

Attachment A3

Proponent Planning Proposal Request – Part A – Urban Design Study

44-78 Rosehill Street, Redfern



Urban Design Report V2



Prepared for
Journal Student Living Pty Ltd

Brookfield Pty Ltd

Issued
November 2025

Gadigal Country
Level 2, 490 Crown Street
Surry Hills NSW 2010

T 61 2 9380 9911
E sydney@sjb.com.au
W sjb.com.au

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.

Issued	
v01	14.11.2023
v02	18.11.2023

Contents

01	Acknowledgement of Country	2	04	Design response	23	Indicative mezzanine plan	53	
	Introduction	4		Existing LEP envelope	24	Indicative level 01-02 plan	54	
				Key moves	25	Indicative level 03 plan	55	
				Proposed envelope	30	Indicative level 04 plan	56	
				Comparison of envelopes	31	Indicative roof plan	57	
				Envelope sections	32	Indicative north-south section	58	
02	Strategic context	7	05	Solar testing	33	Indicative east-west section	59	
	Policy review	8		Solar impact on surroundings	34	Height of building analysis	62	
	Case for change	9		Shadow analysis	35	Indicative typical apartment	63	
	Existing LEP planning controls	10		Solar access to open space	36	Deep soil and landscape	64	
	Applicable DCP controls	11		Impact on adjoining properties	37	08	Proposed LEP amendments	65
	Planning envelope	12		Interpreting guidelines	38		Proposed amendments to LEP Floor Space	
03	Project evolution	13		Analysis of existing conditions	39	Ratio Controls	66	
	Site analysis	14		Solar impact under proposed conditions	40	Proposed amendments to LEP Height of		
	Site photos	15	06	Architectural concept	41	Building Controls	67	
	Character	16		Building form	42	09	Appendix 1	68
	Movement and access	17		Colour and details	46			
	Height and built form	17						
	Land use	18	07	Reference scheme	47			
	Topography	18		GBA breakdown	48			
	Streetscape analysis	19		GFA breakdown	49			
	Constraints	20		Indicative lower ground floor plan	50			
	Opportunities	21		Indicative ground floor plan	51			
	Planning and place summary	22		Journal Student Living assets	52			

Executive summary

This urban design report has been prepared by SJB on behalf of Journal Student Living Pty Ltd in support of the Planning Proposal for 44-78 Rosehill Street, Redfern, which seeks amendments to the current Sydney Local Environmental Plan (LEP) 2012 controls. The report provides the design rationale underpinning the proposed built form, including changes to Floor Space Ratio (FSR), Height of Buildings (HOB) and associated urban design outcomes.

The purpose of this report is to demonstrate that the proposed amendments are well-considered, contextually responsive, and consistent with the strategic vision for the area. It sets out how the proposal contributes to the evolution of the Innovation Corridor as a vibrant, well-connected mixed-use precinct, aligning with both state and local strategic planning objectives.

The report provides all relevant information required to support the Planning Proposal, including:

- An introduction to the site, its context and the strategic drivers in the local area
- A detailed understanding of the local context and analysis of the design implications, summarised in an opportunities and constraints diagram.
- 121 Key design principles that respond to the existing street character and inform the future character, quality of the proposed development and underpin the building design
- A reference scheme that illustrates how a building could be realised under the proposed planning controls, demonstrating the feasibility and design integrity of the proposed amendments.

Together, these components establish a clear urban design framework that ensures the proposed changes deliver a high-quality built form outcome, enhance the public domain, and contribute positively to the character and functionality of the surrounding precinct.



Artist's impression of the proposal. View from Rosehill Street looking north

Introduction

The study area

The subject site is located at 44-78 Rosehill Street, Redfern, within the City of Sydney Local Government Area (LGA). It is situated within a transitioning urban context, between the large-scale commercial and dining precinct of South Eveleigh and the fine-grain residential area of Redfern. The immediate surrounds comprise a diverse mix of building typologies and land uses, reflecting the area’s evolving character within the broader Innovation Corridor.

The site is currently occupied by light industrial and commercial uses operating within several two-storey, large-scale buildings. It is located amongst a variety of terraces and low-rise residential apartments along Cornwallis Street and Margaret Street, contributing to a fine-grain streetscape.

To the east, Gibbons Street defines a more urban edge, characterised by mid-rise residential apartment buildings along the south and recent high-rise mixed-use developments.

This mix of built forms signifies the areas potential to accommodate redevelopment, spurred on by the area’s strategic growth and proximity to key transport nodes.

The site benefits from excellent connectivity, with multiple public transport options within walking distance, including Redfern Station (300 metres north) providing direct rail access to the Sydney CBD and surrounding suburbs, and Waterloo Metro Station (600 metres south) enhancing access to the broader metropolitan network.

Pedestrian and cycling links along Gibbons and Cornwallis Streets further strengthen local accessibility and integration with nearby open spaces, including Gibbons Street Reserve and Daniel Dawson Reserve.

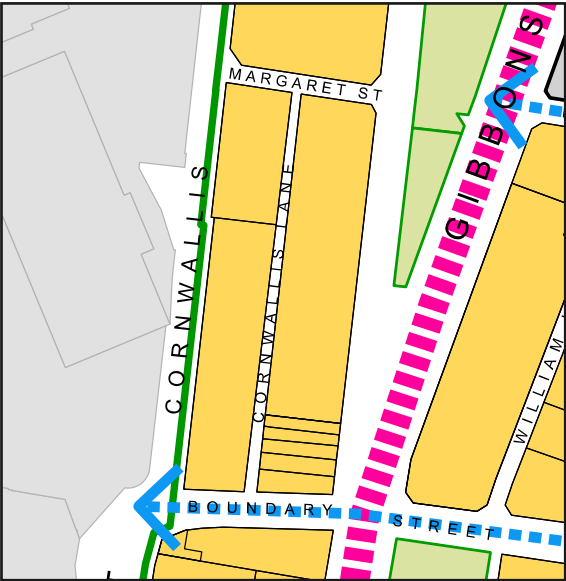
Overall, the site’s location positions it as a critical interface within a significant urban renewal area, offering an opportunity to reinforce the corridor’s role as a vibrant, well-connected, and mixed-use precinct within the inner south of Sydney.



Location plan

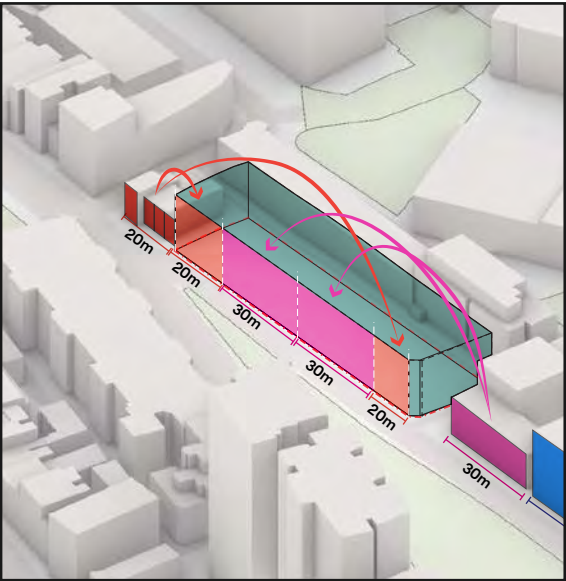
Structure of this report

This Planning Proposal seeks to amend the existing planning controls applying to 44-78 Rosehill Street, Redfern, with the aim of unlocking the site’s development potential in a way that is contextually responsive and strategically aligned with the broader vision for the precinct.



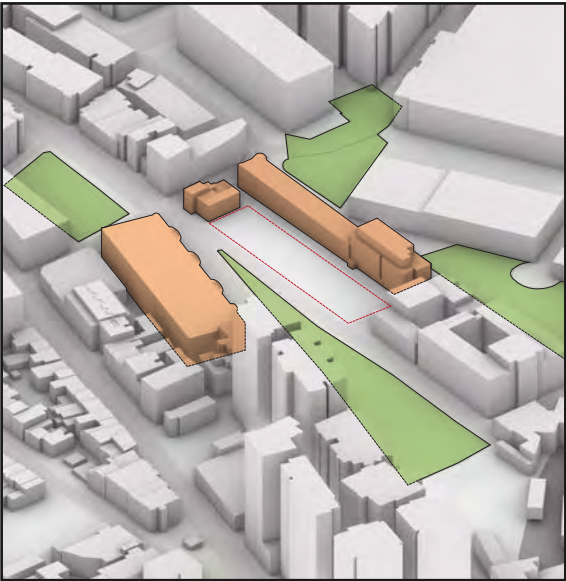
123 Strategic context and site analysis

The site’s position within the Redfern Innovation Corridor and proximity to transport, education, and employment hubs informed a design that leverages these connections. The analysis identified opportunities for increased density, activation, and improved connectivity, guiding a contextually responsive built form aligned with the Botany Road Precinct Urban Strategy.



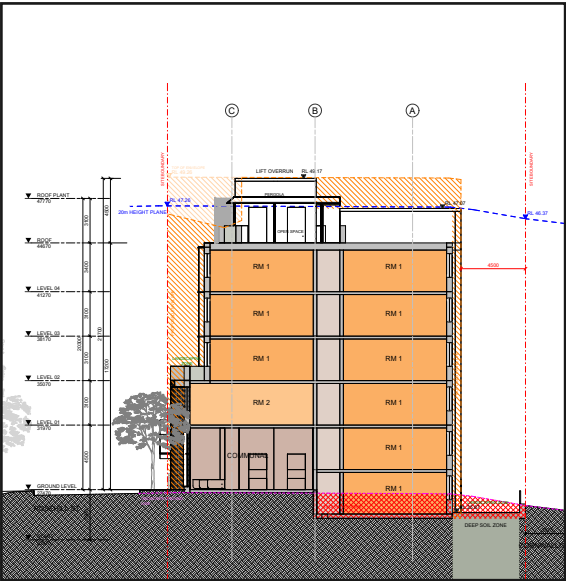
Design response

The proposed framework responds to the site’s context, opportunities, and constraints through active frontages, green rooftops and appropriate setbacks, achieving a balanced, place-based outcome that enhances the public domain.



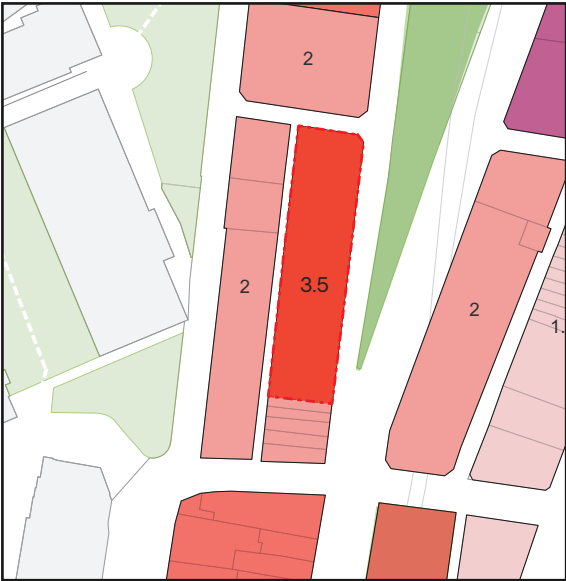
Solar testing

Comprehensive solar testing, including Eye-of-Sun analysis, confirms the proposal minimises overshadowing to surrounding properties and open spaces while optimising solar access and amenity within the site.



Proposed scheme

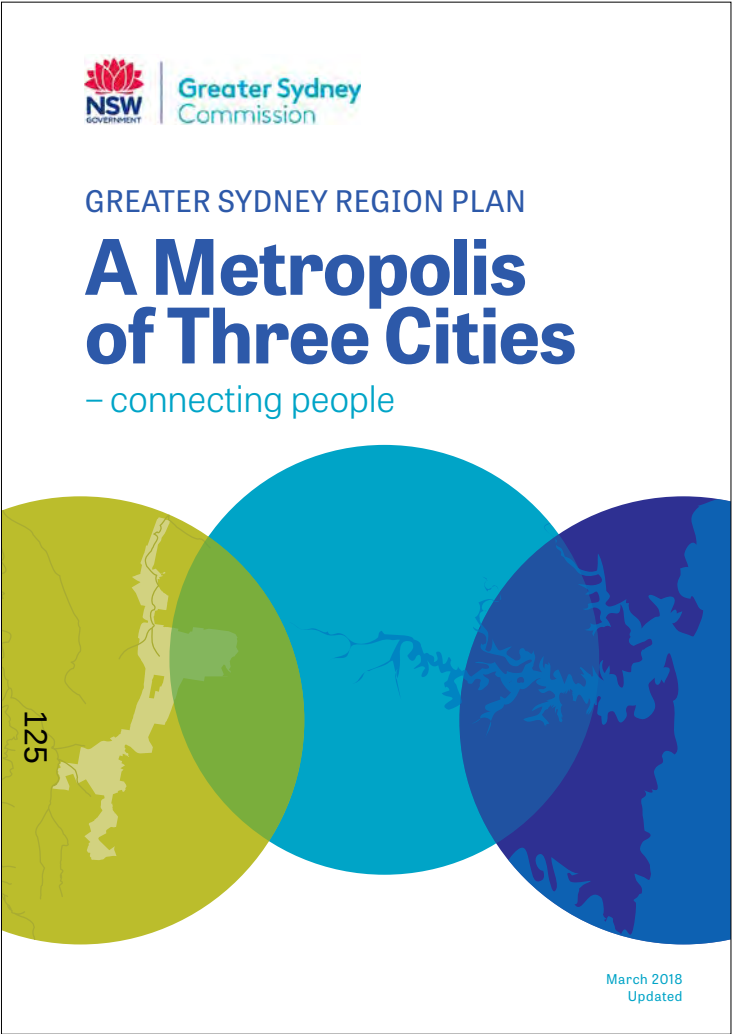
A reference scheme demonstrates the feasibility and design quality of the proposed controls, illustrating how the revised envelope delivers a high-quality, contextually appropriate development aligned with the precinct’s strategic vision.



Recommendations

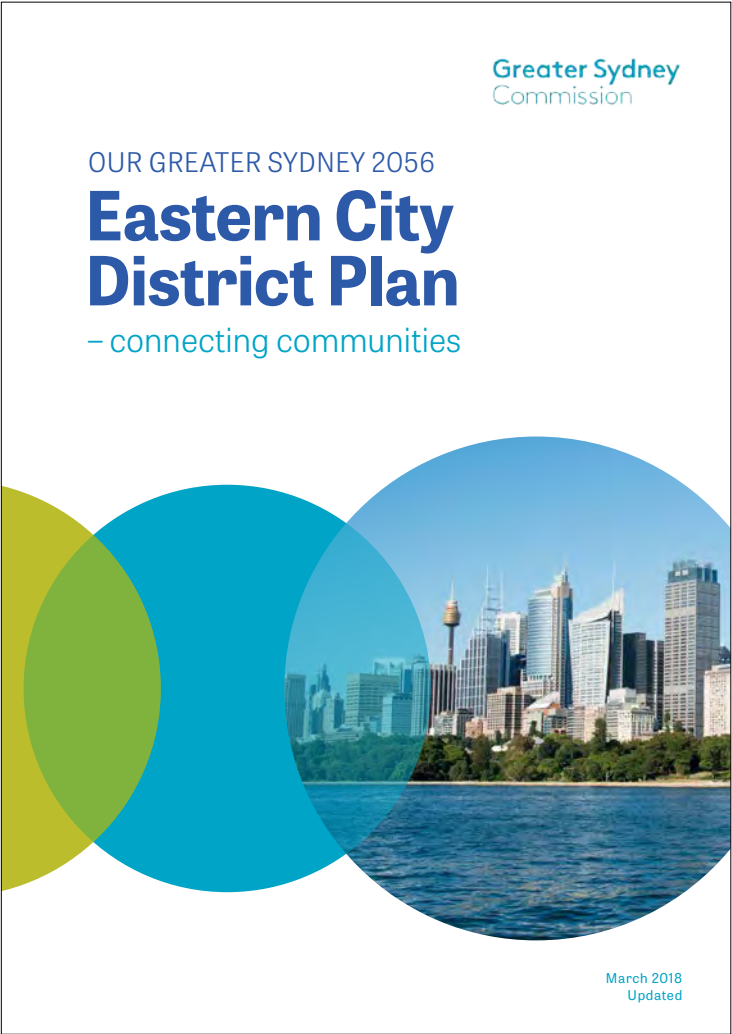
Ultimately, this Planning Proposal is seeking an amendment of existing planning controls. The recommended changes to the controls are as follows:

- An increase in FSR from 2:1 to 3.5:1 across the gross site area.
- An increase in maximum building height from 18 metres to 20 metres.



Greater Sydney Region Plan

- The plan envisages Greater Sydney is built on a vision for three integrated and connected Cities where most residents live within 30 minutes of jobs, education and health facilities, services and great places.
- One of the three cities, ‘the Eastern Harbour City’, aims to build on its recognised economic strength and address liveability and sustainability.
- Redfern is located within the ‘Innovation Corridor’ which supports the growth of tertiary education and research sectors.
- Objective 11, ‘Housing is more diverse and affordable’ advocates for purpose-built accommodation close to jobs, education and services, specifically for students.
- Objective 18, ‘Harbour CBD is stronger and more competitive’ includes the surrounds of the Sydney CBD as a hub for tertiary education and innovation, reinforcing demand for nearby student housing.



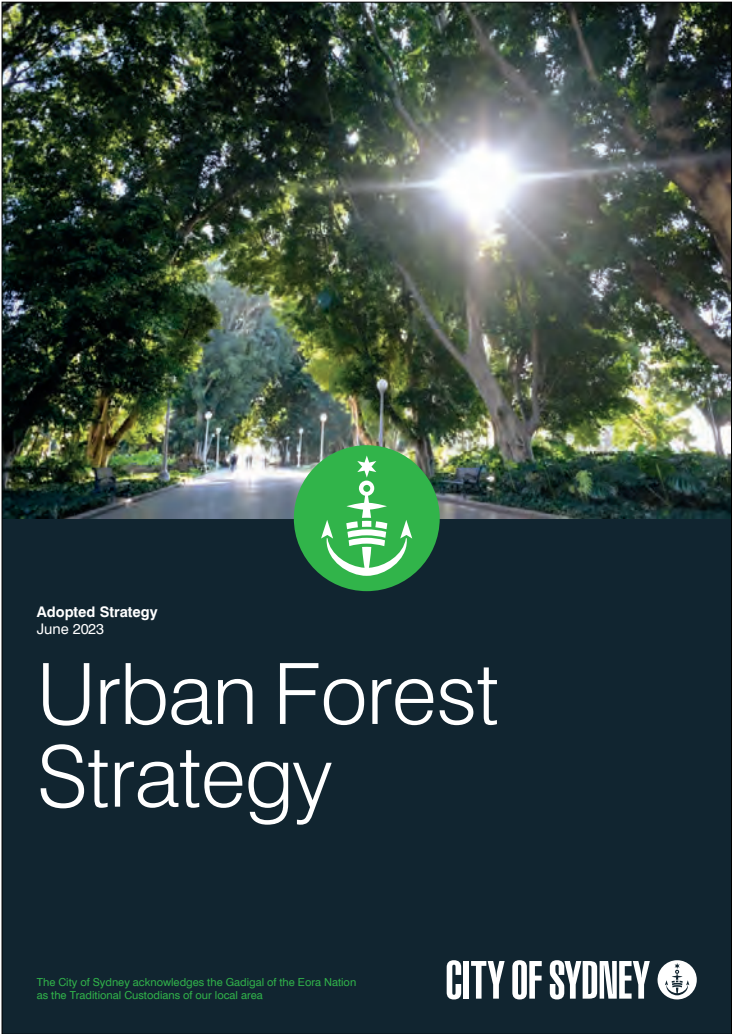
Eastern City District Plan

- The City Plan expands on the Region Plan with Planning priority E5: ‘Providing housing supply, choice and affordability, with access to jobs, services and public transport’. The Plan promotes higher density housing near transport hubs, such as Redfern Station, to reduce travel times and support sustainable transport.
- Planning priority E7: ‘Growing a stronger and more competitive Harbour CBD’ considers the Camperdown-Ultimo health and education precinct and focusses on supporting its growth.



City of Sydney Local Strategic Planning Statement

- The LSPS sets out the 20 year vision for land use planning in the city and the planning priorities and actions needed to achieve the vision.
- The site is located in the ‘City Fringe’ and south of Central Sydney. It is within the Redfern Street village which features a range of historic residential areas and new high-density residential developments.
- Significant capacity for development has been identified for the Redfern Street village, which can be supported by the existing infrastructure in the area, such as Redfern and Waterloo Stations.



City of Sydney Urban Forest Strategy

- The City of Sydney Urban Forest Strategy outlines the city’s approach to enhancing its urban forest through increased tree canopy cover, enhanced tree diversity, equitable distribution and sustainable management.
- Locating deep soil planting zones within private sites can accommodate large canopy trees and contribute to achieving citywide canopy targets of 23% by 2030.
- Explore opportunities for rooftop greening to supplement canopy in high density areas.

Case for change

This proposal seeks an increase to the FSR and Height of Buildings controls to enable the delivery of purpose-built student accommodation (PBSA) in a highly accessible and strategically significant location.

Need for Purpose-Built Student Housing

Sydney faces a well-documented shortage of affordable, high-quality student housing. The site's proximity to major tertiary institutions - including the University of Sydney, UTS, and TAFE NSW Ultimo — makes it ideally suited for PBSA. Increasing the FSR will allow for an efficient, viable development that delivers a meaningful supply of student dwellings while maintaining strong design and amenity outcomes.

Strategic Location and Connectivity

The site benefits from exceptional public transport access, located 300m from Redfern Station and 600m from the future Waterloo Metro Station. This connectivity supports sustainable, car-free living and aligns with State and Local objectives for higher-density development around key transport nodes.

Access to Amenity and Open Space

The site is well-served by nearby shopping, dining, and community facilities along Regent and Redfern Streets, and is within walking distance of Gibbons Street Reserve, Daniel Dawson Reserve, and Prince Alfred Park. These amenities create a liveable environment well-suited to student needs.

Alignment with Strategic Vision

Located within the Innovation Corridor, the site supports the City of Sydney's vision for a diverse, mixed-use precinct that fosters education, innovation, and creative industries. The proposed increase in FSR optimises land use in a growth area, contributing to housing diversity, urban vitality, and the evolution of Redfern as a well-connected, inclusive precinct.





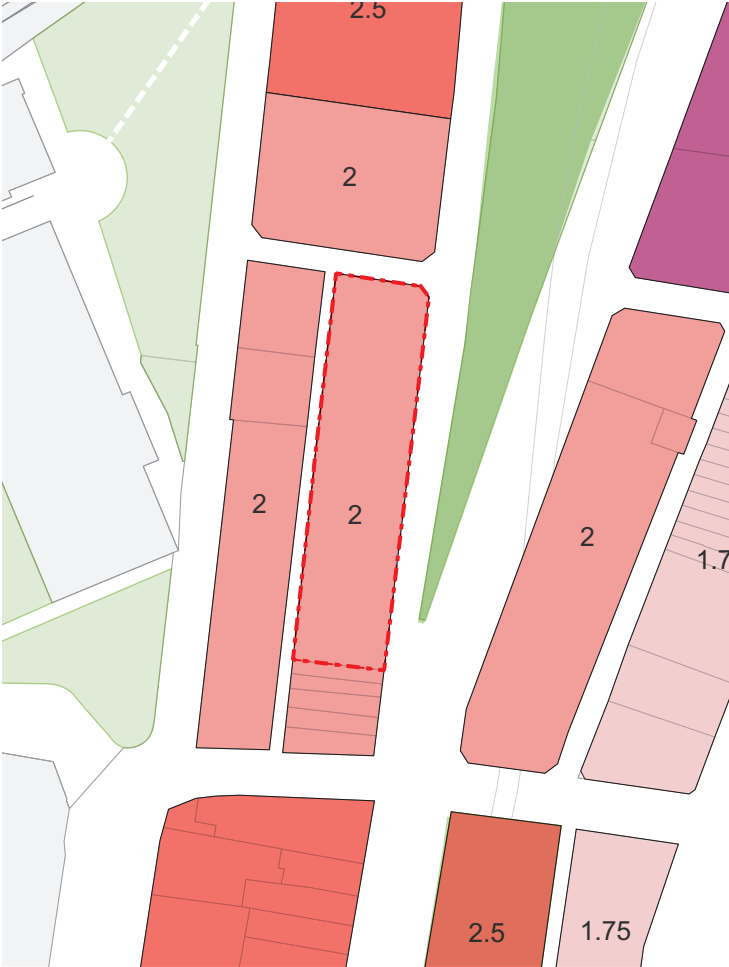
KEY

- MU1 - Mixed use
- H - Recreation
- SP2 - Infrastructure
- E - Business Zone/Park
- C Business Zone Commercial Core



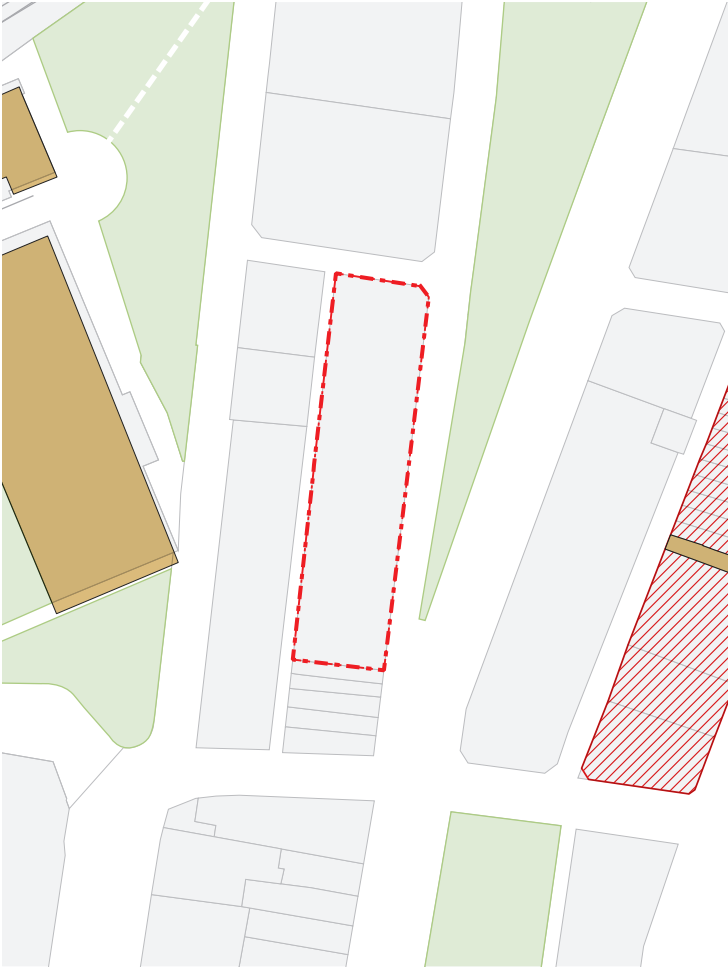
KEY

- O - 15m
- P - 18m
- R - 22m
- Y - 50m



KEY

- 1.75:1
- 2:1
- 2.5:1
- 7:1



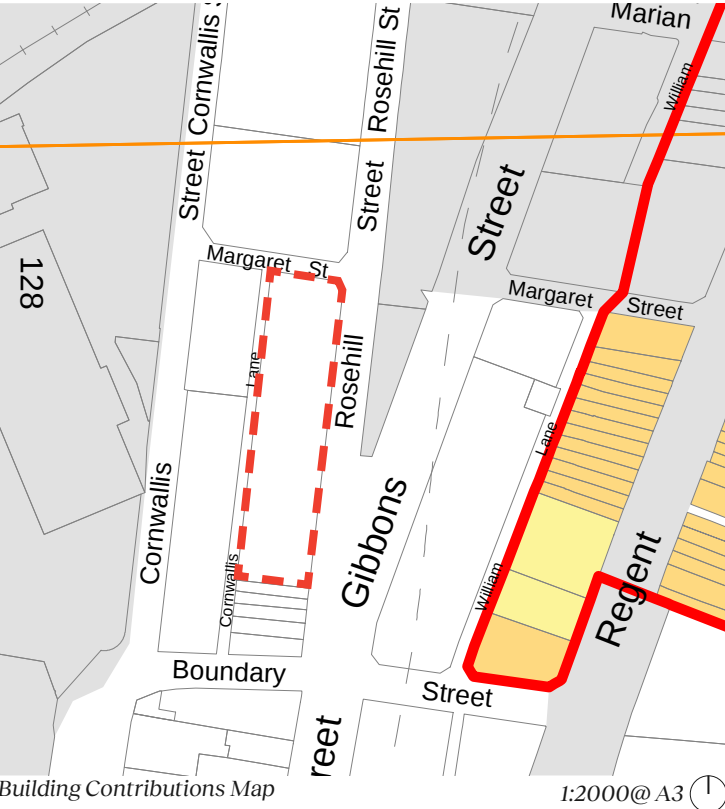
KEY

- Heritage item
- Conservation area

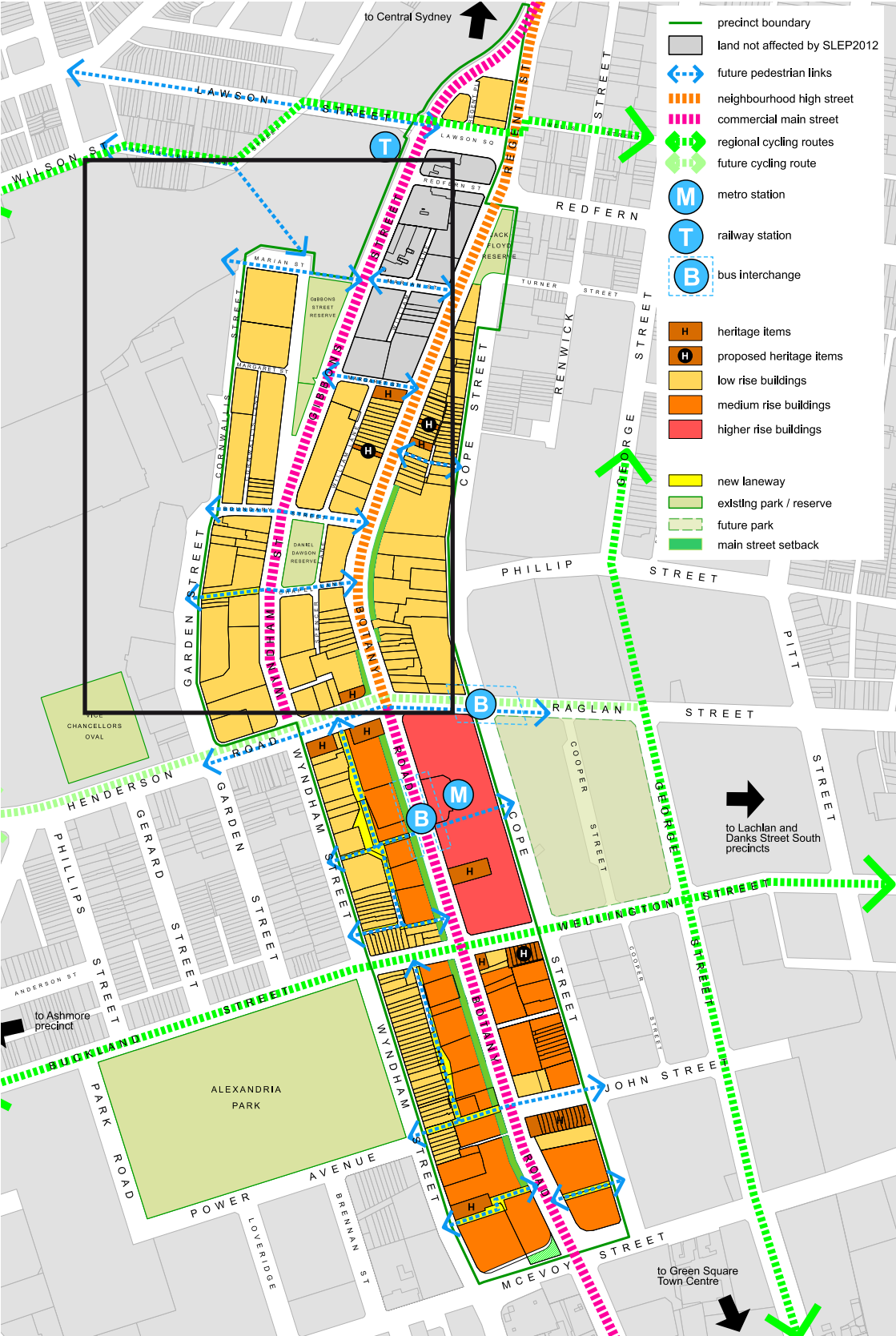
Applicable DCP controls

The site is within the Botany Road Precinct, guided by the Sydney DCP 2012, which seeks to create a vibrant, mixed-use corridor with active street frontages, improved pedestrian amenity, and design excellence. While most detailed controls apply to land south of the site between Henderson Road and McEvoy Street, the precinct framework highlights connectivity, employment growth, and high-quality public domain outcomes.

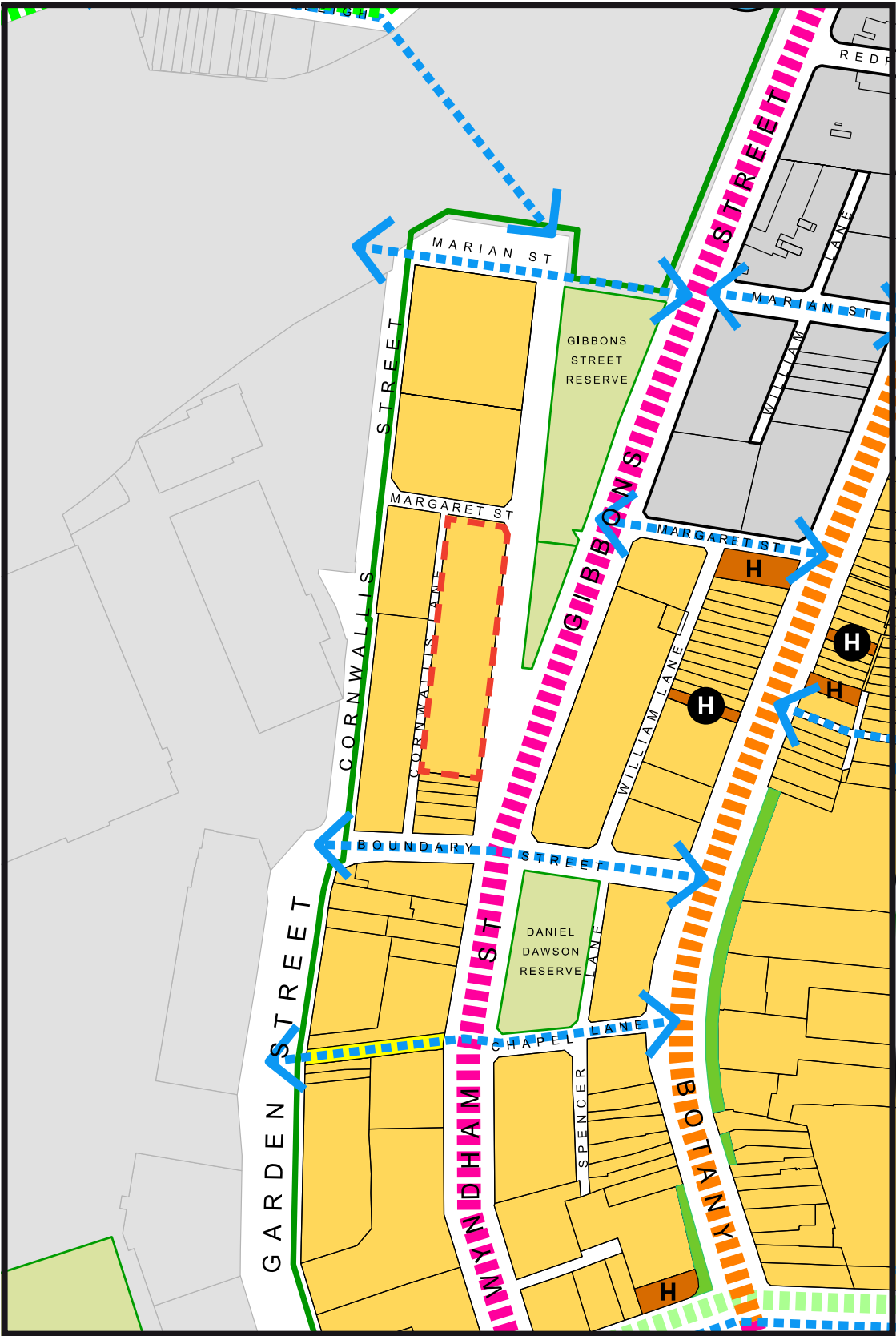
Located approximately 300m south of Redfern Station and 600 metres north of the Waterloo Metro Station, the site benefits from enhanced accessibility, which has already triggered significant urban renewal and residential uplift, positioning it to contribute to the precinct’s vision for a connected, sustainable, and vibrant urban environment.



- KEY**
- Site boundary
 - Conservation area
 - Land excluded from this DCP
 - Contributing
 - Detracting
 - Neutral



Botany Road Precinct Urban Strategy - Sydney DCP 2012



Planning envelope

Development Potential under Current LEP Controls

The site is subject to a 2:1 Floor Space Ratio (FSR), which permits a maximum Gross Floor Area (GFA) of approximately 5,050 m².

The maximum building height permitted under the LEP is 18 metres, which sets the upper limit for built form on the site.

Issues identified with the LEP Envelope

- Laneway interface:

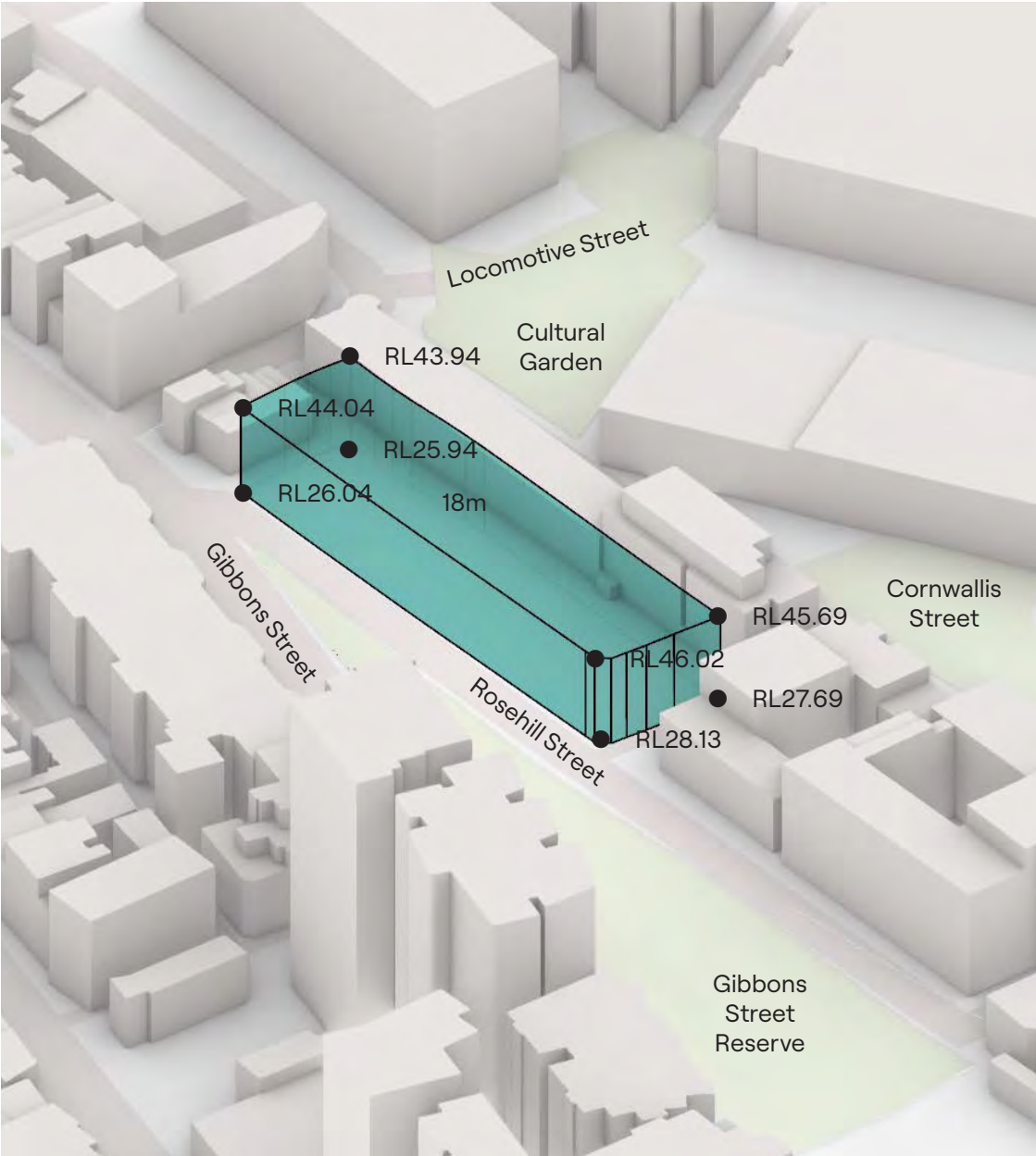
The current LEP envelope does not provide a setback from Cornwallis Lane which is a narrow laneway along the western boundary. This proximity compromises visual privacy and reduces solar access to the adjoining residential building, limiting the amenity of neighbouring properties.

- Built form character:

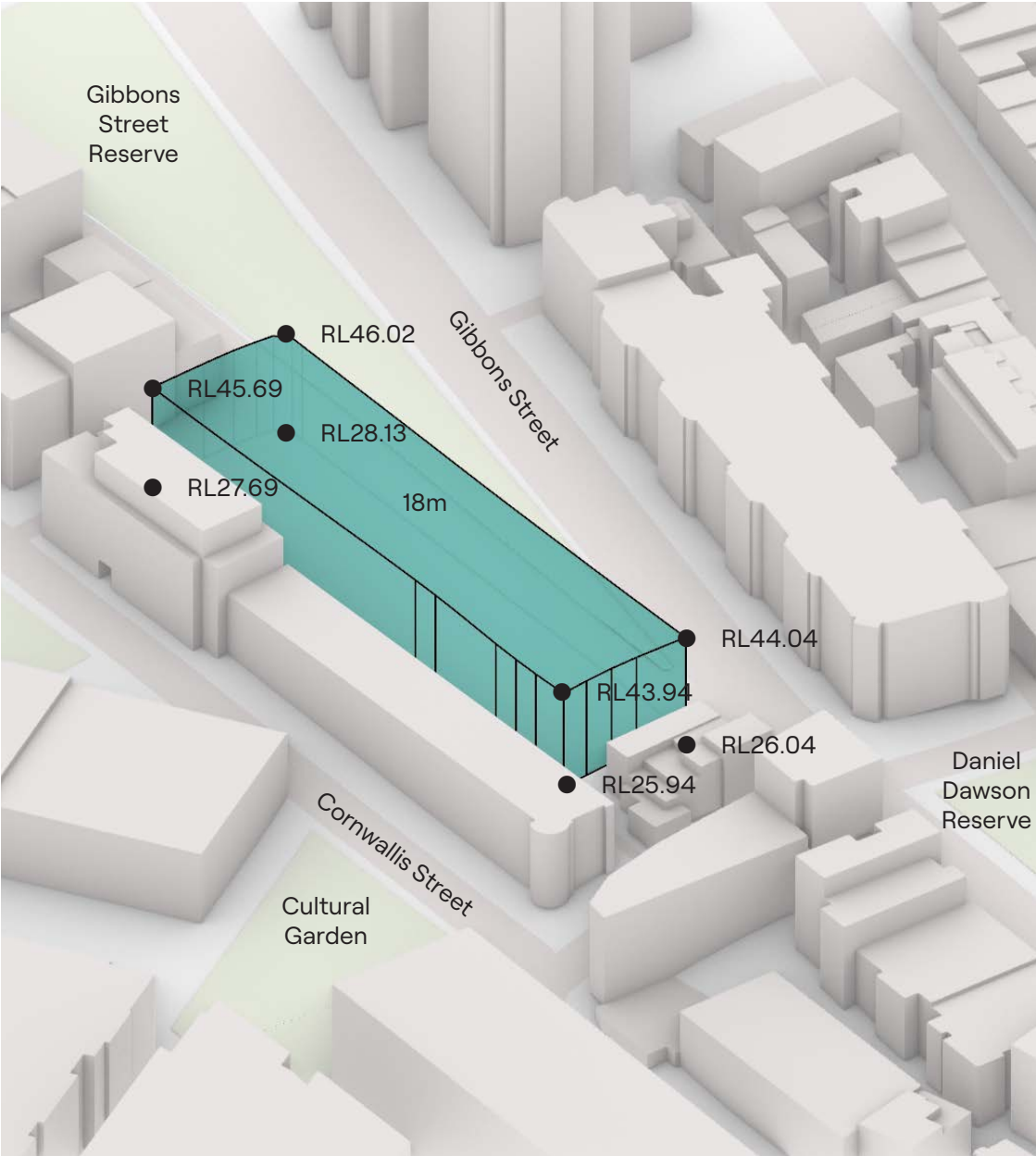
The envelope exhibits limited height variation and lack of frontage articulation, resulting in reduced opportunities to achieve a contextually responsive design.

- Development capacity:

The current controls restrict the site's ability to fully realise its development potential, particularly for uses such as purpose-built student accommodation, which require a greater GFA to achieve viable, well-designed outcomes.



North East

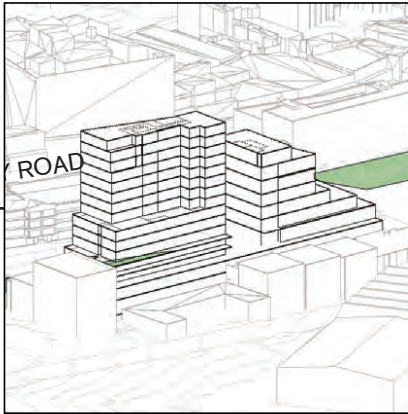


South West

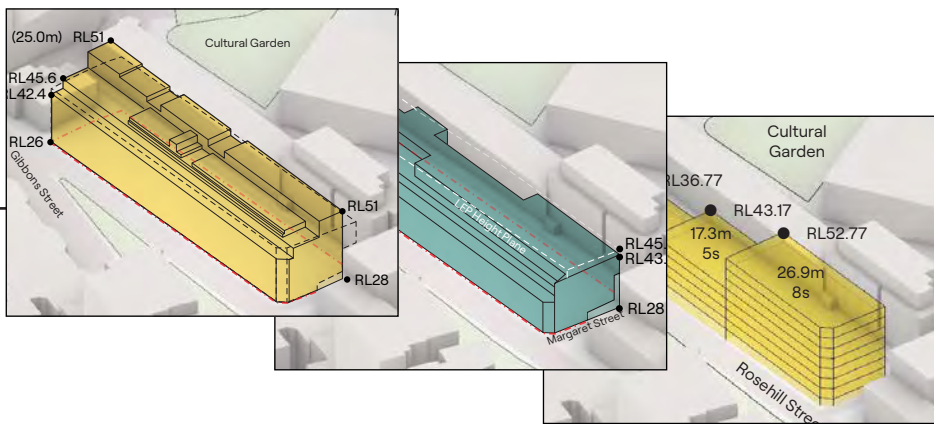
Project evolution



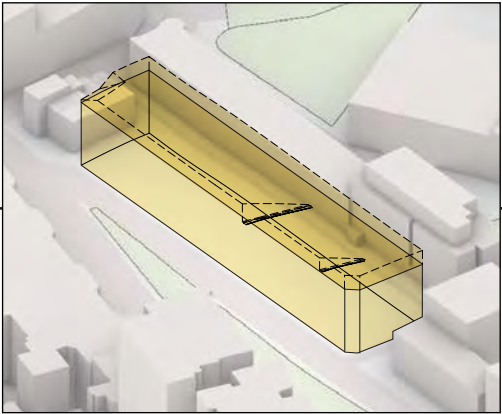
2018



2023



2024



2025

Previous proposals

Previous planning proposals for the site were not supported by Council, primarily due to concerns regarding building height, bulk, and scale. Feedback from Council emphasised the need to better address solar access, amenity impacts, and the relationship of the built form to its surroundings.

Key issues identified included:

- Overshadowing of open space
- Building separation
- Solar impact on neighbouring properties
- Land use
- Built form and streetscape character
- Deep soil and landscaping

Our previous options

During the Scoping Report stage, discussions between the proponent and Council resulted in several iterations of the proposed planning envelope. The initial concept explored concentrating additional height to the north of the site; however, following Council feedback, minimising overshadowing impacts on surrounding properties and open spaces became the key design priority.

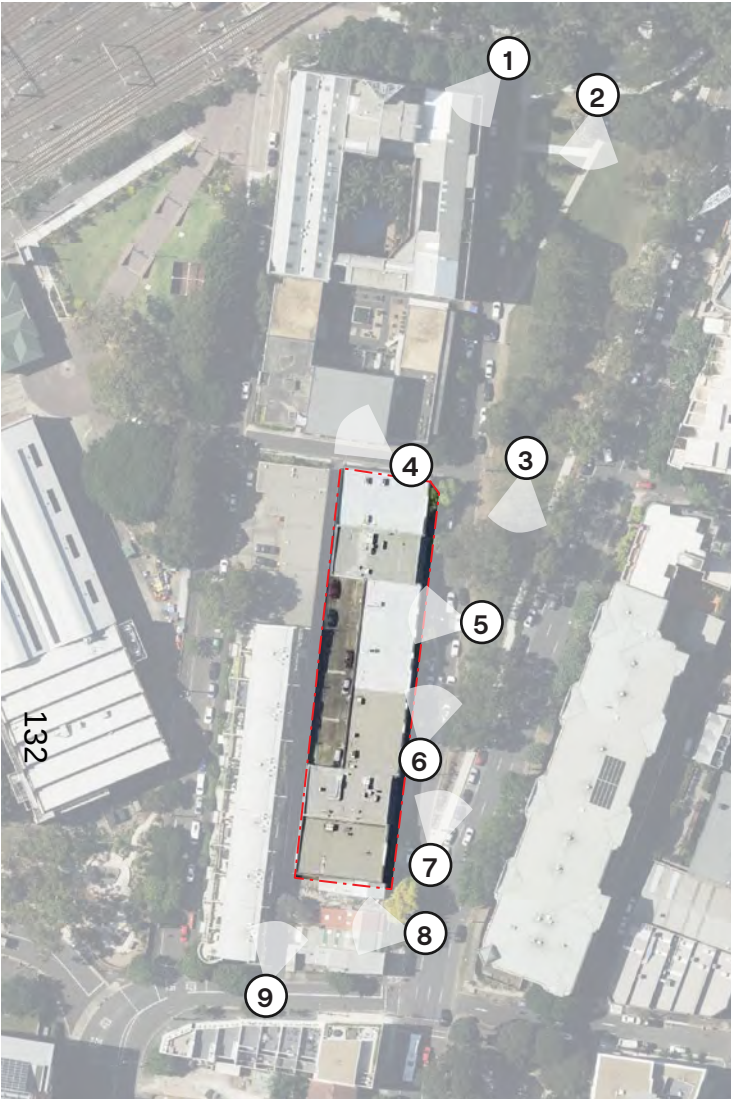
In response, the envelope was refined and shrink-wrapped to the reference scheme, balancing the desired building height with reduced overshadowing and improved amenity outcomes.

Throughout this iterative process, multiple configurations were tested to address Council’s key concerns, which centred on:

- Building height and overshadowing
- Room sizes and internal dimensions
- Waste management and servicing
- Bicycle parking provision

Proposed envelope

In response to Council’s pre-lodgement advice, the proposed envelope has been amended with a 20m building envelope, identification of a 2m green roof zone (clipped to protect and ensure the solar access to neighbouring apartments and open space.), and further refinement of room sizes/ dimensions, waste management and bicycle parking.



Location plan

Character

Rosehill Street has a diverse mixed-use character, combining residential, commercial, and light industrial uses. The streetscape features a blend of heritage terraces, adaptive reuse, and contemporary infill, creating a fine-grain, layered urban character that reflects Redfern’s evolving identity.

Commercial



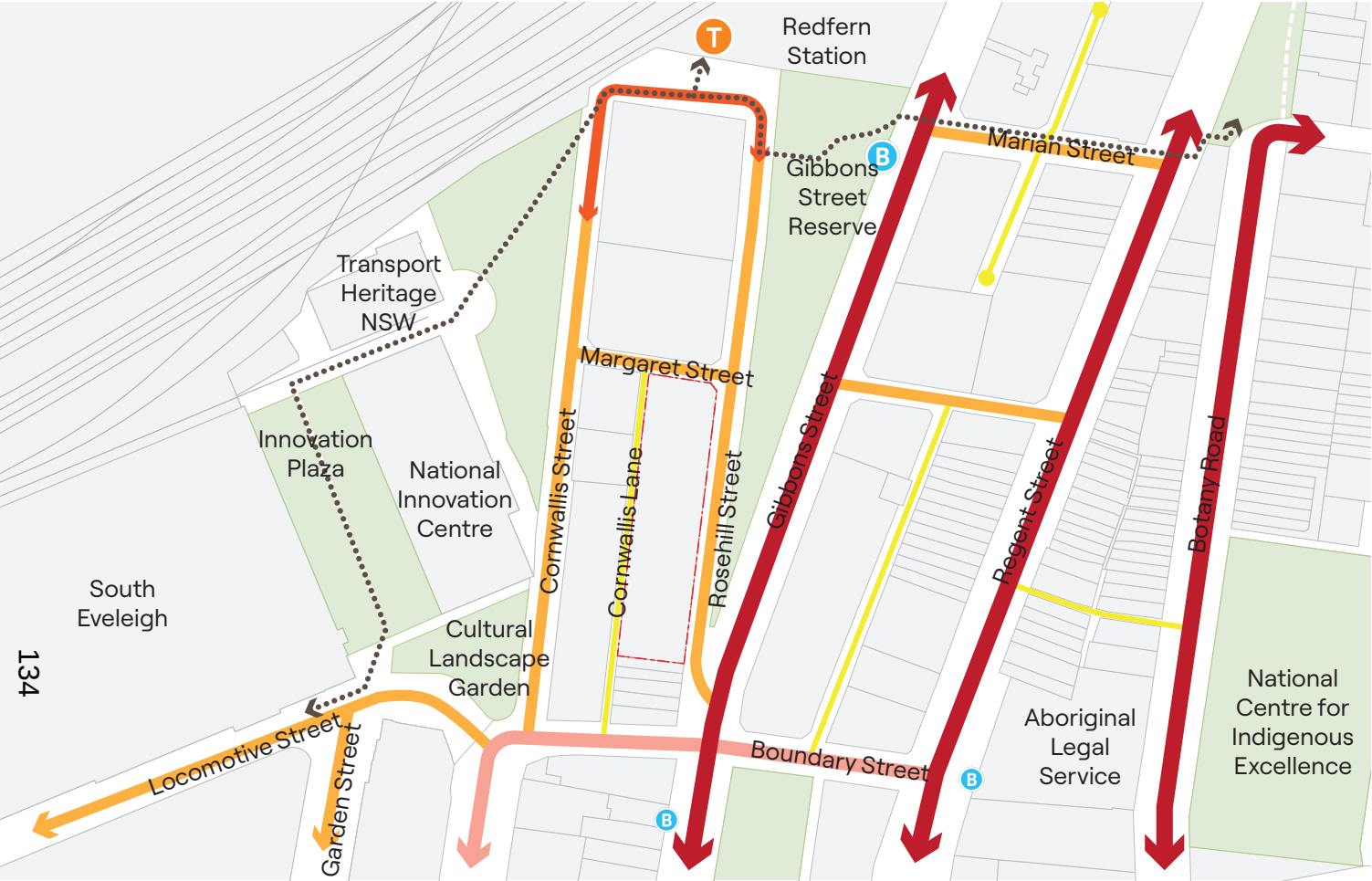
Residential area



Mixed use zone



Movement and access



Movement and access diagram

The site fronts Rosehill Street, a local road serving residential and light industrial uses. To the north, it connects with Cornwallis Street, forming a shared pedestrian and vehicle zone that provides safe access to Redfern Station and supports local walkability.

To the south, Rosehill Street links to Gibbons Street, a high-capacity arterial route that runs parallel to Botany Road and Regent Street, key north-south corridors through the Redfern-Waterloo area. Service lanes provide vehicular access to rear properties, helping maintain active frontages along these main streets.

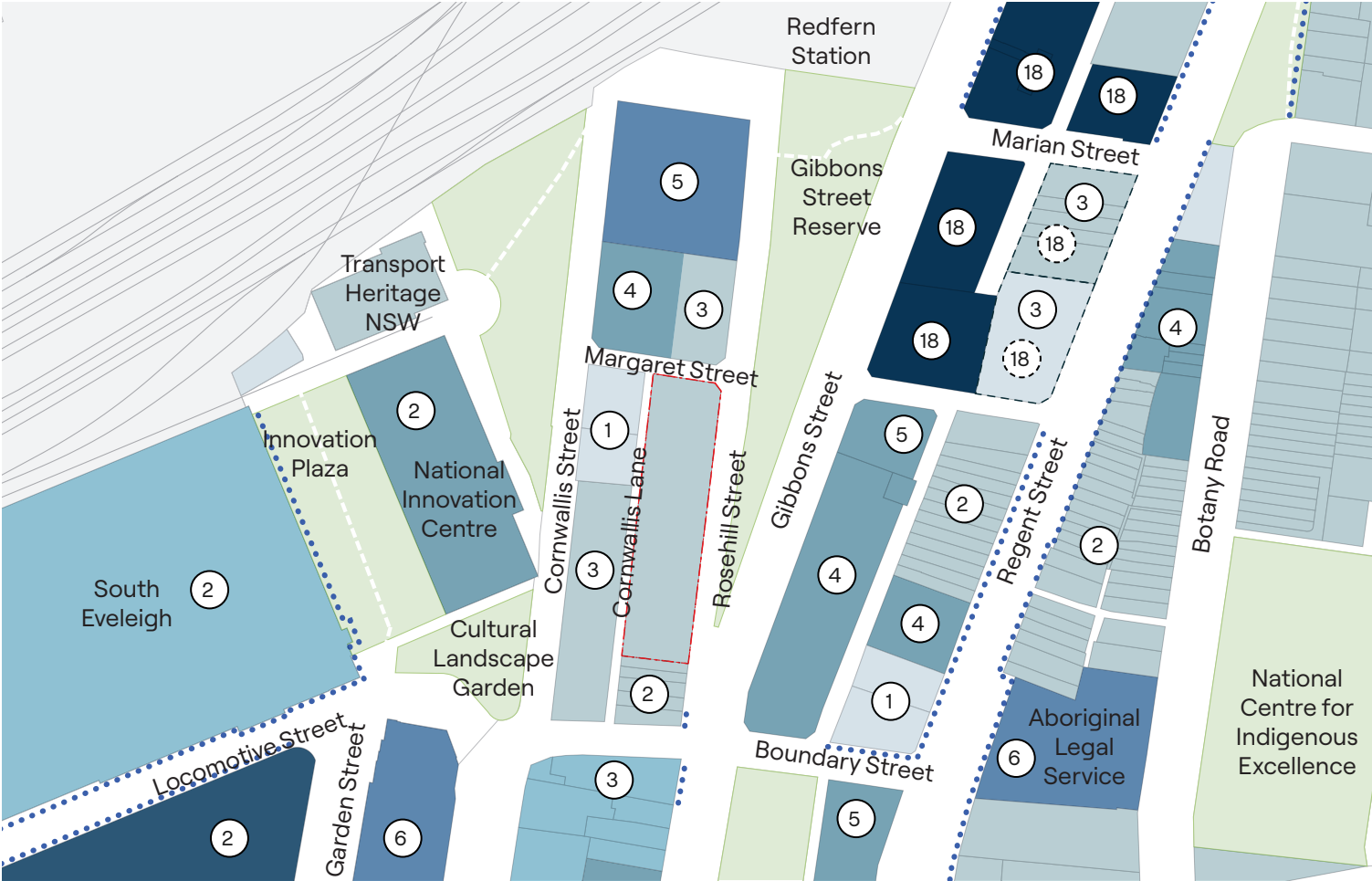
To the west, the network transitions toward South Eveleigh, where slower traffic speeds and improved pedestrian conditions support access to employment and residential areas.

This connected and fine-grain street network promotes multimodal access and supports transit-oriented development.

KEY

- Site boundary
- Train station
- Bus stop
- Main road
- Main street
- Local street
- Service street
- Shared way
- Main pedestrian routes

Height and built form



Existing building heights and active frontages diagram

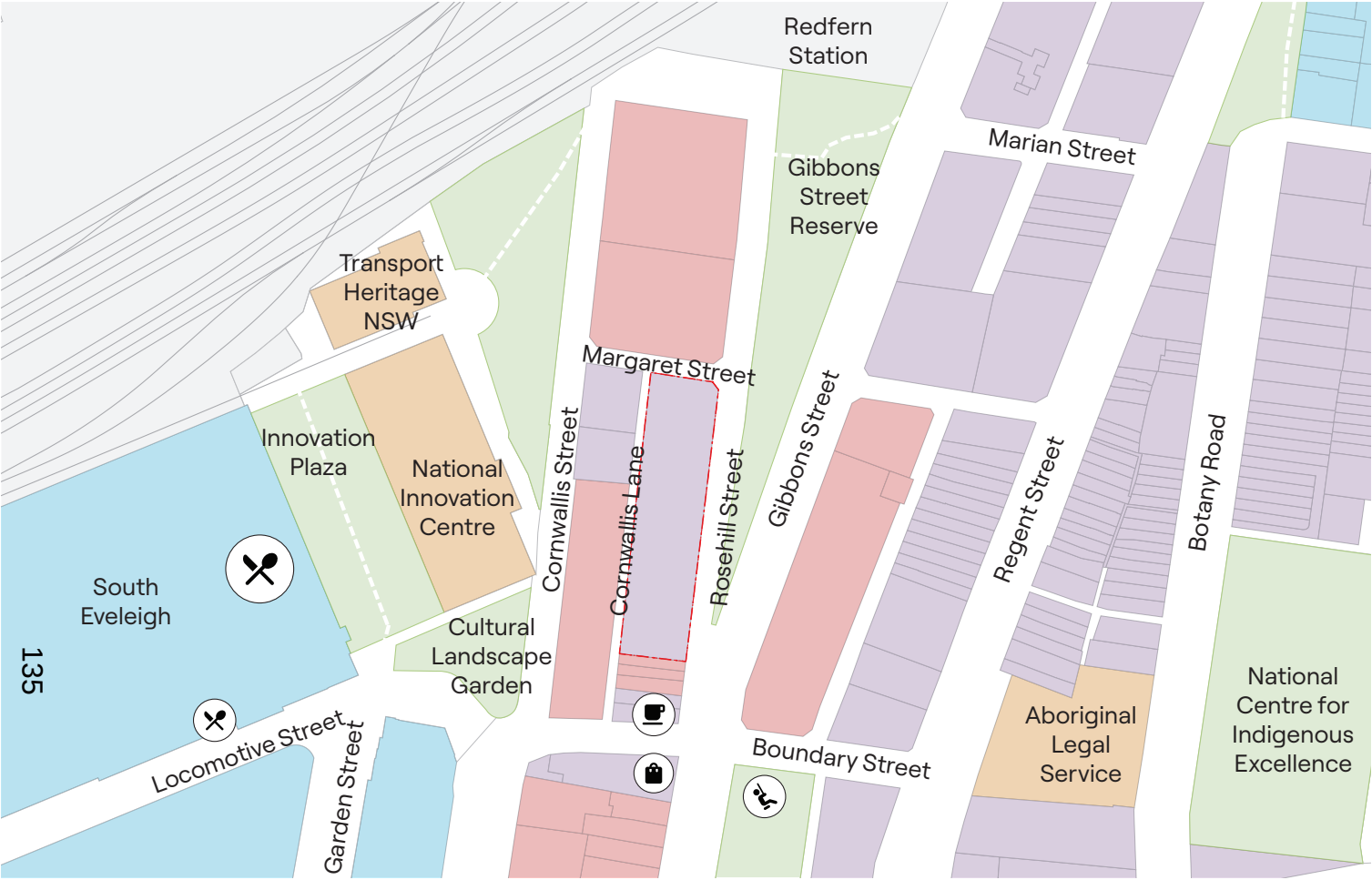
The area is undergoing a significant transition from a medium-density residential neighbourhood to a high-density, mixed-use precinct that supports increased housing near major transport nodes. Recent developments include 18-storey residential towers along the northern edge of Gibbons Street, with similar projects planned along Regent Street. Mid-rise apartment buildings of 4-6 storeys are interspersed throughout the precinct, contributing to an emerging urban scale.

In contrast, heritage terraces, particularly along Regent Street, reflect the area's historic fine-grain character. To the east, adaptive reuse projects, such as the former locomotive workshops, have been transformed into large-scale commercial and retail spaces, reinforcing the precinct's evolving blend of heritage fabric and contemporary development.

KEY

- Site boundary
- 4m HOB
- 7m HOB
- 15m HOB
- 18m HOB
- 20-25m HOB
- 30-35m HOB
- 60m+ HOB
- Planned future development
- Active frontage
- Height in storeys
- Planned future height in storeys

Land use



Land use diagram

The surrounding area comprises a mix of residential, commercial, and employment uses consistent with the evolving character of the Redfern-Eveleigh Innovation Corridor.

To the west, the South Eveleigh Precinct accommodates offices, innovation hubs, and adaptive reuse of industrial buildings.

To the east, medium-density residential development fronts Gibbons Street, supported by local retail and services.

Along Rosehill Street, a transitional character exists, with residential and small-scale commercial uses marking the shift from former industrial land to a mixed-use, transit-oriented environment.

KEY

Site boundary

Residential

Mixed use

Commercial/retail

Civic/community

Open space

Topography



Topography and flooding diagram

The site is located within a gently undulating part of the Redfern-Eveleigh corridor, where the topography generally falls from north to south, descending gradually away from Redfern Station.

Minor level variations occur along Rosehill Street and its adjoining streets, reflecting the transition from the higher ground near Redfern Station to the lower elevations along Gibbons Street to the west. The terrain becomes steeper along Boundary Street, sloping down to both the east and west, with the intersection of Boundary and Gibbons Streets forming one of the few relatively flat areas within this locality.

The south-west corner of the site presents a notable dip of approximately 1.5m, evident particularly from Cornwallis Lane.

KEY

Site boundary

0.5m contours

2m contours

Overland flow direction

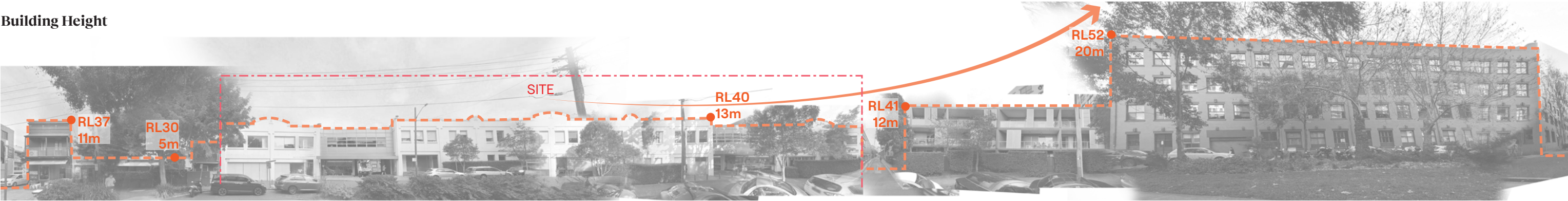
Site analysis

Streetscape analysis

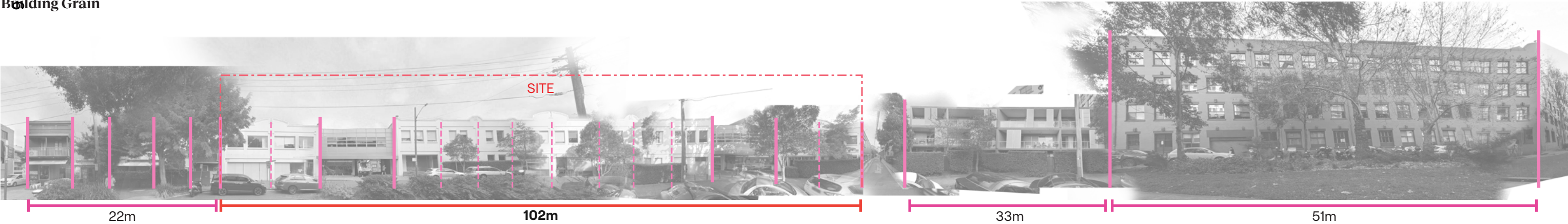
Analysis of the street elevation informs the urban response to street wall, grain and articulation.

- Street wall height increases from south to north with one storey residential frontages leading into two storey commercial frontages.
- Building grain begins along the south as relatively fine, varying from 5-7m along the terraces. The site features a long street frontage resulting from its commercial uses.
- Building articulation is evident in the punched out window openings, typical of masonry construction.

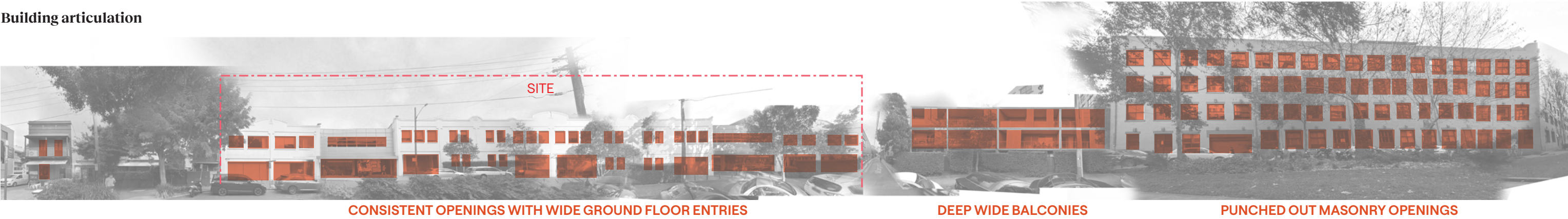
Building Height



Building Grain



Building articulation

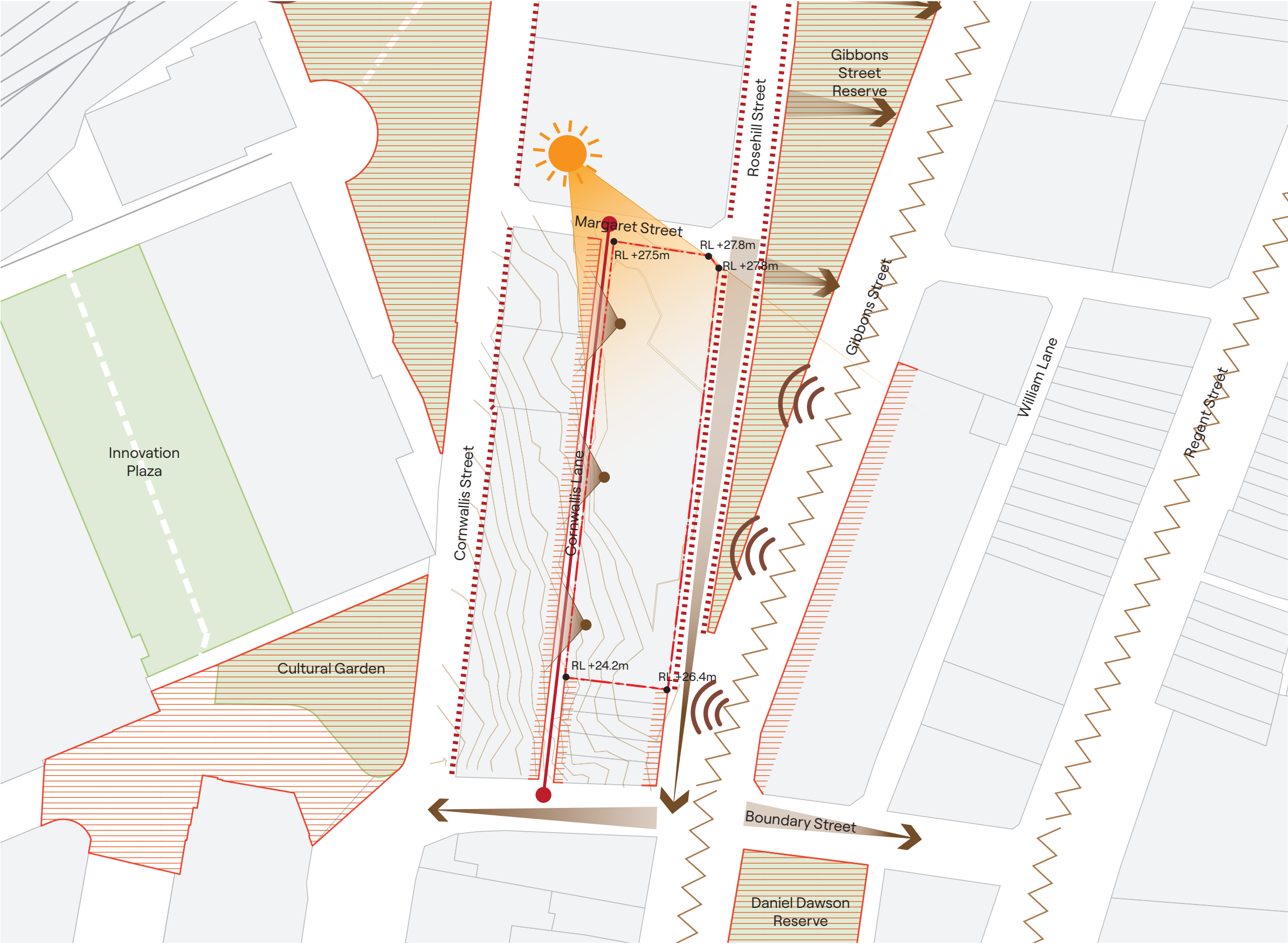


Constraints

- Development must carefully mitigate overshadowing impacts to surrounding residential properties and adjacent open spaces, particularly along 39-61 Gibbons Street, where solar access is a key concern for Council.
- The interface with 15-41 Cornwallis Street, which is built to the boundary, creates potential visual privacy impacts that will require thoughtful building orientation and setbacks.
- The site adjoins the narrow Cornwallis Lane, which primarily serves as a service and access route. Development must respond appropriately to this interface to maintain safety, amenity, and visual quality.
- High traffic volumes along Gibbons Street and Regent Street generate noise and air quality impacts, requiring acoustic mitigation and appropriate building design to ensure internal amenity.
- The sloping terrain along Rosehill Street and Boundary Street presents potential overland flow and stormwater management challenges, necessitating careful site planning and water-sensitive design strategies.
- Given the site's transitional urban context, future development must reconcile varied building scales and typologies, ensuring a cohesive interface between emerging high-density forms and existing fine-grain character.
- A natural dip in the ground located of approximately 1.5 metres at the south-west corner of the site limits the potential to accommodate an 18m high reference scheme. For this reasons an additional 2m to the Height of Buildings (HOB) control are required to ensure full compliance for the small portion of the building affected by the dip.

KEY

- Site boundary
- Noise
- Slope
- Busy main road
- Threat to visual privacy
- Overshadowing
- Rear laneway
- Street parking
- 0.5m contours

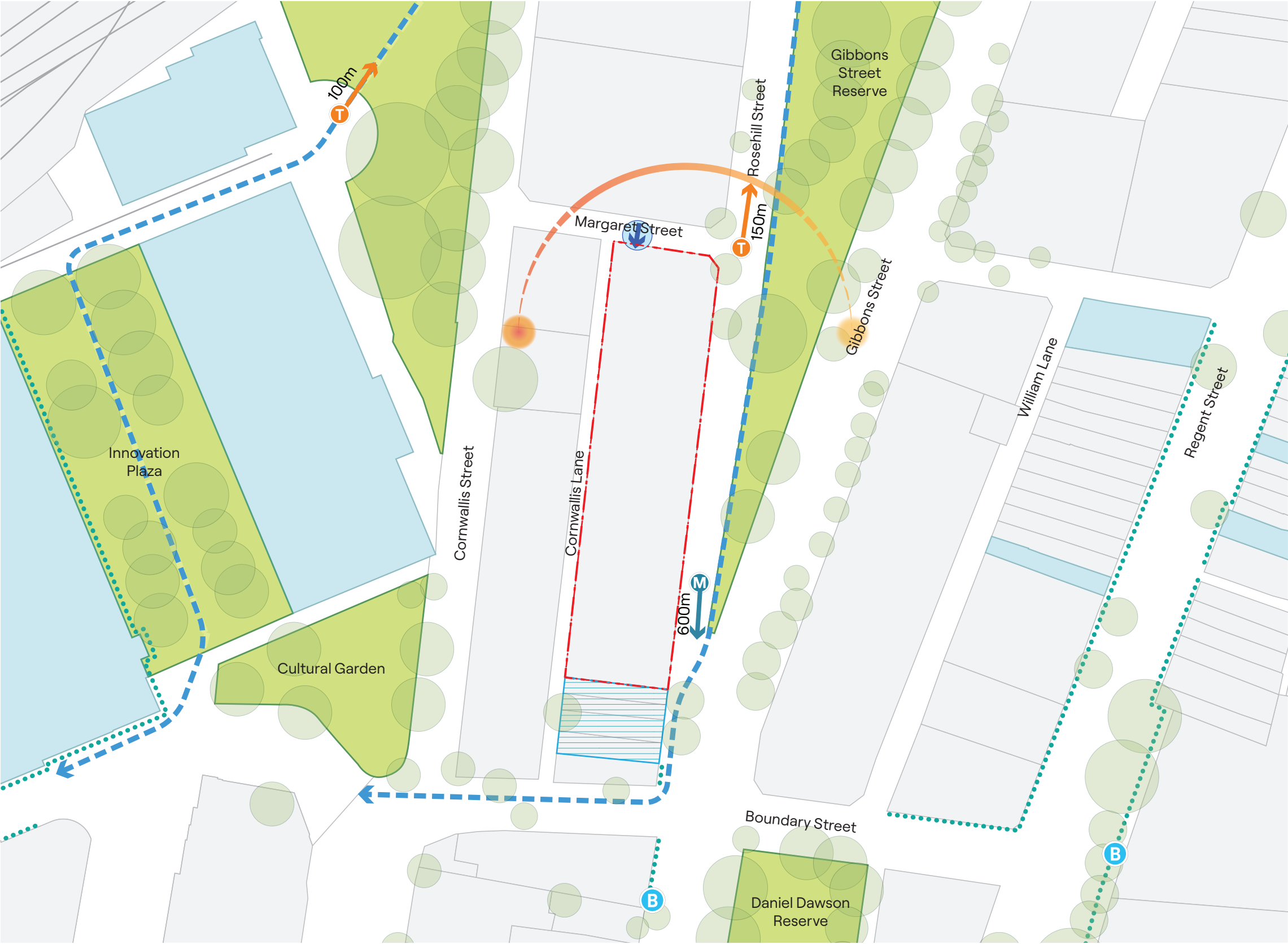


Opportunities

- The site is highly accessible, located approximately 150 metres from Redfern Station and 600 metres from Waterloo Metro Station, providing direct connections to key employment, education, and innovation precincts across Sydney.
- Surrounding heritage items and character buildings contribute to a distinctive local identity, offering opportunities to enhance and complement the historic built fabric through sensitive design.
- Margaret Street provides an opportunity for discrete servicing and basement access, allowing Rosehill Street to function as a primary pedestrian-focused frontage with minimal vehicle conflict.
- Active ground-floor uses contribute to a lively day and night-time economy, supporting street activation and passive surveillance.
- Mature street trees and established landscaping provide leafy streetscapes that reinforce green infrastructure.
- A variety of local open spaces, including Gibbons Street Reserve and Daniel Dawson Reserve, serve the recreational and social needs of future residents.
- The absence of built form along the eastern edge of the site enables excellent solar access
- The dilapidated terraces to the south of the site offer opportunity for renewal, supporting the broader transition of the precinct to a higher-density mixed-use character.

KEY

- Site boundary
- Train station
- Bus stop
- Sun path
- Heritage
- Dilapidated terraces
- Open space
- Tree canopy
- Pedestrian route
- Vehicle access



Planning and place summary

					
Overshadowing of Open Space	Building separation	Solar impact on neighbouring properties	Land use	Built form and streetscape character	Deep soil/Landscaping
Review overshadowing impacts to: — Daniel Dawson Reserve — Gibbons Street Reserve — Indigenous Landscape Cultural Garden at Australian Technology Park — Open Space in Cornwallis Street and Locomotive Street	Consider building separation and preliminary visual privacy treatments to: — 32 Rosehill Street, Redfern — 15-41 Cornwallis Street, Redfern — 80-88 Rosehill Street, Redfern	Impacts to the following key residential developments are to be reviewed: 1. 39-61 Gibbons Street, Redfern 2. 80-88 Rosehill Street, Redfern	DCP requires: — Ground floor and first floor uses are to be non-residential uses — Residential use is permitted where it does not undermine the employment generating function of the precinct.	Analysis to be provided on the compatibility of proposal in context of surrounding locality - Bulk, scale, height, etc. DCP requires: — 18m height limit — Justification of transition heights to neighbouring developments, noting surrounding 5-6 storeys — Maximum street frontage length to Rosehill Street of 40m requires frontage design to reduce appearance of one continuous façade.	DCP requires the following for residential flat buildings and non-residential development: — Deep soil is to be 10% of the site area at a minimum. — For lots greater than 1,000sqm, the deep soil area is to be consolidated with a minimum dimension of 10m. — All remaining deep soil areas are to have a minimum dimension of 3m. — Where site conditions allow, deep soil is to be consolidated as one area to assist with the ease of drainage and allow for effective deep soil planting.
Response					
Analysis of overshadowing impact of existing conditions and testing for the proposed envelope to ensure compliance with DCP objectives.	Assessment of current laneway conditions and streets has informed testing of privacy setbacks in accordance with ADG.	Analysis of overshadowing impact of existing conditions and testing for the proposed envelope to ensure compliance with ADG requirements.	Analysis of surrounding building uses and activity to inform land use allocation. Rosehill Ground floor frontage has non-residential uses including entertainment areas, study rooms, lobby and library.	Alignment of built form to the streetscape character.	Allocating zones in appropriate areas for deep soil and landscaping.



Existing LEP envelope

The proposed design refines the existing LEP envelope to deliver a more contextually responsive and high-amenity built form. The current controls, while establishing a clear height and density framework, present several constraints relating to laneway interface, articulation, and overall development capacity.

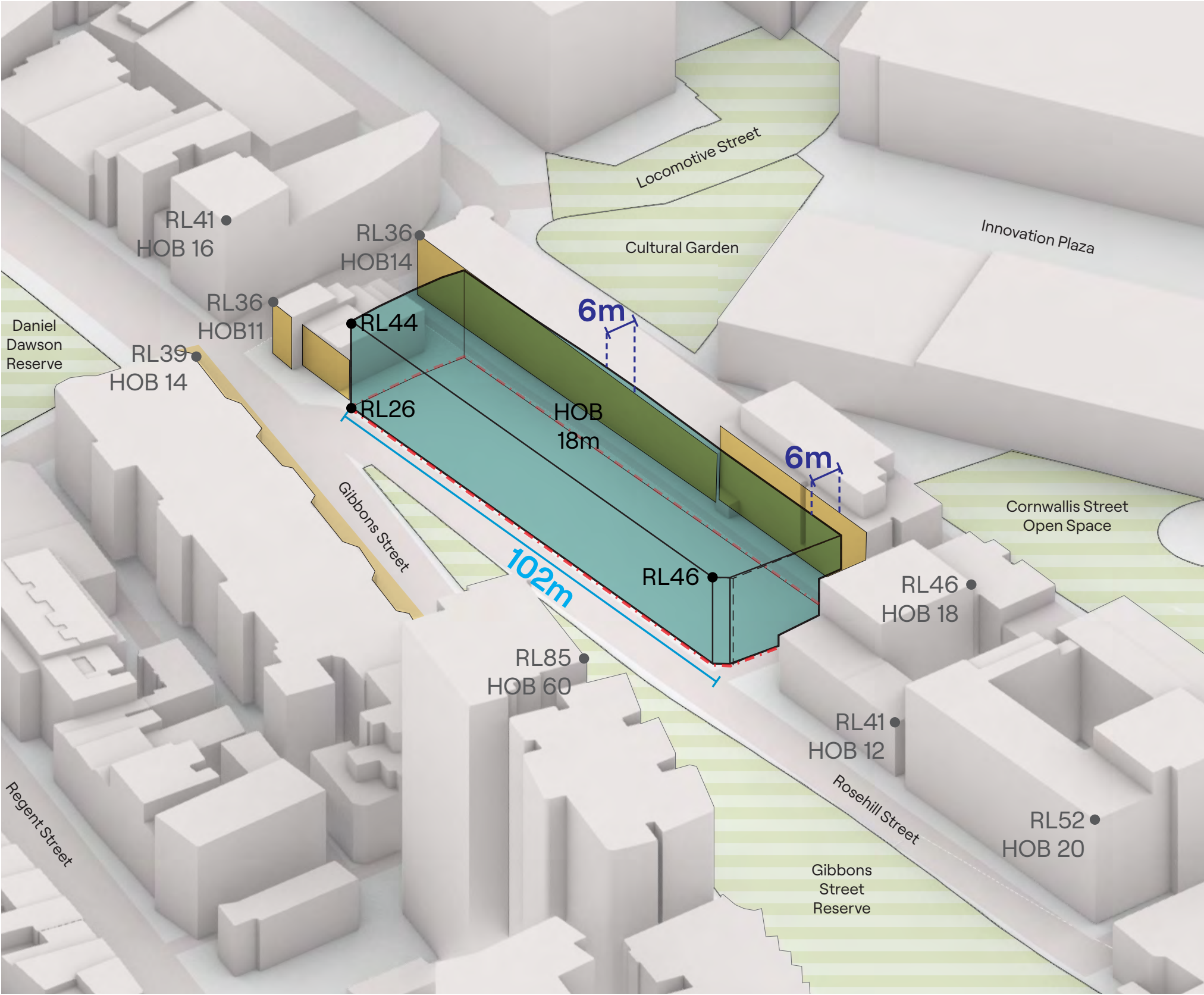
Through targeted design moves, the proposal addresses concerns regarding visual privacy and solar access to adjoining residences. It also reflects the streetscape modulation to better reflect the evolving character of the precinct, and optimises the envelope to support a viable and well-planned built form outcome.

Collectively, these adjustments enable a design that achieves improved amenity, urban quality, and alignment with strategic planning objectives.

141

KEY

- Overshadowing consideration - open space
- Overshadowing consideration - neighbours
- LEP Envelope



Key moves



Overshadowing of Open Space



Building separation



Solar impact on neighbouring properties



Land use



Built form and streetscape character

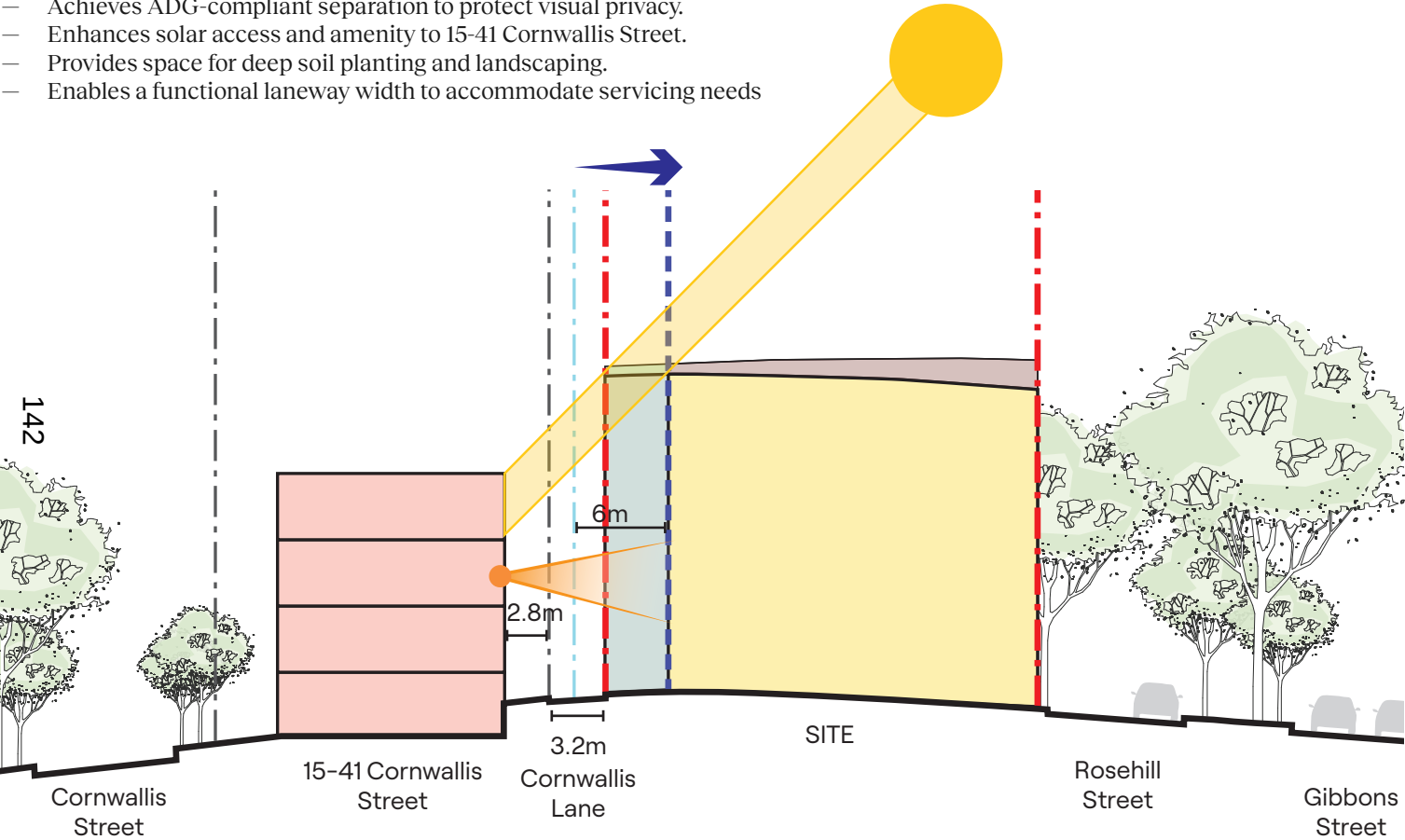


Deep soil/Landscaping

Increase height by 2 metre and introduce a rear setback to create a functional laneway

- Design moves:
- Increasing the height control by 2 metres
 - Introduce a primary rear setback of 3 metres along Cornwallis Lane.

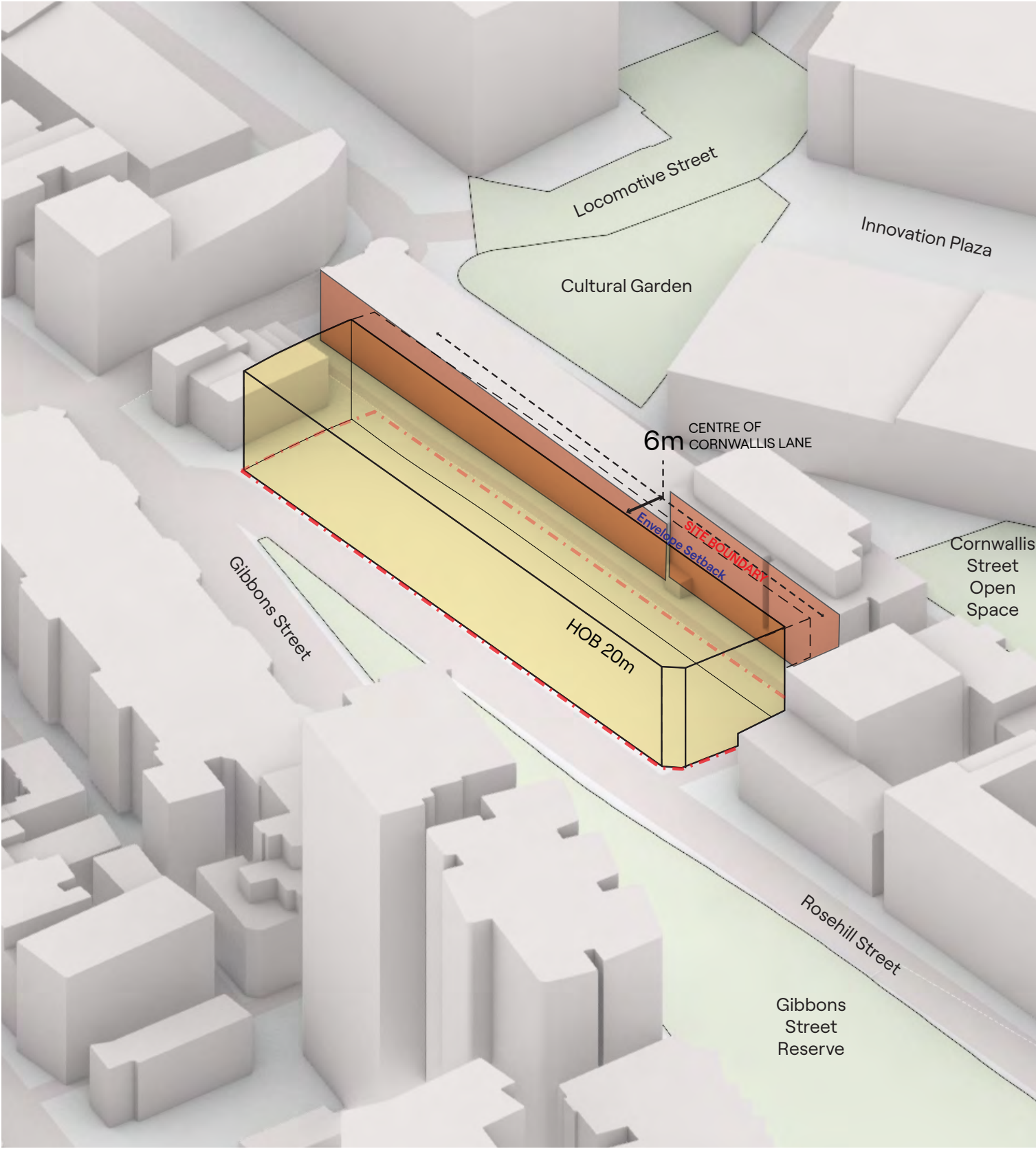
- Rationale:
- The increased height is a response to the site's natural ground and ensure the generated height plane is feasible for development.
 - Achieves ADG-compliant separation to protect visual privacy.
 - Enhances solar access and amenity to 15-41 Cornwallis Street.
 - Provides space for deep soil planting and landscaping.
 - Enables a functional laneway width to accommodate servicing needs



Increased building separation improves the functionality of service laneways and offers safer links for people to walk and cycle.



Establish a quality interface between developments that facilitates both functionality and landscaping of deep soil zones.



Key moves



Divide mass to reflect streetscape rhythm

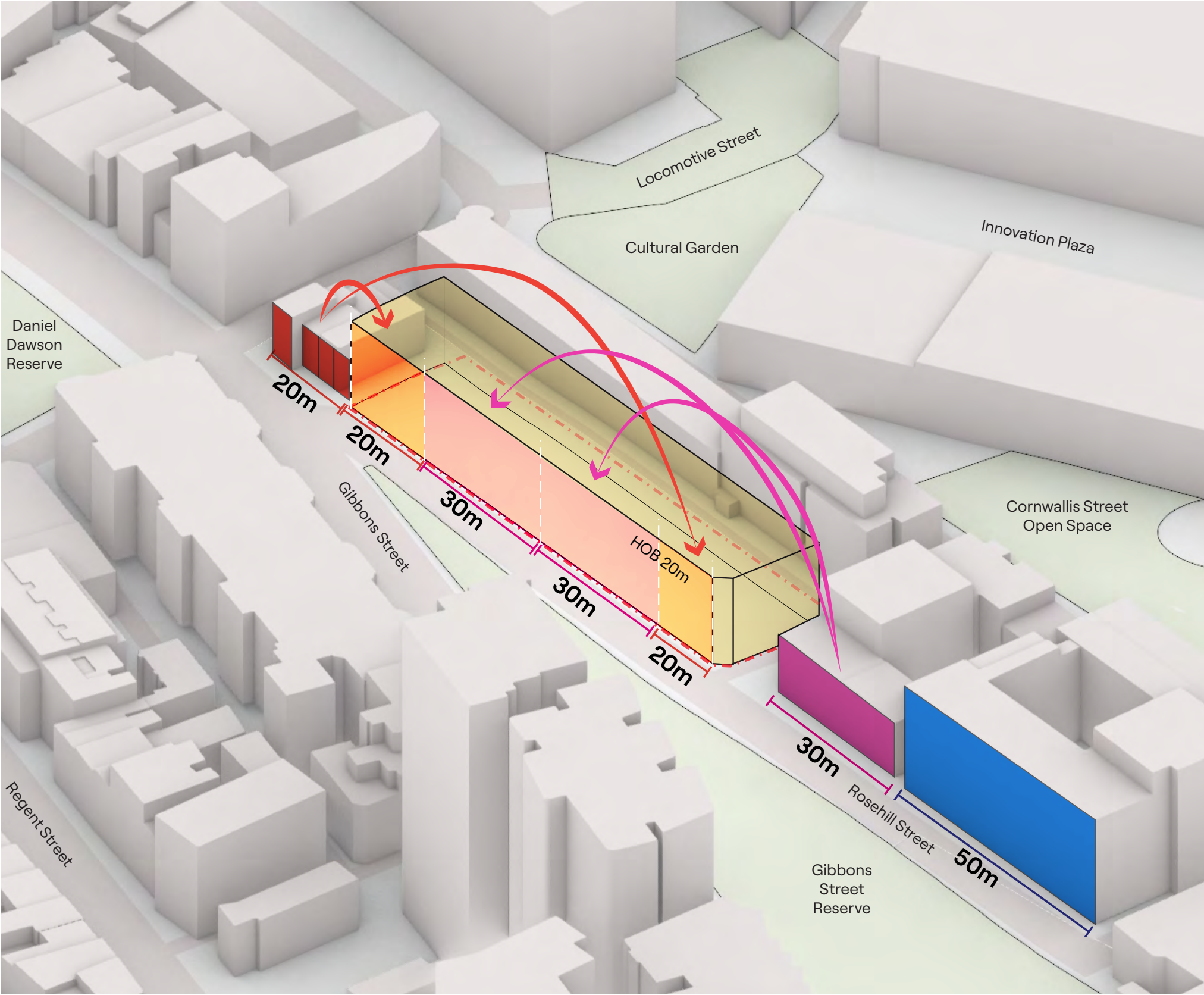
- Design moves:
- Break down the 100m building frontage into smaller, contextually scaled segments that respond to the existing streetscape pattern.
- Rationale:
- Introduces articulation and visual relief along the building length.
 - Enhances the pedestrian interface and address along Rosehill Street
 - Reinforces the established rhythm and fine-grain character of the surrounding streetscape.



Creating rhythm through building separation and articulation reduces perceived bulk and adds visual interest to the building.



Building articulation should be informed by the surrounding streetscape and incorporate elements of architectural features to present a cohesive frontage.



Key moves



Enhance amenity and protect privacy

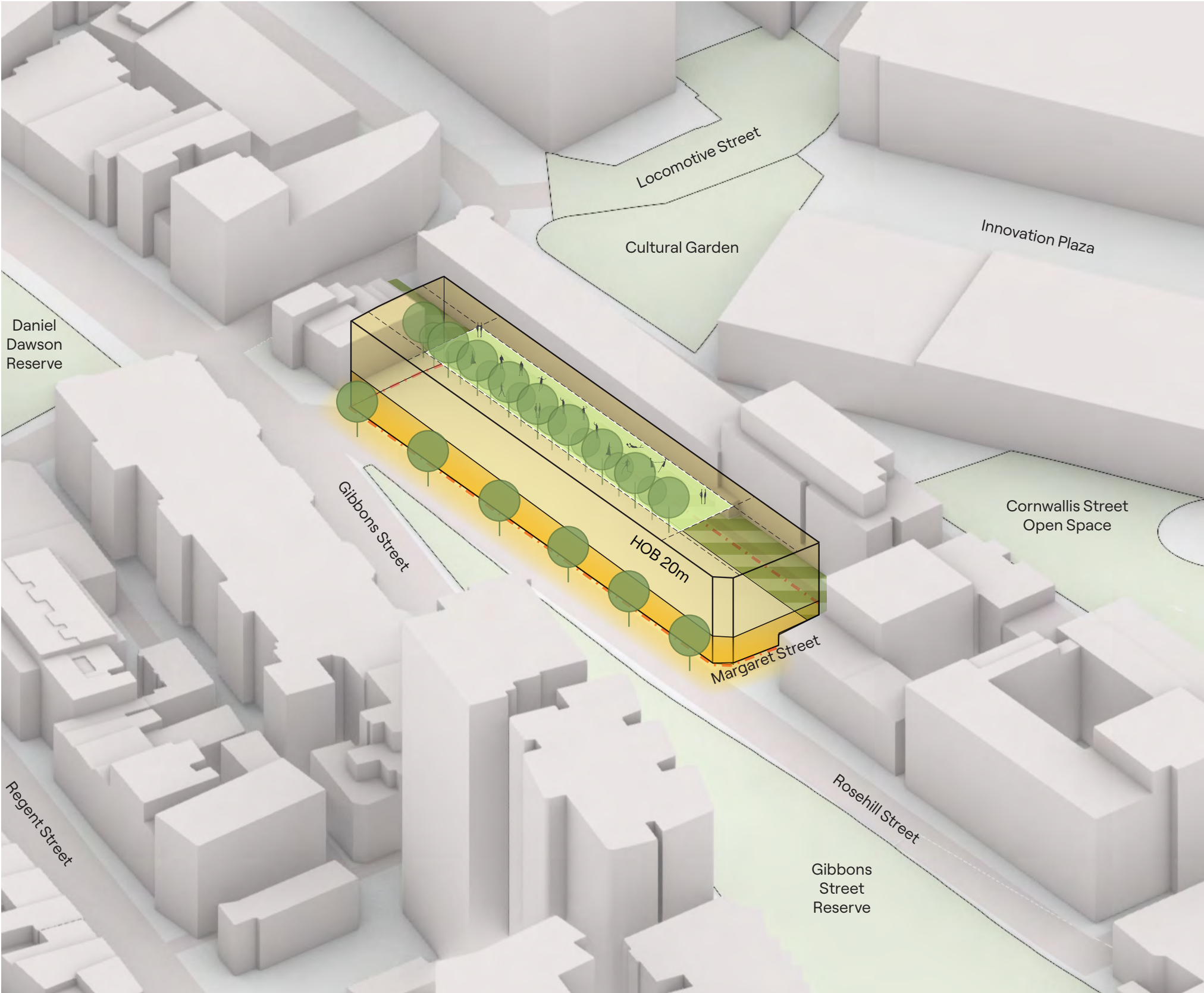
- Design moves:
- Locating communal areas at ground level along the Rosehill Street frontage
 - Landscape the laneway to deliver deep soil zones and communal open spaces
 - Integrate accessible rooftop terraces with planters and screening to provide usable open space while maintaining privacy
- Rationale:
- Cultivates an active and engaging streetscape along Rosehill Street.
 - Enhances residential amenity by offering a variety of communal open spaces.
 - Contributes to best-practice design outcomes for student accommodation by supporting social connection, landscape integration, and privacy protection.



Non-residential uses are visible from the streetscape and facilitate activity along the street frontage, such as a retail tenancy, offering an active transition zone for people to linger and interact.



Create accessible rooftops to ensure solar access to communal open spaces and improves amenity for residents.



Key moves



Position green rooftop articulation zone to minimise impacts

Design moves:

- Provide additional flexibility through a 2m green rooftop articulation zone

Rationale:

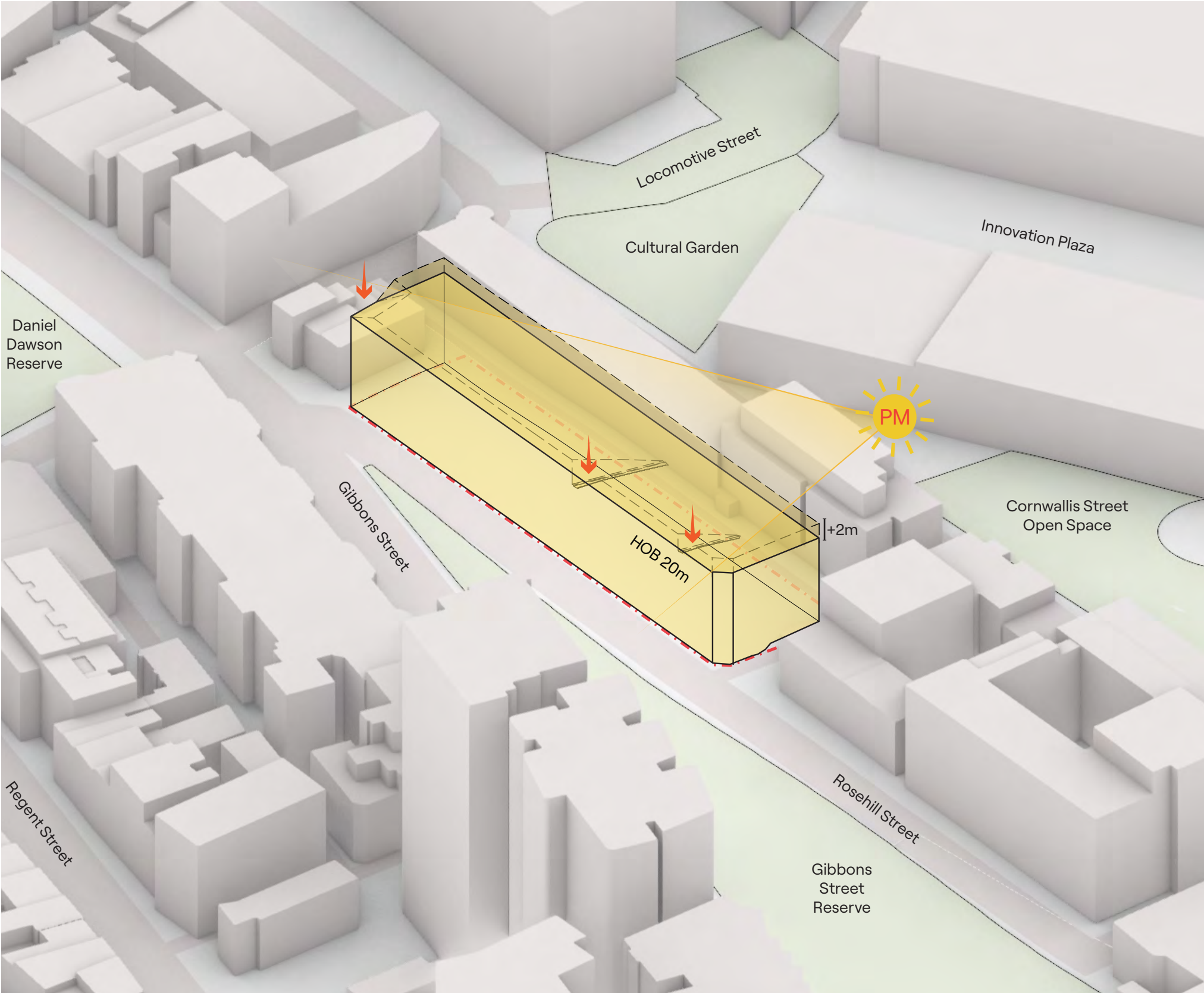
- Allows for plant rooms and lift overruns within a controlled height zone.
- Minimises overshadowing impacts on neighbouring properties and open spaces.
- Enables an accessible, landscaped rooftop to contribute to urban greening and reducing heat island effects.



Continuing the existing datum of the streetscape anchors the development within its surroundings.



Gradation in height and grain creates a more cohesive transition between land uses and density.



Key moves

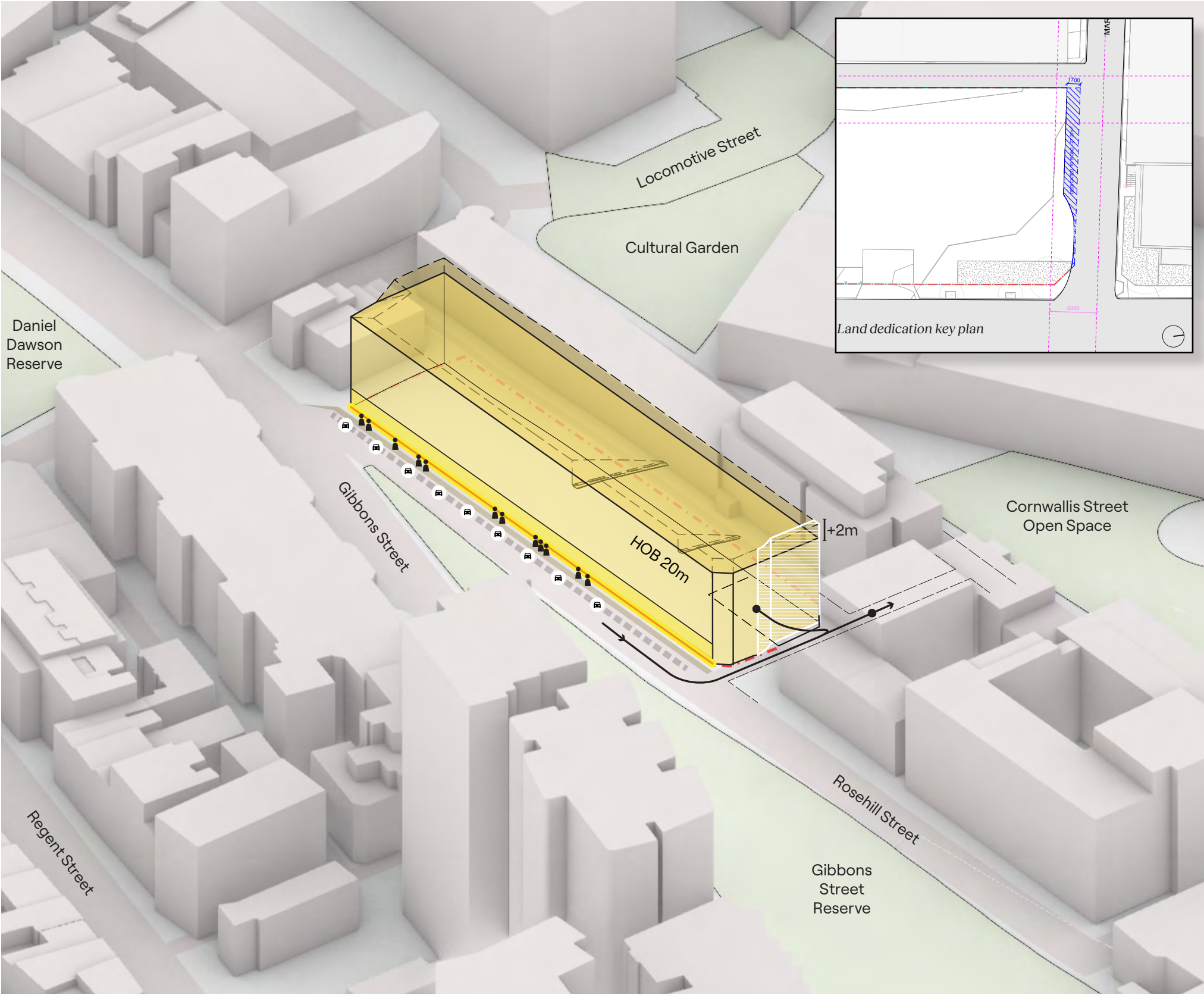


Position loading dock along Margaret Street

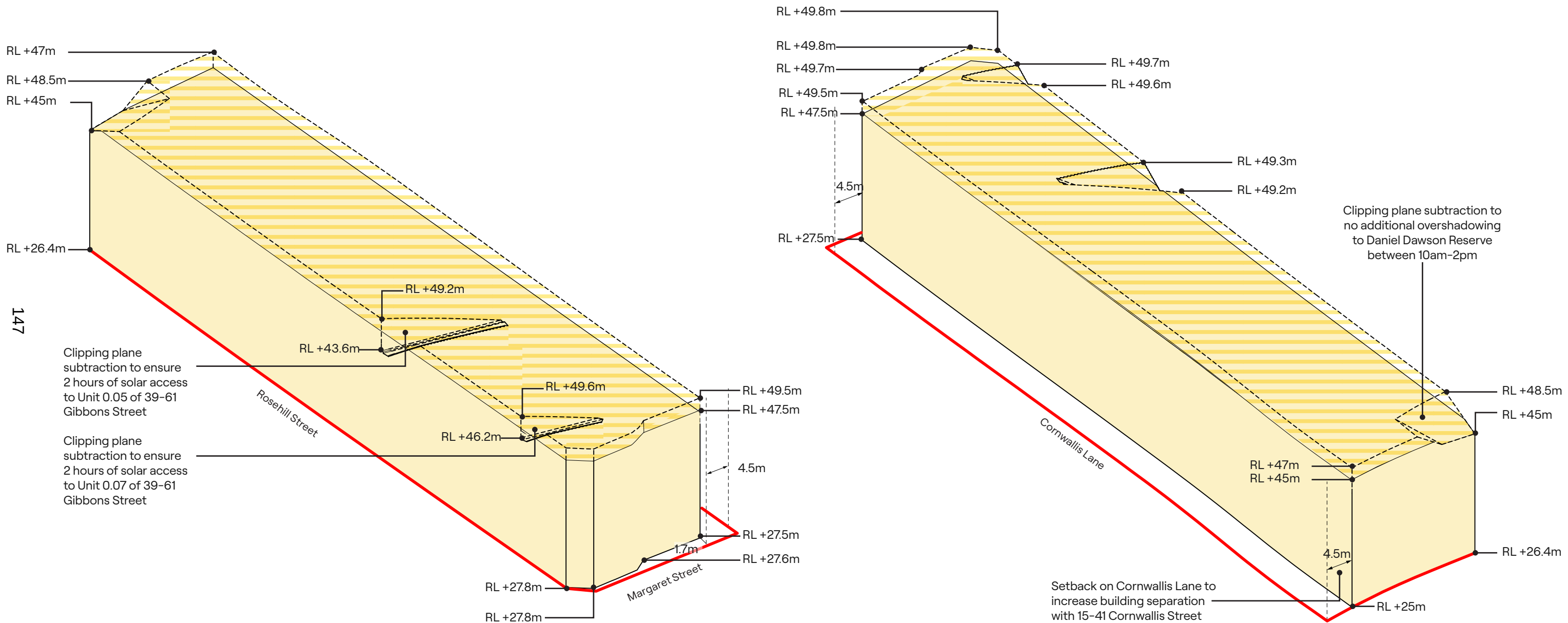
- Design moves:
- Maximise activation of Rosehill Street and optimise Margaret as service lane for waste and loading activities.
 - Widen Margaret Street through a 1.7 land dedication to service all required vehicle movements at the north west corner.
- Rationale:
- Minimise use of wide blank and inactive interface at the ground on primary street frontage (Rosehill Street)
 - Prioritisation of pedestrian movements and avoidance of wide vehicle crossover on Rosehill Street, consistent with Sydney DCP pedestrian priority map. In comparison, Margaret Street functions as a quiet laneway with very little pedestrian movements.
 - Reduce loss of on-street car parking on Rosehill Street. In comparison, Margaret Street has no on-street car parking.



Artist's impression of the Rosehill Street and Margaret Street intersection demonstrating activation along Rosehill Street.



Proposed envelope



North east isometric view

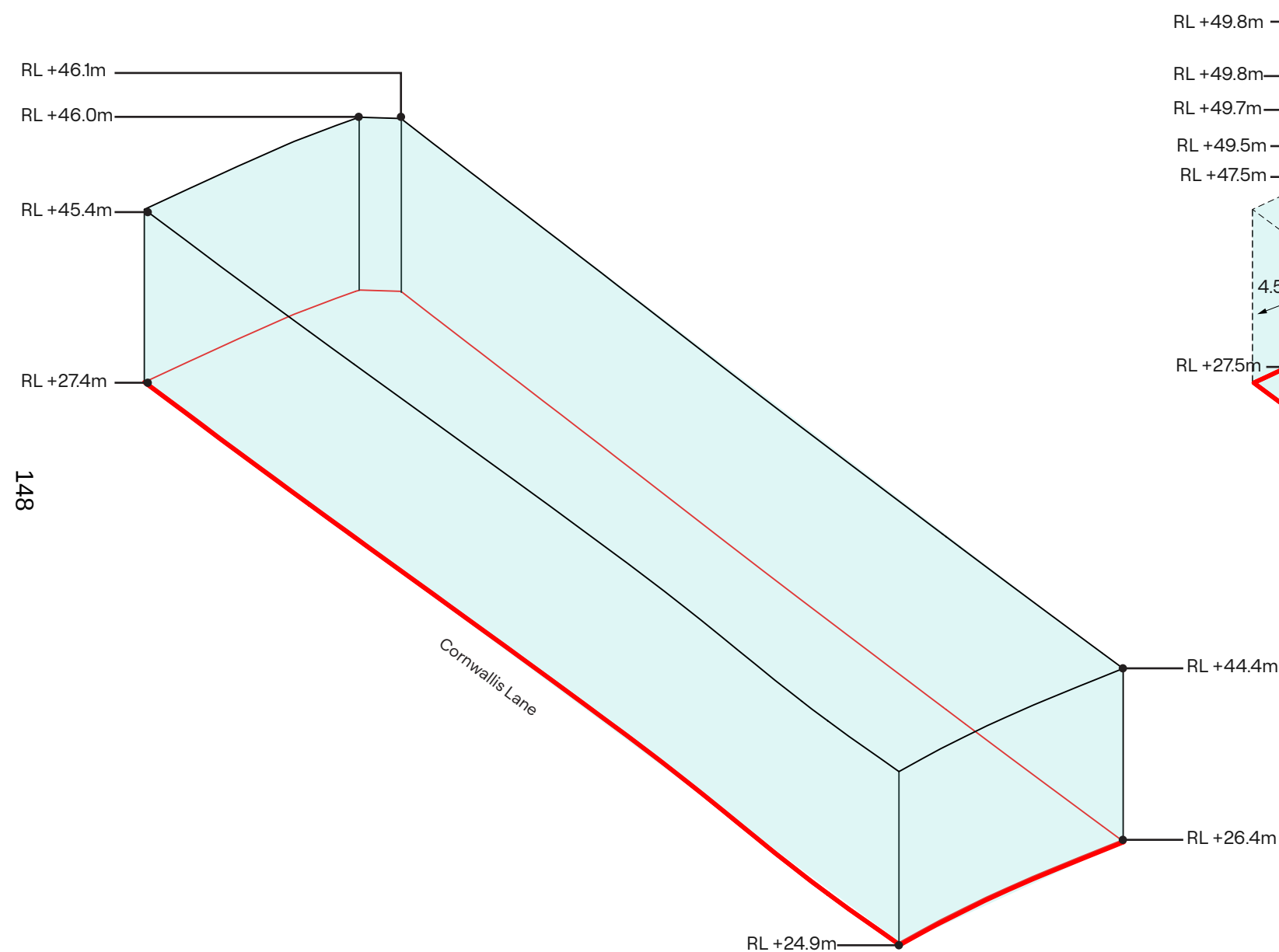
South west isometric view

KEY

- Site boundary
- Proposed envelope
- Green rooftop access articulation zone

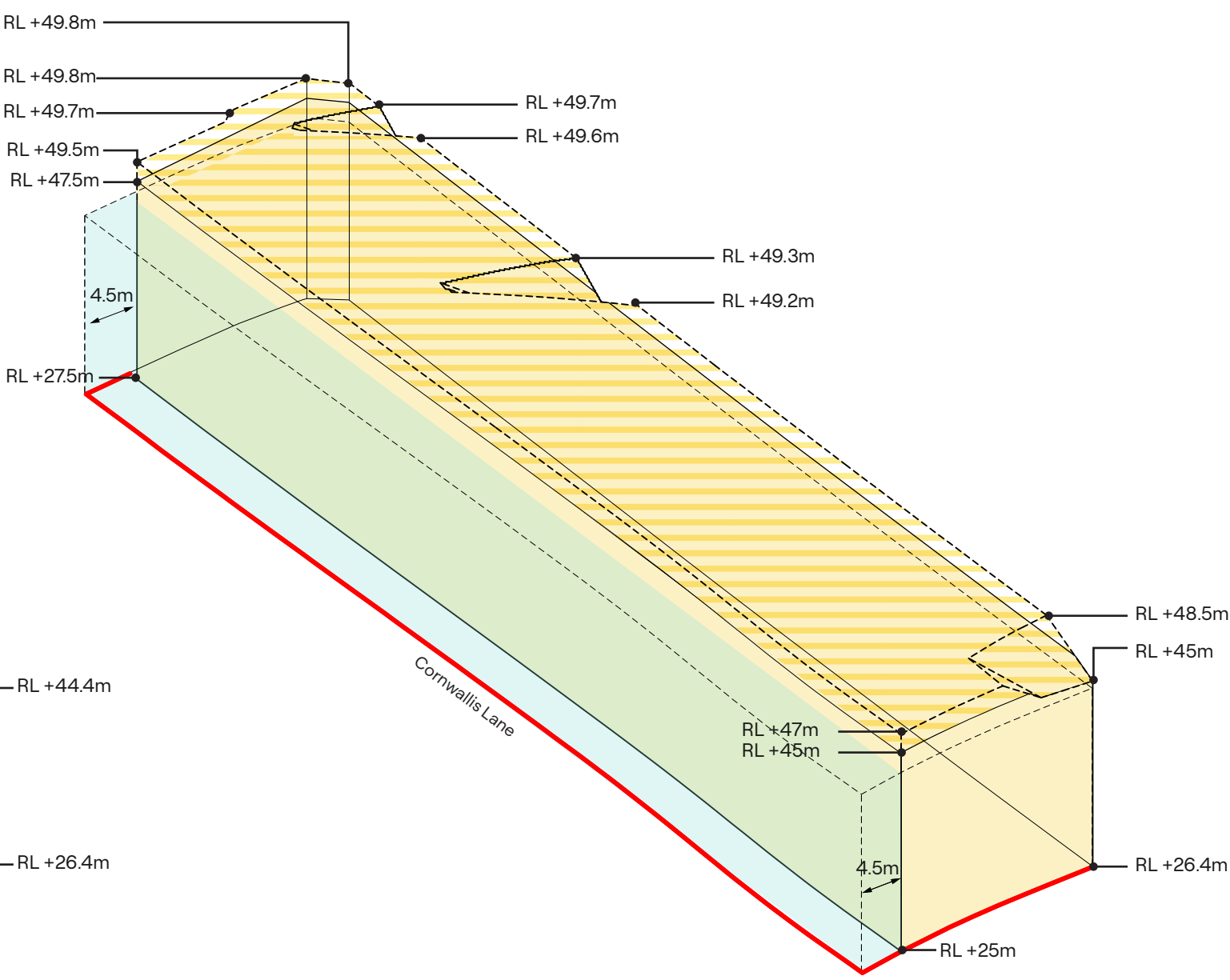
Comparison of envelopes

LEP envelope



South west isometric view

Proposed envelope



South west isometric view

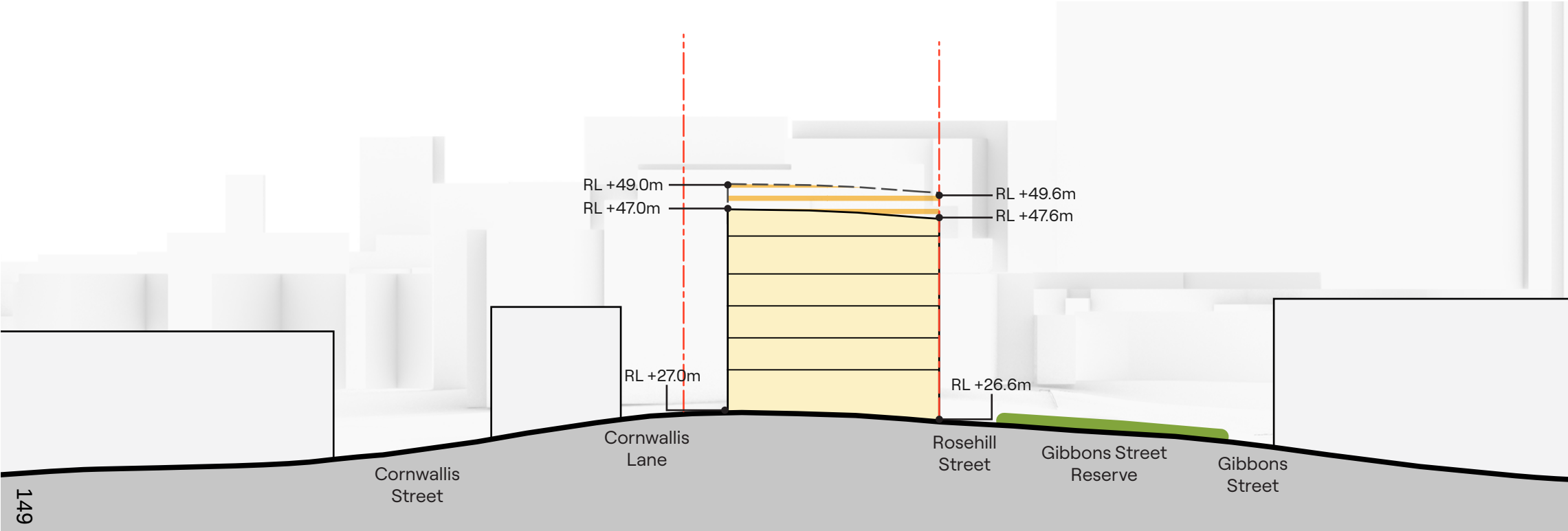
KEY

- Site boundary
- LEP envelope
- Proposed envelope
- Green rooftop access articulation zone

PROPOSED
GFA
8,837m²

PROPOSED
FSR
3.5:1

Envelope sections

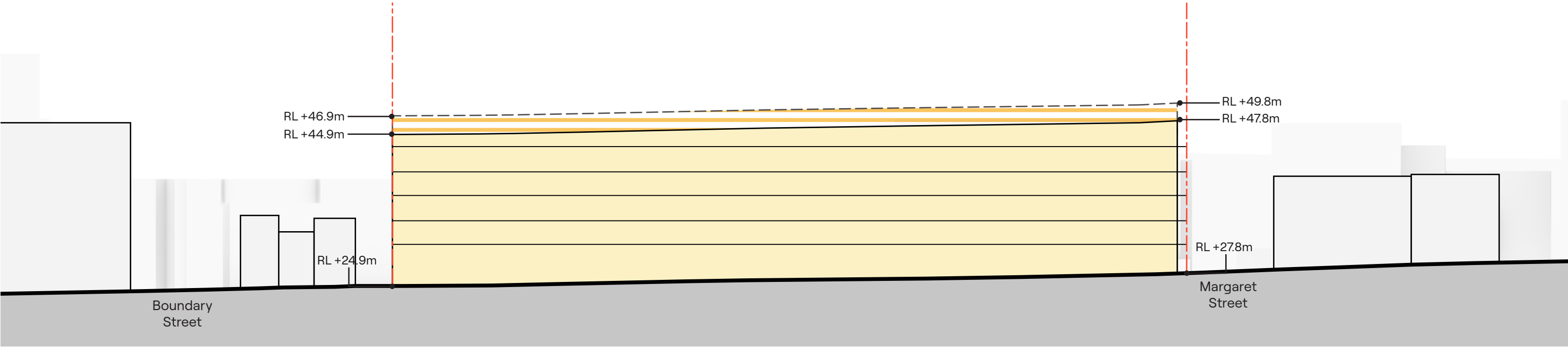


KEY

- Site boundary
- Proposed envelope
- Green rooftop access articulation zone

AA' - East west section

1:500@ A3



BB' - North south section

1:500@ A3

5 Solar testing

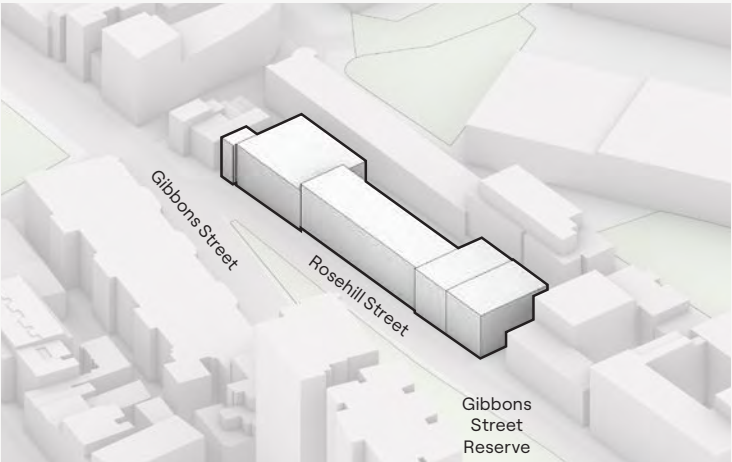
150

Solar impact on surroundings

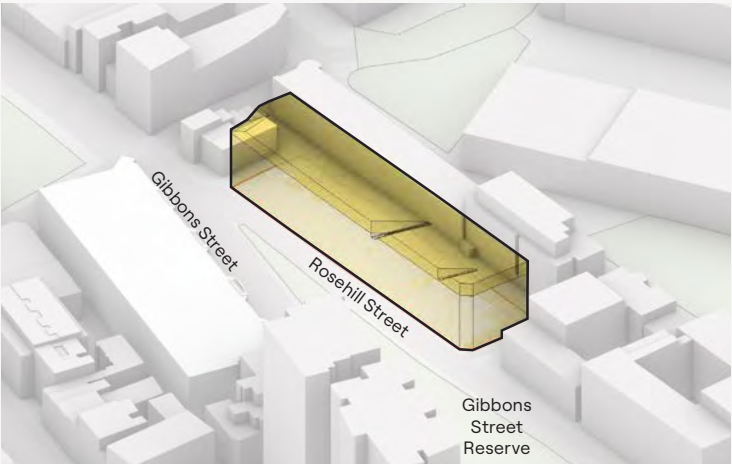
The proposed envelope has been designed to comply with the solar access requirements of the ADG and the City of Sydney DCP. A series of solar insolation studies were undertaken to assess and minimise potential overshadowing impacts.

An initial shadow study identified key areas of concern, which were subsequently examined in greater detail through solar insolation and eye of sun testing to verify outcomes and confirm compliance with relevant solar access provisions.

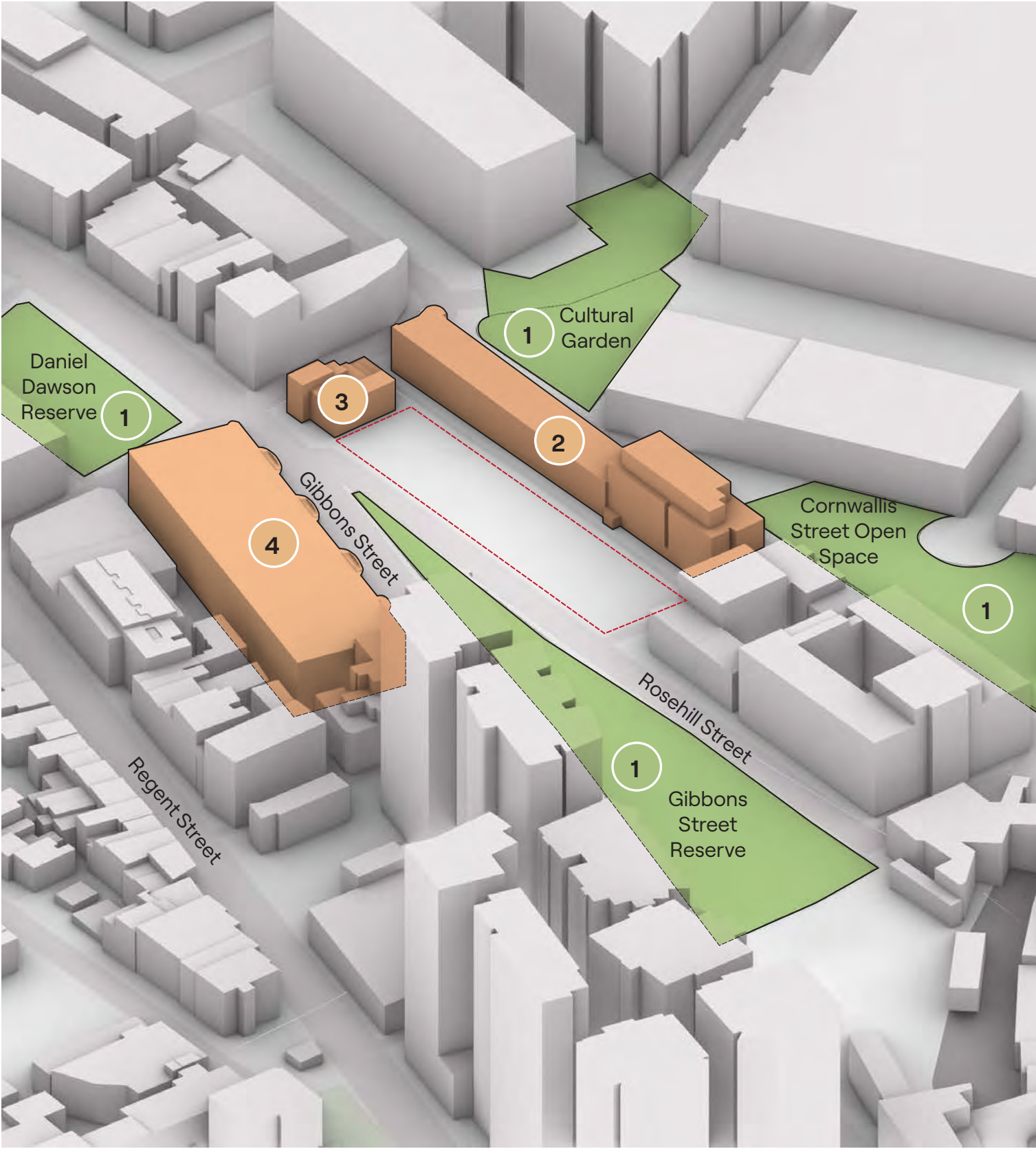
The overshadowing impacts of the following conditions are compared throughout testing:

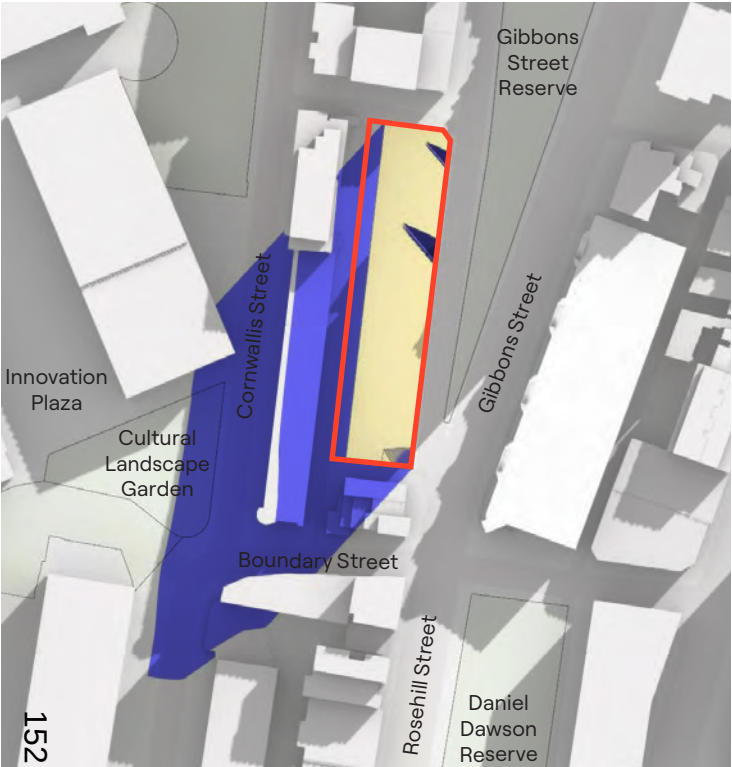


Existing conditions

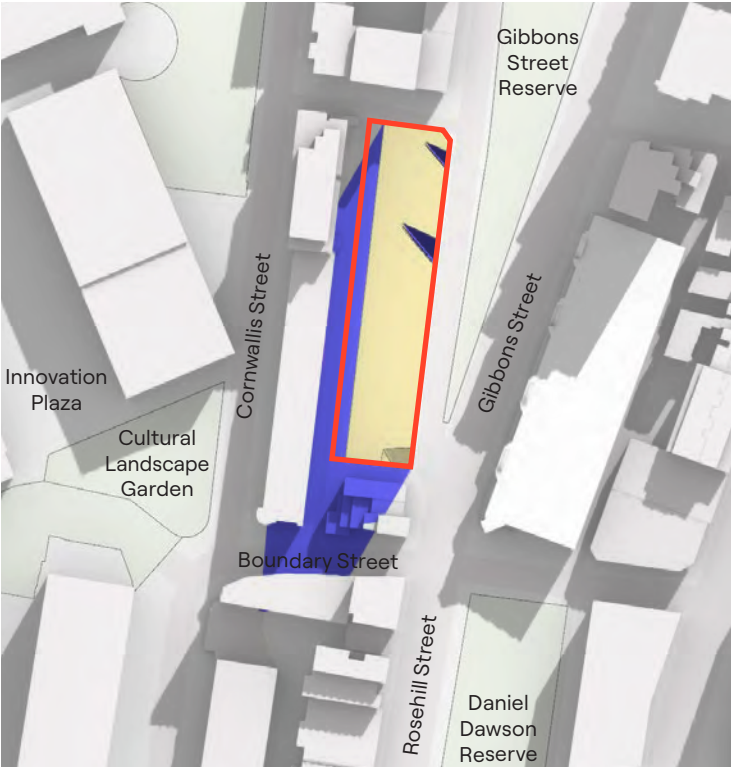


Proposed envelope

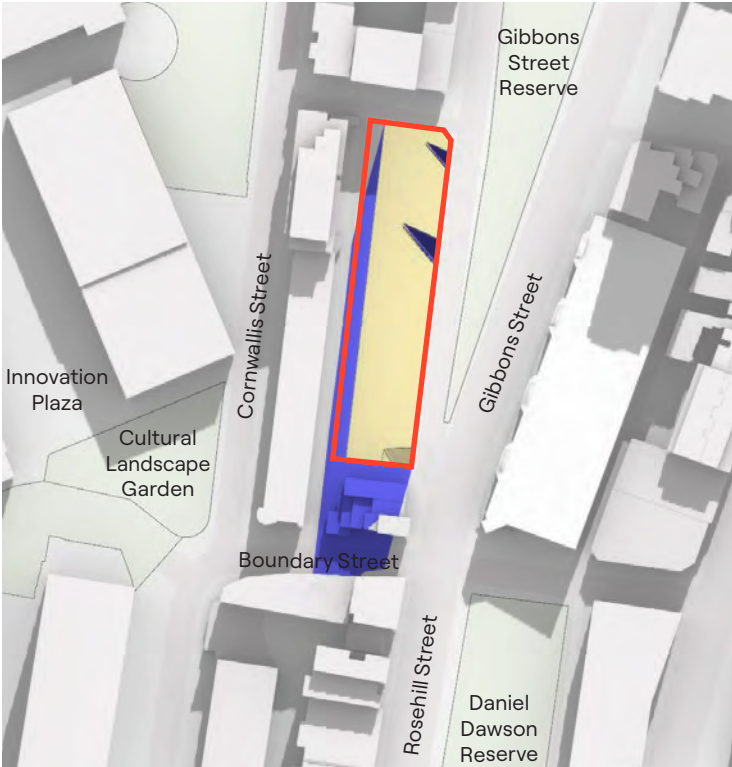




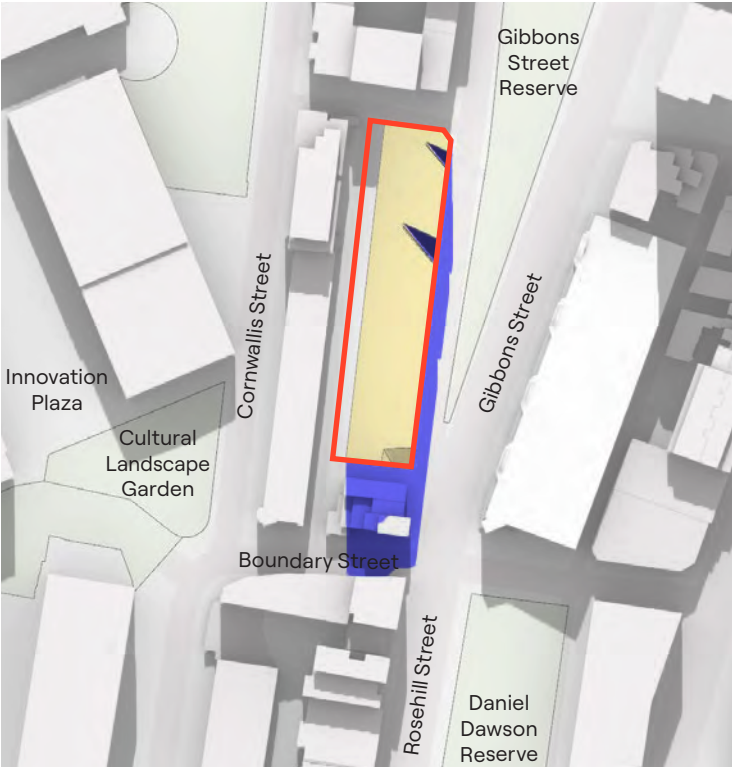
9:00 am



10:00 am

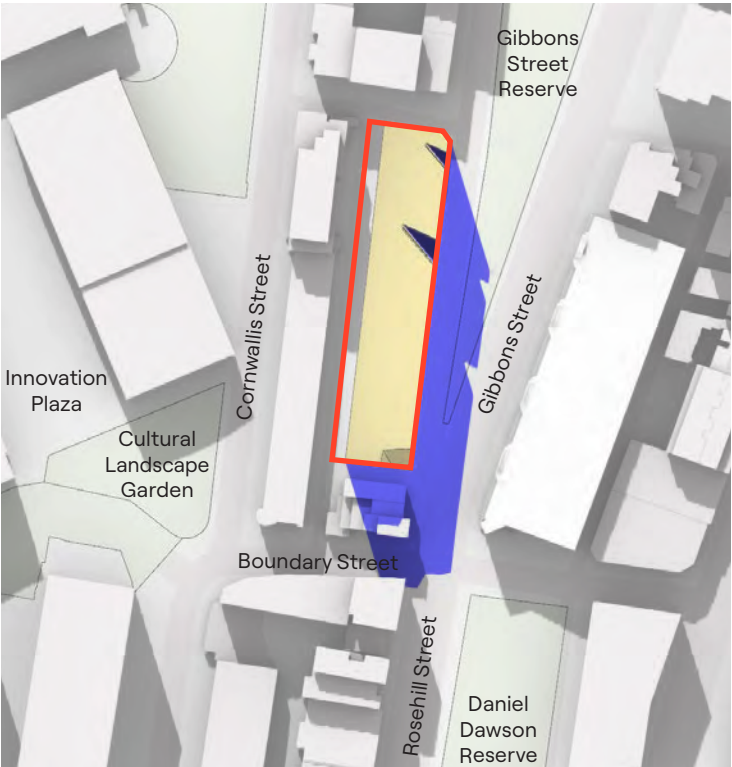


11:00 am

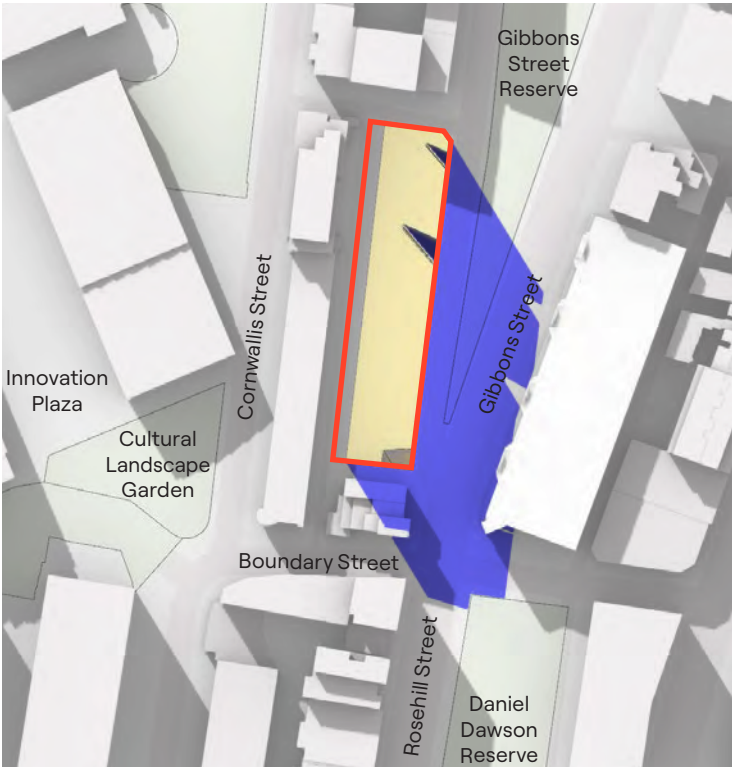


12:00 pm

KEY	
	Subject site
	Proposed envelope
	Existing shadows
	Proposed massing shadow



1:00 pm



2:00 pm



3:00 pm



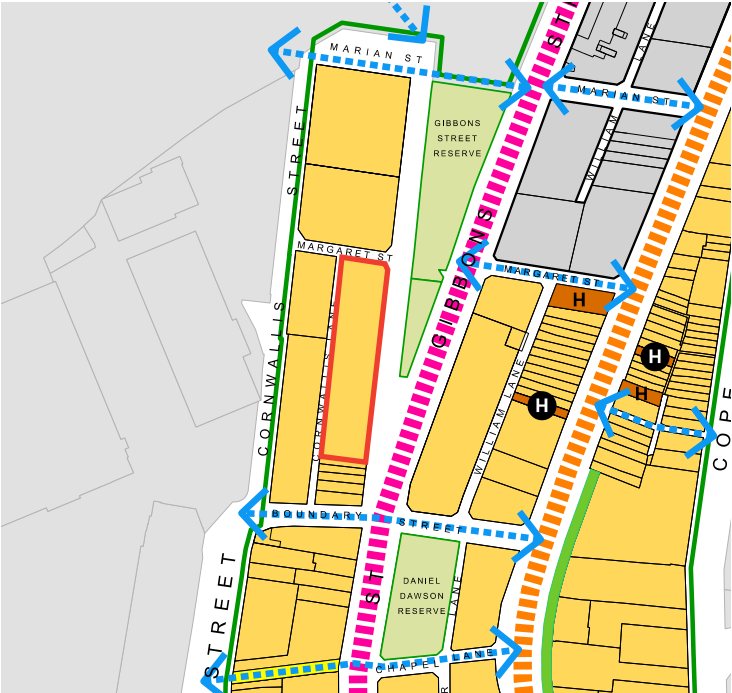
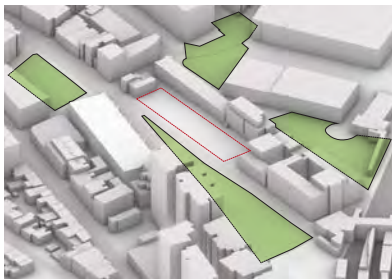


Figure 5.253 Botany Road Precinct Urban Strategy

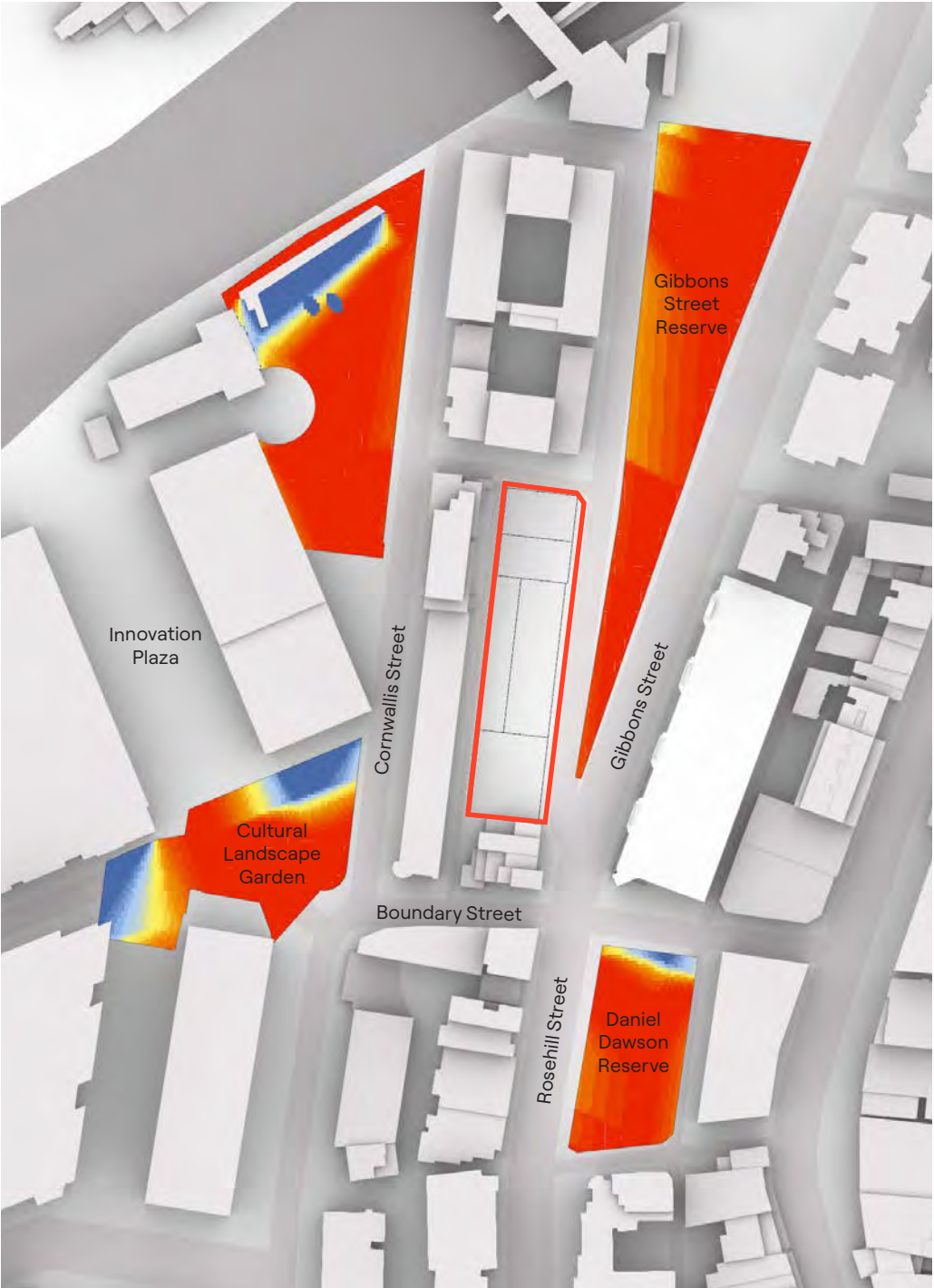
Provision 5.10.4.1(3) of the City of Sydney DCP states that “development is to minimise overshadowing to parks and other identified open space in Figure 5.253 Botany Road Precinct Urban Strategy between 10 am and 2pm at the winter solstice.”

As identified in Figure 5.253, the open spaces relevant to this assessment include Gibbons Street Reserve and Daniel Dawson Reserve. Although Innovation Plaza and the Cultural Landscape Garden are excluded from this provision, analysis confirms that the proposed development does not affect these areas.

The proposal achieves no additional overshadowing of Daniel Dawson Reserve. To ensure this outcome, a solar access plane was projected at 2pm mid-winter, and the proposed envelope was clipped accordingly, a refinement verified through eye of sun testing.

In relation to Gibbons Street Reserve, minor overshadowing is observed between 1pm and 2pm, limited to the narrowest and least functional portion of the space. The primary active and usable areas remain unaffected, preserving the reserve’s overall amenity and access to sunlight.

While complete avoidance of overshadowing to Gibbons Street Reserve was not feasible without compromising development viability, the proposed envelope balances solar access protection with practical development outcomes in accordance with DCP objectives.



Existing conditions

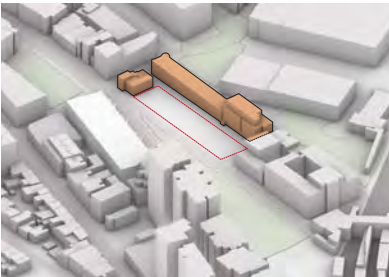


Proposed envelope

Impact on adjoining properties

The proposed envelope complies with solar access requirements in relation to adjoining properties. The interface with 15-41 Cornwallis Street occurs primarily along bedroom façades, as confirmed through floorplan analysis and on-site verification. Since the ADG requires solar access protection only for living rooms, the proposal is compliant.

The properties at 80-88 Rosehill Street still maintain good solar access. Moreover, the buildings are in poor condition and likely to be redeveloped in the future.



88 Rosehill Street



Rear of 15-41 Cornwallis Street



84-86 Rosehill Street

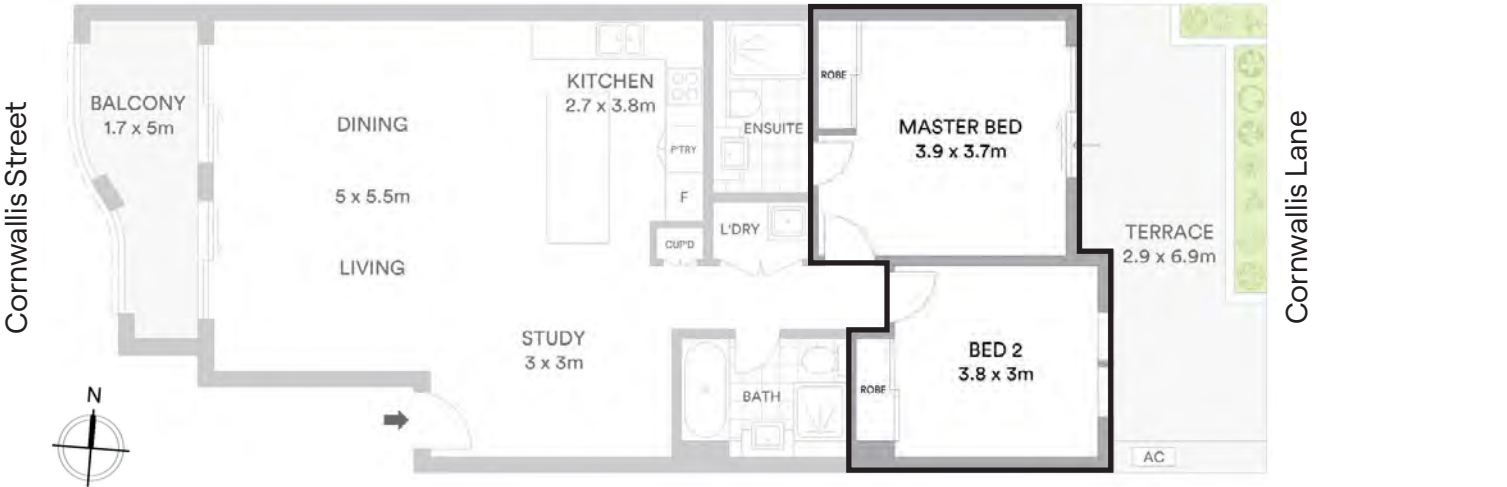
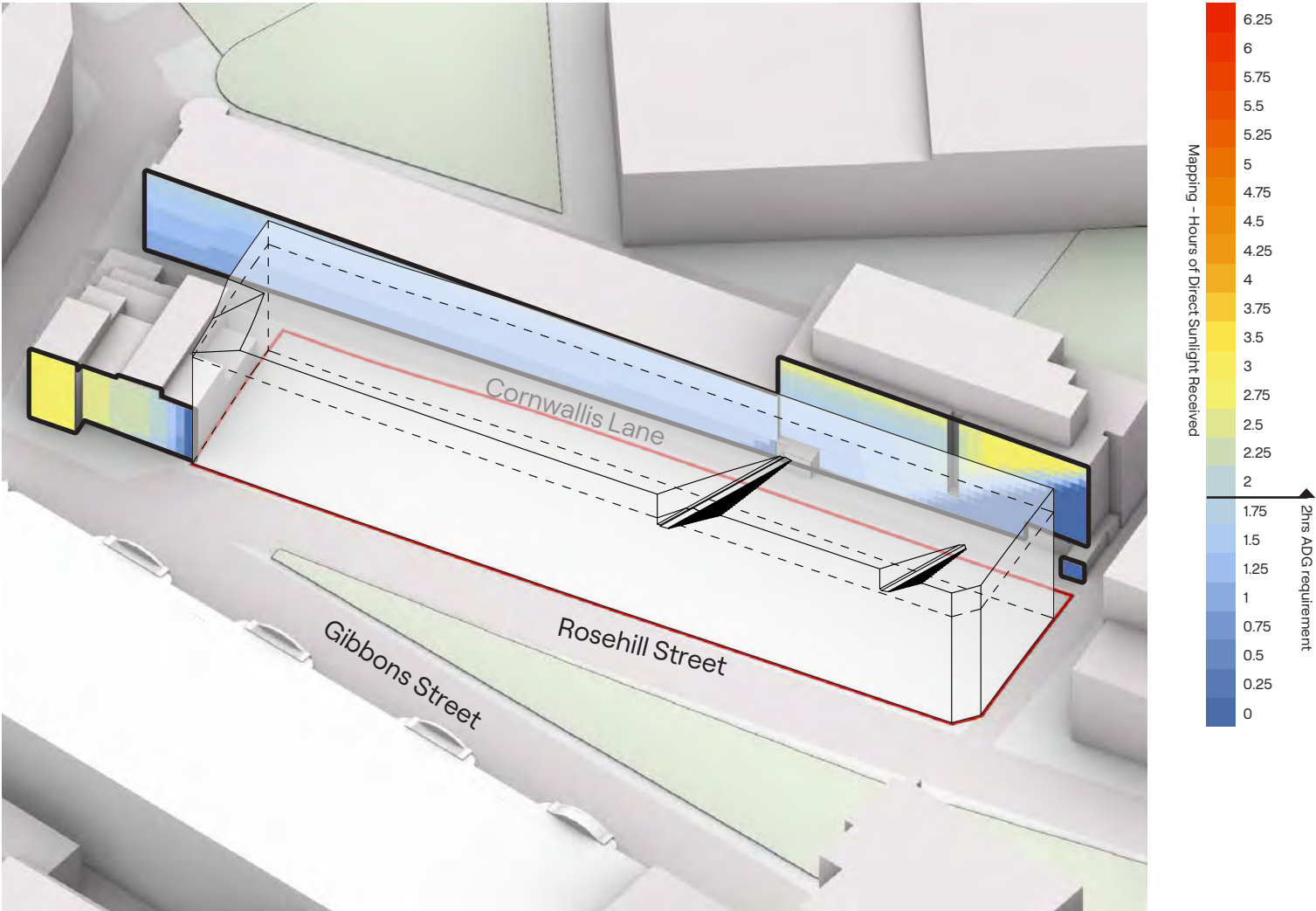


80-84 Rosehill Street

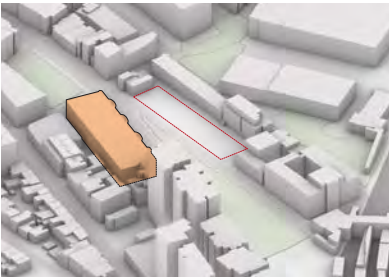


Rear of 15-41 Cornwallis Street

Proposed envelope



Floorplan of apartments at 15-41 Cornwallis Street



Interpreting guidelines

‘Minimising overshadowing of neighbouring apartments’ guidelines

The City of Sydney has published draft guidelines to provide a framework for categorising the solar access of neighbouring apartments based on the amount of direct sunlight received. These guidelines use a consistent testing parameter of 1 square metre of direct sunlight to living areas and private open spaces.

Although the table is titled “Living Areas and Private Open Space,” the categorisation has been applied with additional nuance to enhance amenity for neighbouring properties, ensuring a more considered assessment of solar access.

Interpretation of Categories

- 2 hours of direct sunlight:
 - BOTH living area AND private open space receive at least 2 hours of direct sunlight to 1 m² between 9 am and 3 pm (mid-winter).
- 15 minutes to 2 hours of direct sunlight:
 - EITHER living area OR private open space receives less than 2 hours, but BOTH receive more than 15 minutes of direct sunlight to 1 m².
- No direct sunlight:
 - EITHER living area OR private open space receives less than 15 minutes of direct sunlight to 1 m².

Application of Methodology

Using detailed Eye-of-Sun testing, each apartment within is classified into one of the above categories. A baseline condition is first established to assess solar access under existing circumstances.

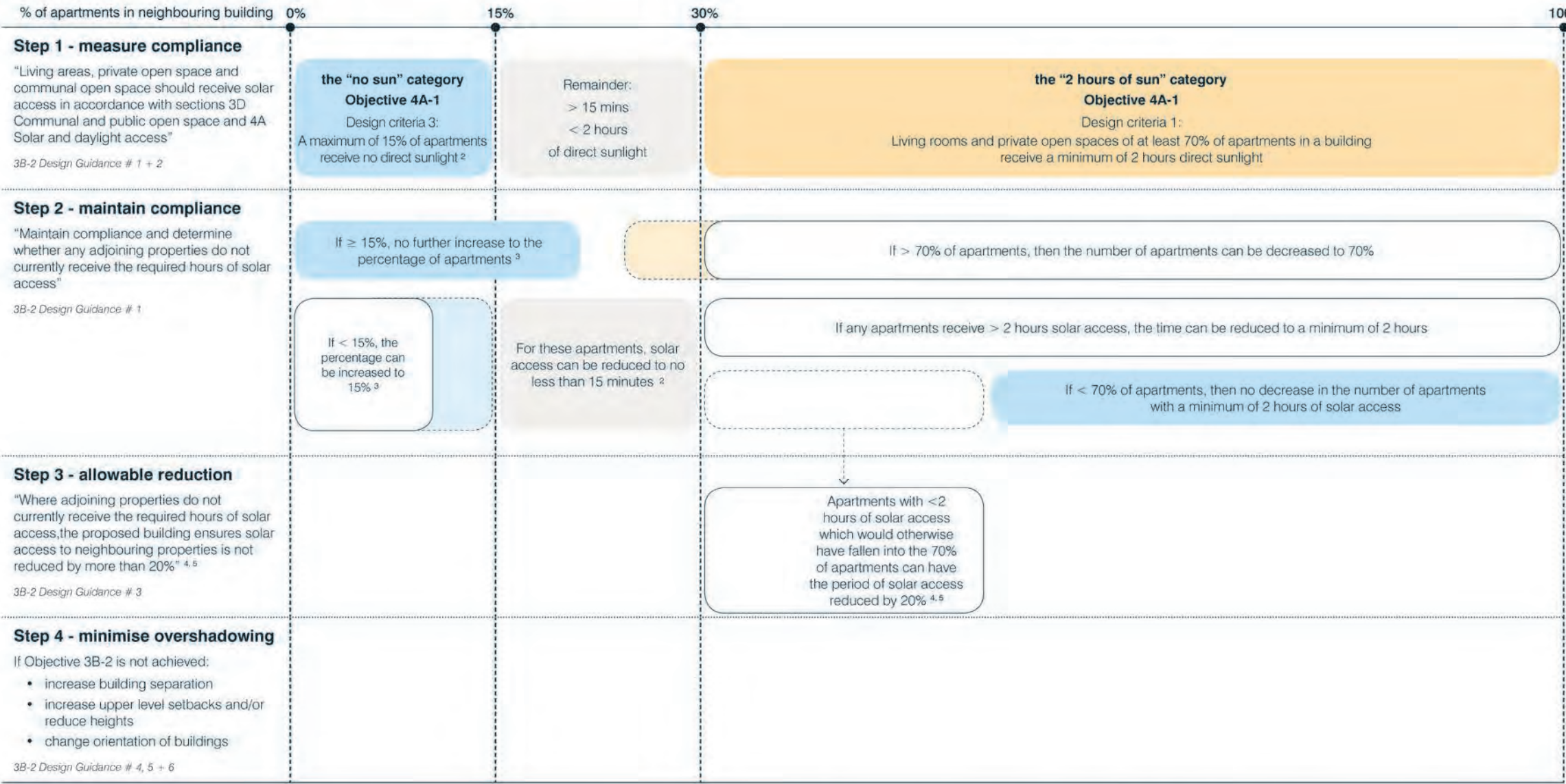
The proposed building envelope is then tested and refined to ensure that it maintains compliance with these categories and adheres to the allowable reductions set out in the guidelines.

City of Sydney

Overshadowing of neighbouring apartments DRAFT

ADG Objective 3B-2
- Overshadowing of neighbouring properties¹ is minimised during mid winter

Living Areas and Private Open Space



Notes

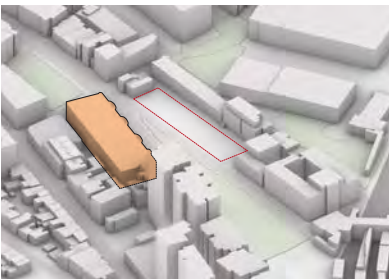
1 Neighbouring properties refers to individual strata properties where sunlight to living rooms and private open space is being considered.

2 Refer to ADG 4A-1 design guidance #5: to maximise the benefit 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.

3 Time can be reduced to 0 minutes.

4 As it is only the 70% of apartments which have a measurable criteria in terms of the required hours of solar access, the 20% reduction applies to that proportion of apartments which would otherwise have fallen into the 70% of compliant apartments it does not apply to the 15% with no direct sun or the remaining 15%, which can be reduced to no less than 15 minutes. It also does not apply to apartments which currently receive the minimum of 2 hours of solar access.

5 The measurable criteria is in hours, so the 20% reduction is measured in hours.



Analysis of existing conditions

Testing methodology

A solar insolation test is first conducted to produce a visual representation of the solar access to each apartment. Eye of sun testing is then used to validate these findings and determine whether 1 square metre is visible of either private open spaces and living areas. This then informs the categorisation of each apartment and informs the allowable reductions that can be made.

The results are documented on the following page.

Note: On-site investigation has identified the subdivision of Unit 0.01, resulting in the additional apartment Unit 0.65.

156

KEY

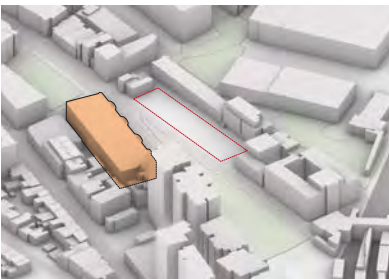
- ≥ 2 hours of direct sunlight to living area and private open space
- 15mins to 2hrs of direct sunlight to living area or private open space
- No direct sunlight to living area or private open space



Solar access of apartments under existing conditions



Solar insolation diagram of the Gibbons Street facade under existing conditions



Solar impact under proposed conditions

Allowable reductions

The property at 39-61 Gibbons Street comprises 67 apartments.

As the number of apartments that receive 2 hours of solar access is below 70% of the total number of apartments, the total number of apartments receiving 2 hours cannot to be reduced.

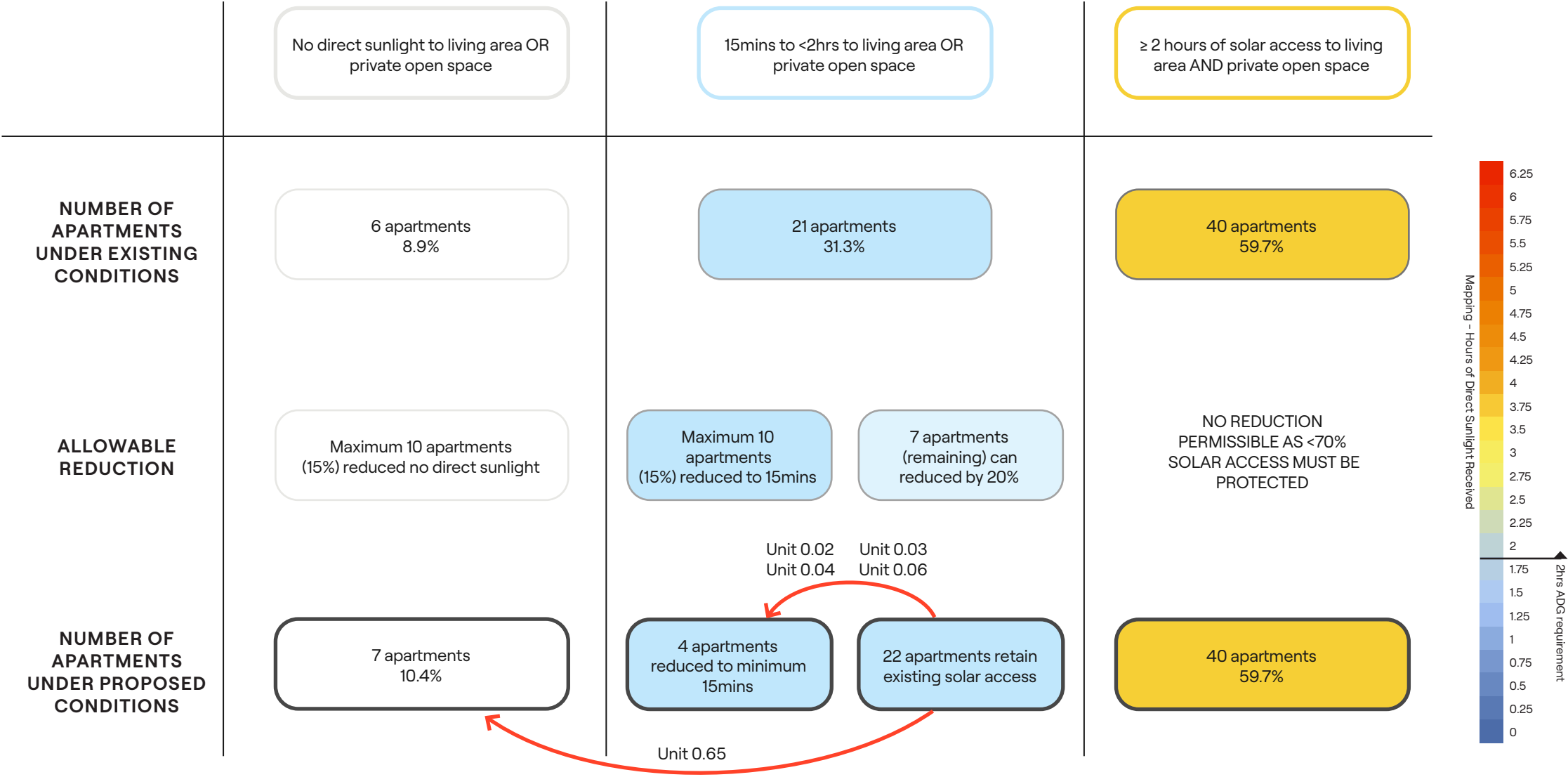
Within the ‘no direct sunlight’ category, a maximum of 15% of apartments can receive no direct sunlight. Under existing conditions, 6 apartments receive no direct sunlight, equating to less than 15%. This means that, under the proposed envelope, an additional 4 apartments can fall within this category without breaching the guideline.

Solar impact

The proposed development only impacts the Gibbons Street facade of 39-61 Gibbons Street. The solar insolation diagram below documents the extent of impact of the proposed envelope along this facade. This has been verified using eye of sun testing and is documented in Appendix 1.

Findings

- The analysis demonstrates that the proposed envelope maintains compliance with the allowable overshadowing parameters:
- The number of apartments receiving two or more hours of direct solar access remains unchanged.
 - Five apartments in the 15 minutes-2 hours category will experience a reduction in solar access. Of these, four apartments continue to receive more than 15 minutes of sunlight, while one apartment (Unit 0.65) will receive less than 15 minutes.
 - The total number of apartments receiving less than 15 minutes of solar access remains below 15% of all apartments, and therefore complies with the City of Sydney guidelines.



Solar insolation diagram of the Gibbons Street facade under proposed envelope

Architectural concept

Building form

Built form has been influenced by the surrounding heritage buildings with masonry facades and punched window openings. Adjacent precedent imagery demonstrates different approaches to those two principles.

159





Artist's impression of the proposal at the corner of Margaret Street



Artist's impression from Gibbons Street



Artist's impression at the intersection of Rosehill Street and Gibbons Street

Facade materiality, colour and detailing is reflective of the heritage character of the surrounding buildings. Simple detailing with the colour of the brick celebrated is a key concept in this reference scheme. Adjacent imagery demonstrates precedent imagery with a similar approach to detailing and materiality.

