

CASE STUDY

Phillip Street, St Marys



Making the most of a corner site
This street-facing building is highly legible and easy to navigate. It is made from durable materials and contributes to the public landscape

All photographs: Tom Ferguson, unless stated otherwise

The outcome of considered design and deep collaboration to meet local demand for quality and tenure-blind social housing

QUICK FACTS

APARTMENT BUILDING TYPE: Medium-density	PROJECT TEAM: ARCHITECTURE McGregor Westlake Architecture (MWA)
LOCATION: St Marys, Penrith NSW	LANDSCAPE ARCHITECTURE SDC Landscape
COUNTRY: Wianamatta and Dharug	ACCESS Vista Access Architects
LOCAL GOVERNMENT AREA: Penrith City Council	ACOUSTIC Rodney Stevens Acoustics
PROJECT COST: \$16.9 million	BCA BCA Logic
CLIENT: Homes NSW	CIVIL ENGINEER van der Meer
PROJECT DATA: Site area 1,928 m ² 44 apartments 5 storeys 20 carparking spaces	ELECTRICAL ENGINEER Utech
PROCUREMENT: Design and construct	ENVIRONMENTAL SUSTAINABILITY Beca
YEAR: Completed 2021	HYDRAULIC AND MECHANICAL ENGINEER Foran Industries
	PROJECT MANAGER RP Infrastructure
	STRUCTURAL ENGINEER van der Meer
	TOWN PLANNER Stephen Kerr
	TRAFFIC ENGINEER McLaren Traffic Engineering
	BUILDER Growthbuilt
	AWARDS: 2022 AIA NSW, Multi Residential Commendation



‘Take the pragmatic brief and turn it into a unified whole’

— MWA

Upper storeys wrapped with light-coloured metal cladding to break up the scale of the building

Clerestory windows

Vertical circulation used to split the built form massing into two parts, in response to the small scale, changing suburban context

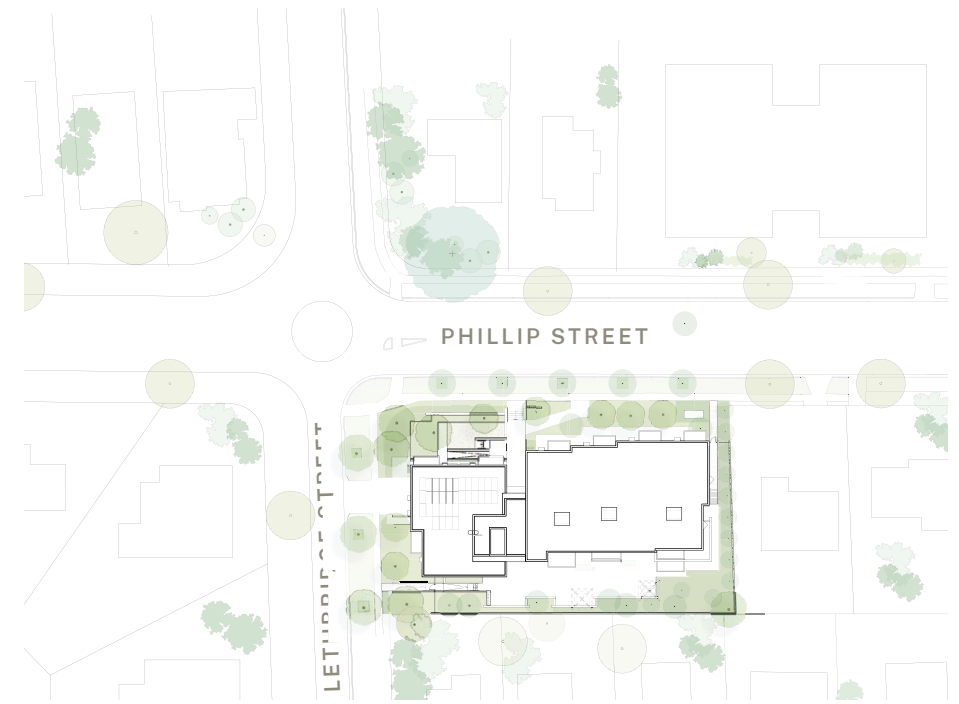
15kW photovoltaic solar system to support communal lighting and reduce operational carbon

Projecting balconies to take advantage of sun and views

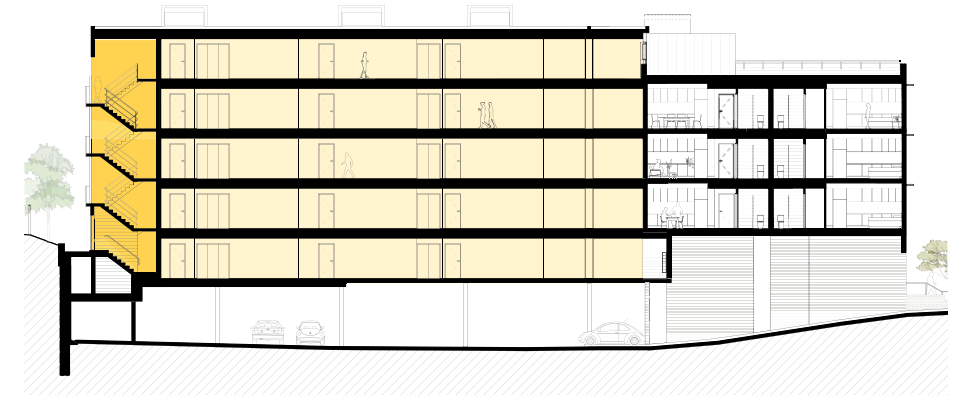
New Scribbly Gums *Eucalyptus sclerophylla* to corner setback, which reflect mature trees opposite

Generous front setback taking up level changes and contributing to the green character of the street

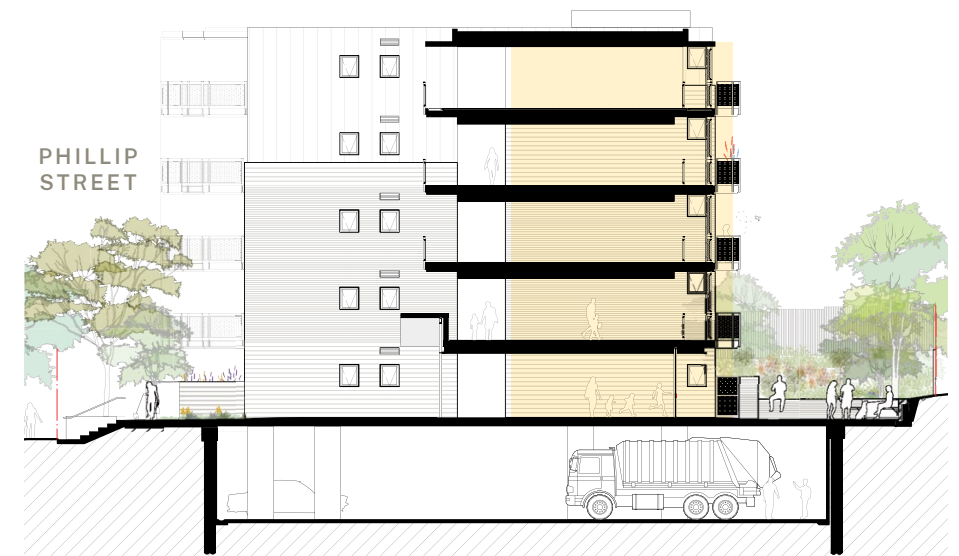
Vehicular entrance to the basement on the secondary street and at the lower point of the site



Site plan
Image: McGregor Westlake Architecture



Single-level floors
All apartments are single level for improved accessibility and there are no steps or changes of level within each floor of the building



Short section
Increased setback for landscape allowance



Homes NSW has provided high-quality, cost-effective social housing in Phillip Street St Marys by transforming 3 single dwellings into 44 contemporary apartments

Central location
The location plan shows the project's location relative to the town centre and train station



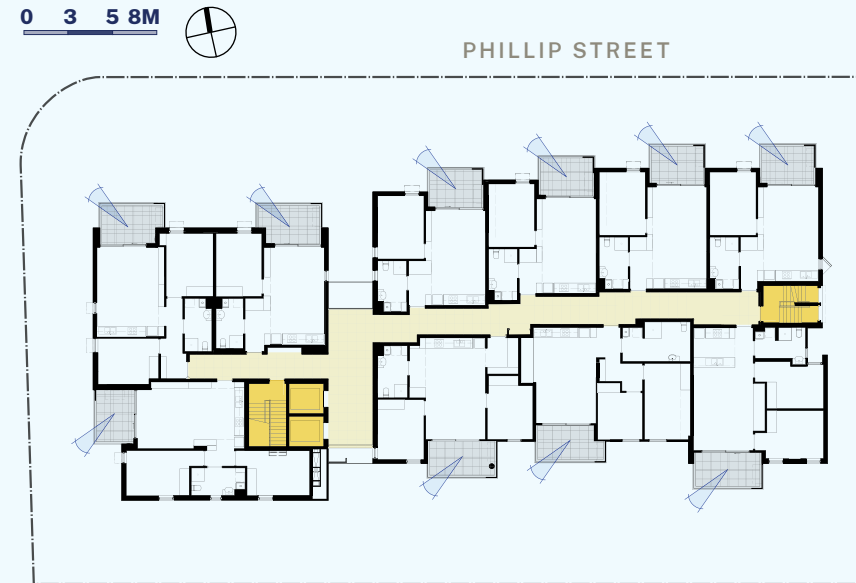
Prior to redevelopment, the site accommodated three single-storey, detached dwellings that no longer met the needs of its residents. The development now extends over 4 and 5 storeys and provides 23 one-bedroom and 21 two-bedroom social housing units. While the site is surrounded by single-storey cottages on large blocks, an existing residential flat building across the road is of a similar scale to the new development.

Well connected to transport, local shops and recreation facilities

St Marys is in Western Sydney, it sits centrally between The Blue Mountains and the Sydney CBD located nearby and connected to the Great Western Highway (M4) and major motorways M5, M7.

Whilst St Mary's is within close proximity to motorways, the development is located immediately to St Mary's local facilities which are within short and easily accessible walking distances. This includes a 5 minute walk to St Mary's town centre, train station and local park and a greater 10 minute walk to recreation areas including a BMX track, a leisure centre with indoor pool, rugby fields and tennis courts with a club house.

Stepping form
Staggered balconies provide unimpeded views. Image: McGregor Westlake Architecture



Providing views and outlook as well as privacy and shelter

The site enjoys a northerly aspect with views of the Blue Mountains in the west. Each apartment has its own balcony, oriented towards this view. The building form is stepped in plan, giving each balcony an outlook past its neighbours and outward towards the view.

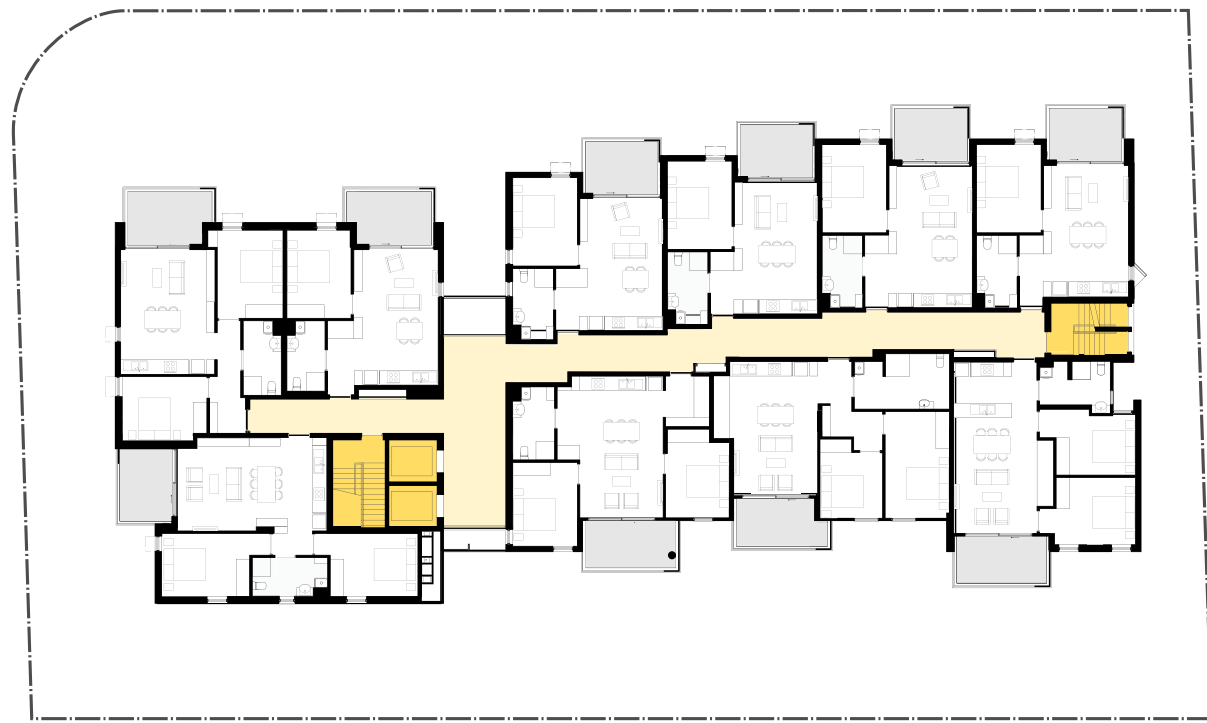
The balconies are a repeated element that provides shade in summer, privacy and definition. Prefabricated metal balustrading adds an extra level of privacy; its perforations become less dense where more privacy is needed, for example, where a direct view into the apartment might otherwise be seen, or where washing might be hung to dry. The tenants on the top floor can also enjoy this privacy and protection from the elements with shelter overhead.

Phillip Street was designed and built with 10 guiding principles at front of mind:

- site strategy
- permanent landscape
- street address and legibility
- accessibility
- street corners and block ends
- car parking
- durability and materials
- structural efficiency
- modular construction
- delight



Image: Brett Boardman



Level 1 (typical) plan 0 3 5 8M

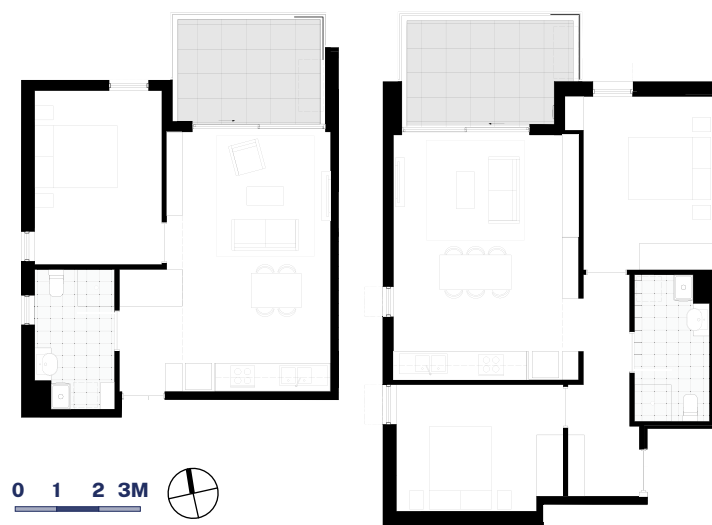
Responding to the urban context

The site is an amalgamation of three sites to create a larger, more substantive site with two street frontages. The benefits of a corner site are myriad, and the planning and organisation of the site takes every opportunity to make the most of this dual street frontage. Phillip Street is the primary address and provides for pedestrian access, while the narrower Lethbridge Street is the secondary address providing vehicle access. The main entrance has been designed so there is a direct line of sight from the street into the sunlit lift lobby, contributing to the building's character and presence. This is further reinforced by using large numbers to identifying the street address.

Over half (28) of the 44 apartments are arranged to overlook the streets and also benefit from the north-east aspect and views of the Blue Mountains. The building form is in 2 parts, bifurcated by the pedestrian entrance which is clearly legible from Phillip Street. This arrangement allows the corner building to be further set back, creating space for a large community garden with trees to the street. This garden is in turn overlooked by a shaded verandah/loggia, open to the public space of the garden and street beyond, and featuring a long, fixed external seat for socialising or resting.

Design and construct procurement

Unlike most buildings delivered by Homes NSW, this building was procured through a design and construct appointment. Under this arrangement, the contract is directly with the builder or contractor who is charged with managing the design and delivery of the project. The architect is appointed by the builder and works closely with a broader consultant team to drive greater efficiencies and better design outcomes. This approach can deliver high quality buildings that offer good value-for-money, provided the contracts and detail specifications are appropriately developed, suitable contractors are selected, and a collaborative working environment is maintained throughout the duration of the projects.

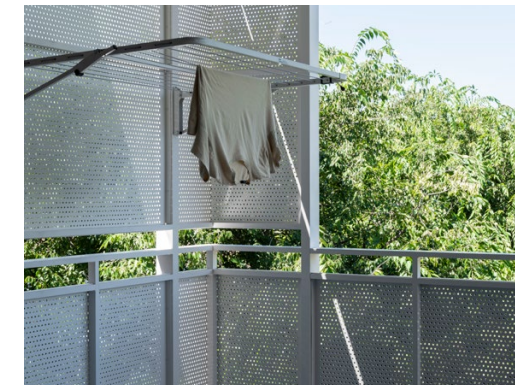


1 bedroom LHA Silver
50 m² + 15 m² private open space

2 bedroom LHA Silver
75 m² + 20 m² private open space

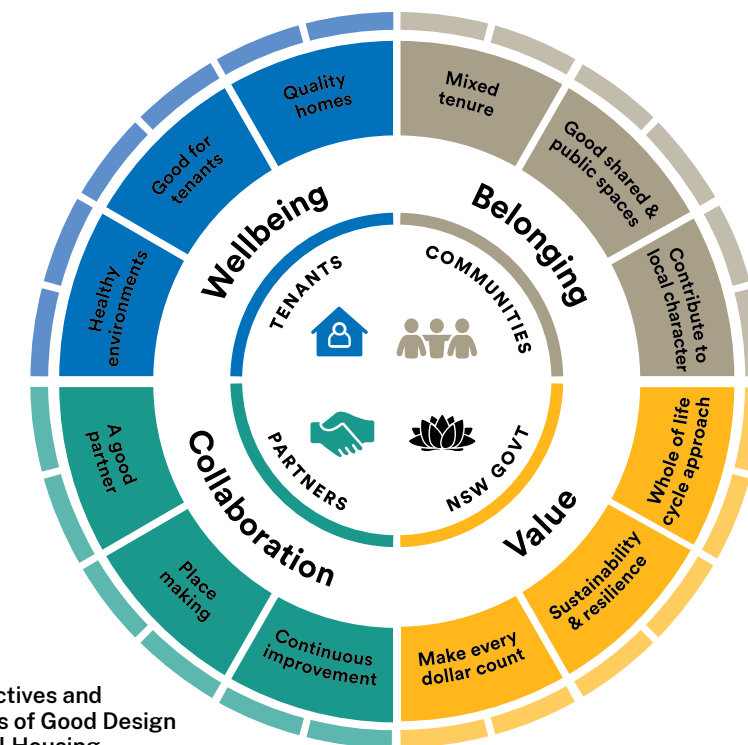


Better look and feel
The soft colour palette used for the kitchens does not intrude on residents' individual taste – colour can be added through personal belongings



Hidden laundry
Built-in clotheslines hide behind the perforated metal sheeting on every balcony

The objectives and principles of Good Design for Social Housing



Homes NSW design objectives for social housing



Value

Making every dollar count, considering the whole project life cycle, and making sustainability an integral priority



Collaboration

Continually improving, supporting place making and establishing good partnerships



Belonging

Supporting mixed tenure, providing good public spaces, and contributing to local character



Wellbeing

Delivering housing that is healthy, good for residents and high quality

These objectives were achieved through:

- Strong partnerships across the project team and client
- Provision of spacious private and communal open space
- A simple material palette that fit the building to its surrounding context



Image: Brett Boardman

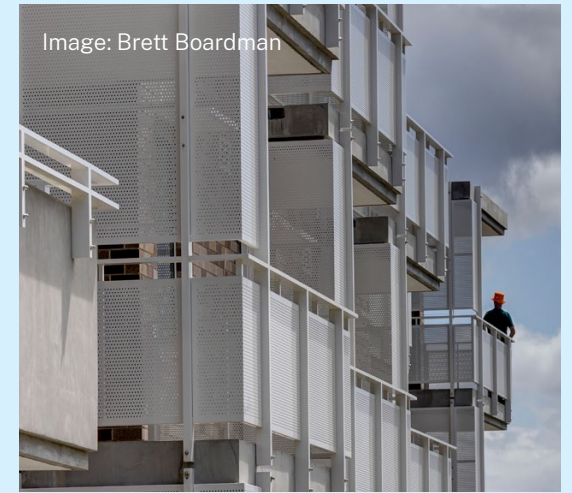


Image: Brett Boardman

Sheltered balcony
Balconies on every level are sheltered to provide refuge and outlook

Room for rest
The bench at the entrance creates a space for interaction with community

Supporting trees in the landscape

The character of the surrounding area comprises of single-storey cottages located in the middle of large lots. This allows for greater landscaping, for example a mature Grey Ironbark *Eucalyptus paniculata* across the road from the site exists because of a large front setback.

Considering the local context, the front setback was increased above council's minimum requirements to imitate the surrounding blocks and enable the front garden to accommodate more trees. Overall 40 new trees were planted on site including native species endemic to the clay soils of the Cumberland Woodland.

Designing for accessibility and amenity

All apartments are single level for improved accessibility, and within each floor there are no steps or changes of level.

The relationship of the living spaces to the balconies has been well considered and the doors to the balconies are scaled accordingly. Corridors are wide and articulated.

Working with the joiner to simplify the layout, all required storage is designed with simplicity in mind, and all storage is located within the apartment. All apartments have achieved the Liveable Housing Design Guidelines – Gold Standard.

Carparking

Parking is located in a basement directly under the building. The vehicle entry is consolidated within the building footprint to maximise the opportunities for deep soil, communal open space and landscaping.

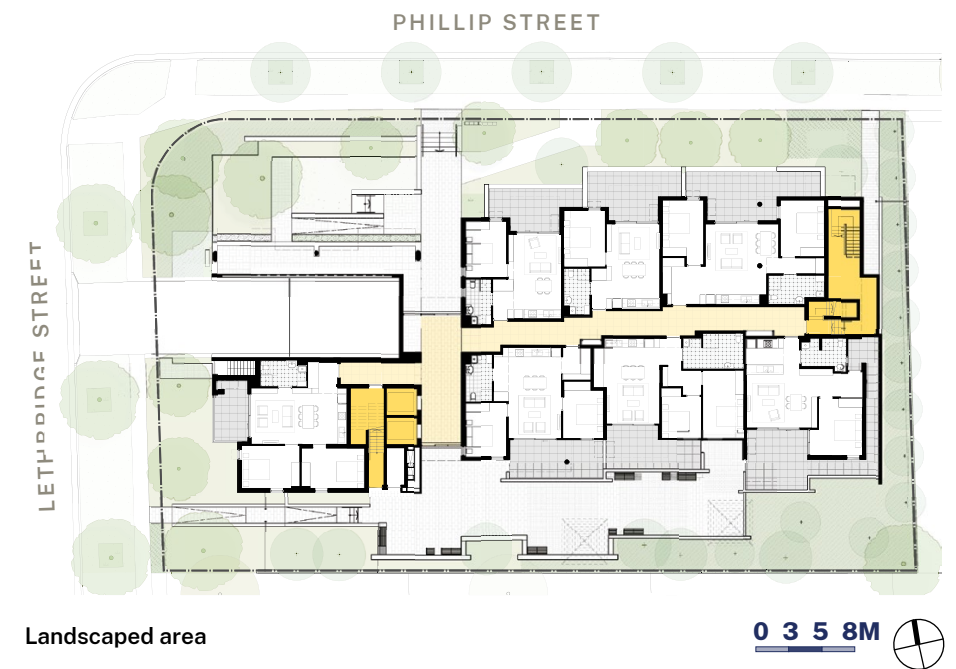
It was a council requirement that the basement be large enough for garbage to be collected on site. This necessitated a taller and deeper basement that added cost to the building and careful design was required to ensure that the garbage truck could maneuver safely.



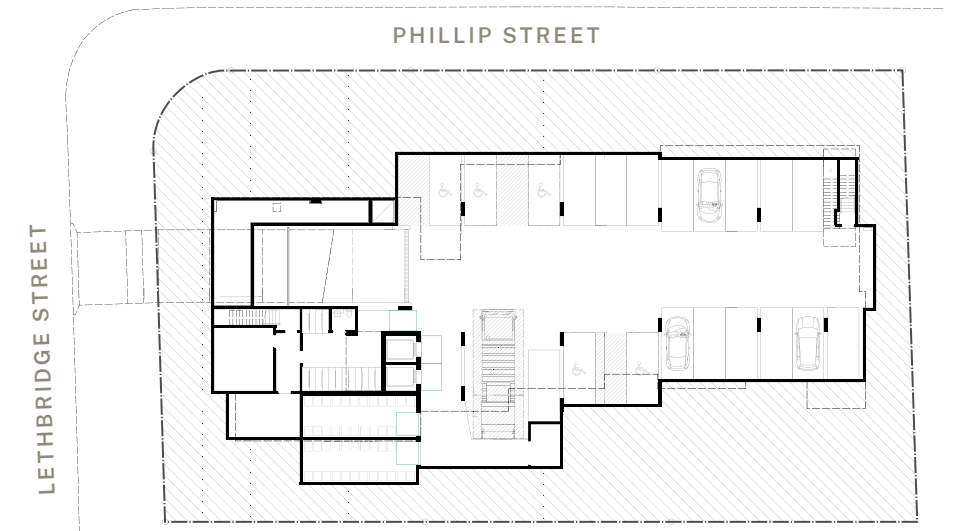
Image: Brett Boardman.

HOMES NSW STATEMENT

These homes help meet the strong demand for smaller dwellings and have been designed to give residents a better living experience and comfort, providing easy access to local shops, services, and health facilities



Landscaped area



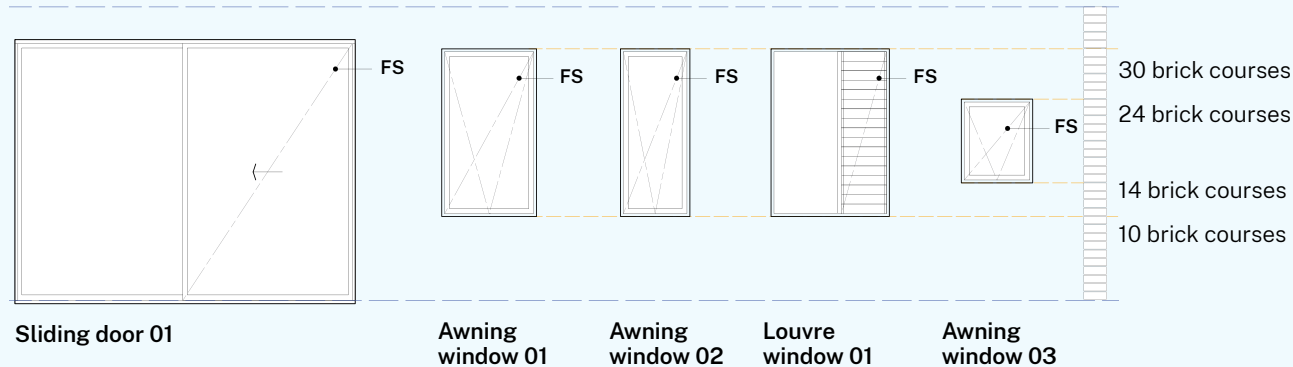
Basement plan



‘The design carefully rationalised building elements such as balcony screens, doors and windows’

— MWA

Door and windows
 Sizes were standardised to correspond with brickwork courses to achieve greater efficiency and reduce waste



Durability and materials

The main finishes in the building are inspired by the materiality of the local area: brickwork – made and seen locally; cladding; metal profiles with colourbond finish; off-form concrete – natural class 2 exposed finish; metal work – factory powder-coated and perforated. Where possible, all materials specified have a factory or integrated finish. There are no applied or painted finishes to the exterior, ensuring durability.

This materiality is discreetly augmented in the front garden landscaping, which includes corten steel garden edging and brick paving.

Passive environmental design

The architects focused on passive environmental design strategies to provide cost-effective, low-maintenance and energy-efficient outcomes for both the tenants and Homes NSW. The lobbies are naturally ventilated, living areas and bedrooms are provided with ceiling fans and there are foldable clotheslines that are screened and installed at a height that allows quick clothes drying. In addition to this the project includes a 15-kW solar photovoltaic system and a 5,000-litre rainwater re-use system.

Structural efficiency

The architects worked closely with the builder and engineers to minimise transfer structure in the ground floor.

Modular construction

Simplicity and modularity have been achieved through collaboration with the builder to standardise the different elements, primarily the brickwork, in plan and section. Each storey has 35 courses of brickwork and each of the openings in the facade correspond simply with the coursing. Forms are repeated in the windows for efficiency in design, fabrication and construction.

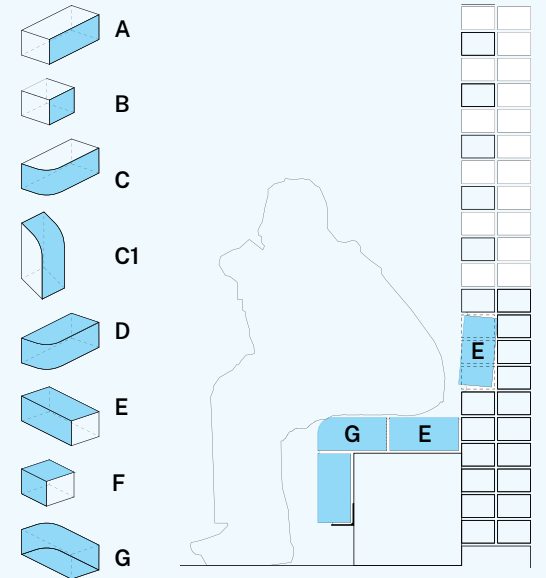
All the metalwork in the building was prefabricated and finished off-site. The architects workshopped designs and drawings with the metalwork contractor to refine and improve these elements. The balconies arrived on site in 2 parts, and being mostly the same size, the repeated form allowed for efficiency in fabrication and construction.

Creating delight

In a sheltered spot at the main entrance, shaded in summer and sunlit in winter, the blue brick community seat overlooks the front garden and the street. Its distinctive blue colour and detailing, using a range of brickwork, have been carefully considered. With its prominent location, outlook and ample seating, a place such as this can foster social encounters that will build a sense of connection between the building residents and with the local community. The blue seat can become part of the everyday life of the building.



Builders enjoying the front seat during construction
 Image: McGregor Westlake Architecture



‘The seat at the ground floor entry is a great touch, a pausing place overlooking the street’

— AIA

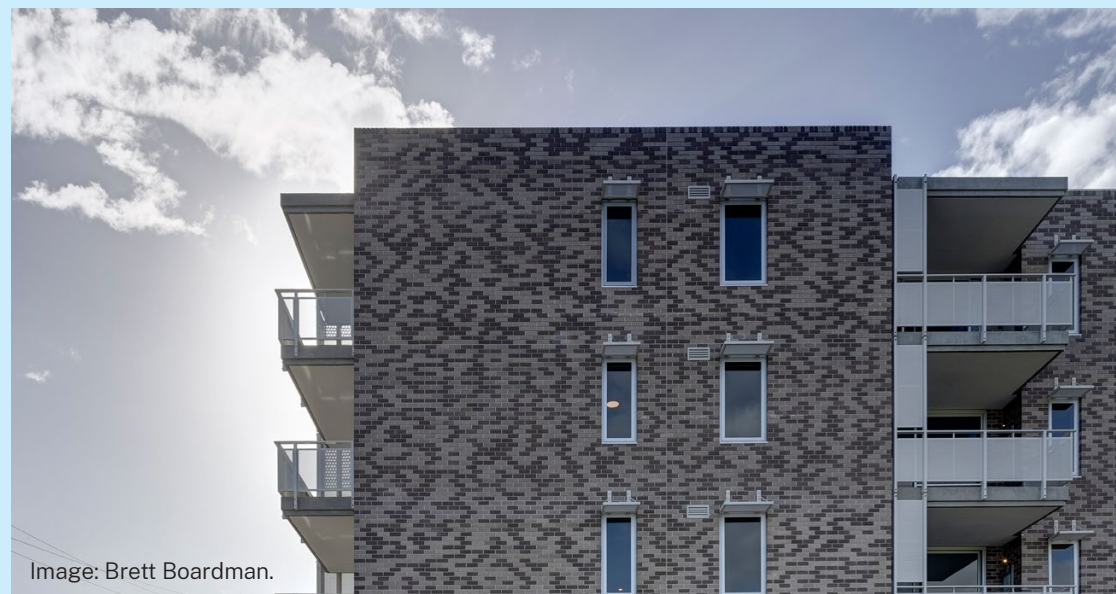


Image: Brett Boardman.

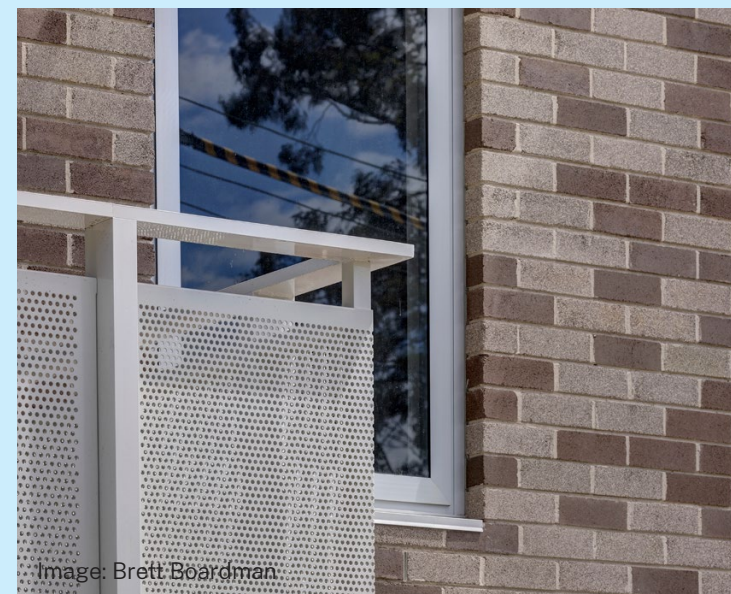
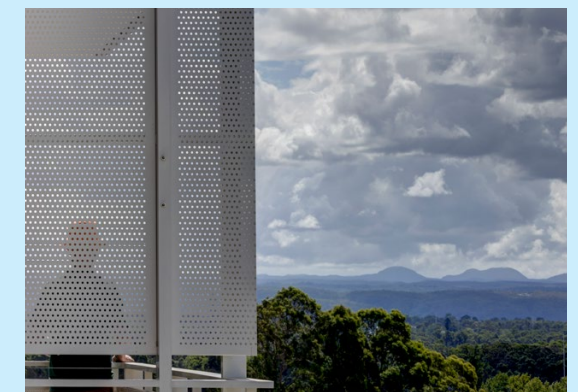


Image: Brett Boardman



Materiality
 Chosen materials complement the materials found in the local area. Image: Brett Boardman

Privacy with a view
 Perforated balustrades allow light to filter through but still provide needed privacy. Image: Brett Boardman

LINE OF SIGHT TO THE APARTMENT DESIGN GUIDE (ADG)



Image: Brett Boardman



Image: Brett Boardman

ADG PART 3 SITING THE DEVELOPMENT: 3D COMMUNAL AND PUBLIC OPEN SPACE, OBJECTIVE 3D-1:

An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping

Communal open space is located at ground level in the front and back of the building. The front area connects the apartment building to the public open space of the street. The covered outdoor entry space and landscaped front garden is easily identifiable as communal open space by the long blue brick bench extending across the front of the main facade. Front and back communal open space can be easily accessed via direct pathways from Phillip and Lethbridge streets from the well-lit entrance and lift lobby.

The minimum required area of communal open space is 25% of the site area and this target was achieved at 482 m². Each COS provides amenity for different seasons throughout the year, not just during mid-winter as proposed by the ADG. This is particularly important given the summer temperatures in Penrith.

3F VISUAL PRIVACY, OBJECTIVE 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

Visual privacy is achieved using various design elements which each add another layer of privacy. The spacing of the perforations in the balcony balustrades and screens becomes more or less dense depending on where privacy is required. The perforated screening from the east, accompanied by the stepping in the balconies, limits the view into neighbouring homes. Internal privacy is enhanced by the balcony of each apartment being attached to the living room.



Image: Brett Boardman

ADG PART 4 DESIGNING THE BUILDING: 4M FACADES, OBJECTIVE 4M-1:

Building facades provide visual interest along the street while respecting the character of the local area

The brick pattern on the facades of the building imitate that of neighbouring households which, with age, will become more alike.

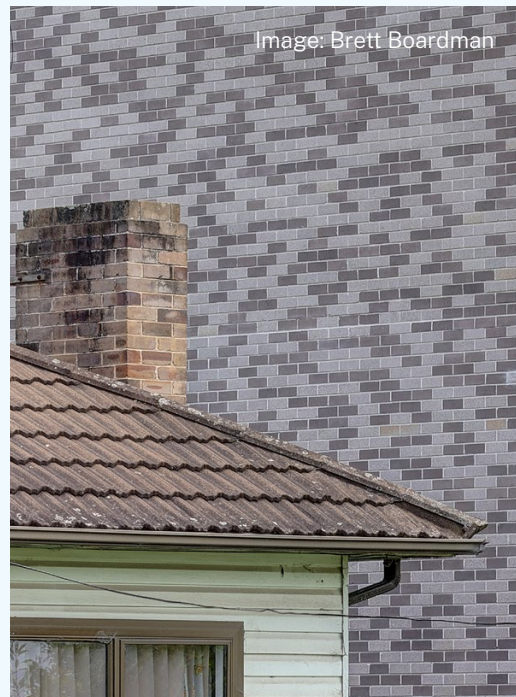


Image: Brett Boardman

4Q UNIVERSAL DESIGN, OBJECTIVE 4Q-1:

Universal design features are included in apartment design to promote flexible housing for all community members

All apartments are single level for improved accessibility, and within each floor there are no steps or changes of level.

All apartments have achieved the Liveable Housing Design Guidelines–Silver Standard.



Strong street presence
The project is easily identifiable from the street, and a line of sight extends directly from the main street into the lift lobby.
Image: Brett Boardman.