

Architectural Design



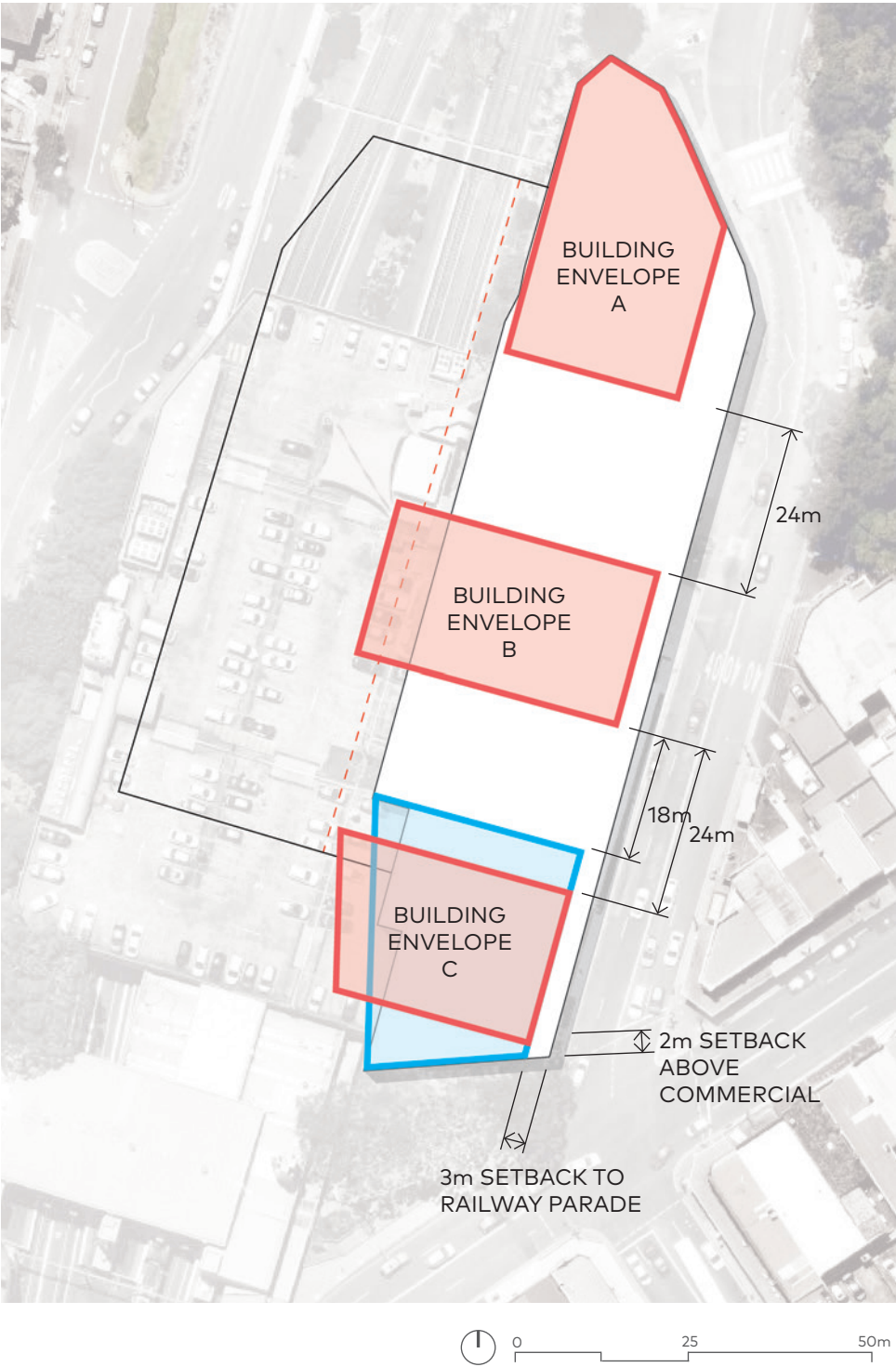
Artist impression - Connecting the users to the public open space

Creation of a high street through footpath widening, traffic calming and landscaping. A fantastic opportunity for an "Eat Street" celebrating the diverse cultures and cuisine of Kogarah

Indicative Floor Plans

Separation and cross ventilation

- To ensure that buildings have adequate separation to minimise visual bulk and to ensure adequate amenity within the site.
- To control overshadowing and maintain amenity to surrounding residences, public domain areas, publicly accessible private land and development within the site.
- To provide visual and acoustic privacy for occupants and surrounding residents.
- To ensure building setbacks have adequate regard to building amenity, privacy, access points, solar access and publicly accessible private land.
- To ensure that the building mass and articulation does not detract from surrounding heritage items and maintains significant views and vistas.
- To ensure that buildings are of a high architectural quality, modulated where appropriate and articulated to provide visual interest.
- Treatment such as impermeable screens, awnings and landscaping to mitigate the westerly winds in areas such as private balconies, podium terrace and car park.



Typical Upper Apartment Levels

The proposed height limit of 31 storeys is applied to the building footprints as a key gateway site of the heart of Kogarah Town Centre.

Residential GFA	2,170m ²
Commercial GFA	0
Retail GFA	0
Total GFA	2,170m²

- Site Boundary
- LGA Boundary
- Built form edge
- Balcony
- 1 Bedroom
- 2 Bedroom
- 3 Bedroom
- Lobby/Corridor



Typical Lower Apartment Levels

Residential GFA (x4 levels)	5,840m ²
Commercial GFA (x4 levels)	3,320m ²
Retail GFA	0
Total GFA	9,160m²

- Site Boundary

●

Lobby/Corridor
- ⋯

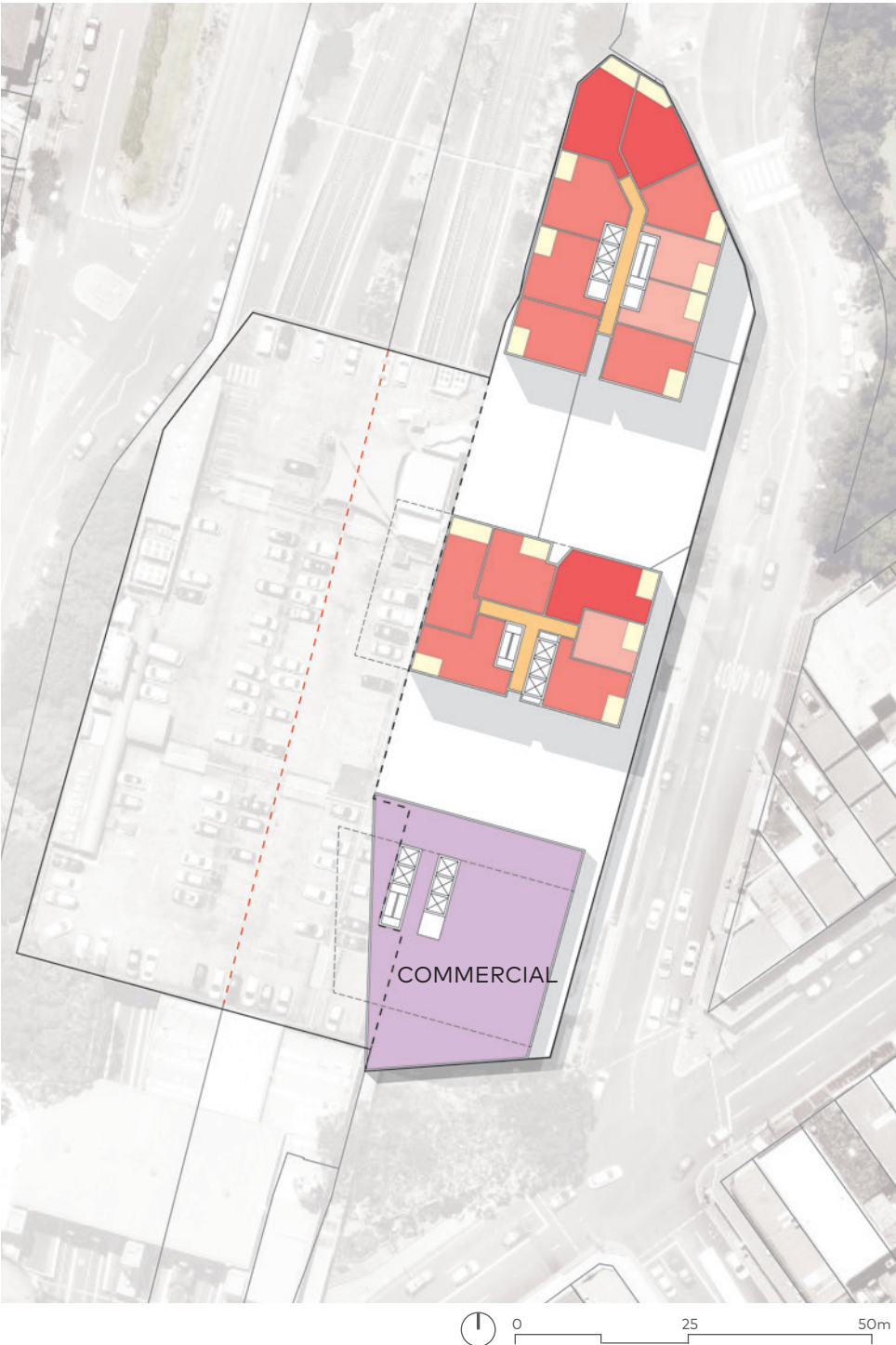
LGA Boundary
- ⋯

1 Bedroom
- ⋯

2 Bedroom
- ⋯

3 Bedroom
- ⋯

Balcony
- Commercial



Podium Roof

Communal uses encompass the podium roof and may include uses such as gymnasias and pools etc.

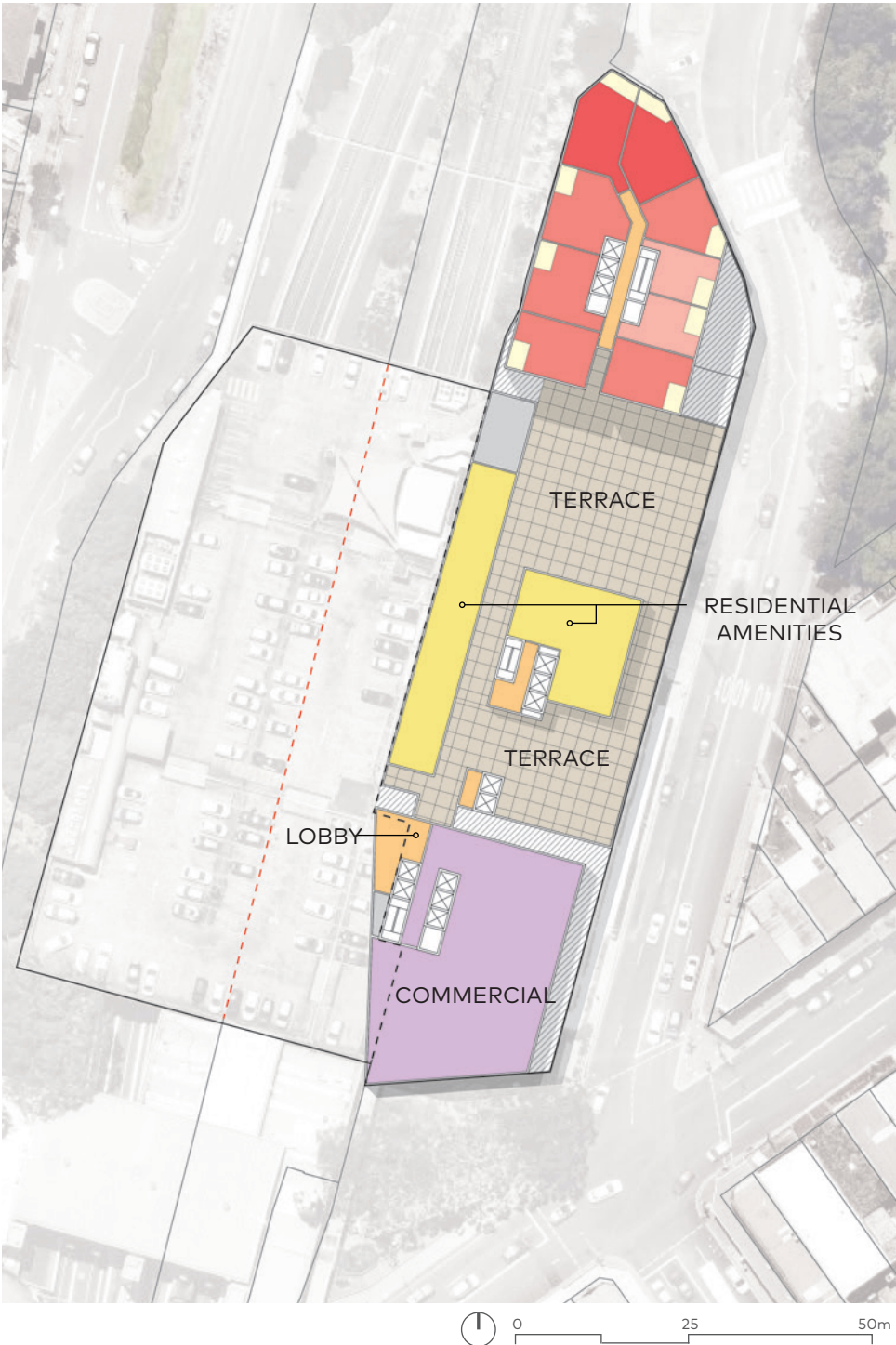
The commercial building includes foyer and facilities.

A small area of residential on the podium level is located in the north of the site.

Residential GFA	1,410m ²
Commercial GFA	810m ²
Retail GFA	0
Total GFA	2,220m²

- Site Boundary
- Residential Amenities
- ⋯

LGA Boundary
- Commercial
- 1 Bedroom
- 2 Bedroom
- 3 Bedroom
- Balcony
- Lobby/Corridor
- Plant
- Paved Area



Retail Parking

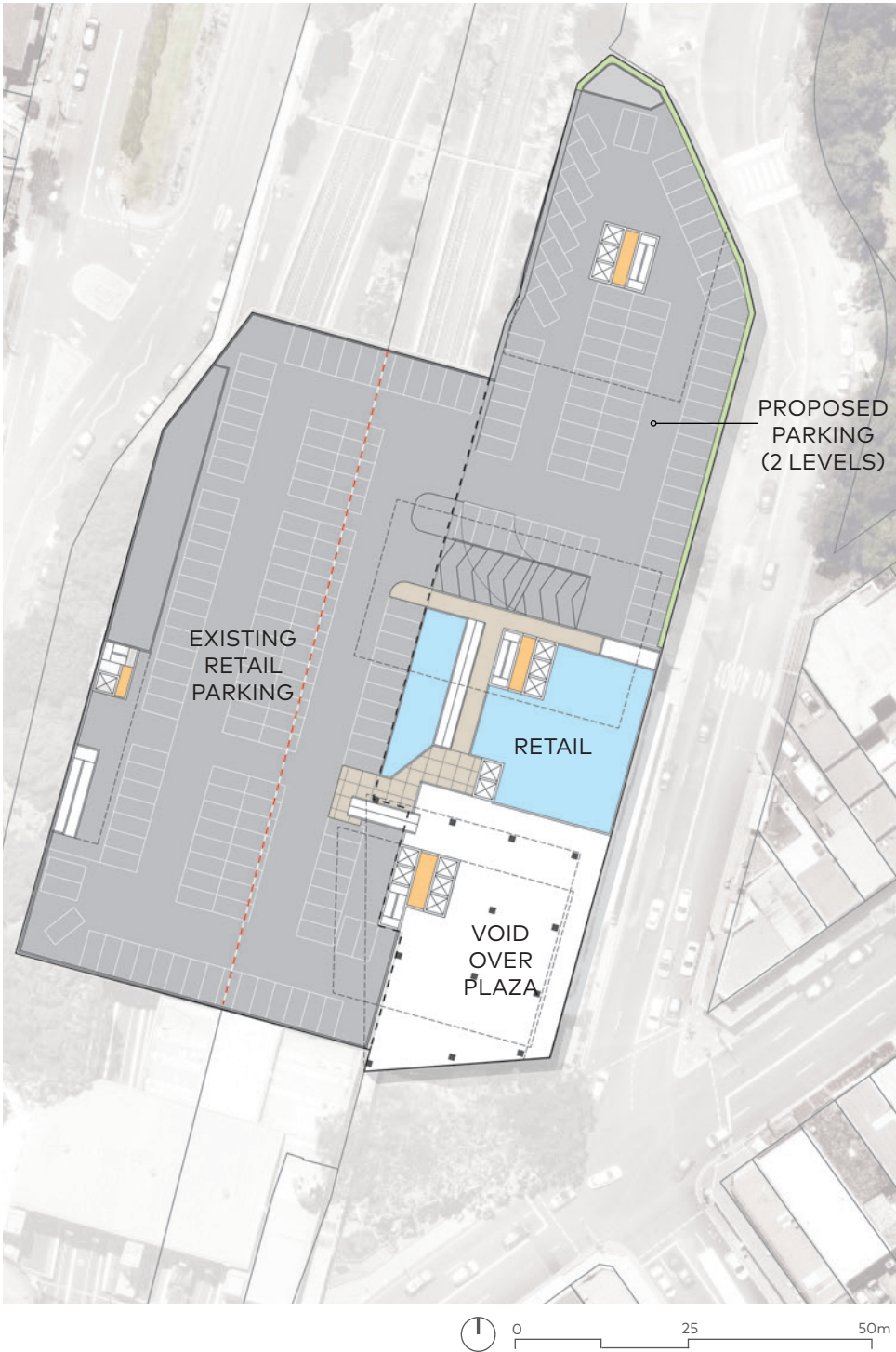
Level 3 and 4

Residential GFA	0
Commercial GFA	0
Retail GFA	640m ²
Total GFA	640m²

- Site Boundary
- Lobby/Corridor
- ⋯

LGA Boundary
- Parking
- ⋯

Built form edge
- Retail



Station Concourse

Retail and active uses front on the Railways Parade with vehicle entry and circulation to the retail parking, loading, and residential basement parking.

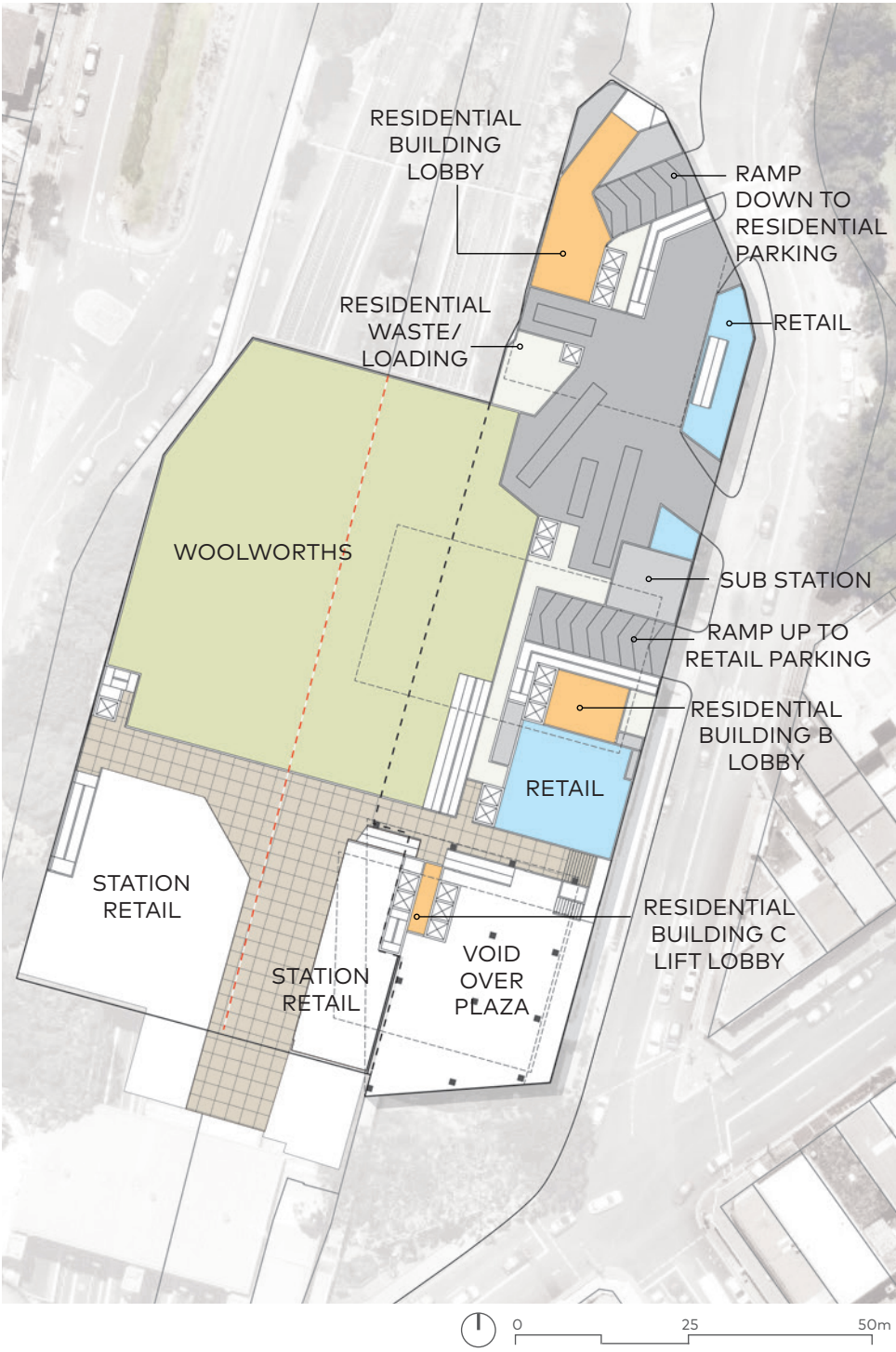
Residential GFA	0
Commercial GFA	0
Retail/ Woolworths GFA	5,245m ²
Total GFA	5,245m²

- Site Boundary
- ⊗

Paved Area
- ⋯

LGA Boundary
- Lobby/Corridor
- ⋯

Built form edge
- Plant
- Woolworths
- Parking
- Retail



Plaza

The plaza reflects the vision to create an active and vibrant precinct, framed around the publicly accessible open space and pedestrian movement to, through and within the site.

As an architectural anchor, to use similar distinctive brick of the heritage civic building as a unifying element to relate to surround buildings and surrounding streetscape. The development and the plaza to become a newly renovated railway parade envisaged as a quality tree lined boulevard/high street.

Residential GFA	0
Commercial GFA	0
Retail GFA	2,435m ²
Plaza	850m ²
Total GFA	2,435m²

- Site Boundary

● Lobby/Corridor

⋯ LGA Boundary

● Plant

⋯ Built form edge

● Retail

● Civic plaza

● Aldi Store



Retail Parking

- Retail and commercial parking on roof and mezzanine level 3 and 4
 - Retail/Commercial @ 1 space/60 sq m
- Potential community hub of 200m², including space for 200 persons in town hall format and 300 standing

Residential GFA	0
Commercial GFA	0
Retail GFA	780m ²
Total GFA	780m²

- Site Boundary

● Retail

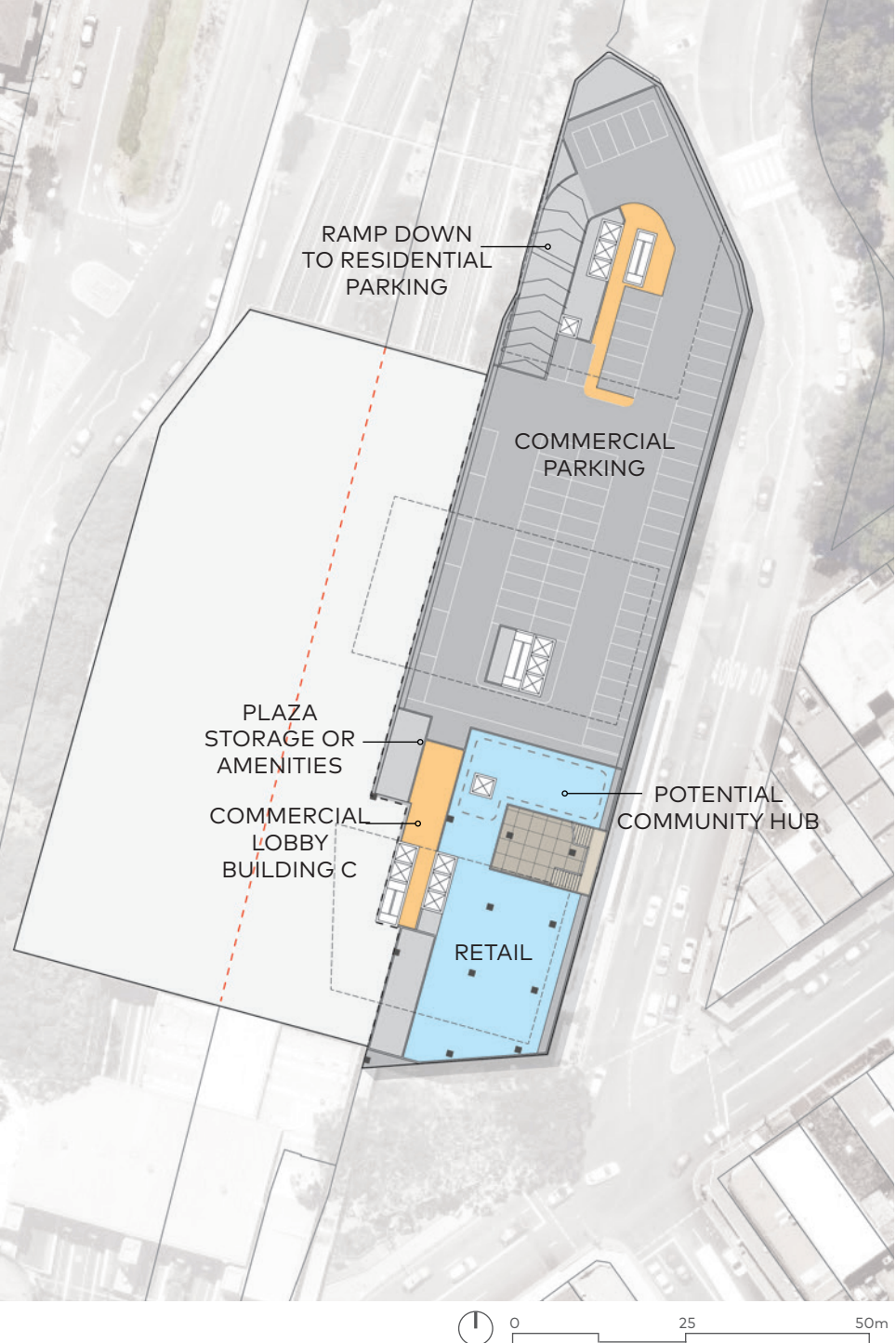
⋯ LGA Boundary

● Parking

⋯ Built form edge

● Lobby/Corridor

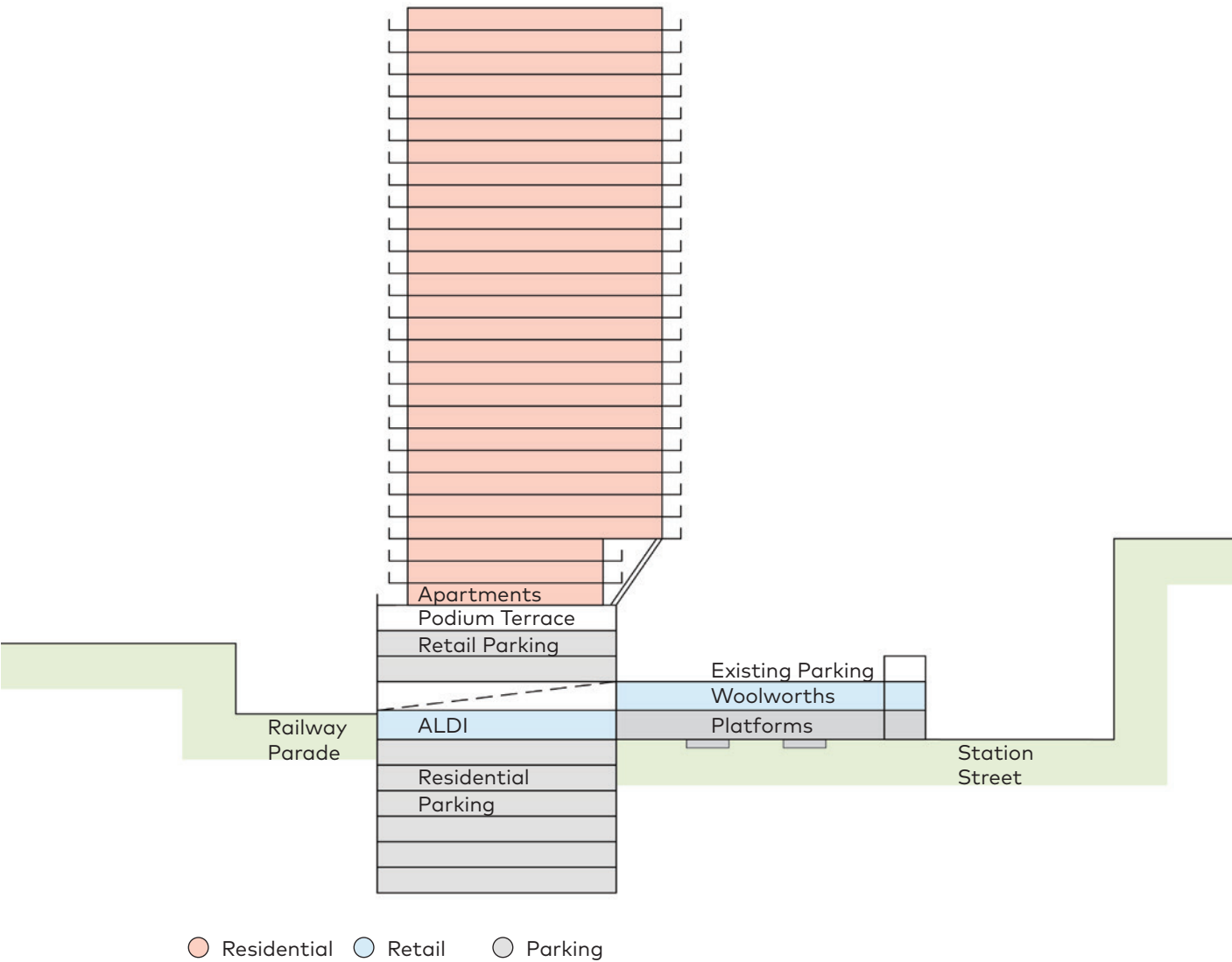
○ Community hub



Basement Parking

Basements have been provided for residential parking.

- Total Residential: approximately 577 bays (over 5.5 basement levels)
- Note:
 - 1 bed apartments @ 0.4 spaces/ap't
 - 2 bed apartments @ 0.7 spaces/ap't
 - 3 bed apartments @ 1.2 spaces/ap't
 - Visitor Spaces @ 1 space/10 ap'ts



PAN OPS
126.40

Residential
58.00

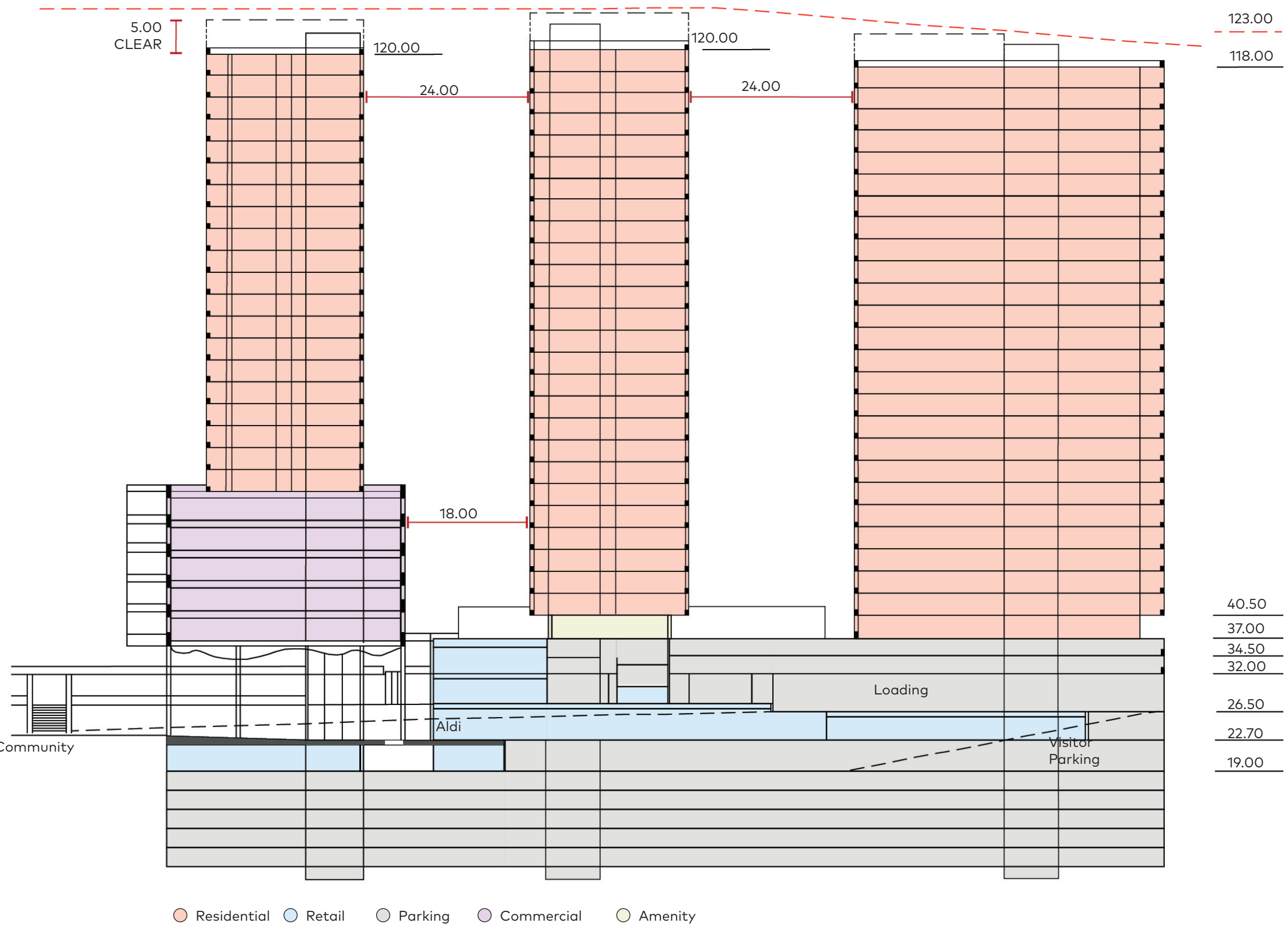
Podium and
Commercial
37.00

Parking
32.00

Woolworths
27.75

Plaza
22.70

Lower retail/ Community
19.00



Indicative GFA and FSR

Use	Georges River GFA	Bayside GFA	Overall GFA
Residential GFA	53,230m ²	0	53,230m ²
Commercial GFA	4,130m ²	0	4,130m ²
Retail GFA	6,340m ²	2,670m ²	9,010m ²
Total GFA	63,700m²	2,670m²	66,370m²
FSR	10.9 :1	1:1	8:1

Notes:

- Residential GFA includes lobbies, circulation, and common amenities
- Commercial GFA includes lobbies
- Retail GFA includes lobbies, and circulation
- Bayside LGA Site Boundary: 2,757m²
- Georges River LGA Site Boundary: 5,842m²

ADG Matrix

Solar

- Total apartment: 576
- ADG Compliant Apartment: 513
- Achieved solar access as per ADG:89% (min. required 70%)

Ventilation

- Total apartment up to level 9: 71
- ADG Compliant Apartment: 44
- Achieved cross ventilation as per ADG: 62% (min. required 60% below 10-storeys)

Communal open space

- Provided at podium level (appropriate above retail/commercial development)

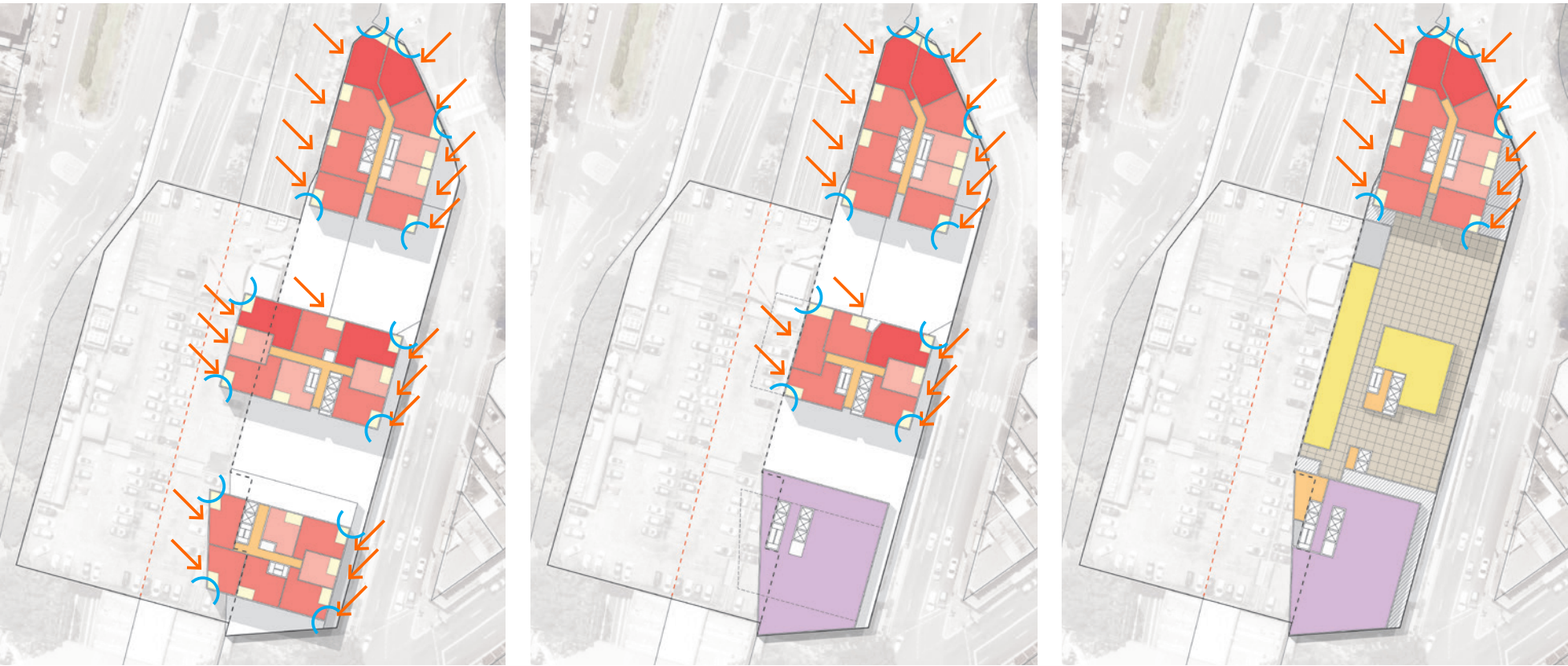
- Communal open space has a minimum area equal to 25% of the site, current design at 2,000m²
- Communal space to be designed to receive 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter) - to be investigated further in next stage of works

Floor plates

- Average from 580 to 780m² GFA with 6 to 9 apartments per floor
- Small floor plates result in reduced corridors, with all lift lobbies receiving direct natural light

Building depth

- Max 23m - lift/stair cores are centrally located within small floor plates to limit depth of individual apartments



Shadow Studies

The study area is located within the heart of the Kogarah Town Centre. The developments immediately surround the site to the include sensitive uses:

- Kogarah Community Centre
- Existing forecourt
- Residential uses
- Schools east of Railways Parade
- Civic spaces east of Railways Parade
- Publicly accessible open space on the west

The site is surrounded by future development height which will have implication on the surround sites and the proposal aims to:

- Maximise solar access and minimise shadow impacts to adjoining development as far as practicable.
- To not unreasonably reduce solar access where existing developments mutually overshadow each other.
- To orientate development to optimise solar access.

ADG Compliance

Surrounding Context

Receiving sunlight hours is essential for a building's solar performance. It reduces reliance on artificial lighting, heating and creates enjoyable living spaces. Beams of sunlight can be quantified and measured to ensure the facade of a building reaches an optimal standard of living.

The Apartment Design Guide (ADG) requires living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area. A detailed analysis of the existing residential blocks need to be done in future stages of works.

Analysing the façades solar performance of the surrounding buildings can be a valuable indicator where the facade is evaluated for its solar performance based on existing conditions and proposed development. At each level, the facade is divided into

10m sections. Beams of sunlight in a 3D model test if contextual buildings obstruct each section. If the section receives 2-6 hours of unimpeded sunlight hours, it passes the ADG guidelines. A section does not pass if its solar performance is between 0 and 2 hours. The rate of passing sections in a building is totalled to a percentage. This serves as a constructive indicator of solar performance impact for the existing residential façades in the initial stages of design.

The following shadow analysis diagrams demonstrate that although the proposed built form overshadows a small number of residential blocks to the south-west of the precinct at 9am and to the south-east at 3pm, the proposed built form does not restrict direct sunlight to these residential uses between 12-2pm. The north south arrangement of the proposal has minimal solar impact on surrounding residential development. Therefore, the residential lots to the south-west and east are able to receive a minimum of 2 hours direct sunlight under the proposed scheme.



North of site looking south on Railway Parade

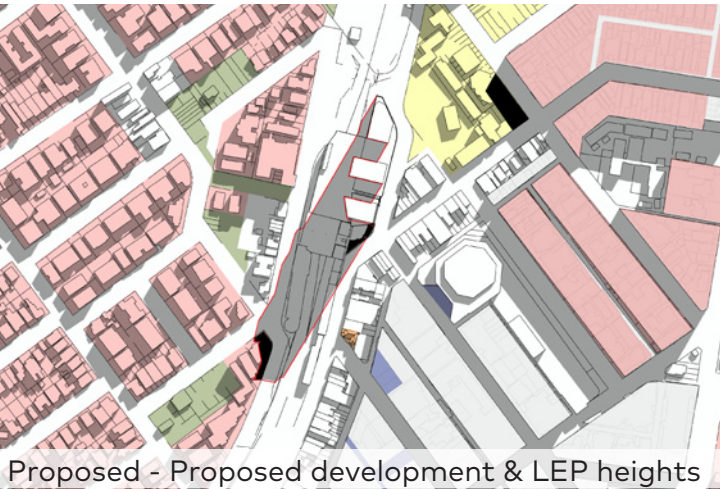
Winter 9am

Already shaded by existing trees, the south-west area of Tom Hanratty Reserve that is overshadowed by the proposed development is not significantly impacted.

Shadows over the park in Taylor Street overshadow an existing tree covered area, the Senior Citizens Centre, and a parcel of open green space. The majority of public open space receives sunlight at this time.



Winter 10am



Winter 11am

- School
- Community Centre
- Residential
- Civic space
- Publicly accessible open space
- Shadows caused by proposed development
- Additional shadows caused by proposed development on sensitive uses

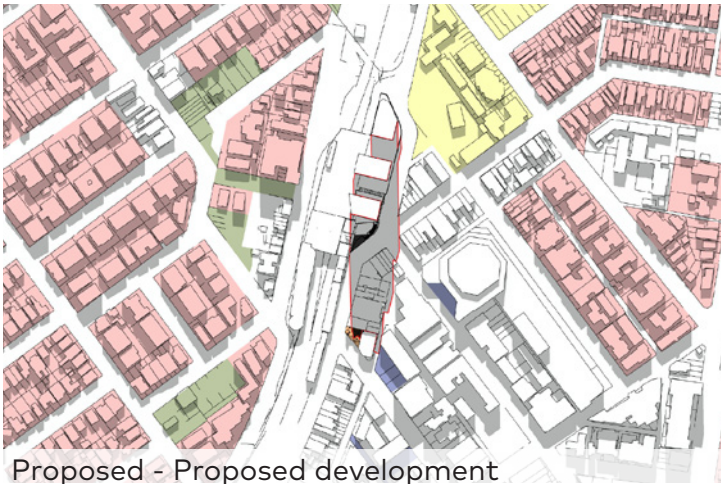


Winter 12pm

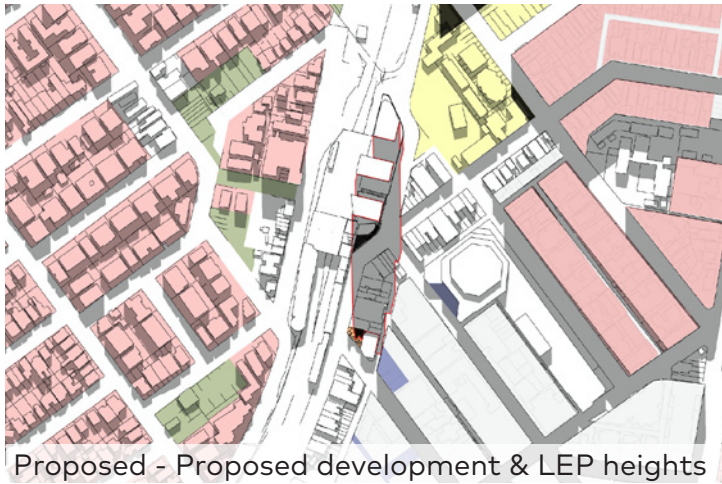
The proposed development will partially overshadow the local community centre.



Existing



Proposed - Proposed development



Proposed - Proposed development & LEP heights

Winter 1pm

The proposed development will partially overshadow the local community centre.



Existing



Proposed - Proposed development



Proposed - Proposed development & LEP heights

Winter 2pm



Existing



Proposed - Proposed development



Proposed - Proposed development & LEP heights

Winter 3pm

At this time, the affected public space is already overshadowed by its surrounding built form.

- School
- Community Centre
- Residential
- Civic space
- Publicly accessible open space
- Shadows caused by proposed development
- Additional shadows caused by proposed development on sensitive uses



Existing



Proposed - Proposed development



Proposed - Proposed development & LEP heights