

SOMETHING FOR EVERYONE

HOUSING MIX MAKES
GOOD NEIGHBOURS

AUCKLAND
DESIGN MANUAL
TE PUKA WHAKATAIRANGA I A TĀMAKI MAKĀURAU

BUILDINGS + SITES // HOUSING CASE STUDY

Chapel Street
Melbourne, Australia

OVERVIEW

Chapel St is excellent demonstration of how to introduce higher density on a long, skinny site while respecting the neighbours and the neighbourhood. It also shows that high end private sector housing and affordable rental accommodation can successfully be part of the same building.

PROJECT SUMMARY

The affordable housing development at 83-87 Chapel Street, St Kilda consists of 2 four storey apartment buildings totalling 81 units joined by a basement car park for 70 vehicles, providing a well considered residential development that addresses local and regional needs for housing Victoria, Australia.

The project is the undertaking of the Port Phillip Housing Association (PPHA) and includes a commercial component to ensure the association's financial sustainability in the long term.

The built envelope for the site was established through earlier approved town planning permits for a development of a similar scale and character which was unrealised. MGS Architects from Australia 'inherited' these constraints and increased the yield and also the height of the buildings. PPHA's financial priorities as well as its preference for a mix of owner occupier and rental accommodation on the site directed the split for 20 units to be sold on the private market and 61 to be retained as affordable rental properties.

External finishes are a combination of painted and natural precast concrete and brickwork at the lower levels and a light weight generally timber cladding and metal clad roof above. The units are designed to best practice universal design principles to accommodate the widest range of occupants and allow aging in place.



North – East elevation of the overall development – view from Chapel Street.

KEY PROJECT INFORMATION

HOUSING TYPE
APARTMENTS

DENSITY
227 DW/HA

ARCHITECT & DESIGN TEAM
MGS ARCHITECTS

YEAR COMPLETED
2012

322 BEDS/HA

Project Team (Design and Doc): Eli Giannini, Chris Jones, Joshua Wheeler, Ryan de Winnaar, Rilla Healey, Ahmad Fardi, Sue Buchanan.

Construction Period: March 2011 to July 2012.

Project Team (Construction): Joshua Wheeler, Rilla Healey.

SITE AREA
3573 M²

The site is located in a residential area in St Kilda, Melbourne, Victoria.

The site is flat in topography with no real topographic challenges. The frontage of the site is 49.8m, narrowing to the rear for width of 30.8m, for an entire site area of 3,570m².

PARKING
BASEMENT

70 spaces (including 3 accessible parking spaces) within basement.

24 bicycle spaces.

PROJECT TYPE
AFFORDABLE HOUSING DEVELOPMENT

Affordable housing development consisting of 81 apartments over 2no. 4 storey buildings plus 1no. combined basement.

Dwelling sizes:

1 bedroom – 50-60m² (+ 8m² balconies min.)

2 bedroom – 75-90m² (+12m² balconies min.)

3 bedroom – 95-120m² (+12m² outdoor ground space min.)

CLIENT/DEVELOPER
PORT PHILIP HOUSING ASSOCIATION

PRICE BAND
HIGH-RANGE

A high-range project would typically have a current build cost of more than A\$3000 per m², exclusive of land costs, professional services and regulatory fees.

Construction Cost: A\$23M, excluding fees and GST.

Project Cost: A\$31M + GST.

Units held by PPHA.

UNDERSTANDING THE NEIGHBOURHOOD

1. The subject site is a large L-shaped lot located on the western side of Chapel Street; a short distance north of Inkerman Street and south of Kipling Street, St Kilda.
2. The immediate surrounding locality has a mixed character of interwar dwellings, interwar multi-storey flats, a public housing estate, an art deco tavern building and an auto repair workshop building and car park. Density increases along Chapel Street as you get closer to the CBD.
3. The subject site was vacant following the demolition some years ago of the Banyan Tree nursing home. Prior to the new proposal, the site was being used as informal public parking.
4. To the south of the site, the land abuts a two storey dwelling at No. 89 Chapel Street, which is constructed within one metre of the shared boundary but setback approximately 2.4m from the frontage.
5. Chapel Street is a busy main road with good public transport, including a tram route that runs north/south to Richmond and St Kilda, while the Carlisle Street Activity Centre is located within 400m of the site to the south.
6. To the rear (west) the site abuts a public housing complex, which comprises a number of buildings ranging between 2 and 13 storeys in height. To the front (east) the Dick Whittington Tavern and bottle shop lies immediately opposite with a mix of residential and commercial premises of between one and three storeys evident.



Looking towards the overall development from Inkerman Street and Chapel Street intersection.

GETTING IT RIGHT PLACING THE BUILDINGS ON SITE

1. The development respects the adjoining neighbouring residential development by pulling the building back from the adjoining boundaries by between 3-12m (depending on location). All balconies are recessed into the building façade, and on the boundary indicated here – the balconies are oriented are arranged to provide views along the side of the building towards the street. Screening limits oversight of the neighbours and provides privacy.
2. Extensive overlooking from upper apartments contributes to the safety of the street.
3. The building mass steps down and reduces in height on the side boundaries.



North – East elevation of the overall development – view from Chapel Street.

GETTING IT RIGHT PLACING THE BUILDINGS ON SITE

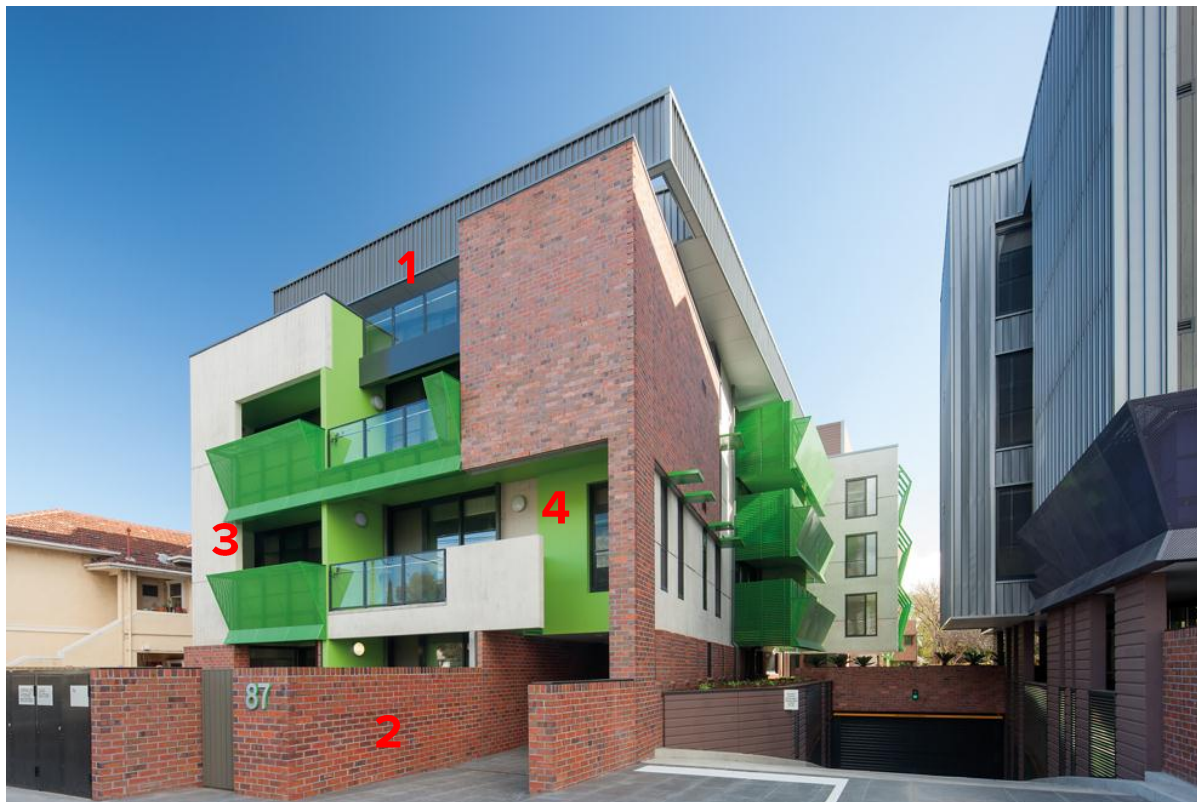
1. The development retained an existing pedestrian link from Kipling Street, which also allows public access through the site.
2. The open space between the two buildings is a key element to the overall success of the design. At ground level it provides common access to the buildings, a through site link and access to the communal open space at the rear. It also forms an outlook space for the buildings and provides access to daylight and ventilation.
3. Designing two separate apartment blocks and treating the elevations of each block differently breaks up the overall mass of the development. Both buildings use a similar palette of materials and colour, with different massing of materials and use of accent colours to provide variation.
4. All car parking is provided underground, which maximises usable open space at ground level. There is a single ramp in the middle of the site serving two basements. Having the access ramp in the middle of the site rather than to the side removes a potential conflict with neighbours.
5. The development respects the adjoining neighbouring residential development by moving the building back from the boundary and gradual stepping and reduction of building mass.
6. Each building has its own pedestrian entry, which is separate from the vehicle ramp.



North – East elevation of the overall development – view from Chapel Street.

GETTING IT RIGHT STREET TO FRONT DOOR

1. The building has four floors above street level, with the upper most set back from the street. This set back reduces the perceived scale of the building when viewed from the street. The setback also enables the filtering of natural light to levels 2 and 3 of the building.
2. Both buildings have their own access to the street, and the one shown here also provides access to the pedestrian link through the site and the communal open space. The development is relatively open to the street in the middle of the site, but this could have been improved by reducing the amount of high fencing.
3. The balconies, perforated screening panels, extruded forms and interlocking levels help to articulate the facade and positively address the public street.
4. There are balconies on all sides of the building which are recessed into the building façade. This creates depth in the building façade, and provides shelter and privacy for the occupants.



Close up shot of building 1 which contains 60 apartments – view from Chapel Street.

GETTING IT RIGHT THE BUILDING

1. The apartment buildings provides excellent definition to the edge of the street. The site is next to a busy, highly trafficked road, and the solidity of the building, its mass and the proportion is an appropriate scale for this context. The different building elements – such as balconies, windows and materials relate to the overall massing and break down the scale of the building.
2. High thermal mass of the building (insitu and pre-cast concrete elements, brick and concrete block work and exposed aggregate and composite panels) contribute towards minimising temperature fluctuations within apartments and helps to delay and reduce solar heat gain.
3. Each apartment has access to a private balcony.
4. The development is a contemporary response to the context– it maintains the existing street setback, and uses traditional materials, forms and proportions.
5. The façade is articulated through the use of different materials, strong building forms, colour and using glass and semi-transparent balustrades to lighten the mass of the building.
6. Rooms and balconies on the sides of the building are specifically designed to look forward or backwards along the length of the site – and minimising any overlooking sideways into neighbouring buildings. This is achieved through window location (as shown here), position of balconies and the use of screens.



Close up shot of building 2 which contains 21 apartments – view from Chapel Street.

GETTING IT RIGHT THE BUILDING

1. Generally, long double loaded corridors should be avoided. If alternatives are not achievable, they can be partly offset, as shown here, by the use of lighting design, colour and signage. All front doors are also offset from each other. Important to the success of this building is that the corridors end in bright, open, well designed communal areas with access to natural light.
2. The lift core and circulation is integrated into the main lobby at the entry of the building, and is a central communal feature on each floor. The areas are bright, have large amounts of glazing and become a space for people to meet and great each other. It is a welcoming environment that fosters a sense of community and makes it more pleasant to live there.

3



Looking down the corridor (left), Integration of lift core to the main foyer (centre), Main entrance foyer (left).

GETTING IT RIGHT OUTDOOR SPACES

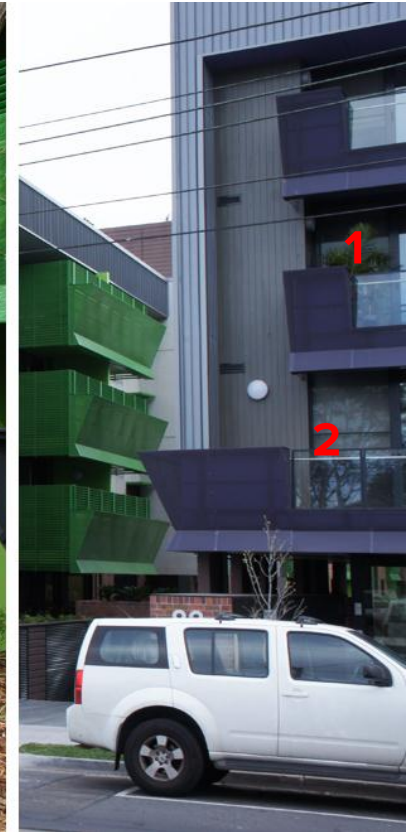
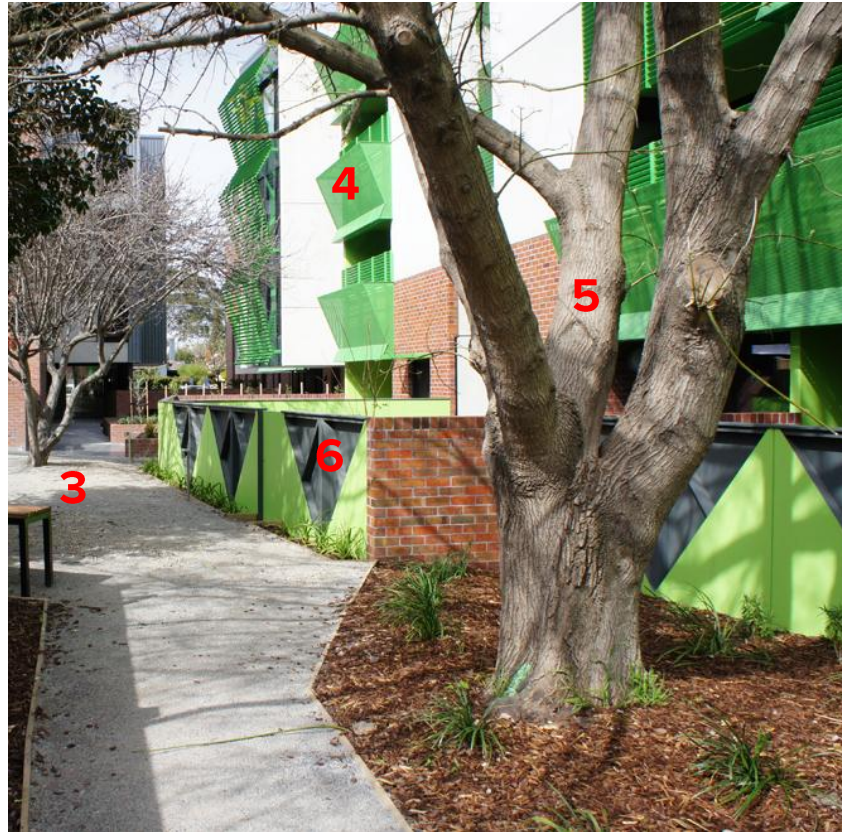
1. A range of secluded and shared open spaces are provided, including a communal courtyard area on the ground floor, outdoor decks and balconies, and individual patios for all ground floor units. This courtyard also includes the through site link to Kipling Street
2. All internal living spaces on the ground floor apartments are closely linked with shared outdoor courtyard area. Privacy is maintained and balanced against the communal space via metal sheet perforated screening devices, planting and hard/soft landscaping features.
3. Screening on the balconies limits views directly down onto private outdoor space below.
4. To the rear (west) the site abuts a public housing complex, which comprises a number of buildings ranging between 2 and 13 storeys in height.
5. The large internal courtyard provides light and an outlook space to the units on the inside of the development. Screening is used to provide privacy, control sunlight admission and limit oversight of neighbouring properties.
6. Two mature trees are retained on-site.
7. The building mass blocks the road noise, which means the balconies and open space at the rear of the building are quiet.



Looking towards the communal outdoor courtyard area from the Chapel Street entrance platform.

GETTING IT RIGHT OUTDOOR SPACES

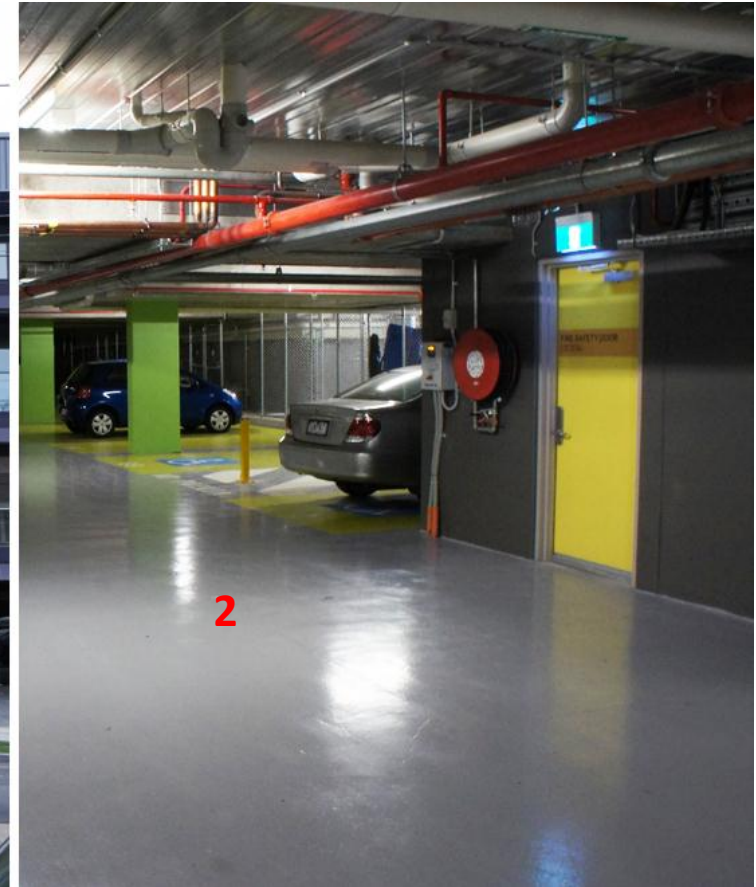
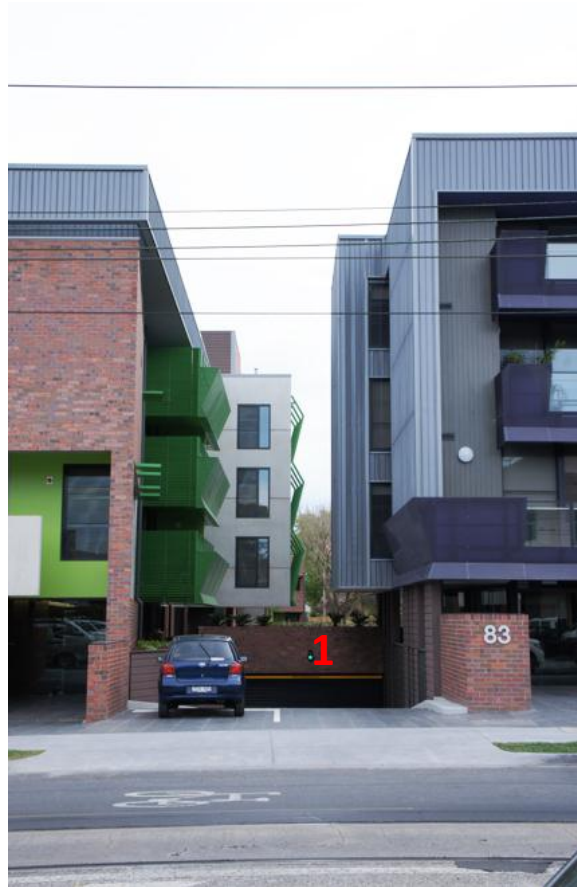
1. Internal living areas are well integrated with the balconies. Almost all of the apartments have either east/west or north facing balconies for good solar access.
2. The balconies are large enough to allow the residents and guests to have a bbq, and sit down together around a table.
3. A range of secluded and shared open spaces are provided, including a communal courtyard area on the ground floor (above basement platform), outdoor decks and balconies for most apartments and individual patios for all ground floor units.
4. The balconies provide oversight and security to the communal outdoor spaces, while the screening limits views directly down onto private outdoor space below.
5. Two well established trees are retained, providing shade and amenity to the communal areas.
6. The design of the fencing is considered as part of the overall landscape design. The form a colorful backdrop to the communal area.



Looking towards the entrance platform on Chapel Street from the rear Courtyard area (left), Chapel Street public realm interface (right).

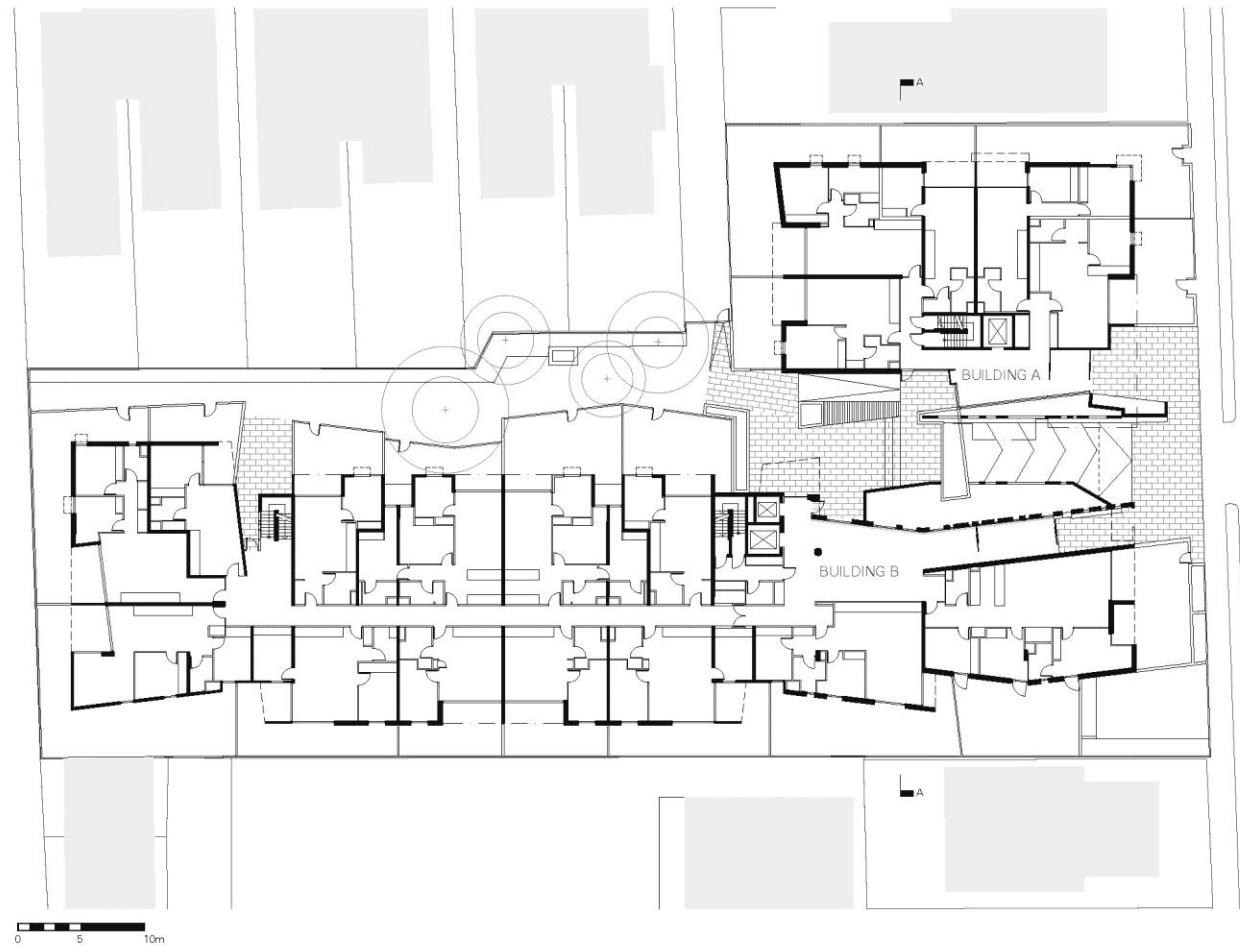
GETTING IT RIGHT ACCOMMODATING THE CAR

1. Chapel Street is a major local road. Public transport is readily available with two tram services along the street. The development complies with Council's parking rates at one space for a one or two bedroom dwelling and two spaces for a three bedroom dwelling.
2. Both buildings are built over a common basement car park which spans the full width of the site. Underground parking is essential for a building of this scale, to ensure there is useful open space at ground level.



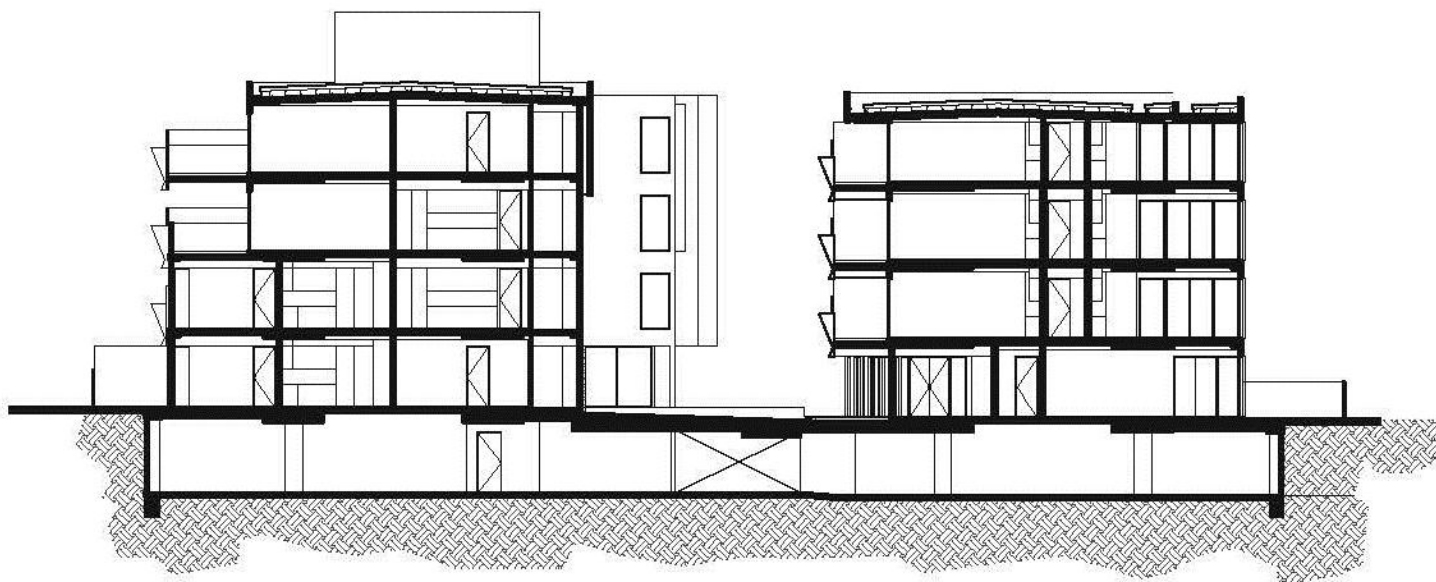
Looking towards the vehicle ramp from Chapel Street (left), Internal photo of basement carp parking (right).

GETTING IT RIGHT SITE PLAN & GROUND FLOOR LAYOUT



Site Plan.

GETTING IT RIGHT SECTIONS



0 5 10m

GETTING IT RIGHT ELEVATIONS



AUCKLAND DESIGN MANUAL

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The Auckland Design Manual provides practical advice, best practice processes and detailed design guidance to enable us to design and build the world's most liveable city. The manual will enable us all to make informed choices, to build houses and develop our streets and neighbourhoods to not only look good but to ensure they are built to last, sustainable and give the best return on investment.

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