608 High St, Penrith

Preliminary Urban Design Analysis

July 2020

Atlas Urban

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PROJECT TEAM:

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INTRODUCTION

Atlas Urban has been commissioned to provide urban design consultancy services for the proposed development. This document presents the context analysis and a review of the planning policy which have informed the architectural response: massing; composition; function and expression of the scheme which is the subject of this Development Application. Furthermore, the design has been refined through a series of Design Panel reviews which saw progressive modification and refinements to become the final DA scheme.

The precinct is undergoing a transformation from an area of low and medium density commercial development to medium and very high-density mixed-use development. Currently, the site is an undeveloped brownfield site. It is situated between the historic retail and commercial core of Penrith, in a mid-block position. Very large scale mixed-use developments are planned to the west. The site is an important infill site due to the requirement to transition and integrate between these two areas.

The view easterly along High St. The site is bounded to its north by four lanes of carriageway

The view westerly along High St. The High St can be seen to transition from two storey to three storey with frontage along the southern side

SITE CONTEXT

High Street is the busy main road leading west from the City Centre. The north side has a number of important functions including: Penrith City Council offices; the Joan Sutherland Centre and; Westfield's. However, these buildings are set behind car parks and loading areas, so the built form relationship to the street is weak. On the south side of the street, to the east of the subject site are buildings with more traditional commercial frontage: glazed shopfront with awnings over the footpath. Beyond Worth Street the frontage is inconsistent and dominated by car parks.

The site benefits from clear address on its primary frontage and the presence of a rear lane for servicing. The clear objective for the design is to provide activation to the street and form a coherent part of the street wall.

The site has a number of challenges which need to be considered. The existing urban fabric has a varied built form which distinctly contrasts the type and scale of the proposed developments to the west. Development on the subject site will represent a transition between the smaller existing buildings to the east and the significantly larger proposed developments to the west.

1. Loading docks and car park entry. Make poorly defined street edge.
2. Fast-moving and heavy traffic
3. Office building has windows facing side boundary
4. Car-parks dominate street frontage
5. Servicing from rear lane

Context Analysis

STRATEGIC PLANNING CONTEXT

The site forms part of Penrtih High Street. Penrith Train Station is within 800m of the site, a distance universally accepted as within reasonable walking distance. Penrith High Street is a site of strategic importance within both the DCP and LEP.

The surrounding area consists of;

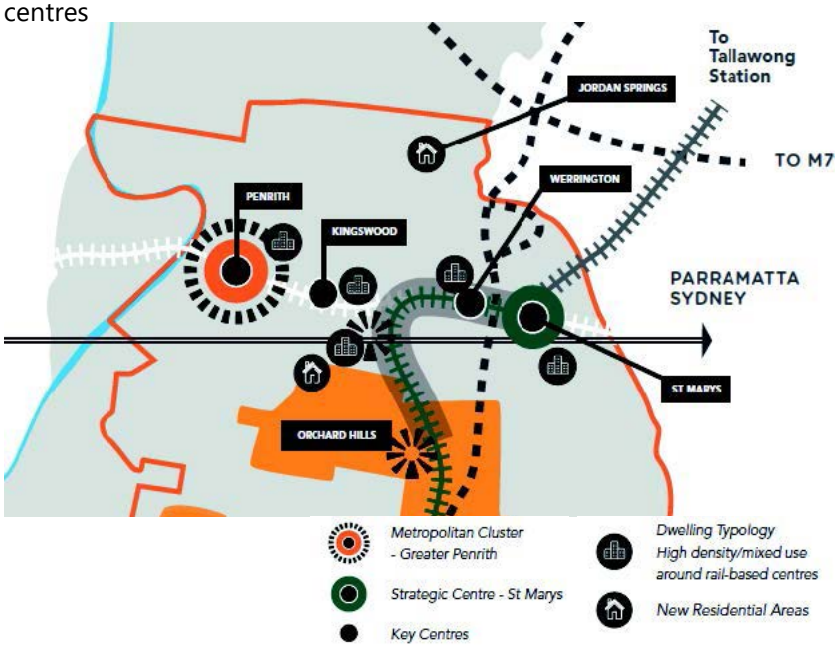
- The existing Penrith High St to the east, this area is due to go through regeneration to improve the urban fabric and public space.
- The south of the site is predominately a residential area
- To the west there is a large brown field site, beyond this is predominately residential
- The north of the site consists of Penrith City Council, Joan Sutherland Performing Arts Centre and Westfield Penrith. These buildings are separated from the site by High Street which consists of 4 lanes of vehicular traffic, a central reservation and a mixed pedestrian and bicycle lane
- The existing urban fabric is made up of low to medium height buildings, with no clearly defined building vernacular.

Key Planning Documents

A range of contemporary strategic planning policy documents identify Penrith as a significant and growing employment hub offering a range of jobs and services.

The strategic and statutory planning framework that applies to the site includes the following:

- Penrith Local Strategic Planning Statement 2020
- Penrith City Centre Vision Document 2007
- Penrith Local Environmental Plan 2010
- Penrith Development Control Plan 2014

Key Planning Documents	Key Framework to Subject Site
Penrith Local Strategic Planning Statement 2020 The Local Strategic Planning Statement (LSPS) outlines Penrith's economic, social and environmental land use needs over the next 20 years. It highlights those characteristics that make the area special and outlines how growth and change will be managed into the future. PLANNING PRIORITY 3: Provide new homes to meet the diverse needs of our growing community	Housing capacity and investigation areas map shows Penrith city is identified as Metropolitan Cluster and the dwelling typology in this area is designated for high density/mixed use around rail-based centres 

Key Planning Documents	Key Framework to Subject Site
Penrith City Centre Vision Document 2007 This plan lays out the future vision for Penrith as a vibrant, forward looking centre which provides high quality living and employment outside the intense environment of metropolitan Sydney. The Vision Document sets out a number of principles that need to be satisfied to ensure that the future vision for Penrith is achieved.	• ***Grow jobs in the heart of the city centre;*** The subject site is a mixed use development with commercial and residential. Creating new jobs and supporting the existing High Street. • ***Encourage diverse precincts around the city centre;*** The proposed development expands the High St westerly whilst also creating a live and work environment expanding the hours that the area would be used. • ***Create a living city by encouraging mixed use development that complements the centre's core employment role;*** The proposed development is a mixed use development which incorporates commercial which provides new job growth. • ***Develop a distinct role and character for the city centre;*** The development is required to follow design guidelines set out in the DCP ensuring building types, facades and activation of the street are both consistent and to a high quality • ***Ensure high quality design of building and public areas;*** The proposed development is a new build incorporating modern building techniques. The design also activates public spaces. • ***Enhance transport links to and from the centre;*** The subject site is within 800m of Penrith Train Station, a generally accepted walkable distance. The area also has an abundance of retail and services that are easily accessible from the subject site. The location of the subject site allows for a modal shift towards walking, and a more sustainable way of life. • ***Improve the natural environment;*** The subject site is a brownfield site with no real natural environment. The proposed development creates a new green space and associated planting. • ***Strengthen governance and funding arrangements and partnerships.*** The proposed development is by a private developer. Increasing the housing supply without the requirement of government funding.

Penrith Local Environmental Plan (PLEP) 2010

The PLEP includes a several key development controls as outlined in the table below.

Key controls under the PLEP

Penrith LEP 2010	Control
Land use	B4 Mixed Use
Building height	20m
FSR	3:1
Heritage	Not Applicable
Minimum Lot Size	Does not apply

Penrith Development Control Plan 2014

The Penrith Development Control Plan 2014 (PDCP) was prepared to support all planning instruments applying to the Penrith Local Government Area (LGA). The PDCP is the consolidates and supersedes all previous DCPs which applied to Penrith. The PDCP provides specific planning controls. The main aims are set out as: *contribute to the growth and character of Penrith, deliver a balanced social, economic and environmental outcome; and protect and enhance the public domain.*

The PDCP defines the subject site as area E11. This is the area which applies to Penrith City Centre. More specifically, the PDCP categorizes the site as ***"City West (Mixed Use)".*** These controls apply to the subject site and it is therefore required that the subject site abides by them.

E11.3 sets out the controls for street alignment.

It is clearly set out that within our subject site buildings should be built to street alignment.

E11.4 sets out the controls for street frontage heights.

The subject site falls under the controls of **E11.5** which sets the minimum street frontage height at 16m with a maximum of 20m, rising to a height of 24m with the presence of a 5m setback.

E11.18 identifies pedestrian links to be maintained and those which are desired.

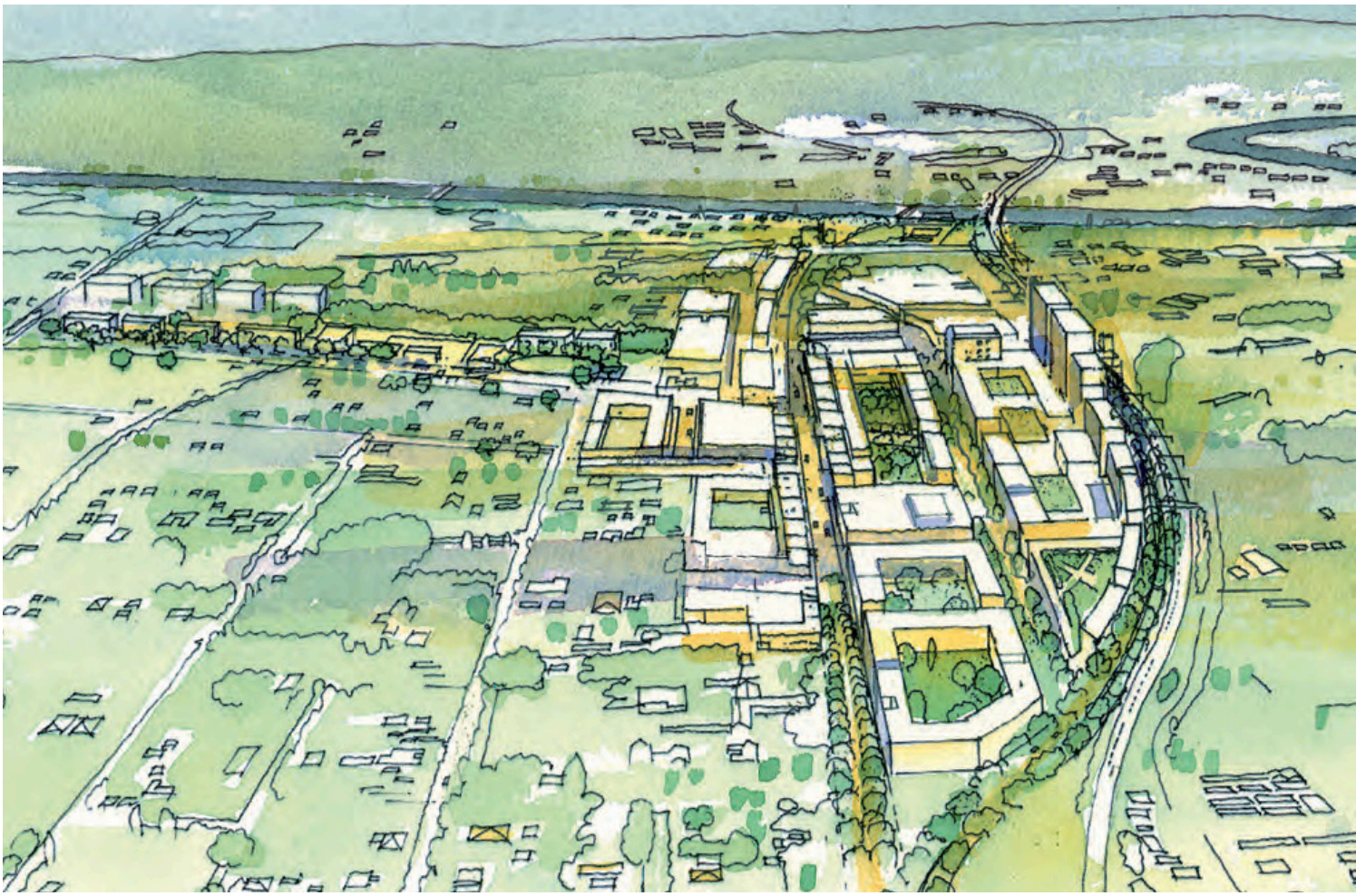
The subject site has an existing lane to its south which is to be maintained.

E11.21 provides the mapping for areas with restrictions on vehicular entries.

The subject site is not permitted to have a vehicular entrance along the northern edge fronting onto High St.

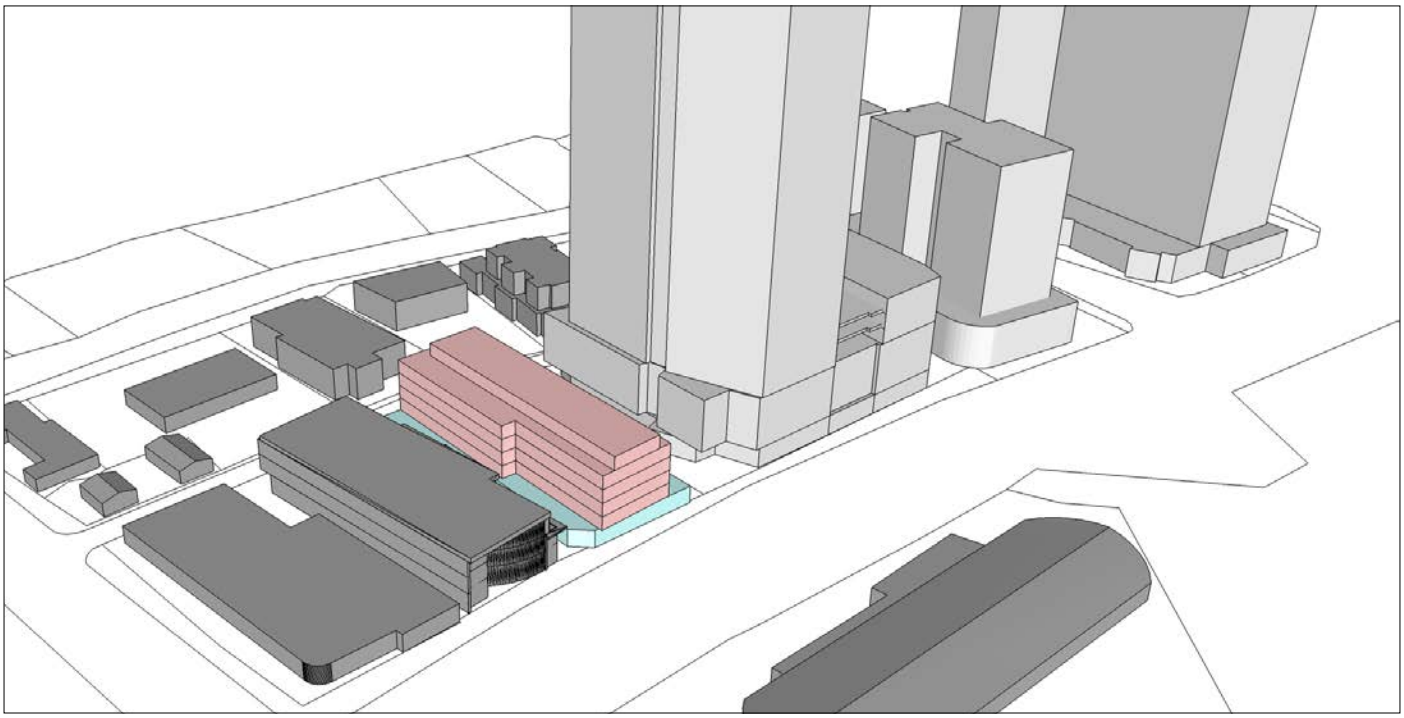
E11.3 sets out the Maximum Site Cover and Minimum Deep Soil Area.

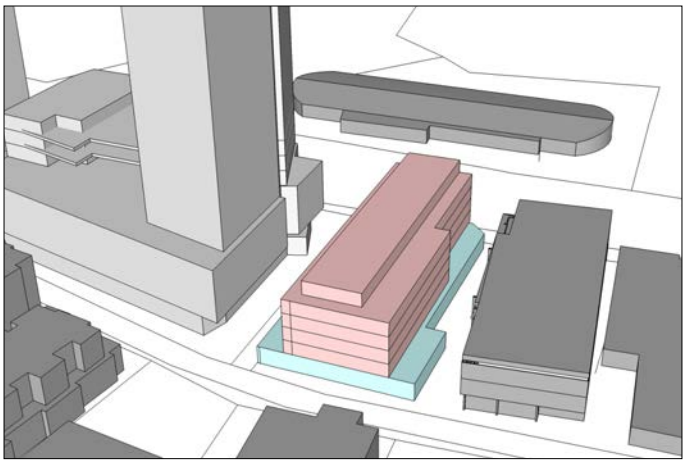
These controls for the subject site are set at a Maximum Site Coverage of 100% and Minimum Deep Soil Area of 0%. This will therefore have no restriction on the subject site.

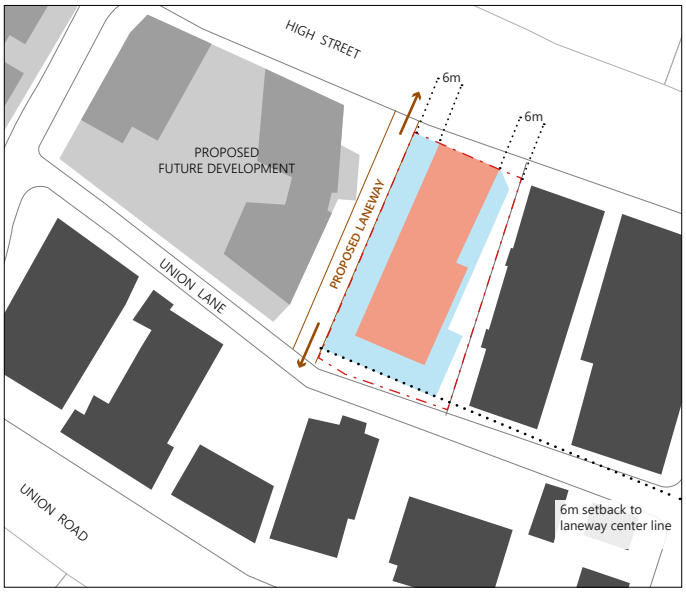


The vision for the Penrith City Centre (Source: *Penrith City Centre Plan Vision, 2007*)

MASSING STUDIES - OPTION 1







The massing options considered a range of massing alternatives for the residential component on levels 1 to 5. In each case the ground level is commercial with setbacks as identified in the previous section. The options represent a range of built forms that could be achieved using the Apartment Design Guide building separation metrics.

This option adopts a zero setback on High Street and a setback of around 6 metres on side and rear boundaries, to establish a simple stepped rectangular form.

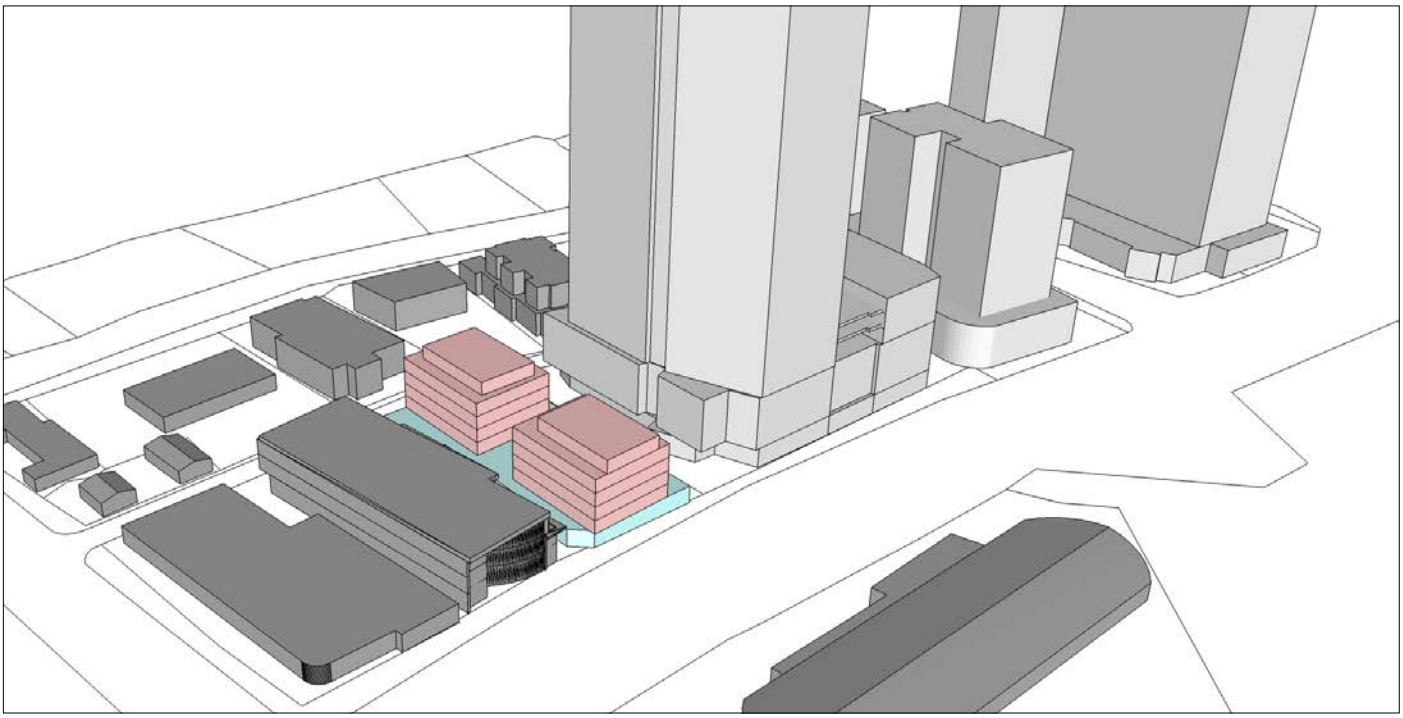
Pros:

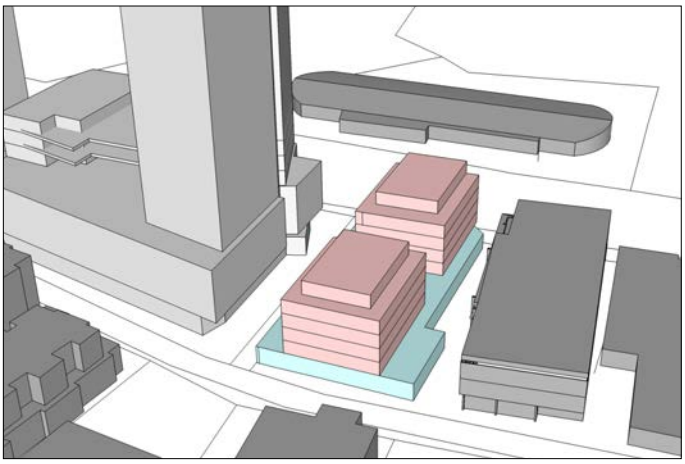
- Simple, economical building plate, with low ratio of floor area to external wall
- Large floor plates produce large yield at a given height

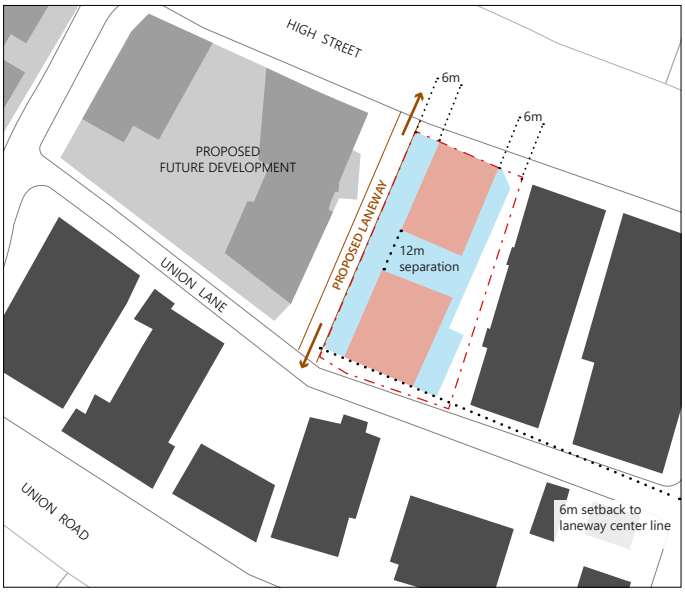
Cons:

- Primary orientation faces neighboring properties
- Limited northern exposure
- Relatively limited solar access and cross ventilation
- Lacks a useable podium-level communal space

MASSING STUDIES - OPTION 2







This option adopts a zero setback on High Street. The Union Lane setback is the minimum required from the centre of the laneway, and a setback of around 6 metres on the side boundaries. The building is divided into two blocks with a separation of 12 metres to establish a simple pair of rectangular forms.

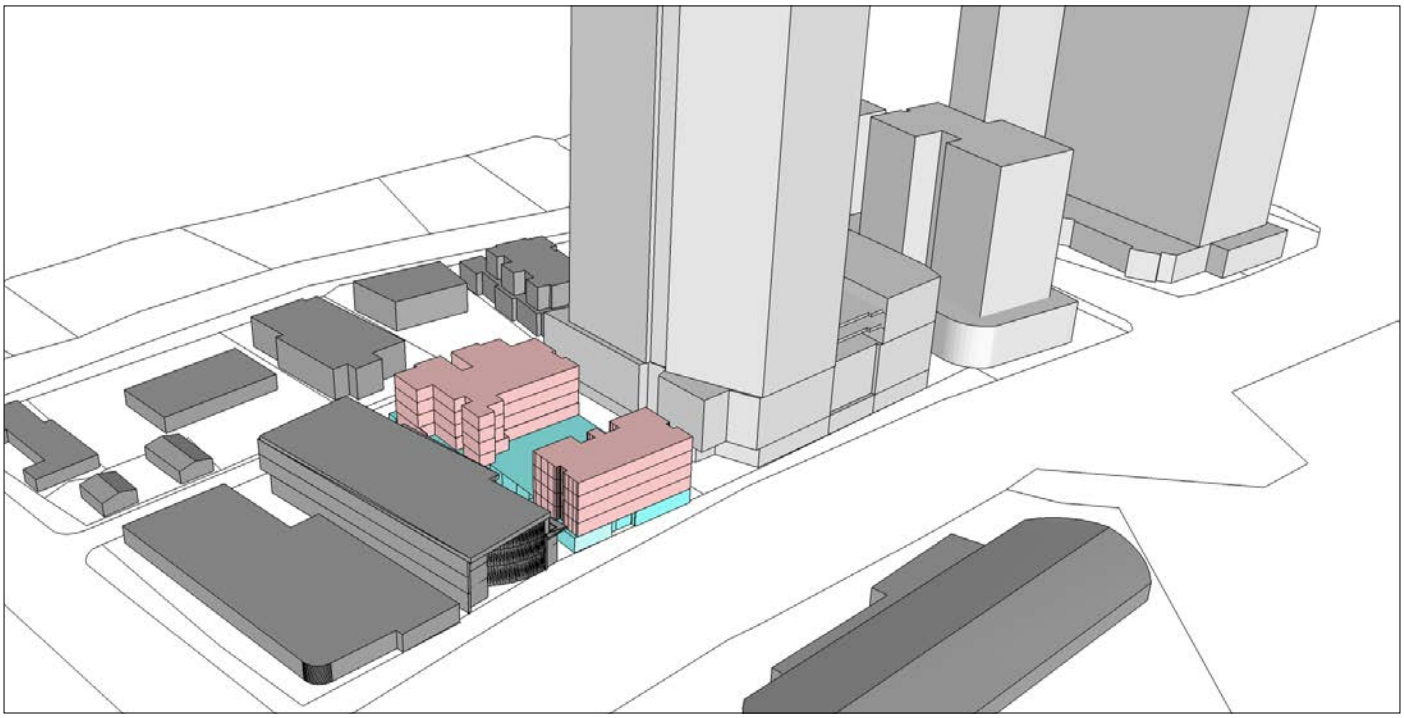
Pros:

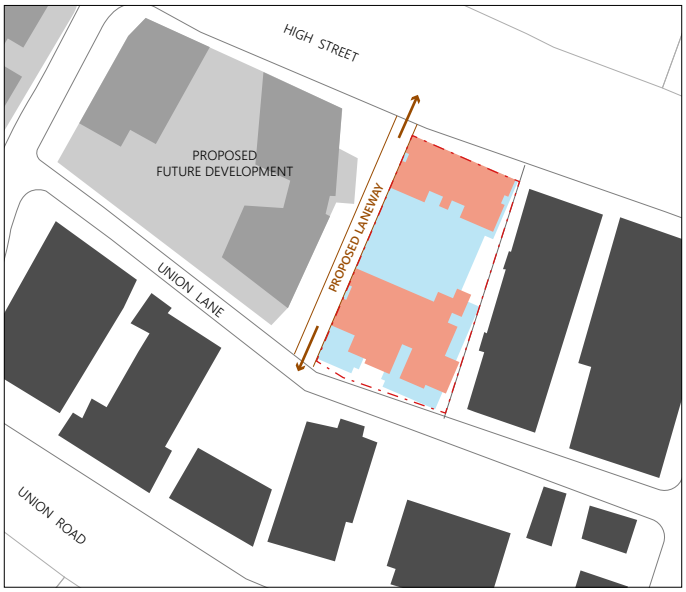
- Multiple orientation and outlook
- High ratio of floor to external wall improves potential light and ventilation

Cons:

- Most elevations look directly into other buildings at a distance of around 12 metres.
- Lacks any podium-level space of sufficient width for a communal area
- The northern building overshadows the lower levels of the southern building (midday, midwinter)

MASSING STUDIES - OPTION 3





This option proposes two blocks with east-west orientation. By taking advantage of the depth of the site which is over 60 metres from High Street to Union Lane, the northern elevation of each block receives excellent solar access. Minimising the side setbacks helps to define the street-wall and maximise the solar access and outlook from the units. The generous space between the blocks is wide enough to create private courtyards adjacent to the buildings and a common garden courtyard with a variety of spaces.

Pros:

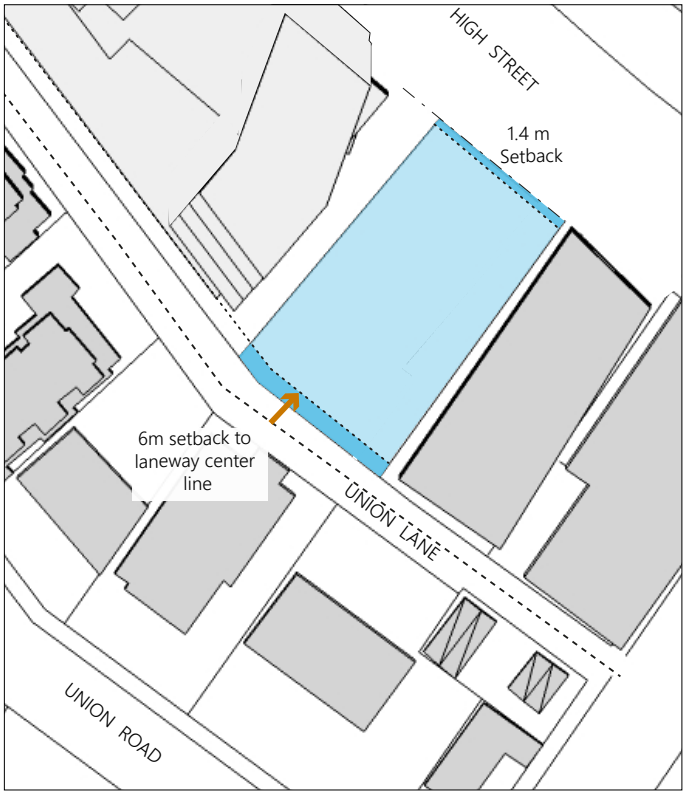
- Excellent solar access and ventilation
- Primary orientation to: street and courtyard (not to neighbours)
- Helps to define street-wall
- Generous and consolidated courtyard on podium

Cons:

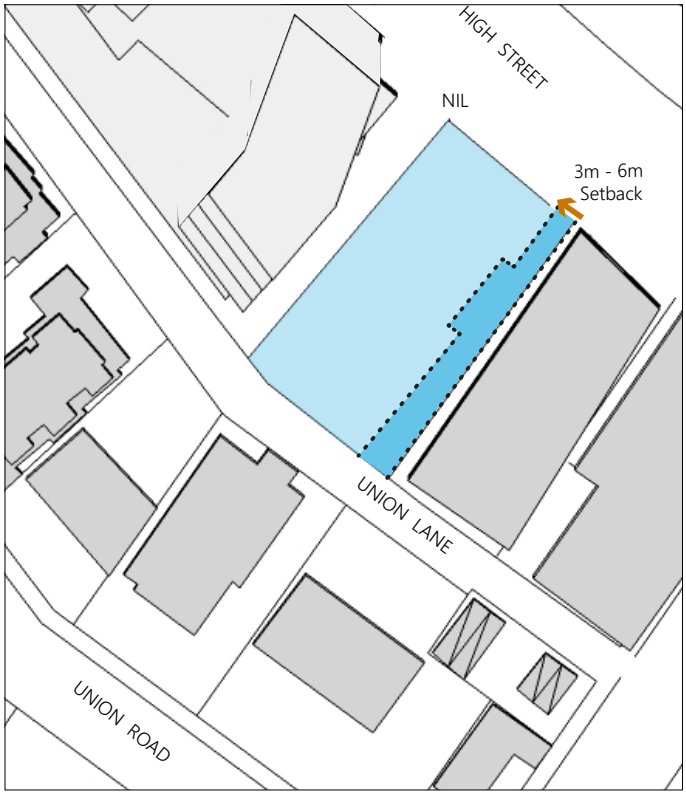
- Smaller yield than option 1
- Lower ratio of floor area to external wall can mean higher construction cost

Future share lane

SITE ANALYSIS



North & South boundary setbacks



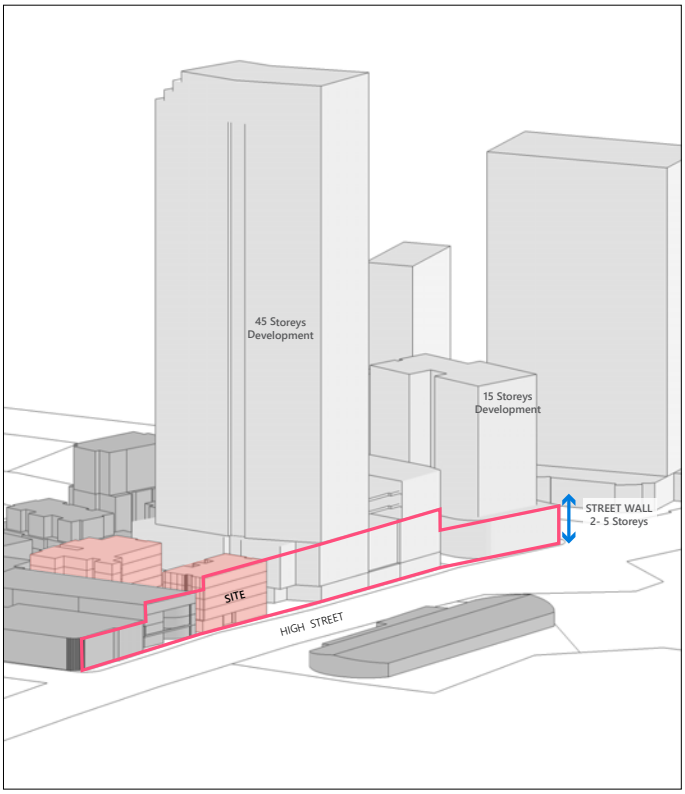
East & West boundary setbacks

The proposal is for a 1.4 metre setback to high Street. This is intended to permit a more generous footpath on the primary frontage which faces this busy road. The reasons for this decision are as follows:

- Enlarge footpath width to around 4.5m which is generous without being too wide
- Effectively enlarging the passage entry to the proposed pedestrian laneway on the neighboring property.
- The rear lane setback allows for a footpath to carry past the site. Its dimensioned in response to the setbacks of the building to the east and west.

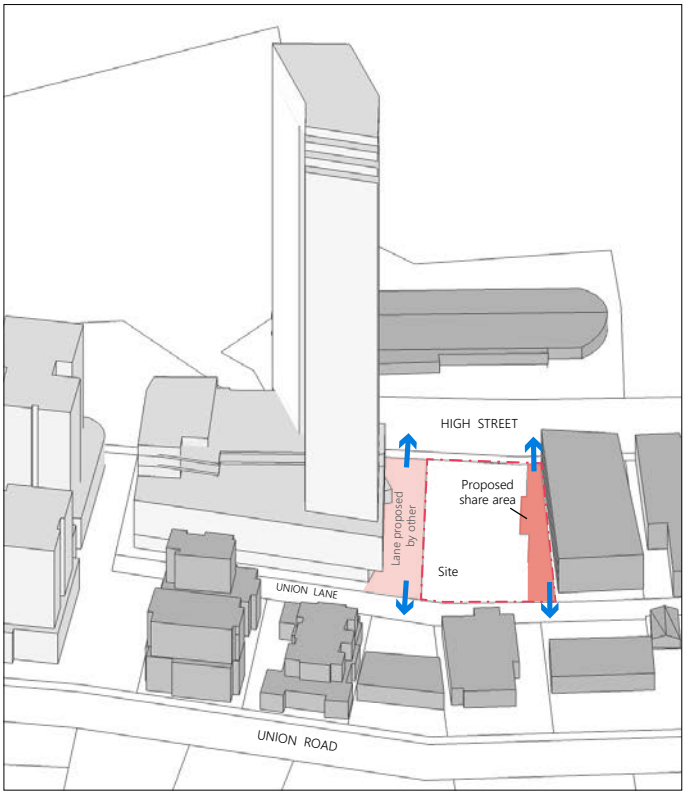
The east and west boundaries both present complications for planning the subject site. To the east is a commercial building with a small setback which faces toward the subject site. To the west is a vacant lot that is the subject of the DA which proposes a laneway, while this presents an opportunity for additional frontage and light, it also bring uncertainty.

- Western boundary is for zero setback with a boundary wall that is capable of being realized as a glazed frontage to the lane, or as a solid wall, depending upon the timing and actualization of the DA.
- Eastern setback is established to create a linear garden between the subject and neighboring building. The setback steps in to create an enlarged courtyard in the middle of the block.



Street wall alignment

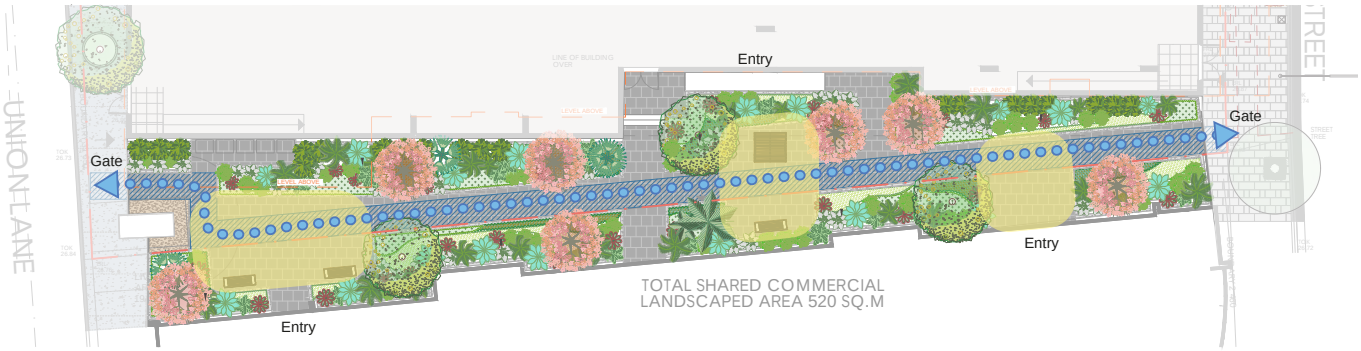
The proposed massing of the building responds to its position in the street. It is part of a rising street wall of 2 to 5 storey in height. This level is slightly higher than the building to the east and the same height as the base of the tower to the west.

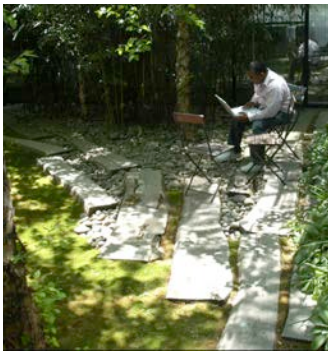


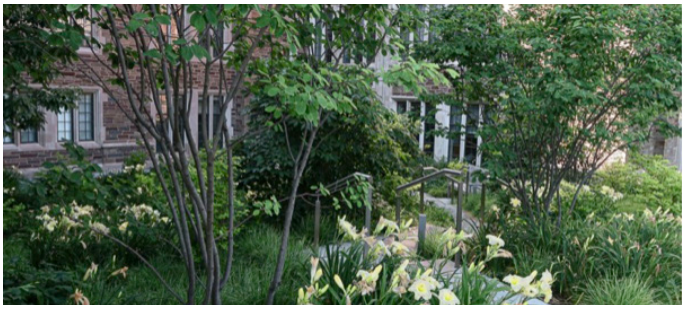
Proposed Laneway

The proposal is for a built form that has a solid edge as part of the street wall, which also has breaks that will read as laneways running at right-angles to the street.

GROUND LEVEL LANDSCAPE CONCEPT

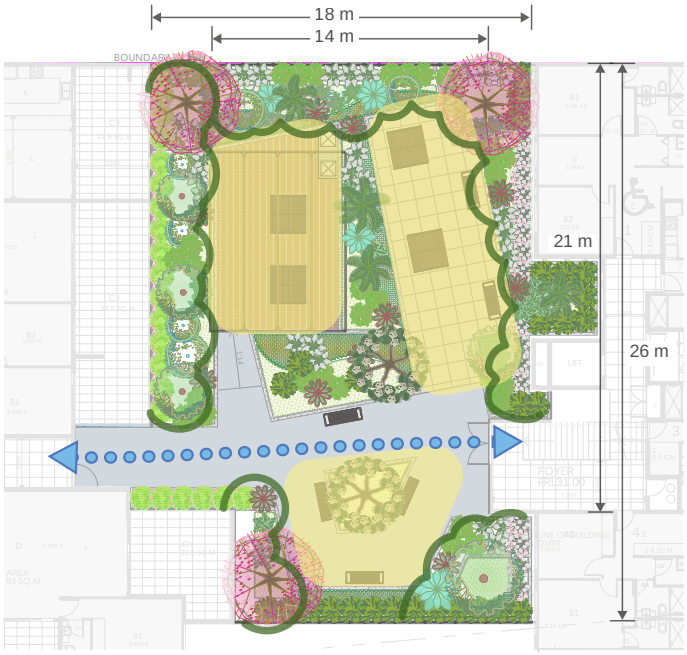




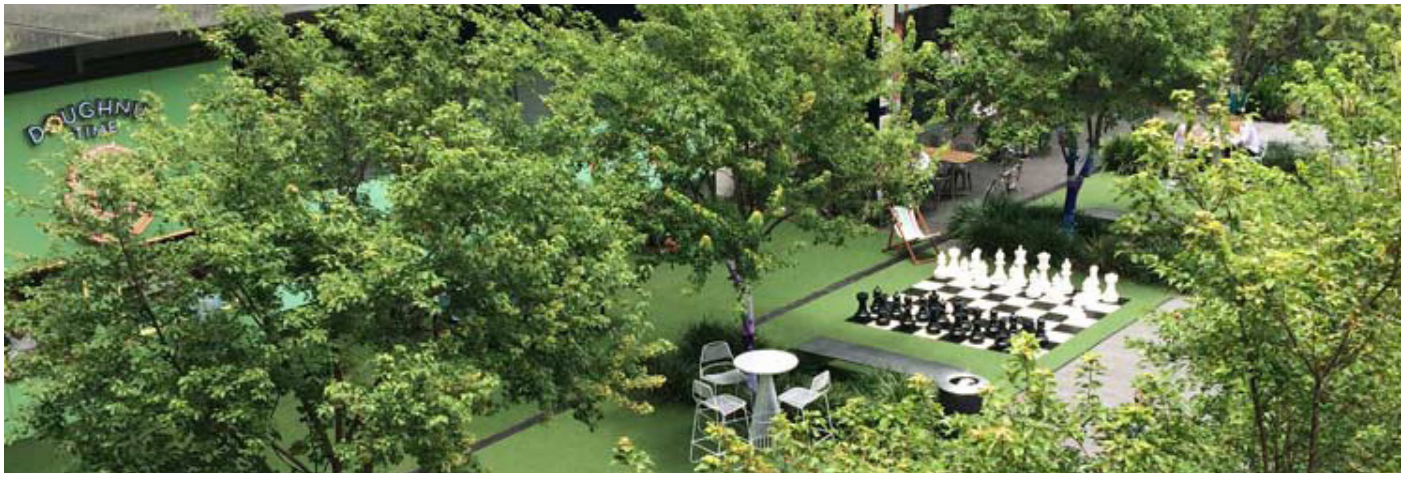


The space between the proposed building and the neighboring office building to the east is designed as a linear garden. This space combines the setbacks of the two buildings as a shared space, this combination creates a space of sufficient width to be useable and attractive space. The entries to this linear garden are controlled at Union Lane and High Street with gates to control entry. The building footprint for the proposed commercial level steps back in the middle to enlarged the volume. Verdant greenery will make this a cool green refuge which serves as a common outdoor space for the commercial tenancies and as a garden outlook.

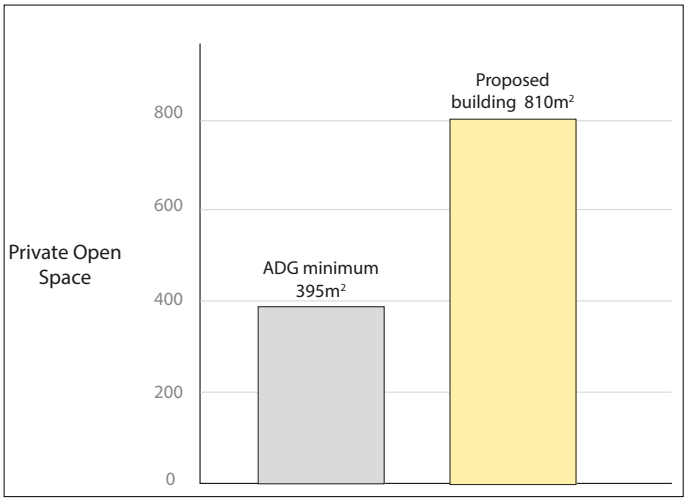
LEVEL 1 LANDSCAPE CONCEPT



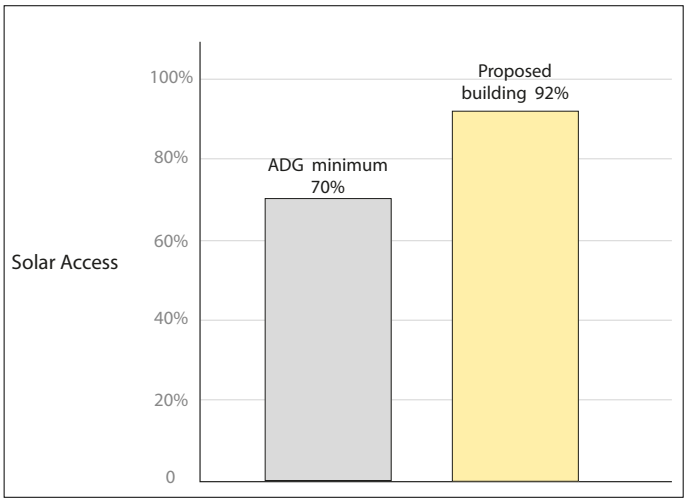
The communal open space is situated in the courtyard at level 1. The design establishes a set of three discreet common spaces with seating set in a lush landscape. Private courtyards and dense planting separate the adjacent apartments from the common spaces. The courtyard is traversed by a path which allows residents living in the southern block to easily move to the northern lobby to access High Street. It also permits residents of the northern block to move to the south and access to the southern lobby and Union Lane.



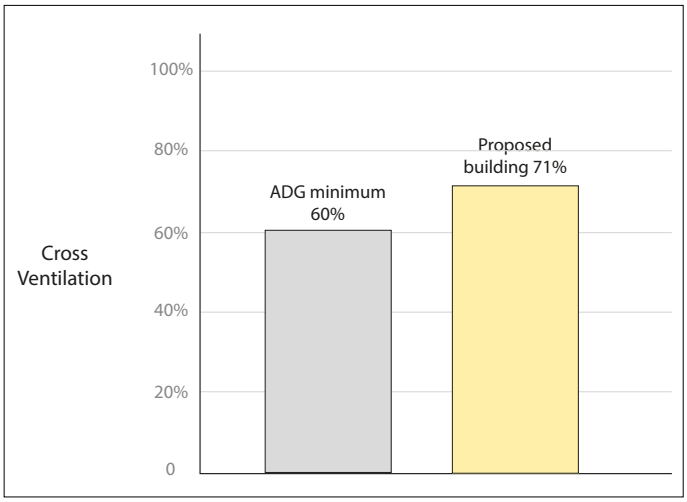
APARTMENT DESIGN GUIDE METRICS



The proposal is for very generous private open space, with an average open space more than double to figures stipulated in the ADG. Furthermore, the massing and orientation of the proposal means that these open spaces principally north-facing: protected from southerly and south-westerly winds are sunny in winter.



Over 90% of apartments receive more than 2 hours of sunlight in mid-winter. Most apartments receive over 4 hours of sunlight in midwinter. Furthermore, the orientation protects the living spaces from the hot afternoon summer sun.



The division of the built form into two blocks means there are eight corners and relatively shallow plate-depth. Consequently, a higher proportion (71%) of apartments achieve cross ventilation than the minimum target of 60%.

CONCLUSION - DESIGN EXCELLENCE

Fundamentally, this proposal is for a well-disciplined, street-wall building in a mid-block location. It does not intend to draw attention to itself or to upstage the proposed 45 storey tower to the west. Rather, the excellence of the proposal is through its thoughtful and understated architecture. This design is the result of extensive investigation and engagement with council and with the design team responsible for the neighboring DA. This infill site resolves issues of transition in build form and land use.

Key design elements of the proposal are as follows:

- Consolidated green space to create a verdant linear garden to be shared between the commercial tenancies on the subject site and the neighboring building to the east
- Flexible plan which may be let as a single tenancy or divided into between 2 and 6 separate commercial tenancies.
- Adaptable design capable of engaging the frontage on the proposed laneway to the west with glazed shopfront. However, in the event that the neighboring project is delayed or is not realized, the scheme still functions with a solid edge on the western boundary.
- Well-resolved massing solves a series of issues relating to amenity for the apartments as urban form (see Massing Study).
- Active frontage to High Street and good passive surveillance of the rear and side lanes.
- The problem of allowing each residential block a street address and lane address is solved by a neat connection across the common courtyard so all residents can readily exit to the north or south, while improving the activation and casual surveillance in the courtyard.