SJB Architects

SEPP65 Design Statement

194-214 Oxford Street and 2 Nelson Street
Bondi Junction
Sydney

We create spaces people love.
SJB is passionate about the possibilities of architecture, interiors, urban design and planning.
Let's collaborate.

Level 2, 490 Crown Street
Surry Hills NSW 2010
Australia
T. 61 2 9380 9911
architects@sjb.com.au
sjb.com.au

Prepared for
Stargate & Waverley City Council
Development Application: SSD-77175998

Issued
April 2025

We create amazing places

At SJB we believe that the future of the city is in generating a rich urban experience through the delivery of density and activity, facilitated by land uses, at various scales, designed for everyone.

Ref: #6289
Version: 03
Prepared by: JTS
Checked by: EW

Contact Details:
Eamon Harrington

SJB Architects
Level 2, 490 Crown Street
Surry Hills NSW 2010
Australia

T. 61 2 9380 9911
architects@sjb.com.au
sjb.com.au

SJB Architecture (NSW) Pty Ltd
ABN 20 310 373 425
ACN 081 094 724
Adam Haddow 7188 John Pradel 7004

Acknowledgement of Country

SJB acknowledges the Traditional Custodians of the lands, waters, and skies, and their perpetual care and connection to Country where we live and work. We support the Uluru Statement from the Heart and accept its invitation to walk with Aboriginal and Torres Strait Islander people in a movement of the Australian people towards a better future.

We believe that inequity enshrined in our society continues to significantly disadvantage our First Nations colleagues, friends, and community. Following the referendum, we are personally and professionally recommitting our support of Aboriginal and Torres Strait Islander people. We will continue to strive for (re) conciliation by acting with integrity and passion, in an effort to address this imbalance in our country and create lasting generational change.

SJB Architects on Cadigal Land
on behalf of Stargate Group
for 194 Oxford Street + Nelson St project
part of Waverley LGA, land of the Cadigal,
Bidiagal, and Birrabirragal people of the
Eora Nation

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SEARS Response Table

This Design Report is submitted to the DPHI in support of a State Significant Development Application (SSD-77175998) for the development of land at 194-214 Oxford St and 2 Nelson St, Bondi Junction.

The proposal will provide additional residential dwellings, in accordance with the in-fill affordable housing provisions under the State Environmental Planning Policy (Housing) 2021 and incorporate a 30% increase in Gross Floor Area (GFA) and building height.

SSD-77175998 seeks approval for the following development:

- Construction of Levels 9 – 16 of the residential towers including Buildings A (Western Tower) and Building B (Eastern Tower) comprising
    - Building A (Western Tower, Residential Levels 9 to 13) with a maximum height of 42.5m
    - Building B (Eastern Tower, Residential Levels 9 to 16) with a maximum height of 54.0m
    - 11,288m² proposed gross floor area
    - 1,706m² (min 15% = 1,693m²) affordable housing GFA (17 units)
    - 746m² of communal open space
    - 138 spaces of basement car parking

In accordance with section 4.39 of the Environmental Planning & Assessment Act 1979 (EP&A Act), the Secretary's Environmental Assessment Requirements (SEARs) for SSD-77175998 were issued on 23rd of October 2024.

This report has been prepared to respond to the following SEARs:

3.	**Design Quality**	**Reference**
	Demonstrate how the development will achieve: - design excellence in accordance with any applicable EPI provisions - good design in accordance with the seven objectives for good design in Better Placed.	Addressed in the EIS
	Recommendations of the jury and Design Integrity Panel (where a competitive design process has been held) or the SDRP are to be addressed prior to lodgement.	Addressed in the EIS
4.	**Built Form and Urban Design**	**Reference**
	Explain and illustrate the proposed built form, including a detailed site and context analysis to justify the proposed site planning, design approach and application of the height and floor space bonuses under the Housing SEPP	Principle 2: built form and scale
	Demonstrate how the proposed built form (layout, height, bulk, scale, separation, setbacks, interface and articulation) addresses and responds to the context, site characteristics, streetscape and existing and future character of the locality.	Principle 2: built form and scale
	Demonstrate how the building design will deliver a high-quality development, including consideration of façade design, articulation, activation, roof design, materials, finishes, colours, any signage and integration of services.	Principle 9: Aesthetics
	Provide a floorplan outlining the gross floor area and units that are dedicated as affordable housing.	GFA & Affordable Housing Proposal Refer to drawings
5.	**Environmental Amenity**	**Reference**
	Address how good internal and external environmental amenity is achieved, including access to natural daylight and ventilation, pedestrian movement throughout the site, access to landscape and outdoor spaces v	Principle 6: Amenity
	Assess amenity impacts on the surrounding locality, including lighting impacts, reflectivity, solar access, visual privacy, visual amenity, view loss and view sharing, overshadowing and wind impacts. A high level of environmental amenity for any surrounding residential or other sensitive land uses must be demonstrated.	Principle 4: Sustainability
	Provide a solar access analysis of the overshadowing impacts of the development within the site, on surrounding properties and public spaces (during summer and winter solstice and spring and autumn equinox) at hourly intervals between 9am and 3pm, comparing the proposed development, existing situation and a development with no bonuses applied.	Principle 4: Sustainability
7.	**Public Space**	**Reference**
	Demonstrate how the development maximises the amount, access to and quality of public spaces (including open space, public facilities and streets/plazas within and surrounding the site), reflecting relevant design guidelines and advice from the local council and the Department.	Principle 8: Housing Diversity and Social Ineraction
	Demonstrate how the development: — ensures that public space is welcoming, attractive and accessible for all. — maximises permeability and connectivity. — maximises the amenity of public spaces in line with their intended use, such as through adequate facilities, solar access, shade and wind protection. — maximises street activation. — minimises potential vehicle, bicycle and pedestrian conflicts.	Refer to drawings

Architectural Drawing List

Note - Refer to Section 15: Architectural Documentation

Area Schedule	N/A
Site Location Plan	1:500
Site Context Analysis	1:500
Development Application Plans	1:100
Building Elevations	1:200
Building Sections	1:100
Analysis - Solar Access	1:500
Analysis - Cross Ventilation	1:500
Analysis - Communal Open Space	1:500
Analysis - Deep Soil	1:500
Analysis - Height Plane	NTS
Analysis - Shadow Diagrams	1:1000
Analysis - Area Plans (GFA)	1:500
Analysis - Affordable Aera Plan	1:500
Project CGIs / visualisations	NTS

Design Verification Statement

1

Design Verification Statement

Prepared to accompany the Development Application submitted to Council

February 2025

Project Address
194-214 Oxford Street and 2 Nelson Street
Bondi Junction, NSW

SSD Number: SSD-77175998

Prepared on behalf:
Stargate Property Group

Prepared by:
SJB Architects NSW

Verification of Qualifications

John Pradel and Adam Haddow are registered as Architects in New South Wales and are enrolled in the Division of Chartered Architects in the register of Architects pursuant to the Architect Act 1921.

Their registration Numbers are 7004 and 7188.

Statement of Design

SJB have been responsible for the design of the project since its inception and have worked with related professionals and experts in respect of the matter. The project has been designed to provide a development with in-fill affordable housing that is respectful of local planning and design controls and responds to the nine design quality principles of Chapter 4 Housing SEPP Asessment.

SJB verify that as required by the Clause 50 (1AB) of the Environmental Planning and Assessment Regulation 2000 the design quality principles set out in Schedule 1, design quality principles of the State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development and the objectives in Part 3 and Part 4 of the Apartment Design Guide have been achieved for the proposed development as described in the following document.

Adam Haddow
Director
Registered Architect NSW, No. 7188

Design Excellence Process

2

June 2020	Design Excellence Competition EOI
October 2020	Design Excellence Competition Submission
November 2020	Design Excellence Competition Jury Report + Feedback
30th April 2021	Jury Presentation Meeting
June-July 2021	Internal Review of Competition Design + Context
6th August 2021	Pre-DA Jury Presentation Meeting of Revised Design
August 2021	Jury Review of Design Documentation (Desk top Review)
September 2021	Submission to Waverley Council
9th April 2024	Centennial Park Trust Engagement
3rd December	Design Integrity Panel Meeting
17th December	Received Signed DIP Letter

2.1 Designing For Country

A big part of SJB's commitment to acknowledging Country is to recognise and celebrate the history of the land and its people.

We seek out the importance of place, the cultural heritage it holds, and enrich our knowledge of the sites we work on with the information and from from Indigenous Australians experiences and cultural knowledge of the land. SJB will design to respond to the site in an appropriate way which we believe is the start of the journey of design excellence.

As mentioned, the design seeks to acknowledge and celebrate the following elements that have been flagged for their importance and relationship to site:

- the "lookout"; place-making from the ridgeline of the Woollahra "Woo-la-ra" landscape

- the 'journey'; the proposed idea that this land and its ridgeline was once used as a path between different areas for Indigenous people

- the 'intersection'; the various ridgelines inland crossing Cadigal land and meeting at the junction of the site where there is a geographical change in direction towards the coastline

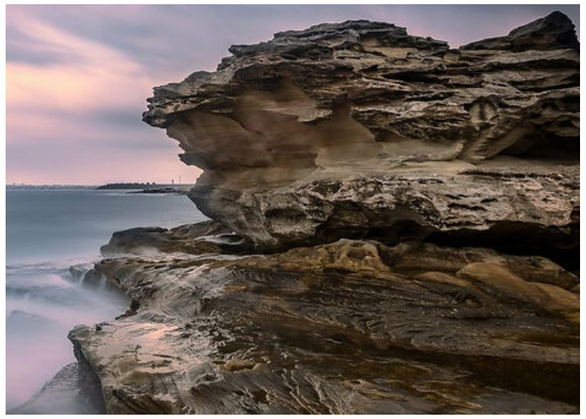
- "Boondi" coastline; the eroded coastline and its organic natural form is a key marker for all people that have experienced the land before and its abundance in undulating contours

- natural stone; the rich materiality of the coastline is evident in the erosion of the landscape, revealing a palette of rich colours and textures

- spaces created for the presence of storytelling and public art in the project through the building design and public domain detailing which will be further developed with artists

These design elements will be thoroughly investigated and instilled within our principles of design for the site and the connection back to Country for people to experience.







2.2 Design Statement

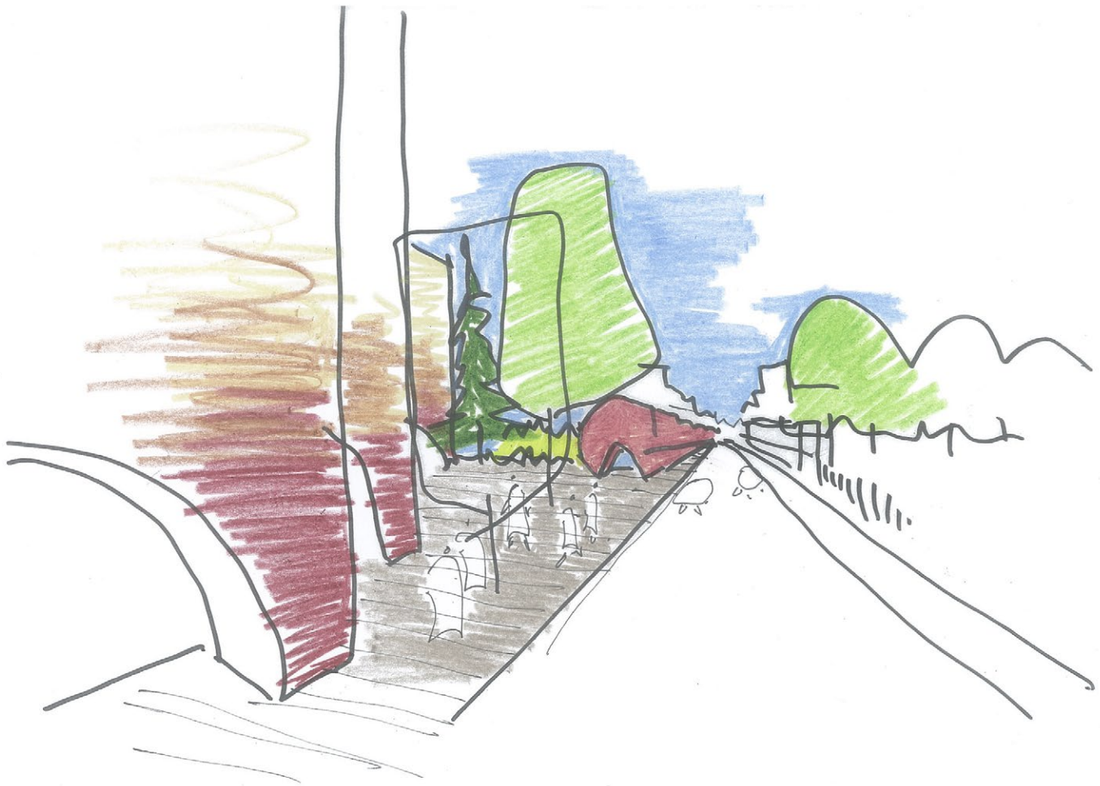
The site touching Oxford + Nelson Streets lends itself to a rich and diverse relationship with the natural landscape. Our response to the site looks to celebrate this relationship and highlight the deep connection we have as a people with the landscape, its natural form, and the heritage of the Indigenous land of the Eora Nation.

By researching an understanding of place and Country, we were able to advocate for reconnecting to Country and celebrating this special place at the top of the hill between the harbour and the ocean. Sitting a-top a natural ridgeline to the surrounding areas, the building design responds to the organic form of the land through its architecture; it respects the peak of the ridge by standing as a visual marker in the urban landscape; and it holds a significant relationship with the land via its materiality of carved stone rich in colour and form.

In terms of the designs' response to the urban context, our belief is that the building should hold the corner, and given its scale, touch the ground. Most buildings in Bondi Junction employ a podium to create a 'pedestrian scale'. An unintended consequence of the podium typology is a reduction of open space at ground level and the delivery of large, monotonous and mostly inactive podiums. We have proposed a hybrid approach to the design of the podium by continuing the finer-grain of the street wall along Oxford street, to then be book-ended by an elegant tower form to the western end of the site. In turn, these positive attributes of the historic Bondi Junction 'high street', are to be embraced – delivering a more people-centred and active environment.

The scheme delivers a highly permeable ground plane, facilitating outdoor activities, retail, dining, and pedestrian short cuts. This approach creates curtilage around the existing 8 pack of shops to the east of the site. Instead of demolishing one of the eight to create a through site link, we have complemented this stretch of highly desirable, pedestrian scaled buildings, by adding an additional end terrace. This new terrace plays with the rhythm of the shopfront scale with a large arch, creating a welcoming setting for activities while delivering eyes on the street. The through-site link enhances the connection to an activated Osmund Lane shared zone rich with cyclists, retail, and a direct link through to the communal open space around the Norfolk Pine to Nelson Street.

The scheme will be a significant public benefit in the form of a permeable and active ground plane, and re-establishment of a section of the 'high street' shopping strip that has been lost further along Oxford Street. The use of robust materials coupled with a built form that graduates from a more enclosed and protected base, to an open and connected upper will ensure that the residents will benefit from a high level of amenity, while concurrently delivering a building that is memorable and playful. This joy in material use has been balanced with simple forms that are articulated to reduce their overall scale to result in a building that respectfully and confidently holds the corner.



Design Progression - Current

Competition Design



The winning Design Compeition Entry responded to its urban context and surroundings in an appropriate manner, however the design had a number of different elements that needed further refinement from the Design Jury's perspective and further resolution from the Clients perspective to achieve the required result.

Previously Proposed Design



SJB proposed the above design as a resolution to the design development that had occured with the Design Jury comments front of mind. However there were a number of queries raised by the Client and a need for further connection to the history of 'place' and its appropriate response to the landscape and geographical context.

Current Design



Through extensive research into place and heritage of the landscape and 'place' that the site marks itself on, SJB have proposed a more appropriate and succinct design to its response of design with Country in mind and the cultural heritage of 'place'. Albeit a departure from the previous scheme, we believe that this design still captures the Design Jury comments in their entirety and has a more beautiful and sensitive approach to design and context.

Proposed SSDA Design



Through extensive research and development with the Centennial Park Trust and Design Integrity Panel, SJB have retained the design commitments of the previous design whilst achieving the in-fill affordable housing scheme setout by the NSW Government.

The variations in height will allow for a stepping up of both forms, the Western building becoming the corner stone marking the entrance to Bondi Junction from Oxford St, and Eastern building becoming a beacon from Syd Enfield Drive when entering the city.

This play in volume and shape will be accentuated by the gradated levels, tiering up from the North Western part of the site, to the additional volumes on the West side of the Eastern Building as shown in the perspectives.

DIP Jury Presentation - 03/12/24

Summary of Presentation Feedback

	Jury Feedback	Architects Response
1.	**Design Excellence**	
1.1	The DIP is confident that the design as presented, is capable of achieving design excellence in accordance with, what was presented at the Design Competition Stage.	Noted.
2.	**Height of Building and Built Form**	
2.1	The DIP commended that the design and in particular, the location of the additional height from the 30% uplift predominantly on the northern tower, results in greater transition in the scale of the two towers. This height difference delivers improved urban design and built form outcomes, with improved proportions of the northern tower.. The scale difference between the two towers ishould be retained as part of future design development.	Noted.
2.2	The DIP has considered the design in relation to the context of the site and are of the opinion that the 30% density has been applied in a thoughtful and considerate way to minimise adverse impacts.	Noted.
2.3	The DIP encourages impacts of views of the proposal from Centennial Park be assessed in comparison to the previous proposal.	See Principle 2: Built Form and Scale
3.	**Overshadowing**	
3.1	The DIP commended that the design as presented would result in proportionally small changes to overshadowing impacts and would not result in any significant amenit y impact.	Noted.
3.2	The DIP recommends that the building bulk and design be further refined so that there is no overshadowing within the “no impact area” of the Centennial Park. That is the area beyond the 40m setback from the eastern boundary of the Park.	As shown further in the detailed response, the proposed design under this application does not impact the 40m setback from the eastern boundary of the park.
3.3	The DIP recommends that the project confirm the existing land uses of the neighbouring properties, directly affected by the proposed development.	The proposal has minimised impacts to the neighbouring amenity. As shown, the neighbouring properties will receive sufficient solar access during the winter solstice between 9am and 3pm. See detailed analysis.
3.4	The DIP recommends that a full and detailed study of overshadowing impacts is undertaken and submitted with any EIS, this should include an hour-by-hour study of all current / previously approved and proposed impacts to all neighbours.	
4.	**Materiality**	
4.1	The DIP is comfortable that the materiality of the development is heading in a positive direction. The results of the VMU at 1:1 scale mock ups presented the scallop material testing and colour / texture that were presented, demonstrates a high-quality design outcome and should be retained.	Noted.

Proposed SSDA Design



DIP Jury Presentation - 03/12/24

Summary of Presentation Feedback

	Jury Feedback	Architects Response
5.	**Affordable Housing Provision**	
5.1	The DIP is very supportive of the proposal given the benefits it would bring in terms of providing additional affordable housing while maintaining high amenity and design quality.	Noted.
5.2	The proposal should clearly demonstrate that the affordable housing units will achieve an equitable outcome with regards to amenity (solar access/ cross ventilation etc) and have equitable access to all of the amenities of the development.	The affordable housing proposal and locations of the apartments have been deemed to provide equitable outcome. See detailed analysis.
6.	**Environmental Amenity**	
6.1	The DIP questioned the effects of south-western winds to the common, open space at the upper level of the development. A wind report will need to be prepared as part of the project.	Noted.
6.2	The DIP questioned the effects of noise generated from Sydney Enfield Drive and notes that the same and improved acoustic management design will be maintained from what was presented at the Design Competition Stage.	Addressed in the Acoustic report and EIS.
6.3	Noting that the affordable housing is proposed to be located in noisier areas (lower down the building), any future EIS should demonstrate in detail how noise impacts will be mitigated to ensure affordable housing amenity.	Addressed in the Acoustic report and EIS.
7.	**Car Parking**	
7.1	The DIP supports no net increase in parking.	The development of the site has physically commenced and construction of the basement completed. The proposed additional carpark spaces is able to be accommdate with minimal adjustments to the basement layout and does not affect or reduce any amenities of the site. Addressed in the Traffic report and EIS.
8.	**Commercial Podium Design**	
8.1	The DIP encourages the proponent to explore potential design refinements to the podium elevation and plan layout to improve the visual continuation of the commercial shopfronts along Oxford Street, for example through continuation of the awning, key datums etc.	The key horizontal datums that have been captured in this proposal is the continuation of the awning and glazing of the Oxford Street shopfront.
8.2	The DIP encourages the proposed design development to explore weather protection, such as awnings, across parts of the southern façade.	

v

Proposed SSDA Design



Jury Presentation

Jury Feedback

3.1 The DIP recommends that the building bulk and design be further refined so that there is no overshadowing within the "no impact area" of the Centennial Park. That is the area beyond the 40m setback from the eastern boundary of the Park.

3.2 The DIP recommends that the project confirm the existing land uses of the neighbouring properties, directly affected by the proposed development.

3.3 The DIP recommends that a full and detailed study of overshadowing impacts is undertaken and submitted with any EIS, this should include an hour-by-hour study of all current / previously approved and proposed impacts to all neighbours.

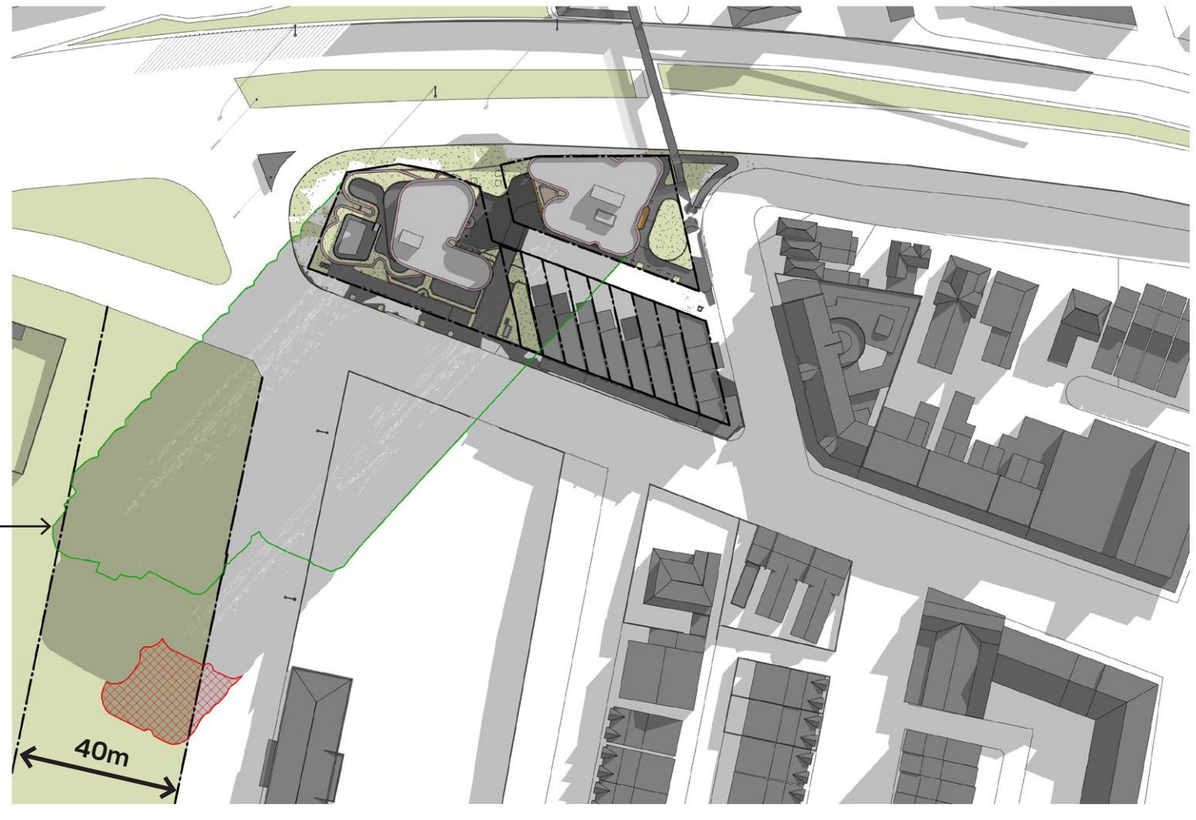
3. Overshadowing

Architects Response

The proposed design under this application does not impact the 40m setback from the eastern boundary of the Park.

As shown in the below image, the only overshadowing of the parkland happens under the approved DA consent. Further, it only occurs in Winter at 9:00am on the 21st June.

See further detailed overshadowing analysis and modelling in Section 15: Architectural Documentation, Analysis - Shadow Diagrams.



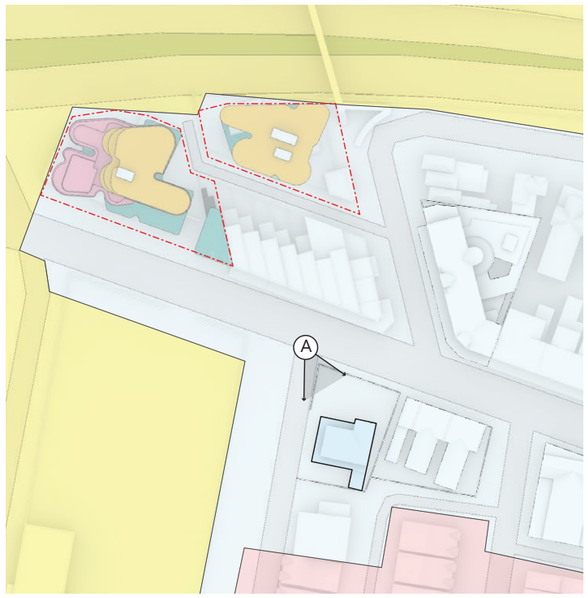
Mid-Winter Morning - 21st June 09:00

Overshadowing analysis - Block A

The following 3D views outlines the solar insolation analysis for the proposed massing, assessing the overshadowing impacts to the southern neighbourhoods on an hour by hour basis. This is to ensure the proposed addition to the buildings would not result in poor outcomes to the surrounding property's solar access.

The study is run comparatively across three different scenarios: existing, the approved DA and the proposed massing. This is to understand the extent of impacts under existing and approved conditions.

The proposal has minimised impacts to the neighbouring amenity. As shown, the neighbouring properties will receive sufficient solar access during the winter solstice between 9am and 3pm.

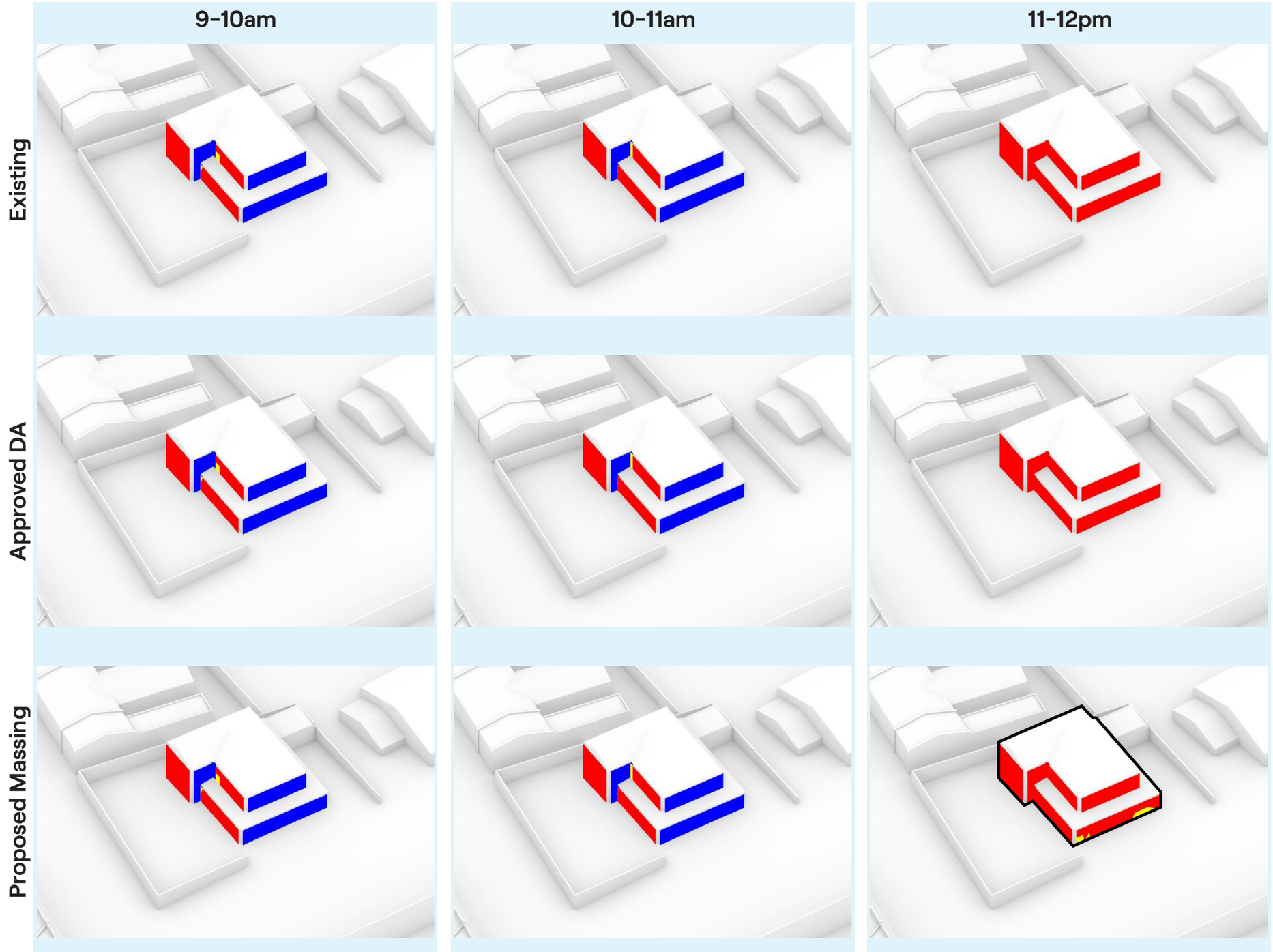


Key - Land zoning

- Site boundary
- Selected block
- MU1 - Mixed Use
- SP2 - Infrastructure
- R3 - Residential

Key - Overshadowing

- Less than 15 mins
- 15mins-45mins
- 1 hour

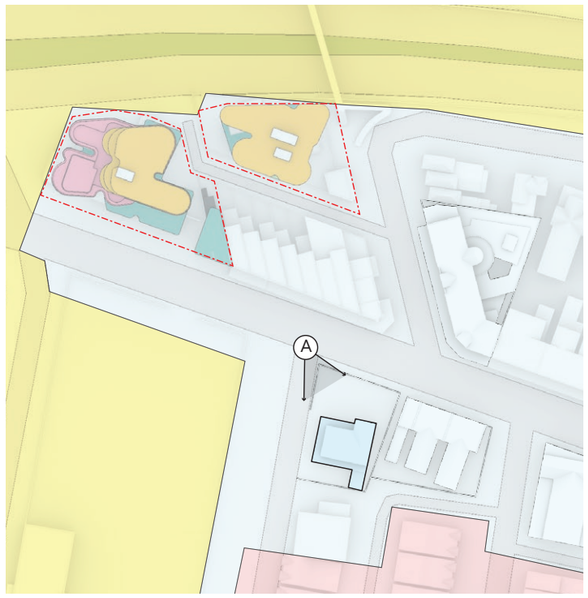


Overshadowing analysis - Block A

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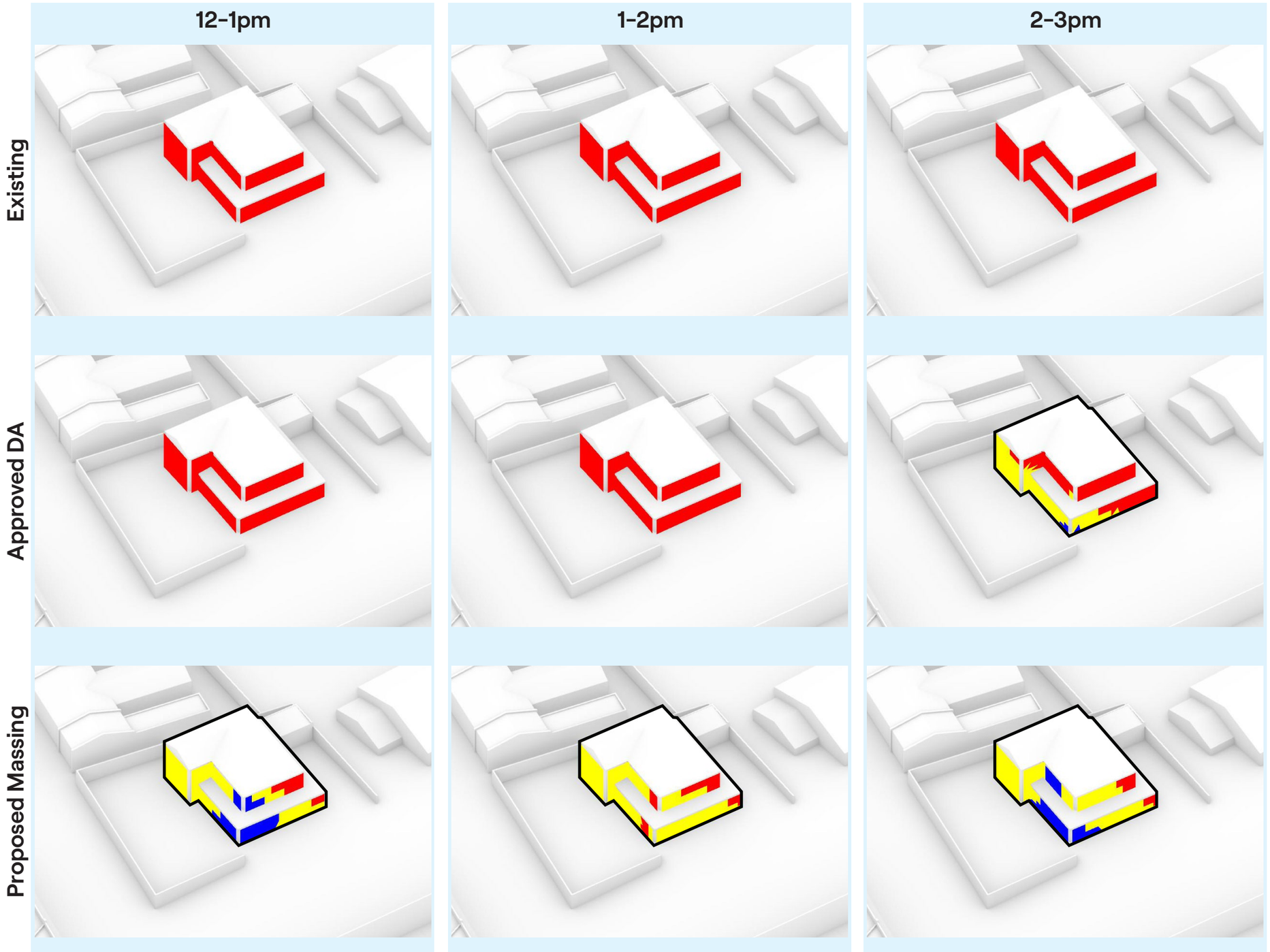


Key - Land zoning

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- SP2 - Infrastructure
- R3 - Residential

Key - Overshadowing

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- 1 hour

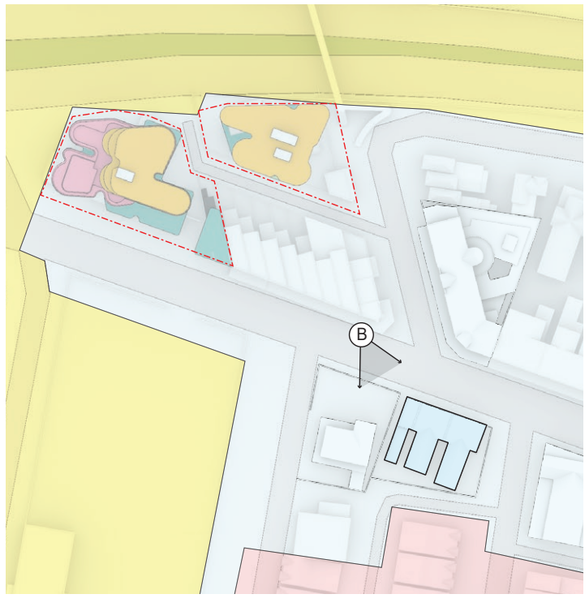


Overshadowing analysis - Block B

The following 3D views outlines the solar insolation analysis for the proposed massing, assessing the overshadowing impacts to the southern neighbourhoods on an hour by hour basis. This is to ensure the proposed addition to the buildings would not result in poor outcomes to the surrounding property's solar access.

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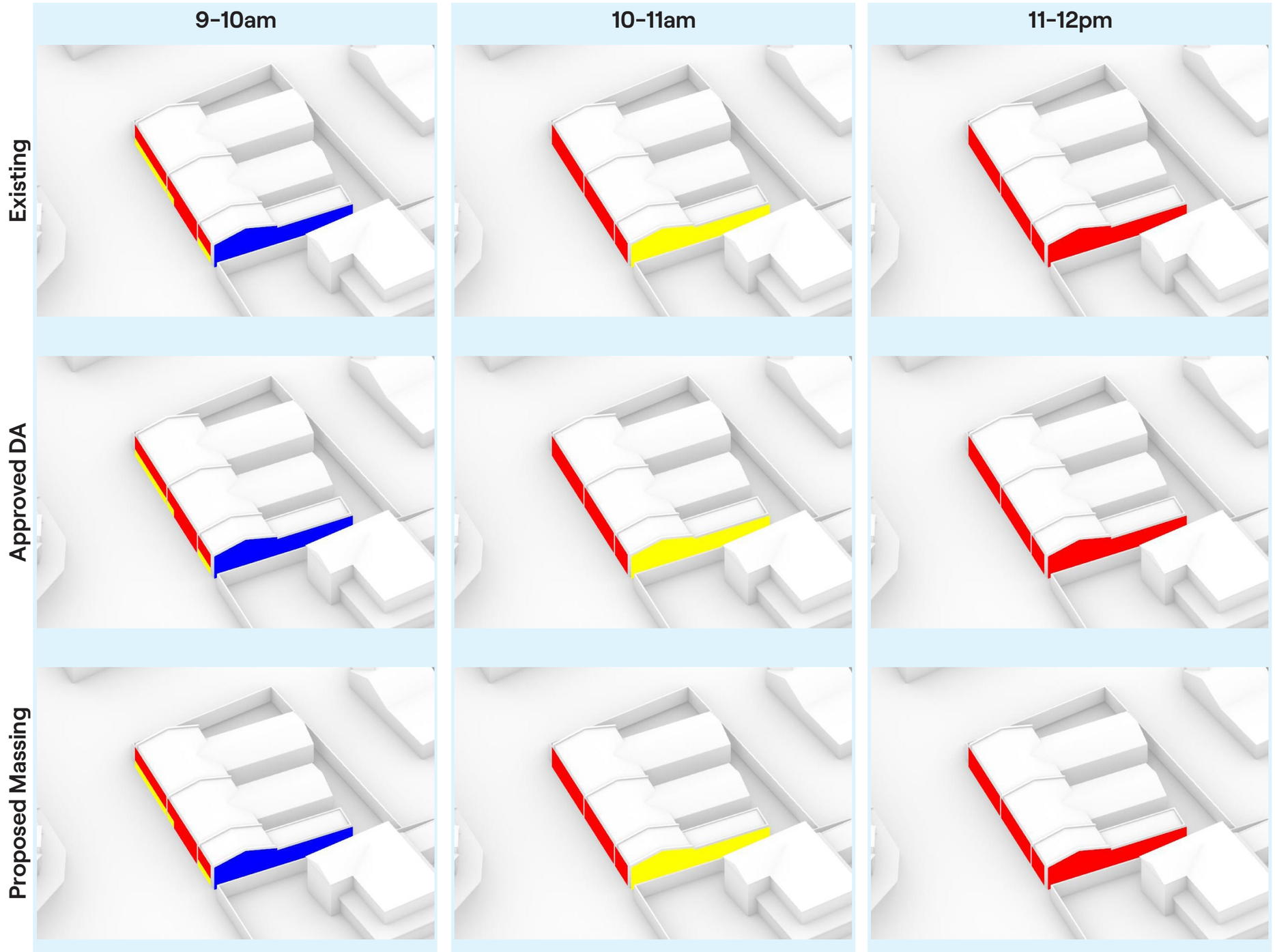


Key - Land zoning

- Site boundary
- Selected block
- MU1 - Mixed Use
- SP2 - Infrastructure
- R3 - Residential

Key - Overshadowing

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- 1 hour

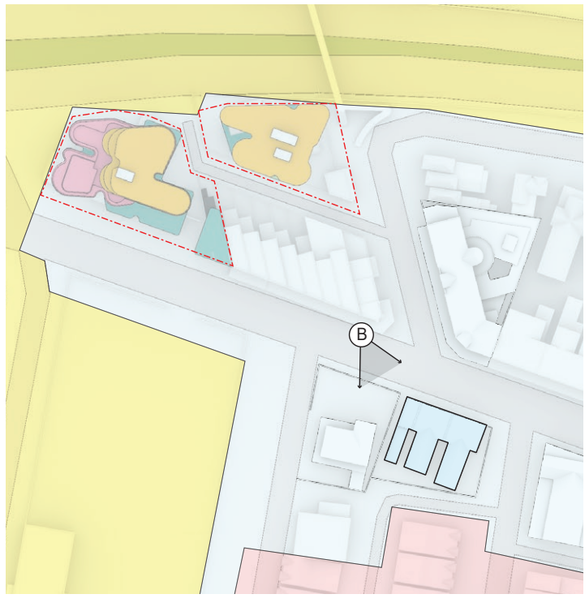


Overshadowing analysis - Block B

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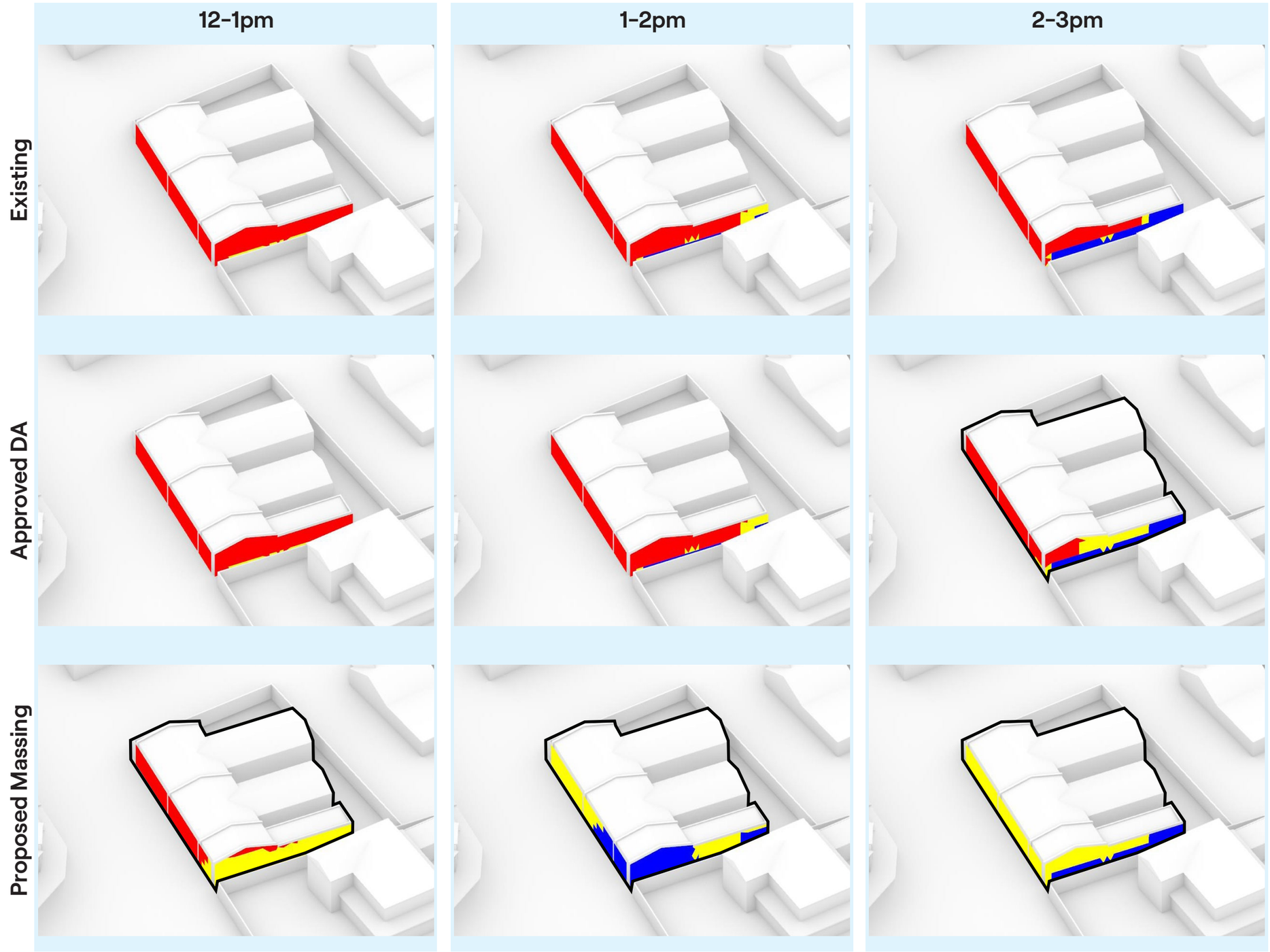


Key - Land zoning

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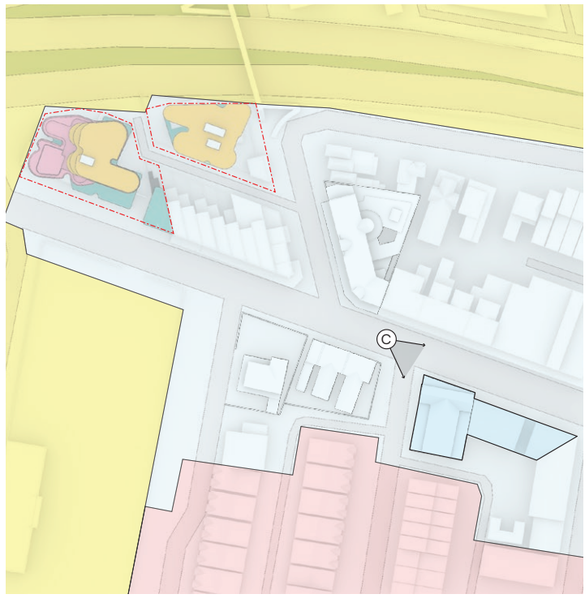


Overshadowing analysis - Block C

The following 3D views outlines the solar insolation analysis for the proposed massing, assessing the overshadowing impacts to the southern neighbourhoods on an hour by hour basis. This is to ensure the proposed addition to the buildings would not result in poor outcomes to the surrounding property's solar access.

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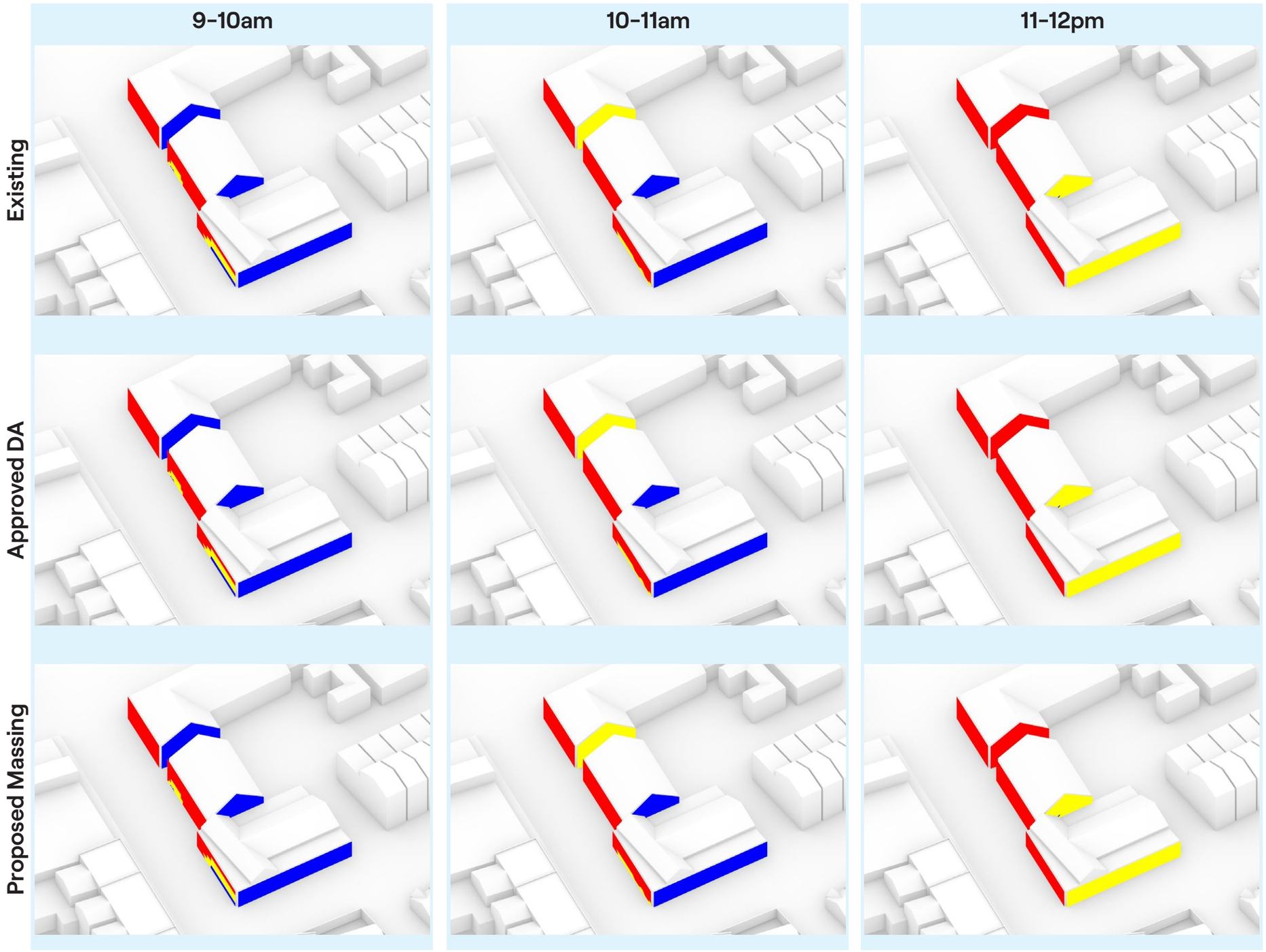


Key - Land zoning

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Key - Overshadowing

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- 15mins-45mins
- 1 hour

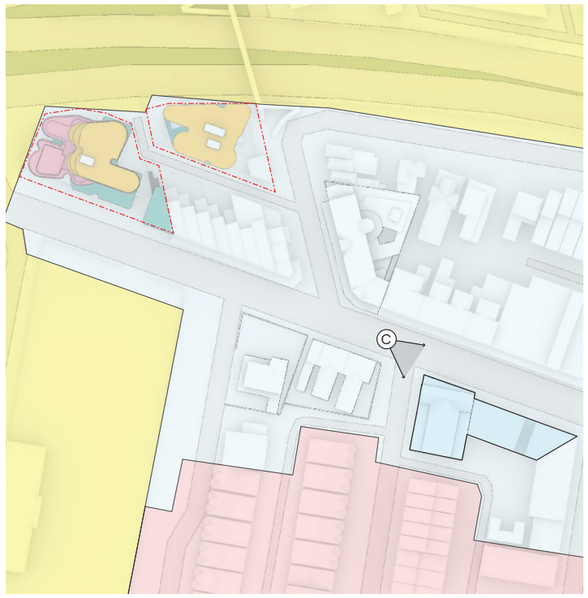


Overshadowing analysis - Block C

The following 3D views outlines the solar insolation analysis for the proposed massing, assessing the overshadowing impacts to the southern neighbourhoods on an hour by hour basis. This is to ensure the proposed addition to the buildings would not result in poor outcomes to the surrounding property's solar access.

The study is run comparatively across three different scenarios: existing, the approved DA and the proposed massing. This is to understand the extent of impacts under existing and approved conditions.

The proposal has minimised impacts to the neighbouring amenity. As shown, the neighbouring properties will receive sufficient solar access during the winter solstice between 9am and 3pm.

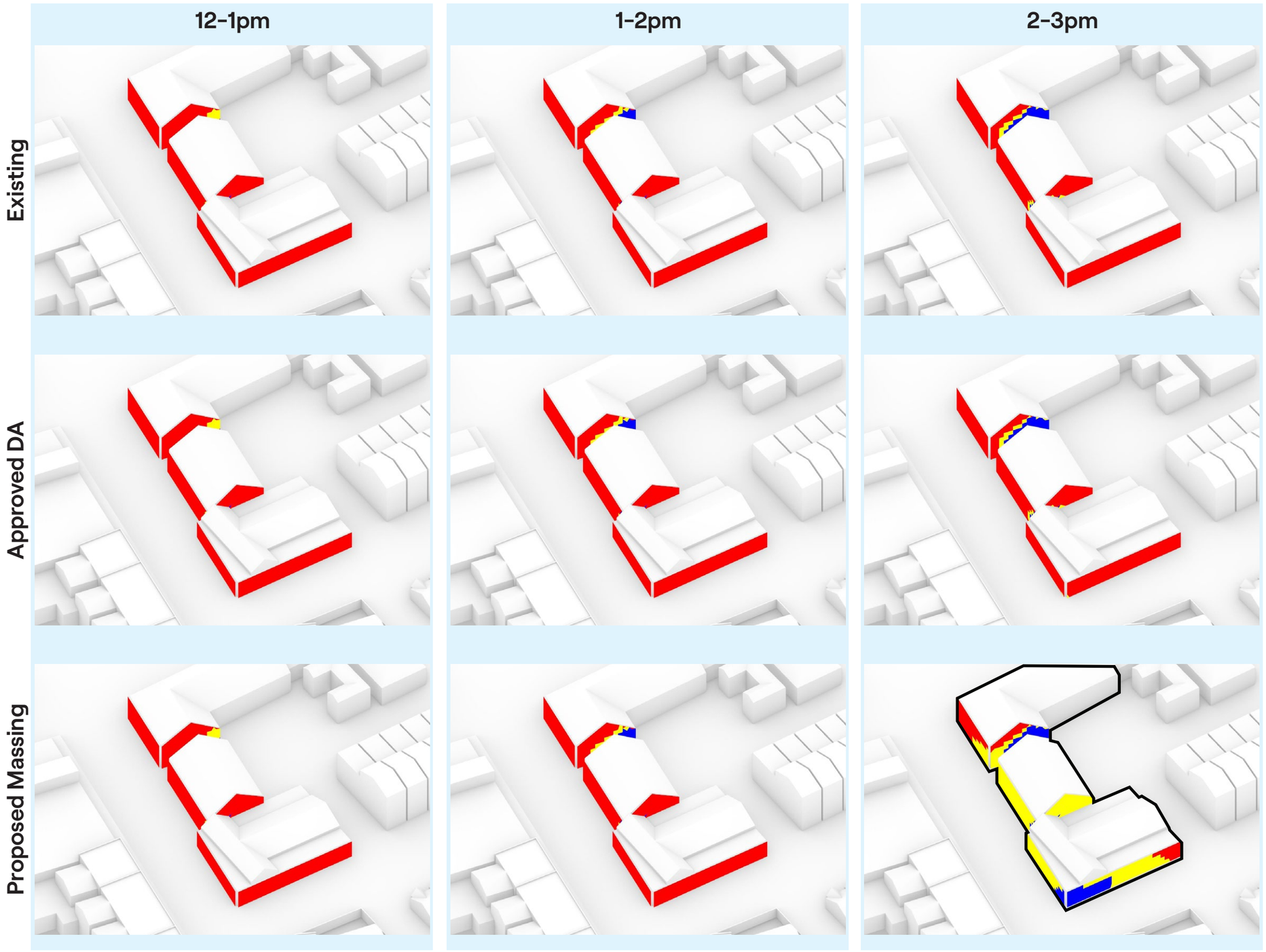


Key - Land zoning

- Site boundary
- Selected block
- MU1 - Mixed Use
- SP2 - Infrastructure
- R3 - Residential

Key - Overshadowing

- Less than 15 mins
- 15mins-45mins
- 1 hour



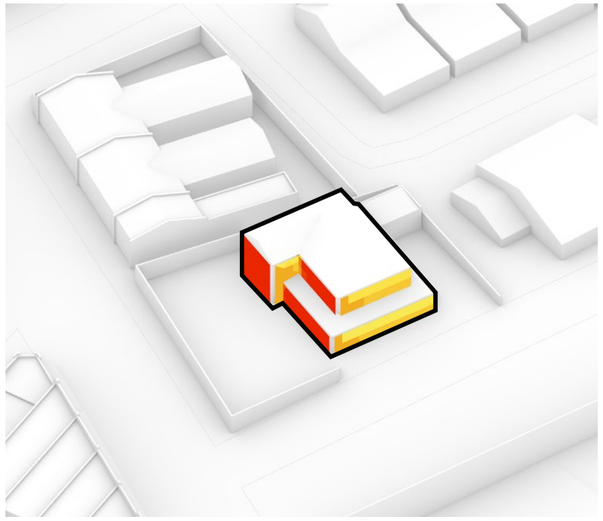
Overshadowing analysis summary - Block A

The following 3D views outlines the solar insolation testing for the proposed massing, assessing the overshadowing impacts to the southern neighbourhoods. This is to ensure the proposed addition to the buildings would not result in poor outcomes to the surrounding property's solar access.

The study is run comparatively across three different scenarios: existing, the approved DA and the proposed massing. This is to understand the extent of impacts under existing and approved conditions.

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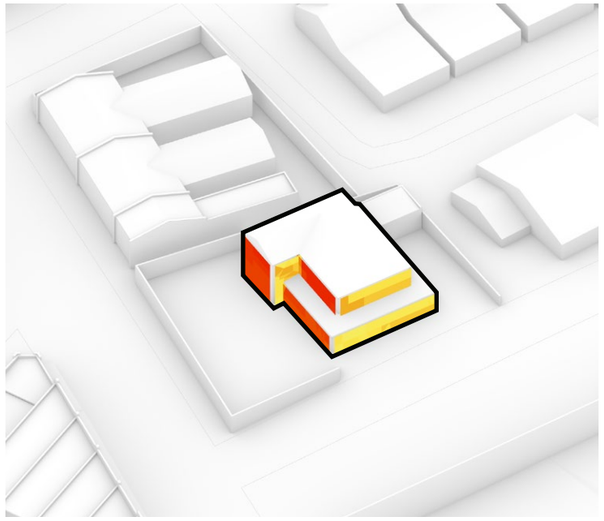
Solar Heatmap - Existing



21st June, 9am-3pm

AVRG HOURS OF SOLAR
4.84

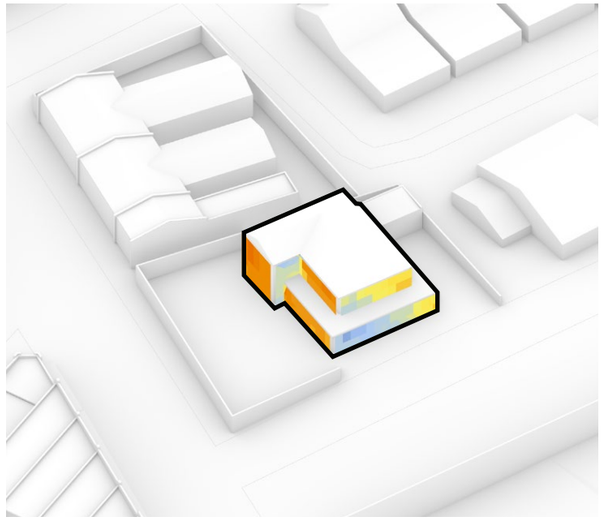
Solar Heatmap - Approved DA



21st June, 9am-3pm

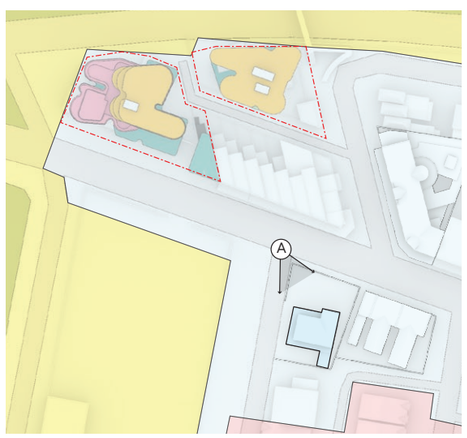
AVRG HOURS OF SOLAR
4.44

Solar Heatmap - Proposed massing



21st June, 9am-3pm

AVRG HOURS OF SOLAR
3.16



Key

- Site boundary
- Selected block
- MU1 - Mixed Use
- SP2 - Infrastructure
- R3 - Residential

Key

6.25
6
5.75
5.5
5.25
5
4.75
4.5
4.25
4
3.75
3.5
3
2.75
2.5
2.25
2
1.75
1.5
1.25
1
0.75
0.5
0.25
0

2hrs ADG requirement

Average hour of solar received between 9am and 3pm at mid winter - Summary

	Existing	Approved DA	Proposed massing
Block A	4.84	4.44	3.16
Block B	4.31	4.27	3.27
Block C	4.66	4.66	4.35

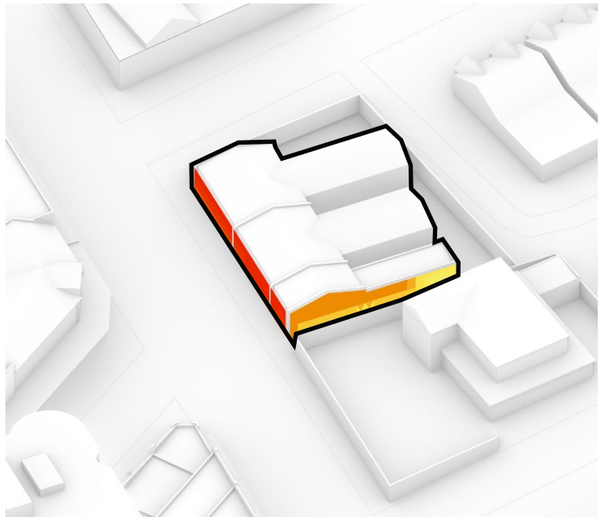
Overshadowing analysis summary - Block B

The following 3D views outlines the solar insolation testing for the proposed massing, assessing the overshadowing impacts to the southern neighbourhoods. This is to ensure the proposed addition to the buildings would not result in poor outcomes to the surrounding property's solar access.

The study is run comparatively across three different scenarios: existing, the approved DA and the proposed massing. This is to understand the extent of impacts under existing and approved conditions.

The proposal has minimised impacts to the neighbouring amenity. As shown, the neighbouring properties will receive sufficient solar access during the winter solstice between 9am and 3pm.

Solar Heatmap - Existing



21st June, 9am-3pm

AVRG HOURS OF SOLAR
4.31

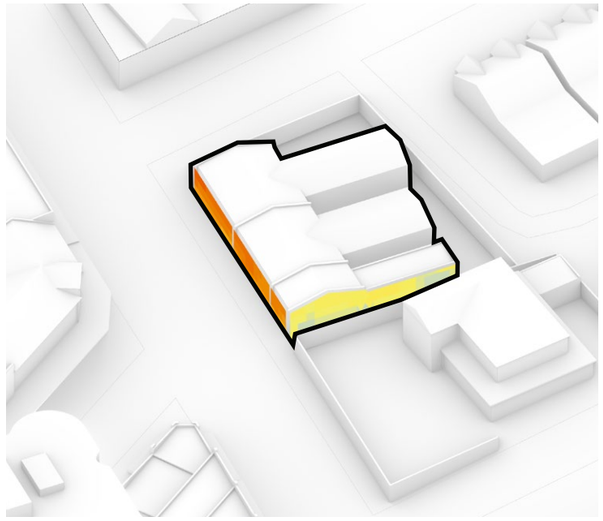
Solar Heatmap - Approved DA



21st June, 9am-3pm

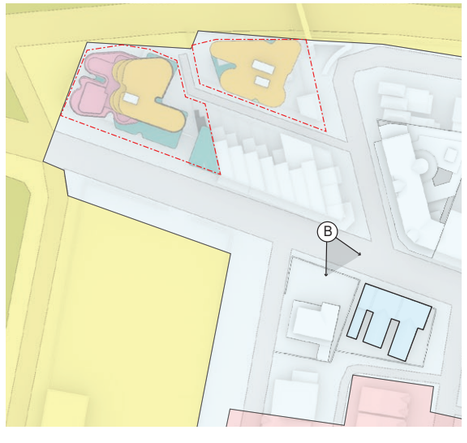
AVRG HOURS OF SOLAR
4.27

Solar Heatmap - Proposed massing



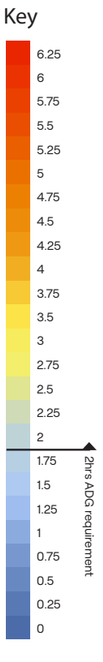
21st June, 9am-3pm

AVRG HOURS OF SOLAR
3.27



Key

- Site boundary
- Selected block
- MU1 - Mixed Use
- SP2 - Infrastructure
- R3 - Residential



Average hour of solar received between 9am and 3pm at mid winter - Summary

	Existing	Approved DA	Proposed massing
Block A	4.84	4.44	3.16
Block B	4.31	4.27	3.27
Block C	4.66	4.66	4.35

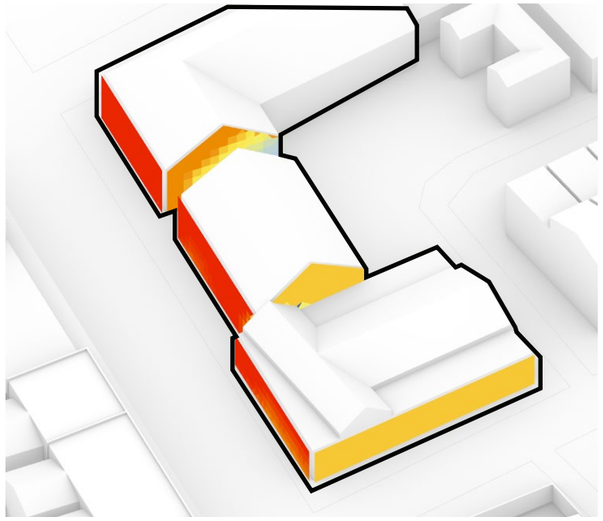
Overshadowing analysis summary - Block C

The following 3D views outlines the solar insolation testing for the proposed massing, assessing the overshadowing impacts to the southern neighbourhoods. This is to ensure the proposed addition to the buildings would not result in poor outcomes to the surrounding property's solar access.

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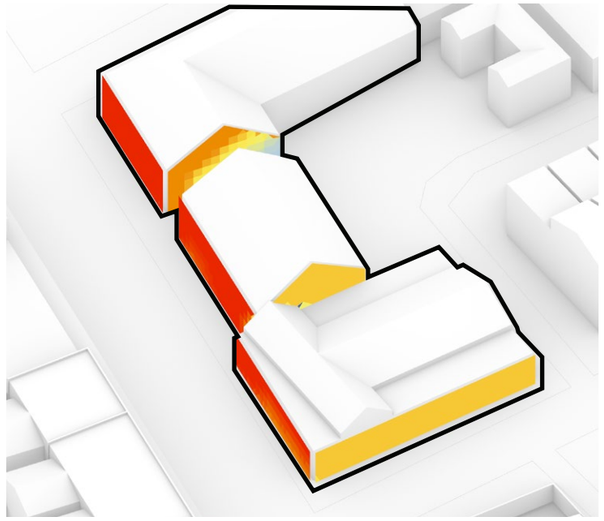
Solar Heatmap - Existing



21st June, 9am-3pm

AVRG HOURS OF SOLAR
4.66

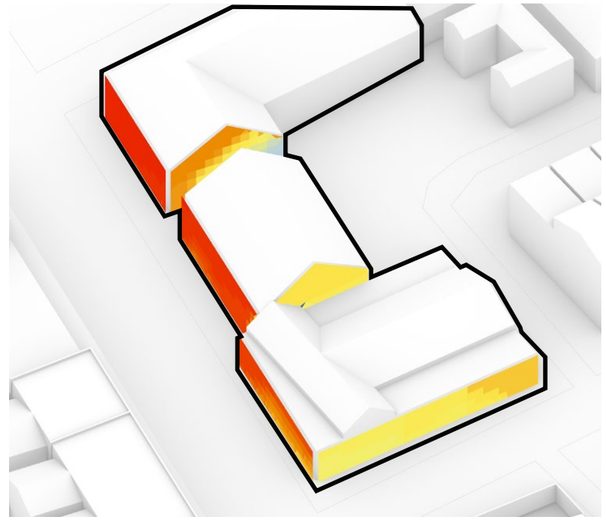
Solar Heatmap - Approved DA



21st June, 9am-3pm

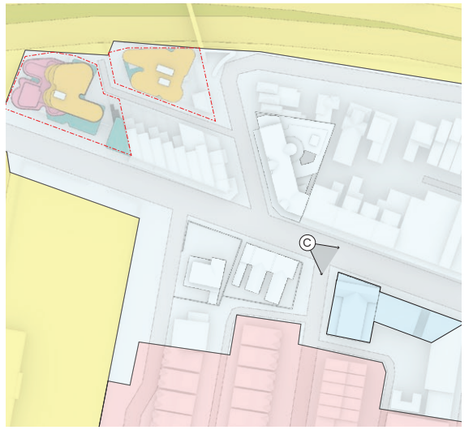
AVRG HOURS OF SOLAR
4.66

Solar Heatmap - Proposed massing



21st June, 9am-3pm

AVRG HOURS OF SOLAR
4.35



Key

- Site boundary
- Selected block
- MU1 - Mixed Use
- SP2 - Infrastructure
- R3 - Residential

Key

6.25
6
5.75
5.5
5.25
5
4.75
4.5
4.25
4
3.75
3.5
3
2.75
2.5
2.25
2
1.75
1.5
1.25
1
0.75
0.5
0.25
0

2hrs ADG requirement

Average hour of solar received between 9am and 3pm at mid winter - Summary

	Existing	Approved DA	Proposed massing
Block A	4.84	4.44	3.16
Block B	4.31	4.27	3.27
Block C	4.66	4.66	4.35

Jury Presentation

Jury Feedback

5.2 The proposal should clearly demonstrate that the affordable housing units will achieve an equitable outcome with regards to amenity (solar access/ cross ventilation etc) and have equitable access to all of the amenities of the development.

5. Affordable Housing Provision

Architects Response

The proposed design offer a mix of dwelling types for the affordable housing units; With 17 out of 85 proposed apartments being allocated to the affordable scheme. It offers equitable outcome with amenities. Including:

- Communal Open Space and Pool area on the level 11 of builing A

- Communal Pool on the level 1 of Building B.

- Carpark access

Affordable Apartment Mix:

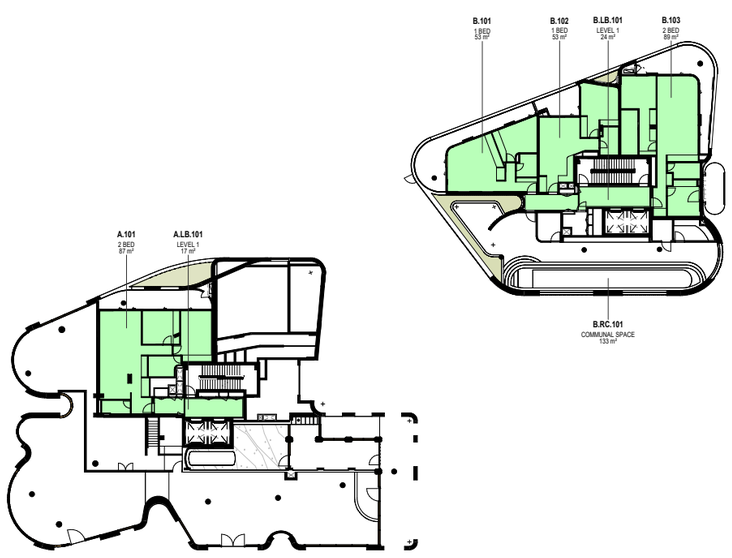
1 Bedroom Apartments	*(12%) 53m²*
2 Bedroom Apartments	*(59%) 83m² - 94m²*
3 Bedroom Apartments	*(29%) 110m² - 117m²*

Affordable aparments a solar access:

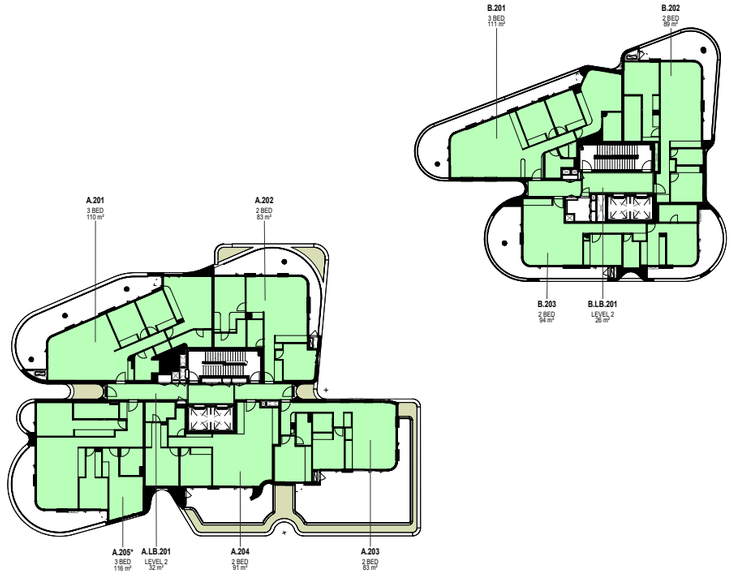
2HRS	*14 / 17 (82%)*
Less 2HRS	*2 / 17 (12%)*
NA	*1 / 17 (6%)*

Affordable aparments achieving cross ventilation:

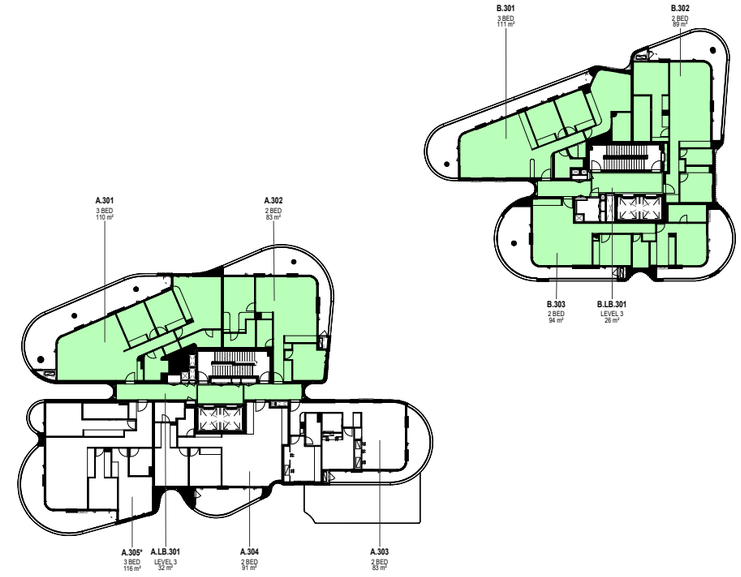
YES	*14 / 17 (82%)*
NO	*3 / 17 (18%)*



GFA - AFFORDABLE AREA LEVEL 01



GFA - AFFORDABLE AREA LEVEL 02



GFA - AFFORDABLE AREA LEVEL 03

Jury Presentation

Jury Feedback

8.1 The DIP encourages the proponent to explore potential design refinements to the podium elevation and plan layout to improve the visual continuation of the commercial shopfronts along Oxford Street, for example through continuation of the awning, key datums etc.

8.2 The DIP encourages the proposed design development to explore weather protection, such as awnings, across parts of the southern façade.

8. Commercial Podium Design

Architects Response

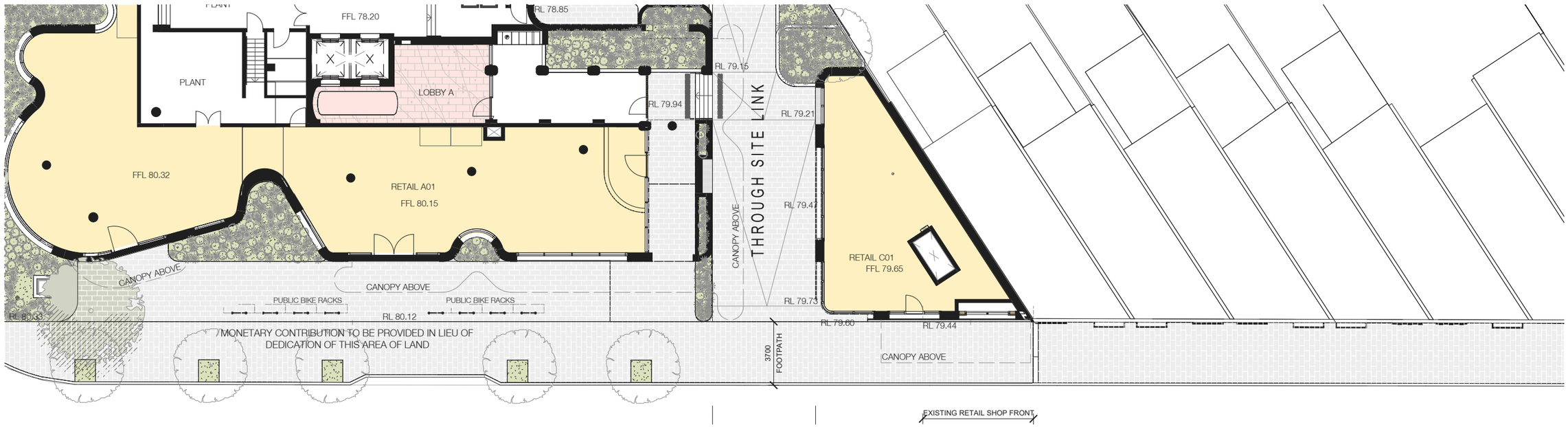
The key horizontal datums that have been captured in this proposal is the continuation of the awning and glazing of the Oxford Street shopfront.

The proposed continuation of the awning over the Building C entry and glazing have both been designed to replicate the curvelinear quality of the precinct.

In addition, additional awnings have been added along the southern side of Building A and over the shop entries to provide weather protection and continuity of the shopfront datum across Oxford Street.



Design Excellence Process



Extent of weather protection shown as canopy above



Horizontal datum expressed

Principle 1: Context and Neighbourhood Character

3

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.

Principle 1: Context and Neighbourhood Character

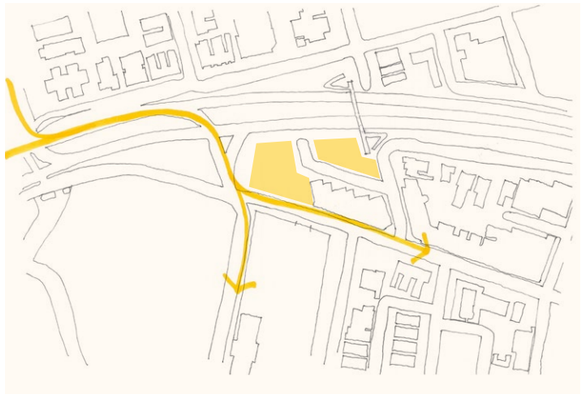
3.1 Site Context



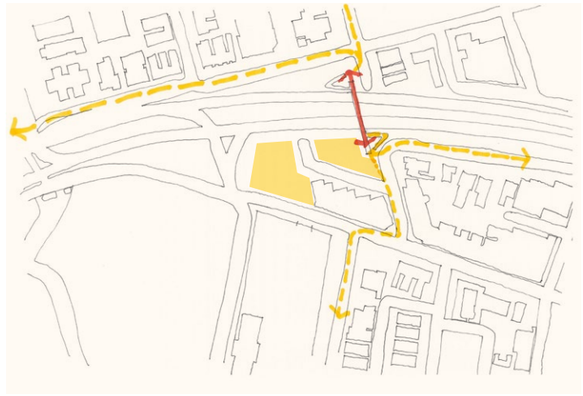
Vehicular movement



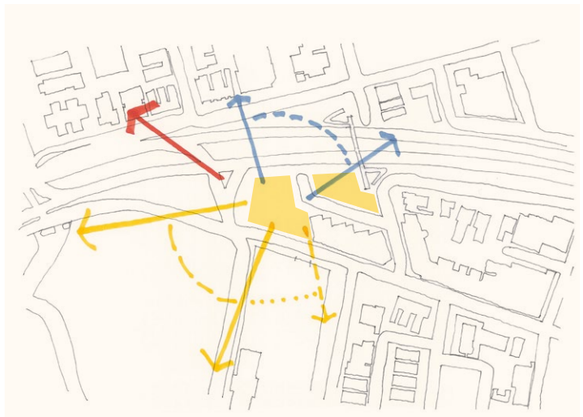
Vehicular movement



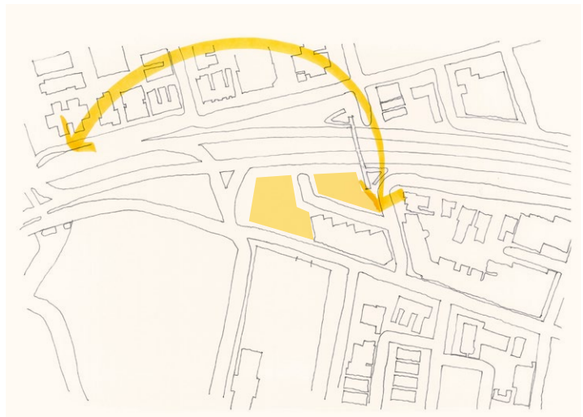
Vehicular movement



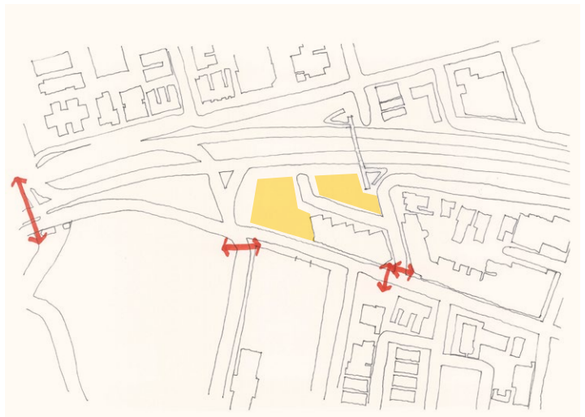
Pedestrian/bicycle network



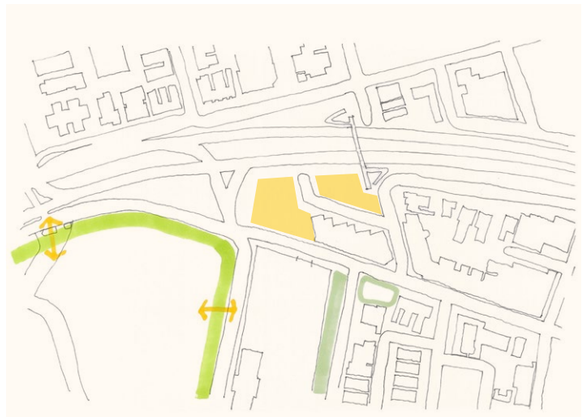
Views



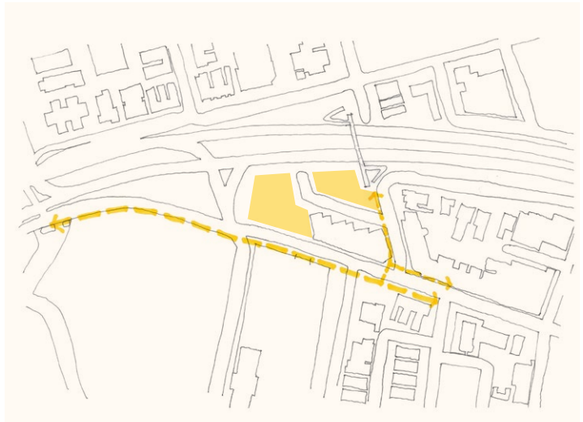
Northern aspect



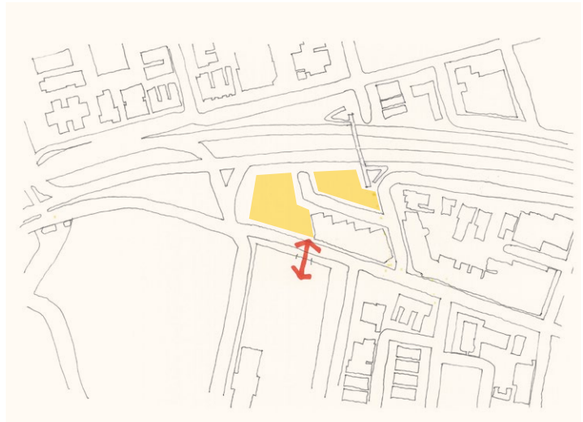
Existing pedestrain crossings



Green space



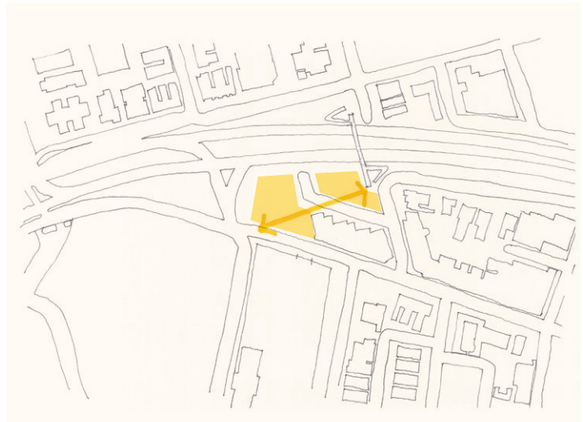
Existing pedestrain route



Existing bus crossover

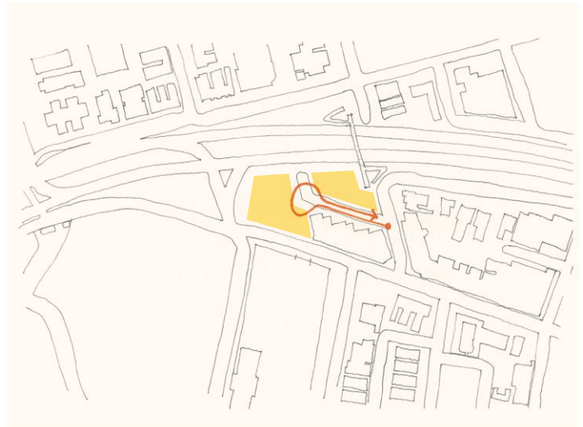


Bus/pedestrain conflict

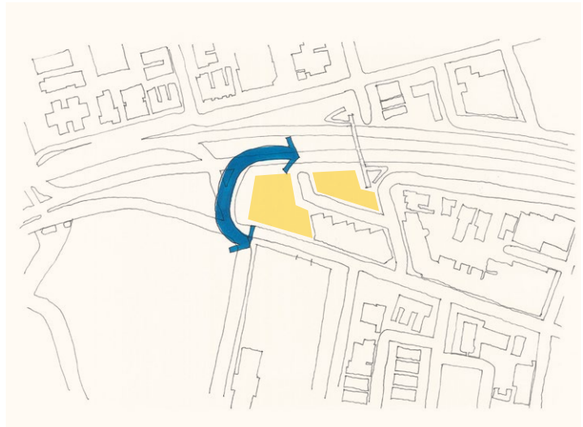


A new through-site link

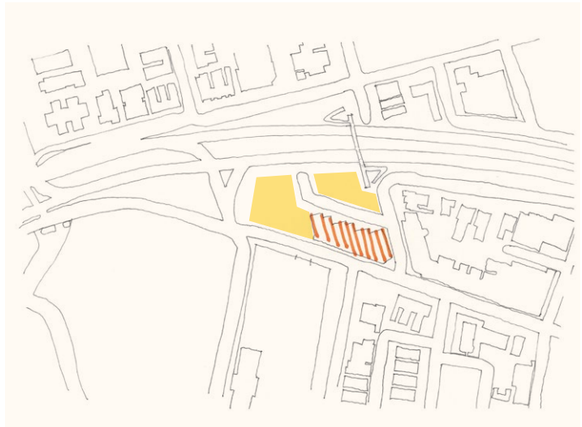
Principle 1: Context and Neighbourhood Character



The address



Showroom opportunity



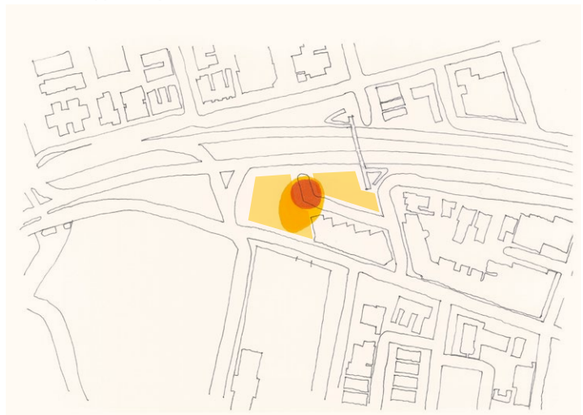
Existing street rhythm



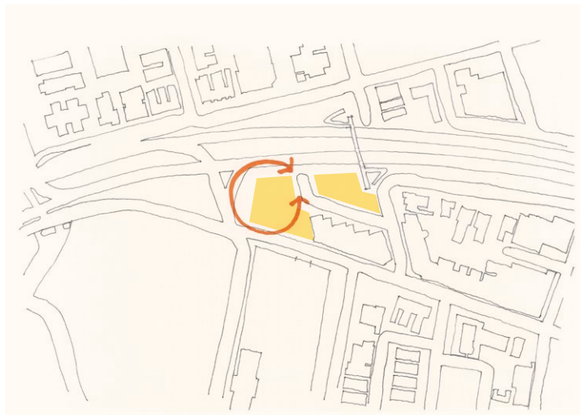
Existing street corner



Complete the block



New public space



A project in the round



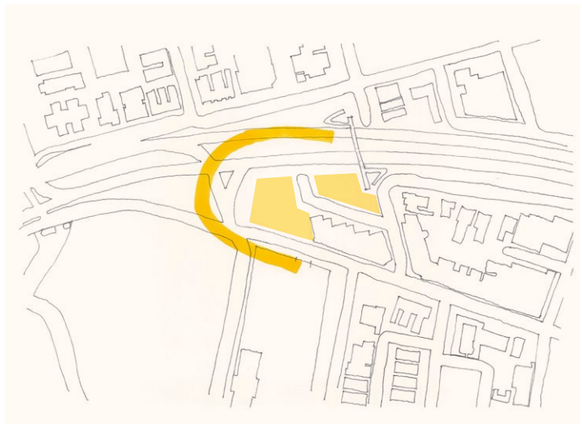
Establish the ‘High Street’ edge



Lower level views



Mid level views

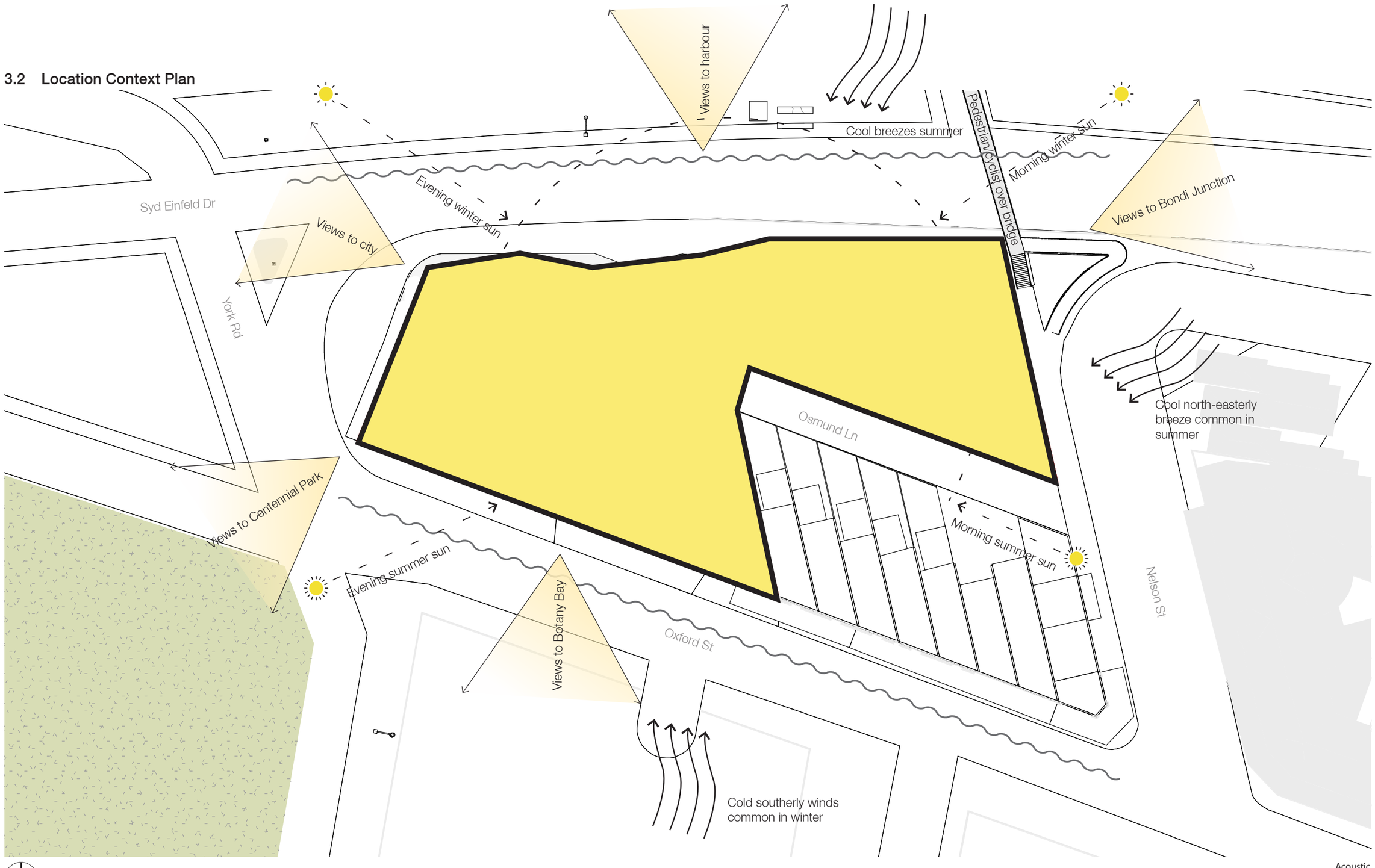


Upper level views



Prime views

3.2 Location Context Plan

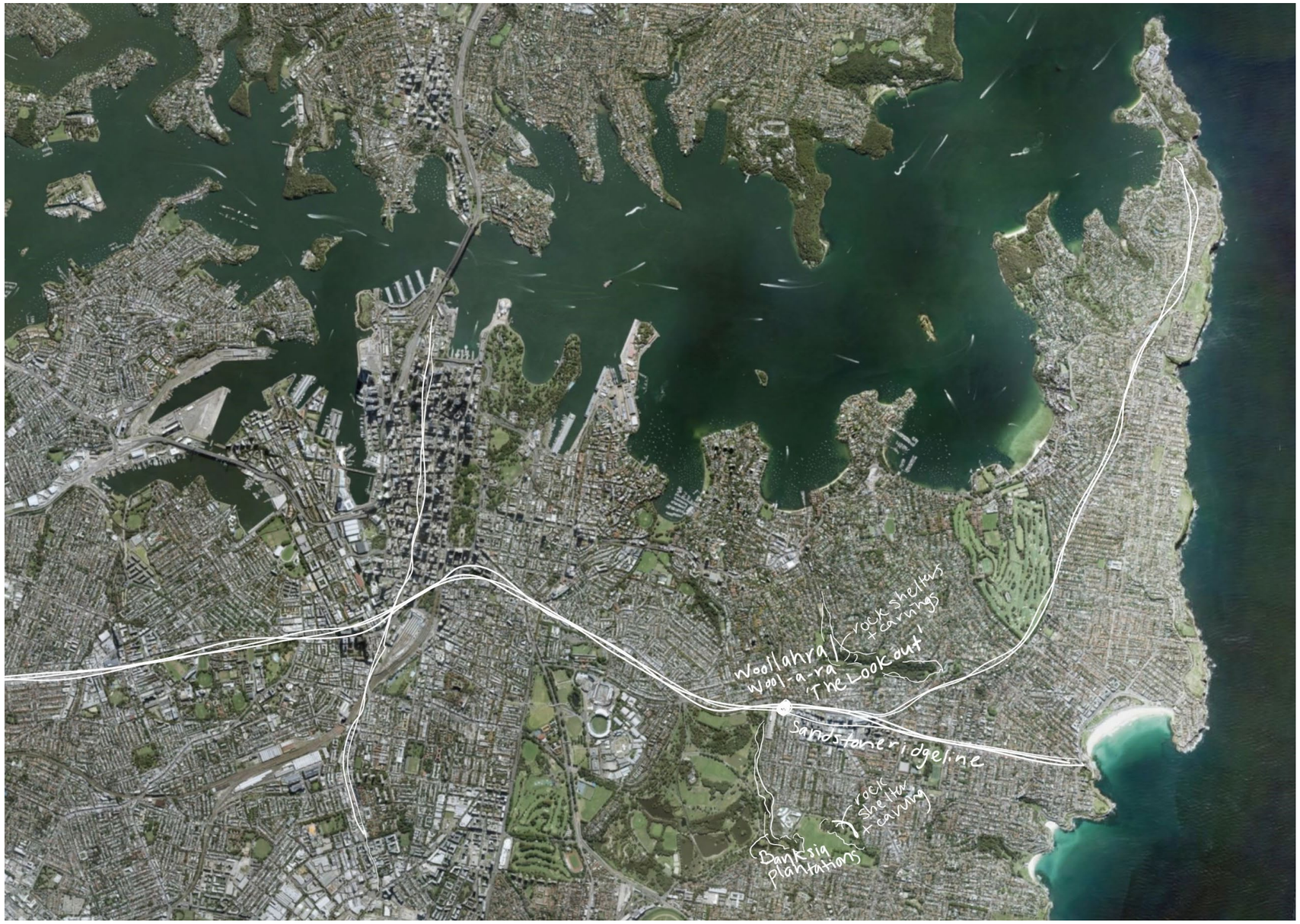


3.3 Cultural Context of Land

The design team took the time to examine the cultural context of the site and the surrounding landscape to understand what the natural landscape once was pre-settlement, and how best to celebrate this through architectural form.

This place would once have been important to the Cadigal people - with its elevated position it would of afforded an outlook from which to survey, and would most likely have sat on a walking route that connected ridge line to ridge line for Indigenous Australians.

The diverse topography of the land lends itself to signify various waypoints around the locale used by Indigenous Australians as a path from the coastline to the bushland and sloping planes beyond.



Memories of the natural landscape and movement patterns becons a significance of ‘place’ - An extension of the ridgeline, signifying the arrival of place at the coastline

3.4 Cultural Heritage

Waverley, land of the Cadigal, Bidiagal, and Birrabirragal people of the Eora Nation.

An area of rich history and land forms expressing a connection of people to the land. As mentioned throughout the report, the conversation with existing masonry structures that stand as landmarks to the intersection of Oxford and Ocean St surrounds the idea of connecting the landscape to the architectural response - both through the rich colouration of the sandstone and deep reds of the rock formations found along the coastline, whilst also respecting the organic form of the Boondi coastline and its significance as a ‘place’.



“The Lookout” as a significant marker seeks connection with its neighbouring land-scape of Boondi coastline and the rich natural rock formations that frame the land.

The development of the architectural response has sought out multiple themese from the landscape and sense of place, one of which recognises the diversity of the landscape and seeks to create a visual marker in the urban landscape to locate and orientate the users and passers-by considering the buildings potential as a gateway to Bondi Junction.

By referencing the heritage of the landscape and flora (namely the banksia community of the eastern ecological scrub), the movement pattern of the Indigenous along the ridgelines, and the formations of the contours and coastline, the architectural response seeks out respect of the past and celebration of what the land still is in its natural form away from the urban installation of buildings.











3.5 Neighbourhood Character

Located on a prominent intersection at the southern edge of Bondi Junction, the site's edges are defined by several distinct conditions. At the lower levels our proposal needs to respond to the bustling traffic along Syd Enfield Drive, optimise desire lines to Centennial Parklands and activate connections to the high streets of Bondi Junction to the east.

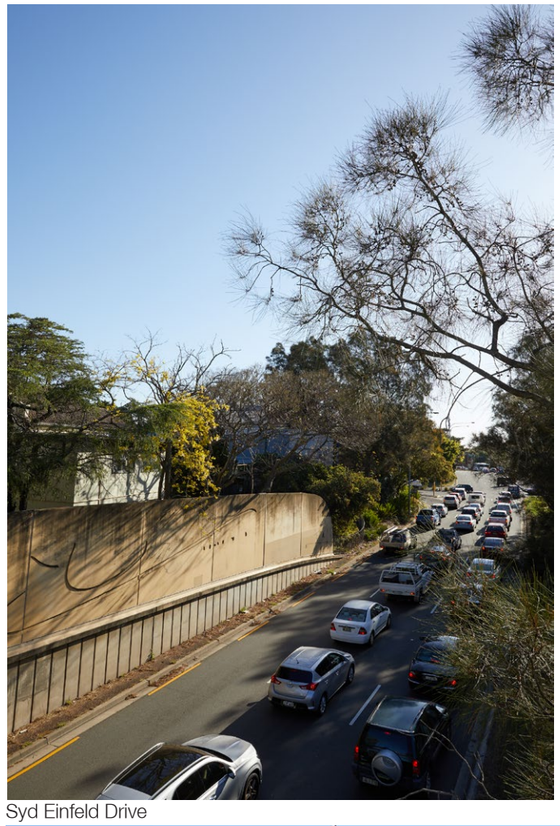
The site's location on a natural ridgeline means that the land slopes away towards the north, ensuring uninterrupted views across the low-scale residential suburbs of Woollahra and Edgecliff with excellent exposure to northern sunlight.

With Bondi Junction being topographically a high point in Sydney, most levels of the buildings will be afforded exceptional views towards the north, west and south ranging from harbour, city, mountain, and parkland vistas.

Historic buildings that sit within close proximity to the site include art deco apartment buildings and Victorian terrace houses, predominantly masonry and highly detailed in character. We see an opportunity to reinforce this character and richness of materiality at a key corner site that has an important role in setting the scene for the eastern suburbs beyond, and introducing a new vibrant destination.



The Nelson Hotel


Syd Einfeld Drive


Centennial Park Federation Dome + parklands



Street wall to east of site - looking east down Oxford


Centennial Park Gates at Woollahra Entrance


Oxford St street wall / shopfronts



Syd Einfeld and Oxford St Junction

3.6 History of Development

The nearby heritage components are integral to the success of this new destination, at a key node of Bondi Junction; its authenticity relies on a respectful approach to its historic context.

The Oxford Street terraces adjacent to the site should be given space to be understood, not engulfed by building mass. The vertical articulation of our built form ensures a rhythm and scale appropriate to the terraces and seeks to create a quiet backdrop for them to sit within. Their role in activating Oxford Street and linking our site to the activity of Bondi Junction's east is paramount.

Whilst not of heritage status, the terrace facade located within the site has been retained to maximise the authentic fabric on the site. A new sculptural termination is introduced to the terrace row that seeks to mirror the Oxford and Nelson Street corner in a contemporary manner. Such an intervention has a positive impact to heritage understanding as it invites public awareness of the prevailing heritage datums along Oxford street. In this way, it continues the aesthetic tradition of the street's built edge and creates a complementary endpoint to the block without imitating historic style.

The Norfolk Pine located on the eastern edge of the site is also given space to be celebrated and to ensure its unique and highly established character has a strong presence in the experience of the north-eastern portion of the site. A public space is created around the large tree, linking the shared lane with the pedestrian footbridge beyond and providing an active forecourt for the site.



Oxford St, Bondi Junction, c1890s



Oxford St, Bondi Junction, c1905



Oxford St, Aerial c1951 - Character of the street wall to terraces + shopfronts - translated by the vertical rhythm along the shopping precinct

Principle 2: Built Form and Scale

4

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.

Principle 2: Built Form and Scale

4.1 Built Form & Urban Response

Connections and articulation

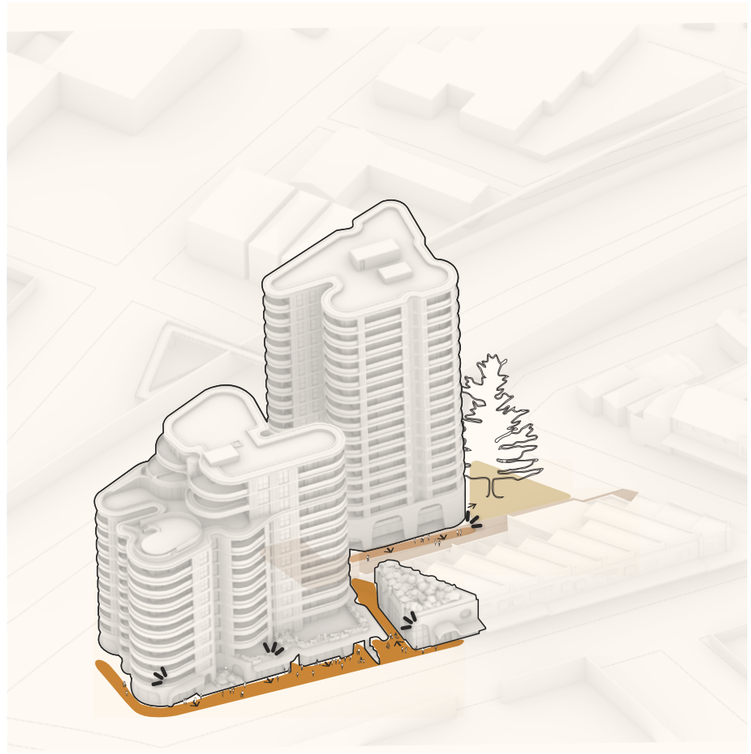
The DCP envelope intended for the terrace house that sits within the site to be demolished to make way for a narrow through-site link directed towards Syd Enfield Drive. Our approach has been to create a generous, contiguous public domain, optimising desire lines through the site whilst maintaining the terrace facade as part of a new anchor retail tenancy. A new addition terminates the terrace row, framing the through site link with a contemporary form.

The vertical articulation of the proposed built form establishes a fine-grained rhythm and breaks-down the overall mass in response to the historic lot patterns of Oxford Street's historic street wall.

Public spaces

A series of new public spaces stitch the site into the surrounding streets and facilitate key pedestrian and vehicular movements through, ensuring a highly activated destination. Each zone of the ground optimises the amenity for their intended uses whether it be for outdoor dining, a residential arrival experience, a protected public colonnade, or an organised event. Each zone invites you to experience the next by locating a series of active nodes at key corners. By ensuring views between the spaces, it is understood that there is something beyond to be explored, with the key public zones benefitting from the character of the low-scaled, highly articulated terrace forms.





Principle 2: Built Form and Scale

Materiality

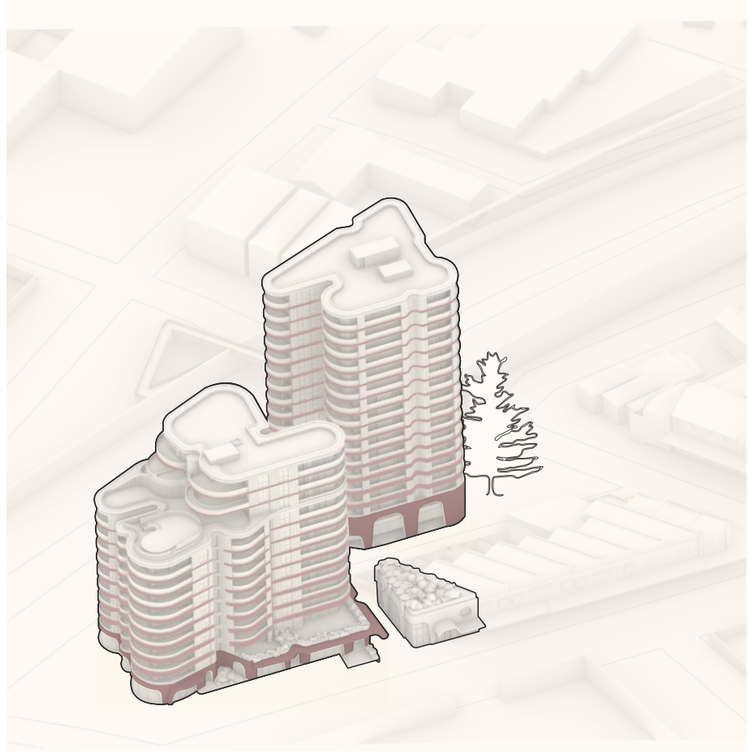
The site's public spaces are defined through the use of a rich masonry ground plane which also extends to the building facades to ensure that the buildings are grounded in their place and present a sense of publicness at the lowest levels, activated by residential lobbies and key retail spaces. A series of destinations is created throughout the site, defined by the sculptural arched openings. The stone facade colouring is of deep warm tones at the base, creating a clear sense of public presence to the height of the adjacent terraces. The upper levels transition to a detailed masonry band referencing the lighter stone colours in an eroded landscape opening up to the surrounding context giving sense of openness at the skyline.

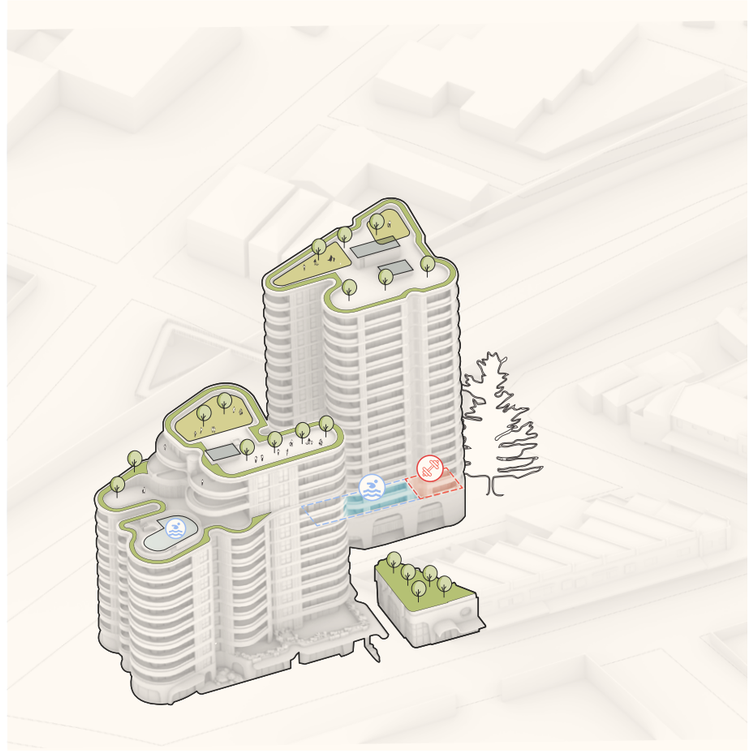
Communal spaces and roof gardens

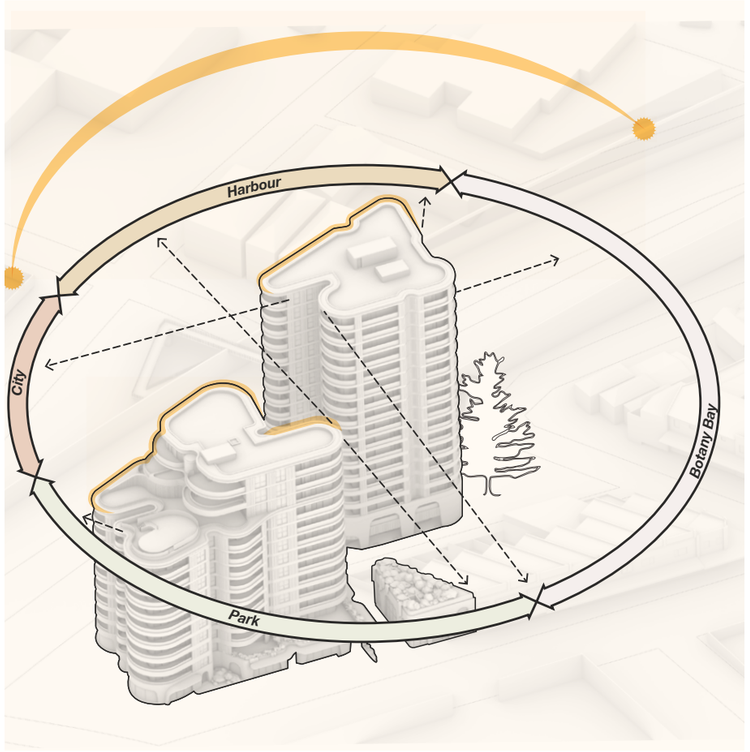
A series of communal spaces are located at varying levels of the site. In addition to the new public spaces at the ground plane, a series of roof spaces are greened for the use of the residents as well as for viewing from above. A shared residents' pool and gym is located within the lower levels of the building to further activate adjacent public spaces.

Solar and views

The site is afforded expansive views to the north, west and south and the site's longest edge also benefits from good access to northern sunlight. The building design optimises view opportunities to the majority of apartments as well as ensuring solar compliance is achieved. Whilst solar capture is important, solar protection is also important and has been considered in our approach to the passive design.







4.2 Architectural Themes

Gateway site

As an important gateway site, the architectural response must seek out the significance of contact, place-making, and respect the heritage of the site.

Our proposed buildings have a role to play in holding and defining the site's edges whilst inviting passers-by to engage with the spaces within. At a large scale the proposal should celebrate its Oxford Street edge and become a fine 'post' to the Bondi Junction gateway; a memorable marker for visitors to this suburb and one for the local community to be proud of.

Organic Form of Landscape

The form recognises the land on which it stands and respects the organic nature of the contours, the coastline, and the views out from its lookout point.

The proposed buildings form inviting thresholds peeling back and stretching towards the site's edges; anchored by key retail tenancies and main building entrances. The lane will be articulated as a shared-way to become a desirable address and vehicular access point for the residences within the site. This will be a space with a high-level of amenity with flexibility at the core of its design and optimising the potential for a variety of passive and active uses throughout various times of the day and evening; a destination in its own right.

Rhythm & Layered History

Much like that of the layered rock that has been eroded away along the coastline and thus proudly displays its many textures and rich colours over time, the architectural response looks to reflect this through the horizontal banding of the organic form. A horizontal layered approach of rich colour and texture thinning out towards the top of the tower reflecting the very nature of the stone erosion and its tiered / layered form and definition.

The podium expresses the deepest high-quality stone to perform to its immediate context as a civic base, but also to reflect the deep colouration and texture of site to be recognised as a high-quality amenity to the precinct.

'The Lookout' / An Open View

In addition to the deep masonry facades, the apartments are protected by beautiful verandas that wrap the interiors and provide generous, outdoor living spaces whilst providing a buffer to the internal spaces. Like houses in the sky, the amenity of each apartment is at the heart of the design; their connection to Sydney's natural landscape celebrated whilst ensuring high-quality, private oases are created.

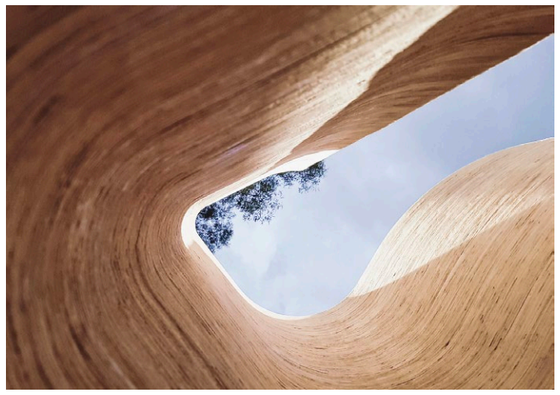
This design strategy helps to provide a high quality amenity of views out from the apartments, but also signifies the importance of connection to the surrounding landscape and views beyond of Cadigal Land.

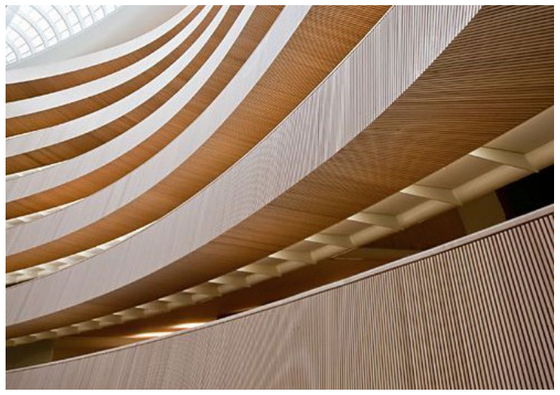












4.3 View Impact Assessment & Massing Study

View Impact Analysis

① ② **Centennial Park**

From the heritage listed Centennial Parklands, the visual impact is perceivably minimal. With the building form curved to its north-western aspect, it softens the perceived visual mass of the building along with its stepped form to reduce shadowing impacts on the north-east corner of the reservoir site to the park.

③ **Ocean Street / Syd Einfeld Drive Arrival**

The offset volumes of the tower with their curved expression to the western facade reduces the impact of shadows to the south and softens the visual connection from the street level on arrival.

③ ④ **Shopping Precinct / Eastern Approach**

With respect to the DCP envelope, the summation of the podium volume collectively enables high quality retail frontage at a human scale, aligned with the existing street wall and urban fabric. The orientation and setback of the towers both celebrate the podium expression before the tower bookmarks the end of Oxford street retail whilst the building retains its significance as a gateway building.

⑤ **Nelson Street / Osmund Lane**

The towers' stepped form towards the northern envelope of both sections of the site aid in reducing the impact of shadows to the reservoir and neighbouring residential sites. The setback to Osmund Lane of the building form aids in the delineation of an activated through-site link, marked by retaining the heritage tree and green plaza, both with increased hours of sunlight by the setback.

⑤ ⑥ **Oxford Street Frontage**

The stepped form of the tower and reduction in volume towards the north helps to signify the corner tower as a gateway to the Oxford Street precinct of Bondi Junction.

Supported by the podium expression on the ground, the building volume grounds itself at a human-scale whilst supported by the fine-grain materiality and civic presence.



Principle 2: Built Form and Scale

1 Federation dome looking north east to site



Photo : Federation dome looking north east to site

Approved DA: Federation dome looking north east to site



Proposed SSDA: Federation dome looking north east to site

2 Top centre of Moonlight Cinema looking north east to site



Photo : Top centre of Moonlight Cinema looking north east to site

Approved DA: Top centre of Moonlight Cinema looking north east to site



Proposed SSDA: Top centre of Moonlight Cinema looking north east to site

3 Corner of Ocean and Oxford Street

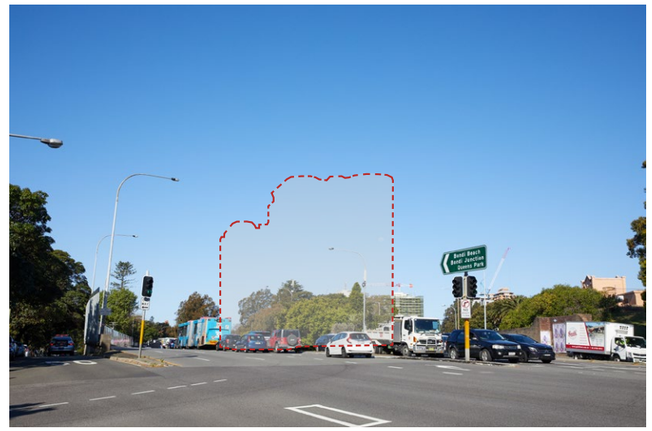


Photo : Corner of Ocean and Oxford Street

Approved DA: Corner of Ocean and Oxford Street



Proposed SSDA: Corner of Ocean and Oxford Street

Principle 2: Built Form and Scale

④ York Rd intersection looking north east towards site

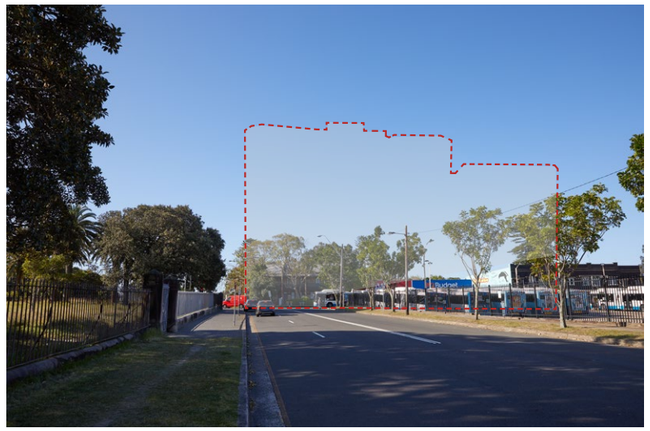


Photo : York Rd intersection looking north east toward site



Approved DA : York Rd intersection looking north east toward site



Proposed SSDA : York Rd intersection looking north east toward site

⑤ Corner of Ruvthen and Oxford facing west north west to site

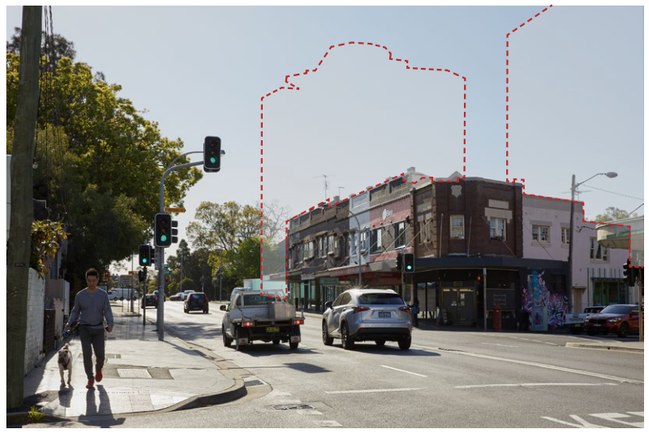


Photo : Corner of Ruthven and Oxford facing west north-west to site



Approved DA : Corner of Ruthven and Oxford facing west north-west to site

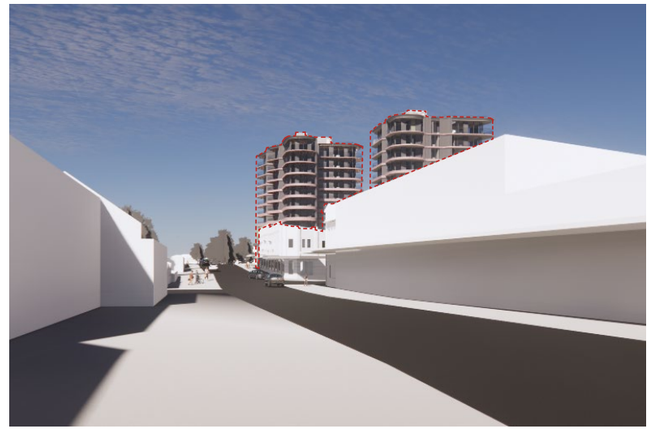


Proposed SSDA : Corner of Ruthven and Oxford facing west north-west to site

⑥ Corner of Mill Hill and Oxford Street west north west facing to the site



Photo : Corner of Mill Hill and Oxford street west facing site



Approved DA : Corner of Mill Hill and Oxford street west facing site



Proposed SSDA : Corner of Mill Hill and Oxford street west facing site

Principle 2: Built Form and Scale

4.4 Superimposed CGI - Immediate Context + Surrounds

From the superimposed images in this analysis, SJB are illustrating the investigation taken place to establish that in this first image the retail street wall to Oxford St is maintained from a heritage standpoint, and that the building has no major visual impact from most residential dwellings with the surrounding density of the tree lined streets.



Photo : Position from St James Road to wards Oxford Street (DA Approved)



Photo : Position from St James Road to wards Oxford Street (Proposed SSDA)

SJB also sought to recognise that the overall height of the building is suitable in its context and does not significantly reduce any impact from surrounding views due to its alignment with the height datum as evidenced by tall buildings along the Oxford St commercial and mixed-use street wall.



Photo : Oxford Street East, looking West towards site (DA Approved)



Photo : Oxford Street East, looking West towards site (Proposed SSDA)



Photo : Position from Syd Einfeld Dr towards York Rd (Approved DA)



Photo : Position from Syd Einfeld Dr towards York Rd (Proposed SSDA)

Principle 3: Density

5

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.

Principle 3: Density

5.1 FSR Analysis and GFA Plans

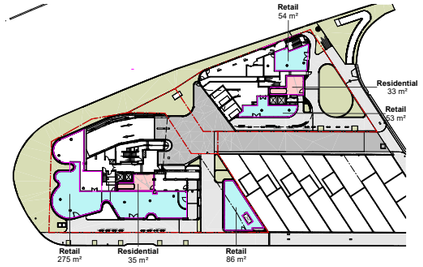
The propoverall development proposes a floor space ratio of 4.55:1, responsive to the State Environmental Planning Policy (Housing) 2021 and incorporating a 30% increase in Gross Floor Area.
All apartments experience a high level of amenity, with both views and generous communal open space.
The wrap-around balconies (private open space) are significant to the design as it helps with overall apartment amenity, privacy, acoustics, energy efficiencies, and wind protection.

The proposal is exceptionally well served by public transport, with Oxford Street a primary connection between the Eastern suburbs and the CBD with a number of frequent bus services.

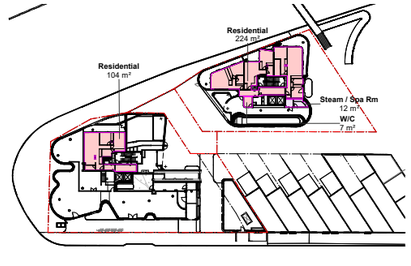
The proposal is also within walking distance of Bondi Junction Shopping Precinct, with the addition of cycle ways and bus services in both directions.
The majority of apartments are provided with a carspace.

Apartment mix:
- 1 Bedroom Apartments 2% 55sqm
- 2 Bedroom Apartments 41% 80sqm
- 3 Bedroom Apartments 56% 110sqm

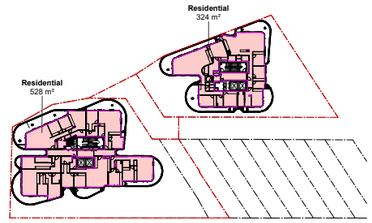
Gross Floor Area Plans



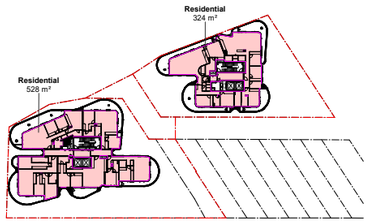
GFA AREA GROUND FLOOR



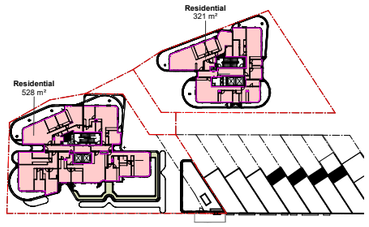
GFA AREA LEVEL 01



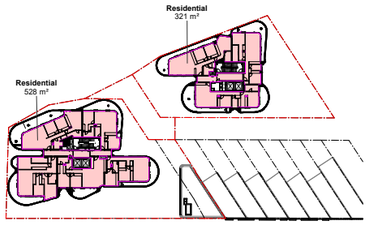
GFA AREA LEVEL 08



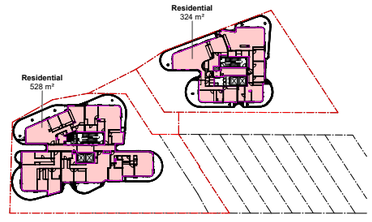
GFA AREA LEVEL 09



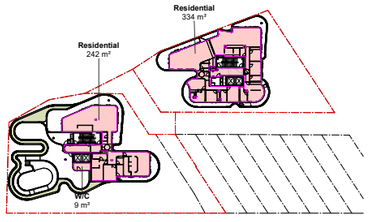
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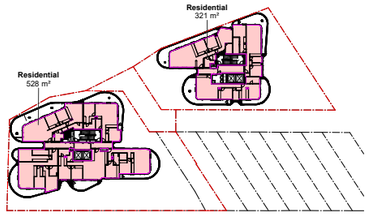
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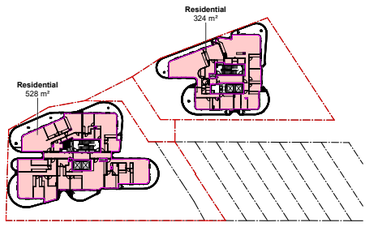
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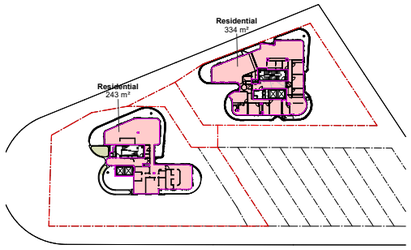
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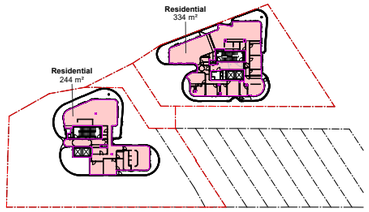
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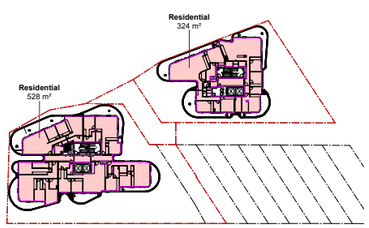
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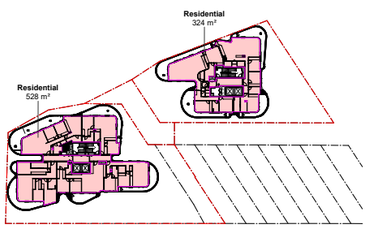
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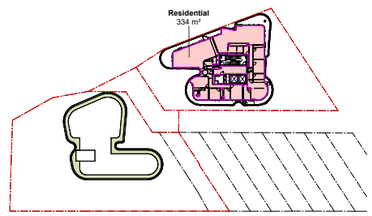
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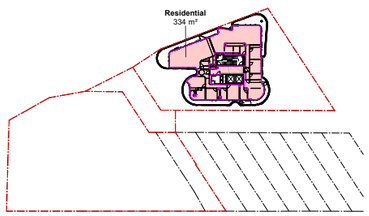
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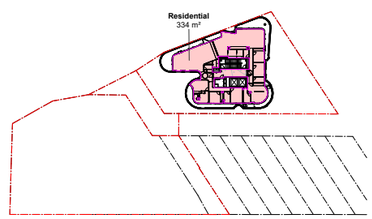
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GFA AREA LEVEL 15



GFA AREA LEVEL 16

Principle 3: Density

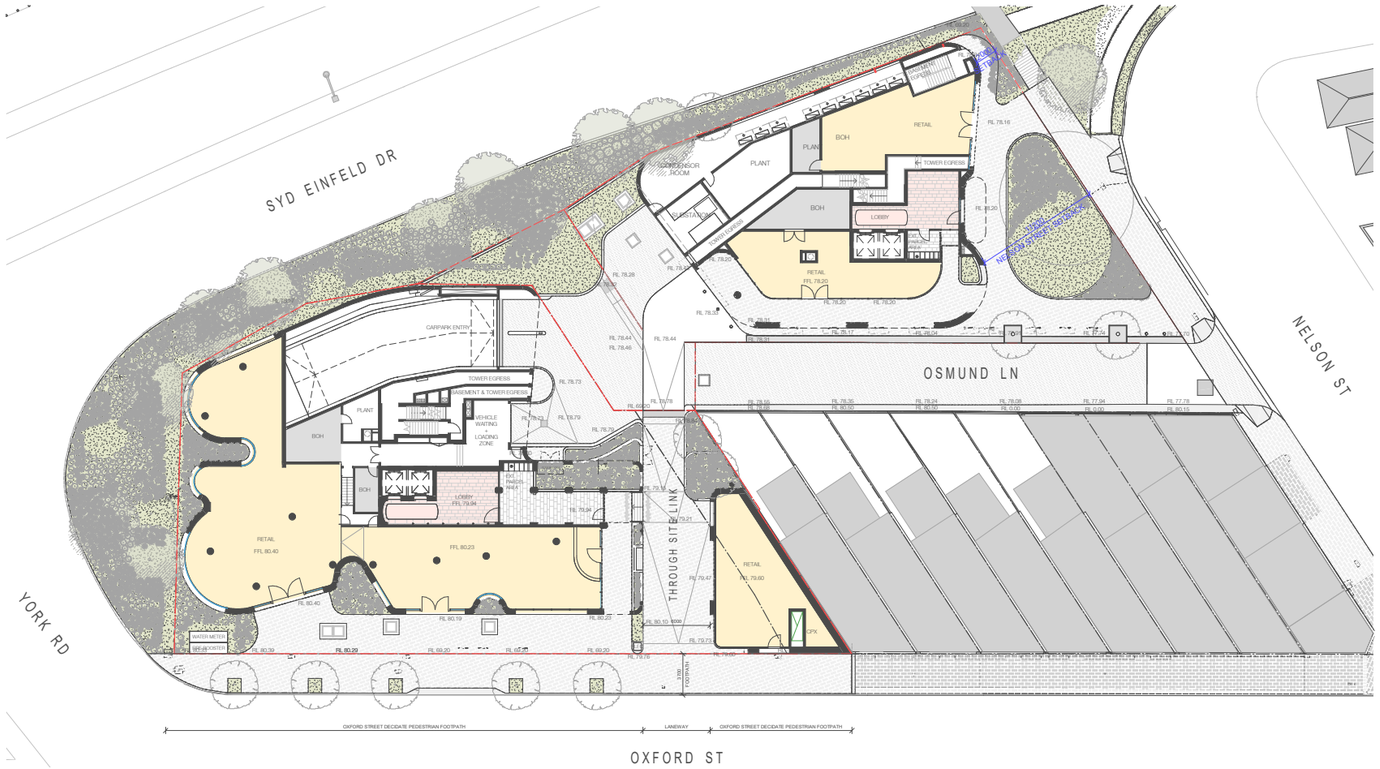
5.2 Ground Floor Analysis

The proposal responds to the need for a ‘marker’ building that will signifiy the entry to the Bondi Junction Precinct.

The proposed buildings will be grounded in the public domain by expressing a masonry arched structure at their base, ensuring the buildings touch down in a meaningful way whilst defining retail tenancies and residential lobbies within. The arched spaces at ground level present a civic quality and become a signifier for the places in which public can engage with, whether it be a retail space, a building entrance or a protective colonnade along the footpath.

This proposal retains its successful design density principles:
- future widening of Oxford St with the setback podium
- increased retail activation along Oxford St
- increased capacity of pedestrian population
- through-site link providing further activation and allowing better connectivity between surrounding sites
- greater connection to Centennial park from Nelson St
- better pedestrian capture zones for increased population
- maintained and improved public infrastructure (laneway)

The following changes are noted:
- Additional services to overall development including additional plant area on the ground floor and an addition of a second substation
- Awning over the ground level retail along Oxford St and and addition of a glazing window to create visual continuation from the neighbouring retail



Public Domain Ground Plan: Approved DA

Public Domain Ground Plan: Proposed SSDA

Principle 4: Sustainability

6

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.

6.1 Principle 4: Sustainability

Our principles for sustainable design have contributed to our proposal for this important piece of Bondi Junction. We strongly believe that architecture has a role to play in supporting the future of our environment; both the natural and the built.

Delight

All buildings should transcend function and comfort by also responding to human emotion; our proposal strives to bring delight and joy to the day-to-day for building users and passing public alike. Buildings that delight their users are valued and retained for an extended lifecycle.

Longevity

A building that is valued motivates people to care for it; our design decisions work to optimise efficiencies in doing so. Material selection, maintenance access and the detailed design of all building elements should consider durability and longevity at every scale. The introduction of verandas in our apartments ensures residents have safe access to glazing for cleaning and reduces need for abseil access.

Adaptability

Whether it be technological advancements or natural phenomena beyond our control, architecture should function as a framework that enables beautiful, adaptable spaces to respond to their place and climate whilst providing a loose fit for a large range of potential future societal shifts and uses. Beginning at the ground level, flexible spaces are provided for a range of potential retail or commercial uses. The apartments themselves are generous and support ageing in place, work-from-home functions as well as creating beautiful houses in the sky.

Low-tech

Passive design has been achieved through the deep protected facades and verandas that capture the desirable sun whilst protecting the apartment interiors from unwanted heat gain and glare. Wherever possible, greened roofs are used to provide thermal properties to the upper levels of the buildings as well as to slow water movement and desirable views from above.

Minimal

A reliance on air-conditioning for internal comfort is vastly reduced through the protective facade design and allowance for good cross-ventilation. Demand on water for irrigation of building planters is also reduced with the incorporation of a rainwater tank in the basement.



Principle 4: Sustainability

The proposal incorporates a number of principles of sustainability:
· Extensive landscaping to roofs and over structure, minimising stormwater run-off
· On-site rainwater detention and re-use
· Natural ventilation to corridors and the majority of apartments (87% of apartments are cross-ventilated)
· Maximising direct sun to apartments while utilising overhangs and shading devices to control summer heat gain (86% of apartments receive a minimum of 2 hours direct sunlight in mid-winter).
Despite the minor shortfall, the apartments benefit from a high level of amenity in terms of ventilation, private open spaces, size and layout, privacy and communal open space as demonstrated in the assessment of the other key design criteria.
· New buildings predominantly constructed from locally produced, sustainable materials as well as being robust for longevity and minimising maintenance.
· Construction materials within Australia so as to eliminate any further shipping or freight impact on the environment, thus reducing the building's carbon footprint.
· Energy-efficient lighting and appliances
· Water-efficient fixtures
· Proximity to public transport and local shops



Principle 5: Landscape

7

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity.

A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.

Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long term management.

Principle 5: Landscape

7.1 Landscape Context

The landscape design strategy Black Beetle have developed with SJB for this project is based on providing a series of private public spaces that are focused on providing meaningful connections with the site, with the community and with the surrounding suburb and city beyond.

We see an opportunity to provide a place to gain access to sunlight, to engage in social and recreational activity. We see landscape plays an important part in enriching the lives of the city inhabitant. It is important to the pedestrian experience and our concept offers significant 'Greening' of the site providing a link from the Norfolk Island Pine (local heritage item) in the east to Centennial Park to the west also enhancing the urban tree canopy of the local area and contributing to an interconnected urban tree canopy across NSW.

Along Oxford Street new street tree planting (Waterhousia 'Green Avenue') will compliment new pavement and street furniture as outlined in Council's Public Domain Manual. Between the public street and building another layer of trees (Koelreuteria paniculata) and planting provide a buffer from the heavy traffic and street noise and further define the communal space. The character of this public space and through link is open and honest through the use of simple, classic materials. Nestled under the canopy of trees the scale of the space is made more relatable. Planting and level change are used throughout the space to direct pedestrian movements and connections and to further divide the space into a series of rooms that enhance usability and create welcoming and comfortable spaces.



Urban tree canopy

The tree canopy contributes to a number of benefits; providing shade and shelter, improving air quality, cooling the urban environment, reducing the urban heat-island effect and supporting healthy living.



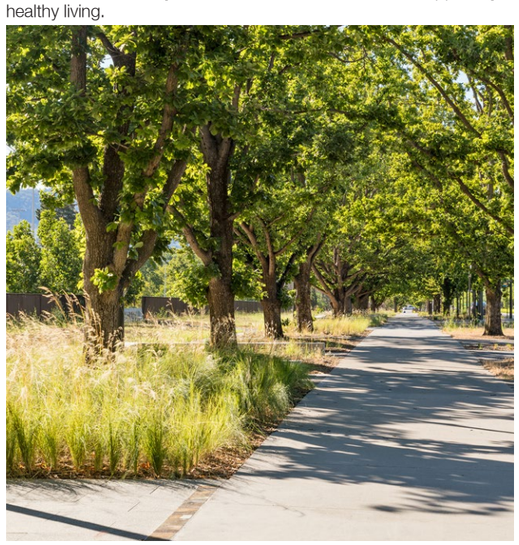
Shareway

The proposed shareway allows both pedestrian and vehicle use, connecting the public plaza piazza creating a vibrant, human scaled place for all to experience.



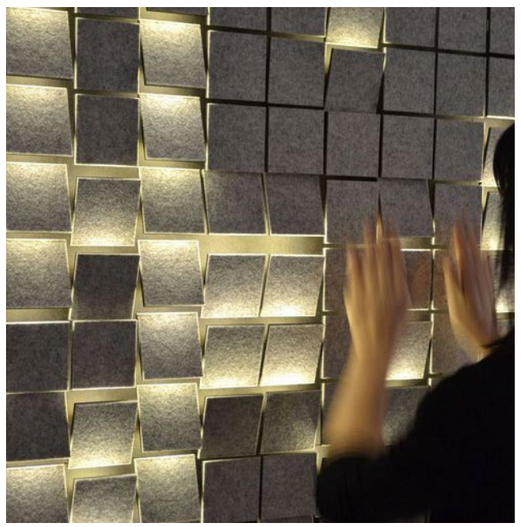
Piazza

The piazza provides a link to the footbridge, access to Oxford Street and the commercial precinct. The introduction of lawn and seating/signage wall allows for a nestled refuge where one can disconnect from the heavy vehicle traffic of surrounding areas



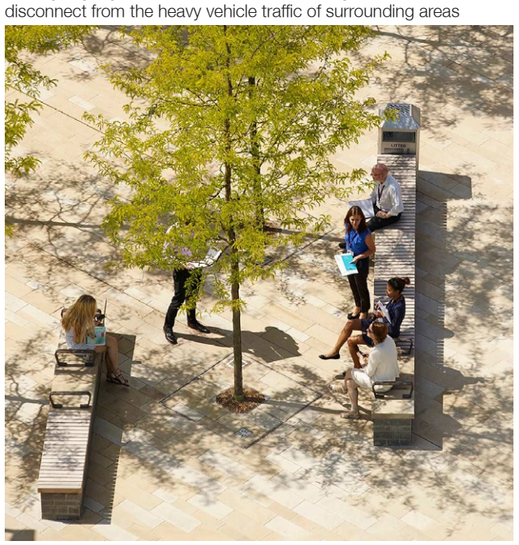
Streetscape buffer

The tree lined public domain along with a secondary avenue of trees and underplanting provide a separation from the busy vehicular traffic and assist in reducing ambient noise.



Public art

Art is an opportunity to be innovative and create a genuine sense of place while taking into consideration of the natural and built history of the site and local area.



Public space

The simplicity of paving material reflects the proposed architecture material selection. Informal planting of trees continue through the space and provide a link to the share way and piazza.

7.2 Connection to the Land

Following the design teams research into the significance of the landscape of the Boondi land, it was discovered that there is an important connection to be made with reference to the eastern ecological scrub and the significant part this flora played in the history of the region and to the Indigenous peoples.

A banksia community is now sought to be established in its appropriation to the landscape and the site, with the idea that a simple palette and hearty planting will provide the public domain a connection with ‘place’ and reference the landscape that was prior to urban settlement.

The planting will seek to have a series of pioneer plants within the banksia community that will be suitable for the public domain as well as the more private communal spaces up the tower and on the roof.









7.3 Ground Floor Public Domain

Connecting the public through link to the piazza on Nelson Street, the laneway will be transformed into an active shared space where cars and pedestrians can navigate through the space.

Connecting the public to site, SJB and Black Beetle have proposed a number of public artwork opportunities by recognising spaces where an artwork centred around ‘Connecting to Country’ will be most visible and have the greatest impact.

One such location is in reference to the ridgeline noted in the design scheme and the laneway connection. An inlay artwork in the pavers would be suitable to recognise the land in which we walk on as Indigenous land and our responsibility on it.

At the end of the laneway the shared space could also be terminated with the opportunity for a public artwork. With reference to the eroded coastline of the Boondi area, it is envisaged that this artwork will form a backdrop to the through link on entry and exit into the heart of the site.

It is an opportunity to be innovative and create a genuine sense of place while taking into consideration the natural and built history of the site and local area.

The inclusion of the piazza on Nelson Street has provided a place where significant landscape has been included. Mass native planting under the existing towering Norfolk Island Pine opens onto a circular lawn. The space, while compact, encourages both



Principle 5: Landscape

7.4 Rooftop Communal Garden

The landscaping scheme has been carried up the tower in its various communal spaces and green roofs, increasing the overall amenity and quality of the development.

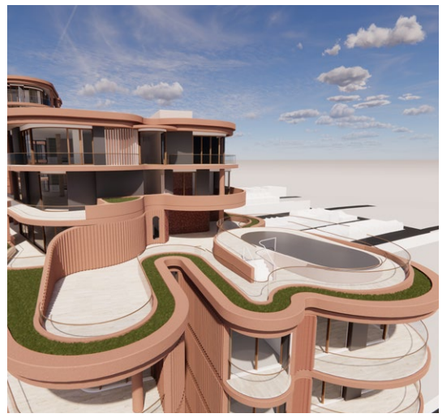
The various green roofs to the development enhance the connection with nature and improve civic space and place-making abilities for all passers-by.

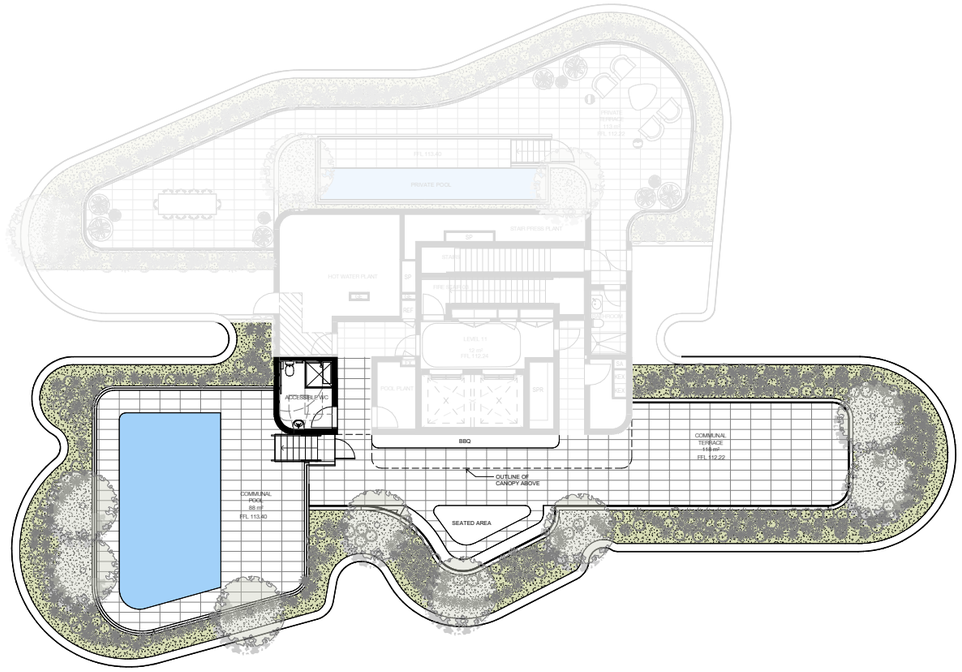
This is further translated through the communal open space that the development provides on the rooftop. The amenity provided is second to none with an open break out space, communal outdoor dining / share spaces, and pool area enveloped by hearty flora to compliment the scheme.

The native landscaping and banksia community is also well utilised to provide additional screening for privacy as well as treatment to the building edges.

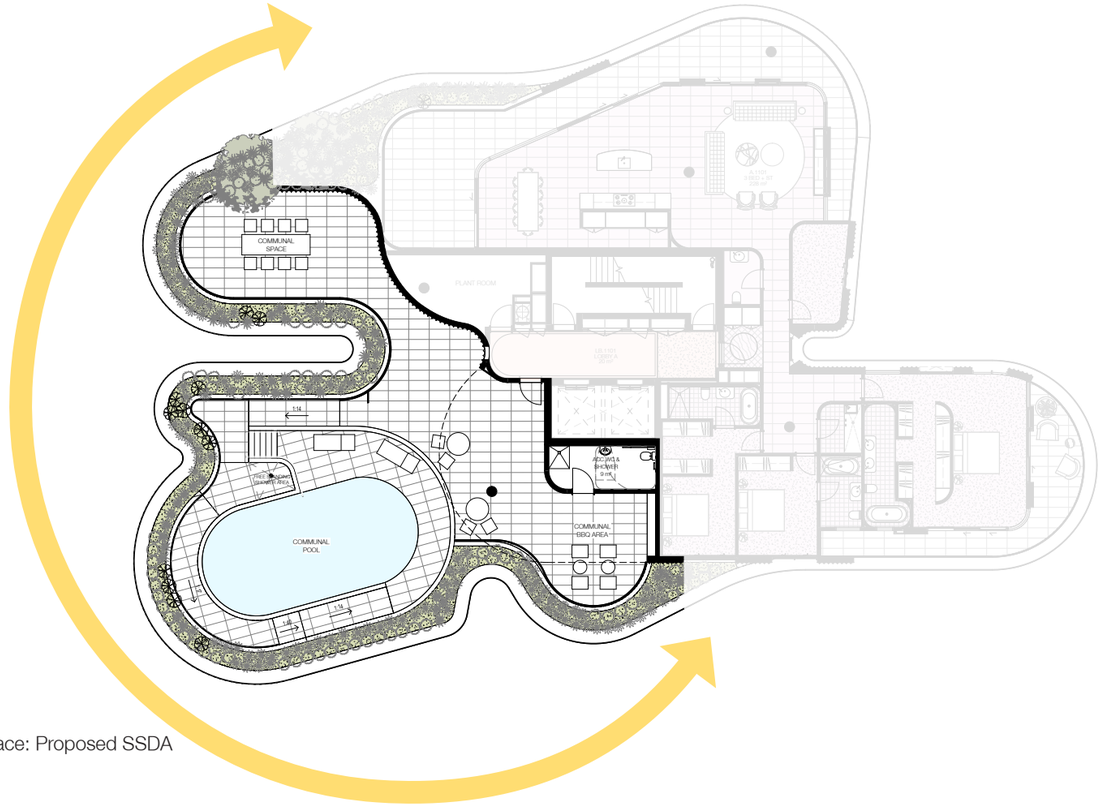
The proposal offers the following a new amenties:

- North facing features and views
- Covered area under the canopy of the level above
- Integrated accessible use of the pool area
- Increased communal space by 26%.
  From 182m² to 230m².





Building A, Roof Communal Space: Approved DA



Building A, Roof Communal Space: Proposed SSDA

Principle 6: Amenity

8

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

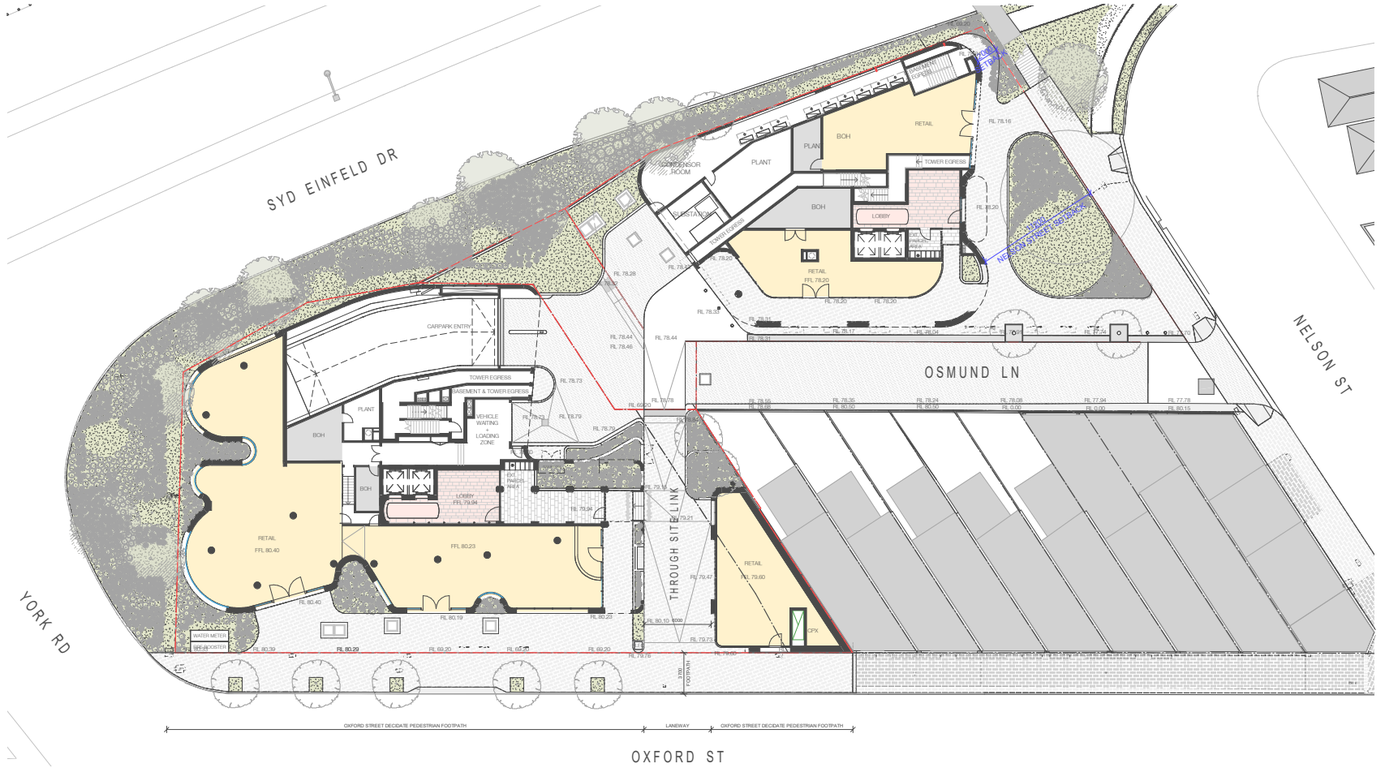
Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.

Principle 6: Amenity

8.1 Amenity - Ground Floor Analysis

During the development of the scheme design, the following principles were considered and have been delivered:
· Access to daylight for the general amenity of all apartments. While driven by the existing street orientations, the location and design of the apartments including the minimisation of apartment depths, ensure that daylight access has been maximised.
· The final built-form of the buildings maximises daylight access to the public space at ground level as well as communcal outdoor spaces to level 1 and the rooftop.
· Public space within the buildings, namely the lobbies to each level, are naturally ventilated.
· Significant communal landscaped spaces have been provided for the residents
· The development contributes to the general public amenity at ground floor level through the activation of frontages via lobby spaces, access and balcony orientation, extensive retail shopfronts and the incoporation of the new active public through-site link
· Provision of open space amenity
· Views from both private apartments and communal terraces
· Vehicular access has been incorporated away from the through-site link to maximise the amenity and safety of pedestrians using Osmund Lane

With the additional services requirements, the proposal has not lost any of its proposed stated amenities.



Approved DA

Proposed SSDA

Principle 6: Amenity

The apartment types range from a 1-bedrooom up to 3-bedroom to create a truly diverse community in the building which will translate to the buildings public precinct as well as internal building meeting spaces such as the lobbies or communal gym / open space.

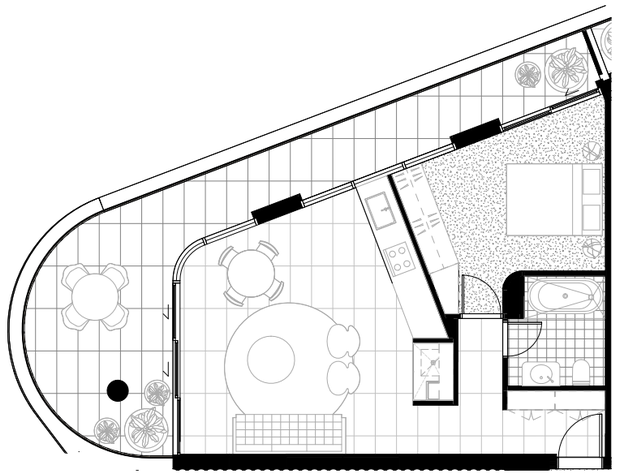
With respect to the design of the apartment types, the design consolidates noise issues to the lower portion of the tower, and deals with these by tailored design elements as shown in the acoustic response for these apartments.

The upper level apartments are located further away from traffic noise and the public domain, with the facade grid opening to invite view opportunities where they exist and where privacy concerns are reduced.

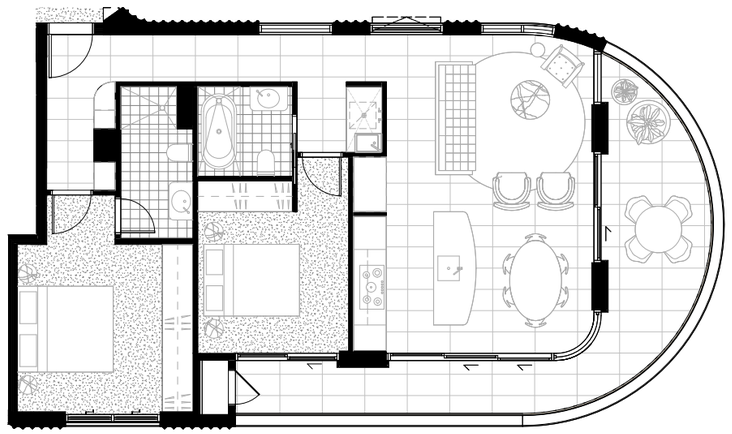
Towards the top of the tower the grid is refined to a delicate net that defines the individual residences and optimises expansive views towards the harbour, city, and mountains beyond.

Apartment mix:

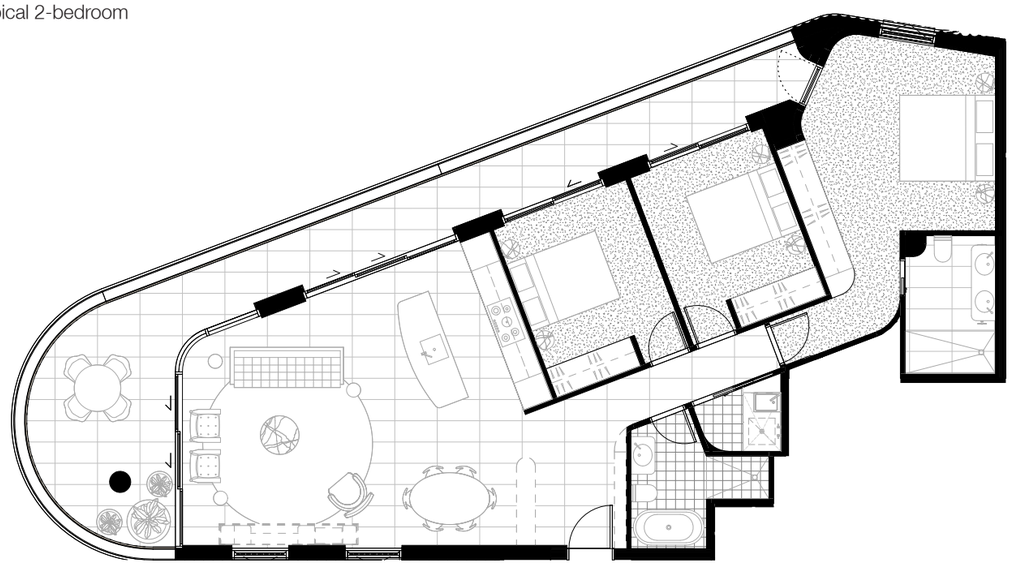
- 1 Bedroom Apartments 2% 53sqm
- 2 Bedroom Apartments 41% 83 - 94sqm
- 3 Bedroom Apartments 56% 110 - 240sqm



Typical 1-bedroom



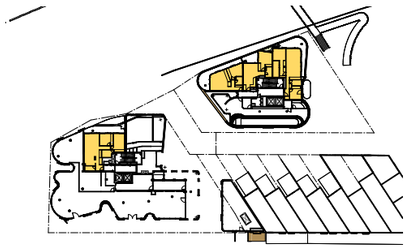
Typical 2-bedroom



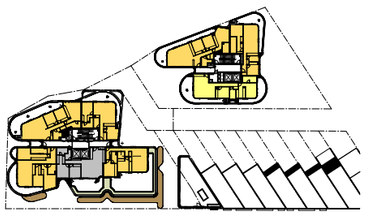
Typical 3-bedroom

Principle 6: Amenity

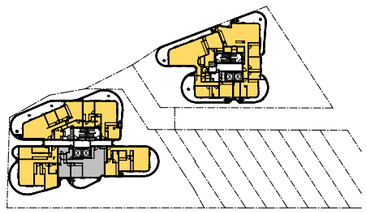
8.2 Apartment Analysis - Solar Access



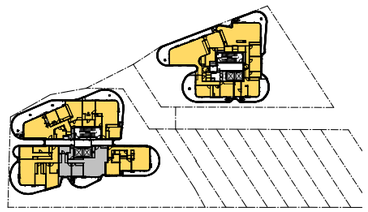
SOLAR ANALYSIS LEVEL 01



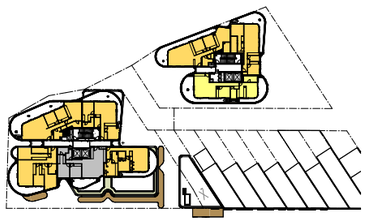
SOLAR ANALYSIS LEVEL 02



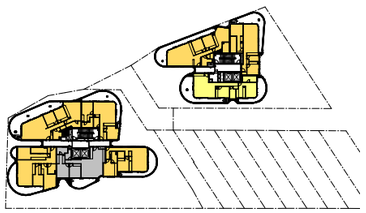
SOLAR ANALYSIS LEVEL 09



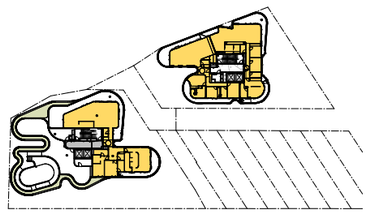
SOLAR ANALYSIS LEVEL 10



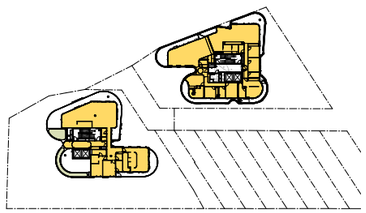
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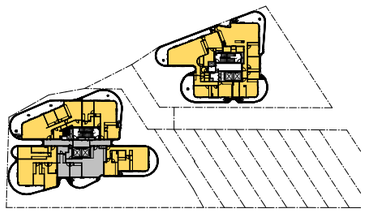
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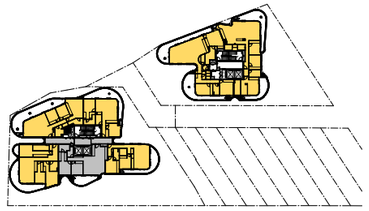
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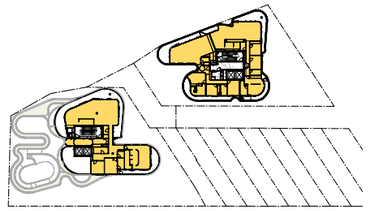
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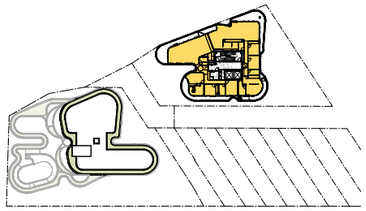
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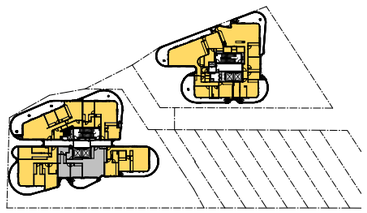
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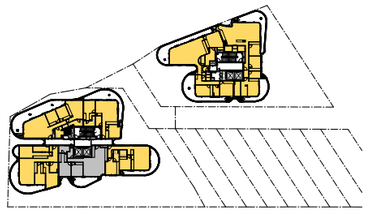
SOLAR ANALYSIS LEVEL 13



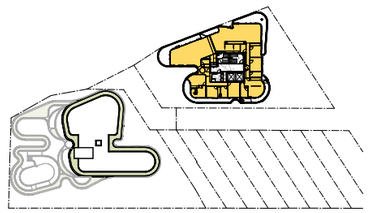
SOLAR ANALYSIS LEVEL 14



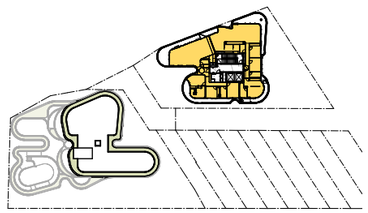
SOLAR ANALYSIS LEVEL 07



SOLAR ANALYSIS LEVEL 08



SOLAR ANALYSIS LEVEL 15



SOLAR ANALYSIS LEVEL 16

LEGEND

2 HRS	MIN 2 HOURS SUNLIGHT TO LIVING ROOM AND PRIVATE OPEN SPACE RECIEVED ON 21 JUNE BETWEEN 9AM - 3PM.
< 2HRS	MIN 15 MINUTES SUNLIGHT TO LIVING ROOM AND PRIVATE OPEN SPACE RECIEVED ON 21 JUNE BETWEEN 9AM - 3PM.
NA	LESS THAN 15 MINUTES SUNLIGHT TO LIVING ROOM AND PRIVATE OPEN SPACE RECIEVED ON 21 JUNE BETWEEN 9AM - 3PM.

ADG DESIGN CRITERIA

- LIVING ROOMS AND PRIVATE OPEN SPACES OF AT LEAST 70% OF APARTMENTS IN A BUILDING RECEIVE A MINIMUM OF 2 HOURS DIRECT SUNLIGHT BETWEEN 9AM AND 3PM IN MID WINTER.

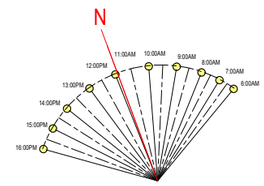
- A MAXIMUM OF 15% OF APARTMENTS IN A BUILDING RECIEVE NO DIRECT SUNLIGHT BETWEEN 9AM AND 3PM AT MID WINTER.

APARTMENTS ACHIEVING 2 HOURS DIRECT SUNLIGHT

= 73 / 85
= 86%

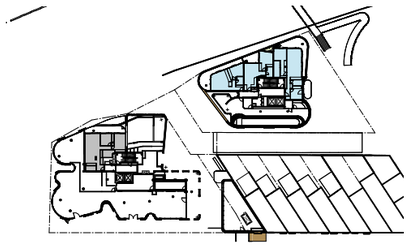
WINTER SOLSTICE SOLAR DIAGRAM

WINTER SOLSTICE - 21st JUNE.

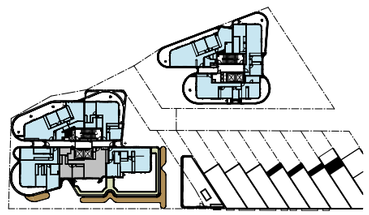


Principle 6: Amenity

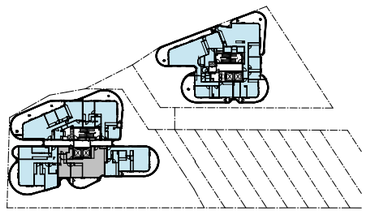
8.3 Apartment Analysis - Cross Ventilation



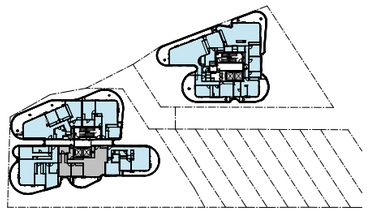
CROSS VENT LEVEL 01



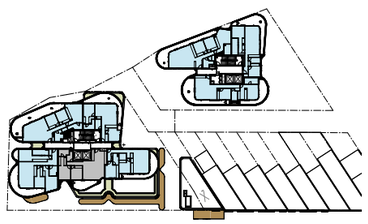
CROSS VENT LEVEL 02



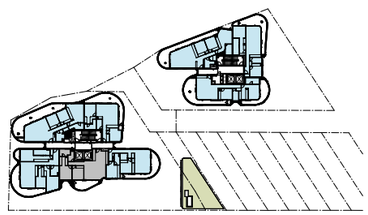
CROSS VENT LEVEL 09



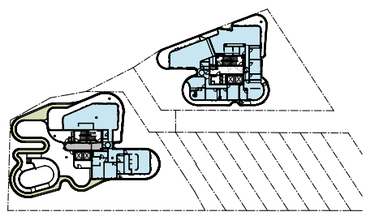
CROSS VENT LEVEL 10



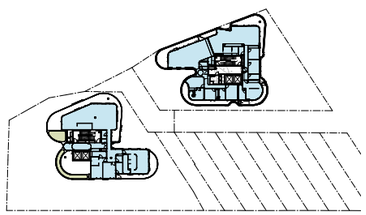
CROSS VENT LEVEL 03



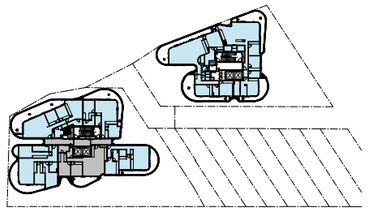
CROSS VENT LEVEL 04



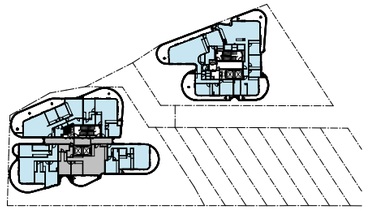
CROSS VENT LEVEL 11



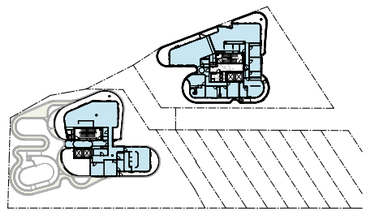
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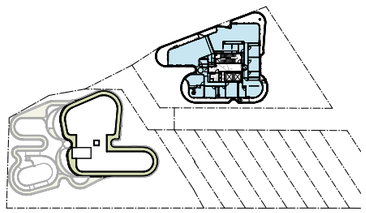
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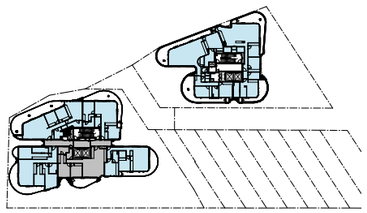
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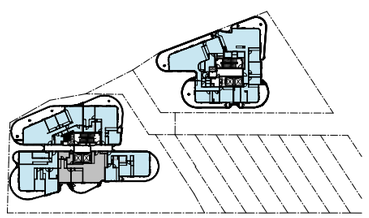
CROSS VENT LEVEL 13



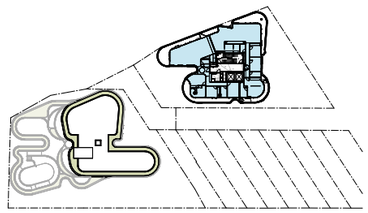
CROSS VENT LEVEL 14



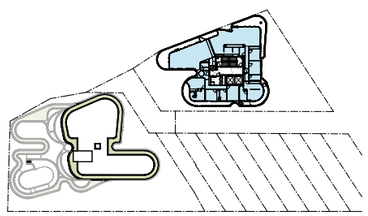
CROSS VENT LEVEL 07



CROSS VENT LEVEL 08



CROSS VENT LEVEL 15



CROSS VENT LEVEL 16

LEGEND

YES — CROSS VENTILATION ACHIEVED UP TO LEVEL 6

NO — CROSS VENTILATION NOT ACHIEVED UP TO LEVEL 6

ADG DESIGN CRITERIA

- 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.

APARTMENTS ACHIEVING NATURAL CROSS VENTILATION

= 60 / 85
= 65.5%

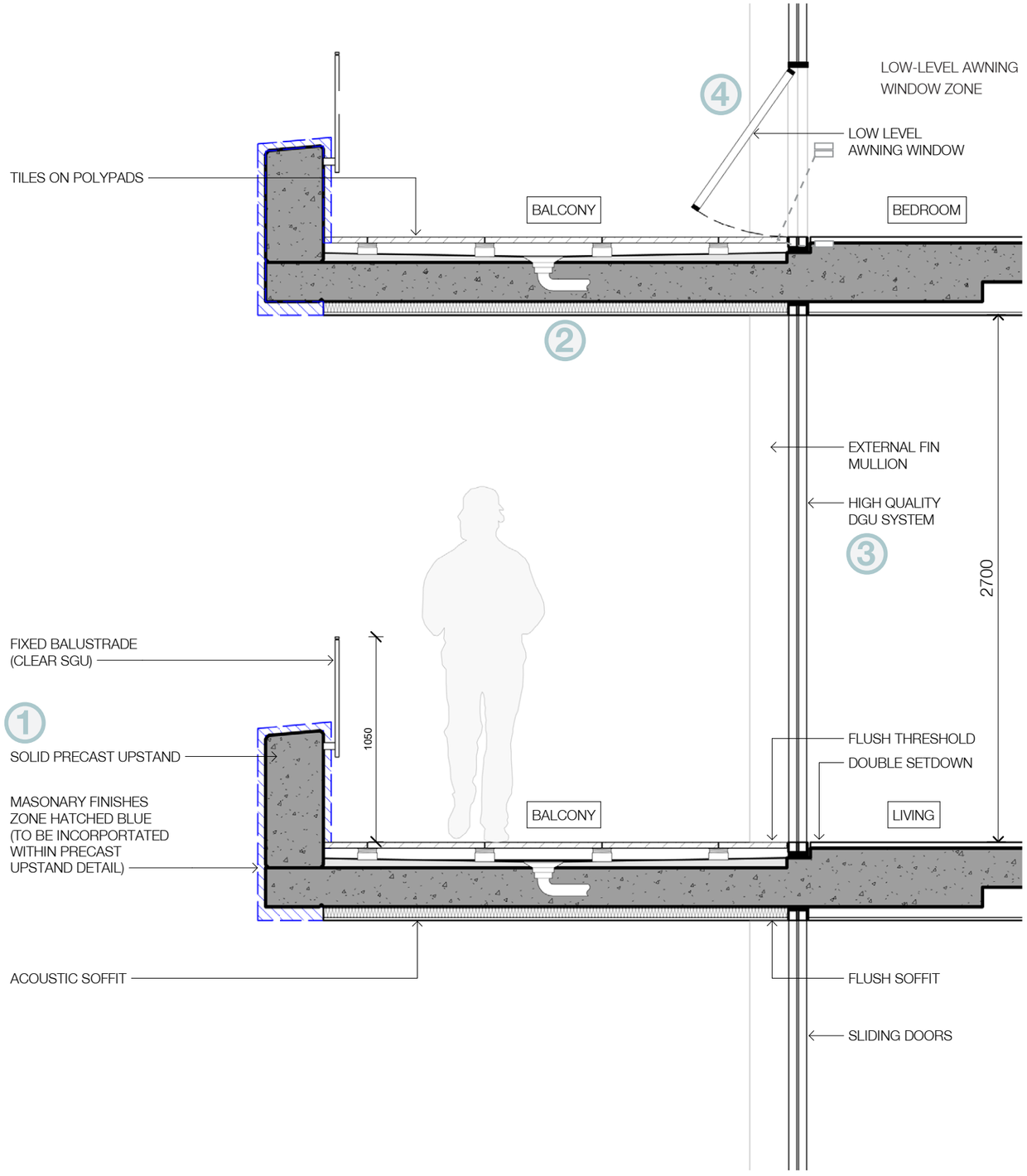
8.4 Facade Analysis - Design + Acoustic Response

The general construction methodology is concrete frame with a series of masonry elements forming the exterior fabric. The masonry-fabric facade alternative is a reflection on the quality of finish for the project with textured stone to the lower podium levels and then a controlled colour gradation in the high quality masonry upstands up to the top of the building. The balconies are treated with clear glass balustrades that grow in height as the level of each balcony increases and the masonry upstands decrease opening up views as the reliance on acoustic treatments of the upstand reduces.

With the combination of solid upstands, glass and acoustically treated ceilings, the design strategy will assist in mitigating unwanted traffic noise from the surrounding network of roads.

The following facade design elements resolve acoustic issues passively and ensure the comfort of residents whilst maintaining natural ventilation:

1. Solid upstands to balconies (of a masonry finish) where noise impacts are greatest to deflect a percentage of traffic noise before reaching the glass line.
2. Balcony soffits are acoustically lined. This allows for a TNR (total noise reduction) of up to 6dB and further reduces noise impacts before reaching the glass line.
3. DGU glass sliding doors to a bedroom or living area provides for another TNR of 10dB in closed position.
4. Low-level awning windows allow for ventilation from a position where noise has been minimised, allowing for ventilation at night time with sliding doors closed.



8.5 Facade Analysis - Quality + Detail

The external detailing to the horizontal banding is to reference the landscape from which the site sits upon and the rich colouration and texture that comes from the land.
By capturing the deep colouration of the stone and soil to the locale, the horizontal masonry elements to the facade strengthen the idea of connection to the land.

The masonry finish also seeks to add movement and play to the banding so as to celebrate a quality that the development seeks to uphold. By the use of a fine-grain detailing through patternation, texture, or aggregate, the masonry bands will seek to reference the movement of the organic form of the landscape and surrounds.

The adjacent imagery references various potentials that could be used with further refinement to develop with the masonry via new technologies and application techniques.

As shown in the 1:1 scale mock ups image (Bottom Right), the materiality of the proposed development is extensively being explored through testing of colour, form and texture; Demonstrating a continous commitment to high quality design outcome.



1:1 Mockup - Ground stone finish, scallop, colour, form and texture.

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.

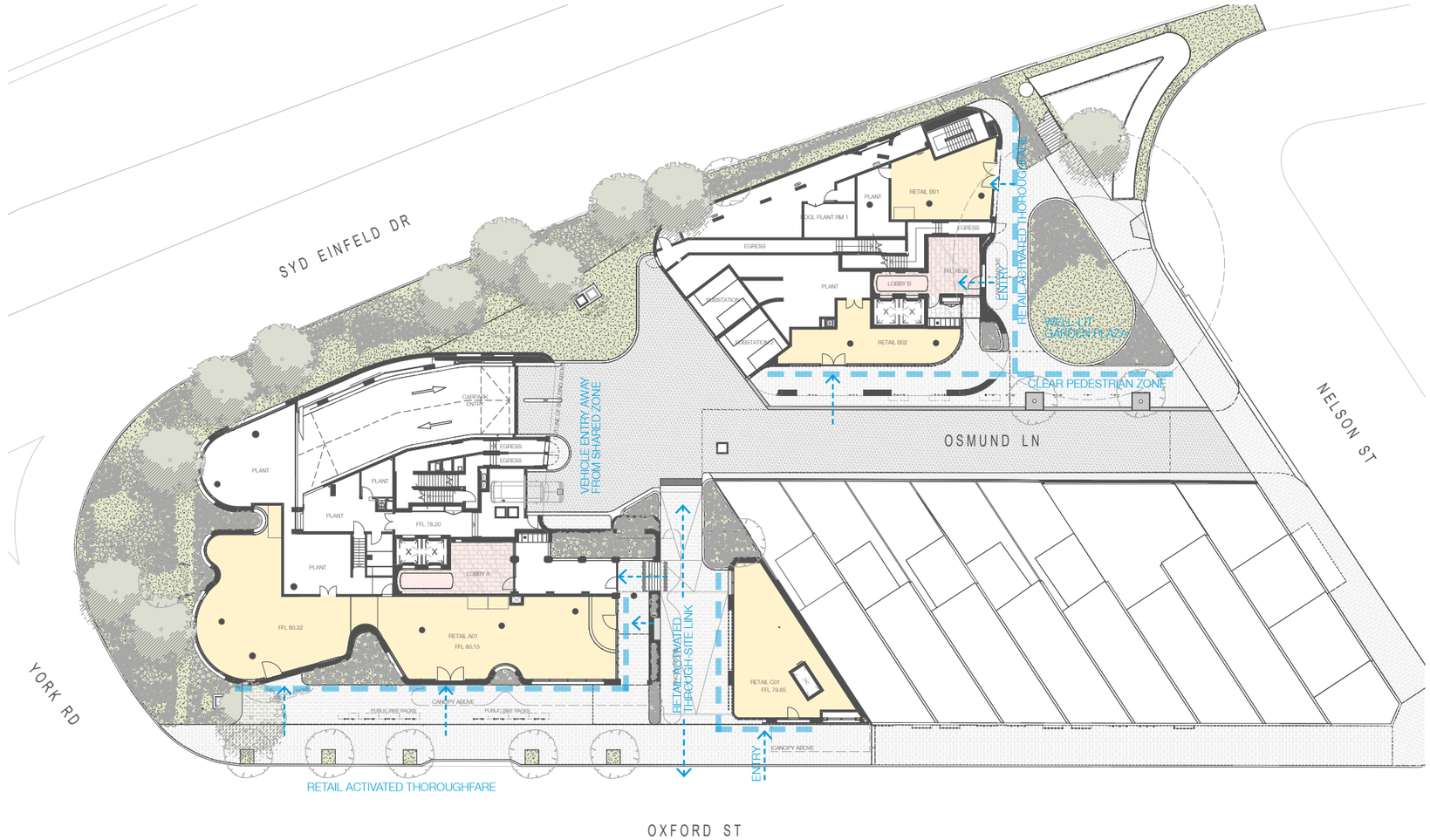
A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.

Principle 7: Safety

9.1 Safe + Considered Design

Design initiatives which have been incorporated into the design are:
· Principle building entrances are clearly identifiable and allow for passive surveillance;
· Building entrances have secure access points with video intercom
· Car park layouts are designed to minimise opportunities for alcoves. Columns or walls do not obstruct sight lines and the car parks are generally open.
Security access in the form of swipe cards and remote controllers will be provided;
· Carpark and loading dock entrances have been located to minimise conflict with pedestrian activity
· Entries are well lit;
· Passive surveillance of through-site link provided from adjacent retail spaces, surrounding apartment buildings and residential communal outdoor spaces;
· Increased pedestrian traffic will be a result of this development, thereby creating more activity and surveillance of the area noting that the majority of the existing buildings within the site are currently unnocupied

Ground Floor Public Domain



Entries
Active edges

9.2 Amenity - Public Open Space / Shared Spaces



Through-site link (Oxford Street to Osmund Lane Retail)



Clear + Covered Entry to Laneway and Open Space



Nelson Street open space - Shared Zone + Public garden + plaza

Principle 8: Housing Diversity and Social Interaction

10

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, providing opportunities for social interaction amongst residents.

Principle 8: Housing Diversity and Social Interaction

10.1 Housing Diversity

There will be a broad range of product offering choice and affordability. The development will also deliver equitable access throughout all common areas.

Internal and external communal spaces have been provided in each of the apartment buildings which cater for a variety of communal activities.
In addition, the public through-site link and its diverse range of associated retail spaces, engage the local community and ensure the block remains active and publicly accessible.

Other key aspects incoporated into the development include;
- Bicycle parking provided for residents and visitors
- Adaptable housing in accordance with Council's controls
- Affordable housing under the State Environmental Planning Policy (Housing) 2021

APARTMENT SCHEDULE - BUILDING A

Level	Number	Department	Occupancy	Area	Balcony Area	Solar	Cross Vent	Adaptable
A_LEVEL 01	A.101	RESIDENTIAL	2 BED	87 m²	22 m²	2HR	No	No
A_LEVEL 02	A.201	RESIDENTIAL	3 BED	110 m²	46 m²	2HR	Yes	No
A_LEVEL 02	A.202	RESIDENTIAL	2 BED	83 m²	28 m²	2HR	Yes	No
A_LEVEL 02	A.203	RESIDENTIAL	2 BED	83 m²	65 m²	2HR	Yes	No
A_LEVEL 02	A.204	RESIDENTIAL	2 BED	91 m²	29 m²	No	No	No
A_LEVEL 02	A.205*	RESIDENTIAL	3 BED	116 m²	33 m²	2HR	Yes	Yes
A_LEVEL 03	A.301	RESIDENTIAL	3 BED	110 m²	46 m²	2HR	Yes	No
A_LEVEL 03	A.302	RESIDENTIAL	2 BED	83 m²	29 m²	2HR	Yes	No
A_LEVEL 03	A.303	RESIDENTIAL	2 BED	83 m²	22 m²	2HR	Yes	No
A_LEVEL 03	A.304	RESIDENTIAL	2 BED	91 m²	15 m²	No	No	No
A_LEVEL 03	A.305*	RESIDENTIAL	3 BED	116 m²	33 m²	2HR	Yes	Yes
A_LEVEL 04	A.401	RESIDENTIAL	3 BED	110 m²	46 m²	2HR	Yes	No
A_LEVEL 04	A.402	RESIDENTIAL	2 BED	83 m²	29 m²	2HR	Yes	No
A_LEVEL 04	A.403	RESIDENTIAL	2 BED	83 m²	22 m²	2HR	Yes	No
A_LEVEL 04	A.404	RESIDENTIAL	2 BED	91 m²	15 m²	No	No	No
A_LEVEL 04	A.405*	RESIDENTIAL	3 BED	116 m²	33 m²	2HR	Yes	Yes
A_LEVEL 05	A.501	RESIDENTIAL	3 BED	110 m²	46 m²	2HR	Yes	No
A_LEVEL 05	A.502	RESIDENTIAL	2 BED	83 m²	29 m²	2HR	Yes	No
A_LEVEL 05	A.503	RESIDENTIAL	2 BED	83 m²	22 m²	2HR	Yes	No
A_LEVEL 05	A.504	RESIDENTIAL	2 BED	91 m²	15 m²	No	No	No
A_LEVEL 05	A.505*	RESIDENTIAL	3 BED	116 m²	33 m²	2HR	Yes	Yes
A_LEVEL 06	A.601	RESIDENTIAL	3 BED	110 m²	46 m²	2HR	Yes	No
A_LEVEL 06	A.602	RESIDENTIAL	2 BED	83 m²	29 m²	2HR	Yes	No
A_LEVEL 06	A.603	RESIDENTIAL	2 BED	83 m²	22 m²	2HR	Yes	No
A_LEVEL 06	A.604	RESIDENTIAL	2 BED	91 m²	15 m²	No	No	No
A_LEVEL 06	A.605*	RESIDENTIAL	3 BED	116 m²	33 m²	2HR	Yes	Yes
A_LEVEL 07	A.701	RESIDENTIAL	3 BED	111 m²	46 m²	2HR	Yes	No
A_LEVEL 07	A.702	RESIDENTIAL	2 BED	83 m²	29 m²	2HR	Yes	No
A_LEVEL 07	A.703	RESIDENTIAL	2 BED	83 m²	22 m²	2HR	Yes	No
A_LEVEL 07	A.704	RESIDENTIAL	2 BED	91 m²	15 m²	No	No	No
A_LEVEL 07	A.705*	RESIDENTIAL	3 BED	116 m²	33 m²	2HR	Yes	Yes
A_LEVEL 08	A.801	RESIDENTIAL	3 BED	111 m²	46 m²	2HR	Yes	No
A_LEVEL 08	A.802	RESIDENTIAL	2 BED	83 m²	29 m²	2HR	Yes	No
A_LEVEL 08	A.803	RESIDENTIAL	2 BED	83 m²	22 m²	2HR	Yes	No
A_LEVEL 08	A.804	RESIDENTIAL	2 BED	91 m²	15 m²	No	No	No
A_LEVEL 08	A.805*	RESIDENTIAL	3 BED	116 m²	33 m²	2HR	Yes	Yes
A_LEVEL 09	A.901	RESIDENTIAL	3 BED	111 m²	46 m²	2HR	Yes	No
A_LEVEL 09	A.902	RESIDENTIAL	2 BED	83 m²	29 m²	2HR	Yes	No
A_LEVEL 09	A.903	RESIDENTIAL	2 BED	83 m²	22 m²	2HR	Yes	No
A_LEVEL 09	A.904	RESIDENTIAL	2 BED	91 m²	15 m²	No	No	No
A_LEVEL 09	A.905*	RESIDENTIAL	3 BED	116 m²	33 m²	2HR	Yes	Yes
A_LEVEL 10	A.1001	RESIDENTIAL	3 BED	112 m²	46 m²	2HR	Yes	No
A_LEVEL 10	A.1002	RESIDENTIAL	2 BED	87 m²	29 m²	2HR	Yes	No
A_LEVEL 10	A.1003	RESIDENTIAL	2 BED	84 m²	22 m²	2HR	Yes	No
A_LEVEL 10	A.1004	RESIDENTIAL	2 BED	91 m²	15 m²	No	No	No
A_LEVEL 10	A.1005*	RESIDENTIAL	3 BED	116 m²	33 m²	2HR	Yes	Yes
A_LEVEL 11	A.1101*	RESIDENTIAL	3 BED	218 m²	84 m²	2HR	Yes	Yes
A_LEVEL 12	A.1201*	RESIDENTIAL	3 BED	240 m²	57 m²	2HR	Yes	Yes
A_LEVEL 13	A.1301	RESIDENTIAL	3 BED	240 m²	59 m²	2HR	Yes	No

TOTAL NO. OF APARTMENTS: 49

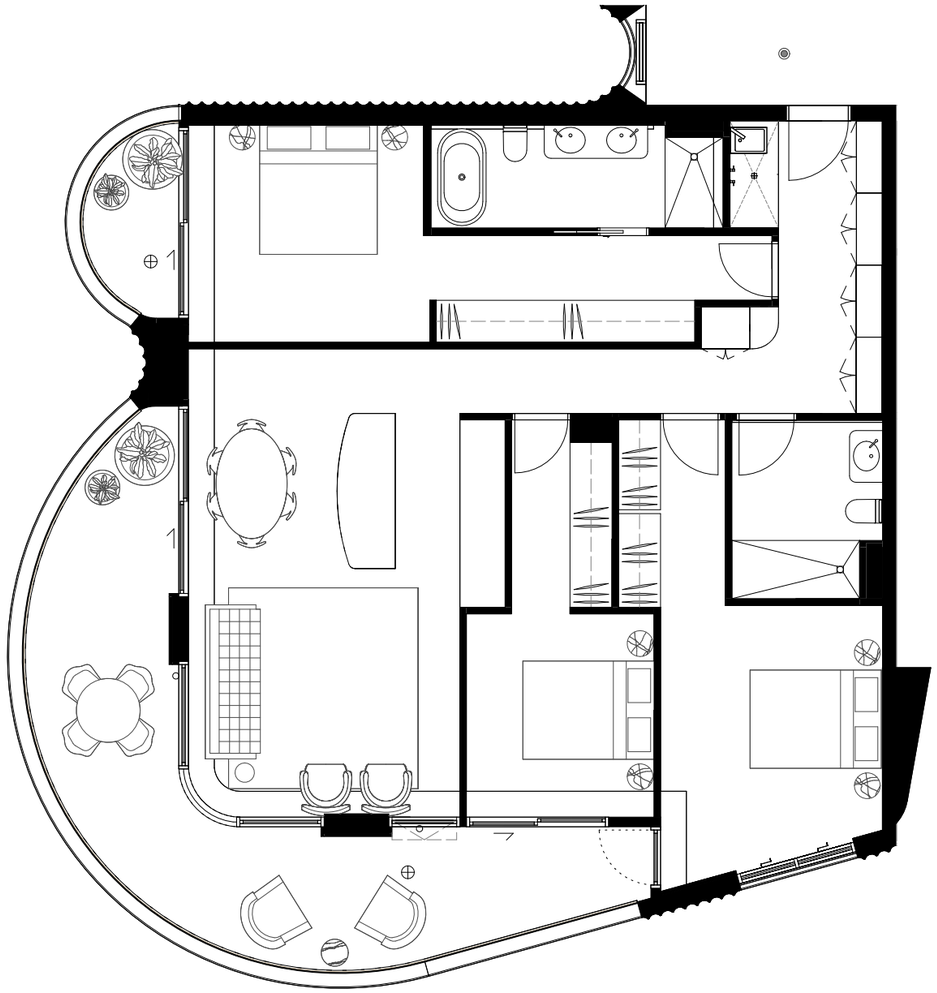
APARTMENT SCHEDULE - BUILDING B

Level	Number	Department	Occupancy	Area	Balcony Area	Solar	Cross Vent	Adaptable
B_LEVEL 01	B.101	RESIDENTIAL	1 BED	53 m²	31 m²	2HR	Yes	No
B_LEVEL 01	B.102	RESIDENTIAL	1 BED	53 m²	11 m²	2HR	Yes	No
B_LEVEL 01	B.103	RESIDENTIAL	2 BED	89 m²	27 m²	2HR	Yes	No
B_LEVEL 02	B.201	RESIDENTIAL	3 BED	111 m²	34 m²	2HR	Yes	No
B_LEVEL 02	B.202	RESIDENTIAL	2 BED	89 m²	28 m²	2HR	Yes	No
B_LEVEL 02	B.203	RESIDENTIAL	2 BED	94 m²	51 m²	<2HR	Yes	No
B_LEVEL 03	B.301	RESIDENTIAL	3 BED	111 m²	34 m²	2HR	Yes	No
B_LEVEL 03	B.302	RESIDENTIAL	2 BED	89 m²	28 m²	2HR	Yes	No
B_LEVEL 03	B.303	RESIDENTIAL	2 BED	94 m²	51 m²	<2HR	Yes	No
B_LEVEL 04	B.401	RESIDENTIAL	3 BED	111 m²	34 m²	2HR	Yes	No
B_LEVEL 04	B.402	RESIDENTIAL	2 BED	89 m²	28 m²	2HR	Yes	No
B_LEVEL 04	B.403	RESIDENTIAL	2 BED	94 m²	51 m²	<2HR	Yes	No
B_LEVEL 05	B.501*	RESIDENTIAL	3 BED	156 m²	59 m²	2HR	Yes	Yes
B_LEVEL 05	B.502	RESIDENTIAL	3 BED	146 m²	44 m²	2HR	Yes	No
B_LEVEL 06	B.601*	RESIDENTIAL	3 BED	156 m²	59 m²	2HR	Yes	Yes
B_LEVEL 06	B.602	RESIDENTIAL	3 BED	147 m²	44 m²	2HR	Yes	No
B_LEVEL 07	B.701*	RESIDENTIAL	3 BED	156 m²	59 m²	2HR	Yes	Yes
B_LEVEL 07	B.702	RESIDENTIAL	3 BED	147 m²	44 m²	2HR	Yes	No
B_LEVEL 08	B.801*	RESIDENTIAL	3 BED	156 m²	59 m²	2HR	Yes	Yes
B_LEVEL 08	B.802	RESIDENTIAL	3 BED	147 m²	44 m²	2HR	Yes	No
B_LEVEL 09	B.901*	RESIDENTIAL	3 BED	156 m²	59 m²	2HR	Yes	Yes
B_LEVEL 09	B.902	RESIDENTIAL	3 BED	147 m²	44 m²	2HR	Yes	No
B_LEVEL 10	B.1001*	RESIDENTIAL	3 BED	154 m²	59 m²	2HR	Yes	Yes
B_LEVEL 10	B.1002	RESIDENTIAL	3 BED	147 m²	44 m²	2HR	Yes	No
B_LEVEL 11	B.1101	RESIDENTIAL	3 BED	155 m²	47 m²	2HR	Yes	No
B_LEVEL 11	B.1102	RESIDENTIAL	3 BED	160 m²	45 m²	2HR	Yes	No
B_LEVEL 12	B.1201	RESIDENTIAL	3 BED	155 m²	47 m²	2HR	Yes	No
B_LEVEL 12	B.1202	RESIDENTIAL	3 BED	160 m²	45 m²	2HR	Yes	No
B_LEVEL 13	B.1301	RESIDENTIAL	3 BED	155 m²	47 m²	2HR	Yes	No
B_LEVEL 13	B.1302	RESIDENTIAL	3 BED	160 m²	45 m²	2HR	Yes	No
B_LEVEL 14	B.1401	RESIDENTIAL	3 BED	156 m²	47 m²	2HR	Yes	No
B_LEVEL 14	B.1402	RESIDENTIAL	3 BED	160 m²	45 m²	2HR	Yes	No
B_LEVEL 15	B.1501	RESIDENTIAL	3 BED	155 m²	47 m²	2HR	Yes	No
B_LEVEL 15	B.1502	RESIDENTIAL	3 BED	160 m²	45 m²	2HR	Yes	No
B_LEVEL 16	B.1601	RESIDENTIAL	3 BED	156 m²	47 m²	2HR	Yes	No
B_LEVEL 16	B.1602	RESIDENTIAL	3 BED	160 m²	45 m²	2HR	Yes	No

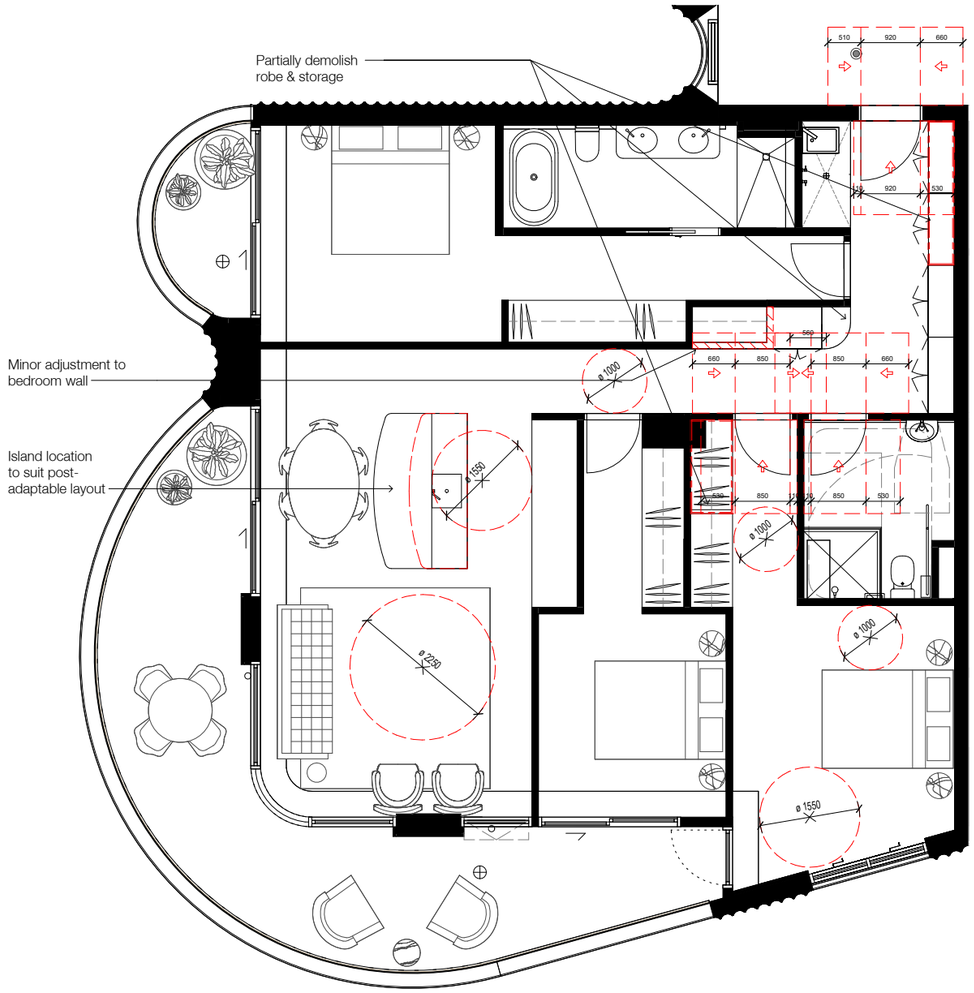
TOTAL NO. OF APARTMENTS: 36

Project Summary	1 Bed	1 Bed+Study	2 Bed	2 Bed+Study	3 Bed	4 Bed	Totals	Affordable	Solar	Cross Vent	Retail	Gym & Swimming Pool	Residnetial GFA	Residnetial NSA	Residnetial Balcony	Effic. NSA/GFA
Totals	2	0	35		48	0	85	17	73	74	467	363	10821	9932	3307	92%
Total Apartments	**85**															
20% Adaptable			17													
% Mix	2%		41%		56%			20%	86%	87%						

10.2 Typical Adaptable Plan

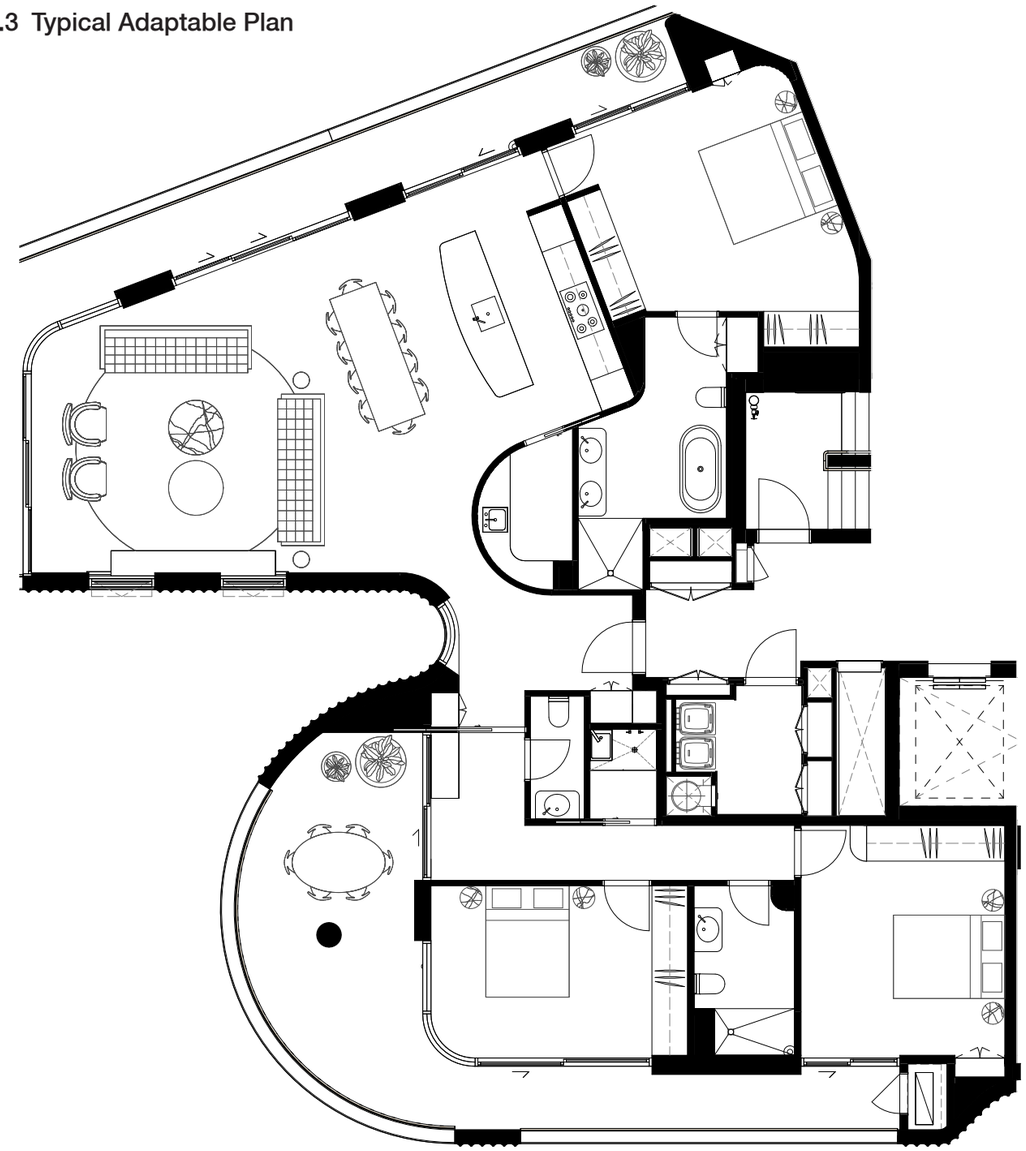


Typical (3B) Pre-Adaptable

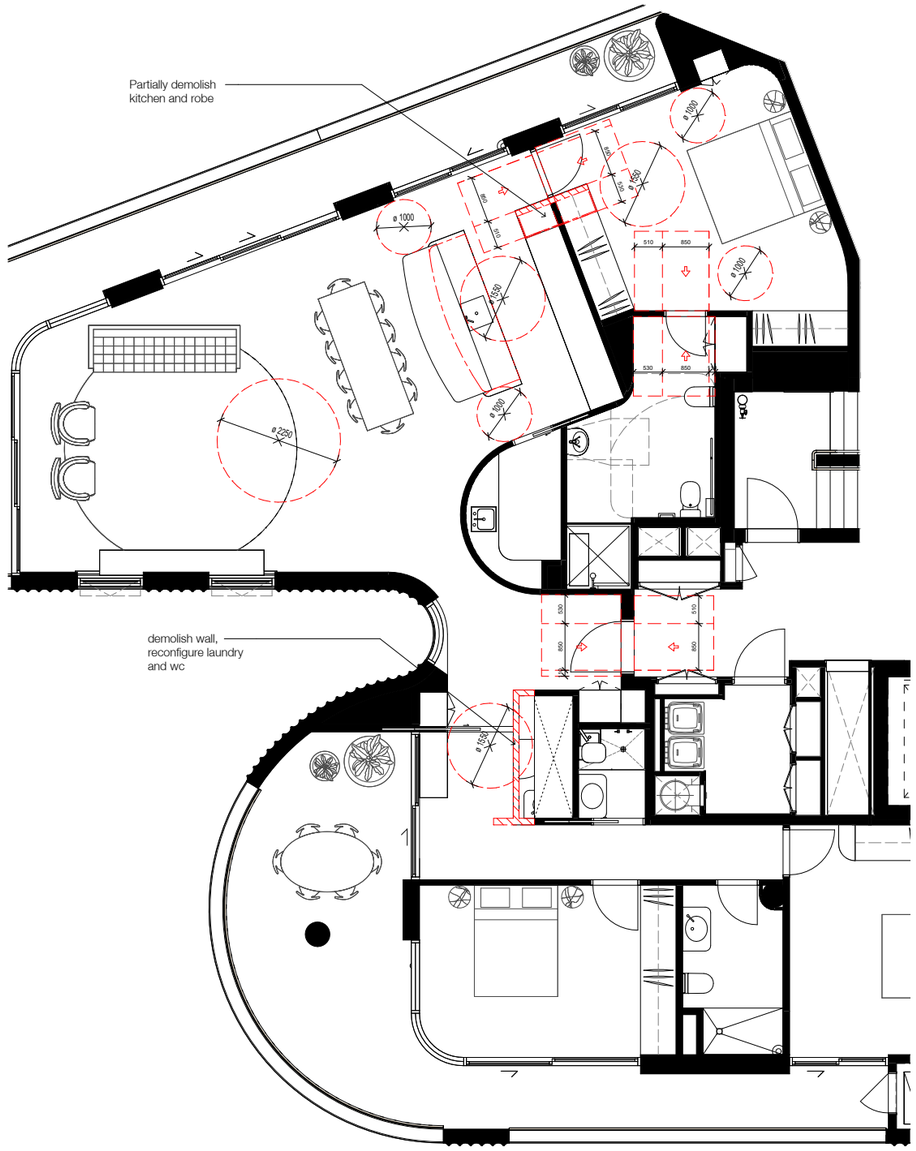


Typical (3B) Post-Adaptable

10.3 Typical Adaptable Plan

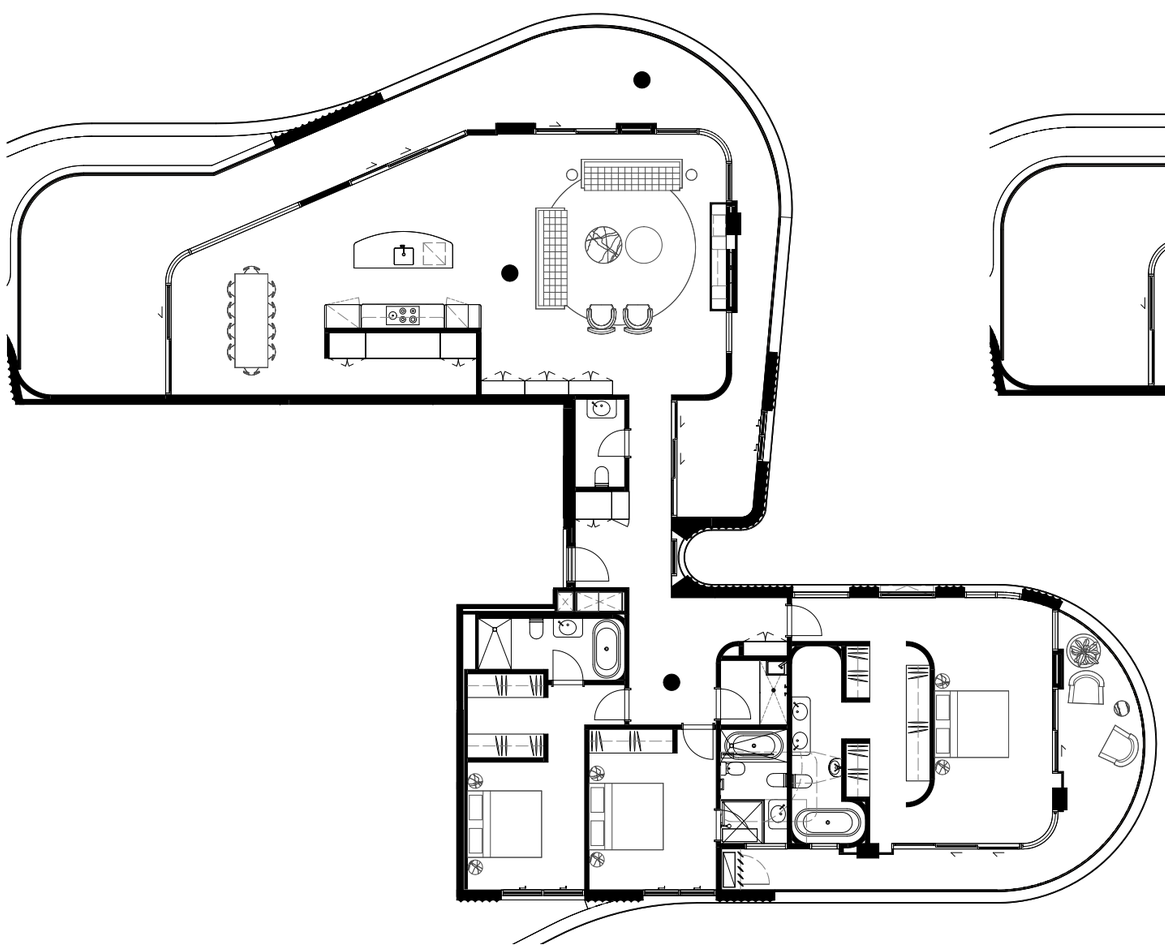


Typical (3B) Pre-Adaptable

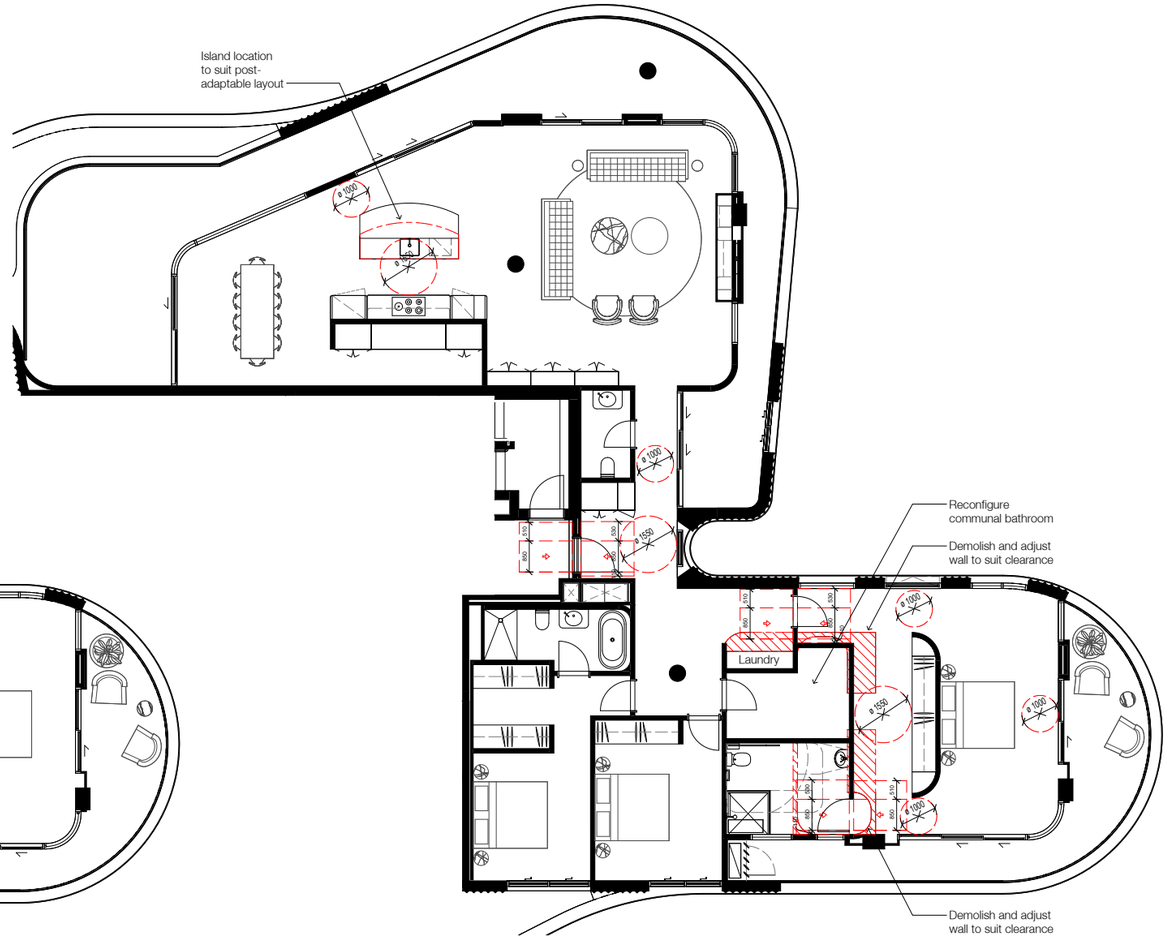


Typical (3B) Post-Adaptable

10.4 Typical Adaptable Plan



Typical (3B) Pre-Adaptable



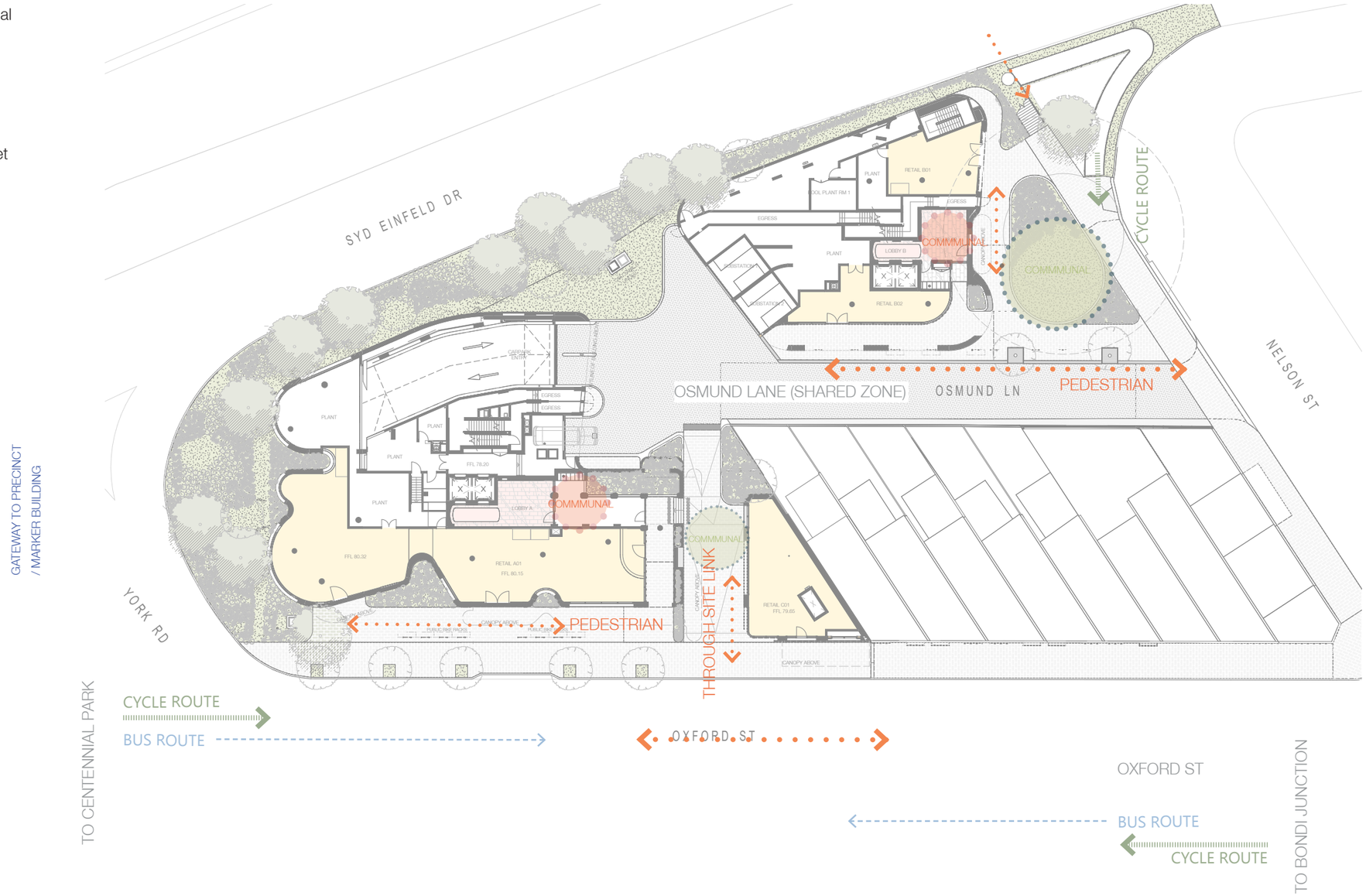
Typical (3B) Post-Adaptable

Principle 8: Housing Diversity and Social Interaction

10.5 Social Consideration

In addition to the social design considerations made internal to the site; the site's location offers a place that is well serviced by a variety of transport options including;

- Bus services along Oxford Street
- Walking distance to shopping precint, Centennial park and additional local amenities
- Maintained and improved bike link through Nelson Street
- Future bike path networks
- Opportunities for interaction



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

Principle 9: Aesthetics

11.1 Quality Materiality

The proposed material palette is refined and simple.

It seeks to inject a high-quality, fine-grain piece of architecture that will retain its beauty over time.

Beginning at the base, the proposed stone is a deep warm colour, defining the public components of the building with a richness of colour and texture. The colour references the rich natural history of the landscape and its connection to the deep colours of the undulating rockfaces and soil. With this, a civic presence is created connecting the site to the street wall and the shopping precinct of Bondi Junction.

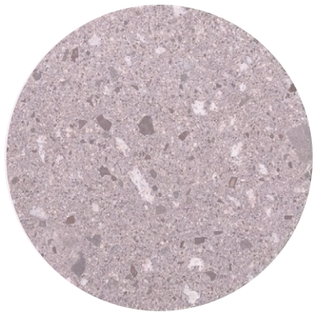
This strong texture palette creates a sense of human scale and a recognition of a high degree of quality to passers-by.

The towers expression seeks to elaborate on the high quality of the masonry facade that organically bends around the external envelope. Also referencing the rich colouration of the land, the aggregate and detailing in the masonry portrays a sense of quality and refined simplicity with the soft colour and movement in the banding.

As the banding decreases towards the top of the tower, the tower opens up to the sky creating a refined, delicate expression.



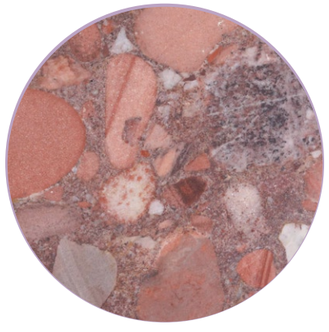
Proposed detail to masonry



Masonry w/ detail



Proposed vertical relief detail



Civic base stone



Principle 9: Aesthetics

11.2 Expression of Verticality

Whilst the curved facade and its organic form reponds to the landscape on which the development stands, SJB also investigated its reponse to verticality to the locale of Bondi Junction.

As a “lookout” the building’s presence is significant in its junction between various neighbourhoods but also its ‘place’ within the skyline to the surrounding context.

The strategy to decrese the bulk of the tower, was to then reduce the height of the high-quality masonry bands that weave around the building creating a natural flow to the external fabric. It softens the overall form of the development and plays with the eye to draw the attention to the podium precint and quality masonry at a human scale.
By reducing the upstand height as the building reaches for the sky, level by level, the building mass begins to dissipate presenting a sensitive approach to the building height and allowing an increased opportunity for vista’s out over the neighbourhood the higher the level.
The views over the surrounding context and towards the Sydney skyline are second to none, and are capitalised by the design of the wrap around balconies.



11.3 Eastern Entry Approach



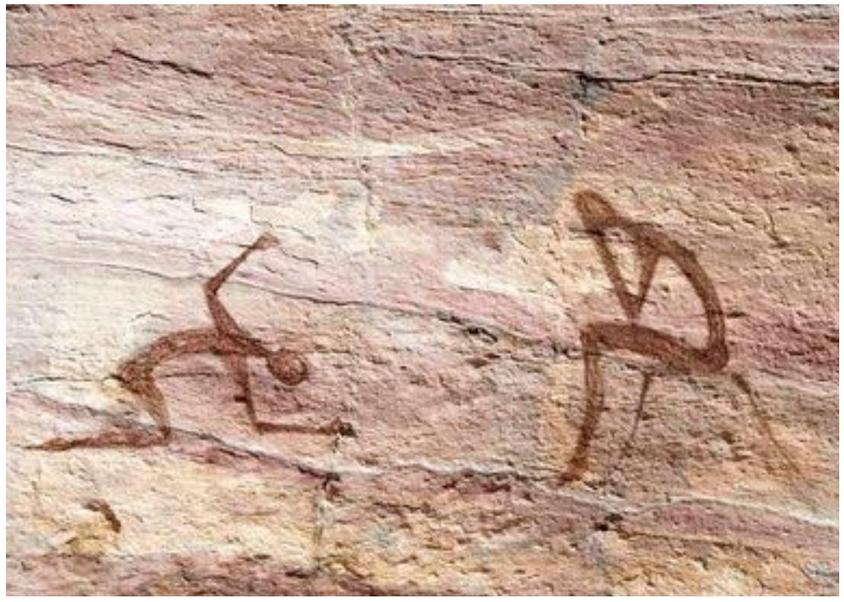
Principle 9: Aesthetics

11.4 Designing for Country - Public Art

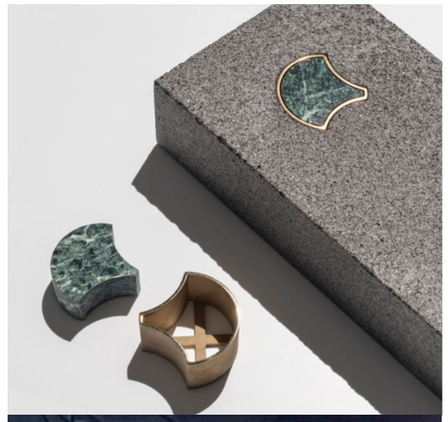
The gateway building looks to enhance the experience for the community and its relationship to site.
An awareness and acknowledgement of Country and place will be represented through public art for the precinct.

Through carved stone art to a prominant facade or finer-grain details in the paving, the public art will connect with passers-by and ring true of the cultural connection to land.

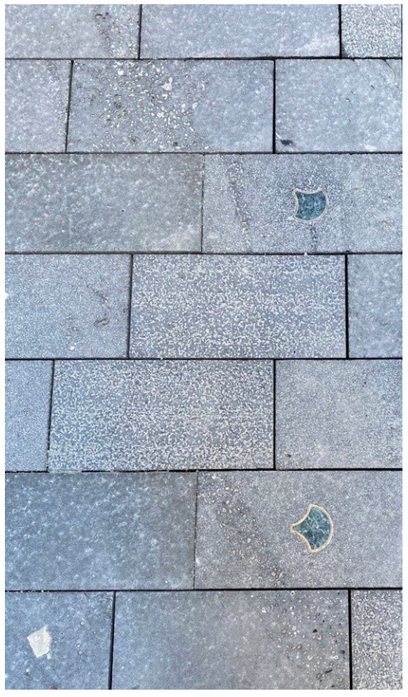
The proposal has established several potential locations to enhance the site, including:
- Through-site link, the stone flooring detail;
- Laneway shared zone, at high level on the facade;
- Nelson St plaza, the communal garden area;
- Link between the retail thoroughfare of Oxford St and the through-site link













Pictured:
- Jonathan Jones, Public Artist

ADG response table

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The following content outlines the architectural scheme's response to Part 3 & Part 4 of the Apartment Design Guide.

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
3	**SITING THE DEVELOPMENT**				
3A	Site Analysis				
	3A–1	**Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context**	•		
		Each element in the Site Analysis Checklist should be addressed (see ADG Appendix 1)	•		
3B	Orientation				
	3B – 1	**Building types and layouts respond to the streetscape and site while optimising solar access within the development**			
		Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1)	•		
		Where the street frontage is to the east or west, rear buildings should be orientated to the north		•	Due to the site boundary being bound by a number of main roads and/or laneway connections, the apartments are designed to maximise the available frontage predominantly to the north where possible, with street frontage to the south elevation. East Apartment has Street frontage on East/West and North. This building addresses all three frontages.
		Where the street frontage is to the north or south, overshadowing to the south should be minimised and buildings behind the street frontage should be orientated to the east and west (see figure 3B.2)	•		Apartments are orientated mainly to the north.
	3B–2	**Overshadowing of neighbouring properties is minimised during midwinter**			
		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	•		No significant impact on solar access to adjacent properties.
		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%			N/A
		If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy			N/A
		Overshadowing should be minimised to the south or downhill by increased upper level setbacks	•		Setbacks to both buildings have been investigated showing no additional overshadowing of Centennial Parklands and adjoining buildings are achieving sufficient solar access.
		It is optimal to orientate buildings at 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where minimum setbacks are used and where buildings are higher than the adjoining development	•		East and West apartments are orientated 90 degrees to boundaries
		A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings		•	2 out of 3 Neighbouring buildings have the opporutnity to receive between 3-4 hours of sunlight to roof spaces; The third property achieves the minimum 4 hours of solar access.
3C	Public Domain Interface				
	3C–1	**Transition between private and public domain is achieved without compromising safety and security**			
		Terraces, balconies and courtyard apartments should have direct street entry, where appropriate			N/A

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		Changes in level between private terraces, front gardens and dwelling entries above the street level provide surveillance and improve visual privacy for ground level dwellings (see figure 3C.1)	•		
		Upper level balconies and windows should overlook the public domain	•		
		Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m			N/A
		Length of solid walls should be limited along street frontages			N/A
		Opportunities should be provided for casual interaction between residents and the public domain. Design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets	•		There is a strong focus on casual interaction in the lift lobbies and corridors with areas to sit and generous spaces within the ground floor area
		In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries should be differentiated to improve legibility for residents, using a number of the following design solutions: · architectural detailing · changes in materials · plant species · colours	•		Noted.
		Opportunities for people to be concealed should be minimised	•		
	3C–2	**Amenity of public domain is retained and enhanced**			
		Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking	•		
		Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided	•		
		The visual prominence of underground car park vents should be minimised and located at a low level where possible	•		
		Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view	•		
		Ramping for accessibility should be minimised by building entry locations and setting ground floor levels in relation to footpath levels	•		
		Durable, graffiti resistant and easily cleanable materials should be used	•		
		Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions: · Street access, pedestrian paths and building entries which are clearly defined · Paths, low fences and plating that clearly delineate between communal/private open space and the adjoining public open space · Minimal use of blank walls, fences and ground level parking	•		The street address and main lobbies are via safe public domain pedestrian zones. There are no blank walls on the boundary
		On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking	•		Carpark entry is located to the rear of the site minimising impacts to pedestrians.
3D	**Communal and public open space**				
	3D–1	**An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.**			

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		Communal open space has a minimum area equal to 25% of the site	•		· Refer to communal open space study
		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)	•		Of the 746m² proposed total communal open space, 444m² (60%) have access to direct sunlight; Achieving the minimum 50% direct sunlight. Refer to communal open space study drawing DA-6020 for additional details.
		Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions	•		
		Communal open space should be co-located with deep soil areas	•		
		Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies	•		All communal open space can be access from the main circulation areas at ground floor or communal lobbies
		Where communal open space cannot be provided at ground level, it should be provided on a podium or roof	•		Also provided at rooftop of West Building.
		Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should: · provide communal spaces elsewhere such as a landscaped roof top terrace or a common room · provide larger balconies or increased private open space for apartments · demonstrate good proximity to public open space and facilities and/or provide contributions to public open space			N/A
	3D–2	**Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting**			
		Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements: · seating for individuals or groups · barbecue areas · play equipment or play areas · swimming pools, gyms, tennis courts or common rooms	•		
		The location of facilities responds to microclimate and site conditions with access to sun in winter, shade in summer and shelter from strong winds and down drafts	•		
		Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks	•		
	3C–3	**Communal open space is designed to maximise safety**			
		Communal open space and the public domain should be readily visible from habitable rooms and private open space areas while maintaining visual privacy. Design solutions may include: · bay windows · corner windows · balconies	•		
		Communal open space should be well lit	•		
		Where communal open space/facilities are provided for children and young people they are safe and contained	•		
	3D–4	**Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood**			

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		The public open space should be well connected with public streets along at least one edge	•		
		The public open space should be connected with nearby parks and other landscape elements	•		Strong focus on landscaped elements with the provision of the Through-Site link.
		Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid	•		
		Solar access should be provided year round along with protection from strong winds	•		
		Opportunities for a range of recreational activities should be provided for people of all ages	•		BBQs areas are being provided, areas to stroll as well as sitting with quiet contemplation
		A positive address and active frontages should be provided adjacent to public open space	•		
		Boundaries should be clearly defined between public open space and private areas	•		Boundaries will be fenced and also, landscaped
3E	Deep soil zones				
	3E–1	**Deep soil zones provide areas on the site that allow for and support healthy plant tree growth. They improve residential amenity and promote management of water and air quality**			
		Deep soil zones are to meet the following minimum requirements. | Site area	Minimum dimensions	Deep soil zone (% of site area) | |---|---|---| | Less than 650m² | – | 7% | | 650m²–1,500m² | 3m | | | Greater than 1,500m² | 6m | | | Greater than 1,500m² with significant existing cover | 6m | |	•		· Refer to Deep Soil Calculation · Refer to Arborist report · Refer to Landscape Architects documentation
		On some sites it may be possible to provide larger deep soil zones, depending on the site area and context: · 10% of the site as deep soil on sites with an area of 650m²–1,500m² · 15% of the site as deep soil on sites greater than 1,500m²		•	
		Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include: · basement and sub-basement car park design that is consolidated beneath building footprints · use of increased front and side setbacks · adequate clearance around trees to ensure long term health · co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep soil	•		
		Achieving the design criteria may not be possible on some sites including where: · The location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres) · There is 100% site coverage or non-residential uses at ground floor level · Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure	•		Limited site ability to achieve deep soil due to shape, toplogy and existing site conditions.
	3F–1	**Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy**			

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows: Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2) Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties		•	Eastern podium level apartments to building A (adjacent to laneway) are non-compliant however all apartments have been considered in their separation and design for privacy which is captured by the deeper balcony conditions from facade to internal glazing line. Further to this, where privacy / separation is considered non-compliant closer to the ground floor levels, solid upstands have been designed to cater for acoustics, privacy and sufficient visual separation from the ground floor looking up and vice-versa. All other apartments comply. Proposed separation distance between Building A & B ranges from 17.5m to 19.1m between habitable rooms as shown in the drawings DA-1013 to DA-1024.
		Generally one step in the built form as the height increases due to building separations is desirable. Additional steps should be careful not to cause a 'ziggurat' appearance	•		Podium setback is designed in with the architectural expression
		For residential buildings next to commercial buildings, separation distances should be measured as follows: · for retail, office spaces and commercial balconies use the habitable room distances · for service and plant areas use the non-habitable room distances			N/A
		New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include: · site layout and building orientation to minimise privacy impacts (see also section 3B Orientation) · on sloping sites, apartments on different levels have appropriate visual separation distances (see figure 3F.4)			N/A
		Apartment buildings should have an increased separation distance of 3m (in addition to the requirements set out in design criteria 1) when adjacent to a different zone that permits lower density residential development to provide for a transition in scale and increased landscaping (figure 3F.5)	•		Where the building neighbours adjacent properties, the increased setback has been catered for (towards the eastern end of the site. A transition in scale is achieved directly connected to the laneway
		Direct lines of sight should be avoided for windows and balconies across corners		•	The building separation and upstands to each balcony caters for dealing with privacy issues
		No separation is required between blank walls	•		
	3F–2	**Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space**			
		Communal open space, common areas and access paths should be separated from private open space and windows to apartments, particularly habitable room windows. Design solutions may include: · setbacks · solid or partially solid balustrades to balconies at lower levels · fencing and/or trees and vegetation to separate spaces · screening devices · bay windows or pop out windows to provide privacy in one direction and outlook in another · raising apartments/private open space above the public domain or communal open space · planter boxes incorporated into walls and balustrades to increase visual separation · pergolas or shading devices to limit overlooking of lower apartments or private open space · on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies	•		Landscape is provided as a buffer between private open space and communal open space and access paths.

Building Height	Habitable Room and Balconies	Non Habitable
Up to 12 (4 storeys)	6m	3m
Up to 25m (5-8 storeys)	9m	4.5m
Over 25m (9+ storeys)	12m	6m

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas	•		
		Balconies and private terraces should be located in front of living rooms to increase internal privacy	•		
		Windows should be offset from the windows of adjacent buildings	•		
		Recessed balconies and/or vertical fins should be used between adjacent balconies	•		
3G	Pedestrian Access and Entries				
	3G–1	**Building entries and pedestrian access connects to and address the public domain**			
		Multiple entries (including communal building entries and individual ground floor entries) are provided to activate the street edge	•		
		Entry locations relate to the street and subdivision pattern and the existing pedestrian network	•		
		Building entries are clearly identifiable. Communal entries are clearly distinguishable from private entries	•		
		Where street frontage is limited and multiple buildings are located on the site, a primary street address is provided with clear sight lines and pathways to secondary building entries	•		
	3G–2	**Access, entries and pathways are equitable and easy to identify**			
		Building access areas including lift lobbies, stairwells and hallways are clearly visible from the public domain and communal spaces	•		
		The design of ground floors and underground car parks minimise level changes along pathways and entries	•		
		Steps and ramps are integrated into the overall building and landscape design	•		
		For large developments 'way finding' maps should be provided to assist visitors and residents (see figure 4T.3)			As required, subject to future design development
		For large developments electronic access and audio/video intercom should be provided to manage access			As required, subject to future design development
	3G–3	**Pedestrian links through developments provide access to streets and connect destinations**			
		Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport	•		A pedestrian through-site link exists in order to allow pedestrians to gain quick access to Osmund Ln and/or Centennial Park depending on direction of travel
		Pedestrian links should be direct, have clear sight lines, be overlooked by habitable rooms or private open spaces of dwellings, be well lit and contain active uses, where appropriate	•		The pedestrian through-site link is over looked by the habitable rooms of most eastern apartments and will be well lit
3H	Vehicle Access				
	3H–1	**Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes**			
		Car park access is integrated with the building's overall facade, design solutions may include: · the materials and colour palette minimise visibility from the street · security doors or gates at entries that minimise voids in the facade · where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed	•		
		Car park entries are located behind the building line	•		
		Vehicle entries are located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout	•		The ramp lengths were of less of a concern on these generously sized lots, when the basement can fit in the footprint of the building above.

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		Car park entry and access is located on secondary streets or lanes where available	•		Car park entry has been located on the secondary street of Osmund Ln and at the furthest point away from the entry street to the precinct.
		Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided	•		
		Access point locations avoid headlight glare to habitable rooms	•		
		Adequate separation distances are provided between vehicular entries and street intersections	•		
		The width and number of vehicle access points is limited to the minimum	•		One vehicle access point for both building
		Visual impact of long driveways is minimised through changing alignments and screen planting	•		A buffer zone of planting lines the boundaries of the driveways to act as screen planting.
		The requirement for large vehicles to enter or turnaround within the site is avoided		•	Pick up of garbage is via use of the laneway and appropriate turning has been provided per the development allowances and shared laneway. Refer to the OWMP - Waste Management Report
		Garbage collection, loading and servicing areas are screened	•		Garbage collection happens within the basement. The holding area at the street level is screened.
		Clear sight lines should be provided at pedestrian and vehicle crossings	•		
		Traffic calming devices such as changes in paving material or textures should be used where appropriate	•		
		Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include: · changes in surface materials · level changes · the use of landscaping for separation	•		Landscape is used to separate the pedestrian paths and the vehicle entry points
3J		**Bicycle and Car Parking**			
	3J–1	**Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas**			
		For development in the following locations: **– on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or** **– on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre** **The minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less** **The car parking needs for a development must be provided off street**			N/A
		Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site	•		
		Where less car parking is provided in a development, council should not provide on street resident parking permits			Noted
	3J–2	**Parking and facilities are provided for other modes of transport**			
		Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters	•		
		Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas	•		Secure undercover bicycle parking has been provided.
		Conveniently located charging stations are provided for electric vehicles, where desirable	•		Charging station infrastructure has been provided in the basement.

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
	3J–3	**Car park design and access is safe and secure**			
		Supporting facilities within car parks, including garbage, plant and switch rooms, storage areas and car wash bays can be accessed without crossing car parking spaces	•		Garbage / plant /storage and switch rooms can be accessed without crossing car parking spaces, however the car wash bay is further away from the lift lobby which is an appropriate location away from the lifts in the basement
		Direct, clearly visible and well lit access should be provided into common circulation areas	•		
		A clearly defined and visible lobby or waiting area should be provided to lifts and stairs	•		
		For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/or bollards			Noted.
	3J–4	**Visual and environmental impacts of underground car parking are minimised**			
		Excavation should be minimised through efficient car park layouts and ramp design	•		
		Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles	•		
		Protrusion of car parks should not exceed 1m above ground level. Design solutions may include stepping car park levels or using split levels on sloping sites	•		
		Natural ventilation should be provided to basement and sub-basement car parking areas	•		
		Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design	•		
	3J–5	**Visual and environmental impacts of on-grade car parking are minimised**			
		On-grade car parking should be avoided	•		
		Where on-grade car parking is unavoidable, the following design solutions are used: · parking is located on the side or rear of the lot away from the primary street frontage · cars are screened from view of streets, buildings, communal and private open space areas · safe and direct access to building entry points is provided · parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space · stormwater run-off is managed appropriately from car parking surfaces · bio-swales, rain gardens or on site detention tanks are provided, where appropriate · light coloured paving materials or permeable paving systems are used and shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of paving			N/A
	3J–6	**Visual and environmental impacts of above ground enclosed car parking are minimised**			
		Exposed parking should not be located along primary street frontages			N/A
		Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking with the facade. Design solutions may include: · car parking that is concealed behind the facade, with windows integrated into the overall facade design (approach should be limited to developments where a larger floor plate podium is suitable at lower levels) · car parking that is 'wrapped' with other uses, such as retail, commercial or two storey Small Office/Home Office (SOHO) units along the street frontage (see figure 3J.9)			N/A
		Positive street address and active frontages should be provided at ground level	•		
4	**DESIGNING THE BUILDING**				

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
4A		Solar and daylight access			
	4A–1	**To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space**			
		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			Per drawing DA-6001, 12.7% of apartments do not receive solar access. Hence 87.3% apartments achieve direct sunlight to living rooms and private open space.
		2. In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid-winter	•		
		3. A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid winter	•		At maximum of 15% to the south during winter, no other apartments are impacted otherwise. Per drawing DA-6001, 12.7% of apartments do not receive solar access.
		The design maximises north aspect and the number of single aspect south facing apartments is minimised	•		All apartments maximise on the east – west and northerly orientations
		Single aspect, single storey apartments should have a northerly or easterly aspect	•		
		Living areas are best located to the north and service areas to the south and west of apartment	•		
		To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used: · dual aspect apartments · shallow apartment layouts · two storey and mezzanine level apartments · bay windows	•		Dual aspect apartments are the majority of apartments in this design
		To maximise the benefit to residents of direct sunlight within living rooms and private open spaces, a minimum of 1m² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes	•		This is achieved to the majority of apartments.
		Achieving the design criteria may not be possible on some sites. This includes: · where greater residential amenity can be achieved along a busy road or rail line by orientating the living rooms away from the noise source · on south facing sloping sites · where significant views are oriented away from the desired aspect for direct sunlight Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective			N/A
	4A–2	**Daylight access is maximised where sunlight is limited**			
		Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms			N/A
		Where courtyards are used: · use is restricted to kitchens, bathrooms and service areas · building services are concealed with appropriate detailing and materials to visible walls · courtyards are fully open to the sky · access is provided to the light well from a communal area for cleaning and maintenance · acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual privacy) are achieved	•		

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		Opportunities for reflected light into apartments are optimised through: · reflective exterior surfaces on buildings opposite south facing windows · positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light · integrating light shelves into the design · light coloured internal finishes	•		Internal finishes on balconies are a lighter colouring
	4A–3	**Design incorporates shading and glare control, particularly for warmer months**			
		A number of the following design features are used: · balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas · shading devices such as eaves, awnings, balconies, pergolas, external louvres and planting · horizontal shading to north facing windows · vertical shading to east and particularly west facing windows · operable shading to allow adjustment and choice · high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided)	•		
4B	Natural Ventilation				
	4B–1	**All habitable rooms are naturally ventilated**			
		The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms	•		
		Depths of habitable rooms support natural ventilation	•		
		The area of unobstructed window openings should be equal to at least 5% of the floor area served	•		
		Light wells are not the primary air source for habitable rooms	•		
		Doors and openable windows maximise natural ventilation opportunities by using the following design solutions: · adjustable windows with large effective openable areas · a variety of window types that provide safety and flexibility such as awnings and louvres · windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement windows and externally opening doors	•		
	4B–2	**The layout and design of single aspect apartments maximises natural ventilation**			
		Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)	•		
		Natural ventilation to single aspect apartments is achieved with the following design solutions: · primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation) · stack effect ventilation / solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries · courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells	•		
	4B–3	**The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents**			

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed	•		
		2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	•		
		The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths	•		Per drawing DA-6010, 14.2% of apartments do not receive cross ventilation. Hence 85.8% of apartments achieve cross ventilation.
		In cross-through apartments external window and door opening sizes/areas on one side of an apartment (inlet side) are approximately equal to the external window and door opening sizes/areas on the other side of the apartment (outlet side) (see figure 4B.4)	•		
		Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow	•		
		Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow	•		
4C	Ceiling heights				
	4C–1	**Ceiling height achieves sufficient natural ventilation and daylight access**			
		Measured from finished floor level to finished ceiling level, minimum ceiling heights are:	•		Habitable rooms are 2.7m ceiling height and non-habitable are 2.4m

Minimum ceiling height for apartment and mixed use buildings	
Habitable rooms	2.7m
Non-habitable rooms	2.4m
For 2 storey apartments	2.7m for main living area floor 2.4m for second floor, where its apartment area does not exceed 50% of the apartment area
Attic spaces	1.8m at edge of room with a 30 people degree minimum ceiling slope
If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use

		These minimums do not preclude higher ceilings if desired			
		Ceiling height can accommodate use of ceiling fans for cooling and heat distribution	•		
	4C–2	**Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms**			

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		A number of the following design solutions can be used: · The hierarchy of rooms in an apartment is defined using changes in ceiling heights and alternatives such as raked or curved ceilings, or double height spaces · Well-proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings · Ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist	•		There is flexibility with the services running through ceiling spaces as the structure is timber framed with timber flooring. The intention is that there will be no bulkheads over kitchens or in bedrooms where the full 2.7m is desired.
	4C–3	**Ceiling heights contribute to the flexibility of building use over the life of the building**			
		Ceiling heights of lower level apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses (see figure 4C.1)	•		
4D	Apartment size and layout				
	4D–1	**The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity**			
		1. Apartments are required to have the following minimum internal areas:	•		The apartments have been designed with generous internal areas as a rule of thumb: 1 Bed + Study = 53m² 2 Bed + Study = 83m² + 3 Bed + Study = 110m² +

Apartment Type	Minimum Internal Area
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**			
		2. Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms	•		
		Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)	•		
		A window should be visible from any point in a habitable room	•		
		Where minimum areas or room dimensions are not met apartments need to demonstrate that they are well designed and demonstrate the usability and functionality of the space with realistically scaled furniture layouts and circulation areas. These circumstances would be assessed on their merits			N/A
	4D–2	**Environmental performance of the apartment is maximised**			
		1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height	•		
		2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	•		
		Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maxi-mum depths	•		

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		All living areas and bedrooms should be located on the external face of the building	•		
		Where possible: · bathrooms and laundries should have an external openable window · main living spaces should be oriented toward the primary outlook and aspect and away from noise sources	•		
	4D–3	**Apartment layouts are designed to accommodate a variety of household activities and needs**			
		1. Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space)	•		
		2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	•		
		3. Living rooms or combined living/dining rooms have a minimum width of: 3.6m for studio and 1 bedroom apartments 4m for 2 and 3 bedroom apartments	•		
		4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	•		
		Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas	•		
		All bedrooms allow a minimum length of 1.5m for robes	•		
		The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high	•		
		Apartment layouts allow flexibility over time, design solutions may include: · dimensions that facilitate a variety of furniture arrangements and removal · spaces for a range of activities and privacy levels between different spaces within the apartment · dual master apartments · dual key apartments · Note: dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the Building Code of Australia and for calculating the mix of apartments · room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1)) · efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms	•		
4E		**Private Open Space and Balconies**			
	4E–1	**Apartments provide appropriately sized private open space and balconies to enhance residential amenity**			

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		All apartments are required to have primary balconies as follows: Dwelling Type / Minimum Area / Minimum Depth Studio Apartments / 4m² / - 1 bedroom apartments / 8m² / 2m 2 bedroom apartments / 10m² / 2m 3+ bedroom apartments / 12m² / 2.4m **The minimum balcony depth to be counted as contributing to the balcony area is 1m**		•	The wrap around balcony design to the dual-aspect apartments caters for an increased amenity, despite the depth being under 2m in some cases. Where the depth is below 2m (but of a minimum 1m clear accessible space), this is only to more private spaces to the apartments like bedrooms, robes or ensuites. These are private thoroughfare zones for tenants.
		For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a bal-cony. It must have a minimum area of 15m² and a minimum depth of 3m			N/A
		Increased communal open space should be provided where the number or size of balconies are reduced	•		
		Storage areas on balconies is additional to the minimum balcony size			N/A
		Balcony use may be limited in some proposals by: · consistently high wind speeds at 10 storeys and above · close proximity to road, rail or other noise sources · exposure to significant levels of aircraft noise · heritage and adaptive reuse of existing buildings In these situations, Juliet balconies, operable walls, enclosed wintergardens or bay windows may be appropriate, and other amenity benefits for occupants should also be provided in the apartments or in the development or both. Natural ventilation also needs to be demonstrated			N/A
	4E–2	**Primary private open space and balconies are appropriately located to enhance liveability for residents**			
		Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space	•		
		Private open spaces and balconies predominantly face north, east or west	•		
		Primary open space and balconies should be orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms	•		
	4E–3	**Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building**			
		Solid, partially solid or transparent fences and balustrades are selected to respond to the location. They are de-signed to allow views and passive surveillance of the street while maintaining visual privacy and allowing for a range of uses on the balcony. Solid and partially solid balustrades are preferred	•		
		Full width full height glass balustrades alone are generally not desirable		•	The glass balustrade is part of the acoustic response to the site and is required.
		Projecting balconies should be integrated into the building design and the design of soffits considered	•		The balconies are completely integrated and form part of the façade design
		Operable screens, shutters, hoods and pergolas are used to control sunlight and wind	•		
		Balustrades are set back from the building or balcony edge where overlooking or safety is an issue	•		All balconies have their balustrades set back slightly of the face of the façade.
		Downpipes and balcony drainage are integrated with the overall facade and building design	•		
		Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design	•		

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and inte-grated in the building design	•		
		Ceilings of apartments below terraces should be insulated to avoid heat loss	•		
		Water and gas outlets should be provided for primary balconies and private open space			Noted.
	4E–4	**Private open space and balcony design maximises safety**			
		Changes in ground levels or landscaping are minimised	•		
		Design and detailing of balconies avoids opportunities for climbing and falls	•		
4F	Common Circulation and Spaces				
	4F–1	**Common circulation spaces achieve good amenity and properly service the number of apartments**			
		1. The maximum number of apartments off a circulation core on a single level is eight	•		
		2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40			Noted. Refer to Vertical Transport report
		Greater than minimum requirements for corridor widths and/ or ceiling heights allow comfortable movement and ac-cess particularly in entry lobbies, outside lifts and at apartment entry doors	•		
		Daylight and natural ventilation should be provided to all common circulation spaces that are above ground	•		To the majority of lobbies, natural ventilation is provided as all corridors are not enclosed and they also have the oppor-tunity for filtered natural light to some locations
		Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors	•		Instead of windows, the common circulation has a balustrade and actual opening
		Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include: · a series of foyer areas with windows and spaces for seating · wider areas at apartment entry doors and varied ceiling heights			N/A
		Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments	•		
		Achieving the design criteria for the number of apartments off a circulation core may not be possible. Where a development is unable to achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be demonstrated, including: · sunlight and natural cross ventilation in apartments · access to ample daylight and natural ventilation in common circulation spaces · common areas for seating and gathering · generous corridors with greater than minimum ceiling heights · other innovative design solutions that provide high levels of amenity	•		A high level of amenity had been designed for the apartments including; · natural cross ventilation to 87% of apartments · Common circulation spaces are naturally ventilated · Communal areas have seating · All corridors are 2m in width
		Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level			N/A
		Primary living room or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces to any other rooms should be carefully con-trolled	•		
	4F–2	**Common circulation spaces promote safety and provide for social interaction between residents**			
		Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines	•		

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		Tight corners and spaces are avoided	•		
		Circulation spaces should be well lit at night			Noted
		Legible signage should be provided for apartment numbers, common areas and general wayfinding			Noted
		Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided	•		The lift lobbies have additional space for furniture
		In larger developments, community rooms for activities such as owners corporation meetings or resident use should be provided and are ideally co-located with communal open space			N/A
		Where external galleries are provided, they are more open than closed above the balustrade along their length			N/A
4G	Storage				
	4G–1	**Adequate, well designed storage is provided in each apartment**			
		In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:	•		
		At least 50% of the required storage is to be located within the apartment			
		Storage is accessible from either circulation or living areas	•		
		Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weather proof and screened from view from the street	•		
		Left over space such as under stairs is used for storage			N/A
	4G–2	**Additional storage is conveniently located, accessible and nominated for individual apartments**			
		Storage not located in apartments is secure and clearly allocated	•		
		Storage is provided for larger and less frequently accessed items, where practical	•		Storage rooms are located in the basement for larger storage items
		Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages so that allocated car parking remains accessible	•		Storage will not be designed to impede the car parking spaces.
		If communal storage rooms are provided they should be accessible from common circulation areas of the building			N/A
		Storage not located in an apartment is integrated into the overall building design and not visible from the public domain	•		Additional storage is located in the basement
4H	Acoustic Privacy				
	4H–1	**Noise transfer is minimised through the siting of buildings and building layout**			
		Adequate building separation is provided within the development and from neighbouring buildings / adjacent uses (also see section 2F Building separation and section 3F Visual Privacy)	•		
		Window and door openings are generally orientated away from noise sources	•		

Dwelling type	Storage size
Studio apartments	4m3
1 bedroom apart-ments	6m3
2 bedroom apart-ments	8m3
3 bedroom apart-ments	10m3

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		Noisy areas within buildings including building entries and corridors are located next to or above each other and quieter areas next to or above quieter areas	•		The floor plans are mainly typical throughout
		Storage, circulation areas and non-habitable rooms are located to buffer noise from external sources	•		Service cupboards and circulation areas are centrally located, with bedrooms sitting on the outside of the apartments and non- habitable spaces on the inside of the apartments.
		The number of party walls (walls shared with other apartments) are limited and are appropriately insulated	•		
		Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas are located at least 3m away from bedrooms	•		Plantrooms have been designed in the basement and garage doors are hidden below the apartments so that noise doesn't travel to the bedrooms of the apartments above. Mechanical equipment has been placed on the roof and active communal spaces are not near apartments / on the same level unless in a completely isolated area (L1)
	4H–2	**Noise impacts are mitigated through internal apartment layout and acoustic treatments**			
		Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions: · rooms with similar noise requirements are grouped together · doors separate different use zones · wardrobes in bedrooms are co-located to act as sound buffers	•		
		Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions: · double or acoustic glazing · acoustic seals · use of materials with low noise penetration properties · continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements	•		
4J	**Noise and Pollution**				
	4J–1	**In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings**			
		To minimise impacts the following design solutions may be used: · physical separation between buildings and the noise or pollution source · residential uses are located perpendicular to the noise source and where possible buffered by other uses · non-residential buildings are sited to be parallel with the noise source to provide a continuous building that shields residential uses and communal open spaces · Non-residential uses are located at lower levels vertically separating the residential component from the noise or pollution source. Setbacks to the underside of residential floor levels should increase relative to traffic volumes and other noise sources · Buildings should respond to both solar access and noise. Where solar access is away from the noise source, nonhabitable rooms can provide a buffer · Where solar access is in the same direction as the noise source, dual aspect apartments with shallow building depths are preferable (see figure 4J.4) · Landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry	•		

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		Achieving the design criteria in this Apartment Design Guide may not be possible in some situations due to noise and pollution. Where developments are unable to achieve the design criteria, alternatives may be considered in the following areas: · solar and daylight access · private open space and balconies · natural cross ventilation	•		Noted
	4J–2	**Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission**			
		Design solutions to mitigate noise include: · limiting the number and size of openings facing noise sources · providing seals to prevent noise transfer through gaps · using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens) · using materials with mass and/or sound insulation or absorption properties e.g. solid balcony balustrades, external screens and soffits	•		
4K	Apartment Mix				
	4K–1	**A range of apartment types and sizes is provided to cater for different household types now and into the future**			
		A variety of apartment types is provided	•		1Bed / 2 Bed / 3 Bed
		The apartment mix is appropriate, taking into consideration: · the distance to public transport, employment and education centres · the current market demands and projected future demographic trends · the demand for social and affordable housing · different cultural and socioeconomic group	•		Refer to area schedule
		Flexible apartment configurations, such as dual key apartments, are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households	•		Flexible apartment plans have been designed
	4K–2	**The apartment mix is distributed to suitable locations within the building**			
		Different apartment types are located to achieve successful facade composition and to optimise solar access. See figure 4A.3			
		Larger apartment types are located on the ground or roof level where there is potential for more open space and on corners where more building frontage is available	•		Larger 3 Bedroom apartments exist on each floor
4L	Ground Floor Apartments				
	4L–1	**Street frontage activity is maximised where ground floor apartments are located**			
		Direct street access should be provided to ground floor apartments			N/A
		Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include: · both street and foyer entrances to ground floor apartments · private open space is next to the street · doors and windows face the street			N/A
		Retail or home office spaces are located along street frontages			N/A

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for con-version into commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor ameni-ties for easy conversion			N/A
	4L–2	**Design of ground floor apartments delivers amenity and safety for residents**			
		Privacy and safety is provided without obstructing causal surveillance. Design solutions may include: · elevation of private gardens and terraces above the street level by 1m – 1.5m (see Figure 4L.4) · landscaping and private courtyards · window sill heights that minimise sight lines into apartments · integrating balustrades, safety bars or screens with the exterior design			N/A
		Solar access is maximised through: · high ceilings and tall windows · trees and shrubs that allow solar access in winter and shade in summer			N/A
4M	Facades				
	4M–1	**Building facades provide visual interest along the street respecting the character of the local area**			
		Design solutions for front building facades may include: · A composition of varied building elements · A defined base, middle and top of the buildings · Revealing and concealing certain elements · Changes in texture, material, detail and colour to modify the prominence of elements	•		
		Building services should be integrated within the overall façade	•		Downpipes will not be visible along with condensers.
		Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include: · Well composed horizontal and vertical elements · Variation in floor heights to enhance the human scale · Elements that are proportional and arranged in patterns · Public artwork or treatments to exterior blank walls · Grouping of floors or elements such as balconies and windows on taller buildings	•		
		Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights	•		
		Shadow is created on the façade throughout the day with building articulation, balconies and deeper window re-veals	•		
	4M–2	**Building functions are expressed by the façade**			
		Building entries should be clearly defined	•		Breaks in the façade highlight where the building entries exist
		Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height	•		
		The apartment layout should be expressed externally through façade features as party walls and floor slabs	•		A design excellence jury has endorsed the current design per the assessment and design process
4N	Roof Design				
	4N–1	**Roof treatments are integrated into the building design and positively respond to the street**			

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		Roof design relates to the street. Design solutions may include: · Special roof features and strong corners · Use of skillion or very low pitch hipped roofs · Breaking down the massing of the roof by using smaller elements to avoid bulk · Using materials or a pitched form complementary to adjacent buildings	•		Flat roofs have been used throughout the development. The roof design does not overpower in mass, as the form of the building is broken down with articulated breaks. The additional height of the 30% uplift on the North Building offers a greater transition in the scale of the two towers. This height difference delivers improved urban design and built form outcomes, with improved proportions.
		Roof treatments should be integrated with the building design. Design solutions may include: · Roof design proportionate to the overall building size, scale and form · Roof materials complement the building · Service elements are integrated	•		
	4N–2	**Opportunities to use roof space for residential accommodation and open space are maximised**			
		Habitable roof space should be provided with good levels of amenity. Design solutions may include: · Penthouse apartments · Dormer or clerestory windows · Openable skylights			Noted.
		Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations	•		
	4N–3	**Roof design incorporates sustainability features**			
		Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include: · The roof lifts to the north · Eaves and overhangs shade walls and windows from summer sun	•		Overhangs and deep balconies shade the walls in the summer
		Skylights and ventilation systems should be integrated into the roof design	•		
4O	**Landscape Design**				
	4O–1	**Landscape design is viable and sustainable**			
		Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating: · Diverse and appropriate planting · Bio-filtration gardens · Appropriately planted shading trees · Areas for residents to plant vegetables and herbs · Composting · Green roofs or walls	•		
		Ongoing maintenance plans should be prepared	•		
		Microclimate in enhanced by: · Appropriately scaled trees near the eastern and western elevations for shade · A balance of evergreen and deciduous trees to provide shading in summer and sunlight access in winter · Shade structures such as pergolas for balconies and courtyards	•		
		Tree and shrub selection considers size at maturity and the potential for roots to complete (see table 4)	•		
	4O–2	**Landscape design contributes to the streetscape and amenity**			

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		Landscape design responds to the existing site conditions including: · Changes of levels · Views · Significant landscape features including trees and rock outcrops	•		
		Significant landscape features should be protected by: · Tree protection zones (see figure 40.5) · Appropriate signage and fencing during construction	•		
		Plants selected should be endemic to the region and reflect the local ecology	•		
4P	Planting on Structures				
	4P–1	**Appropriate soil profiles are provided**			
		Structures are reinforced for additional saturated soil weight	•		
		Soil volume is appropriate for plant growth, considerations include: · Modifying depths and widths according to the planting mix and irrigation frequency · Free draining and long soil life span · Tree anchorage	•		
		Minimum soil standards for plant sizes should be provided in accordance with Table 5	•		
	4P–2	**Plant growth is optimised with appropriate selection and maintenance**			
		Plants are suited to site conditions, considerations include: · Drought and wind tolerance · Seasonal changes in solar access · Modified substrate depths for diverse range of plants · Plant longevity	•		
		A landscape maintenance plan is prepared			Noted.
		Irrigation and drainage systems respond to : · Changing site conditions · Soil profile and the planting regime · Whether rainwater, stormwater r recycled grey water is used	•		
	4P–3	**Planting on structure contributes to the quality and amenity of communal and public open spaces**			
		Building design incorporates opportunities for planting on structures. Design solutions may include: · Green walls with specialised lighting for indoor green walls · All design that incorporates planting · Green roofs, particularly where roofs are visible form public domain · Planter boxes Note: structures designed to accommodate green walls should be integrated into the building façade and consider the ability of the façade to change over time	•		
4Q	Universal Design				
	4Q–1	**Universal design features are included in apartment design to promote flexible housing for all community members**			

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		Developments achieve a benchmark of 20% of the total apartment incorporating the Liveable Housing Guideline's silver level universal design features	•		All apartments incorporate the Liveable Housing Guideline's silver level universal design features
	4Q–2	**A variety of apartments with adaptable designs are provided**			
		Adaptable housing should be provided in accordance with the relevant council policy	•		
		Design solutions for adaptable apartments include: · Convenient access to communal and public areas · High level of solar access · Minimal structural change and residential amenity loss when adapted · Larger car parking spaces for accessibility · Parking titled separately from apartments or shared car parking arrangements	•		Noted.
	4Q–3	**Apartment layouts are flexible and accommodate a range of lifestyle needs**			
		Apartments design incorporates flexible design solutions which may include: · Rooms with multiple functions · Dual master bedroom apartments with separate bathrooms · Larger apartments with various living space options · Open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom	•		The area of the apartments are generally larger than the minimums suggested in the ADG
4R	**Adaptive Reuse**				
	4R–1	**New additional to existing buildings are contemporary and complementary and enhance an area's identity and sense of place**			
		Design solutions may include: · New elements to align with the existing building · Additions that complement the existing character, siting, scale, proportion, pattern form and detailing · Use of contemporary and complementary materials, finishes, textures and colours			N/A
	4R–2	**Adapted buildings provide residential amenity while not precluding future adaptive reuse**			
		Design features should be incorporated sensitively into adapted buildings to make up for any physical limitations, to ensure residential amenity is achieved. Design solutions may include: · Generously sized voids in deeper buildings · Alternative apartment types when orientation is poor · Using additions to expand the existing building envelope			N/A
		Some proposals that adapt existing buildings may not be able to achieve all of the design criteria in this Apartment Design Guide. Where developments are unable to achieve the design criteria, alternatives could be considered in the following areas: · Where there are existing higher ceilings, depths of habitable rooms could increase subject to demonstrating access to natural ventilation, cross ventilation (when applicable) and solar an daylight access (see also sections 4A Solar and daylight access and 4B Natural ventilation) · Alternatives to providing deep soil where less than the minimum requirement is currently available on the site · Building and visual separation – subject to demonstrating alternative design approaches to achieving privacy · Common circulation · Car parking · Alternative approaches to private open space and balconies			N/A
4S	**Mixed Use**				

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
	4S–1	**Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement**			
		Mixed use development should be concentrated around public transport and centres			N/A
	4S–2	**Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents**			
		Residential circulation areas should be clearly defined. Design solutions may include: · Residential entries are separated from commercial entries and directly accessible from the street · Commercial service areas are separated from residential components · Residential car parking and communal facilities are separated or secured · Concealment opportunities are avoided			N/A
		Landscape communal open space should be provided at podium or roof levels	•		All sites have the communal open space at ground floor which is appropriate for the green field nature of the precinct as well as to the rooftop
4T	Awnings and Signage				
	4T–1	**Awnings are well located and complement and integrate with the building design**			
		Awnings should be located along streets with high pedestrian activity and active frontages	•		
		A number of the following design solutions are used: · Continuous awnings are maintained and provided in areas with existing pattern · Height, depth, material and form complements the existing street character · Protection from the sun and rain is provided · Awnings are wrapped around the secondary frontages of corner sites · Awnings are retractable in areas without an established pattern	•		
		Awnings should be located over building entries for building address and public domain amenity	•		
		Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure			N/A
		Gutters and down pipes should be integrated and concealed	•		
		Lighting under awnings should be provided for pedestrian safety	•		
	4T–2	**Signage responds to the context and desired streetscape character**			
		Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development	•		Noted
		Legible and discrete way finding should be provided for larger developments	•		Noted
		Signage is limited to being on and below awnings and in single façade sign on the primary street frontage	•		Noted
4U	Energy Efficiency				
	4U–1	**Development incorporates passive environmental design**			
		Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access)	•		
		Well located, screened outdoor areas should be provided for clothes drying	•		Where possible. Solid balcony upstands have been provided to allow balcony drying facilities to be screened from the public domain
	4U–2	**Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer**			

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		A number of the following design solutions are used: · The use of smart glass or other technologies on north and west elevations · Thermal mass in the floors and walls of north facing rooms in maximised · Polished concrete floor, tiles, or timber rather than carpet · Insulated roofs, walls and floors and seals on window and door openings · Overhangs and shading devices such as awnings, blinds and screens	•		
		Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement)	•		
	4U–3	**Adequate natural ventilation minimises the need for mechanical ventilation**			
		A number of the following design solution are used: · Rooms with similar usage are grouped together · Natural cross ventilation for apartments is optimised · Natural ventilation is provided to all inhabitable rooms and as many non-habitable rooms, common areas and circulation spaces as possible	•		
4V	**Water Management and Conservation**				
	4V–1	**Potable water use is minimised**			
		Water efficient fittings, appliances and wastewater reuse should be incorporated	•		Refer BASIX certificate
		Apartments should be individually metered	•		
		Rainwater should be collected, stored and reused on site	•		Refer BASIX certificate
		Drought tolerant, low water use plants should be used within landscaped areas	•		Refer landscape design
	4V–2	**Urban stormwater is treated on site before being discharged to receiving waters**			
		Water sensitive urban design systems are designed by a suitably qualified professional	•		Noted.
		A number of the following design solutions are used: · Runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation · Porous and open paving materials is maximised · On site stormwater and infiltration, including bio-retention systems such as rain gardens or street tree pits	•		Noted.
	4V–3	**Flood management systems are integrated into site design**			
		Detention tanks should be located under paved areas, driveways or in basement car parks	•		Detention tanks are located off site as they deal with the site run off for the whole precinct
		On large sites parks or open spaces are designed to provide temporary on site detention basins			N/A
4W	**Waste Management**				
	4W–1	**Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents**			
		Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park	•		Storage of rubbish bins is within the basement levels with collection being up on the street. Refer to the OWMP - Waste Management Report.
		Waste and recycling storage areas should be well ventilated	•		
		Circulation design allows bins to be easily manoeuvred between storage and collection points	•		
		Temporary storage should be provided for large bulk items such as mattresses	•		A bulky items storage room, that is separate from the waste rooms, has been provided in each basement.

ADG response table

Part No.	Objective No.	Objective Design criteria Design guidance	Complies Yes	Complies No	Notes
		A waste management plan should be prepared	•		
	4W–2	**Domestic waste is minimised by providing safe and convenient source separation and recycling**			
		All dwellings should have a waste and recycling cupboard or temporary storage area of sufficient size to hold two days' worth of waste and recycling	•		Kitchens will incorporate waste storage in the layout which will then be taken to the waste chutes in the shared lobbies.
		Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core	•		
		For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses			N/A
		Alternative waste disposal methods such as composting should be provided	•		Noted.
4X	Building Maintenance				
	4X–1	**Building design detail provides protection from weathering**			
		A number of the following design solutions are used: · Roof overhangs to protect walls · Hoods over windows and doors to protect openings · Detailing horizontal edges with drip lines to avoid staining of surfaces · Methods to eliminate or reduce planter box leaching · Appropriate design and material selection for hostile locations	•		
	4X–2	**Systems and access enable ease of maintenance**			
		Window design enables cleaning from the inside of the building	•		There are only a few windows that are not accessed from a balcony and of the ones that can't be accessed the openable section of the window will be generally cleaned by the building management
		Building maintenance systems should in incorporated and integrated into the design of the building form, roof and façade	•		A roof hatch has been allowed for in order to gain access to the roof where condensers are located.
		Design solutions do not require external scaffolding for maintenance access	•		
		Manually operated systems such as blinds, sunshades and curtains are used in preference to mechanical systems	•		
		Centralised maintenance, services and storage should be provided for communal open space areas within the building	•		
	4X–3	**Material selection reduces ongoing maintenance costs**			
		A number of the following design solutions are used: · Sensors to control artificial lighting in common circulation and spaces · Natural materials that weather well and improve with time such as face brickwork · Easily cleaned surfaces that are graffiti resistant · Robust and durable materials and finished are used in locations which receive heavy wear and tear, such as common circulation areas and lift interiors	•		

Site Analysis Checklist

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Documentation	Required information	Provided	
		Yes	No
Site location	Broad map or aerial photo showing site location in relation to surrounding centres, shops, civic/community facilities and transport	•	
Aerial photograph	Colour aerial photographs of site in its context	•	
Local context plan	Plan(s) of the existing features of the wider context including adjoining properties and the other side of the street, that show:	•	
	· pattern of buildings, proposed building envelopes, setbacks and subdivision pattern	•	
	· land use and building typologies of adjacent and opposite buildings in the street	•	
	· movement and access for vehicles, servicing, pedestrians and cyclists	•	
	· topography, landscape, open spaces and vegetation	•	
	· significant views to and from the site	•	
	· significant noise sources in the vicinity of the site, particularly vehicular traffic, train, aircraft and industrial noise	•	
Site context and survey plan	Plan(s) of the existing site based on a survey drawing showing the features of the immediate site including:	•	
	· boundaries, site dimensions, site area, north point	•	
	· topography, showing relative levels and contours at 0.5 metre intervals for the site and across site boundaries where level changes exist, any unique natural features such as rock outcrops, watercourses, existing cut or fill, adjacent streets and sites	•	
	· location and size of major trees on site and relative levels where relevant, on adjacent properties and street trees	•	
	· location and use of existing buildings or built features on the site	•	
	· location and important characteristics of adjacent public, communal and private open spaces	•	
	· location and height of existing windows, balconies, walls and fences on adjacent properties facing the site, as well as parapet and ridge lines	•	
	· pedestrian and vehicular access points, driveways and features such as service poles, bus stops, fire hydrants etc.	•	
	· location of utility services, including easements and drainage	•	
	· location of any other relevant features	•	

Documentation	Required information	Provided	
		Yes	No
Streetscape elevations and sections	Photographs or drawings of the site in relation to the streetscape and along both sides of any street that the development fronts, that show:	•	
	· overall height (storeys, metres) and important parapet/datum lines of adjacent buildings	•	
	· patterns of building frontage, street setbacks and side setbacks	•	
	· planned heights	•	
Analysis	Plan that synthesises and interprets the context, streetscape and site documentation into opportunities and constraints that generate design parameters, including the following information:	•	
	· orientation and any overshadowing of the site and adjoining properties by neighbouring structures (excludes vegetation). The winter sun path should also be shown between 9 am and 3 pm on 21 June	•	
	· identification of prevailing wind	•	
	· the geotechnical characteristics of the site and suitability of the proposed development	•	
	· the public domain interface and street setback	•	
	· relationship to and interface with adjacent properties, including side and rear setbacks	•	
	· ventilation for the subject site and immediate neighbours	•	
	· proposed building footprint location	•	
	· retained and proposed significant trees and deep soil zones	•	
	· proposed communal open space	•	
	· proposed car park footprint and depth	•	
	· proposed building entries	•	
	· supporting written material - this should include technical advice from specialists involved in the development process including landscape architects, arborists, geotechnical engineers and/or contamination specialists where applicable	•	

Development Application Checklist

Documentation	Required information	Provided	
		Yes	No
Development details	A summary document that provides the key details of the development proposal. It contains information such as the:	•	
	· floor space ratio of the development	•	
	· number, mix, size and accessibility of apartments	•	
	· number of car parking spaces for use (residential, retail, accessible, visitor etc.)	•	
	· percentage of cross ventilation and daylight compliance	•	
Statement of Environmental Effects	In addition to the consent authorities requirements:		
	· An explanation of the design in terms of the design quality principles set out in Schedule 1 of State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development	•	
	· If the proposed development is within an area where the built form and density is changing, statements about how the proposed development responds to the existing context and contributes to desired future character of the area		
	· Description of how the proposed development achieves the relevant objectives and design criteria of the Apartment Design Guide	•	
Site analysis	Prepared consistent with Appendix 1 of the Apartment Design Guide	•	
Site plan	A scale drawing showing:		
	· any proposed site amalgamation or subdivision		•
	· location of any proposed buildings or works in relation to setbacks, building envelope controls and building separation dimensions	•	
	· proposed finished levels of land in relation to existing and	•	
	· proposed buildings and roads	•	
	· pedestrian and vehicular site entries and access	•	
	· interface of the ground floor plan with the public domain and	•	
	· with open spaces within the site	•	
	· areas of communal open space and private open space	•	
	· indicative locations of planting and deep soil zones including retained or proposed significant trees	•	
Landscape plan	A scale drawing showing:		
	· the building footprint of the proposal including pedestrian, vehicle and service access	•	
	· trees to be removed shown dotted	•	
	· trees to remain with their tree protection zones (relative to the proposed development)	•	
	· deep soil zones and associated tree planting	•	
	· areas of planting on structure and soil depth	•	
	· proposed planting including species and size	•	
	· details of public space, communal open space and private open space	•	
	· external ramps, stairs and retaining wall levels	•	
	· security features and access points	•	
	· built landscape elements (fences, pergolas, walls, planters and water features)	•	
	· ground surface treatment with indicative materials and finishes	•	
	· site lighting		•
	· water management and irrigation concept design		•
	· external ramps, stairs and retaining wall levels	•	
Floor plans	A scale drawing showing:		
	· all levels of the building including roof plan	•	
	· layout of entries, circulation areas, lifts and stairs, communal spaces, and service rooms with key dimensions and RLs shown	•	
	· apartment plans with apartment numbers and areas, all fenestration, typical furniture layouts for each apartment type, room dimensions and intended use and private open space dimensions	•	
	· accessibility clearance templates for accessible units and common spaces	•	
	· visual privacy separation shown and dimensions where necessary	•	
	· vehicle and service access, circulation and parking	•	
	· storage areas	•	
Elevations	· A scale drawing showing:		
	· proposed building height and RL lines	•	
	· building height control	•	
	· setbacks or envelope outline	•	
	· building length and articulation	•	
	· the detail and features of the facade and roof design	•	

Development Application Checklist

Documentation	Required information	Provided	
		Yes	No
	· any existing buildings on the site		•
	· building entries (pedestrian, vehicular and service)	•	
	· profile of buildings on adjacent properties or for 50m in each direction, whichever is most appropriate	•	
Sections	A scale drawing showing:		
	· proposed building height and RL lines	•	
	· building height control	•	
	· setbacks or envelope outline	•	
	· adjacent buildings	•	
	· building circulation	•	
	· the relationship of the proposal to the ground plane, the street and open spaces particularly at thresholds	•	
	· the location and treatment of car parking	•	
	· the location of deep soil and soil depth allowance for planting on structure (where applicable)	•	
	· building separation within the development and between neighbouring buildings		•
	· ceiling heights throughout the development	•	
	· detailed sections of the proposed facades	•	
	· the location and treatment of car parking	•	
Solar access study	Where required, graphic documentation at winter solstice (21 June) at a minimum of hourly intervals showing:		
	· number of hours of solar access to the principal communal open space	•	
	· number of hours of solar access to units within the proposal and tabulation of results	•	
	· overshadowing of existing adjacent properties and overshadowing of future potential development where neighbouring sites are planned for higher density	•	
	· elevation shadows if shadow is likely to fall on neighbouring windows, openings or solar panels		•
Cross ventilation study	· Where required, graphic documentation of unobstructed path of air movement through dual aspect apartments and tabulation of results	•	
Material and finishes board	· A sample board of the proposed external materials, finishes and colours of the proposal, keyed to elevations		•

Documentation	Required information	Provided	
		Yes	No
Illustrative views	Photomontages or similar rendering or perspective drawings illustrating the proposal in the context of surrounding development. Note: Illustrative views need to be prepared using a perspective that relates to the human eye. Where a photomontage is prepared, it should use a photo taken by a full frame camera with a 50mm lens and 46 degree angle of view	•	
Models	A three dimensional computer generated model showing views of the development from adjacent streets and buildings	•	
	A physical model that shows the massing of the proposal that includes relevant context (particularly for developments of 20 apartments or more, or on contentious sites) if required by the consent authority		•

Appendix - Architectural Documentation

Area Schedule

Summary

Site area		2,480 sqm + 153 sqm Osmund Ln
Residential		10,821 sqm
Retail		467 sqm
Total GFA		11,288 sqm
1 bedroom	2	2%
2 bedroom	35	41%
3 bedroom	48	56%
(20% adaptable)	17	
Total apartments	85	
Car parking	138	
Bicycle spaces	97	
Solar	86%	
Cross vent	87%	

Communal Open Space Calculations

Ground Level	Nelson St Plaza	364	sqm	
Level 01	Gym & Swimming Pool	152	sqm	
Rooftop	Pool + Communal Space	230	sqm	
Total		746	sqm	(min to achieve 25% of site area)

Floor Space Ratio Calculations

Site Area (sqm)	2,480.8	
Base FSR	3.50	:1
Base GFA	**8,683**	
30% GFA (In-fill Affordable Housing)	**2,605**	
Target GFA	**11,288**	**sqm**
Proposed GFA	11,288	sqm
Proposed FSR	4.55	:1
Difference	*0*	*sqm*
NSA:GFA efficiency	92%	

GFA Breakdown

Residential	10821	sqm
Retail	467	sqm
Totals	11288	sqm

Car Parking Requirements (Proposed)

	Basement 1	Basement 2	Basement 3	Basement 4	Totals
Retail/staff	9				**9**
Carshare	1				**1**
Visitors		4	4	4	**12**
Residential	23	36	35	22	**116**
TOTALS	**33**	**40**	**39**	**26**	**138**
Includes:					
Carwash Bay	1				1
Electric Vehicle	2	2	2	1	7
Adaptable Carpark (20%)	6	10	8	4	28
Motorcycle					45

Location	Height (M)	AHD	Apartment Numbers										Building Areas					
Building A			1 Bed	1 Bed+Study	2 Bed	2 Bed+Study	3 Bed	4 Bed	Totals	Affordable	Solar	Cross Vent	Retail	Gym & Swimming Pool	Gross Floor Area (sqm)	Nett Sale Area (sqm)	Apt Balcony (sqm)	Effic. NSA/GFA
Ground Level	1.1	79.8											275		35	0	-	-
Level 01	3.1	80.9			1				1	1	1	0			105	87	20	83%
Level 02	3.1	84			3		2		5	5	4	4			528	484	200	92%
Level 03	3.1	87.1			3		2		5	2	4	4			528	484	145	92%
Level 04	3.1	90.2			3		2		5		4	4			528	484	145	92%
Level 05	3.1	93.3			3		2		5		4	4			528	484	145	92%
Level 06	3.1	96.4			3		2		5		4	4			528	484	145	92%
Level 07	3.1	99.5			3		2		5		4	4			528	484	145	92%
Level 08	3.1	102.6			3		2		5		4	4			528	484	145	92%
Level 09	3.1	105.7			3		2		5		4	4			528	484	145	92%
Level 10	3.4	108.8			3		2		5		4	4			528	484	145	92%
Level 11	3.3	112.2					1		1		1	1		230	251	218	92	87%
Level 12	3.3	115.5					1		1		1	1			243	240	126	99%
Level 13	3.3	118.8					1		1		1	1			243	240	130	99%
Roof		122.1													-	-	-	-
Total Height	42.3																	
Sub Total			0	0	28	0	21	0	49	8	40	39	275	230	5629	5141	1728	91%
Total			**49**															
Mix			0%	0%	57%	0%	43%	0%		16%	82%	80%						
Building B																		
Ground Level	3.5	78.5											106		33	-	-	-
Level 01	3.1	82	2		1				3	3	3	2		133	245	195	64	80%
Level 02	3.1	85.1			2		1		3	3	2	3			322	294	113	91%
Level 03	3.1	88.2			2		1		3	3	2	3			322	294	113	91%
Level 04	3.1	91.3			2		1		3		2	3			322	294	113	91%
Level 05	3.1	94.4					2		2		2	2			324	303	104	94%
Level 06	3.1	97.5					2		2		2	2			324	303	104	94%
Level 07	3.1	100.6					2		2		2	2			324	303	104	94%
Level 08	3.1	103.7					2		2		2	2			324	303	104	94%
Level 09	3.1	106.8					2		2		2	2			324	303	104	94%
Level 10	3.2	109.9					2		2		2	2			324	303	104	94%
Level 11	3.2	113.1					2		2		2	2			334	316	92	95%
Level 12	3.2	116.3					2		2		2	2			334	316	92	95%
Level 13	3.2	119.5					2		2		2	2			334	316	92	95%
Level 14	3.2	122.7					2		2		2	2			334	316	92	95%
Level 15	3.2	125.9					2		2		2	2			334	316	92	95%
Level 16	3.4	129.1					2		2		2	2			334	316	92	95%
Roof		132.5													-	-	-	-
Total Height	54																	
Sub Total			2	0	7	0	27	0	36	9	33	35	106	133	5192	4791	1579	92%
Total			**36**															
Mix			6%	0%	19%	0%	75%	0%		25%	92%	97%	100%					
Building C																		
Ground Level	4.5	79.6							0				86		-			

Project Summary	1 Bed	1 Bed+Study	2 Bed	2 Bed+Study	3 Bed	4 Bed	Totals	Affordable	Solar	Cross Vent	Retail	Gym & Swimming Pool	Residential GFA	Residential NSA	Residential Balcony	Effic. NSA/GFA
Totals	2	0	35		48	0	85	17	73	74	467	363	10821	9932	3307	92%
Total Apartments	**85**															
20% Adaptable			17													
% Mix	2%		41%		56%			20%	86%	87%						

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Level 2, 490 Crown Street
Surry Hills NSW 2010
Australia
T. 61 2 9380 9911
architects@sjb.com.au
sjb.com.au