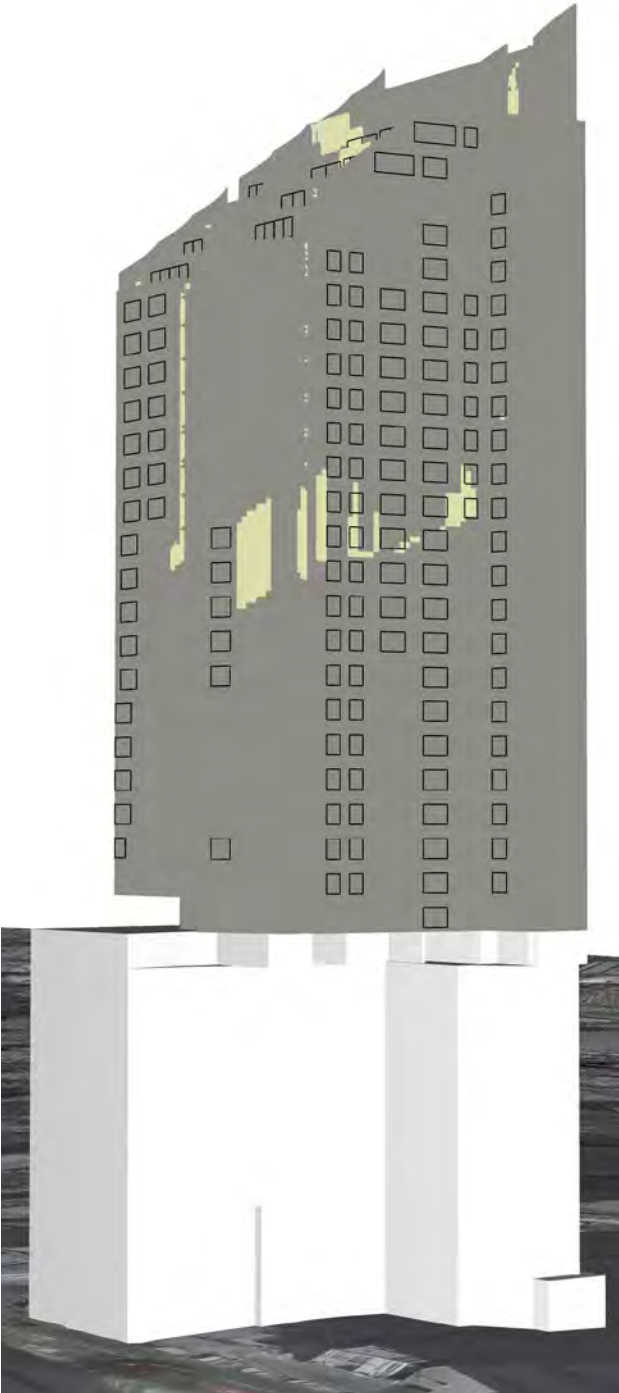
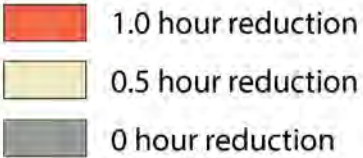
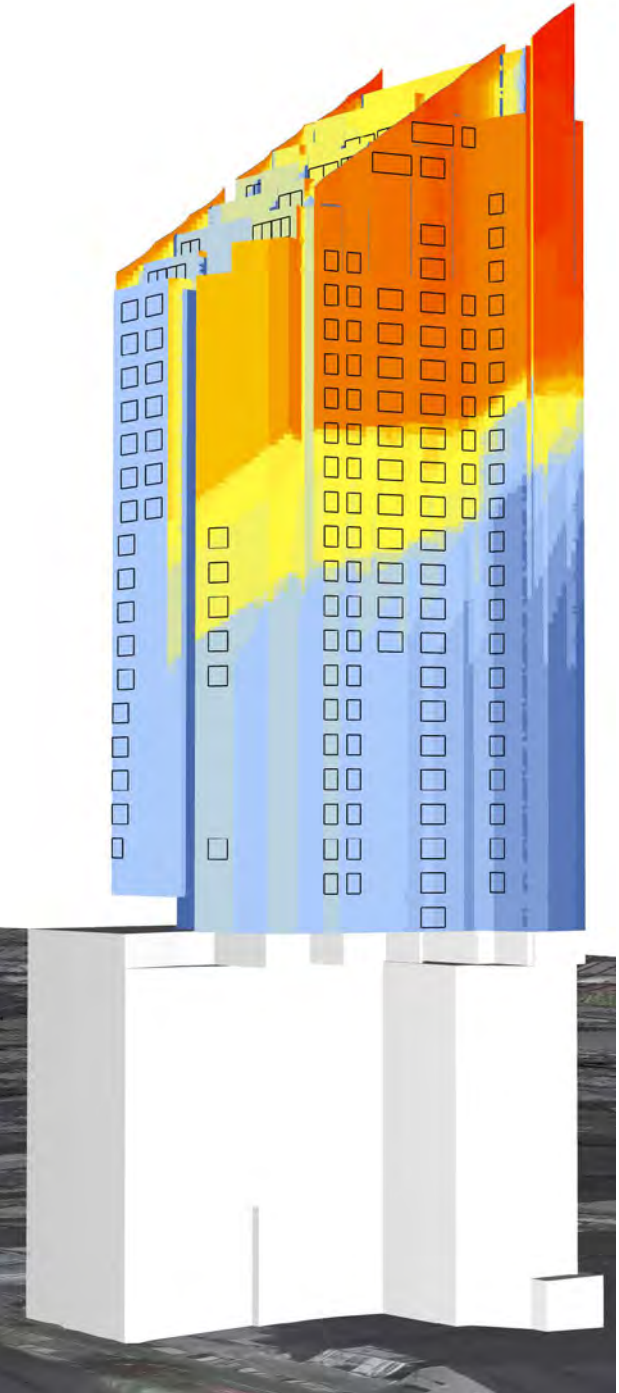
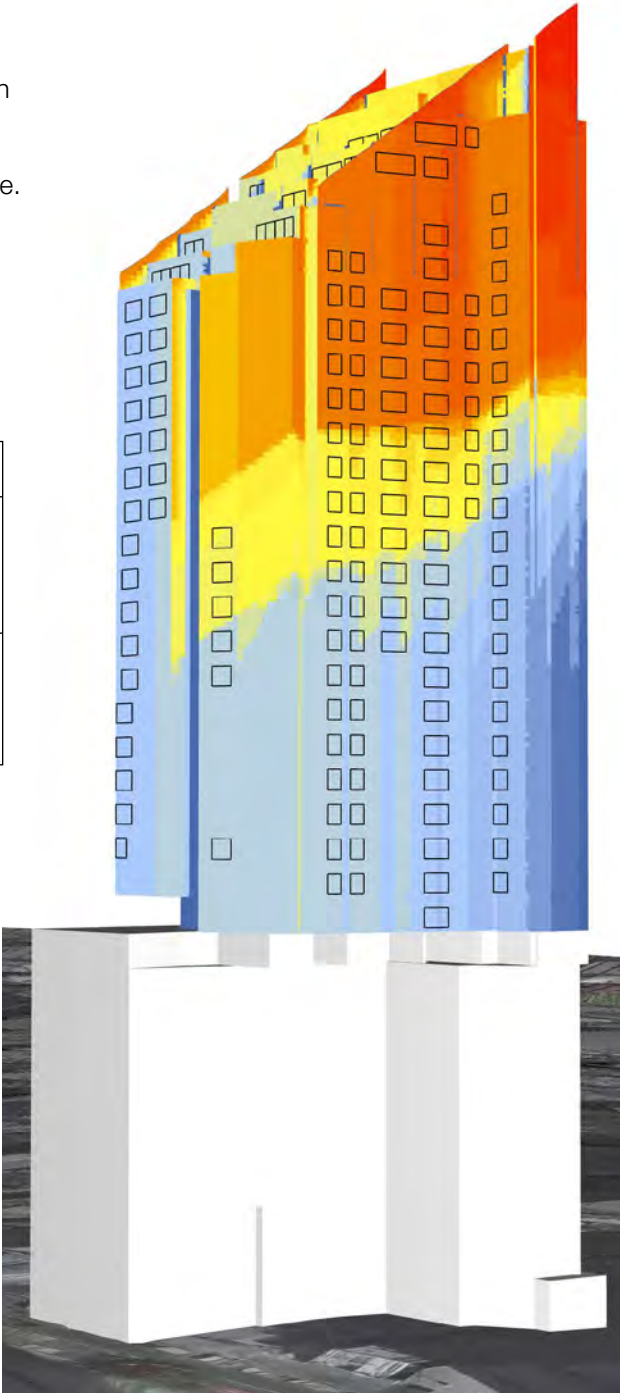
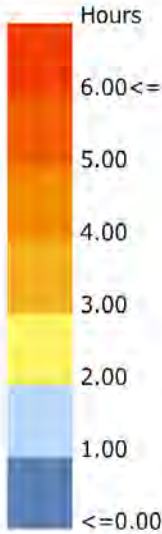
116 Bathurst Street

Facade Sun Access Analysis

*Total 131 apartments
0 apartment will lose 2 hours sun access between 9 am and 3pm on 21st June as a result of the proposed Central tower envelope.

Comply

Total	131 apartments
Existing Solar access	77 apartments (58.8 %)
Proposed Solar access	77 apartments (58.8 %)



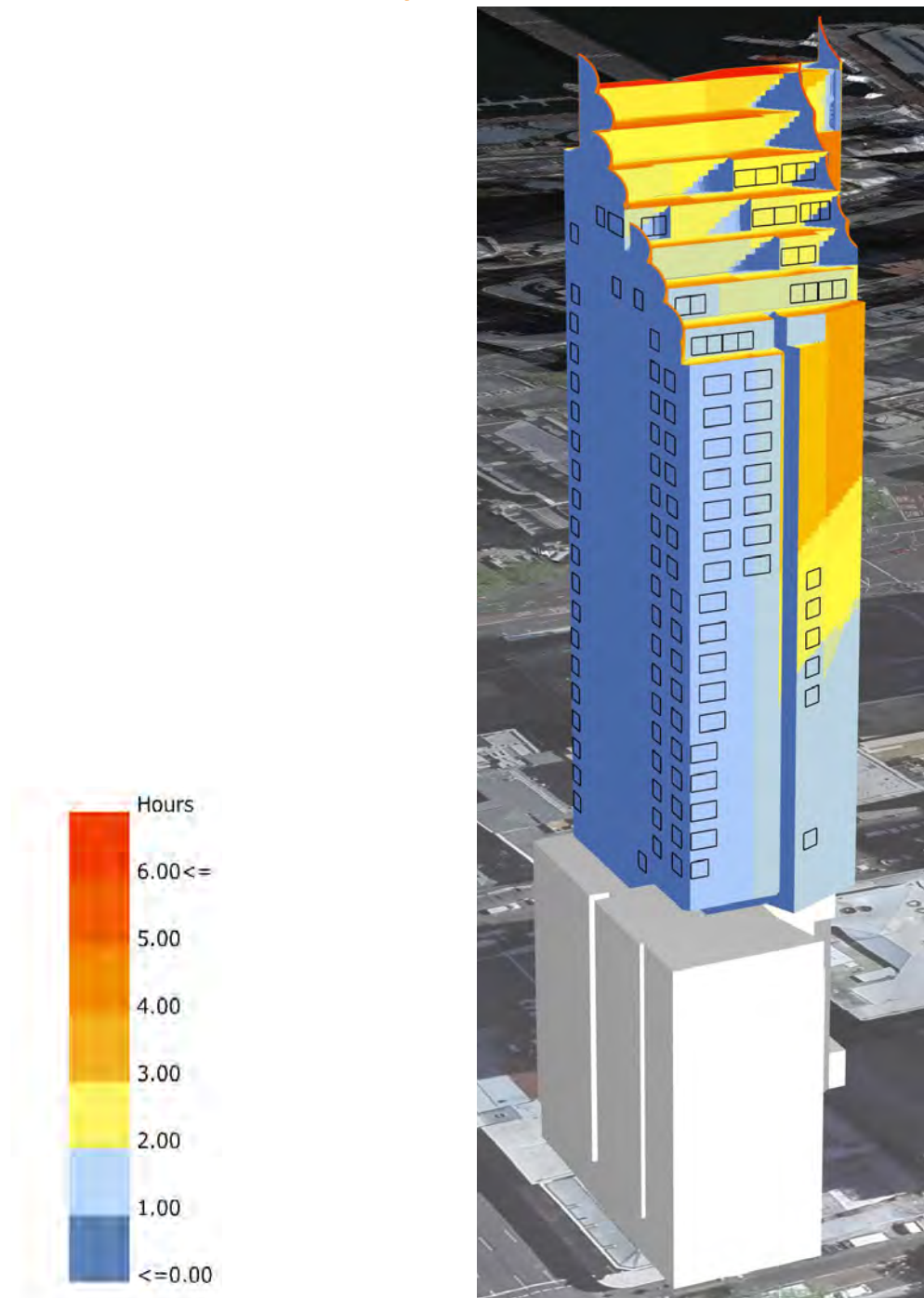
Living room window
(source from Section 96 exhibition at Sydney City website)

*Total apartment numbers are counted from Section 96 attachment plans

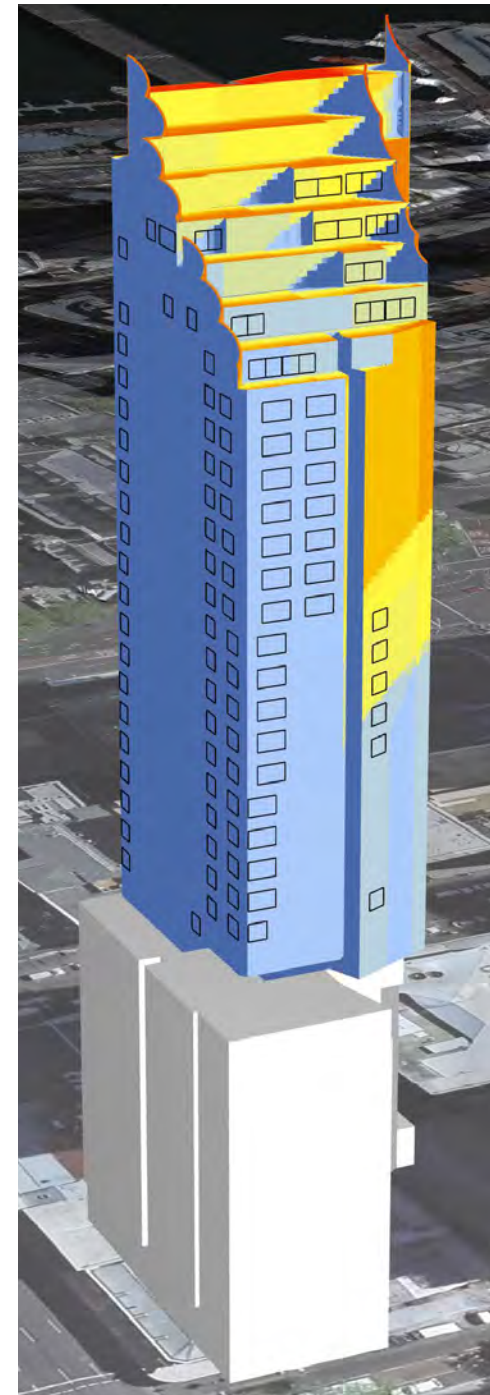
Residential Overshadowing Study - **Proposed Central Tower** | 116 Bathurst Street

116 Bathurst Street

Facade Sun Access Analysis



Existing | South-east View



Proposed Central Tower | South-east View

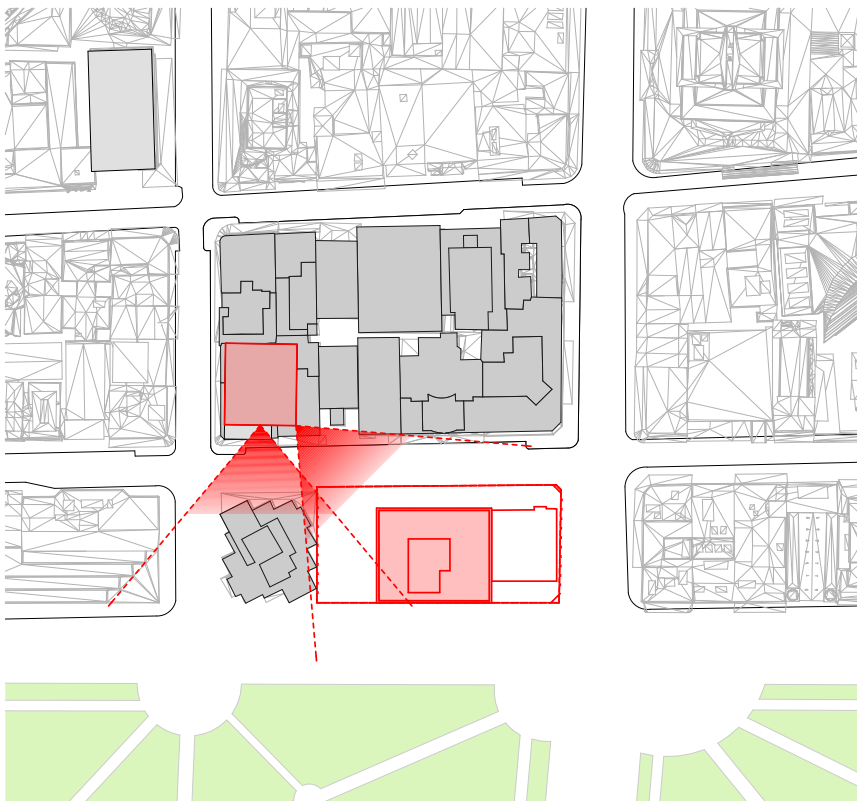
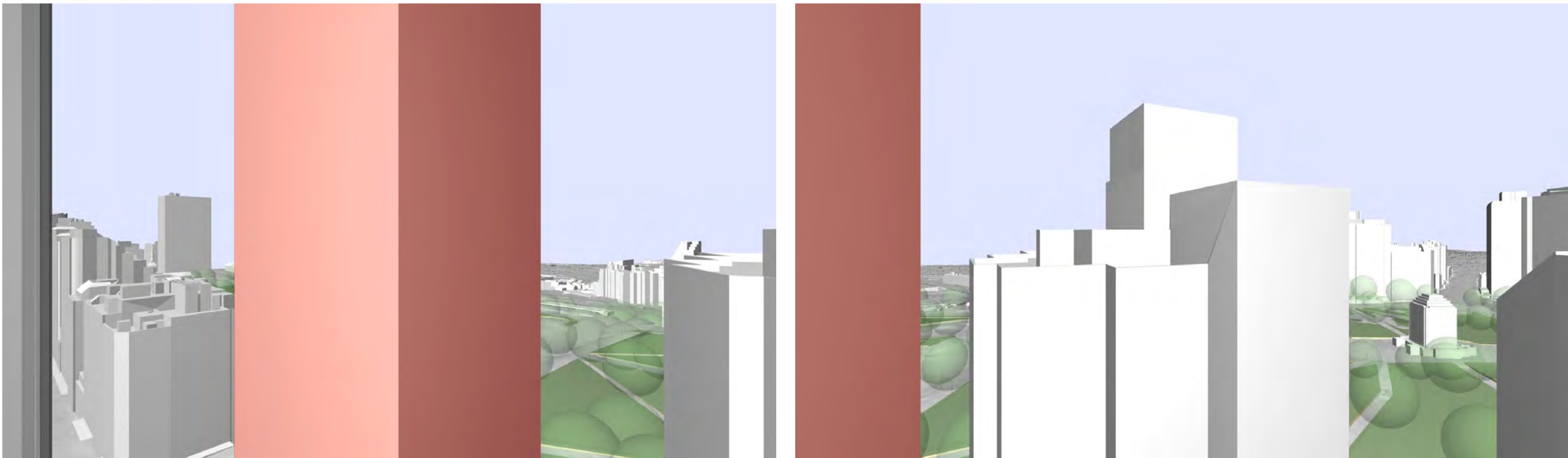


Comparison | South-east View



Private View Analysis | 116 Bathurst Street

Existing Volume - Approx. 70m (Level 21)

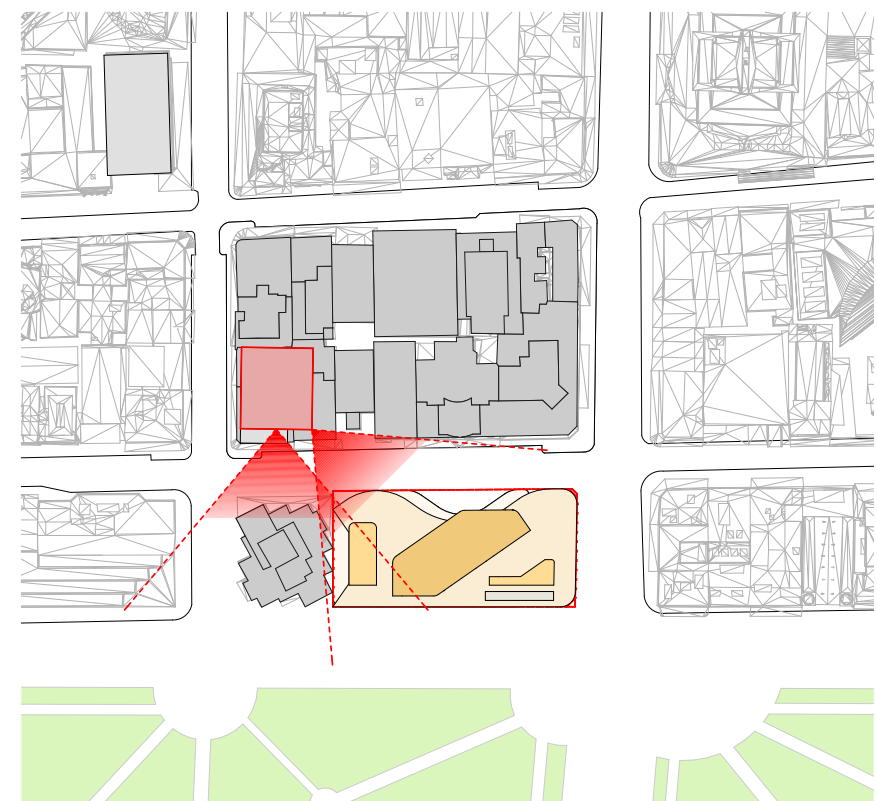
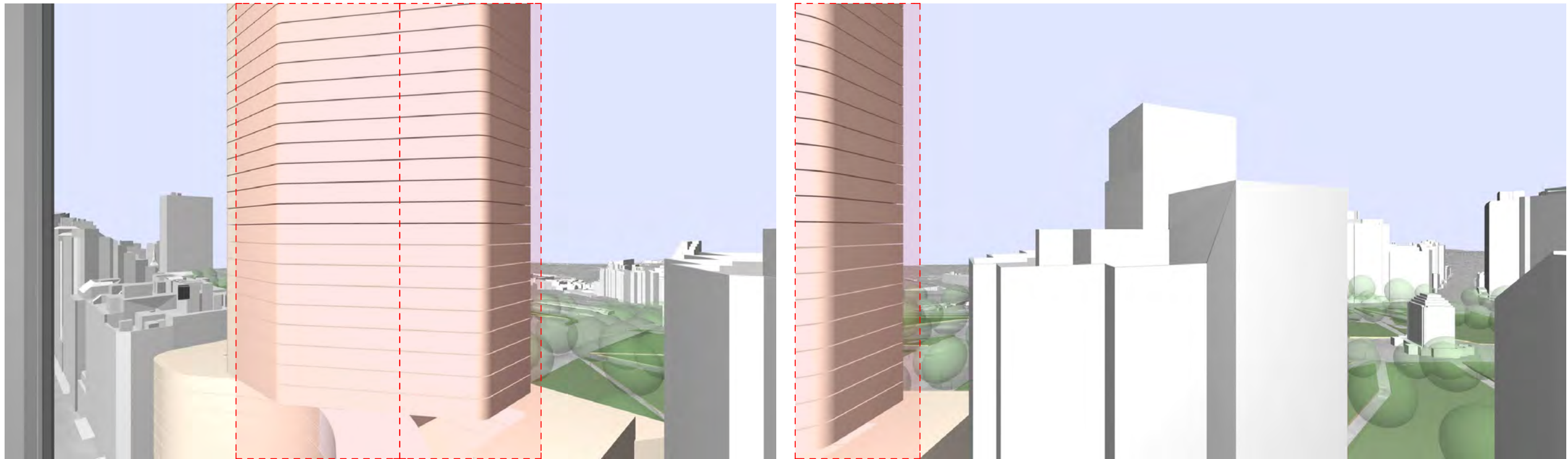


EXISTING VOLUME

LENS FOCAL LENGTH : 18 mm

Private View Analysis | 116 Bathurst Street

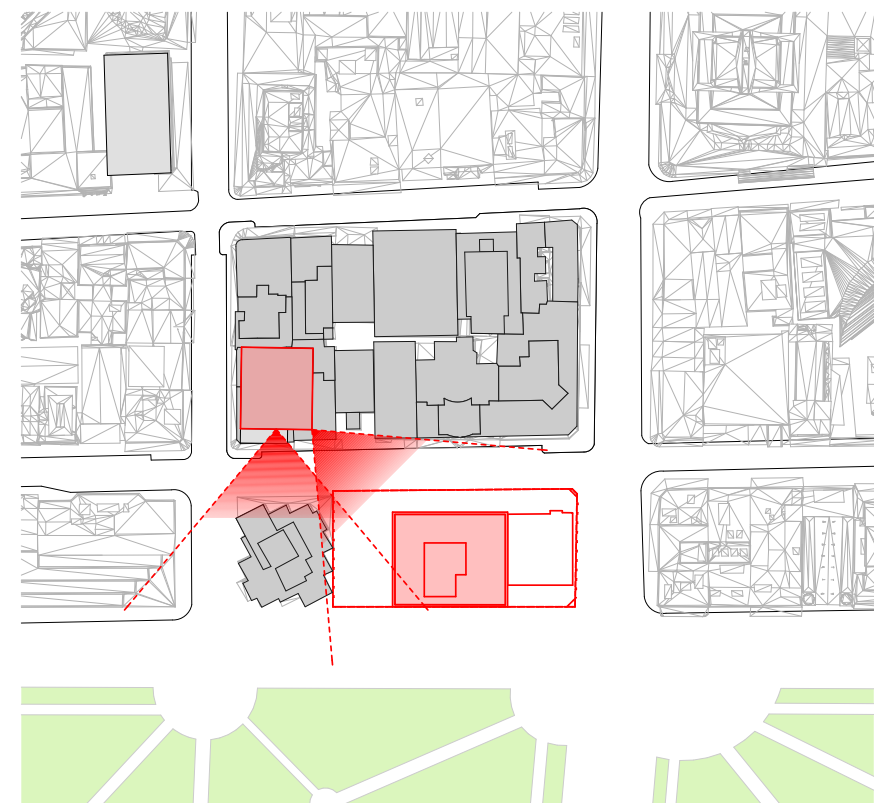
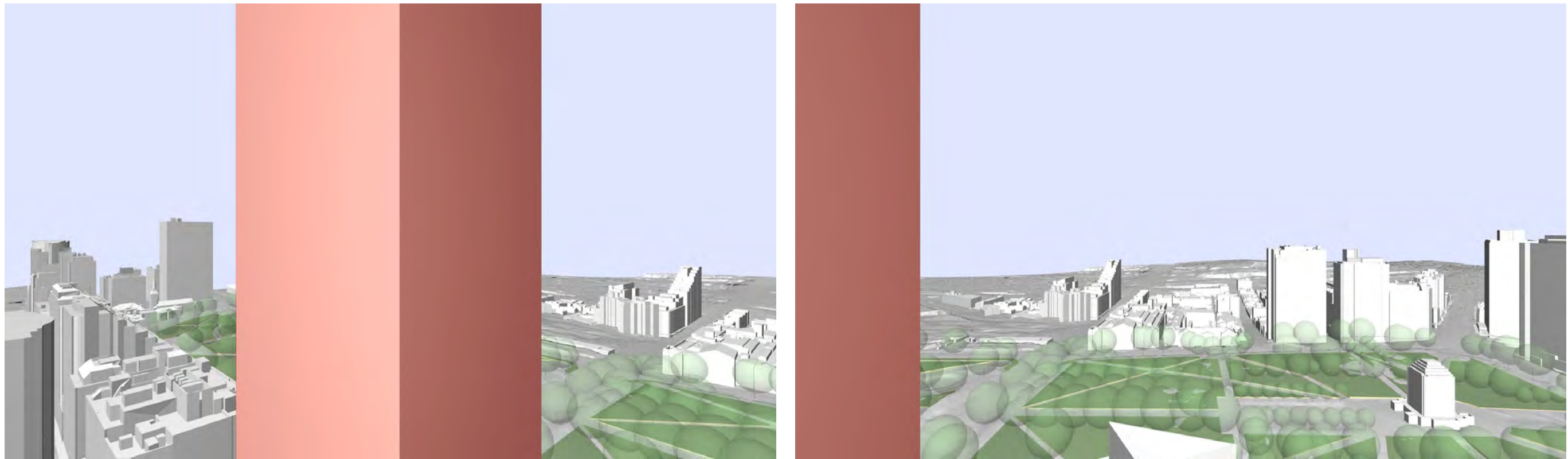
Indicative Volume - Approx. 70m (Level 21)



EXISTING VOLUME
PROPOSED INDICATIVE VOLUME
LENS FOCAL LENGTH : 18 mm

Private View Analysis | 116 Bathurst Street

Existing Volume - Approx. 105m (Level 32)

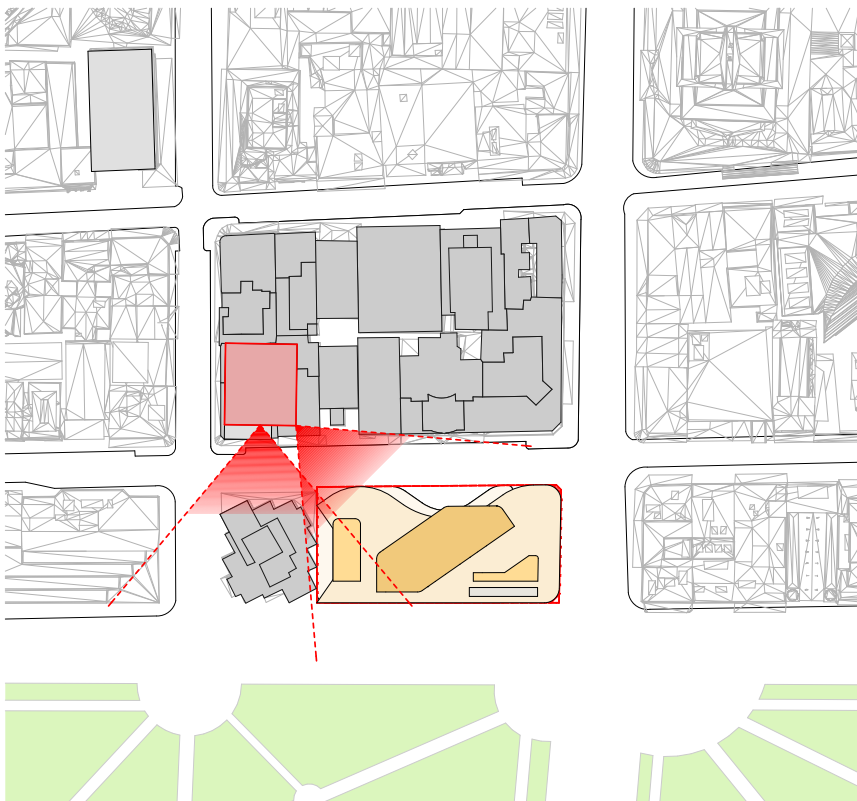
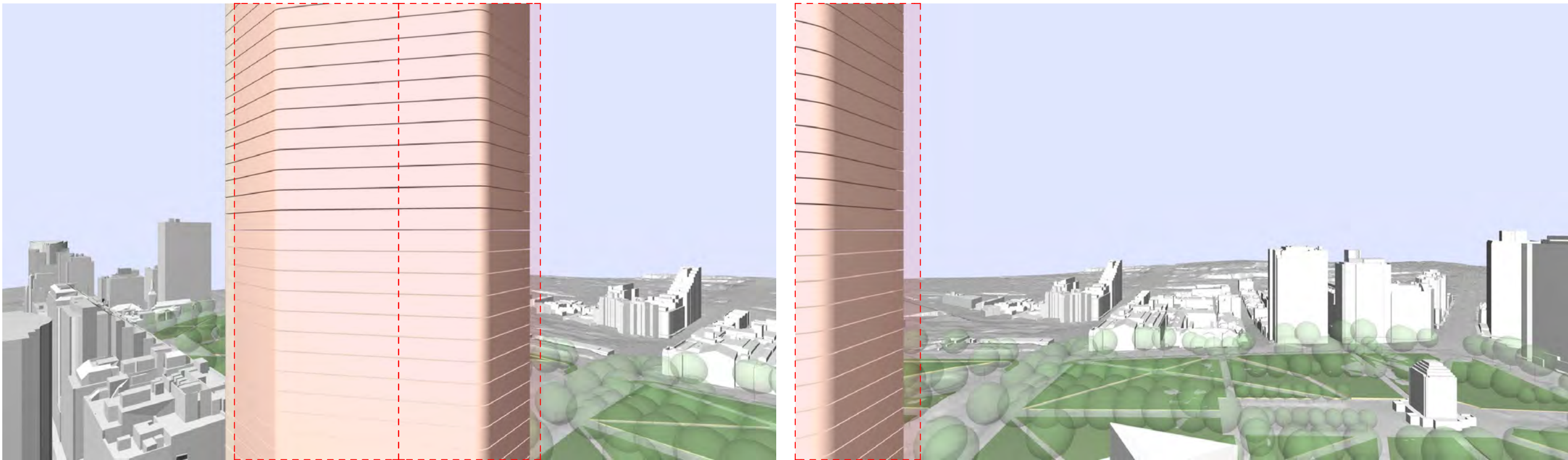


EXISTING VOLUME

LENS FOCAL LENGTH : 18 mm

Private View Analysis | 116 Bathurst Street

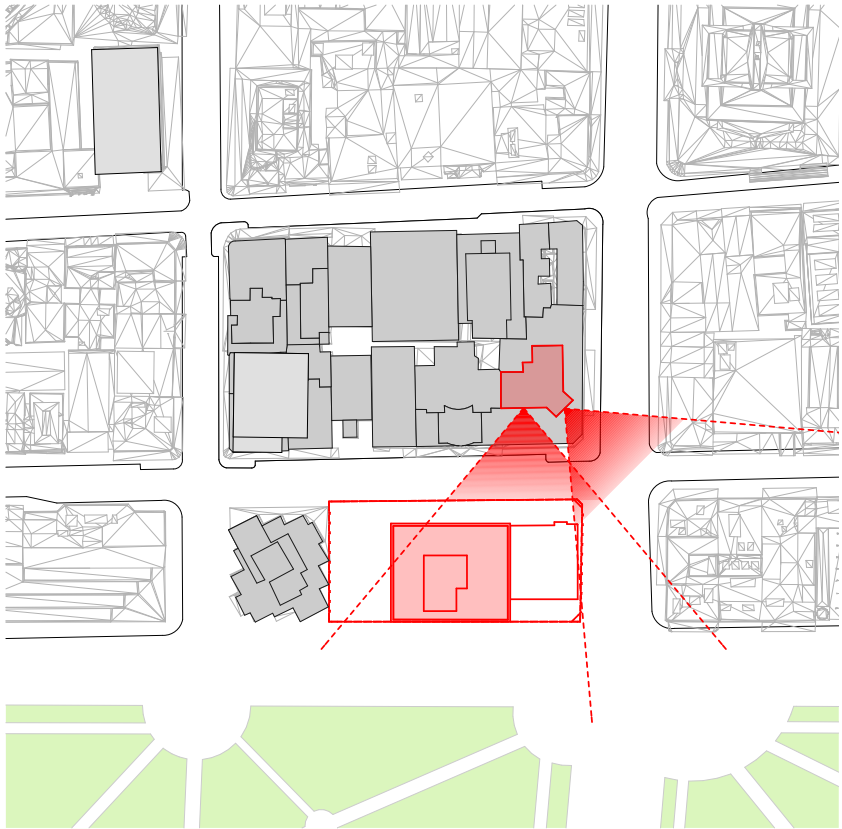
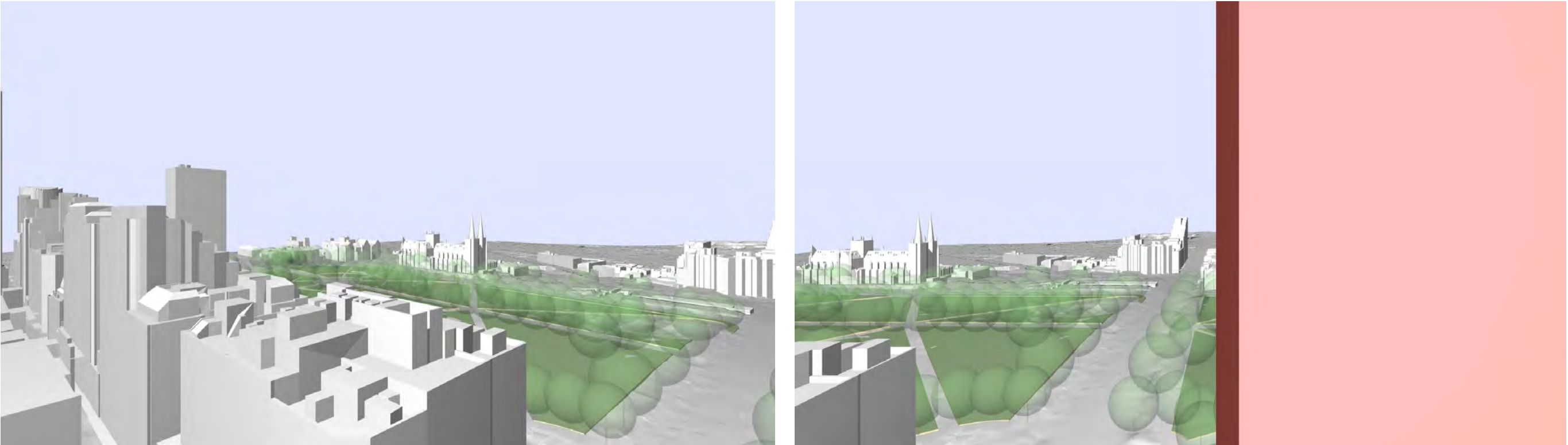
Indicative Volume - Approx. 105m (Level 32)



EXISTING VOLUME
PROPOSED INDICATIVE VOLUME
LENS FOCAL LENGTH : 18 mm

Private View Analysis | 27 Park Street

Existing Volume - Approx. 70m (Level 21)

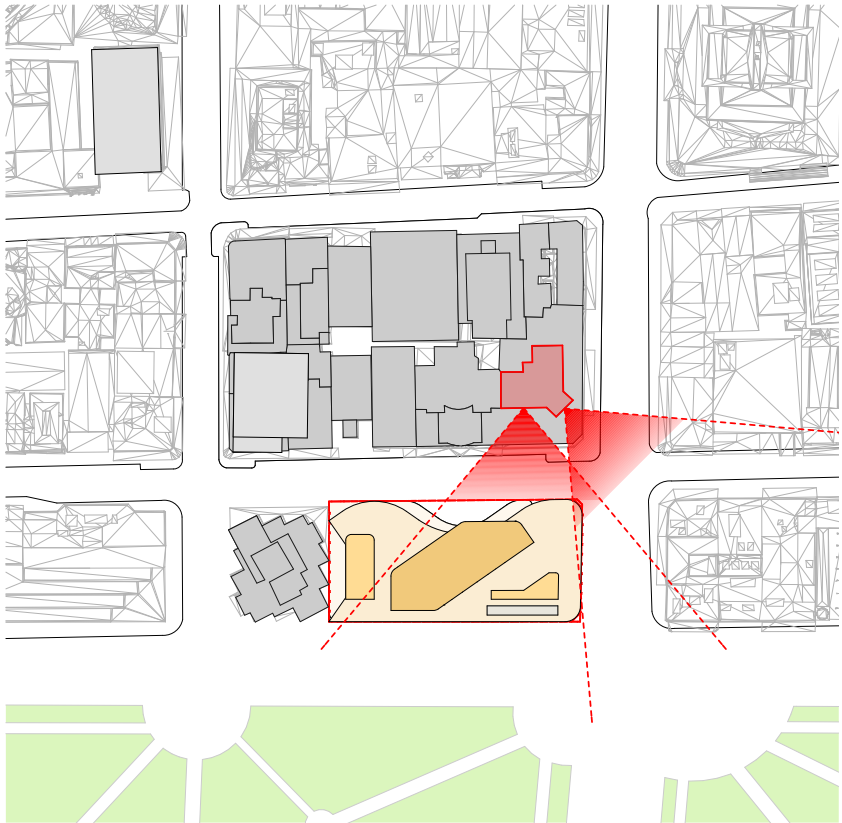
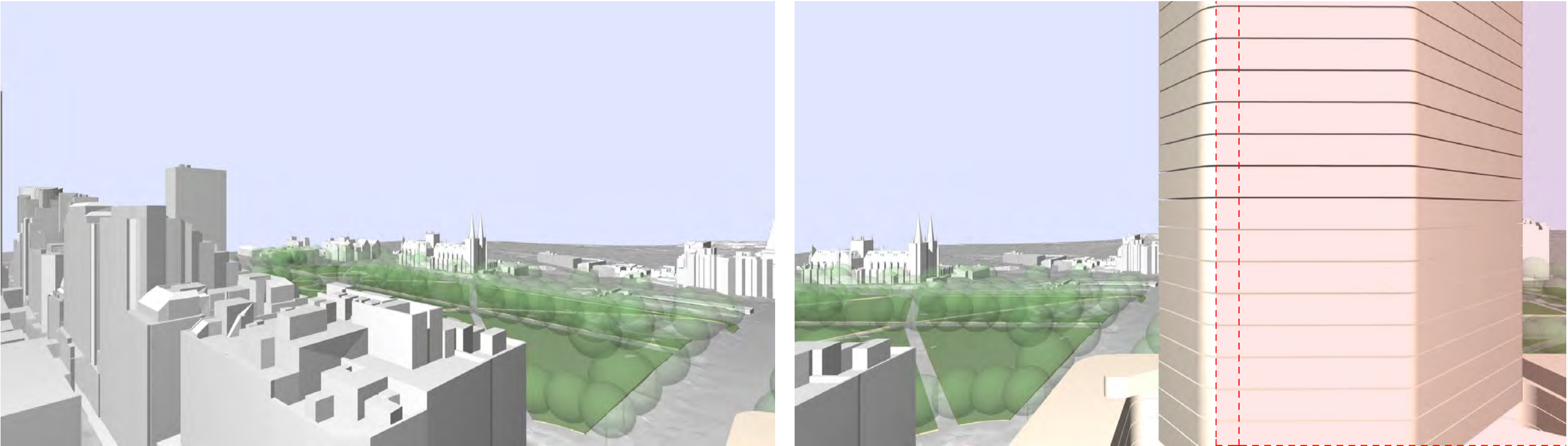


EXISTING VOLUME

LENS FOCAL LENGTH : 18 mm

Private View Analysis | 27 Park Street

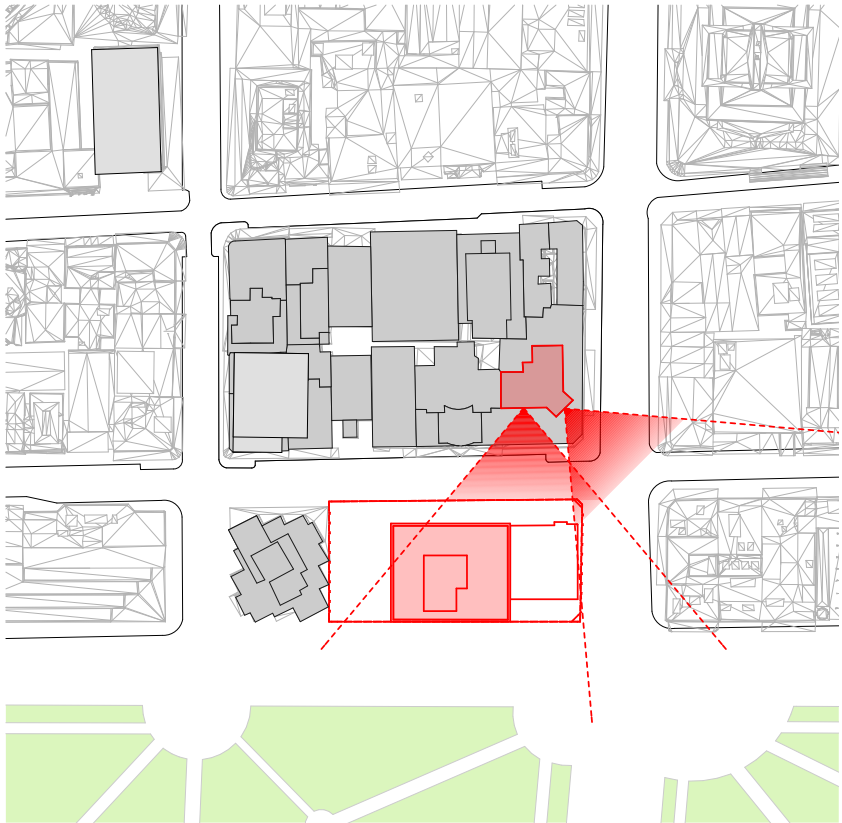
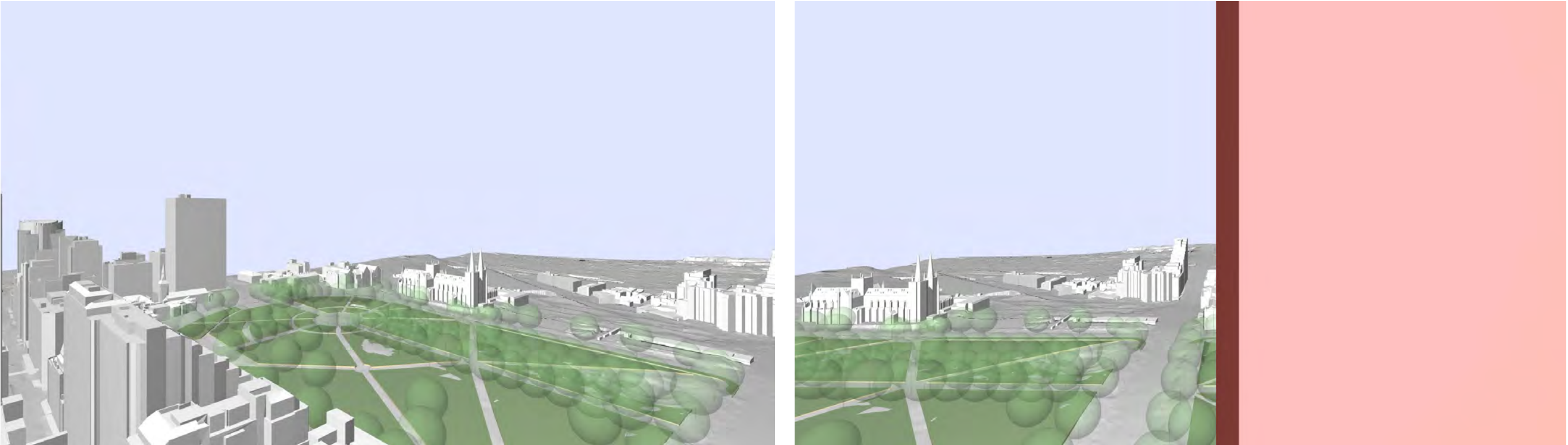
Indicative Volume - Approx. 70m (Level 21)



EXISTING VOLUME
PROPOSED INDICATIVE VOLUME
LENS FOCAL LENGTH : 18 mm

Private View Analysis | 27 Park Street

Existing Volume - Approx. 105m (Level 32)

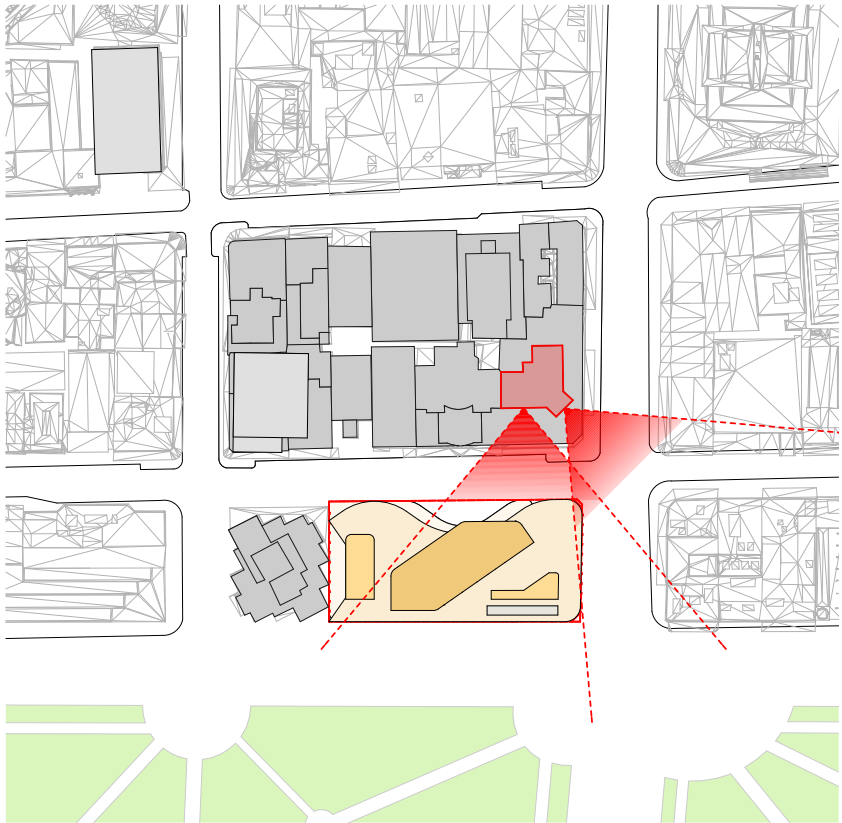
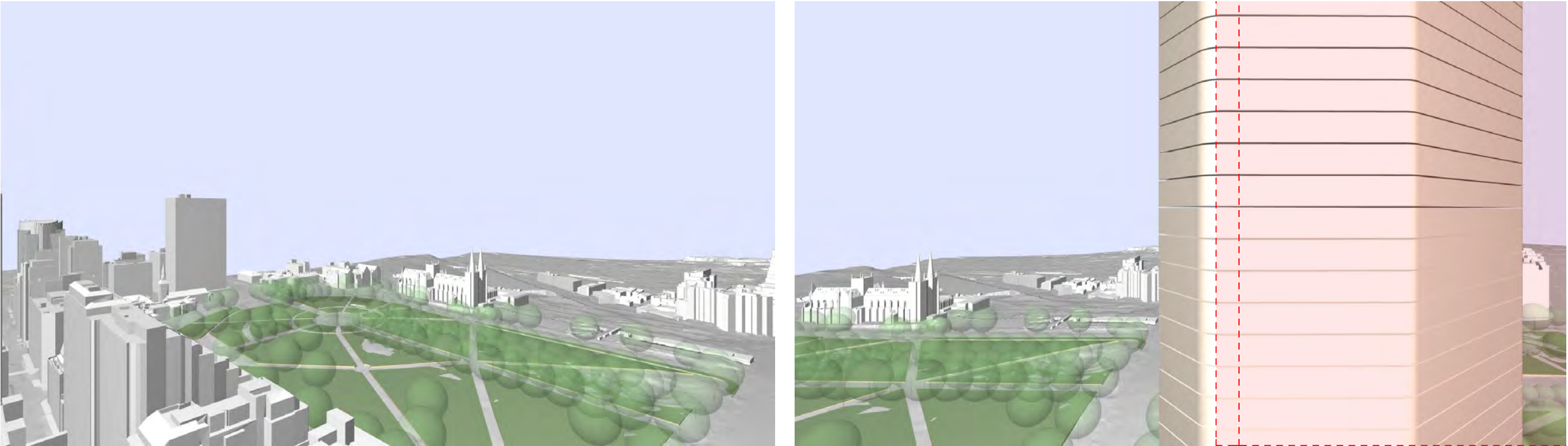


EXISTING VOLUME

LENS FOCAL LENGTH : 18 mm

Private View Analysis | 27 Park Street

Indicative Volume - Approx. 105m (Level 32)



EXISTING VOLUME

PROPOSED INDICATIVE VOLUME

LENS FOCAL LENGTH : 18 mm

SEPP 65 Compliance Statement

Principle 1 : Context and neighbourhood character

Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.

Responding to context involves identifying the desirable elements of an area's existing or future character. Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood.

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

The proposal responds directly to the adjacent Hyde Park and the Sydney CBD surrounds. The placement of the through site link introduces a layer of natural pedestrian networks, and improves access to the open areas of Hyde Park from Sydney CBD. This through site link allows for activated uses and an enhanced public domain.

The proposed linkage assists to define new built forms, both to address and maintain the street wall frontage, provide appropriate view sharing to Hyde Park, the Sydney CBD, and Sydney Harbour, improve the quantity of sun access to Hyde Park and provide an appropriate built form at the gateway to the CBD on the corner of Park street.

The proposal allows for the future site connection from the Museum Station underneath Elizabeth Street to the sites.

Principle 2 : Built form and scale

Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.

Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements.

Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

The proposed built forms embody a classic tower/podium configuration. Setbacks, articulation levels and parapet heights are carefully aligned consistent with the precinct, and reinforce a geometry that contributes and enhances each respective street frontage and city skyline articulation.

The proposed massing achieves 50% reduction in overshadowing of Hyde Park between 12pm and 2pm in mid Winter when compared with the existing building and a qualitative improvement through the tall slender tower which results in a faster moving shadow.

The positioning of the tower to the centre of the site provides the best urban design outcome in terms of overshadowing, view sharing and commercial use.

Principle 3 : Density

Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context. Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.

As part of the Sydney CBD and acknowledgement of the anticipated population growth of the area, the proposed development seeks to accommodate the future density of the precinct with high quality housing supply and activated retail frontages. The proposed density is consistent with the floor space ratio for the subject site.

Principle 4 : Sustainability

Good design combines positive environmental, social and economic outcomes.

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

The "Sustainability" issues will be carefully addressed in detailed design.

Principle 5 : Landscape

Good design combines positive environmental, social and economic outcomes.

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

The "Landscape" issues will be carefully addressed in detailed design.

Principle 6 : Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility.

The carefully considered built form allow for positive living environments with adequate natural daylight access, natural ventilation and privacy.

Principle 7 : Safety

Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety. A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.

The "Safety" issues will be carefully addressed in detailed design.

Principle 8 : Housing diversity and social interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets. Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix.

Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.

The "Housing diversity and social interaction" issues will be carefully addressed in the detailed design. The desire to support a varied social mix contributes to the long-term social sustainability of the project and ensures that the appeal of the development is not relegated to any single social or economic group.

Principle 9 : Aesthetics

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.

The visual appearance of a well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape..

A central ambition for this development is to create a residential building that is supportive to the needs and aspirations of its future residents of the city of Sydney. Beautiful buildings characterise all great cities and every development should be seen as an opportunity to enhance that collective beauty. Beautiful buildings also improve the values of existing buildings in their vicinity and provide an uplifting influence on the character of a neighbourhood.

This proposal represents a carefully proportioned building mass, articulated by its site constraints and orientated with sensitivity to this particular place. These refined and composed slender forms appear sculpted from afar, and yet tactile and sophisticated when experienced more intimately. Through both its tower-podium proportions and the human scaling of the entry address, and through site link, the proposed development demonstrates a timeless composition that will elevate the standard, and positively contribute to the urban fabric of Sydney CBD.

Further, as per the requirements of the Sydney LEP 2012, a competitive design process will be conducted for the detailed design of the proposed development based on the proposed building envelope.