INNER WEST

Appendix 2A –

Architectus Leichhardt, Taverners Hill and Kings Bay/Croydon Urban Design Review

November 2023

FOR EXHIBITION

Contents

Leichhardt Urban Design Review.....3

Taverners Hill Urban Design Review.....133

Kings Bay Urban Design Review.....190



Parramatta Road Corridor - Urban Design Peer Review (2023 Updates)

Leichhardt

architectus™

Architectus Australia Holdings Pty Ltd.
ABN 90 131 245 684

Nominated Architect
Managing Director
Ray Brown
NSWARB 6359

Adelaide
Lower Ground Floor
57 Wyatt Street
Adelaide SA 5000
Australia
T +61 8 8427 7300
adelaide@architectus.com.au

Melbourne
Level 25, 385 Bourke Street
Melbourne VIC 3000
Australia
T +61 3 9429 5733
F +61 3 9429 8480
melbourne@architectus.com.au

Perth
QV1 Upper Plaza West
250 St. Georges Terrace
Perth WA 6000
Australia
T +61 8 9412 8355
perth@architectus.com.au

Sydney
Level 18, MLC Centre
19 Martin Place
Sydney NSW 2000
Australia
T +61 2 8252 8400
F +61 2 8252 8600
sydney@architectus.com.au

architectus.com.au

Project and report	Parramatta Road Corridor - Urban Design Peer Review - Leichhardt
Date	September 20, 2023
Client	Inner West Council
Document no.	K:\230218.00\Docs\C_Client\C05_REPT\MASTER_LeichhardtPresentationFolder\230920_LeichhardtFinalPackage

Issue A (Final issue) - 01/06/21	Approved by: Greg Burgon
Issue B (Draft update to client) - 20/07/23	Approved by: Tim Moore
Issue C (Final issue) - 06/09/23	Approved by: Tim Moore
Issue D (Revised final report) - 20/09/23	Approved by: Greg Burgon

Report contact	Greg Burgon Principal
This report is considered a draft unless signed by a Director or Principal	Approved by: Greg Burgon

1.1 Background and Purpose of report

Background

Inner West Council is preparing a Planning Proposal to amend the Draft Inner West Local Environmental Plan for the Parramatta Road Corridor Urban Transformation Strategy (PRCUTS) precincts including Leichhardt, Taverners Hill and part of Kings Bay.

Council have prepared draft structure plan maps and design guidelines for these precincts which encompass changes to existing planning controls and take into consideration the recommendations of PRCUTS.

Purpose of this report

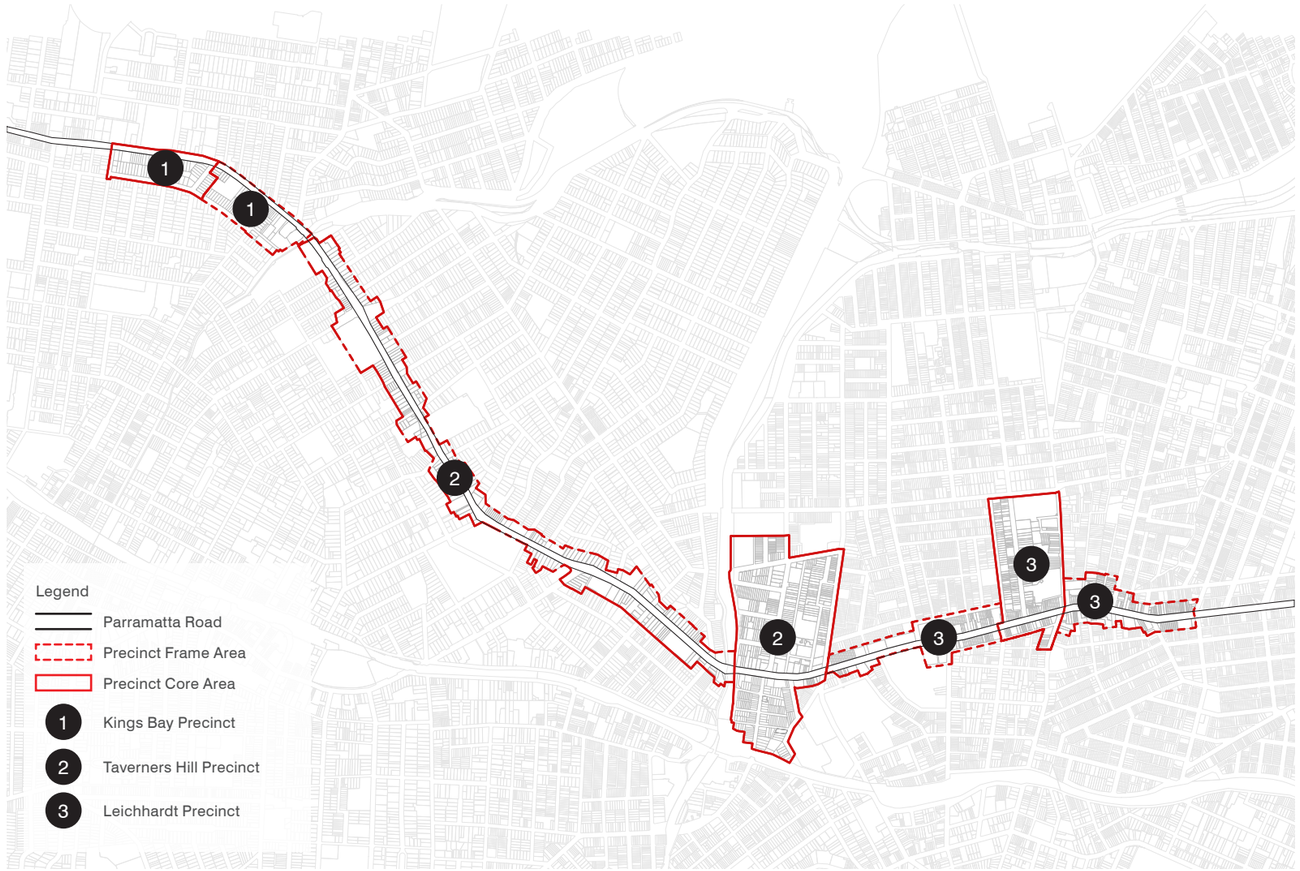
Architectus has been engaged by Inner West Council to give peer review advice on Council's draft structure plan maps and guidelines which will inform the LEP/ DCP controls. The fine grain design guidelines apply to individual precincts - Kings Bay, Taverners Hill and Leichhardt, as well as to general urban design issues across the three precincts.

Three reports have been prepared (one for each precinct) and structured according to the specific issues which Council have identified and are seeking peer review advice on. This report covers the Leichhardt Precinct.

2023 Update to Urban Design Report

Following the issue of the Urban Design reports in 2021, Council submitted a Planning Proposal in May 2022 to the Department of Planning & Environment (DPE) for Gateway Determination. In October 2022 DPE provided Gateway Determination to proceed to public exhibition subject to conditions.

Further to this, and providing the basis for this round of updates to the Urban Design Reports, DPE and Council require floor to floor height assumptions for residential storeys to align with updates to the NCC, which was updated in May 2022, and, subsequently any impacted LEP HOB recommendations. In addition to this, LEP recommendations have been updated to correspond with the Employment Zone Reform which took effect from April 2023.



Parramatta Road Corridor study area map

Background and Purpose of report

Approach

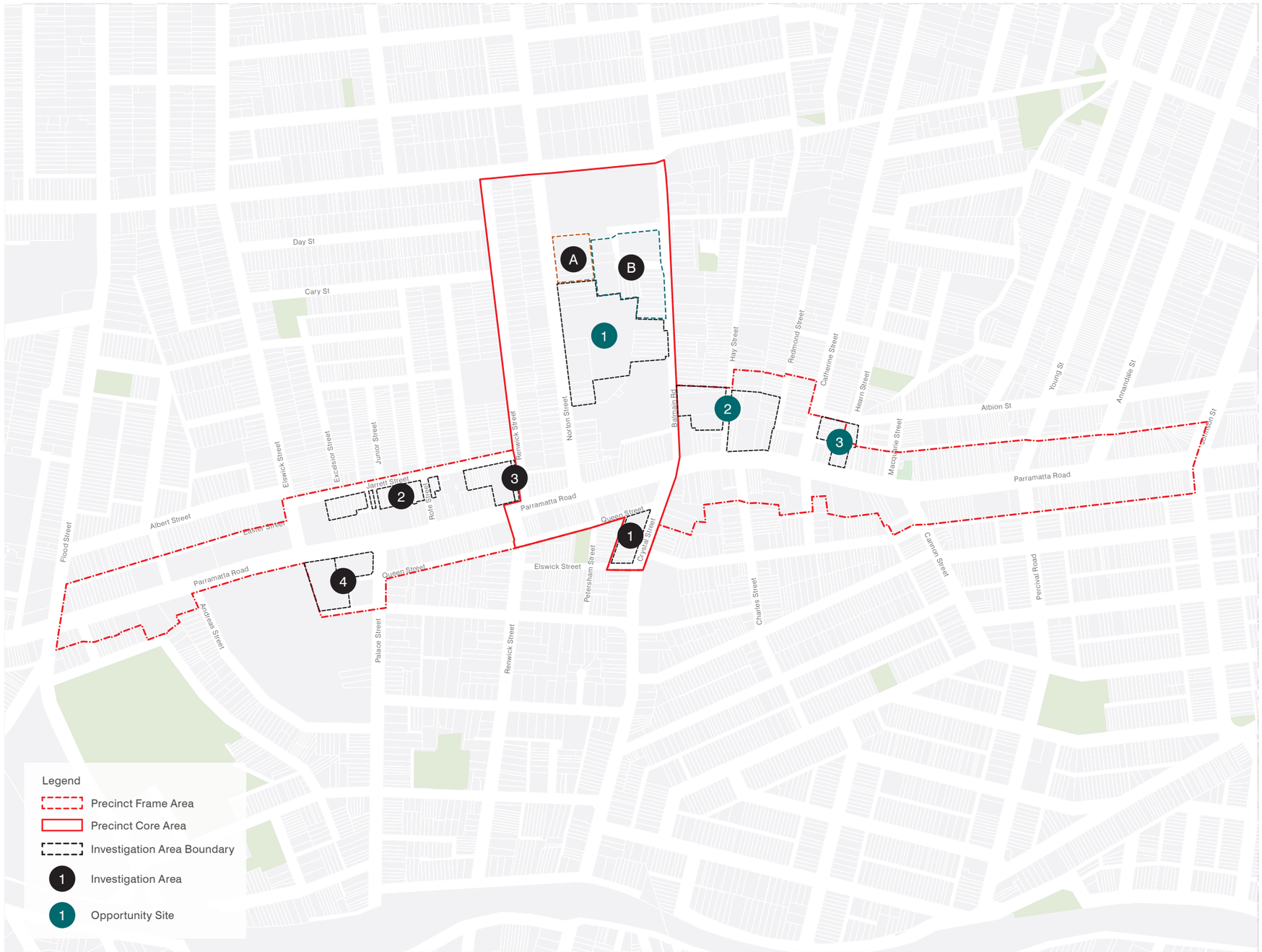
This report includes five investigation areas and three opportunity sites within the Leichhardt Precinct:

- Investigation Area 1 - 2-18 Crystal Street, Petersham
- Investigation Area 2 - 4 – 98 Jarrett Street, Leichhardt
- Investigation Area 3 - 10-12 Renwick Street, Leichhardt
- Investigation Area 4 - 592 - 610 Parramatta Road, Petersham
- Opportunity Site 1 - Norton St
- Opportunity Site 2 - Hay St
- Opportunity Site 3 - Catherine St
- Investigation Area A North Leichhardt
- Investigation Area B North Leichhardt

Consideration of each issue may include some or all of the following sections as relevant:

- Existing, PRCUTS, and Draft Structure Plan LEP controls
- Existing character analysis
- Development constraints and opportunities
- Built form typology study
- Precedent imagery
- Solar analysis and overshadowing
- Recommendations

The final chapter of this report includes a summary of Architectus' key recommendations and summary tables of yield across the precinct based on this.



Leichhardt investigation areas key map

Background and Purpose of report

General commercial and residential assumptions

Zone / Land use	Efficiency	Floor to floor height	
E2 Commercial Core		5m	Ground - floor to floor (inclusive of 1m slope/topography allowance)
Commercial component	85%	4m	Typical first floor level (first floor upper level has potential to transition to commercial use in future based on demand for commercial floorspace)
Residential component	75%		
		3.2m	Typical upper levels (sufficient for residential floor to floor height)
		1.5m	Lift overrun
E3 Productivity Support	90%	5m	Ground - floor to floor (inclusive of 1m slope/topography allowance)
		3.6m	Typical upper levels (sufficient for commercial floor to floor height)
		1.5m	Lift overrun
RFB	75%	4m	Ground - floor to floor (inclusive of 1m slope/topography allowance)
		3.2m	Typical upper levels (sufficient for residential floor to floor height)
		1.5m	Lift overrun

Definitions

ADG	Apartment Design Guide (accompanying State Environmental Planning Policy 65)
FSR	Floor Space Ratio
GFA	Gross Floor Area
HOB	Height of Building
IWC	Inner West Council
IWLEP	Inner West Local Environmental Plan 2022
LZN	Land Zoning
NLA / NSA	Nett Lettable Area / Nett Saleable Area
PRCUTS	Parramatta Road Urban Transformation Strategy 2016
RFB	Residential flat building
SEPP65	State Environmental Planning Policy 65

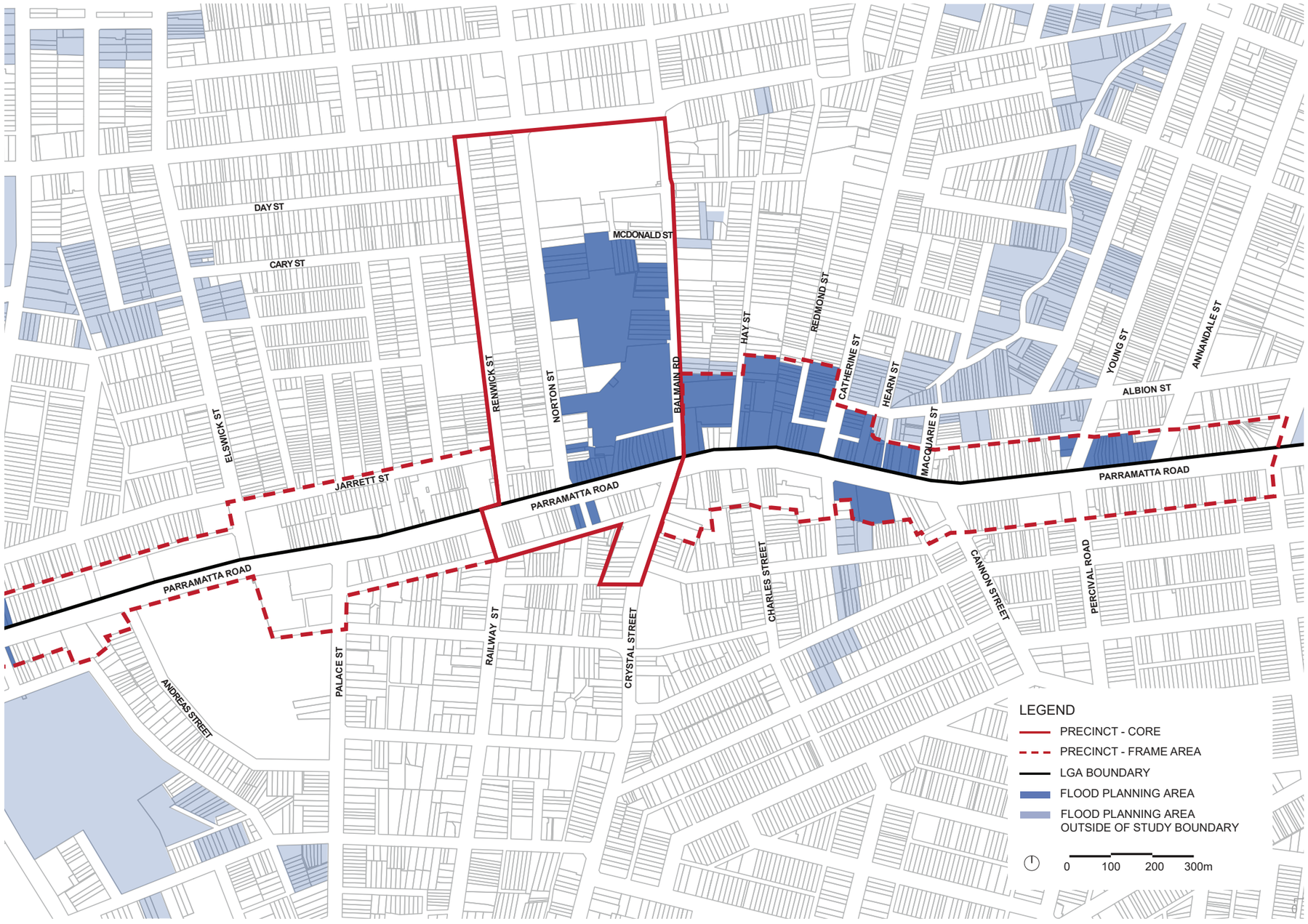
Employment Zone Reform Equivalent Zone Tables (Inner West LEP 2022)

Business and Industrial Zone	Employment Zone
B2 Local Centre	E1 Local Centre
B4 Mixed Use	MU1 Mixed Use
B6 Enterprise Corridor	E3 Productivity Support
IN2 General Industrial	E4 General Industrial

Background and Purpose of report

Flood mapping

The typology testing and selected sites is subject to hydrological engineering advice, with regard to minimum landscape area, setbacks and impacts of basement carparking.



Leichhardt Floor Map (Source: Inner West Council)

This map is from Inner West Council Floodplain Risk Management Studies and Plans. Council is reviewing its flood management plan for this area which might result in changes to the flooding lots.

1.2 Investigation Area 1

Issue

2-18 Crystal Street, Petersham

Advice sought on proposed zoning and controls – existing E2 zoning should be retained or rezoned to R3 Medium Density residential. Advice also sought on appropriate development controls (FSR/heights/setbacks/street frontage heights/appropriate ground floor uses etc.)



Investigation area key aerial plan

LEP controls

The investigation area is currently zoned E1 Local Centre with an FSR of 1.5:1 and HOB of 14m.

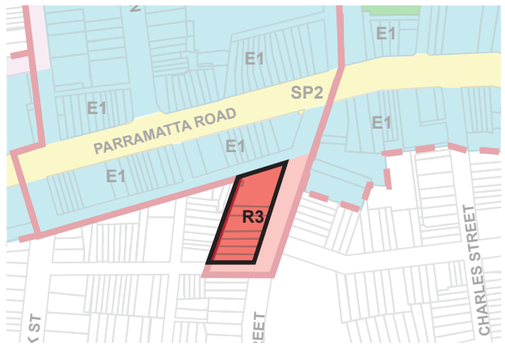
PRCUTS recommends rezoning this investigation area from B2 to R3 Medium Density Residential with a 3:1 FSR and 22m HOB.

Draft Structure Plan controls
The IWC Draft Structure Plan controls under consideration support the PRCUTS rezoning and FSR recommendations but suggest the HOB be reduced to 20m.

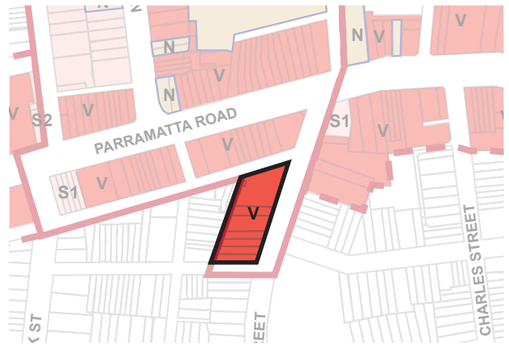
Existing LEP controls (IWLEP 2022)	
LZN	E1 Local Centre
FSR	1.5:1
HOB	14m

PRCUTS recommendations (2016)	
LZN	R3 Medium Density Residential
FSR	3:1
HOB	22m

Draft Structure Plan controls under consideration (2021)



LZN R3 Mixed Use Residential



FSR 3:1 + bonus for public benefits



HOB 20m

Investigation Area 1

Character

Lots and existing development

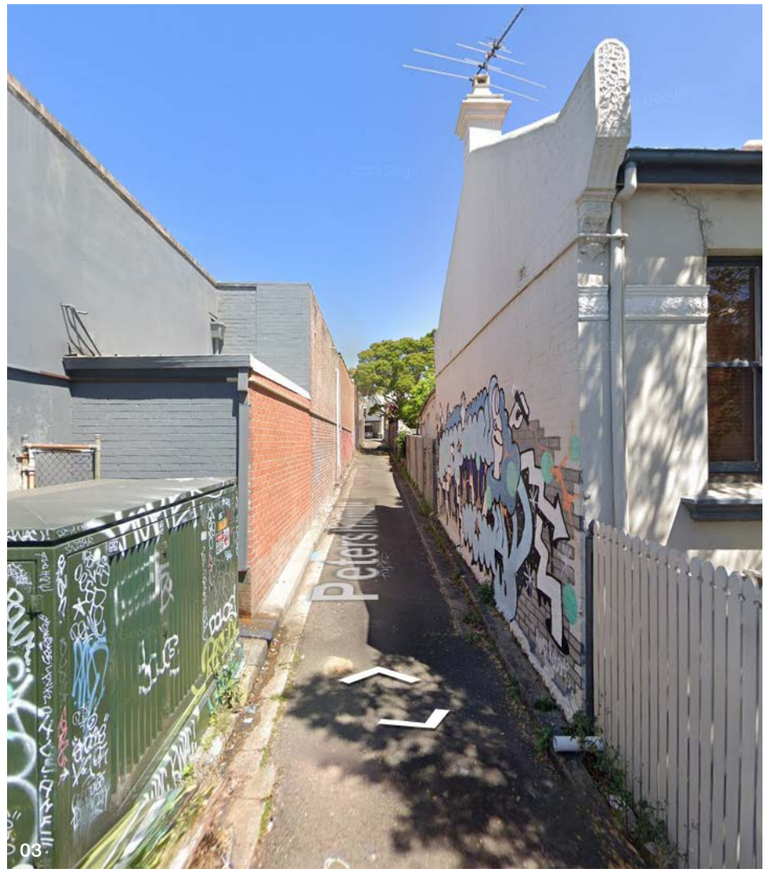
- Generally mixed built form character that consists of small residences, shop fronts and warehouses and a service station in the north of the investigation area.
- Developments along existing streetscape are 1-2 storeys approximately 5-9m high.
- Inconsistent front setbacks due to the mix of uses.
- No rear setbacks along Petersham Lane.

Streets

- Investigation area fronts Crystal Street; a main thoroughfare connecting Petersham to Parramatta Road, with high traffic.
- No existing parking to investigation area along Crystal Street frontage.
- Minimal planting along Crystal Street, due to wide driveway crossings providing access to existing businesses (service station and auto repair workshop).
- No existing rear access to investigation sites from Petersham Lane. Laneway is narrow with no footpath (approximately 2.4m wide).
- Queen Street to the northern side of investigation area provides rear access to sites along Parramatta Road. Predominately made up of driveways and parking bays.
- Elswick Street to the southern side of the investigation area is a narrow street with minimal footpath and no planting.







01 Existing developments at No.12-18 Crystal Street, currently zoned as E1 Local Centre.

02 Existing service station development at No. 2-10 Crystal Street. Located at intersection of Crystal Street and Queen Street.

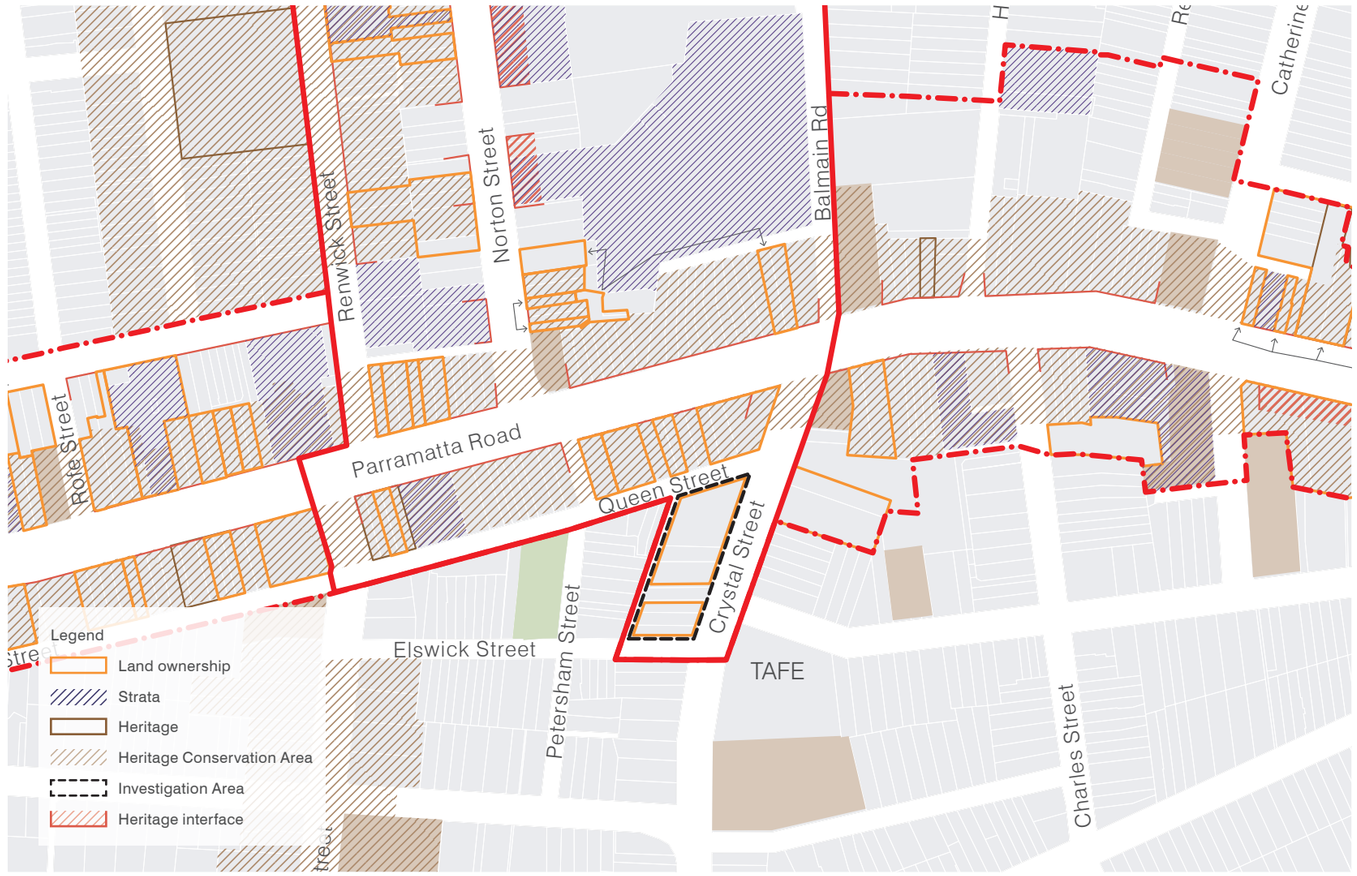
03 Petersham Lane (to rear of investigation sites)

Development constraints and opportunities

- Two significant land ownership sites within investigation area present feasible opportunities for amalgamation and large residential floorplates
- Petersham Lane is very narrow, which presents vehicle access challenges from the rear.
- The western frontage of Petersham Lane consists of the rear courtyards of single dwellings. Separation, interface and amenity will need to be considered.
- The investigation area is unconstrained by heritage items and heritage conservation areas. The block to the north between Parramatta Road and Queen Street is a heritage conservation area.
- Petersham TAFE situated opposite the south east corner of the investigation area is 5 storeys high.

Preliminary ideas

- Explore height commensurate to E1 zoned area to the north of the investigation area.
- Consider solar amenity to surrounding residential neighbours, particularly those along Petersham Lane to the west.
- Consider provision of adequate space to allow for access to the rear of site.
- Create opportunities for improved streetscape and pedestrian amenity along Crystal Street, including street tree planting and verges.



Constraints map

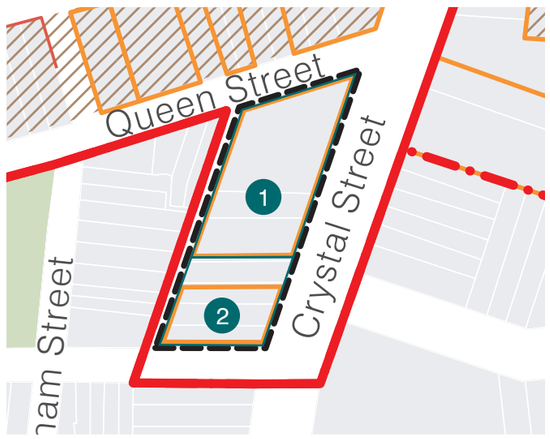
1:3,000 0 30 60 90 120 150M

Built form typology study

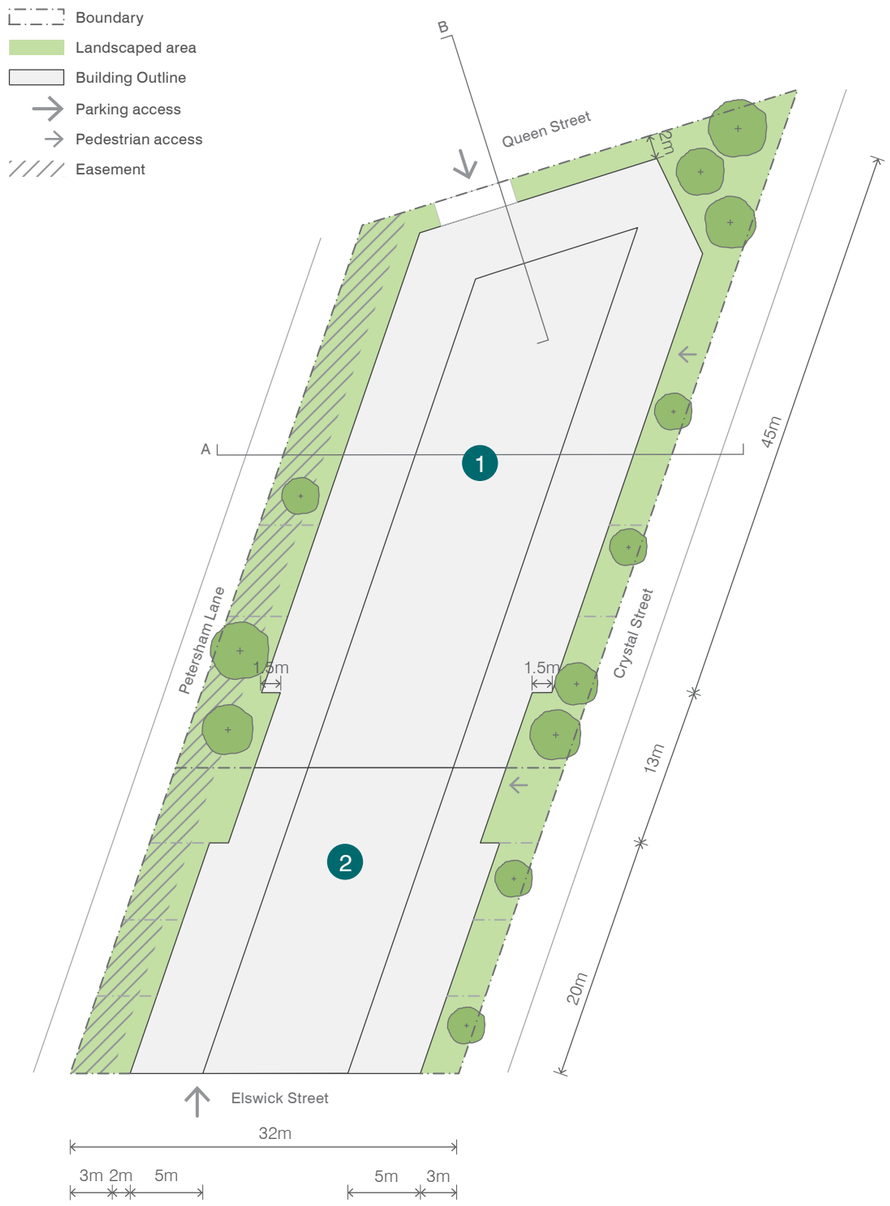
The following study has been undertaken to understand potential built form outcomes for two sites, taking the existing land ownership pattern into consideration.

1. Existing land ownership of 3 lots to northern side of investigation area has been explored as one potential opportunity site. Includes existing service station site. R3 Medium Density Residential RFB typologies have been explored. Refer to Council's preliminary site investigation report for contamination assessment.

2. Current land ownership of 3 lots to southern side of investigation area explored as one amalgamated site, with assumption that remaining lot at No. 14 Crystal Street would be included in future redevelopment. R3 Medium Density Residential RFB typologies have been explored.



Key plan



Plan

Assumptions
- Built form typology requires amalgamation of 2 lots to achieve a minimum 12m site width and 31m depth for basement carparking.

Setbacks
- Min. rear setback of 5m to first 4 storeys and a further 5m setback to fifth storey from rear building line, to allow for rear access via Petersham Lane to basement parking, solar access, privacy and amenity to R2 zoned area to west of investigation area.
- Min. 3m front setback to Crystal Street to allow for planting, then a further 5m setback to fifth storey from building line.
- 5th storey setback to reduce the impact to neighbouring properties to the West.
- Min. 2m setback to Queen Street and additional 5m setback to the fifth storey form the building line.
- 0 setback to Elswick Street.

Building height and street wall
- Proposed 5 storey residential development.
- 4 storey street wall
- 4m Ground floor to floor height.
- 3.2m floor to floor height for storeys above.
- Overall building height of 18.3m including services.

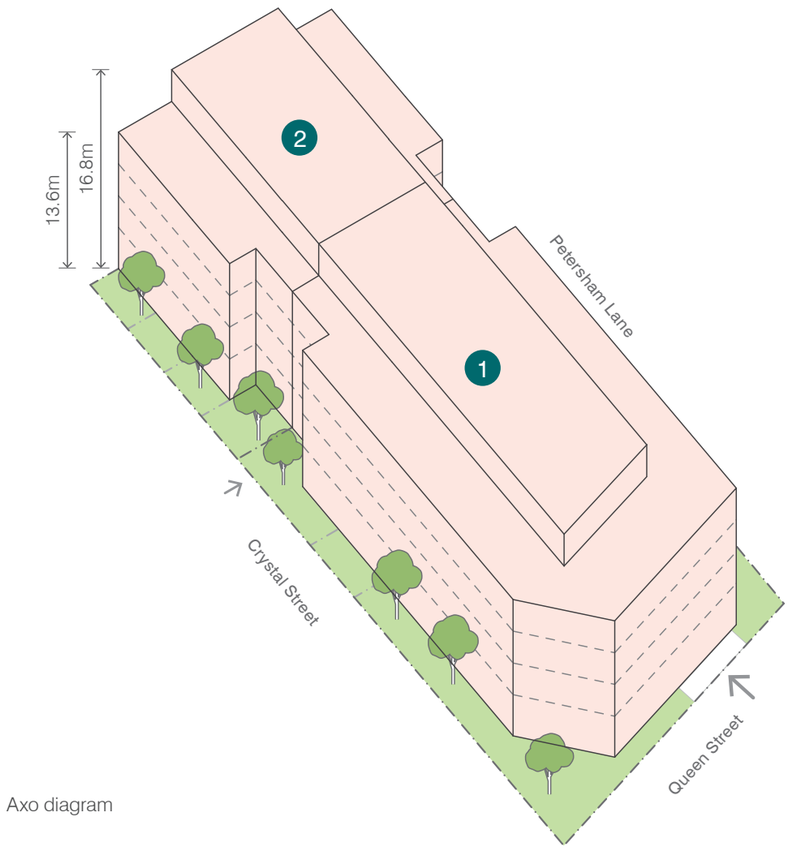
Access
- Parking access from Queen St and Elswick St or from Petersham Lane
- 3m zone for potential Petersham lane widening

1:500 0 5 10 15 20 25M

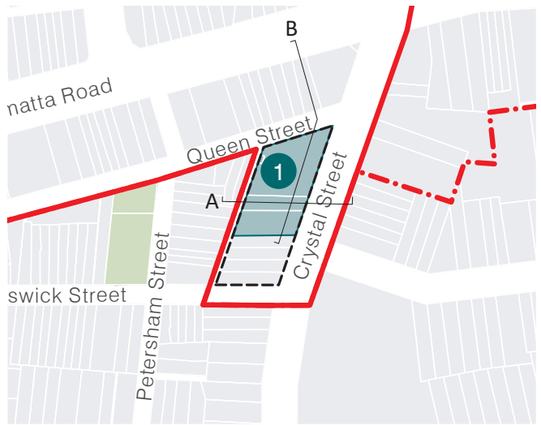
Investigation Area 1

RFB typology

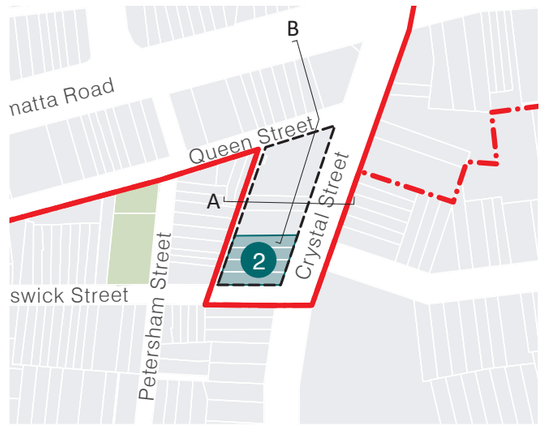
- RFBs with an FSR of 2.2:1 have been explored for this investigation area, responding to the future redevelopment of Parramatta Road.
- Proposed building envelope achieves cross ventilation to apartments, and can be articulated further at design stage to respond to the built form pattern of Crystal St and reduce visual bulk
- Height and street wall considers the redevelopment of Parramatta Road properties and interface along Queen Street. The height and typology also responds to the 5-storey TAFE site to the southeast of the investigation area.



Axo diagram

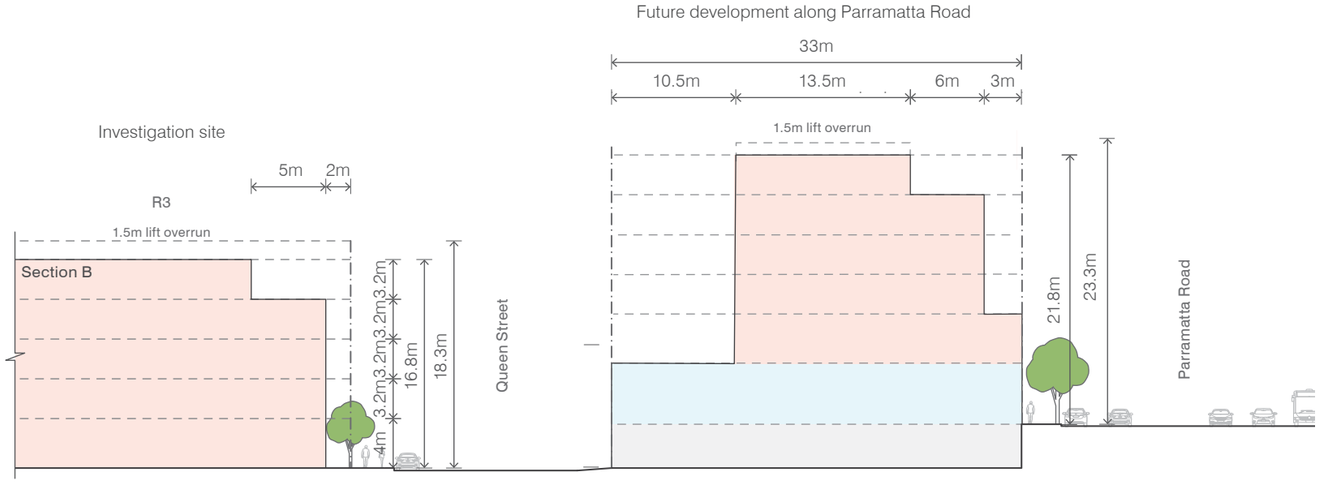


FSR	2.2:1
Site width	52m
Site depth	32m
Site area	1600m^2
Front setback	3m
Side setback (to Queen St)	2m
Rear setback	5m (incl. 3m for potential lane widening)
Upper level setback (to 5th storey from building line from Crystal St, Queen St and Petersham Lane)	5m
GFA	3586m^2
Street wall	4 storeys
Height*	18.3m (5 storeys)
Dwelling Yield	45



FSR	2.2:1
Site width	26m
Site depth	32m
Site area	806m^2
Front setback	3m
Side setback	0m
Rear setback	5m (incl. 3m for potential lane widening)
GFA	1820m^2
Upper level setback (to 5th storey from building line from Crystal St and Petersham Lane)	5m
Street wall	4 storeys
Height*	18.3m (5 storeys)
Dwelling Yield	23

*Height inclusive of 1.5m for lift overrun



Section B

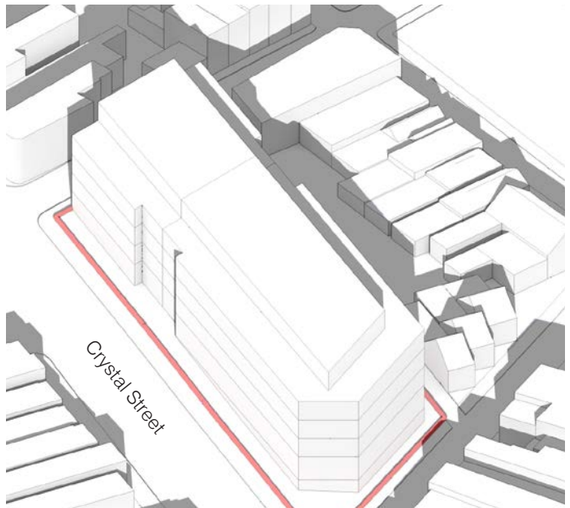
Overshadowing Analysis

Solar access requirements
Minimum two hours of solar access to surrounding properties. Accompanying shadow diagrams are taken at 9am, 11am and 1pm on the 21st June.

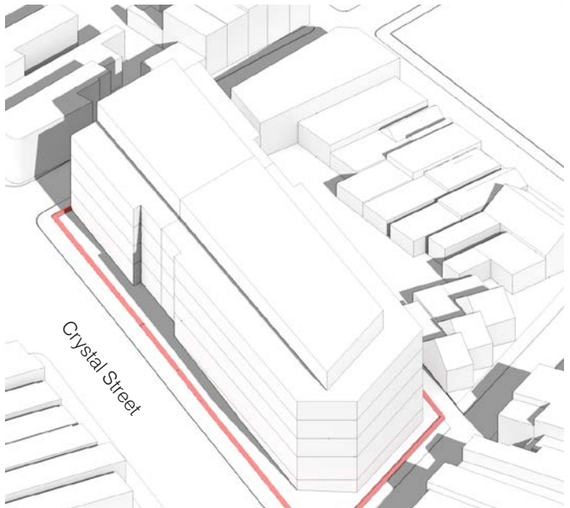
Summary
– Proposed R3 zoned sites along Crystal Street maintain a minimum 2 hours of sunlight to open space of neighbouring R2 sites to West.

R2 to R3 interface

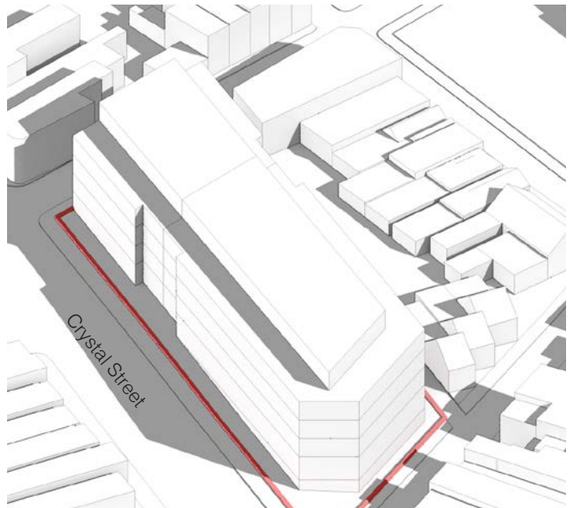
North-East



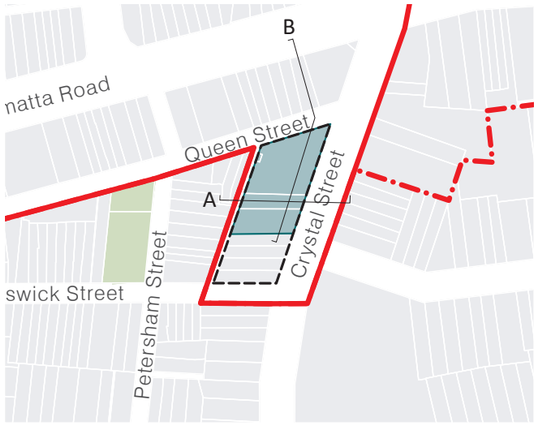
9am



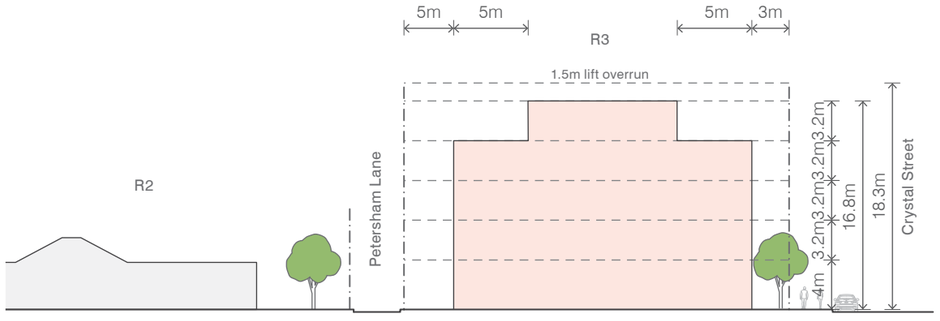
11am



1pm



Key plan



Section A

Recommendations

LEP recommendations

Architectus supports PRCUTS' recommendations to rezone the existing E1 investigation area to R3 Medium Density Residential (with RFBs as an additional permitted use) in keeping with its surrounding residential context. The testing indicates that a reduced HOB and FSR from those proposed by PRCUTS and the Draft Structure Plan would be more appropriate for this investigation area.

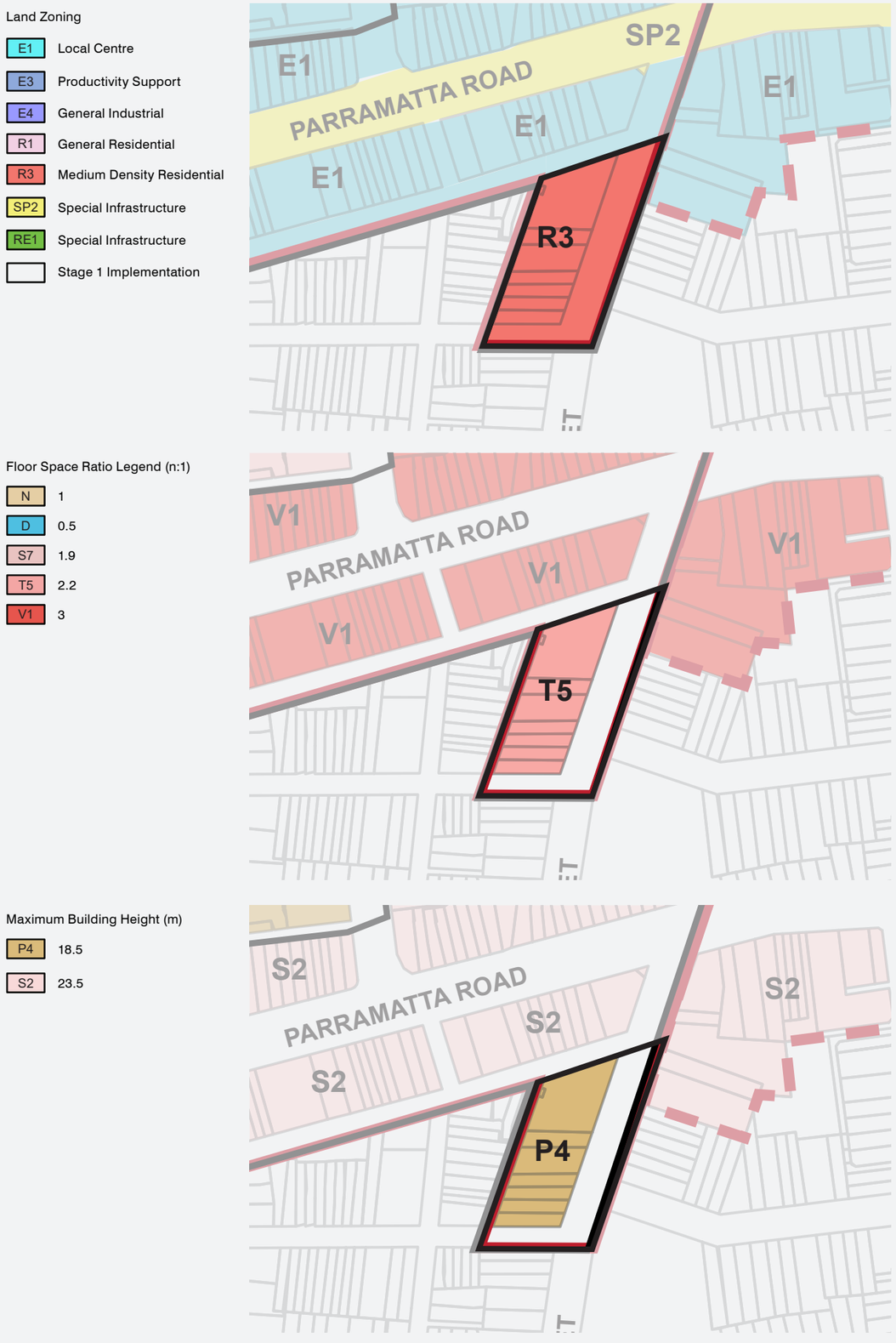
Justification
In order to achieve the 3:1 FSR recommendation put forward by both PRCUTS and the IWC Draft Structure Plan, 6+ storeys would be required which is not in keeping with the local low density residential character and would have negative solar impacts on neighbours, particularly those along Petersham Lane. 18.5m (5 storeys) with an FSR of 2.2:1 is more appropriate for this area and will provide a better interface to the E1 development to the north which is marked for 20m HOB and 3:1 FSR.

Existing LEP controls (IWLEP 2022)	
LZN	E1 Local Centre
FSR	1.5:1
HOB	14m

PRCUTS recommendations (2016)	
LZN	R3 Medium Density Residential
FSR	3:1
HOB	22m

Draft Structure Plan Controls (2021)	
LZN	R3 Mixed Use Residential
FSR	3.1 + bonus for benefits
HOB	20m

Final recommendations	
LZN	R3 Medium Density Residential
FSR	2.2:1
HOB	18.5 (5 storeys)



1.3 Investigation Area 2

Issue

4 – 98 Jarrett Street, Leichhardt

Advice sought on proposed zoning and building/development controls considering the interface with the rear of properties along Parramatta Road.



Investigation area key aerial plan

LEP controls

The investigation area is currently zoned as E1 Local Centre with an FSR of 1:1 (maximum FSR 1.5:1 if active frontage is provided). HOB is currently undefined.

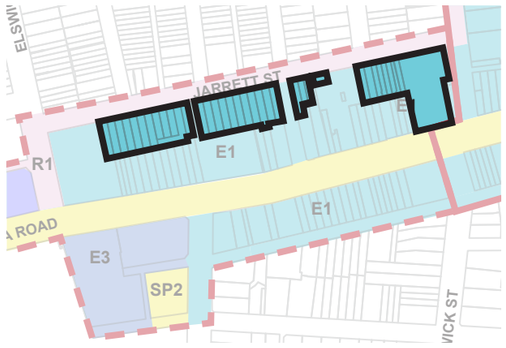
PRCUTS recommends decreasing the FSR to 1:1 (no bonus for active frontage), proposing 3:1 only for the eastern-most lot which is the Bel Mondo residential development. It also recommends a general HOB of 14m along Jarrett Street, with a 22m exception again for Bel Mondo.

Draft Structure Plan controls
The IWC Draft Structure Plan controls under consideration support the PRCUTS rezoning and FSR recommendations but suggest no HOB.

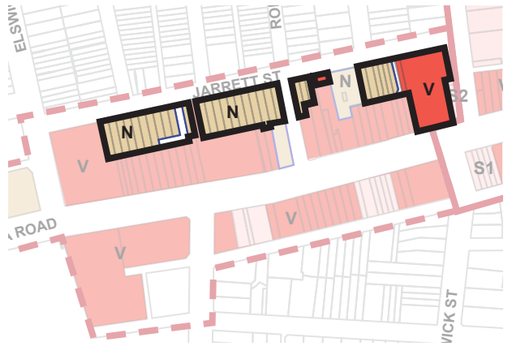
Existing LEP controls (IWLEP 2022)	
LZN	E1 Local Centre
FSR	1:1 + bonus 0.5 for active frontage
HOB	Undefined

PRCUTS recommendations (2016)	
LZN	B2 Local Centre
FSR	1:1 and 3:1
HOB	14m and 22m

Draft Structure Plan controls under consideration (2021)



LZN E1 Local Centre



FSR 1:1 (+ 0.5 bonus for active frontage) and 3:1



HOB Undefined (no change). 20m for Bel Mondo development

Character

Lots and existing development

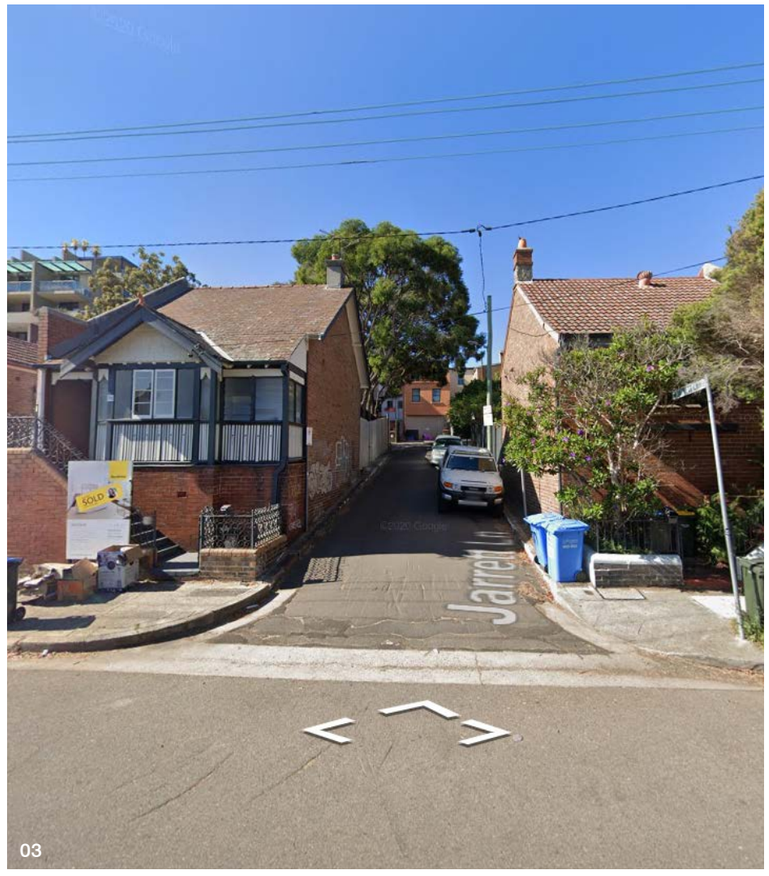
- Mixed character along Jarrett Street including single storey dwellings, non-heritage terrace typologies, warehouses and a recent 5 storey apartment building, ‘Atelier’.
- Predominately 1-2 storey developments approximately 5-9m high.
- Strong warehouse character and predominant brick materiality.
- The Atelier development consists of a smaller 2-storey brick building along the street frontage keeping with the built form scale of the street, while the remaining storeys are set back approximately 6m.
- Most dwellings built to side boundaries, with minimal 1m side setbacks.
- Some existing larger industrial/commercial warehouses on the western end of Jarrett Street.
- The northern side of Jarrett Street predominantly consists of the side boundaries of dwellings and commercial/light industrial properties.

Streets

- Investigation area backs onto Parramatta Road to the south. Jarrett Street is relatively quiet with low traffic and streets of approximately 11m wide.
- Streetscape is predominantly hardscape with some significant mature street trees within the verge.
- Majority of dwellings without off-street parking, however there is driveway access to some warehouses from Jarrett Street.
- Jarrett Lane provides rear access to a number of commercial tenancies that front Parramatta Road.
- Driveway from Jarrett Street provides car parking access to the apartment building at 469-483 Parramatta Road.







01 Existing dwellings along Jarrett Street. Character of streetscape features mix of small warehouses and semi-attached houses.

02 Existing 1-2 storey residential dwellings along Jarrett Street.

03 Jarrett Lane (to rear of investigation area) which services some sites along Parramatta Road.

Development opportunities and constraints

- E1 along Parramatta Road to the south consists of shoptop housing etc.
- Single storey dwellings along the northern side of Jarrett Street
- Investigation area has several lots under strata which are unlikely to be redeveloped and have been excluded from this study. “1.10 Dwelling yield calculations” at the end of the document includes a spreadsheet where all strata lots are assumed to be redeveloped for comparison.
- East of Rofe Street has a notably different character to the west. The East which includes the Bel Mondo residential development, consists primarily of terrace/townhouse typologies with the exception of the recent medium density ‘Atelier’ development. The east is also heavily constrained by existing strata developments.
- West of Rofe Street is more commercial in feel with several existing warehouse typologies and is largely unconstrained by strata.

Preliminary ideas

- Retain the current use and character of Jarrett Street. There are currently heritage contributing houses and small commercial and industrial workshops that front Jarrett Street and contribute a unique character and use
- Investigate E1 shop top typologies for lots to the west of Rofe Street
- Retain existing heritage contributing warehouses where possible

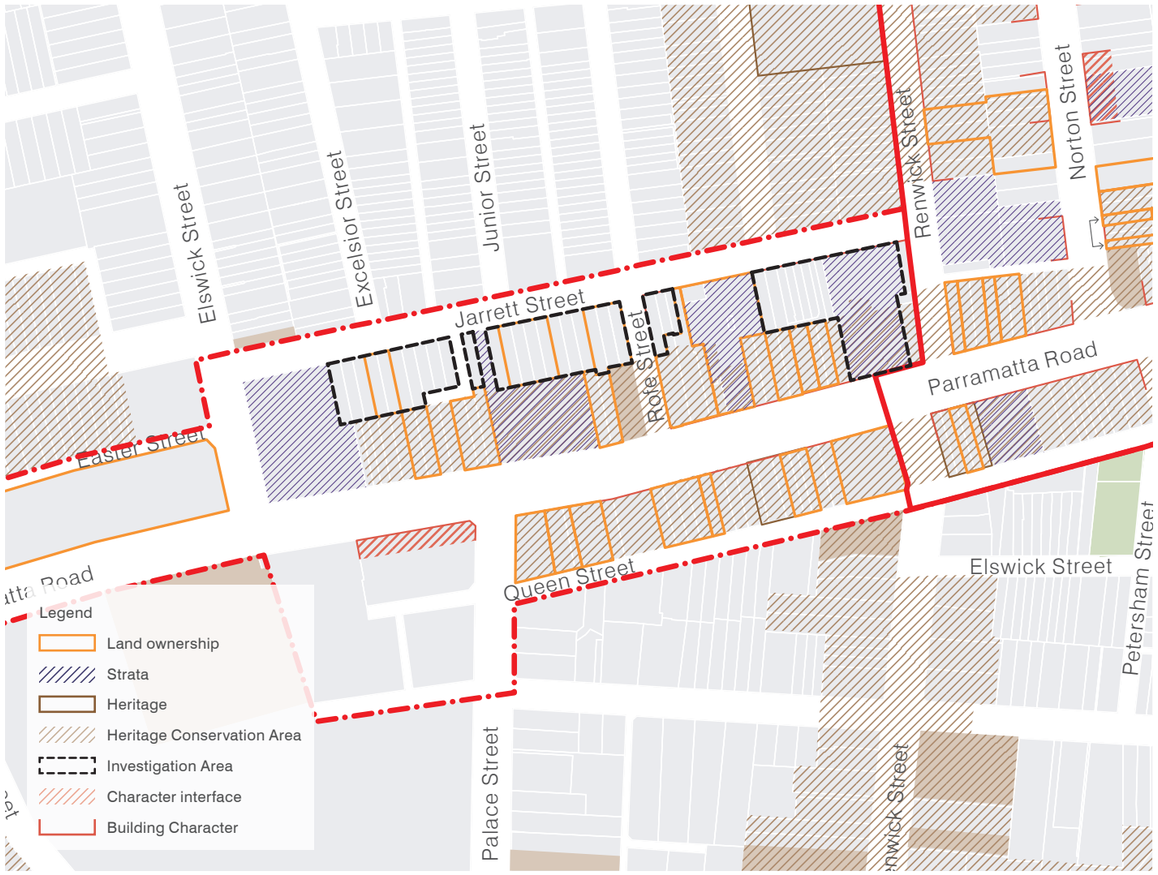
Built form typology study

The following study has been undertaken to understand potential built form outcomes for Jarrett Street, taking into consideration its relationship with future proposed E1 development along Parramatta Road to the south and existing low density residential housing to the north.

4 storey shop-top housing that extends the existing E1 character of Parramatta Road has been explored as the preferred typology for this investigation area.

Typologies:

- Shop-top typology with access from Jarrett Street.
- Shop-top typology incorporating lots fronting Parramatta Road.



Constraints map

Investigation Area 2

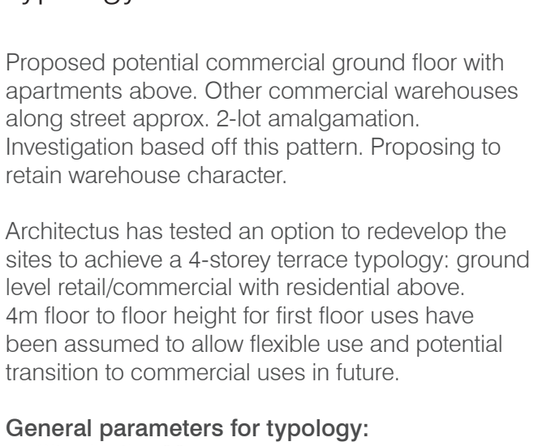
Typology

Proposed potential commercial ground floor with apartments above. Other commercial warehouses along street approx. 2-lot amalgamation. Investigation based off this pattern. Proposing to retain warehouse character.

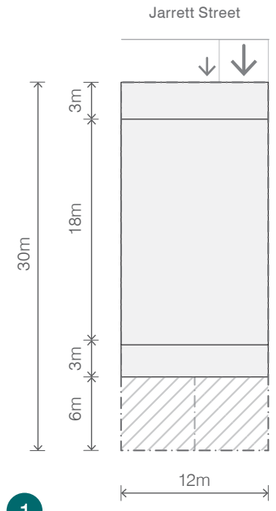
Architectus has tested an option to redevelop the sites to achieve a 4-storey terrace typology: ground level retail/commercial with residential above. 4m floor to floor height for first floor uses have been assumed to allow flexible use and potential transition to commercial uses in future.

General parameters for typology:

- Site depth - 30m
- Site size - Site 1 - 360m^2 and Site 2 - 540m^2
- Street frontage - 12m and 18m
- Access & Carparking - Basement car-parking. Extend Jarrett Ln as easement for Parramatta Rd lots



Proposed lot amalgamations key plan

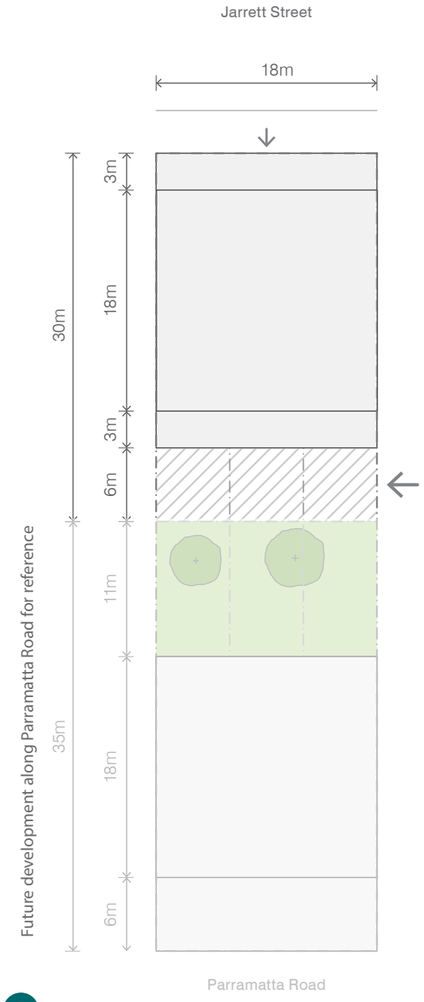


1

1. Amalgamated site to Jarrett St

FSR	2.2:1
Site width	12m
Site depth	30m
Site area	360m^2
Front setback	0m
Upper level front setback	3m to 3rd and 4th storey
Side setback	0m
Rear setback	min. 6m
GFA	784m^2
Street wall	2 storeys
Height*	16.9m (4 storeys)
Dwelling Yield	6

*Height inclusive of 1.5m for lift overrun

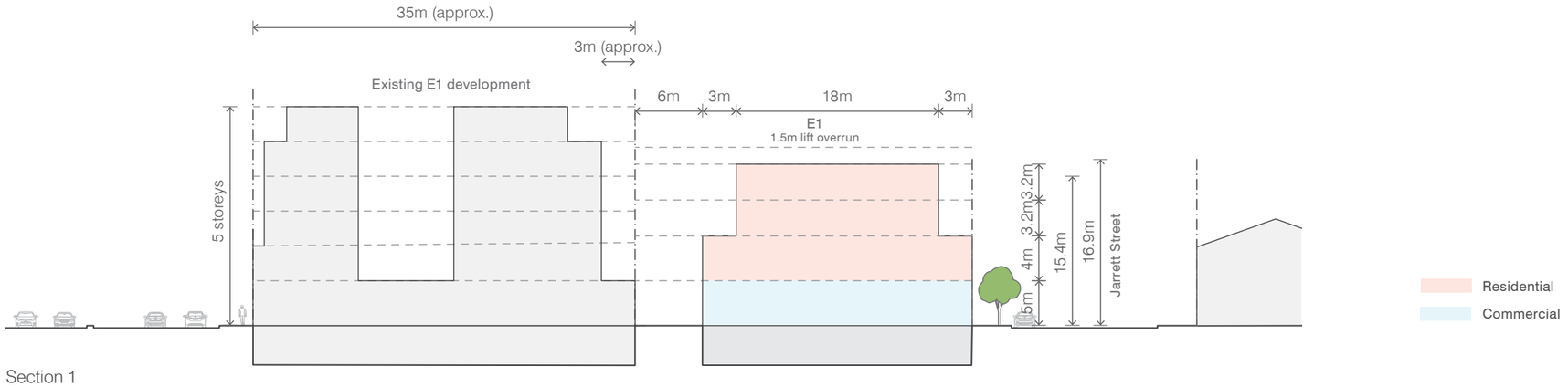


2

2. Amalgamated site Jarrett St

FSR	2.2:1
Site width	18m
Site depth	30m
Site area	540m^2
Front setback	0m
Upper level front setback	3m to 3rd and 4th storey
Side setback	0m
Rear setback	6m
GFA	1177m^2
Street wall	2 storeys
Height*	16.9m (4 storeys)
Dwelling Yield	10

*Height inclusive of 1.5m for lift overrun



Section 1

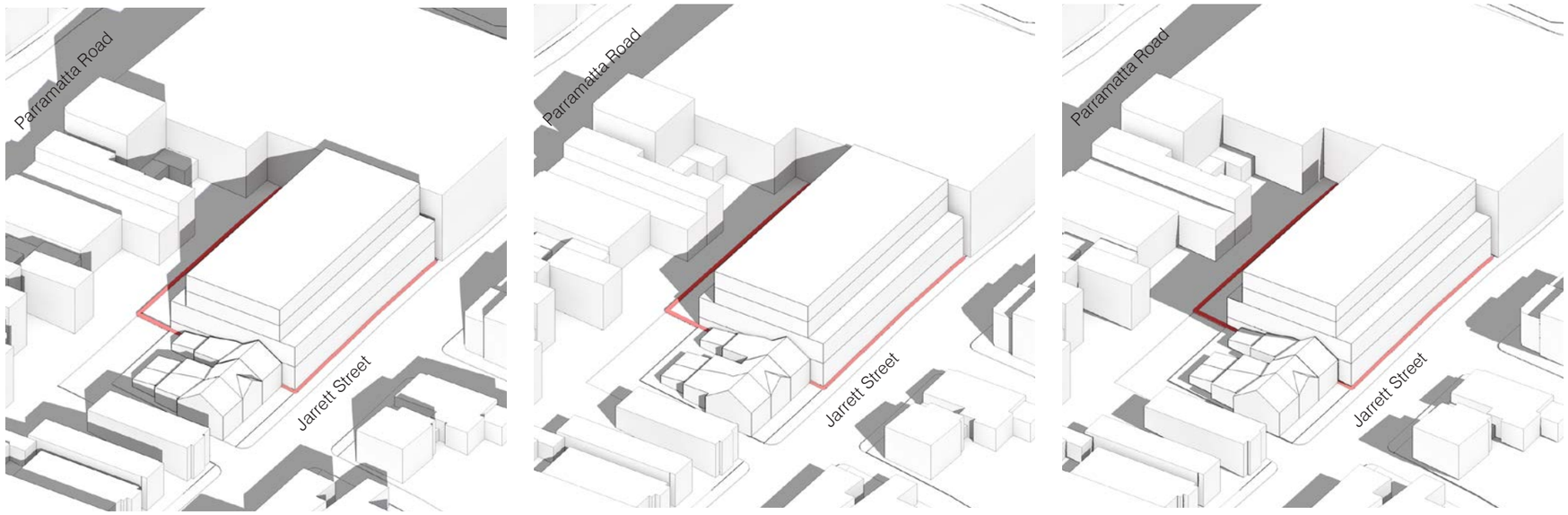
Solar Analysis

Minimum two hours of solar access to surrounding properties. Accompanying shadow diagrams are taken at 9am, 11am and 1pm on the 21st June.

6m rear setbacks to built form along Jarrett Street to provide for adequate solar access to development fronting Parramatta Road. The testing indicates that this arrangement will achieve solar access requirements.

E1 - Parramatta Road to Jarrett Street interface

North-East

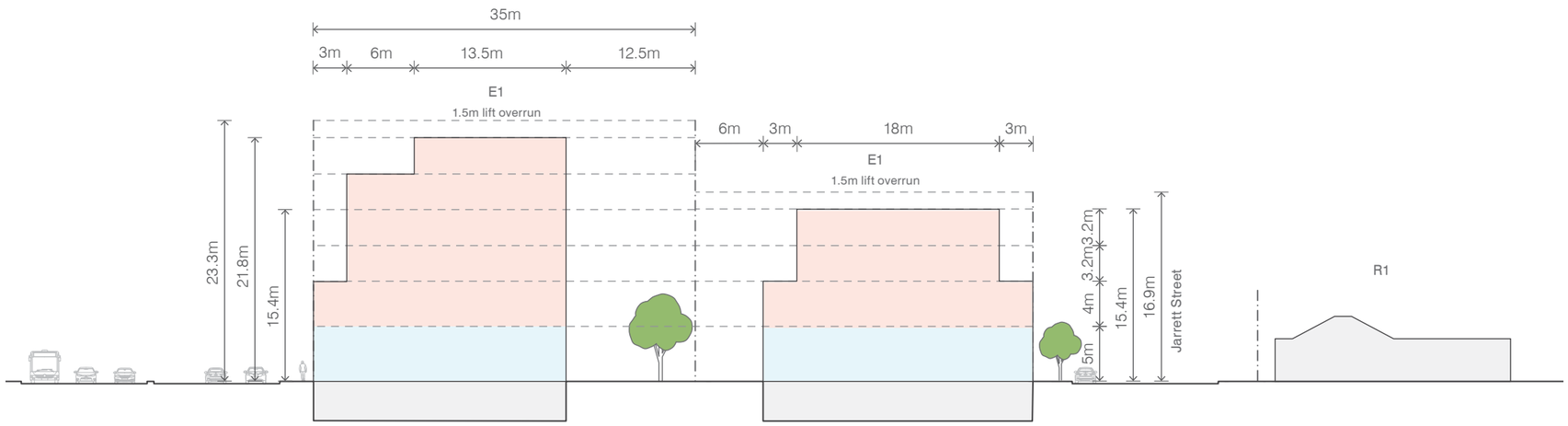


9am 11am 1pm

Setbacks
- Minimum rear setback of 6m to ground and first floor to allow for solar access, privacy and amenity.
- Further 3m setback to the third and fourth floor.
- 0 setback to Jarrett Street.
- Additional 3m setback to third and fourth floor from building line to Jarrett St.

Building height and street wall
- 4-storey (16.9m) overall building height
- 2-storey street wall

Access
- Where possible, access provided via rear laneway (extend Jarrett Lane). In other cases, access to be provided from street frontage.
- Where possible, access for lots fronting Parramatta Road to be provided via rear/ easements from Jarrett Street/Lane.



Section 2

Recommendations

LEP recommendations

Architectus supports PRCUTS and the Draft Structure Plan's recommendation to retain the current E1 zoning for the Jarrett Street investigation area.

Architectus has tested an option to redevelop the site to achieve a 4 storey shoptop terrace typology. It was found that the E1 sites on Jarrett St are able to achieve FSR 2.2:1, at 4 storeys (16.9m) with a 2-storey street wall. The built form tested works with the diverse streetscape of Jarrett St.

Built form testing also indicated that it was difficult to achieve an FSR of 3:1 if lots were amalgamated to have a frontage to both Jarrett St and Parramatta Road; this was primarily to address an access issue via a battle-axe driveway, for lots on Parramatta Road.

Furthermore the Bel Mondo (4 Jarrett St), which currently has an FSR of 1.26:1 was tested, as it is a large site with Parramatta Road and Jarrett St frontage. The testing showed that 3 storeys would have to be added to the Jarrett St side (based on Parramatta Rd frontage being fixed at 6 storeys), in order to achieve FSR 3:1.

An appropriate outcome in terms of urban design would be to uplift the FSR 3:1 for Parramatta Rd fronting lots, and the lower FSR 2.2:1 for Jarrett St lots; with access to constrained Parramatta Road lots provided via easement as shown per Typology 2 where possible.

Maximum FSR may not be achievable in certain cases if adjoining lots fronting Parramatta Rd cannot provide appropriate setbacks/amenity to Jarrett Street lots. This will need to be demonstrated on a case by case basis.

Existing LEP controls (IWLEP 2022)	
LZN	E1 Local Centre
FSR	1:1 + bonus 0.5:1 for active frontage
HOB	Undefined

PRCUTS recommendations (2016)	
LZN	B2 Local Centre
FSR	1:1 with bonus 0.5:1 for active frontages
HOB	14m and 22m

Draft Structure Plan Controls (2021)	
LZN	E1 Local Centre
FSR	1:1 + bonus 0.5:1 for active frontage and 3:1
HOB	Undefined (no change)

Final recommendations	
LZN	E1 Local Centre
FSR	2.2:1
HOB	17m (4 storeys)

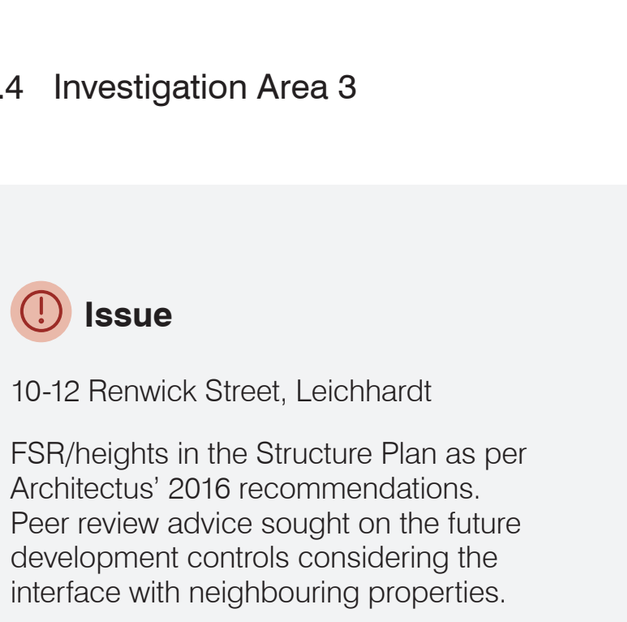


1.4 Investigation Area 3

Issue

10-12 Renwick Street, Leichhardt

FSR/heights in the Structure Plan as per Architectus' 2016 recommendations. Peer review advice sought on the future development controls considering the interface with neighbouring properties.



Investigation area key aerial plan

LEP controls

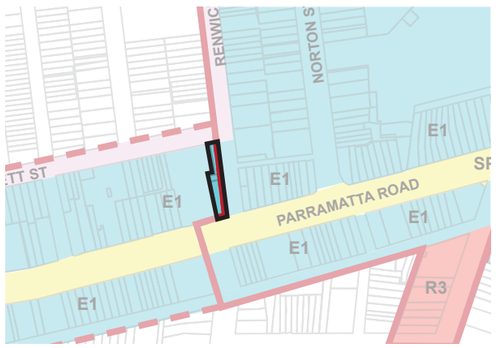
Existing LEP controls (IWLEP 2022)	
LZN	E1 Local Centre
FSR	1:1 + 0.5 bonus for active frontage
HOB	Undefined

PRCUTS recommendations (2016)	
LZN	B2 Local Centre
FSR	3:1
HOB	22m

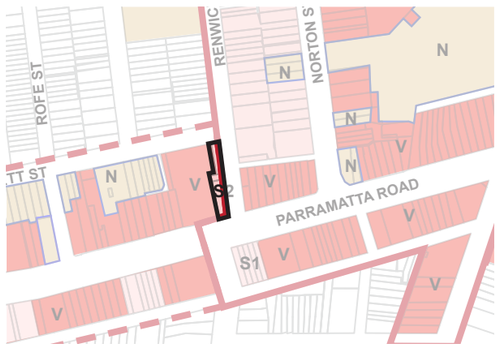
Draft Structure Plan Controls (2021)	
LZN	E1 Local Centre
FSR	1.9:1 + bonus for public benefits
HOB	14m

Final Recommendations	
LZN	E1 Local Centre
FSR	1:1 + 0.5 bonus for active frontage
HOB	Undefined

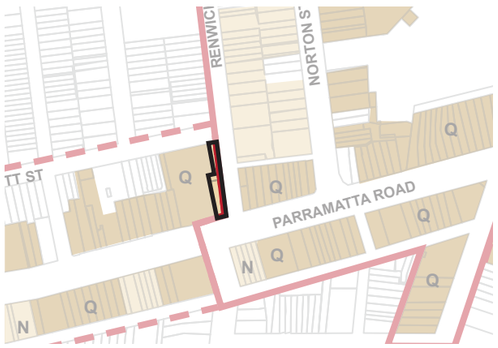
Draft Structure Plan controls under consideration



LZN E1 Local Centre



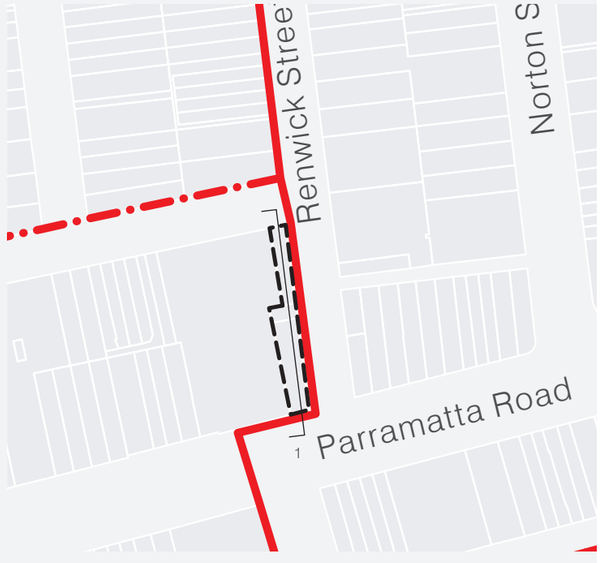
FSR 1.9:1 + bonus for public benefits



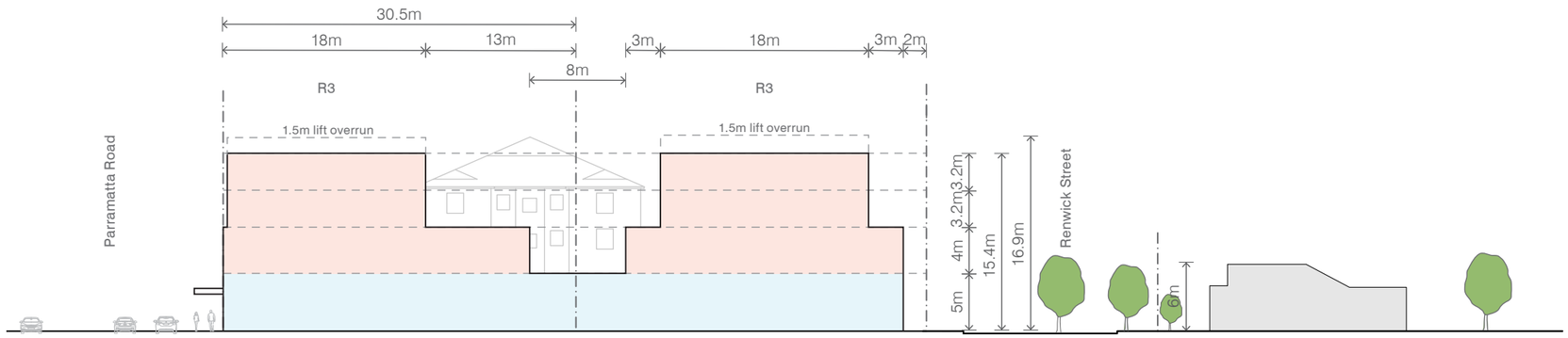
HOB 14m

Recommendation

The section on this page was an example of built form testing undertaken on this site, and demonstrates with 0m setbacks on all boundaries the achievable FSR is under the 3:1 recommended in PRCUTS. The site width of 6m makes it difficult to achieve a high FSR with a good built form outcome; this in addition to the existing building having good character, is justification for recommending no changes to the existing controls for this site.



Key map



Section 1

10-12 Renwick St	
FSR	2.1:1
Site width	6m
Site depth	30.5-59.5m
Site area	384m^2
Front setback	0m
Side setback	0m
Rear setback	0m
GFA	808m^2
Street wall	2 storeys
Height	4 storeys
Dwelling Yield	7

1.5 Investigation Area 4

Issue

592 - 610 Parramatta Road, Petersham

Retain existing E3 Productivity Support and adopt PRCUTS density and height controls to reflect the scale of existing and future development. Peer review advice sought.



Investigation area key aerial plan

LEP controls

The investigation area, which includes light industrial and retail uses to the south of Parramatta Road is currently zoned E3 Productivity Support, with an FSR of 0.95:1 and an undefined HOB limit. At the edge of the frame boundary, the site backs onto a large SP2 zone to the south and west, where Fort Street high school is located.

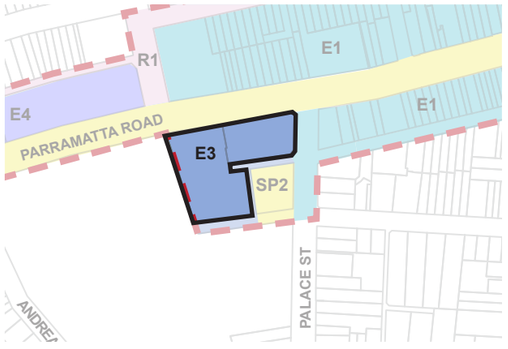
PRCUTS recommends re-zoning the sites within the investigation area as B2 Local Centre, and further proposes to increase the FSR to 3:1 as well as identifying a maximum height control of 22m.

Draft Structure Plan controls
The IWC Draft Structure Plan controls under consideration support the current zoning of the site as E1 Local Centre, rather than PRCUTS recommendations for B2. The Draft Structure Plan supports PRCUTS' recommendation to increase FSR to 3:1 but suggests a lower HOB of 20m from the proposed 22m.

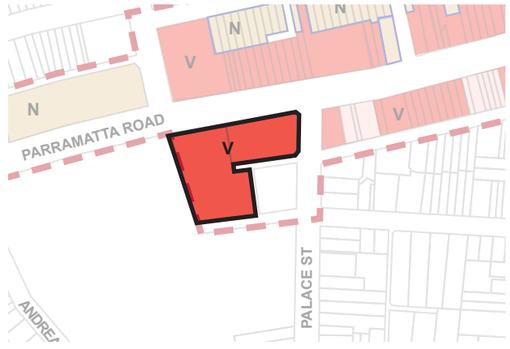
Existing LEP controls (IWLEP 2022)	
LZN	E3 Productivity Support
FSR	0.95:1
HOB	Undefined

PRCUTS recommendations (2016)	
LZN	B2 Local Centre
FSR	3:1
HOB	22m

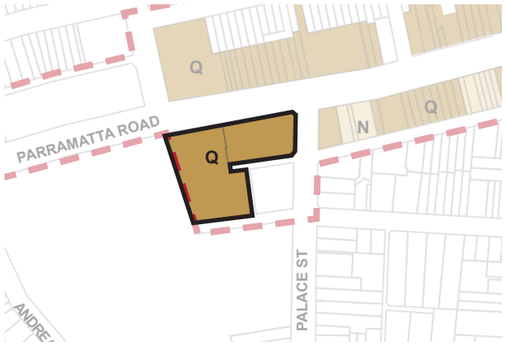
Draft Structure Plan controls under consideration (2021)



LZN E3 Productivity Support



FSR 3:1 - + bonus for public benefits



HOB 20m



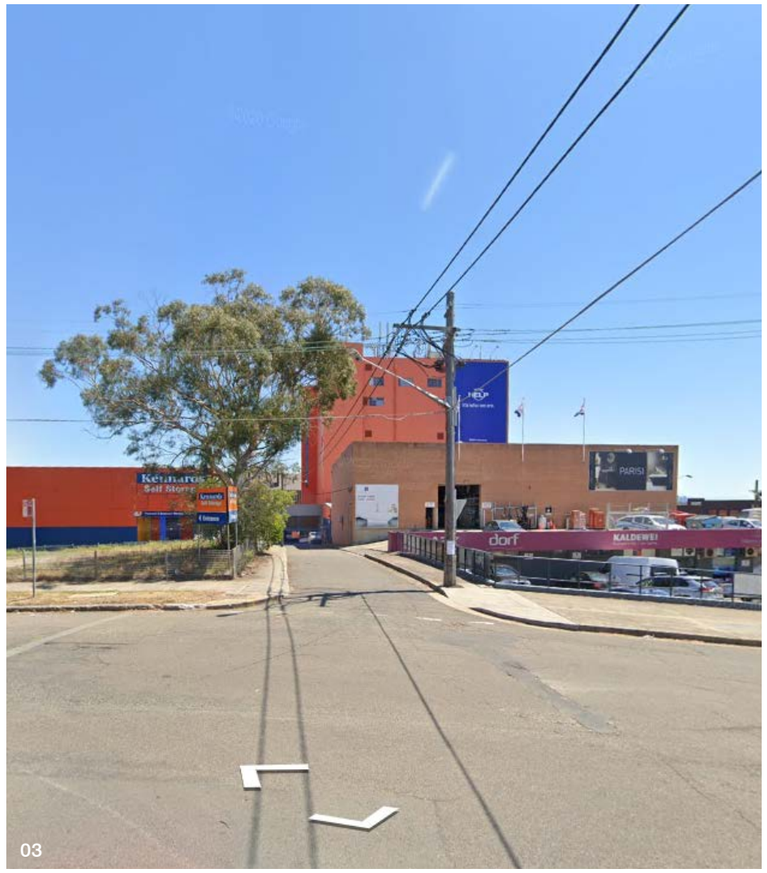
01



02

01 Existing development at No.592 Parramatta Road, Petersham.

02 Existing storage warehouses at No.606-610 Parramatta Road. Site opposite intersection of Elswick Street and Parramatta Road.



03

03 Queen Street (to rear of investigation site)

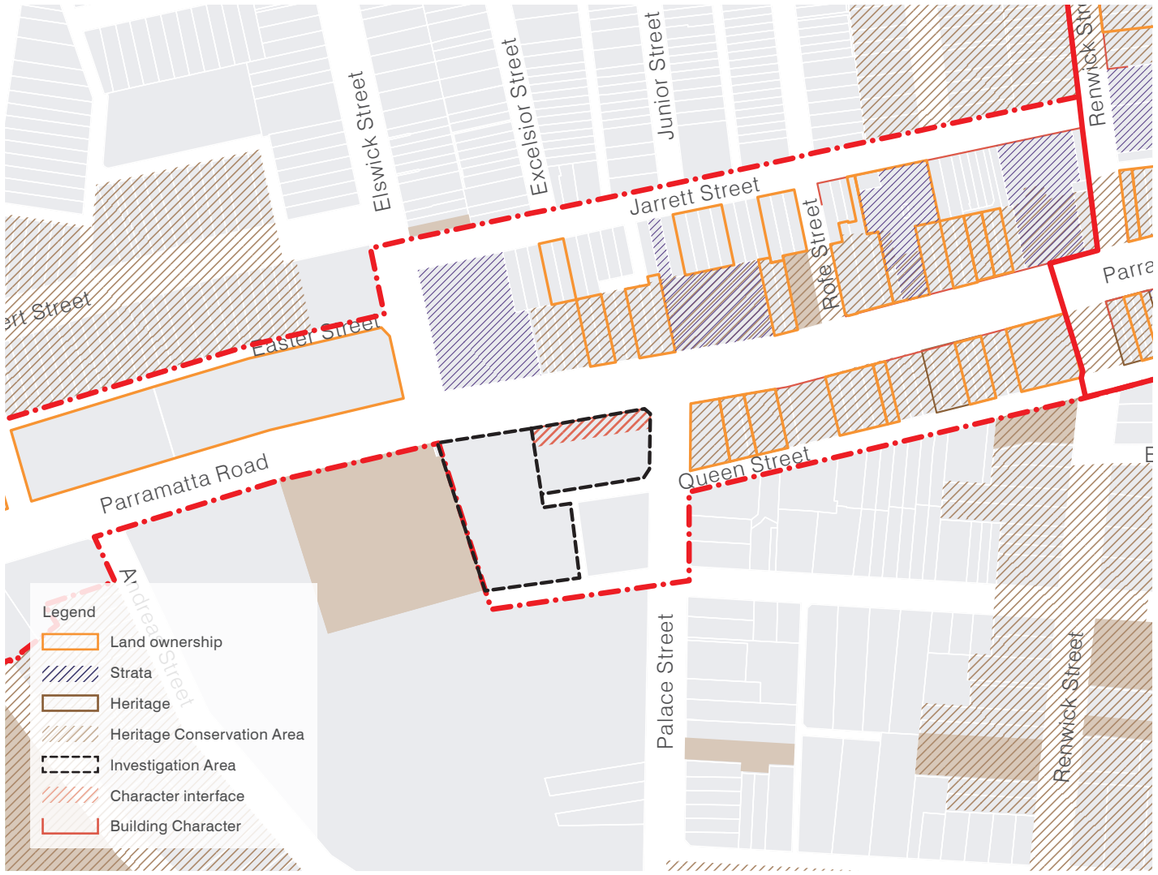
Investigation Area 4

Development constraints and opportunities

- E3 zoned area interfaces with medium density residential dwellings to the east and SP2 zoned site (Fort Street Hight School) to the south and west.
- Study sites have access via Queen Street running parallel to Parramatta Road.
- Investigation area is largely unconstrained by heritage and heritage conservation areas. Frontage to No. 592 Parramatta Road has been identified as interfacing a heritage conservation area to the northern side of Parramatta Road. There is an additional HCA on the eastern side of Palace Street.
- SP2 area adjacent to site to be considered in terms of any overshadowing impacts.
- Site is adjacent to Fort St High School and pedestrian bridge to the north of Parramatta Road—there isn't a pedestrian light crossing north for approximately 200m either east or west.

Preliminary ideas

- Retain site as E3 to provide for commercial development with large floor area to Parramatta Road.
- Minimum rear setback requirements to be established to ensure solar access, privacy and amenity for SP2 area to the south of study site.

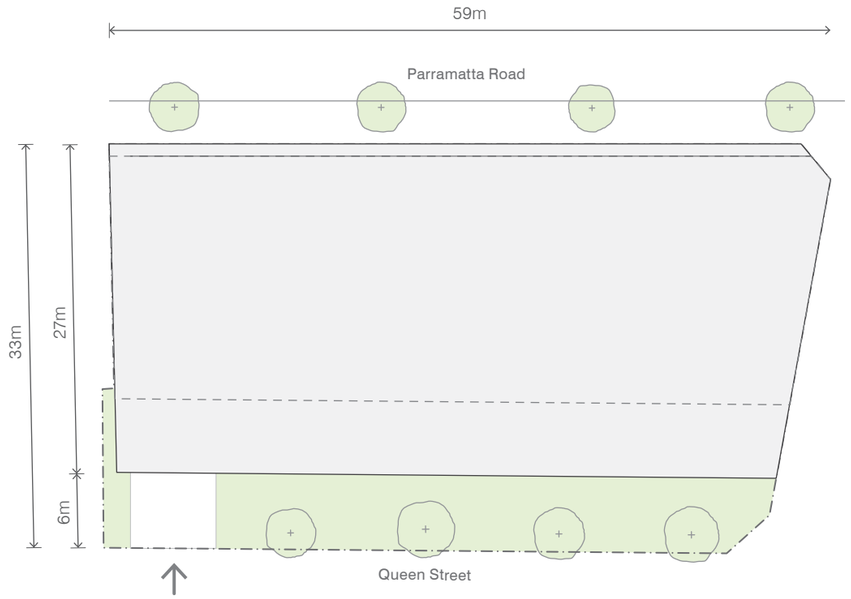


Constraints map

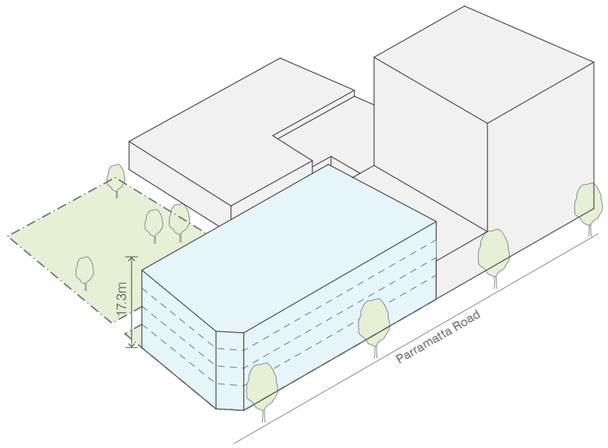
E3 Typologies

The proposed controls for 606-610 Parramatta Rd reflect the existing built form on the site and present an opportunity to retain a E3 use. 592 Parramatta Rd has the opportunity to provide increased density and different business uses.

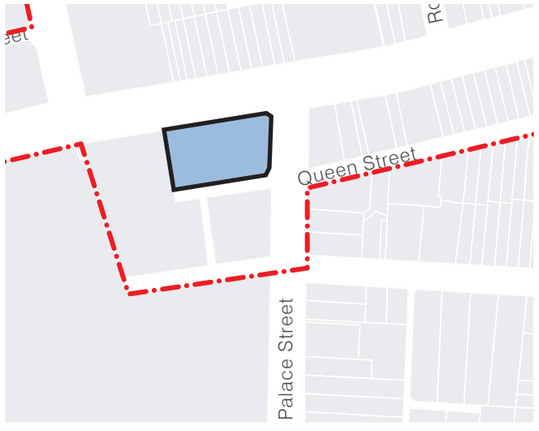
The proposed typology for 592 Parramatta Rd allows for an increase in commercial floorspace that would compliment the existing neighbouring development.



592 Parramatta Rd plan



592 Parramatta Rd axo diagram



Key plan

Setbacks
- Minimum rear setback of 6m to allow for solar access, privacy and amenity to SP2 zoned area to south of investigation site as green open space.

Building height and street wall
- Proposed 4 storey built form
- 5m Ground floor, allowing potential for mezzanine
- 3.6m for the three floors above
- 1.5m lift overrun
- Overall building height of 17.3m.
- Street wall of 4 storeys

Access
- Potential access possible from Queen Street

592 Parramatta Road

FSR	3:1
Site width	59m
Site depth	33m
Site area	1861m^2
Front setback	0m
Side setback	0m
Rear setback	6m
Floor to floor height (ground)	5m
Floor to floor height (above ground)	3.6m
Lift overrun	1.5m
GFA	5515m^2
Street wall	4 storeys
Height	17.3m

Boundary
Landscaped area
Building Outline
Mezzanine
Commercial

Solar Analysis

Accompanying shadow diagrams are taken at 9am, 11am and 1pm on the 21st June.

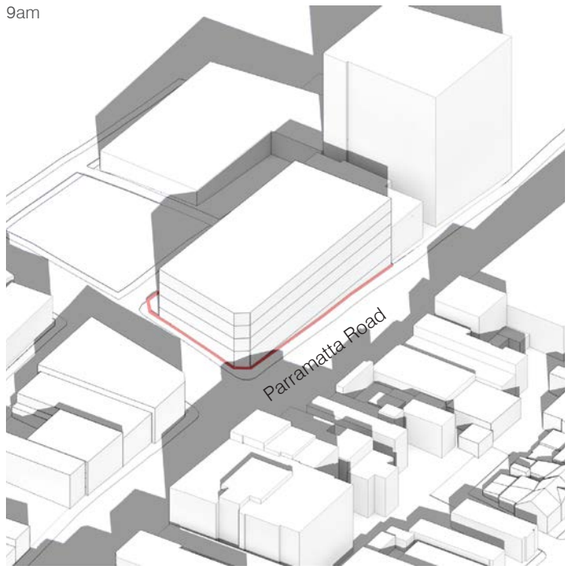
Summary

- The overshadowing diagram demonstrates that approximately 50% of the open space to the immediate south (part of Fort Street High School) achieves solar access for at least 2 hours.
- No significant overshadowing impacts to existing dwellings at 3-7 Palace St.

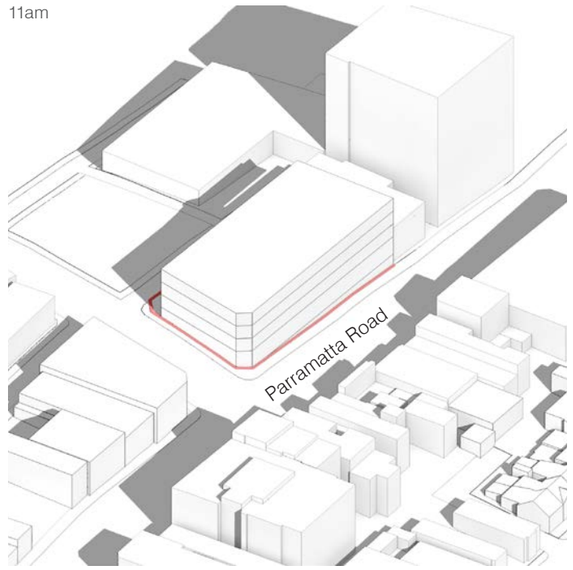
E3 Opportunity site

North-East

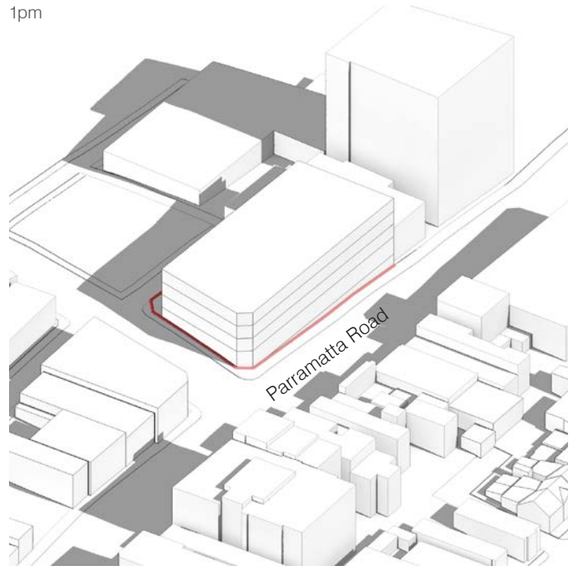
9am

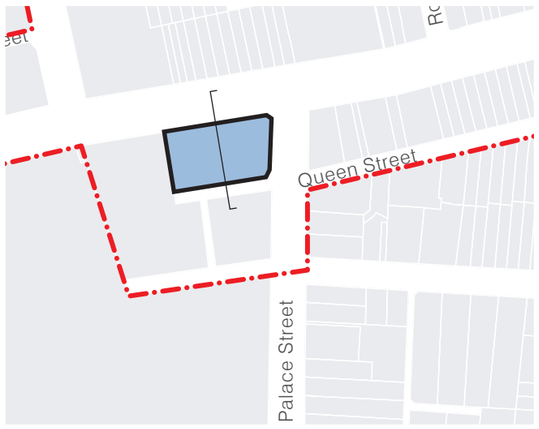


11am

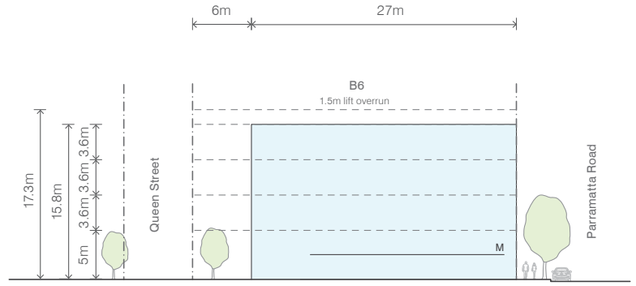


1pm





Key Plan



Section diagram

LEP Recommendations

LEP recommendations

Architectus supports the Draft Structure Plan recommendation to retain the existing E3 zoning and increase the FSR to 3:1 for the investigation area. Testing suggests a reduced HOB of 17.5m (4 storeys) is more appropriate for the site which varies from the Draft Structure Plan's and PRCUTS' recommendation of 20m.

Justification
Architectus recommends the two sites to have the same LZN, FSR and HOB controls. If the Kennards Self Storage site (606-610 Parramatta Road) were to be redeveloped, at 4 storeys it would achieve an FSR of 3:1.

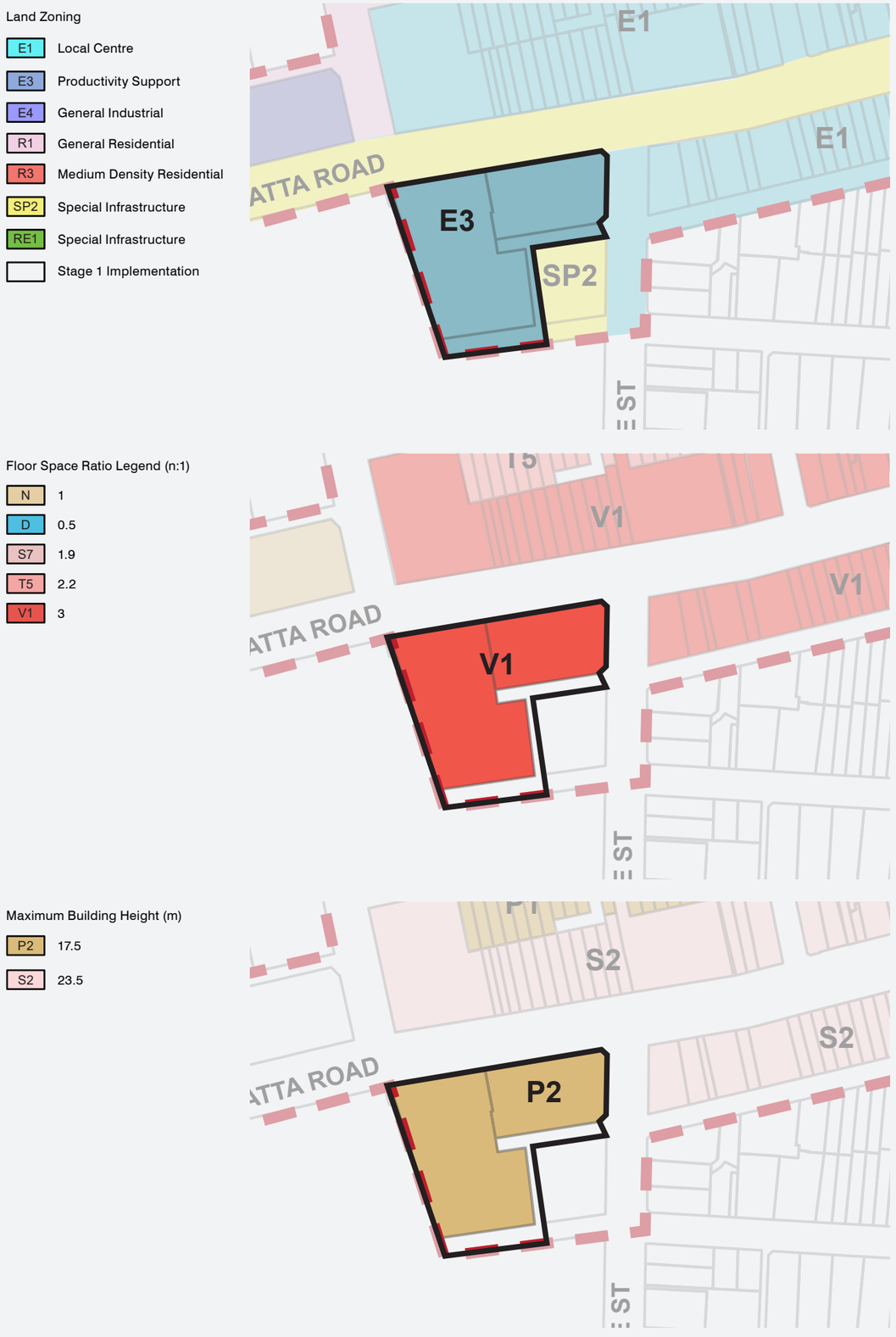
The proposed height of the new development has been informed by maintaining solar amenity to the SP2 zone (currently vacant space for the adjacent Fort St High School) to the south of the site.

Existing LEP controls (IWLEP 2022)	
LZN	E3 Productivity Support
FSR	0.95:1
HOB	Undefined

PRCUTS recommendations (2016)	
LZN	B2 Local Centre
FSR	3:1
HOB	22m

Draft Structure Plan Controls (2021)	
LZN	E3 Productivity Support
FSR	3:1 + bonus for public benefits
HOB	20m

Final recommendations	
LZN	E3 Productivity Support
FSR	3:1
HOB	17.5m (4 storeys)



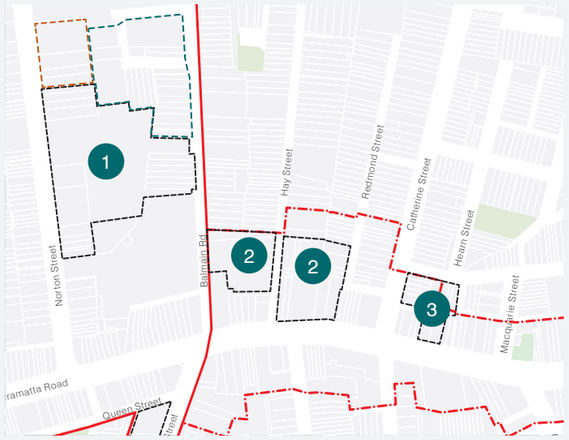
1.6 Opportunity Site 1 - Norton St/ Balmain Rd

Issue

Advice also sought on mechanisms to incentivise the provision of public benefits in the redevelopment of opportunity sites and the type of public benefits sought for each key opportunity site. If bonus FSR and heights are considered appropriate, identify the incentives for each opportunity site.

Proposed new open spaces and how to incentivise provision of new open space through amalgamation of sites. Guidance sought on appropriate sites to target and LEP mechanisms to implement these provisions.

Advice sought on the location and size of proposed new open space as part of Norton Street plaza redevelopment.



1. Opportunity Site 1
2. Opportunity Site 2
3. Opportunity Site 3

LEP controls

The investigation area comprises three sites: 1. Norton Street Plaza, 2. Hay St Centrelink building and adjacent carpark, and 3. Catherine, Albion Streets and Albion Lane. The sites are predominantly zoned E1 Local Centre with an FSR of 1:1 (1.5 for E1 where active frontage is provided), and with undefined controls for HOB.

PRCUTS proposes to retain the B2 zoning, except at 40-50 Balmain Road where R3 is proposed.

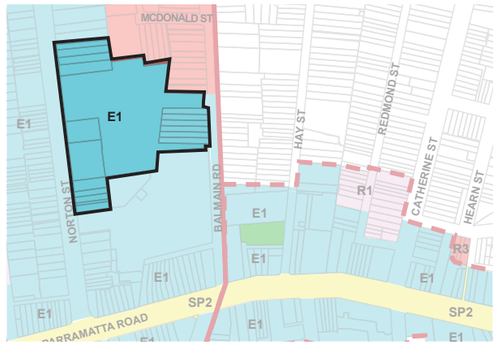
Draft Structure Plan controls

The IWC Draft Structure Plan controls under consideration support the current zoning of the site as E1 Local Centre. The Draft Structure Plan supports PRCUTS' recommendation to increase FSR to 3:1. The Draft Structure plan also proposes a lower HOB of 20m from the PRCUTS' recommended HOB of 22m.

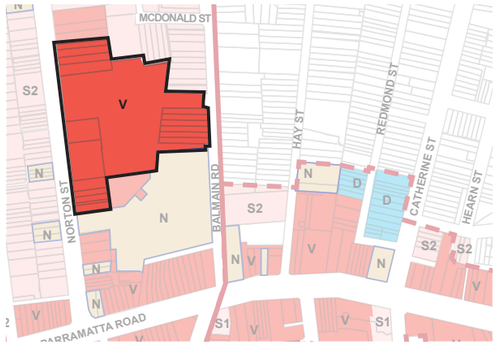
Existing LEP controls (IWLEP 2022)	
LZN	E1 Local Centre
FSR	1:1 + 0.5 for active frontage for E1
HOB	Undefined

PRCUTS recommendations (2016)	
LZN	B2 Local Centre
FSR	3:1
HOB	22m

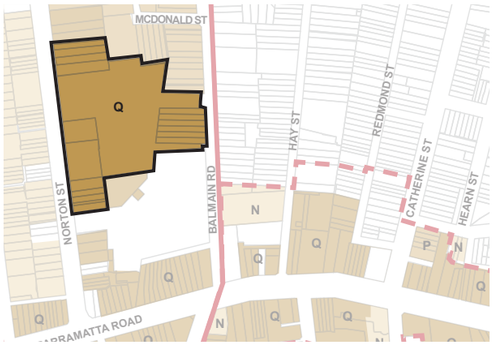
Draft Structure Plan controls under consideration (2021)



LZN E1 Local Centre



FSR 3:1 and 1.9:1



HOB 14m and 20m

Opportunity Site 1 - Norton St/ Balmain Rd

Existing Site

- The existing site comprises Norton Plaza, a local shopping centre. Norton Plaza comprises 3-storeys from Norton St level, with 2 basement levels. There is a 2-storey street wall to Norton St.
- Ground level contains a mix of retail including a Coles supermarket. Levels 1 and 2 have a relatively small footprint, with retail on Level 1 and a childcare centre on Level 2. The two basement levels contain carparking; basement level one contains a Harris Farm supermarket.
- The four lots at the northern part of the opportunity site comprise two-storey offices/retail (63-93 Norton St). 65-67 Norton St is a Montessori Academy.
- The opportunity site also includes two lots, under strata, one of which is a recent development; the other lot (39–45 Norton St) contains an open-air plaza which has limited contribution to pubic amenity to Norton St.
- The four lots in the southern part of the opportunity site (29-37 Norton St) contain a mix of one and two-storey retail.
- There are six lots at the western part of the opportunity site (40-50 Balmain Rd) with 1-storey dwellings.

Existing built form

- Generally small two-storey buildings on Norton St from varying periods, from newer mid-block buildings to terrace housing which has been adapted to retail and business use. Large developments include the Forum and Norton Plaza.
- Irregular street setbacks ranging from 0-4m
- Wide pedestrian footpaths, sections of street planting within on-street carparking zone

Heritage

- The western side of Norton St is within a heritage conservation area (Excelsior Subdivision Conservation Area) notable for its Late Victorian boom period suburb architecture, street and lot pattern.

Strata

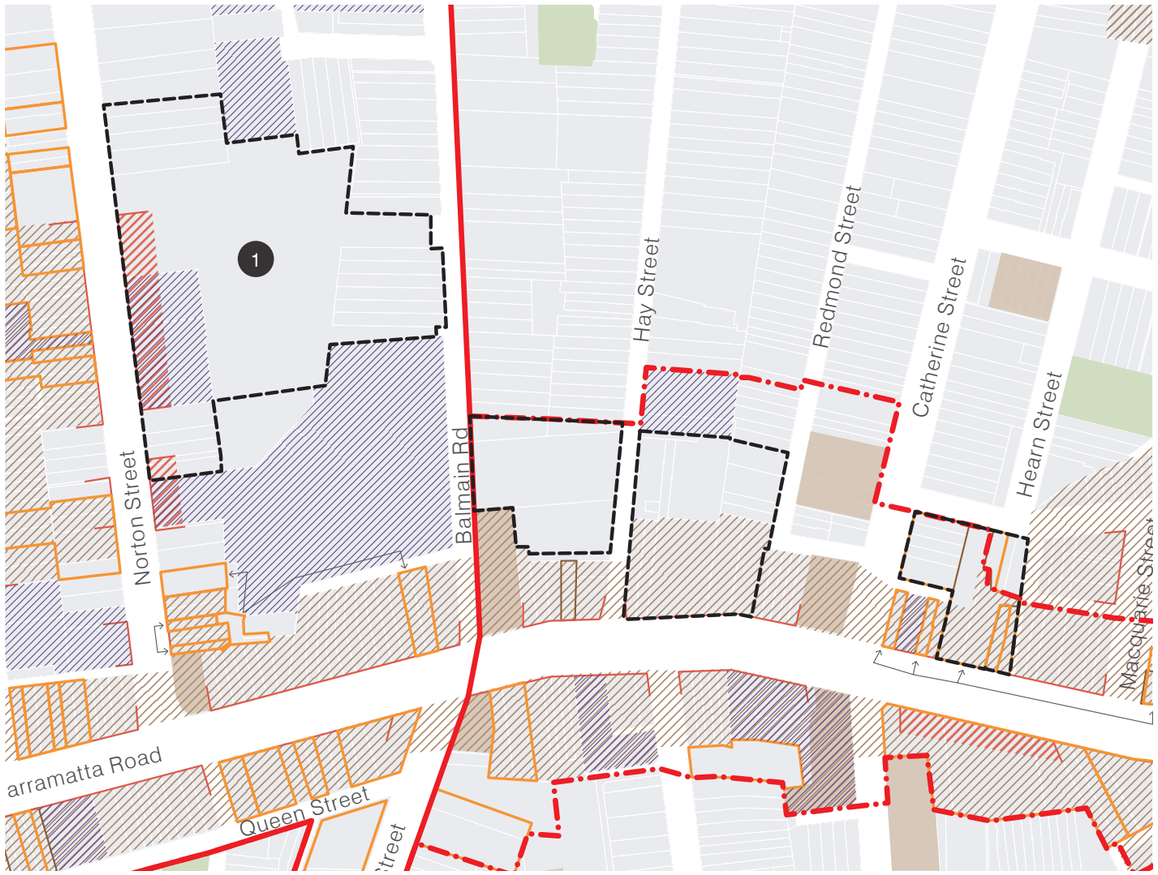
- There are two strata lots in the investigation area: 39–45 Norton St (29 units) and 47 Norton St (18 units).

Development constraints and opportunities

- Poor east - west pedestrian links in block. Currently the Forum does not provide a well-used pedestrian link.
- Generally lack of open space through precinct. The Italian Forum comprises privately owned open space however its popularity and vibrancy has declined in recent years due to tenancy issues.
- Balmain Rd RL is approximately 8m lower than Norton St
- Range of interfaces to opportunity site. The Italian Forum is built to boundary. The north-east part of the backs onto rear private open space of typically 1-storey dwellings. 8A McDonald St is a 3-storey multi-dwelling housing development built to northern boundary.

Preliminary ideas

- Provide green-link as part of future redevelopment to address poor pedestrian permeability and green open space.
- Provide active frontages to the through-site link where possible.



Opportunity sites constraints map

Legend

- Land ownership
- Strata
- Heritage
- Heritage Conservation Area
- Opportunity Site
- Character interface
- Building Character

1:3,000 0 30 60 90 120 150M

1 Norton Street / Balmain Road

Built Form Response:

Built form testing demonstrates it is possible to obtain an FSR of 3:1 for this group of sites. Further preliminary ideas include:

- provide 25m wide green space to Norton St
- maintain 3-4 storey street wall to Norton St, and places taller buildings within the site.
- incentivise the provision of a through-site pedestrian link by allowing additional height
- provide active frontages and commercial uses on ground floor to all E1 zoned sites



Opportunity Site 1 Plan

Legend
- Investigation area
- Residential
- Commercial
- Communal Open Space
- Basement Carpark Access*
- Pedestrian/cycle link
- (1) Number of storeys (above street level)

1:1,500 0 15 30 45 60 75M

Opportunity Site 1 - Norton St/ Balmain Rd



Opportunity Site 1 Key Plan

Site 1

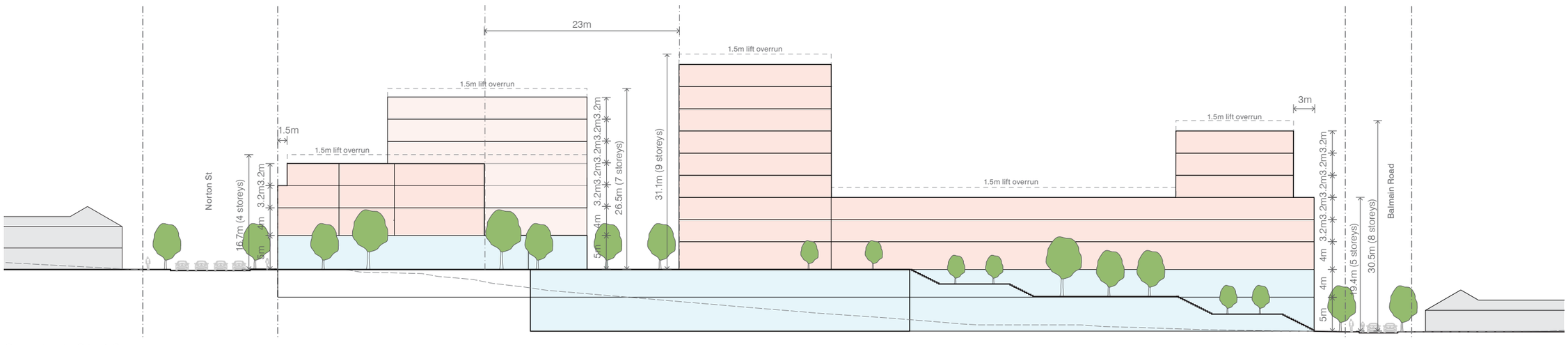
FSR	3:1
Site area	2754m²
Total GFA (Commercial)	3916m² (45%)
Total GFA (Residential)	4661m² (55%)
Total GFA	8577m²
Height	23.3m (6 storeys)
Street wall	4-storey
Site Coverage	67%
Communal Open Space	413m² + 276m² rooftop
Setback to the North (to the existing building)	25m to be used as a new plaza
Setback to Norton St	0m
Upper level front setback to Norton St and through-site link	3m from 5th storey above
Rear setback	0-14m (due to L shape of the building)
Parking	Basement
Landscaped area	770m² (15% of the site as deep soil on sites greater than 1,500m²)
Dwelling Yield	59 dwellings

Site 2

FSR	3:1
Site area	1975m²
Total GFA (Commercial)	3357m² (56%)
Total GFA (Residential)	2593m² (44%)
Total GFA	5950m²
Height	16.9m - 26.5m (4-7 storeys)
Street wall	3-storey
Site Coverage	100% (due to basement structure)
Communal Open Space	493m² (podium and rooftop)
Setback to Norton St	0m
Upper level front setback to Norton St	1.5m from 4th storey above. 15m from building line from 5th storey above
Rear setback	9-12m
Parking	Basement
Dwelling Yield	32 dwellings

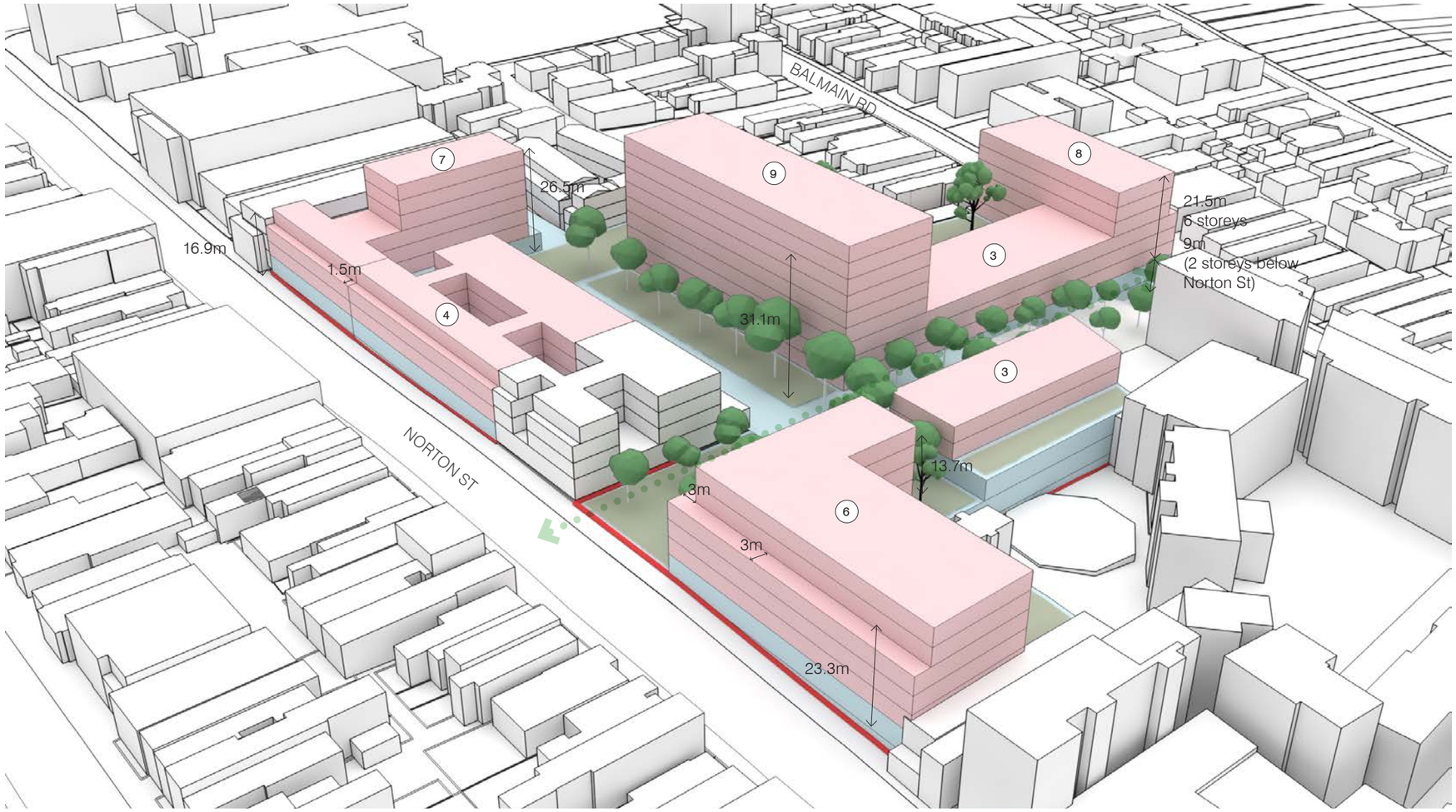
Site 3

FSR	3:1
Site area	13248m²
Total GFA (Commercial)	20738m² (54%)
Total GFA (Residential)	17785m² (46%)
Total GFA	38523m²
Height	11.9m (3 storeys) to 30.5m (8 storeys) Balmain Rd and 31.1m (9 storeys) within site
Street wall (Balmain Rd)	5-storey
Site Coverage	100% (due to basement structure)
Communal Open Space	3312m²
Setback to Balmain Rd	5m (aligned to part of existing site boundary)
Upper level front setback to Balmain Rd	3m from building line above 5th storey
Parking	Basement
Dwelling Yield	225 dwellings



Opportunity Site 1 Section

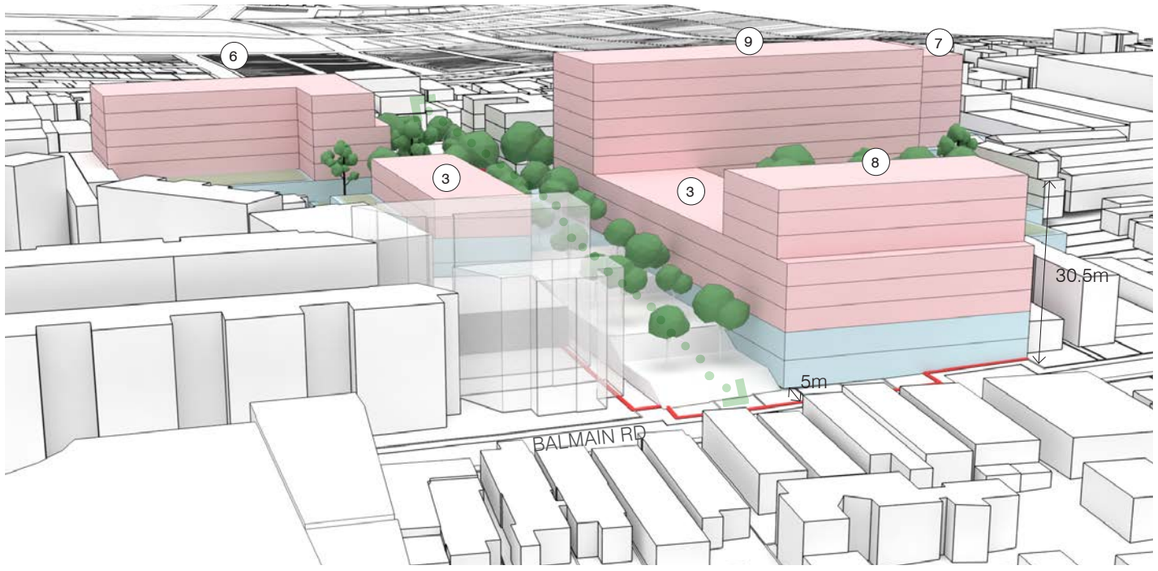
1 Norton Street / Balmain Road



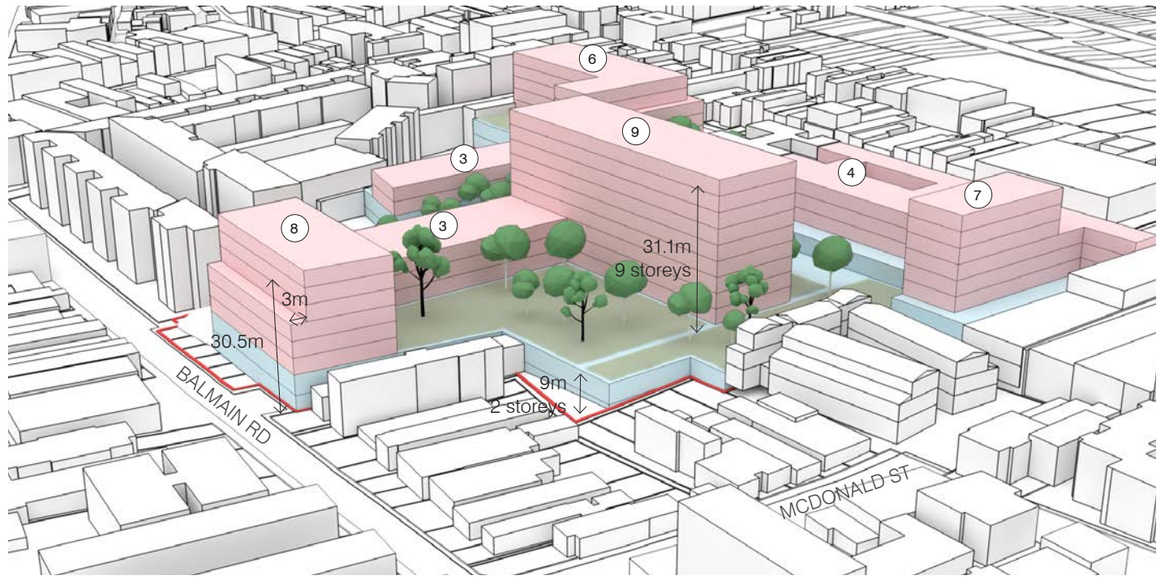
Legend

- Investigation area
- Residential
- Commercial
- Communal Open Space
- Basement Carpark Access*
- Pedestrian/cycle link

Opportunity Site 1 3D View 1



Opportunity Site 1 3D View - 2



Opportunity Site 1 3D View - 3

Overshadowing testing - 21st June (winter solstice)

Overshadow testing was conducted for winter solstice (21st June), between 9AM to 3PM. The below overshadow diagrams demonstrate solar access requirements are achievable.

9am



11am



1pm



Opportunity Site 1 - Norton St/ Balmain Rd

LEP Recommendations

LEP recommendations

- Land Zoning controls to be retained as per Draft Structure Plan and PRCUTS.
- Increase HOB from 22m and 20m under PRCUTS and Council's Draft Structure Plan to 32m (9 storeys).
- Provide new landscaped open space/plaza fronting Norton Street (25m wide).
- Provide a new 18m wide through-site link for pedestrians between Norton Street and Balmain Road.

Justification

The redevelopment of Opportunity Site 1 has a potential to become the commercial and civic core of Leichhardt precinct. This is to be achieved by providing a new civic space/plaza fronting Norton Street and a through site-link connecting Norton Street and Balmain Road. This link is to be reasonably sized and designed so as to enable its use as a plaza with active frontages from the proposed ground floor employment uses.

The provision of a reasonably sized link and plaza requires that the site be provided with additional height of 3 storeys in the middle of the block over the 6 storeys envisaged in the Draft Structure Plan and PRCUTS. The built form testing indicates that FSR of 3:1 can be accommodated on the site within the 9 storey height limit.

Existing LEP controls (IWLEP 2022)	
LZN	E1 Local Centre
FSR	1:1
HOB	Undefined

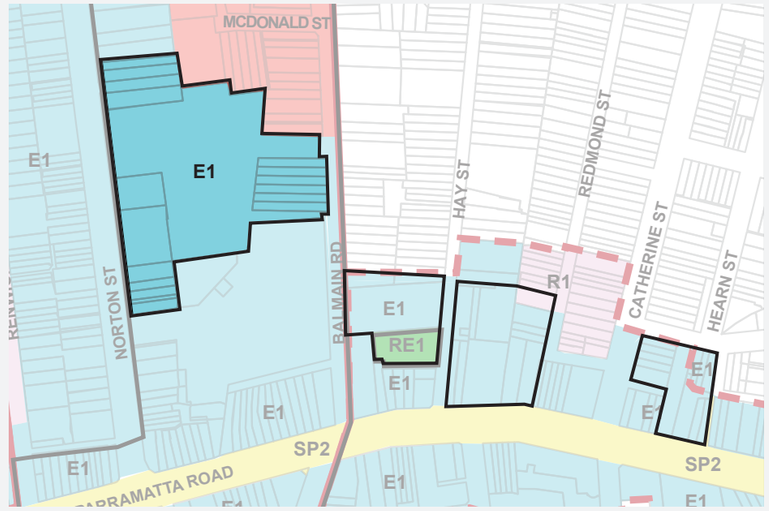
PRCUTS recommendations (2016)	
LZN	B2 Local Centre
FSR	3:1
HOB	22m

Draft Structure Plan Controls (2021)	
LZN	E1 Local Centre
FSR	3:1
HOB	20m

Final recommendations	
LZN	E1 Local Centre
FSR	3:1
HOB	23.5m (6 storeys), 27m (7 storeys), 32m (9 storeys)

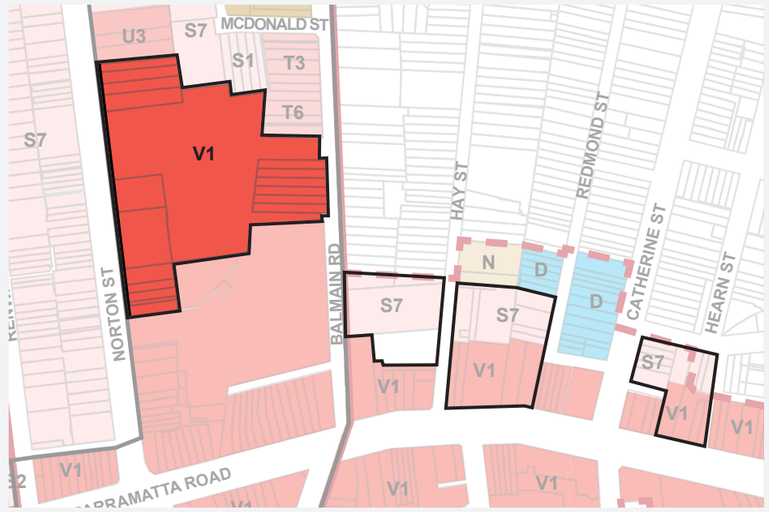
Land Zoning

- E1 Local Centre
- E3 Productivity Support
- E4 General Industrial
- R1 General Residential
- R3 Medium Density Residential
- SP2 Special Infrastructure
- RE1 Special Infrastructure
- Stage 1 Implementation



Floor Space Ratio Legend (n:1)

- N 1
- D 0.5
- S7 1.9
- T5 2.2
- V1 3



Maximum Building Height (m)

- P1 17
- S1 23
- S2 23.5
- T3 27
- U3 32



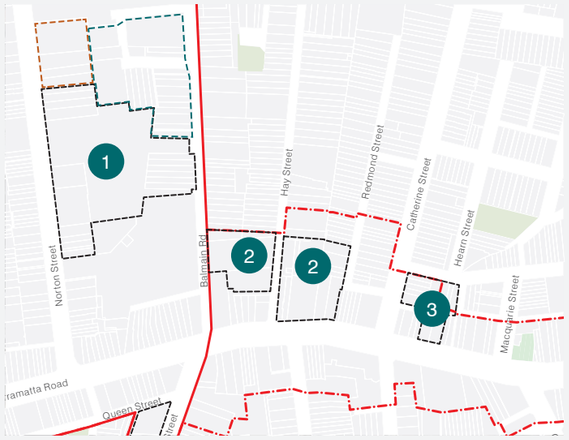
1.7 Opportunity Site 2 - Hay St/ Balmain Rd/ Redmond St

Issue

Advice also sought on mechanisms to incentivise the provision of public benefits in the redevelopment of opportunity sites and the type of public benefits sought for each key opportunity site. If bonus FSR and heights are considered appropriate, identify the incentives for each opportunity site.

Proposed new open spaces and how to incentivise provision of new open space through amalgamation of sites. Guidance sought on appropriate sites to target and LEP mechanisms to implement these provisions.

Advice sought on the location and size of proposed new open space as part of Norton Street plaza redevelopment.



1. Opportunity Site 1
2. Opportunity Site 2
3. Opportunity Site 3

LEP controls

Opportunity Site 2 is currently under E1 land zoning. Existing FSR is 1:1 (1.5 for E1 where active frontage is provided), with the R1 lot under a sliding scale FSR 0.6:1 HOB is undefined.

PRCUTS proposes 10 Redmond St, which is part to change from R1 to R3 zoning.

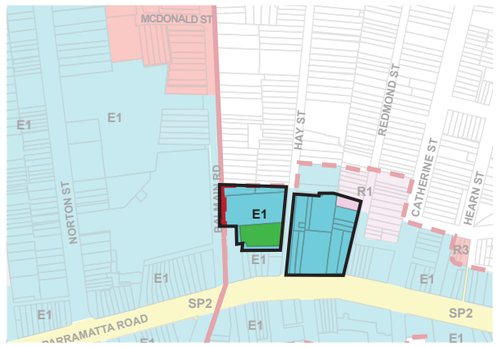
Draft Structure Plan controls
The IWC Draft Structure Plan controls under consideration support the current zoning of the site as E1 Local Centre, however proposes the car park at 2-24 Hay St be rezoned to RE1 Public Recreation.

The Draft Structure Plan supports PRCUTS' recommendation to increase FSR to part 3:1 and part 1.9:1 with no FSR/ HOB for the RE1 zone. The Draft Structure plan also proposes a lower HOB of 20m and 14m from the PRCUTS' recommended HOB of 22m.

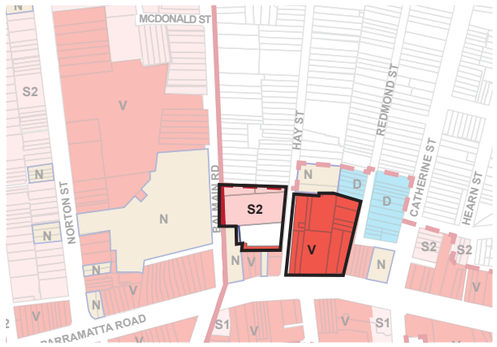
Existing LEP controls (IWLEP 2022)	
LZN	E1 Local Centre + R1 General Residential
FSR	1:1 + 0.5 for active frontage for E1; 0.5:1 - 0.8:1 for R1 lot (sliding scale FSR)
HOB	Undefined

PRCUTS recommendations (2016)	
LZN	B2 Local Centre
FSR	3:1
HOB	22m

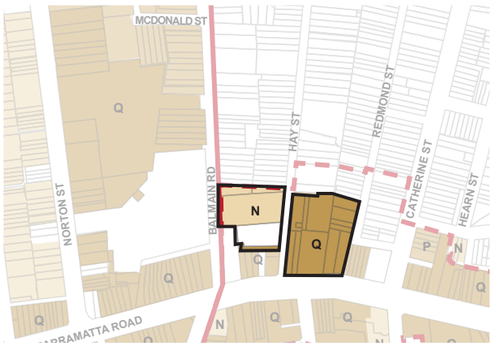
Draft Structure Plan controls under consideration (2021)



LZN E1 Local Centre; RE1 Public Recreation



FSR 3:1 and 1.9:1



HOB 14m and 20m

Opportunity Site 2

Existing Site

- The existing site comprises two 2-storey office buildings (1-23, 25 Balmain Rd), one of which is occupied by Centrelink.
- There is an at-grade carpark at 2 Hay St.
- The block between Hay Street and Redmond St comprises a council car park (13, 13A Hay St) and a stretch of lots with an address to Parramatta Rd (305, 311, 315, 325, 327 Parramatta Rd). There are also three lots (4, 6-8, 10 Redmond St) which comprise a small warehouse building and two dwellings.

Character

- Lots fronting Parramatta Rd between Balmain Rd and Hay St are fine-grain with one to three-storey buildings with red brick facades, some with street-art.
- The lots opposite and to the north of the opportunity site on Redmond St are 1-storey workers style terraces. Some terraces on the east side of Redmond St address the street (1–5 Redmond St), however the majority of the street-frontage consists of rear garages of terraces on Catherine St.
- Redmond St itself is approximately 9 metres wide (one lane with on-street car parking), minimal planting and a footpath on both sides.

Heritage

– There is a heritage item at 343-345 Parramatta Rd (former Bald Faced Stag Hotel) which backs onto the opportunity site, adjacent to the proposed open space on Hay St.

– All lots on Parramatta Rd adjacent to and within the opportunity site are within a heritage conservation area. The lots at 305, 307-309, 311-313, 315, 325, 327 Parramatta Rd are within the opportunity site.

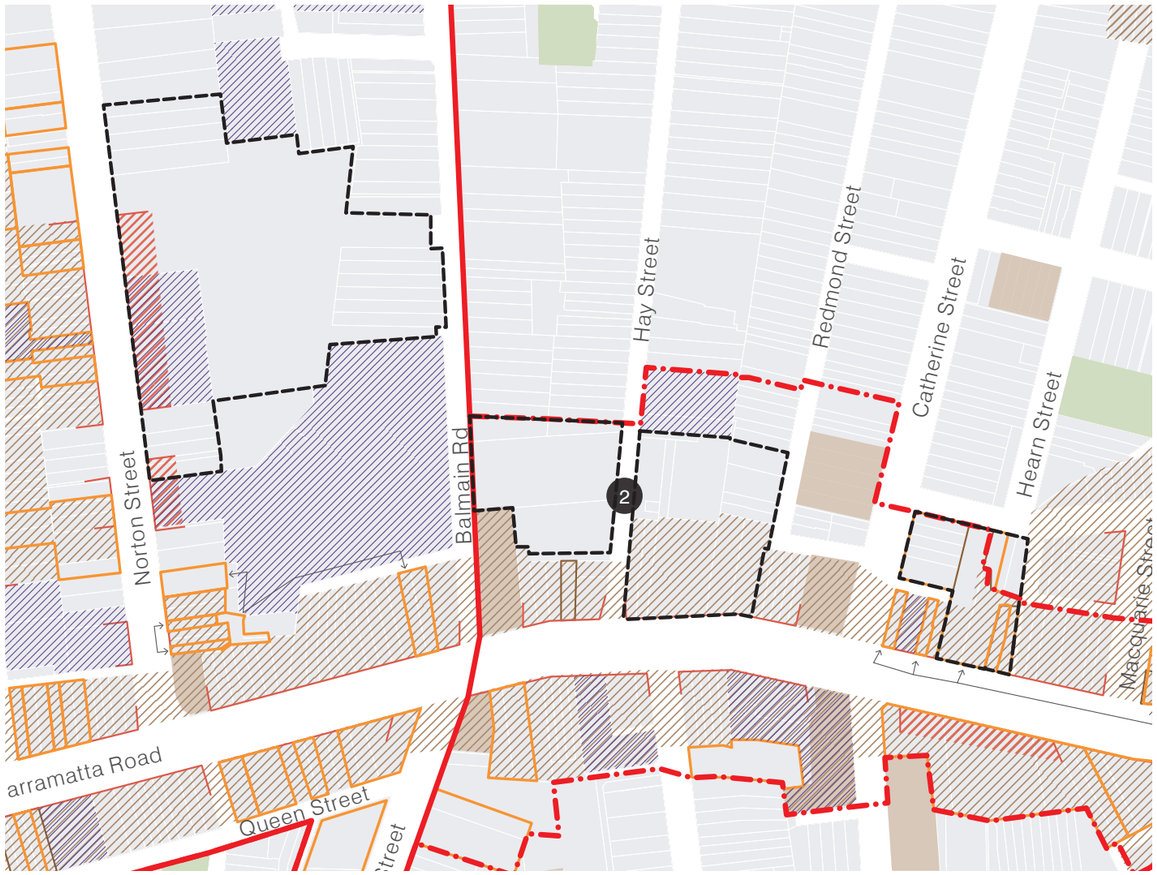
– This opportunity site addresses the rear of heritage lots on 8–16 Catherine St.

Development constraints and opportunities

- The opportunity site straddles Hay St and consists of at grade car parks, including Council and RMS owned sites.
- RMS owned car park at 2 Hay Street has been ear-marked as proposed open space in PRCUTS.
- Council has plans to redevelop its Hay St car park site into an affordable housing development.
- The opportunity site is adjacent to and opposite different scales of built form, e.g. opposite the
- 7-storey development on Balmain Rd at the west (The Italian Forum), and 1-storey workers cottages on Hay St, some of which are heritage items.
- Council as part of its Parramatta Road Urban Amenity Improvement Plan has proposed active transport link between Balmain Road Redmond Street which would run through the middle of the site close to the southern end of Bald Faced Stag hotel.

Preliminary ideas

- Re-purpose existing carparks as publicly accessible open space, and as part of a human-scale pedestrian network running behind the lots to the north of Parramatta Rd.



Opportunity sites constraints map

Legend
- Land ownership
- Strata
- Heritage
- Heritage Conservation Area
- Opportunity Site
- Character interface
- Building Character

1:3,000 0 30 60 90 120 150M

2 Hay St / Balmain Road

Built Form Response:

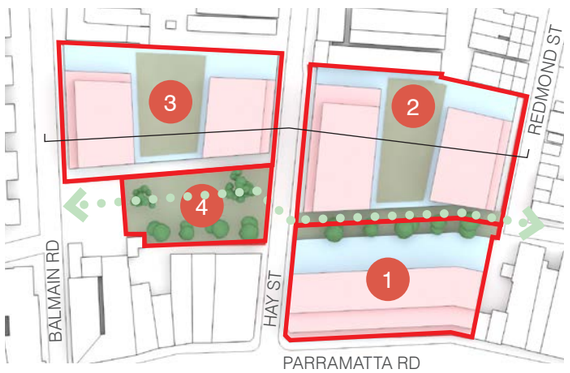
Opportunity Site 2 has been split into 4 sites. Refer to the Key Plan below. Built form testing demonstrates that Site 2 (Council car park) can accommodate an FSR of 1.9:1, as per Site 3 (Centrelink) as it interfaces more appropriately with the existing low-density development to the north. It is recommended that the height for Site 3 be increased to 23m as Sites 1 & 2. Further points include:

- provide new publicly accessible open space on Site 4.
- provide active frontages on ground floor for E1 zoned sites and to the proposed pedestrian/cycle link (9m wide).
- maintain solar access to proposed park and green link by locating communal green space in the centre of Sites 2 and 3.
- overall maximum height of 6 storeys for Sites 1, 2 and 3.

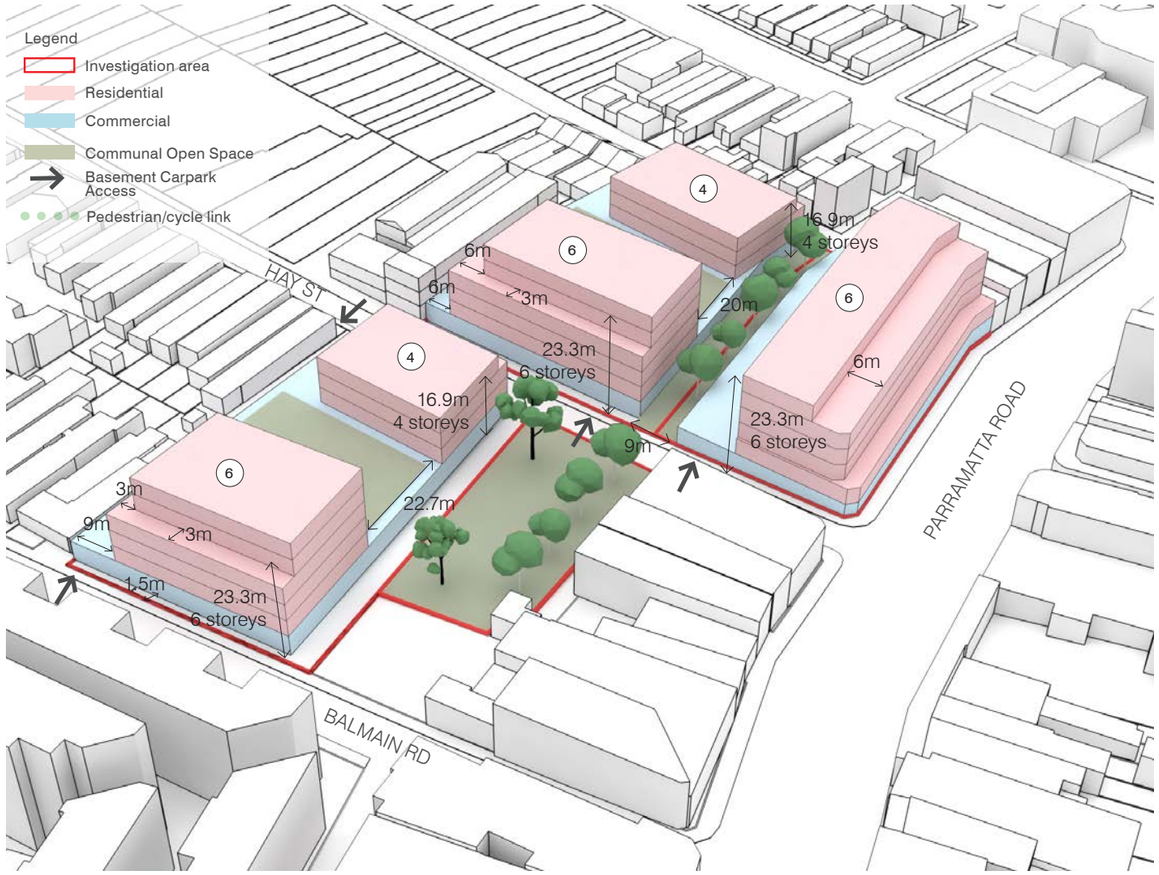
Site 1:
- maintain street wall of 2 storeys along Parramatta Road with setback of 3m from 3rd to 5th storey from front boundary; 9m for 6th storey from front boundary
- provide 4.5m setback to the rear to accommodate the proposed pedestrian and cycling link and additional 9m rear setback to the residential uses

Site 2:
- locate taller buildings towards the west. This is to respond to the adjacent 2-3 storey apartment developments (note these lots' current max. FSR is 1.5:1, in contrast with surrounding low-density residential area with FSRs 0.5:1-0.8:1).
- provide 1.5m setback to ground floor uses fronting Hay St and Redmond St due to existing nature of narrow streets.
- restrict development to 4-storeys (with additional 3m setback to the top storey) on Redmond St, to address the 1-storey terraces in the surrounding area.
- provide 3m upper level setback to residential uses along Hay St and Redmond St.
- provide 9m setback to residential uses to 1-storey terraces on Redmond St and Hay St.

Site 3:
- locate taller buildings towards the west. This is to respond to the Forum opposite the site on Balmain Rd.
- provide 1.5m setback to ground floor uses fronting Balmain Road and Hay St.
- provide 9m setback to residential uses to 1-storey terraces on Balmain Rd.
- restrict development to 4-storeys (with additional 3m setback to the top storey) on Hay Street to provide a suitable transition to the 1-storey terraces to the north.

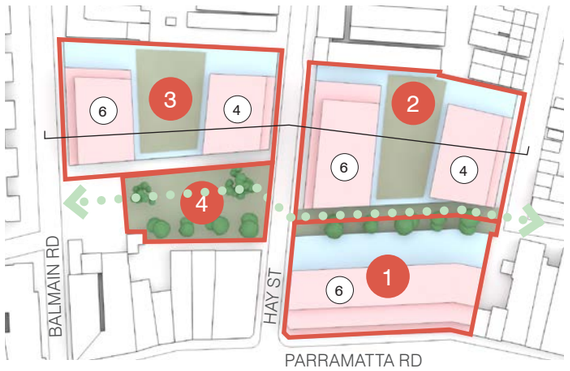


Opportunity Site 2 Key Plan



Opportunity Site 2 3D View

Opportunity Site 2 - Hay St/ Balmain Rd/ Redmond St

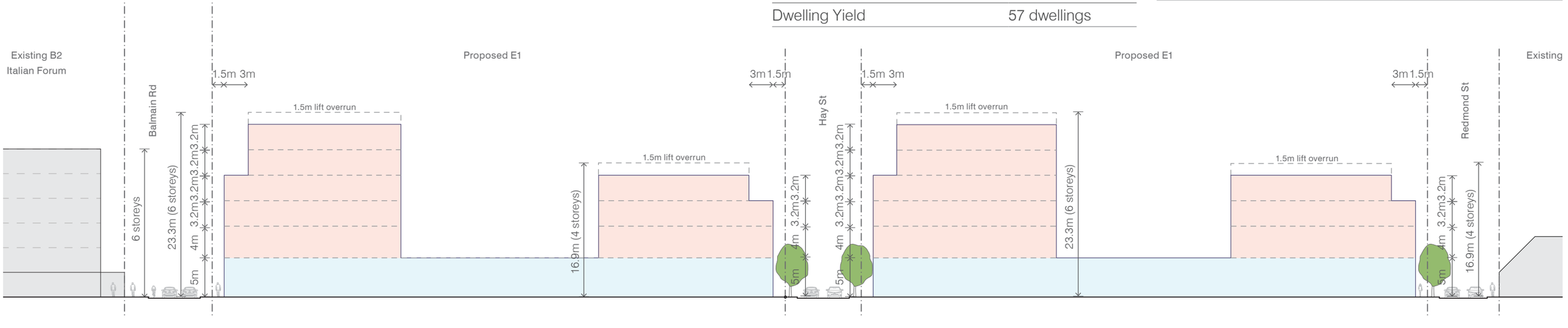


Opportunity Site 2 Key Plan

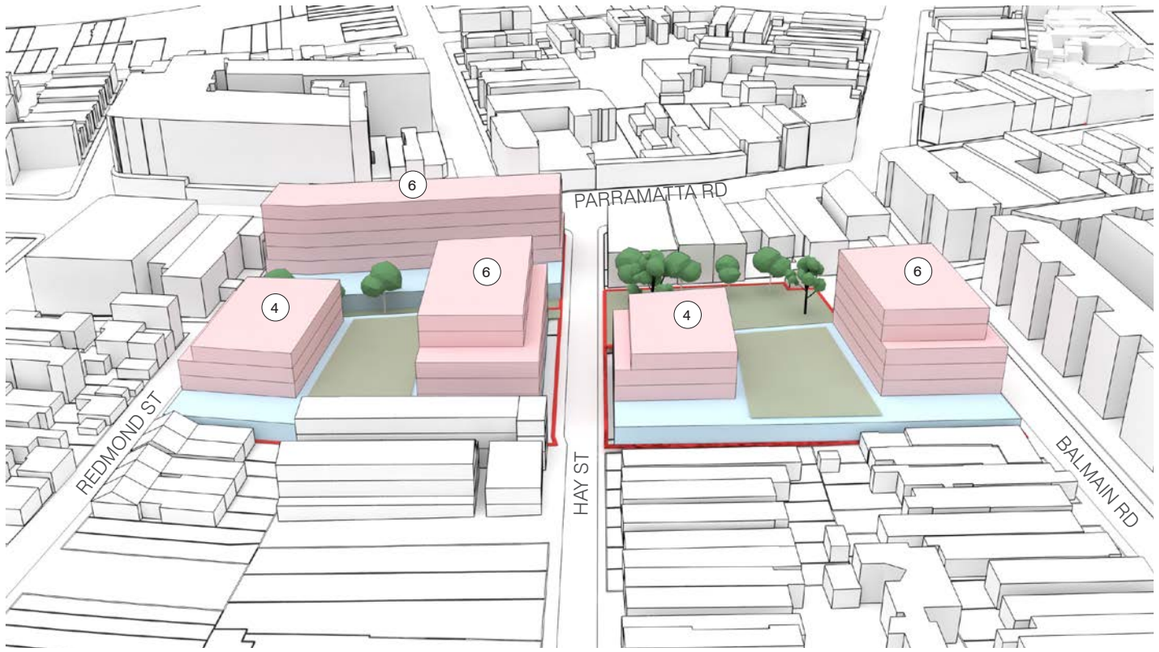
Site 1	
FSR	**3:1**
Site area	2201m²
Total GFA (Commercial)	1871m² (28%)
Total GFA (Residential)	4691m² (72%)
Total GFA	6562m²
Height	23.3m (6 storeys)
Street wall	2-storey
Site Coverage	53%
Communal Open Space	25% site area (podium/rooftop)
Upper level front setback to Parramatta Rd	3m from 3rd to 5th storey from front boundary; 9m for 6th storey from front boundary
Rear level setback	min. 4.5m to provide the through-site link
Upper level rear setback	9m from building line to residential uses on 2nd storey and above
Parking	Basement
Landscaped area	15% of the site as deep soil on sites greater than 1,500m²
Dwelling Yield	59 dwellings

Site 2	
FSR	**1.9:1**
Site area	3761m²
Total GFA (Commercial)	2671m² (37%)
Total GFA (Residential)	4552m² (64%)
Total GFA	7223m²
Height	16.9m (4 storeys) to 23.3m (6 storeys) fronting Hay St
Site Coverage	78%
Communal Open Space	976m²
Front setback from Hay St & Balmain Rd	1.5m
Upper level front setback (Hay St) from building line	3m from 5th storey above
Upper level front setback (Redmond St) from building line	3m from 4th storey above
Setback from north site boundary (Hay St)	6m to 2nd-4th storeys. 12m from 5th storey and above
Setback from north site boundary (Redmond St)	9m from 2nd storey and above
Parking	Basement
Landscaped area	15% of the site as deep soil on sites greater than 1,500m²
Dwelling Yield	57 dwellings

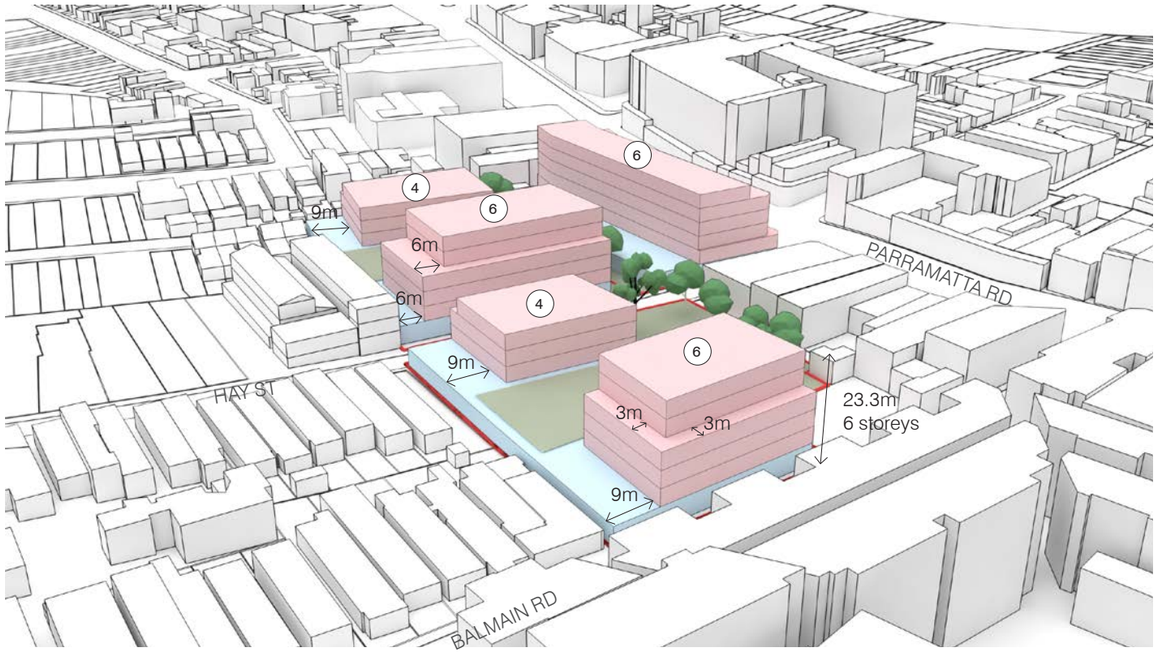
Site 3	
FSR	**1.9:1**
Site area	3044m²
Total GFA (Commercial)	2226m² (38%)
Total GFA (Residential)	3586m² (62%)
Total GFA	5813m²
Height	16.9m (4 storeys) to 23.3m (6 storeys) fronting Balmain Rd
Street wall	4-storey
Site Coverage	86%
Communal Open Space	958m²
Front setback from Hay St & Balmain Rd	1.5m
Upper level front setback (Hay St) from building line	3m from 4th storey above
Upper level front setback (Balmain Rd) from building line	3m from 5th storey above
Setback from north site boundary (Hay St)	6m to 2nd-4th storeys. 12m from 5th storey and above
Setback from north site boundary (Redmond St)	9m from 2nd storey and above
Parking	Basement
Landscaped area	15% of the site as deep soil on sites greater than 1,500m²
Dwelling Yield	45 dwellings



Opportunity Site 2 - Hay St/ Balmain Rd/ Redmond St



Opportunity Site 2 3D View - 2



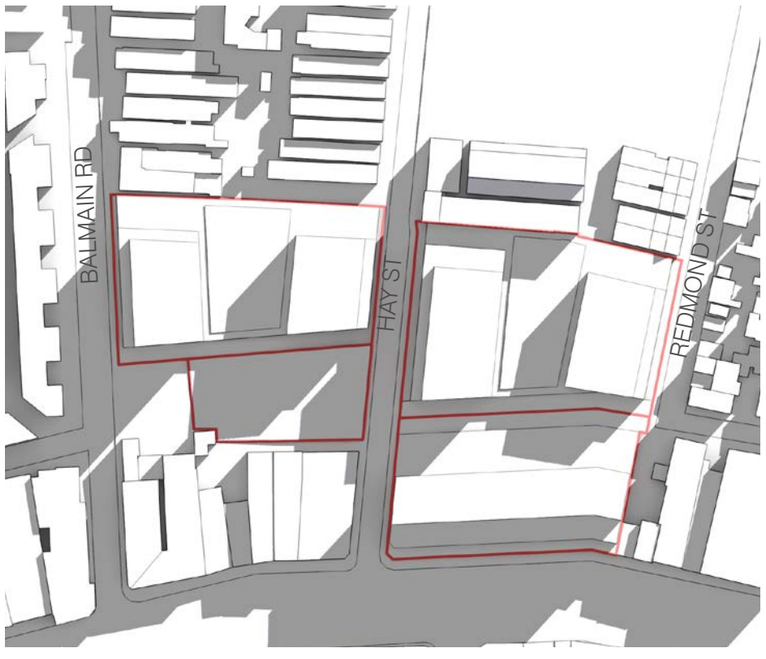
Opportunity Site 2 3D View - 3

Opportunity Site 2 Section

Overshadowing testing - 21st June (winter solstice)

Overshadow testing was conducted for winter solstice (21st June), between 9AM to 3PM. The below overshadow diagrams demonstrate solar access requirements are achievable.

9am



11am



1pm



Opportunity Site 2 - Hay St/ Balmain Rd/ Redmond St

LEP Recommendations

LEP recommendations

- Retain E1 Local Centre and extend the E1 zone to 10 Redmond Street to allow cohesive redevelopment of the block (this is instead of the proposed R3 zoning at 10 Redmond Street as in PRCUTS and Draft Structure Plan).
- Rezone 2 Hay St to RE1 Public Recreation as per Draft Structure Plan and PRCUTS proposed Open Space Plan. Remove any associated FSR or HOB control from this part of the site.
- FSR for part of the site fronting Parramatta Road to be increased to 3:1 as per PRCUTS and Draft Structure Plan.
- FSR for the block between Balmain Road and Hay Street; and Hay Street and Redmond Street; to be reduced to 1.9:1 from recommended FSR of 3:1 under PRCUTS and Council's Draft Structure Plan, due to direct adjacency to residential lots of single storey workers cottages.
- Maximum HOB control of 23.5m to allow a loose built form and for FSR to be distributed across the site between 4-6 storeys. This approach would provide appropriately scaled building transitions to surrounding context.
- Provide new Active Transport link as indicated on the site plan.

Existing LEP controls (IWLEP 2022)	
LZN	E1 Local Centre
FSR	1:1
HOB	Undefined

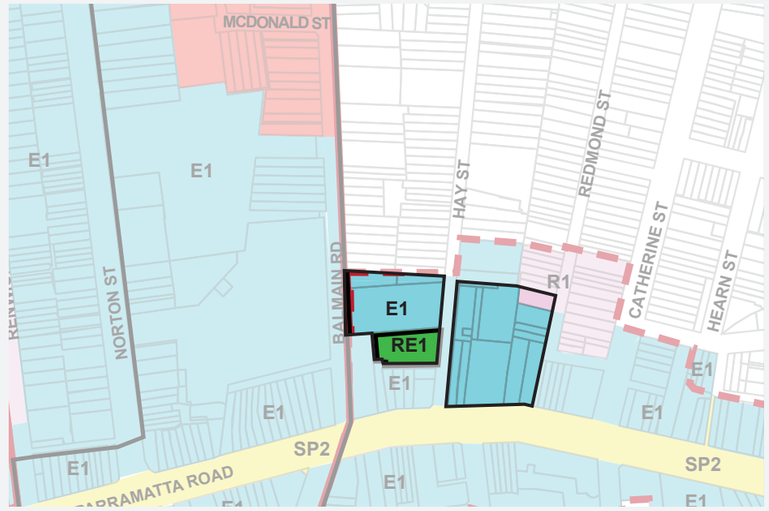
PRCUTS recommendations (2016)	
LZN	B2 Local Centre
FSR	3:1
HOB	22m

Draft Structure Plan Controls (2021)	
LZN	E1 Local Centre
FSR	3:1
HOB	20m

Final recommendations	
LZN	E1 Local Centre and RE1 Public Recreation
FSR	1.9:1, 3:1
HOB	23.5m (6 storeys) (nil for RE1)

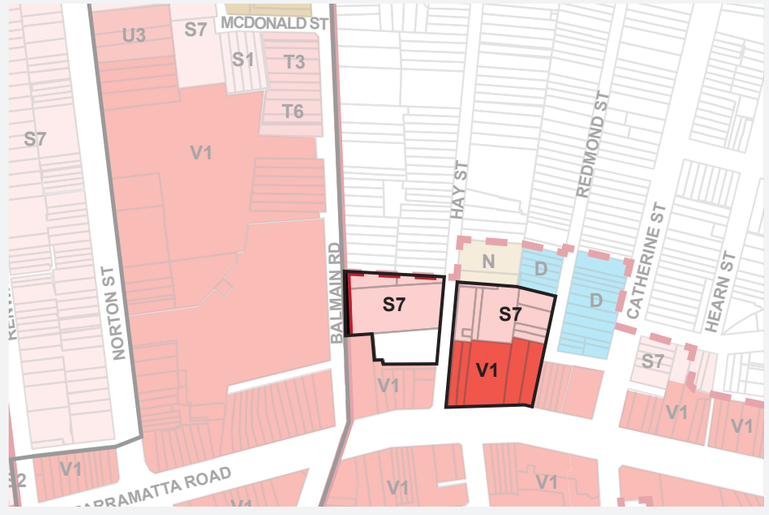
Land Zoning

- E1 Local Centre
- E3 Productivity Support
- E4 General Industrial
- R1 General Residential
- R3 Medium Density Residential
- SP2 Special Infrastructure
- RE1 Special Infrastructure
- Stage 1 Implementation



Floor Space Ratio Legend (n:1)

- N 1
- D 0.5
- S7 1.9
- T5 2.2
- V1 3



Maximum Building Height (m)

- P1 17
- R2 21.5
- S1 23
- S2 23.5
- T1 25
- T3 27
- U3 32



1.8 Opportunity Site 3

Issue

Advice also sought on mechanisms to incentivise the provision of public benefits in the redevelopment of opportunity sites and the type of public benefits sought for each key opportunity site. If bonus FSR and heights are considered appropriate, identify the incentives for each opportunity site.

Proposed new open spaces and how to incentivise provision of new open space through amalgamation of sites. Guidance sought on appropriate sites to target and LEP mechanisms to implement these provisions.

Advice sought on the location and size of proposed new open space as part of Norton Street plaza redevelopment.



1. Opportunity Site 1
2. Opportunity Site 2
3. Opportunity Site 3

LEP controls

Opportunity Site 3 is currently zoned E1 Local Centre. Three additional lots along Albion St zoned R1 General Residential are outside the PRCUTS frame area but included in the study area as part of Opportunity Site 3 to provide a block-level urban design response.

The existing FSR is 1:1 (1.5:1 for E1 where active frontage is provided), and sliding scale FSR 0.5-0.8:1 for R1 zoned lots. Existing HOB controls are undefined.

PRCUTS proposes to retain the B2 zoning, to lift the FSR to 3:1 and HOB to 22m.

Draft Structure Plan controls
Draft Structure Plan controls

The IWC Draft Structure Plan retains the current zoning of the site as E1 Local Centre and proposes to rezone R1 lots along Albion Street to R3.

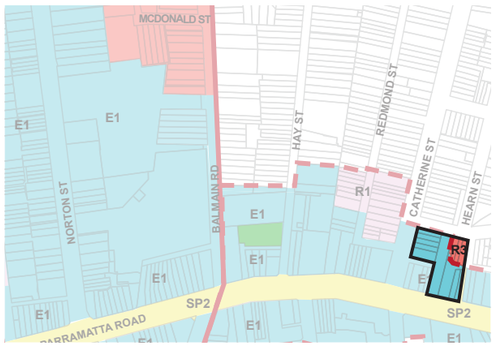
The Draft Structure Plan proposes that FSR of 277, 267, 265 Parramatta Rd lots' be increased to 3:1. Other addresses within the opportunity site are proposed to have an FSR of 1.9:1. PRCUTS' recommends an FSR of 3:1.

The Draft Structure plan also proposes a lower HOB of 20m for 277, 267, 265 Parramatta Rd and 14m for 9-11 and 13-19 Catherine St, and 17m for 212, 210, 208 Albion St.

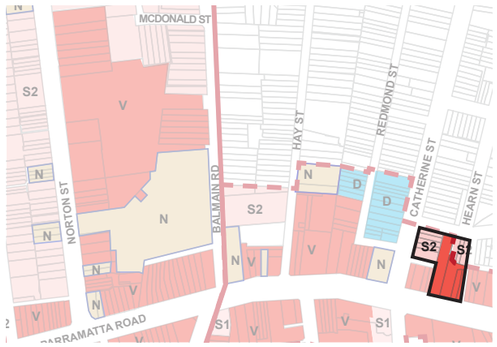
Existing LEP controls (IWLEP 2022)	
LZN	E1 Local Centre + R1 General Residential (lots outside PRCUTS)
FSR	1:1 + 0.5:1 for active frontage for E1; 0.5:1-0.8:1 for R1 (lots outside PRCUTS)
HOB	Undefined

PRCUTS recommendations (2016)	
LZN	B2 Local Centre + R1 General Residential
FSR	3:1 + 0.5:1-0.8:1 for R1 (lots outside PRCUTS)
HOB	22m + undefined for R1 (lots outside PRCUTS)

Draft Structure Plan controls under consideration (2021)



LZN E1 Local Centre



FSR 3:1 and 1.9:1



HOB 14m, 17m and 20m

Opportunity Site 3

Existing Site

- The opportunity site consists of 277 Parramatta Road, 13-19 and 9-11 Catherine Street, and 208, 210, 212 Albion St. Albion Lane runs adjacent to 277 Parramatta Road.

Existing Character

- 277 Parramatta Rd is a 2-storey former theatre/ cinema, approximately 24 metres wide. There is screen for the full extent of the facade going up to approximately 12m high.
- Catherine St is 20 metres wide with street planting and green verges. Although the street is wide it is dominated by on-street carparking particularly on the west and footpaths are narrow relative to the street.
- Predominantly one-storey residential terrace housing on narrow lots
- Albion St at 12 metres wide is a human-scale street with good amenity.

Heritage

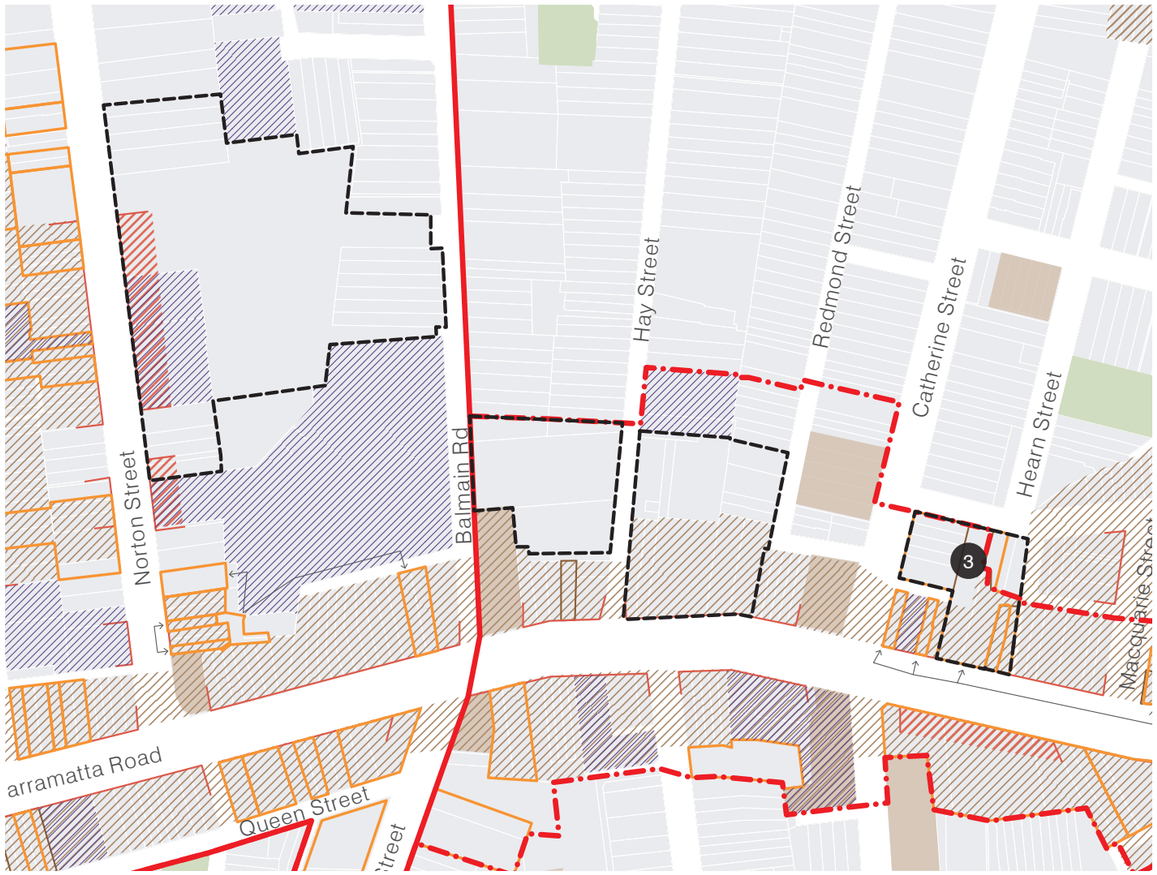
- The site is opposite a heritage conservation area to the east of Albion St.
- All lots on Parramatta Rd in this area are within a heritage conservation area. 277 Parramatta Rd is within the opportunity site; 279, 283-285, 287 Parramatta Rd are opposite across a service lane.

Development constraints and opportunities

- There is potential to extend Albion Ln to create a through-block pedestrian link.
- The northern part of the opportunity site has street frontage on three sides (Catherine St, Albion St, Albion Ln)

Preliminary ideas

- There is potential to incorporate publicly accessible open space with the proposed east-west through-site link.
- Potential for site to mark the beginning of Whites Creek Lane which leads to Whites Creek Valley Park



Opportunity sites constraints map

Legend
- Land ownership
- Strata
- Heritage
- Heritage Conservation Area
- Opportunity Site
- Character interface
- Building Character

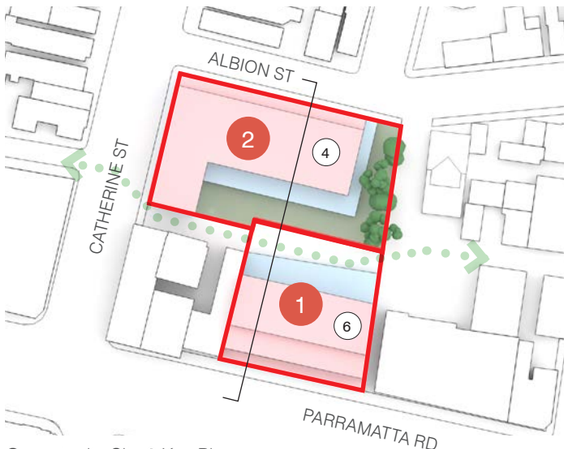
1:3,000 0 30 60 90 120 150M

3 Catherine St

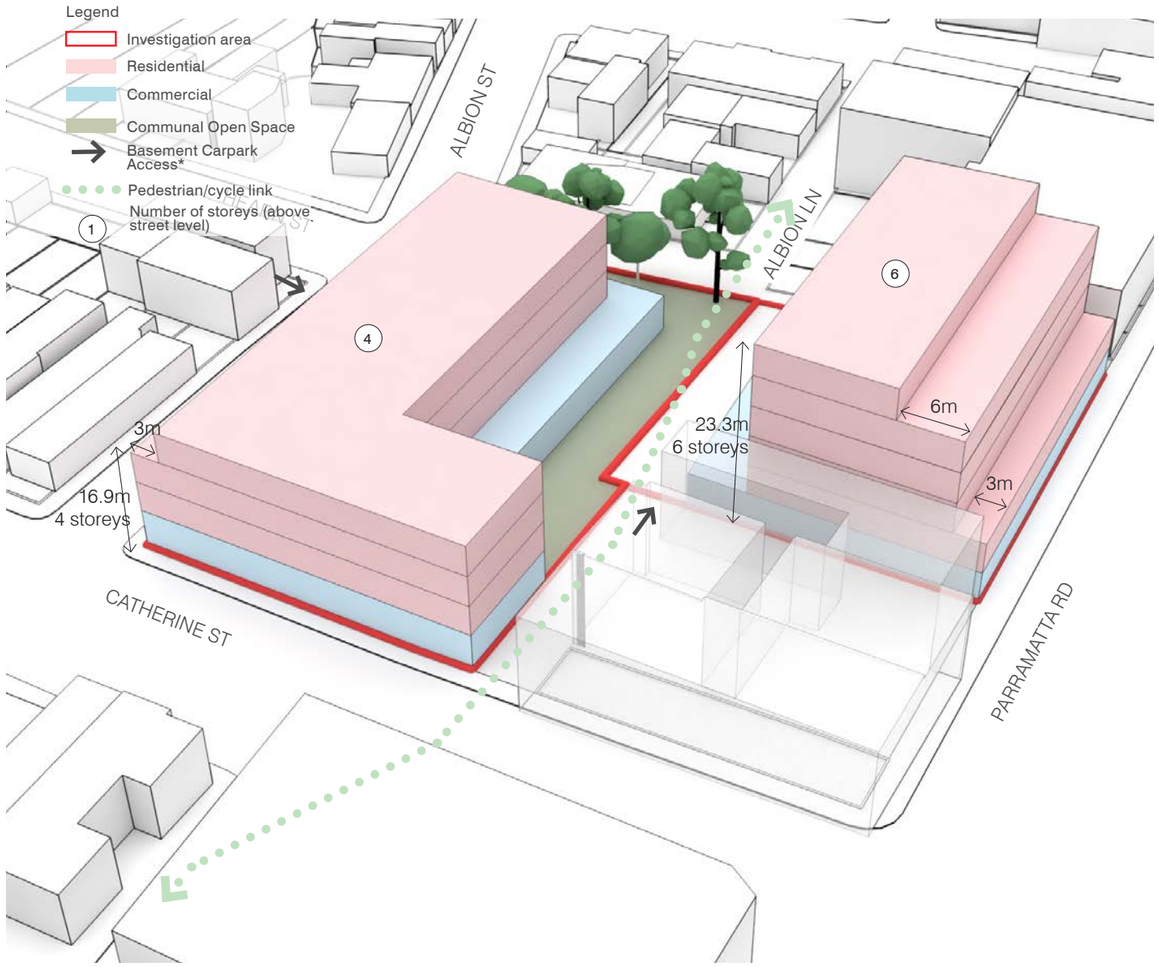
Built Form Response:

Opportunity Site 3 has been split into two sites for built form testing. The testing demonstrates that the draft Structure Plan controls can produce a good outcome; however a split FSR/HOB control may be required for 277 Parramatta Rd, as the lot extends to Albion St. It is better that the Albion St portion maintain a consistent height and FSR control. Further preliminary ideas include:

- maintain street wall of 2 storeys along Parramatta Road with setback of 3m from 3rd to 5th storey from front boundary; 9m for 6th storey from front boundary
- provide a new pedestrian/cycle link from Albion St to Catherine Lane. New green/open space proposed adjacent to link.
- potential for rear laneway retail activation. 3-storey street wall with 3m setback from building line to fourth storey. This was designed in line with public domain improvements to Catherine St.
- 6m ground level setback and 9m setback to residential uses on the east boundary for Site 2 to provide appropriate transition to the 1 storey terraces along Albion St.
- Parramatta Rd ground level E1 can be accessed via lane off Catherine St.
- Basement car parking access for Site 2 via Albion St.



Opportunity Site 3 Key Plan



Opportunity Site 3 3D View from Parramatta Rd west

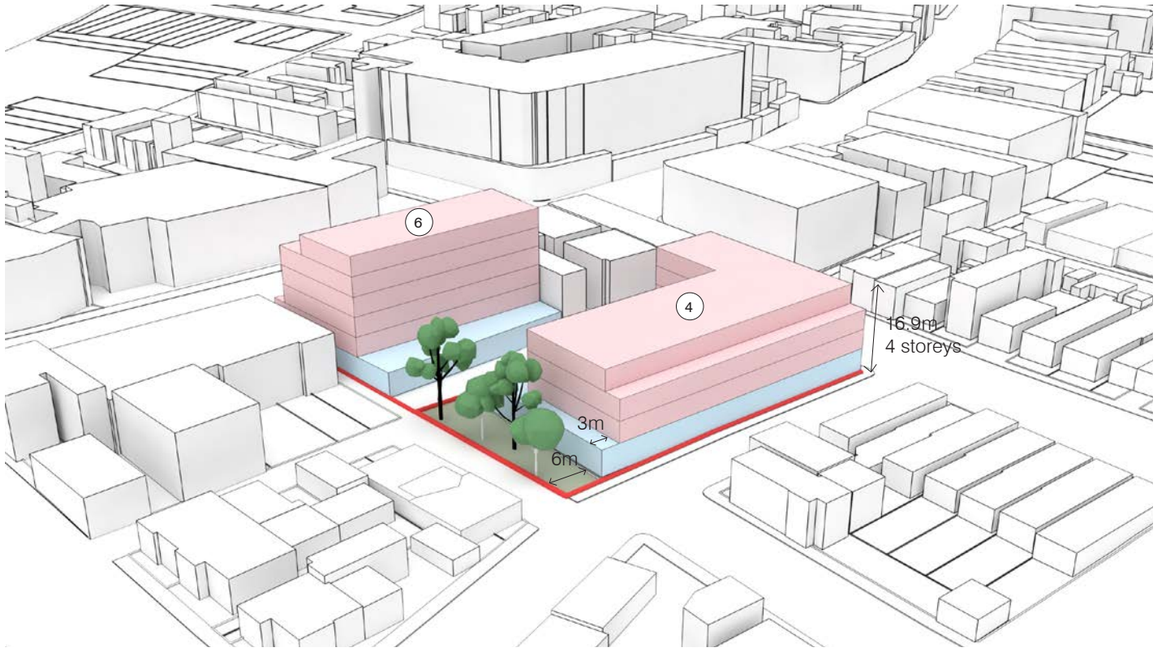
Site 1

FSR	2.9:1
Site area	1264m²
Total GFA (Commercial)	988m² (27%)
Total GFA (Residential)	2625m² (73%)
Total GFA	3613m²
Height	23.3m (6 storeys)
Street wall	2-storey
Site Coverage	53%
Communal Open Space	25% site area (podium/ rooftop)
Upper level front setback to Parramatta Rd	3m from 3rd to 5th storey from front boundary; 9m for 6th storey from front boundary
Rear setback	6-8.5m to accommodate the through site link
Parking	Basement
Landscaped area	10% of site area deep soil (ADG recommendation for sites 650-1500m²)
Dwelling Yield	33 dwellings

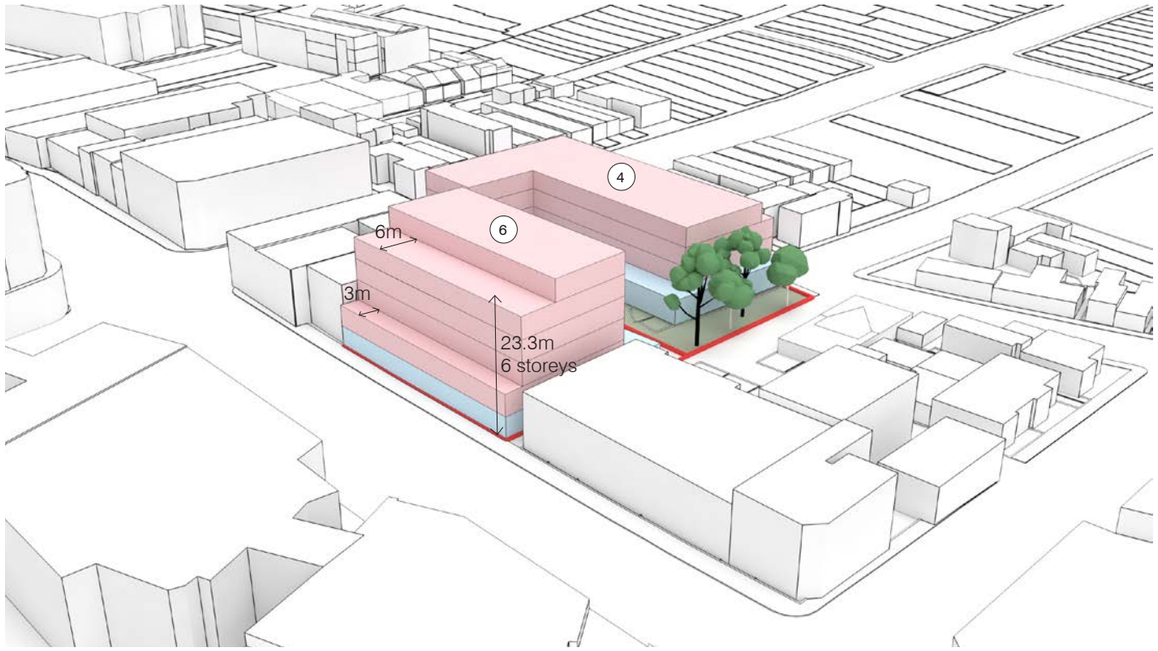
Site 2

FSR	1.9:1
Site area	1904m²
Total GFA (Commercial)	1174m² (32%)
Total GFA (Residential)	2436m² (68%)
Total GFA	3610m²
Height	16.9m (4 storeys)
Street wall	3-storey
Site Coverage	73%
Communal Open Space	520m²
Setback to Catherine St	0m
Setback to Albion St	0m
Side setback at eastern boundary (Albion Ln)	6m on ground floor and 9m to residential from 1st storey and above
Rear Setback	6-9m to accommodate the through site link
Upper level front setback to Albion St to 4th storey	3m
Parking	Basement
Landscaped area	15% of the site as deep soil on sites greater than 1,500m²
Dwelling Yield	30 dwellings

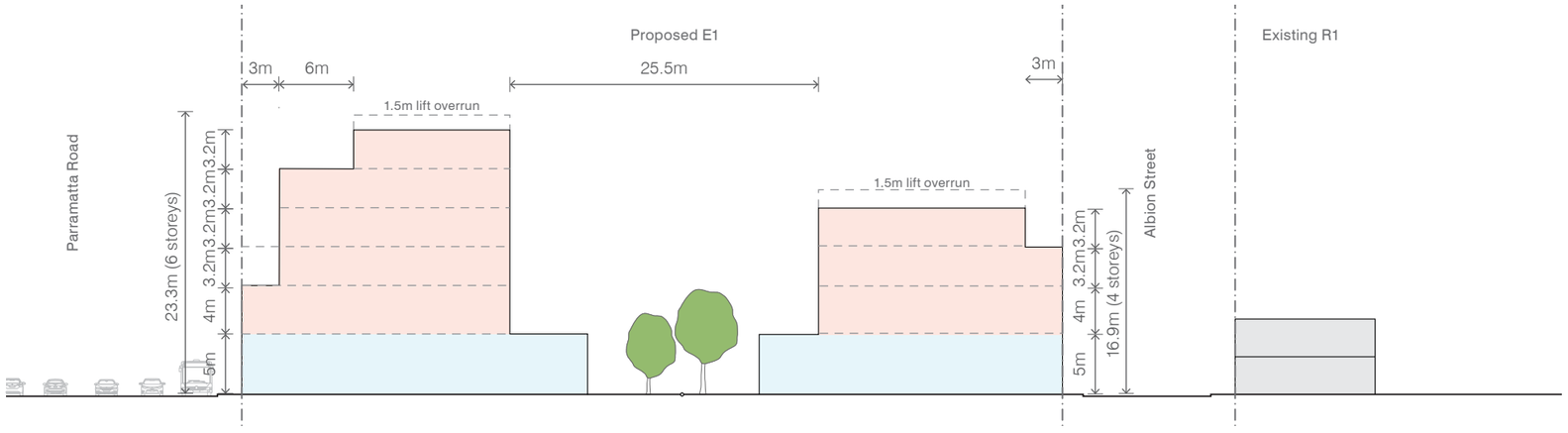
Opportunity Site 3



Opportunity Site 3D View from north



Opportunity Site 3D View from Parramatta Rd east

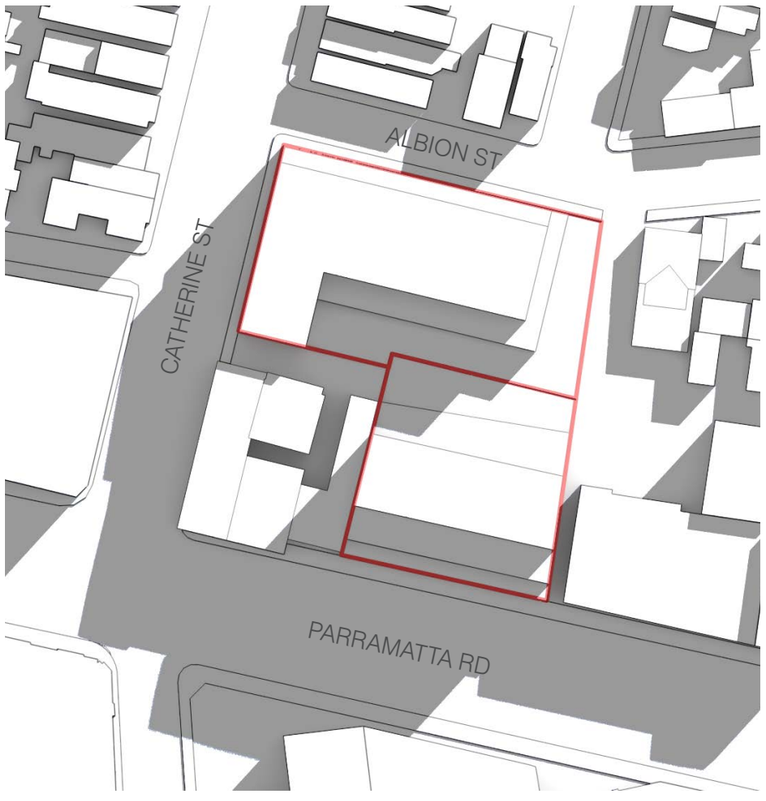


Opportunity Site 3 Section

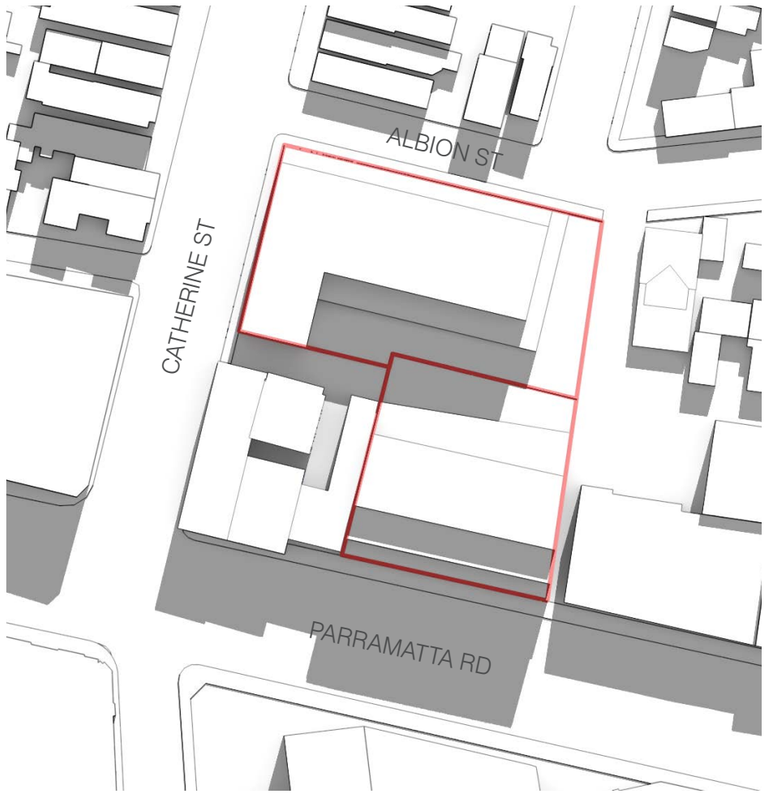
Overshadowing testing - 21st June (winter solstice)

Overshadow testing was conducted for winter solstice (21st June), between 9AM to 3PM. The below overshadow diagrams demonstrate solar access requirements are achievable.

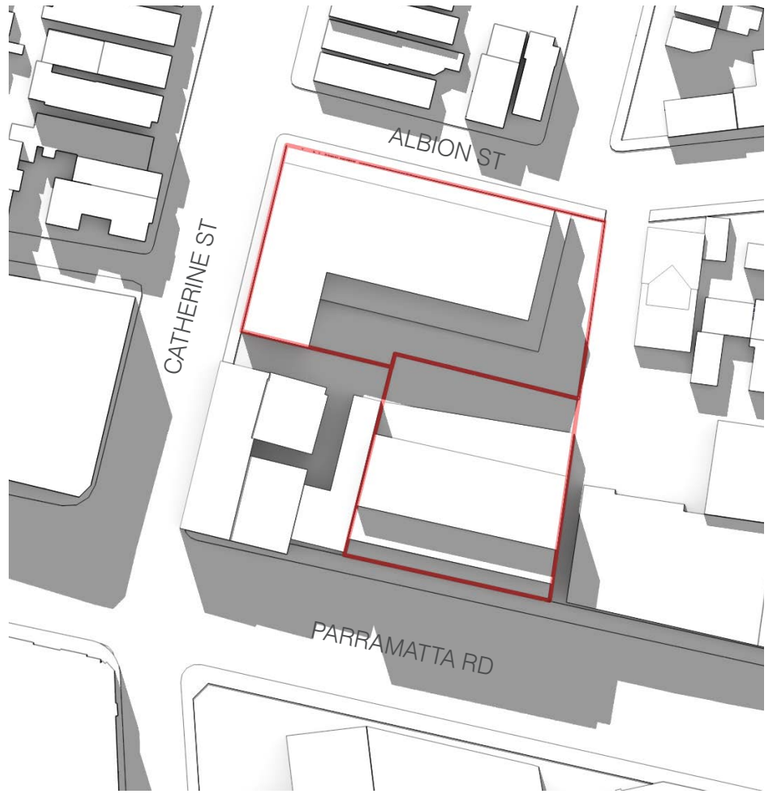
9am



11am



1pm



LEP Recommendations

LEP recommendations

- Land Use E1 Local Centre to be retained as per Draft Structure Plan and PRCUTS. Rezone 208 - 212 Albion St from R1 to E1 so that new development can take place in a holistic manner at a block-level through continuation of E1 zone
- FSR 3:1 for lots fronting Parramatta Road as per Council's Draft Structure Plan and PRCUTS. HOB for these lots to be 23.5m (6 storeys).
- FSR 1.9:1 for lots fronting Catherine Street and Albion Street. HOB for these lots to be 17m (4 storeys).
- Provide a new through-site link to Catherine Street as extension of Albion Lane.

Existing LEP controls (IWLEP 2022)	
LZN	E1 Local Centre
FSR	1:1 (+ 0.5:1 for E1 active frontages), 0.5:1-0.8:1 for R1 lots
HOB	Undefined

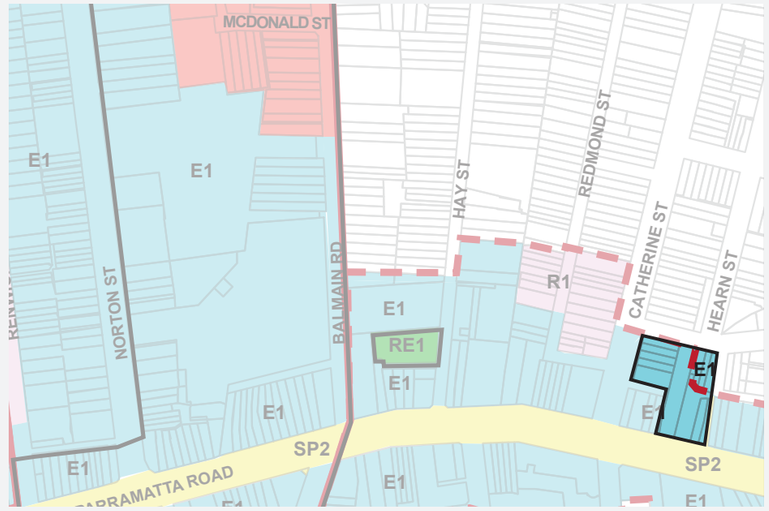
PRCUTS recommendations	
LZN	B2 Local Centre, R1 General Residential (no change for lots outside PRCUTS)
FSR	3:1, 0.5:1-0.8:1 for R1 lots (no change for lots outside PRCUTS)
HOB	22m, undefined for R1 lots

Draft Structure Plan Controls	
LZN	E1 Local Centre, R3 Medium Density Residential
FSR	1.9:1, 3:1
HOB	14m, 17m, 20m

Final recommendations	
LZN	E1 Local Centre
FSR	3:1, 1.9:1
HOB	17m, 23.5m

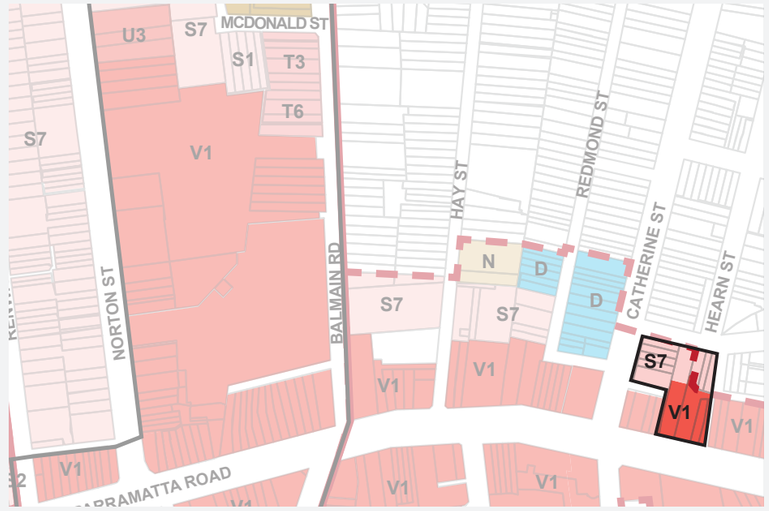
Land Zoning

- E1 Local Centre
- E3 Productivity Support
- E4 General Industrial
- R1 General Residential
- R3 Medium Density Residential
- SP2 Special Infrastructure
- RE1 Special Infrastructure
- Stage 1 Implementation



Floor Space Ratio Legend (n:1)

- N 1
- D 0.5
- S7 1.9
- T5 2.2
- V1 3



Maximum Building Height (m)

- P1 17
- R2 21.5
- S1 23
- S2 23.5
- T1 25
- T3 27
- U3 32



1.9 North Leichhardt Investigation Area

The following study in north Leichhardt was undertaken post Gateway Determination in October 2022. In February 2023, Council engaged Architectus to undertake built form testing and urban design advice for two Site Investigation Areas in the Leichhardt Precinct, to address the abovementioned Gateway Determination and to support the development of DCP controls.

- Site Investigation A area relates to the abovementioned Gateway Determination by DPE, specifically a review of the proposed controls for 93, 95, 97 and 99 Norton Street.
- Site Investigation Area B comprises 56-76A Balmain Road and 1-14 McDonald Street.

Approach

The following report section is structured around the following:

- Analysis of planning context (existing IWC LEP 2022 controls, PRCUTS controls, Architectus' previously recommended controls in 2016 and 2020 Urban Design Studies, and proposed controls in IWC Stage 1 LEP
- Site analysis: opportunities and constraints
- Built-form testing around 3 development scenarios
  - **Scenario 1** Considers redevelopment of all lots within the Site Investigation Areas. It is anticipated to occur at a later date in the future. Scenario 1 also incorporates an open to sky through site link at the north of Site Investigation Area A.
  - **Scenario 2** Considers a likely development scenario in the short term, whereby current strata lots and adjacent lots in Site Investigation Area B are not turned over.
  - **Scenario 3** Developed from Scenario 1, Site B2 is split into smaller amalgamated lots.
  - Each scenario is summarised with a yield table with overshadowing and solar testing (provided in Appendix)
- Recommendations with supporting controls for inclusion in DCP



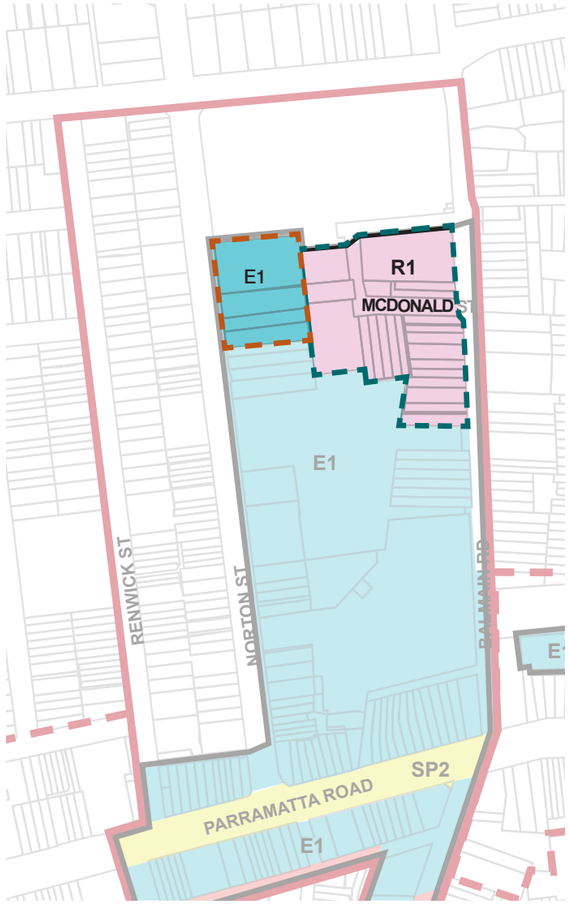
Aerial map of Site Investigation Areas within the Leichhardt Precinct

Existing Controls (Inner West LEP 2022)

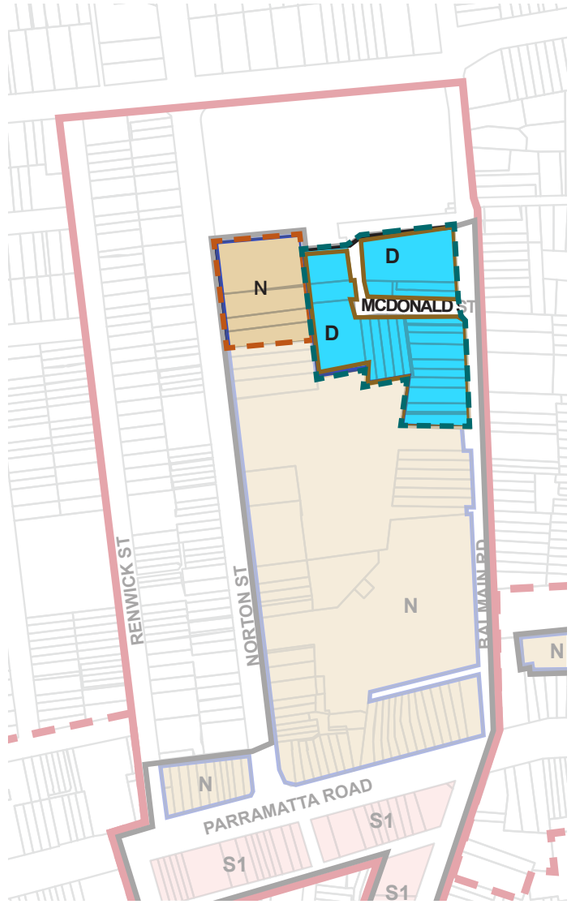
Area A	
LZN	E1 Local Centre
FSR	1.0:1 (Refer to Clause 4.4A IWC LEP 2022 - 1.5:1 FSR for mixed use development with active street frontage)
HOB	None

Area B		
LZN	R1 General Residential	
FSR	0.5:1 (Refer to Clause 4.42B IWC LEP 2022 - sliding scale FSR based on site area)	
	Site area	**FSR**
	<150m²	1.0:1
	≥ 150 < 300m²	0.9:1
	≥ 300m²< 450m²	0.8:1
	≥ 450m²	0.7:1
HOB	None	

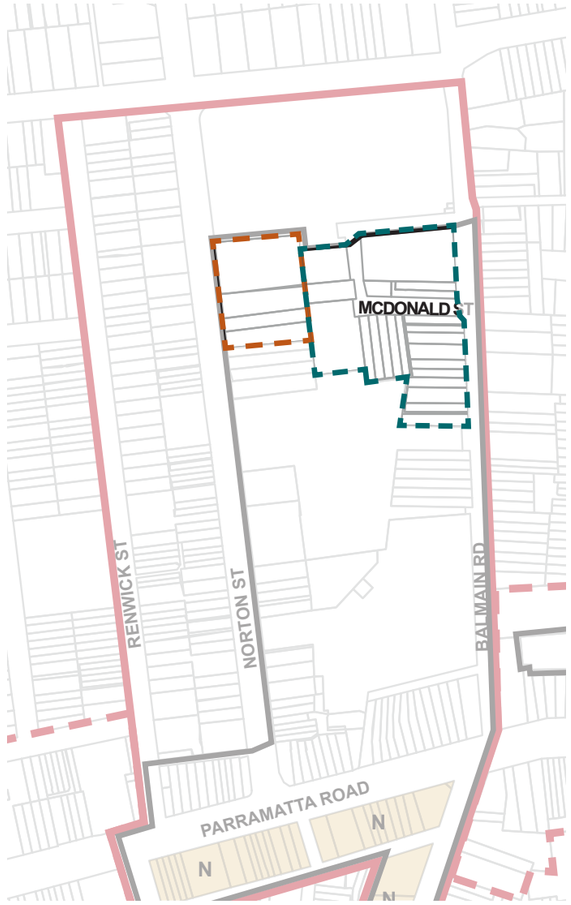
Land Zoning



FSR



Height



Legend

- Precinct - Core
- Precinct - Frame
- Parramatta Road Corridor LEP Stage 1 Implementation
- Site Investigation Area A
- Site Investigation Area B

Land Zoning

- E1 Local Centre
- R1 General Residential
- SP2 Infrastructure

Floor Space Ratio Legend (n:1)

- D 0.5
- N 1.0
- S1 1.5
- Refer to Clause 4.42B
- Area 1: Refer to Clause 4.4A

Maximum Building Height (m)

- N 14m

PRCUTS (2016)

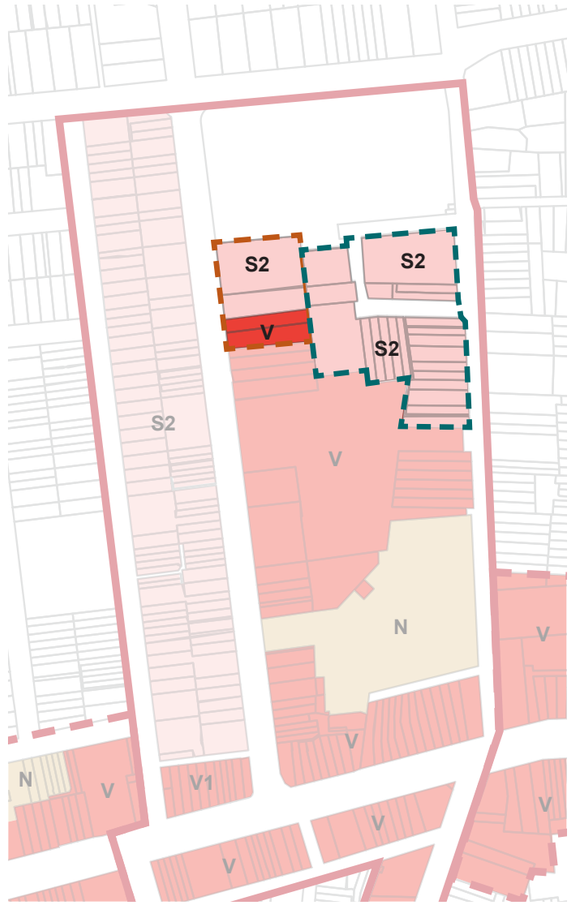
Area A	
LZN	B2 Local Centre
FSR	1.9:1 and 3:1
HOB	17m and 22m

Area B	
LZN	B2 Local Centre
FSR	1.9:1
HOB	22m

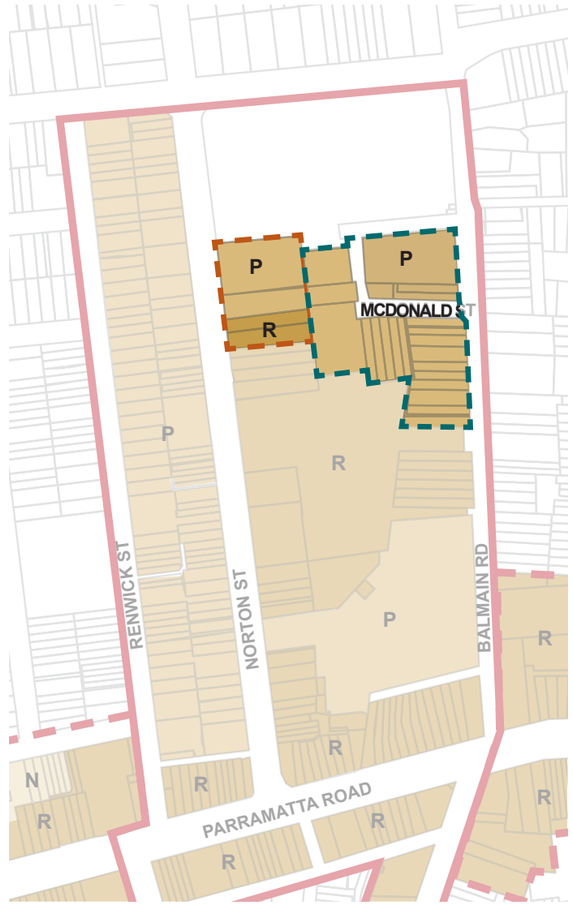
Land Zoning



FSR



Height



Legend

- Precinct - Core
- Precinct - Frame
- Site Investigation Area A
- Site Investigation Area B

Land Zoning

- B2 Local Centre
- R3 Medium Density Residential
- SP2 Infrastructure

Floor Space Ratio Legend (n:1)

- N 1.0
- S1 1.5
- S2 1.9
- V 3.0

Maximum Building Height (m)

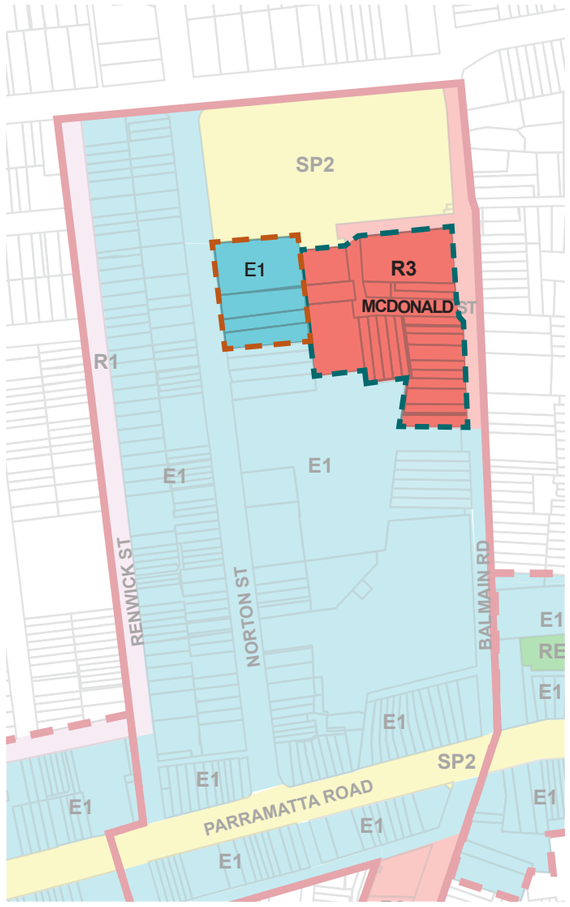
- P 17
- R 22

Leichhardt Council Urban Design Study 2016 (Architectus)

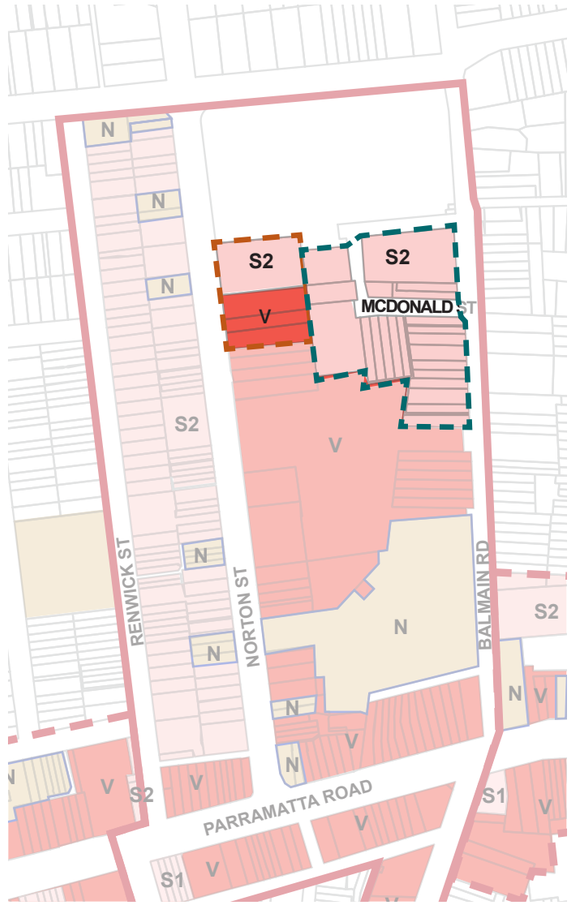
Area A	
LZN	E1 Local Centre
FSR	1.9:1 and 3.0:1 + bonus for public benefits
HOB	17m and 20m

Area B	
LZN	R3 - Medium Density Residential
FSR	1.9:1
HOB	17m

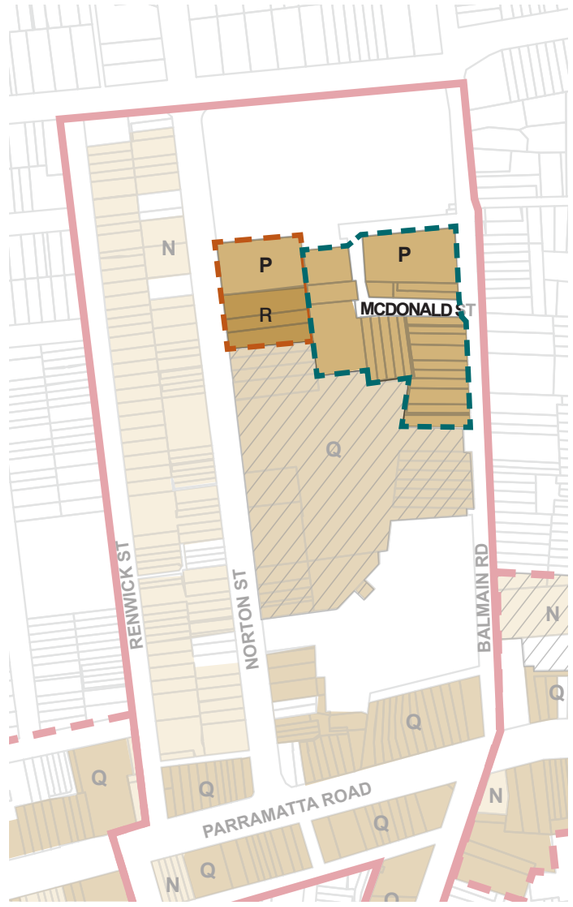
Land Zoning



FSR



Height



Legend

- Precinct - Core
- Precinct - Frame
- Site Investigation Area A
- Site Investigation Area B

Land Zoning

E1	Local Centre
R3	Medium Density Residential
SP2	Infrastructure

Floor Space Ratio Legend (n:1)

S2	1.9
V	3.0

Maximum Building Height (m)

P	17
R	20

Proposed LEP controls (Stage 1 LEP) March 2022

Area A	
LZN	E1 Local Centre
FSR	1.9:1 and 3.0:1 (Incentivised)
HOB	18m and 23m (Incentivised)

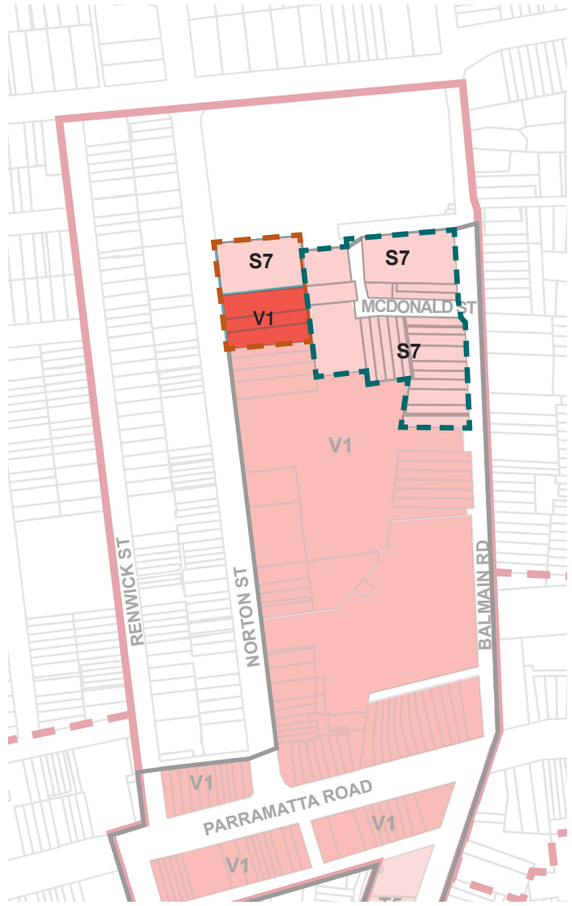
Area B	
LZN	R3 - Medium Density Residential*
FSR	1.9:1 (Incentivised)
HOB	18m (Incentivised)

*RFBs Additional permitted land use in R3 Zone.

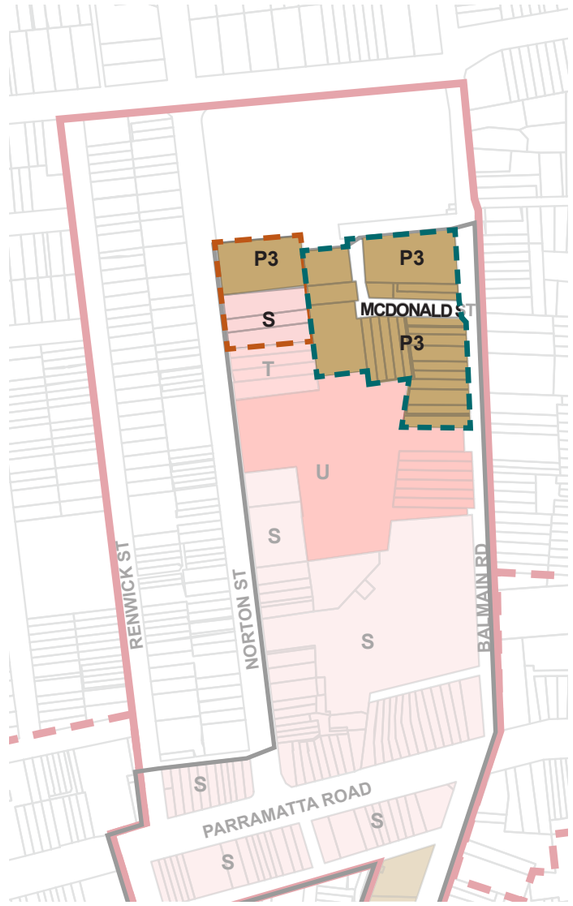
Land Zoning



FSR



Height



Legend

- Precinct - Core
- Precinct - Frame
- Parramatta Road Corridor LEP Stage 1 Implementation
- Site Investigation Area A
- Site Investigation Area B

Land Zoning

E1	Local Centre
R3	Medium Density Residential
SP2	Infrastructure

Floor Space Ratio Legend (n:1)

S7	1.9
V	3.0

Maximum Building Height (m)

P3	18m
S	23m
T	26m
U	30.5m

Site Analysis

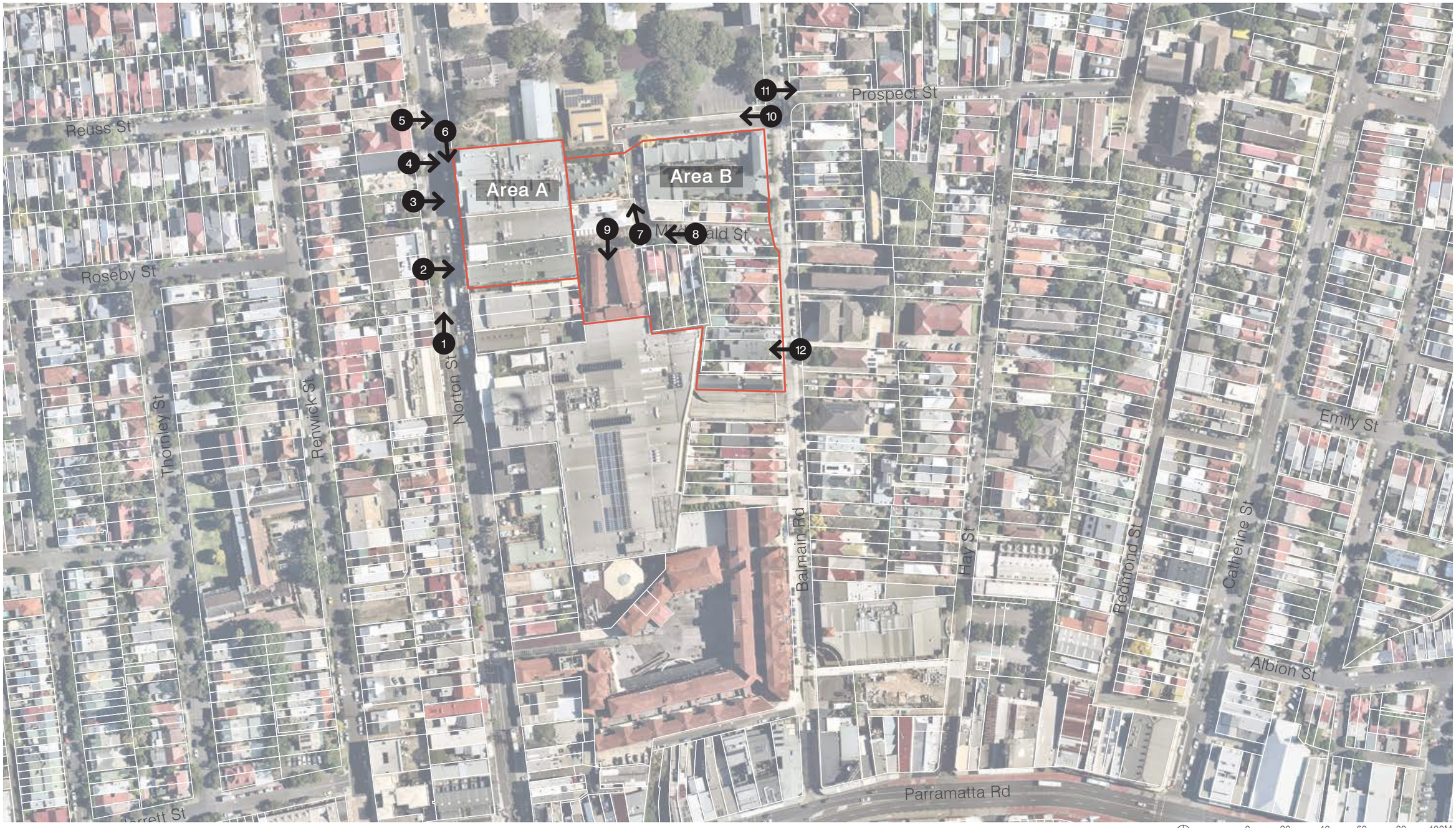
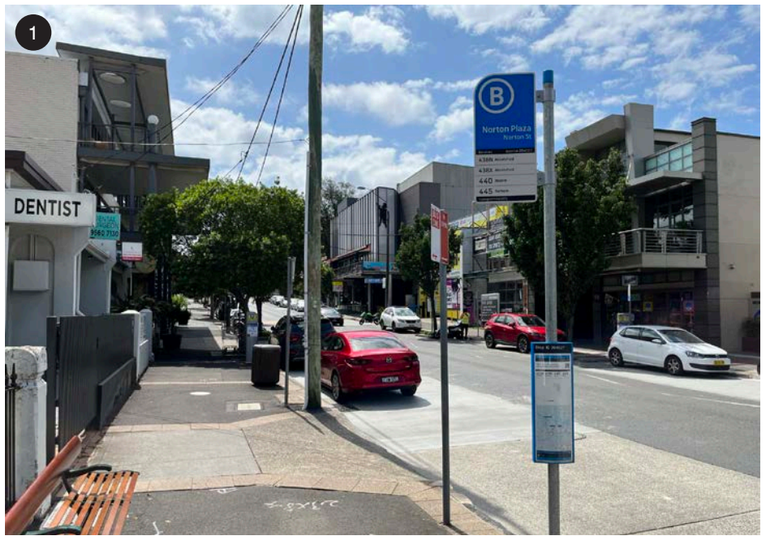
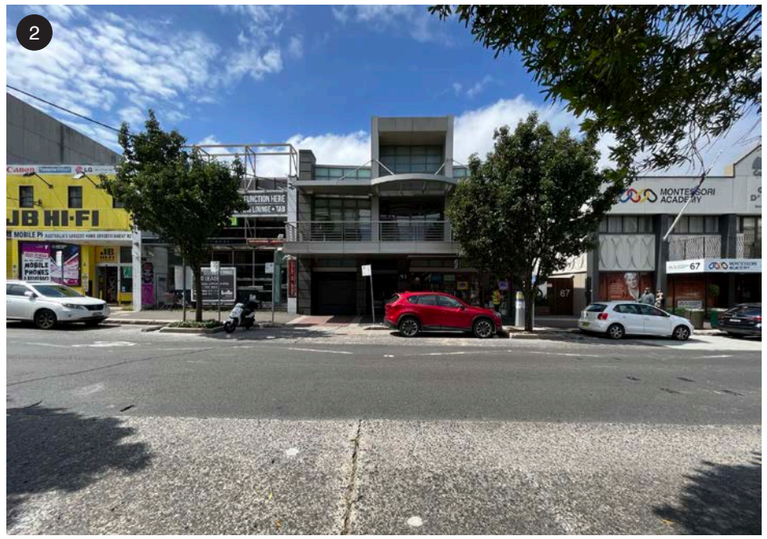


Photo key map with aerial



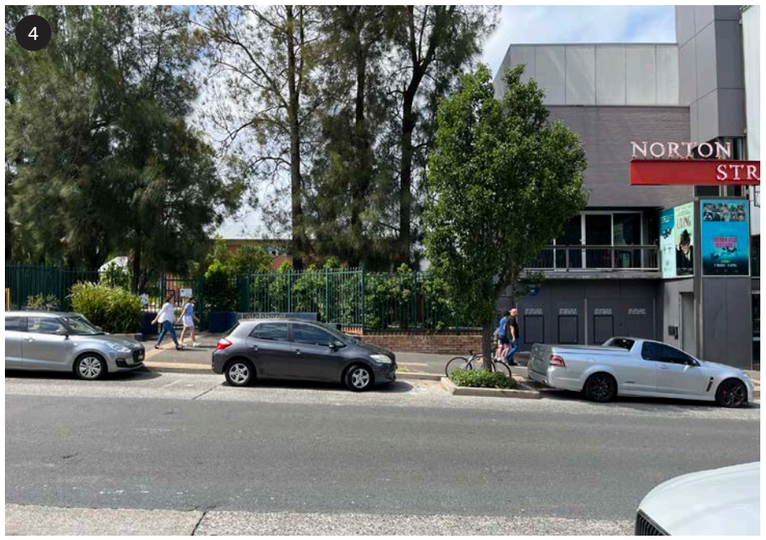
Looking north up Norton St with Site Investigation A to the right. The site currently has 2 to 3-storey retail/commercial offices, a JB Hi-Fi and the Norton St Cinema.



There is generally a consistent street wall of 2 storeys on Norton St. The upper storey is generally set back and not visible from the street.



The Norton Street Cinema is a well-recognised cultural/social hub for Leichhardt.



The frontage of the Leichhardt Public School playground is screened with mature trees, however, there is quite a harsh blank interface, and zero boundary setback to the Norton Street Cinema.



The continuous street wall is broken up by the heritage-listed Leichhardt Public School, with areas of planted open space between historical low-scale buildings.



Looking south down Norton St, with Site Investigation Area to the left of image. The western side of Norton St is a mixture of 2-storey retail and generally single-storey workers cottages at this end of Norton St.



Strata development at 14 McDonald St. It is 4 storeys at this frontage due to the topography with the car park entry at street level. The street is about 9m wide, with narrow footpaths broken up by driveways.



The driveway to car parking for 8A McDonald St appears to be shared with the site at 95 Norton St and with the dwelling at 10B McDonald St. McDonald St is characterised at present with narrow footpaths, minimal landscaping and large areas of hard, impervious surfaces.



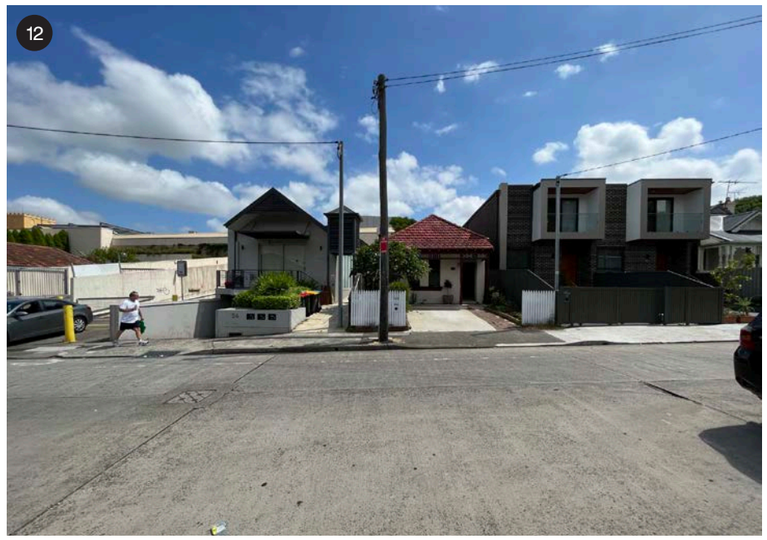
The 3-storey strata development at 8A McDonald St has overlooking and setback issues between units across the driveway with garages at ground level.



The 2-storey townhouse development at 76A Balmain Rd has entries from the street with a landscaped setback for private outdoor space and incorporates an older tall 2-storey building at the corner of McDonald St and Balmain Rd.



There is potential for an expanded east west connection through Leichhardt from Catherine St, through Prospect St (in photo) to Norton St.



Existing 1 and 2-storey detached and semi-detached housing on Balmain Rd, in Site Investigation Area B, with a recent duplex development at the right of photo. The entry/exit to Norton St Plaza car parking is to the left.

North Leichhardt Investigation Area

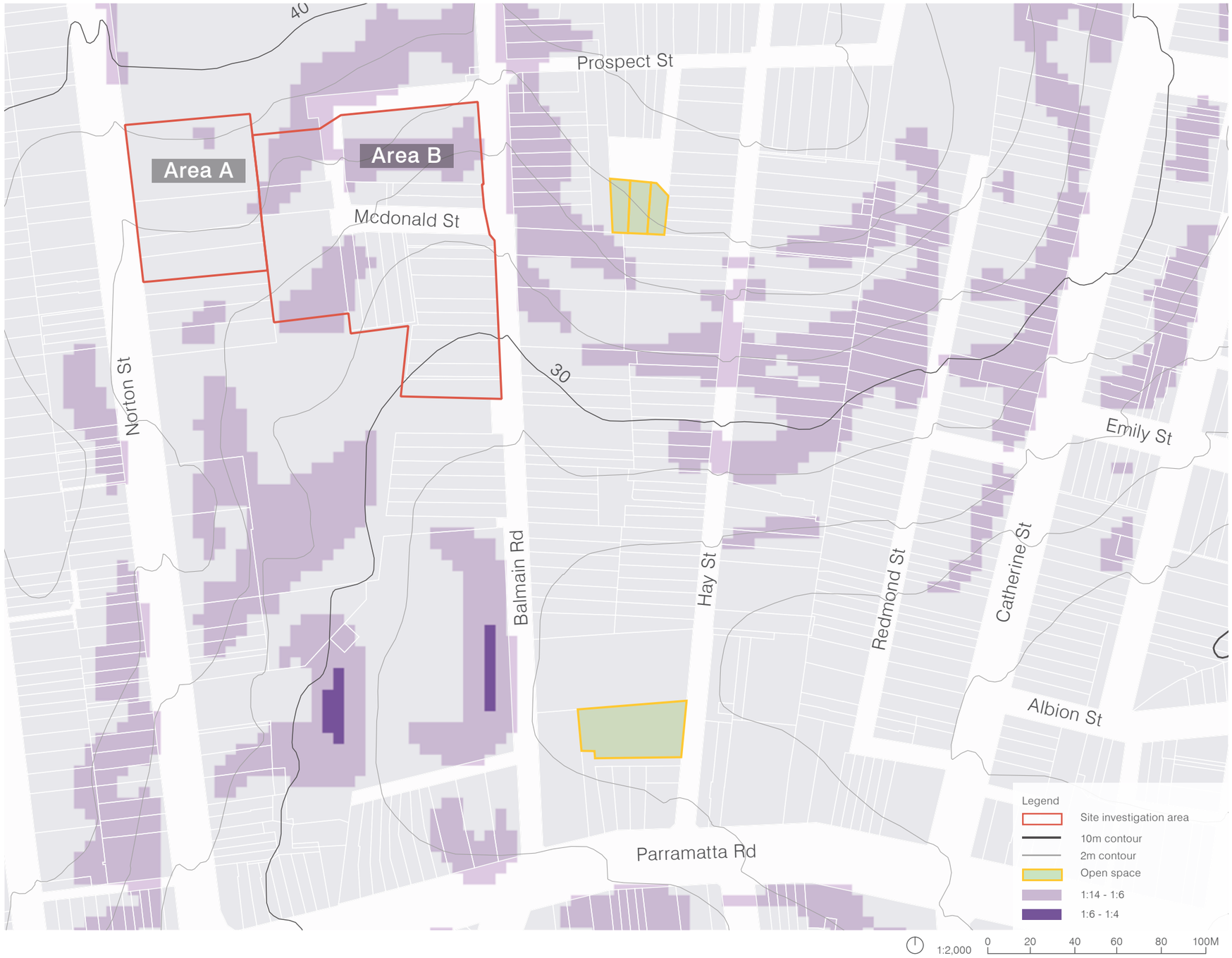
Flood Affected Lots

– The majority of the Site Investigation area, except for 74, 76 and 76A Balmain Rd and 1 McDonald St are flood affected lots.



Topography & Slope

- There is a fall from west to east of approximately 4 to 8m across the block containing the two Site Investigation Areas.
- Parts of Site Investigation Area B are quite steep, with a slope of about 1:14 to 1:6, of the natural topography. This has manifested as quite a high level change between the rear of the Norton St Plaza and the level at grade for the development at 8A McDonald St.
- The slope in this area has resulted in parts of existing sites having half storeys at street level, e.g. entry to car parking.



North Leichhardt Investigation Area

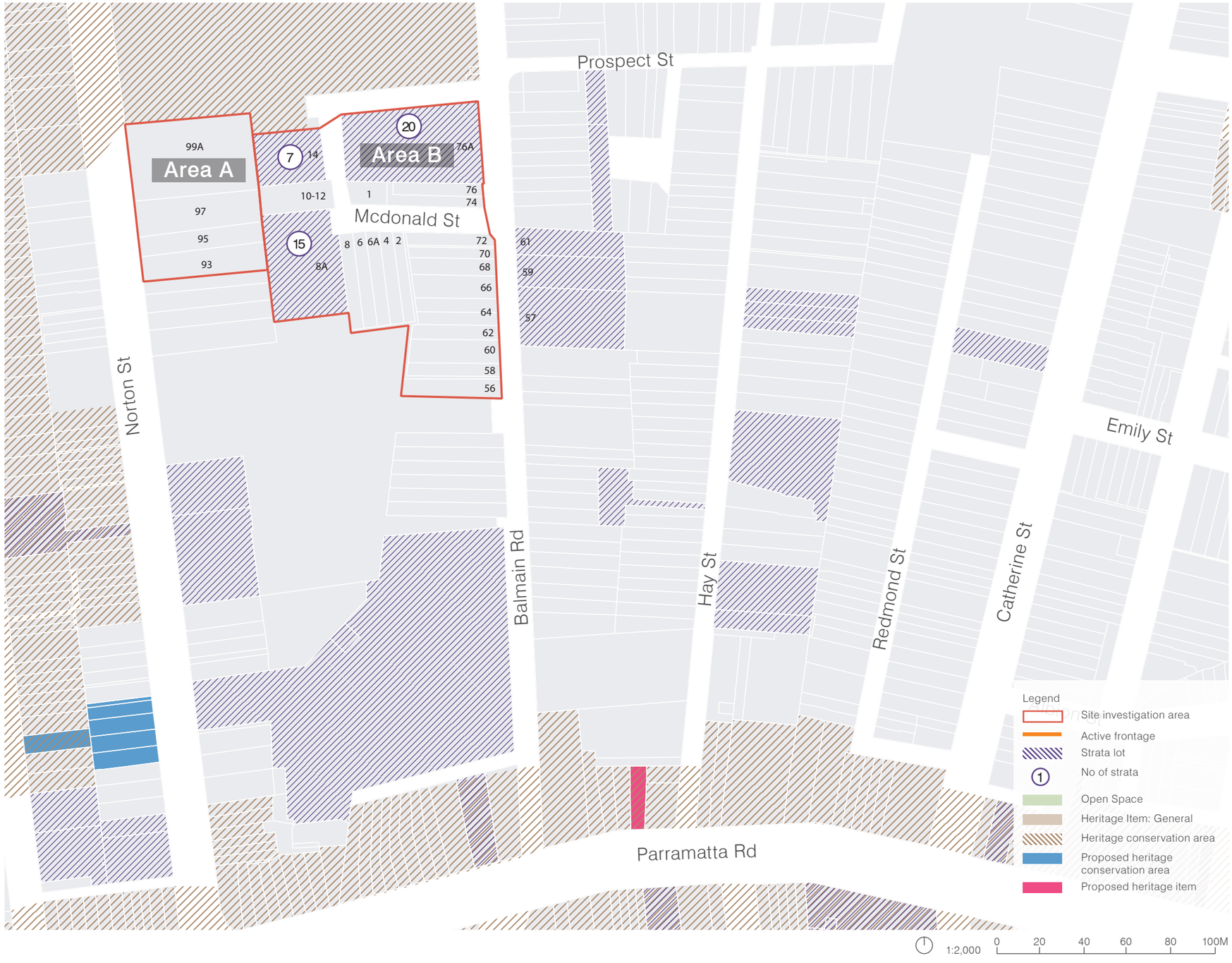
Canopy Cover

- The following map highlights low tree canopy cover in the Site Investigation Areas.
- Leichhardt Public School to the north of the Site Investigation Areas has 20-40% canopy cover.
- The north part of the block east of the Site Investigation Areas has 20-40% canopy cover. The aerial indicates trees at the rear of relatively long lots. Pine Square Playground, with 60-80% canopy cover, is located in the middle of the block bounded by Balmain Rd, Prospect St and Hay St.



Site Constraints & Opportunities

- **Site Investigation Area A** is adjacent to the heritage-listed Leichhardt Public School. The direct interface is to an outdoor play area of the school. There is potential to address setbacks to heritage and provide a better condition than currently exists. The site at 99 Norton St is the Norton St Cinema, a 3-storey building built to boundary, with a blank wall interface to Leichhardt Public School.
- Service access to this area is constrained by existing strata lots to the east and narrow streets within Site Investigation Area B. The quiet residential nature of this area may impede any potential for rear service access to these sites.
- **Site Investigation Area B** is constrained by several strata lots:
  - 76A Balmain Rd is a 2-storey townhouse development containing 20 strata units
  - 8A McDonald St is a 3-storey townhouse development containing 15 strata units. There appears to be an easement shared with the property on 10-12 McDonald St.
  - 14 McDonald St is a 3-storey townhouse development containing 7 strata units. The building height is 4 storeys at the south end due to topography and including street-level access to car parking.
- Strata developments opposite Site Investigation are B on Balmain Rd at 57, 59 and 61 Balmain Rd. These properties are 3 to 4-storey walk-ups with front setbacks of 4-9m to Balmain Rd.
- The remainder of Site Investigation Area B consists of 1 to 2-storey detached and semi-detached dwellings. Generally these are on narrow lots of about 6m width and 40m depth.
- Part of Site Investigation Area B (74, 76 and 76A Balmain Rd and 1 McDonald St) consists of a small block, approximately 60m x 40m.
- The irregular lot boundary of 55 Norton St (Norton St Plaza) and topography has resulted in a poor 2-storey blank wall interface with the south and west lots boundaries.



The preferred scenario is premised on the adjacent amalgamations and redevelopment.

1. **Site Investigation Area A**
   - **Site A1**: amalgamation of 93, 95 and 97 Norton St
   - **Site A2**: amalgamation of 93, 95 and 97 Norton St
2. **Site Investigation Area B**
   - **Site B1**: amalgamation of 74, 76 and 76A Balmain Rd and 1 McDonald St as one lot. 76A is currently strata townhouses containing 20 dwellings
   - **Site B2-1** is an amalgamation of 56, 58, 60, 62 Balmain Rd.
   - **Site B2-2** is an amalgamation of 64, 66, 68, 70, 72 Balmain Rd.
   - **Site B2-3** is an amalgamation of 2, 4, 6A, 6, 8 McDonald St.
   - **Site B3:**amalgamation of 8A, 10-12 and 14 McDonald St. 8A and 14 McDonald St is strata multi dwelling housing containing 15 and 7 dwellings respectively.

- The typologies tested are single and double-loaded perimeter block apartments, with maisonettes at ground level for sites within Site Investigation Area B, and shop top apartments for Site Investigation Area A.

Key urban design considerations incorporated:

- Transition from the 8 storeys at Opportunity Site 4 on Balmain Road down to 4 storeys at the north end of site B2.
- Responding to the context on the east side of Balmain Rd (see 3d massing and sections on the following pages). Opposite Site B2-1 and B2-2 on Balmain Rd are 2 detached dwellings and 3-4 storey RFBs. The 3-storey street wall on Balmain Rd at Site B1 is responsive in scale to the predominantly single storey dwellings opposite.

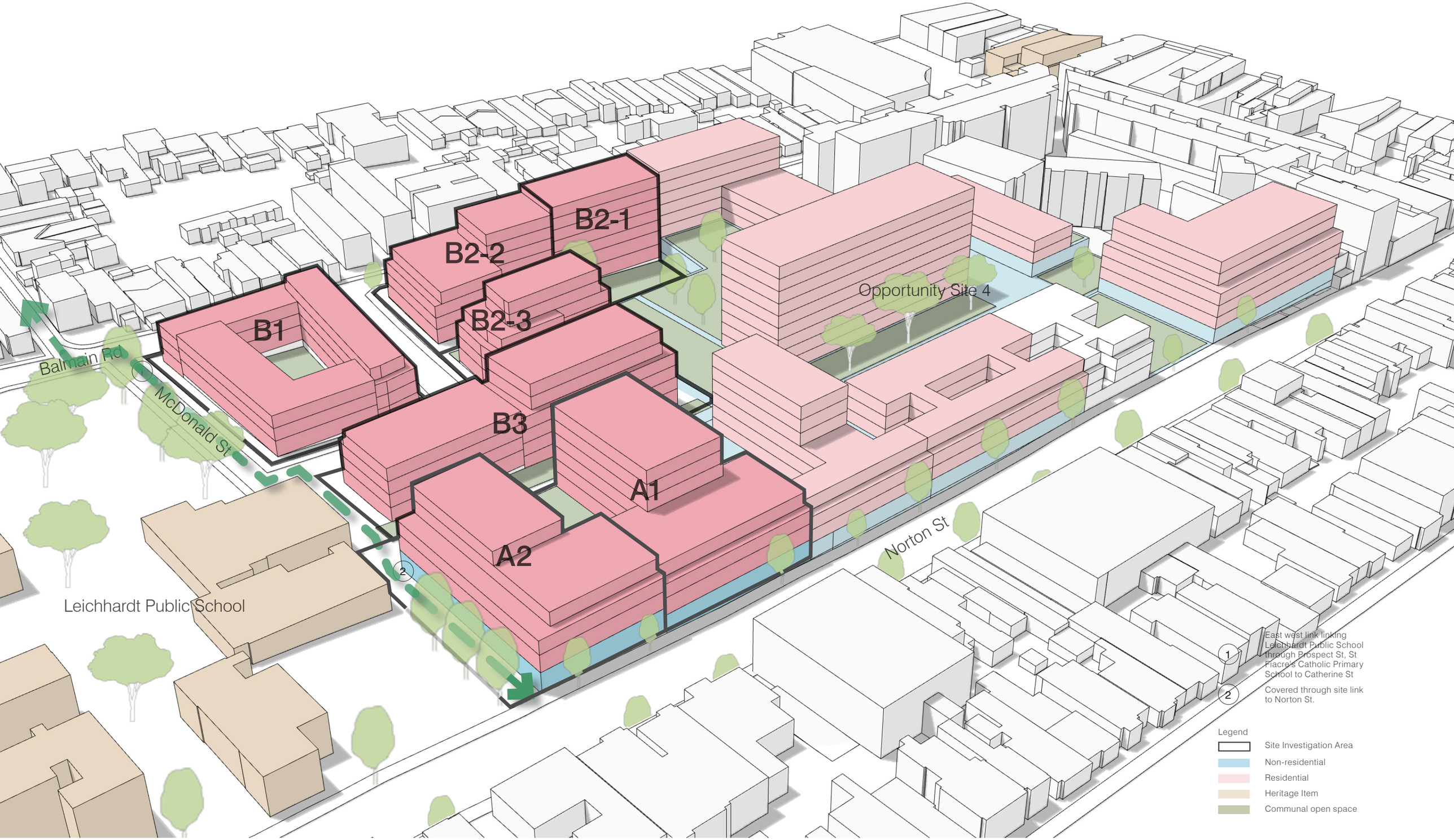
The properties opposite the Site Investigation Area B are not within a heritage conservation area nor contain any heritage items.

- The bulk and scale of massing on A2 is set back from the northern boundary and interface to heritage-listed Leichhardt Public School to minimise direct overlooking of the school's outdoor play area. The setback tested is 6m for the first 3 storeys and an additional 4m for the upper 2 storeys.
- Open to sky link through A2 connecting Balmain Rd/McDonald St to Norton St, provided in the setback to Leichhardt Public School. It is assumed in this scenario that the link would run through part of the school's lot.
- 4 storeys along Norton St (3-storey street wall, with set back upper storey)
- For Sites B2-1, B2-2 and B2-3 **i**n the amalgamation of a smaller number of lots into three sites, consideration was given to:
  - Continuous street wall to Balmain Rd, hence 0m side boundary setbacks, appropriate residential floor plate depth of 20m, and generous communal open space with high amenity.
  - A maximum of 6 storeys was tested, consistent with the southern end of the massing at Site B3.

A range of scenarios were tested for this investigation area prior to this being selected as the preferred scenario. These are included within Appendix I of this report.

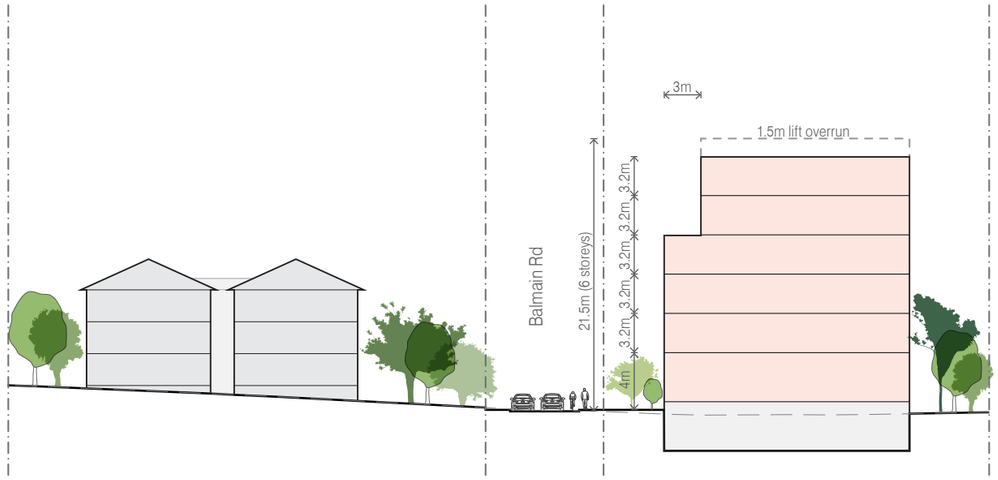


Preferred scenario plan

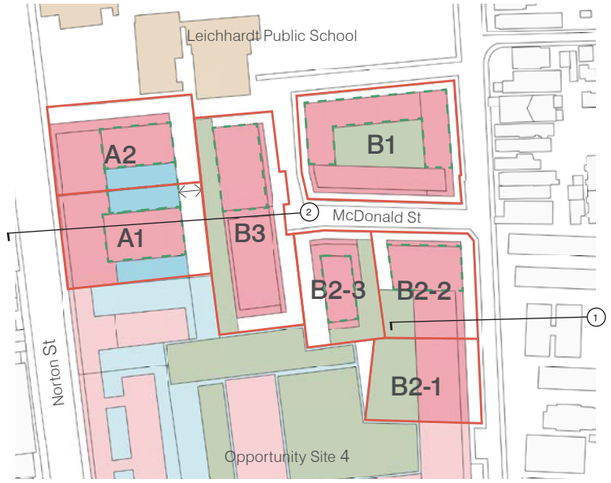


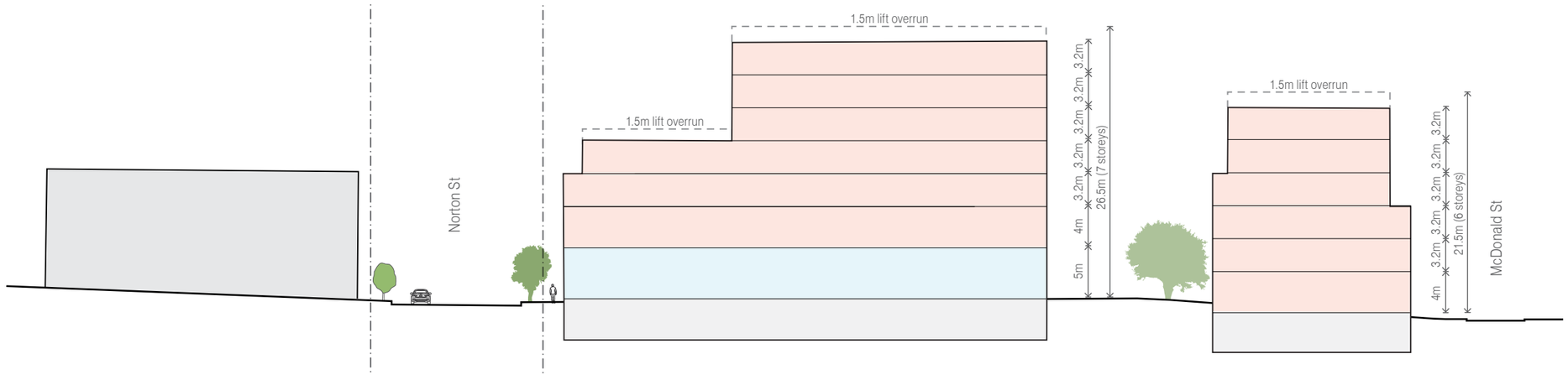
Preferred scenario - view from northwest

Sections



Preferred scenario - Section 1





Preferred scenario - Section 2



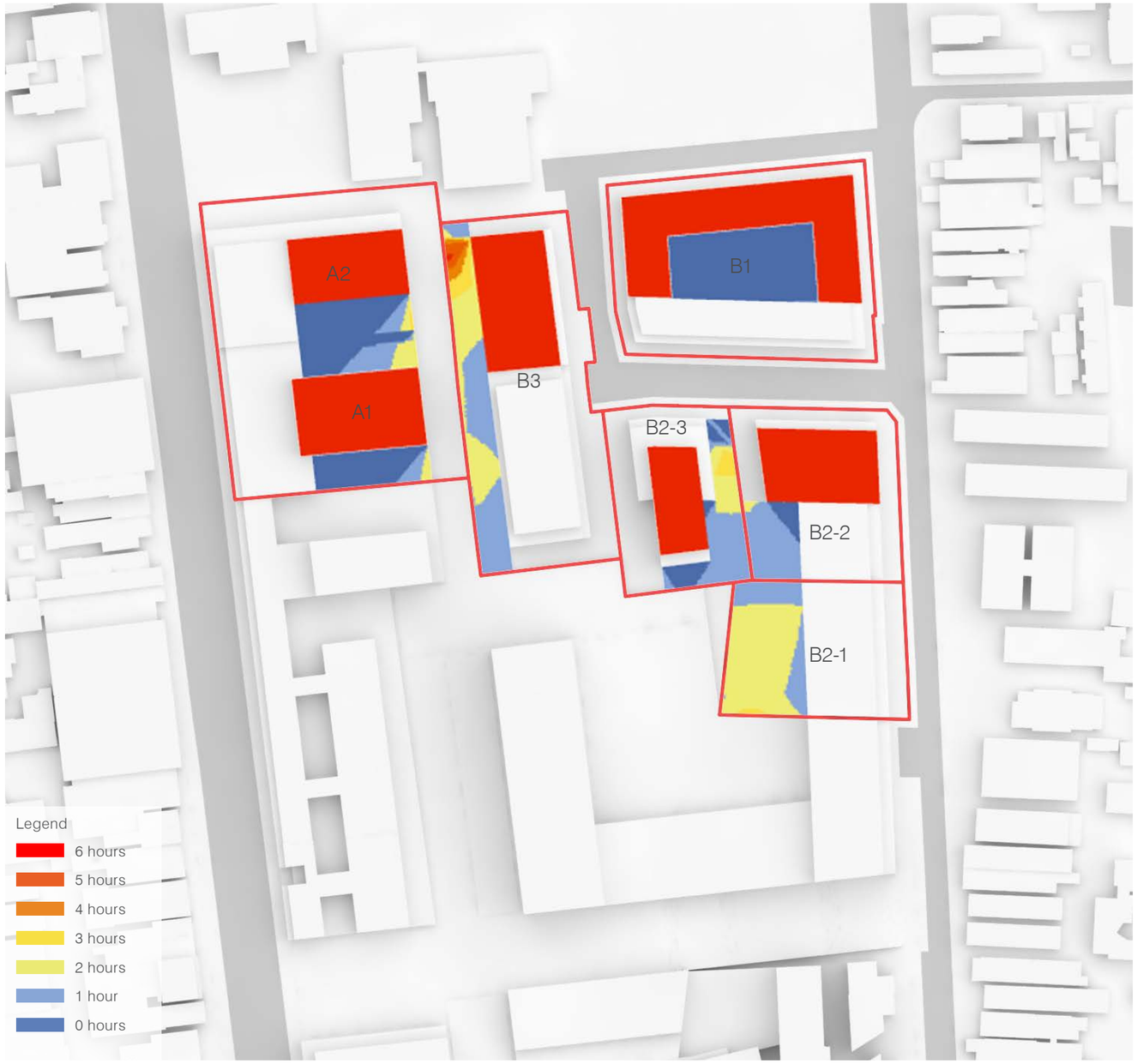
Preferred scenario - view from northeast

Solar access to communal open space - winter solstice (June 21)

This heat map analysis describes the number of hours of sunlight to the proposed open space areas within subject site, assessed between 9am and 3pm on June 21.

Results
Communal open space for each Site Investigation Area includes space at ground level and at rooftops. The diagram and summary table below indicates that Objective 3D-1 of the ADG is achievable for each site.

Site	Percentage achieving at least 2 hours between 9am and 3pm on June 21
A1	100% (rooftop)
A2	100% (rooftop)
B1	100% (rooftop)
B2-1	68%
B2-2	100% (rooftop)
B2-3	100% (rooftop)
B3	100% (rooftop)

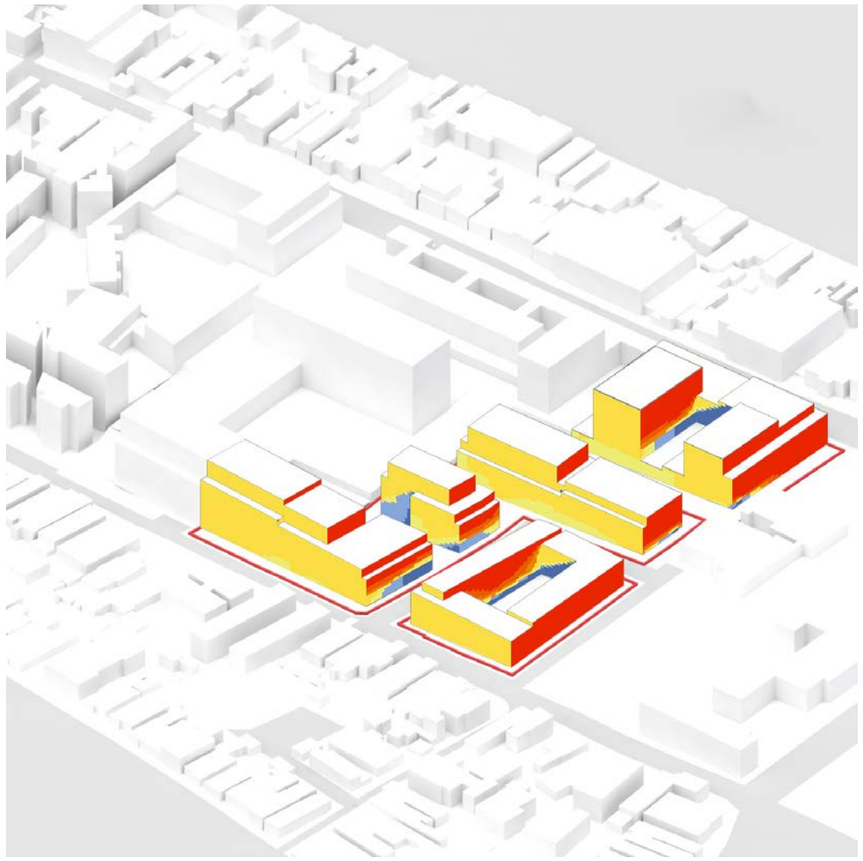


Solar access to facades - winter solstice (June 21)

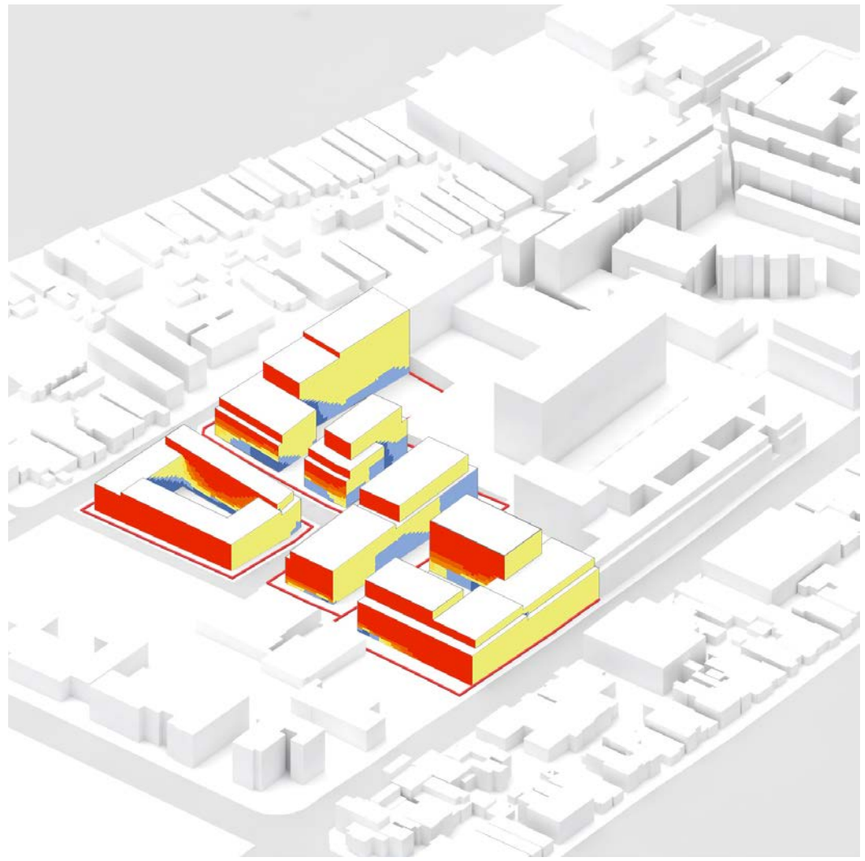
This heat map analysis describes the number of hours of sunlight to the proposed development facades (as a built form massing), assessed between 9am and 3pm on June 21.

Summary

– The majority of the north and east facades of the proposed built form massing achieve at least 2 hours of solar access. This demonstrates that Objective 4A-1 of the ADG is achievable.



NE



NW

Legend

- 6 hours
- 5 hours
- 4 hours
- 3 hours
- 2 hours
- 1 hour
- 0 hours

Site B2 Yield

Site Investigation Area B2-1

Site area	1474m²	
Communal Open Space	633m²	43%

	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	671.6	503.7	428.2	4
L1	671.6	503.7	428.2	3.2
L2	671.6	503.7	428.2	3.2
L3	671.6	503.7	428.2	3.2
L4	671.6	503.7	428.2	3.2
L5	570.6	428.0	363.8	3.2
L6	570.6	428.0	363.8	3.2
Lift overrun				1.5
Total	**4499.5**	**3374.6**	**2868.4**	**24.7**
FSR (n:1)		**2.3**		
No. of dwellings (NLA/67m²)		**42**		

Site Investigation Area B2-2

Site area	1650m²	
Communal Open Space	767m²	46%

	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	962.4	721.8	613.5	4
L1	962.4	721.8	613.5	3.2
L2	962.4	721.8	613.5	3.2
L3	903.2	677.4	575.8	3.2
L4	329.0	246.8	209.7	3.2
L5	329.0	246.8	209.7	3.2
Lift overrun				1.5
Total	**4448.4**	**3363.3**	**2835.8**	**21.5**
FSR (n:1)		**2.0**		
No. of dwellings (NLA/67m²)		**42**		

Site Investigation Area B2-3

Site area	1397m²	
Communal Open Space	406m²	29%

	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	568.1	426.1	362.2	4
L1	568.1	426.1	362.2	3.2
L2	568.1	426.1	362.2	3.2
L3	530.4	397.8	338.1	3.2
L4	313.5	235.1	199.9	3.2
L5	313.5	235.1	199.9	3.2
Lift overrun				1.5
Total	**2861.7**	**2146.3**	**1824.3**	**21.5**
FSR (n:1)		**1.5**		
No. of dwellings (NLA/67m²)		**27**		



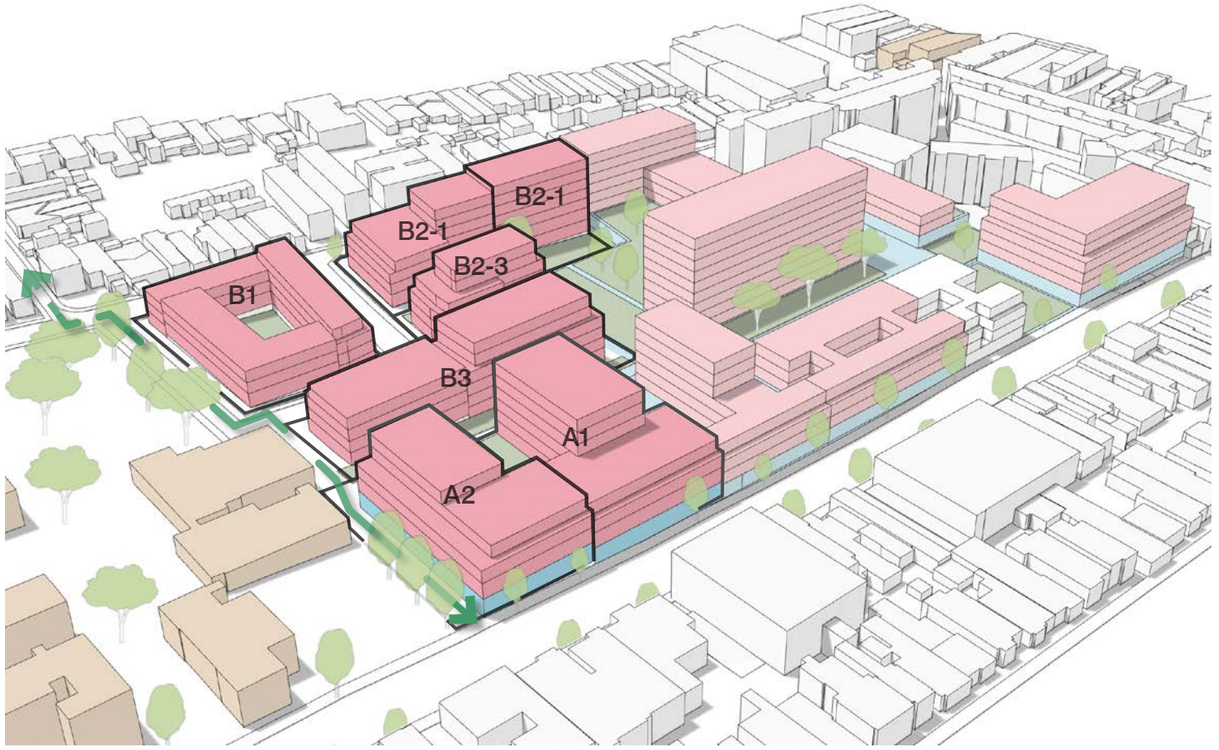
Key Plan

1:2,500 0 25 50 75 100M

Summary of Recommendations

The preferred scenario is the preferred eventual urban design outcome to be used as the basis for future Development Controls.

- Testing for all scenarios for both Investigation Areas indicates that the FSR proposed in PRCUTS and Proposed LEP Stage 1 are achievable, except for Site A1 and B1.
- For Site A1 an FSR of 3:1 was proposed in PRCUTS (only for 93 and 95 Norton St) and Proposed LEP Stage 1 (for 93, 95 and 97 Norton St).
- For Site B1 an FSR of 1.9 was proposed in PRCUTS and Proposed LEP Stage 1.
- The resulting HOB for all scenarios is higher than the HOB proposed in PRCUTS and Proposed LEP Stage 1. The building heights were impacted by a change to the NCC which became effective from May 1, 2023, requiring residential floor to floor heights to increase to 3.2m. Further considerations include keeping to typical 20m floorplate depths for residential apartments, minimum setbacks and building separation, consideration of overshadowing to neighbouring properties, and in the case of Scenario 1, a setback and dedication for a through site link at the north of the site.
- While Architectus acknowledges that strata sites in B1 and B3 are unlikely to turn over in the short-term, LEP and DCP recommendations have been provided in the event that redevelopment becomes feasible in the future. The controls ensure a cohesive urban design in terms of consistent street wall height and building height transition where it is required and appropriate.
- Testing of all development scenarios demonstrates that the provision of a through site link adjacent to Leichhardt Public School is possible as an open to sky link or as a covered link.
- The through site link is dependent upon Site A being redeveloped, and Leichhardt Public School dedicating part of their lot for the potential through site link. Architectus recommends the open to sky link as the aspiration, given the broader east-west connection through Prospect St to Catherine St is open to sky, even if this is not delivered in the short to medium term. This link would be of benefit to the wider community, particularly given the existing long north-south block lengths and the proposed link's ability to connect east to Prospect Street and Whites Creek Lane.
- Direct overlooking of the Leichhardt Public School outdoor play area can be managed by screening by fencing and planting, the building setbacks provided, balustrade height and treatment.



Preferred Scenario Perspective

LEP Recommendations

LEP recommendations

- Land Zoning controls to be retained as existing
- Heights and FSRs have been revised from PRCUTS and the Draft Structure Plan following site testing.

See previous page for further discussion and justification.

Existing LEP controls (IWLEP 2022)	
LZN	E1 Local Centre / R1 General residential
FSR	1.0 (E1 zone) / 0.5:1 (R1 zone)
HOB	Undefined

PRCUTS recommendations (2016)	
LZN	B2 Local Centre / R3 Medium Density Residential
FSR	1.9:1 (typical) / 3:1 (two lots on Norton Street)
HOB	17m (typical) / 22m (two lots on Norton Street)

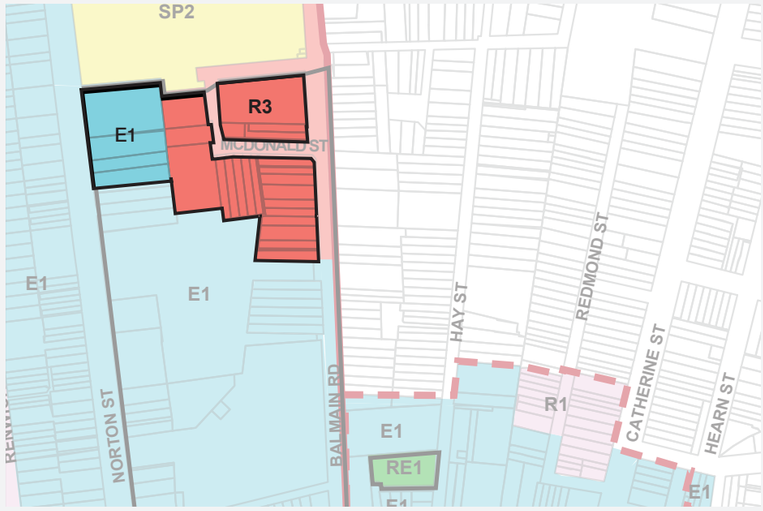
Draft Structure Plan Controls (2021)	
LZN	E1 Local Centre / R3 Medium Density Residential
FSR	1.9:1 (typical) / 3:1 (three lots on Norton Street)
HOB	18m (typical) / 23m (three lots on Norton Street)

Final recommendations	
LZN	E1 Local Centre / R3 Medium Density Residential*
FSR	1.5:1, 1.9:1, 2.1:1, 2.3:1 and 2.7:1 (Incentivised)
HOB	15.5m, 20.5m, 21.5m, 25m and 27m (Incentivised)

*RFBs Additional permitted land use in R3 Zone.

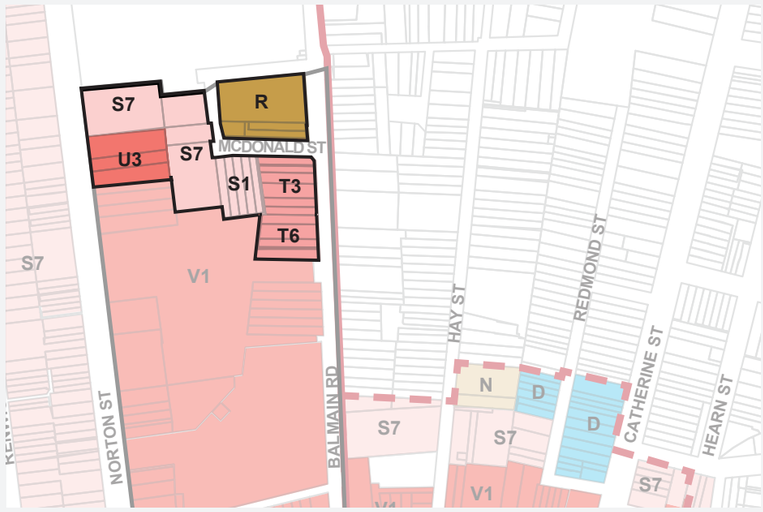
Land Zoning

- E1 Local Centre
- R3 Medium Density Residential
- SP2 Infrastructure



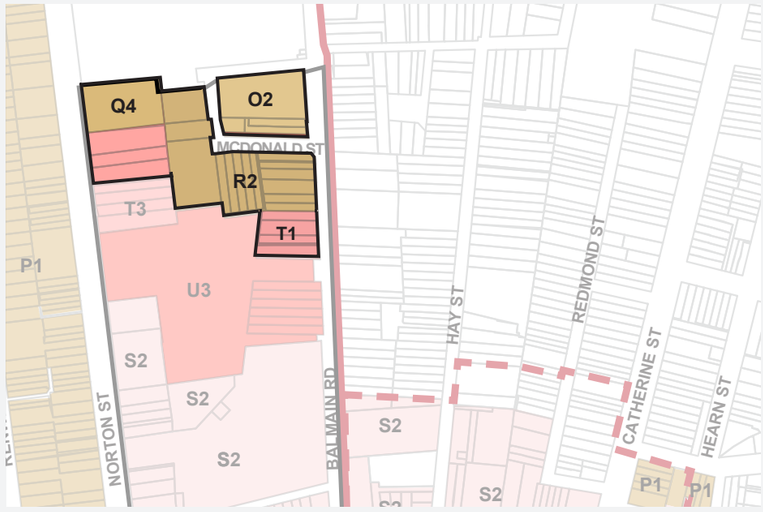
Floor Space Ratio Legend (n:1)

- R 1.4
- S1 1.5
- S7 1.9
- T3 2.1
- T6 2.3
- U3 2.7
- V1 3.0



Maximum Building Height (m)

- O2 15.5
- Q4 20.5
- R2 21.5
- S2 23.5
- T1 25
- T3 27
- U3 32



Recommendations Diagrams

The following pages present diagrams based on the preferred scenario that may be further used towards development controls and guidance

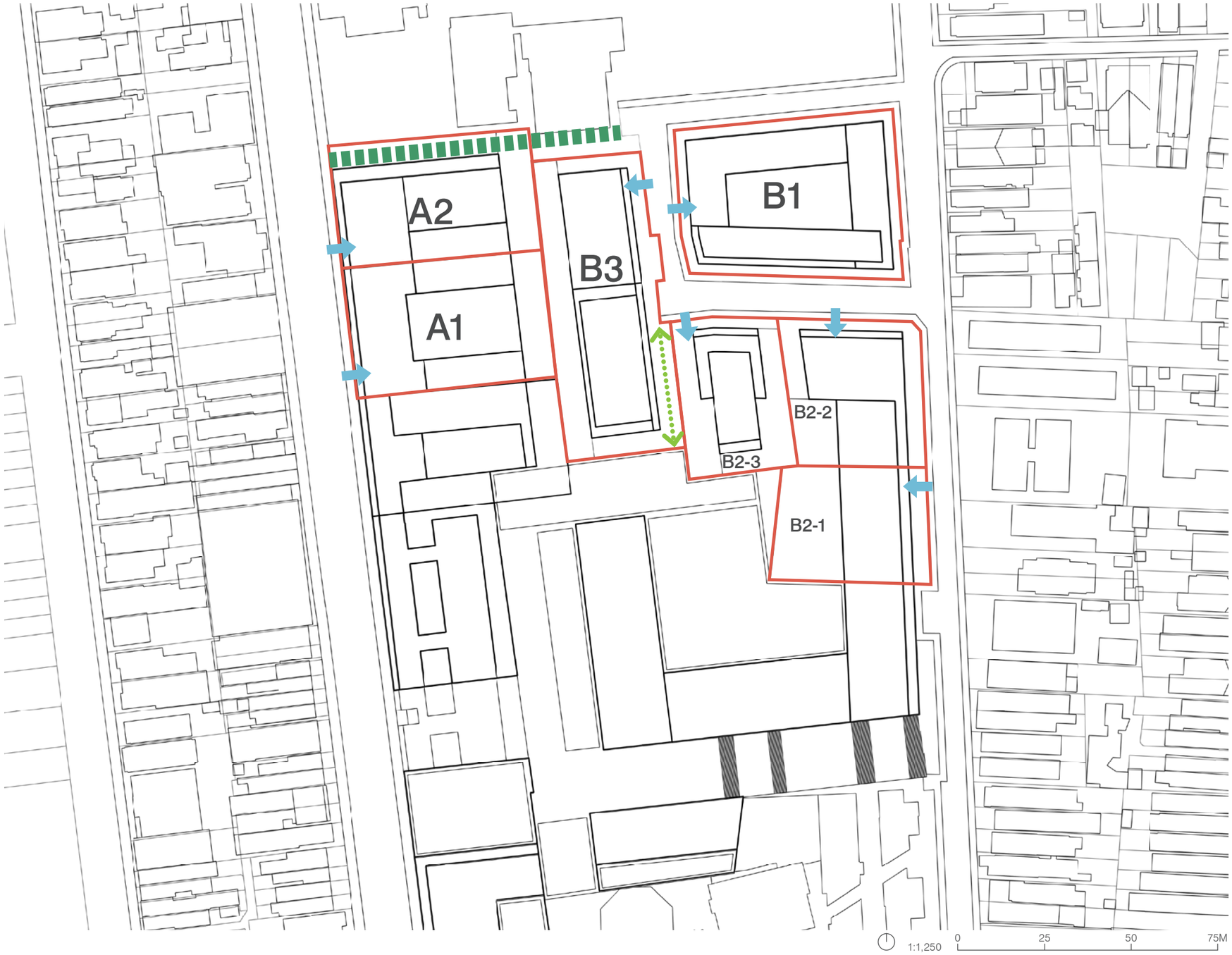
Lot Amalgamations



Height in Storeys



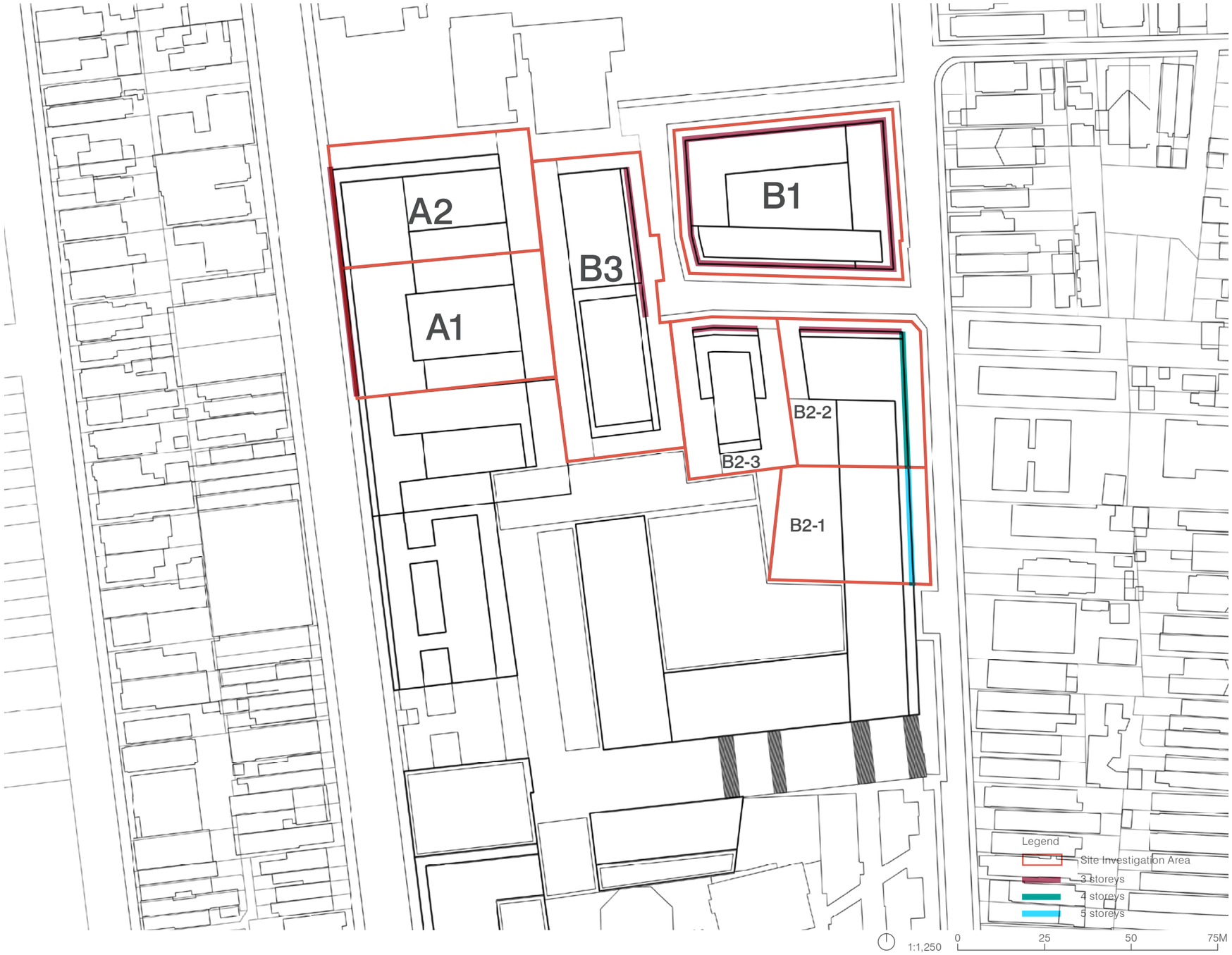
Circulation



Street Setbacks



Street Frontage Heights



1.10 Densities along Parramatta Road

Issue

Densities along Parramatta Road

With reference to Leichhardt Council's 2016 Parramatta Road and Norton Street urban design study, clarification is sought regarding Architectus' proposed densities of FSR 3:1 along Parramatta Road and Norton Street with 'bonus for public benefits' (Refer to Architectus Structure Plan p.54) – what height and FSR bonuses should be considered in return for public benefits?

Guidance sought on appropriate LEP mechanisms to implement these provisions.

Justification

The previous section provides recommendations to building heights for the special or 'Opportunity Sites' that correspond with the provision of through-site links and public space. These through-site links are proposed in Council's Draft Structure Plan and should be delivered in redevelopment of the Opportunity Sites.

Regarding other sites along Parramatta Rd, and as per Architectus' 2016 report (p39), bonus height is recommended to incentivise the creation of mid-block connections or through-site links as a public benefit.

The following section provides testing to:

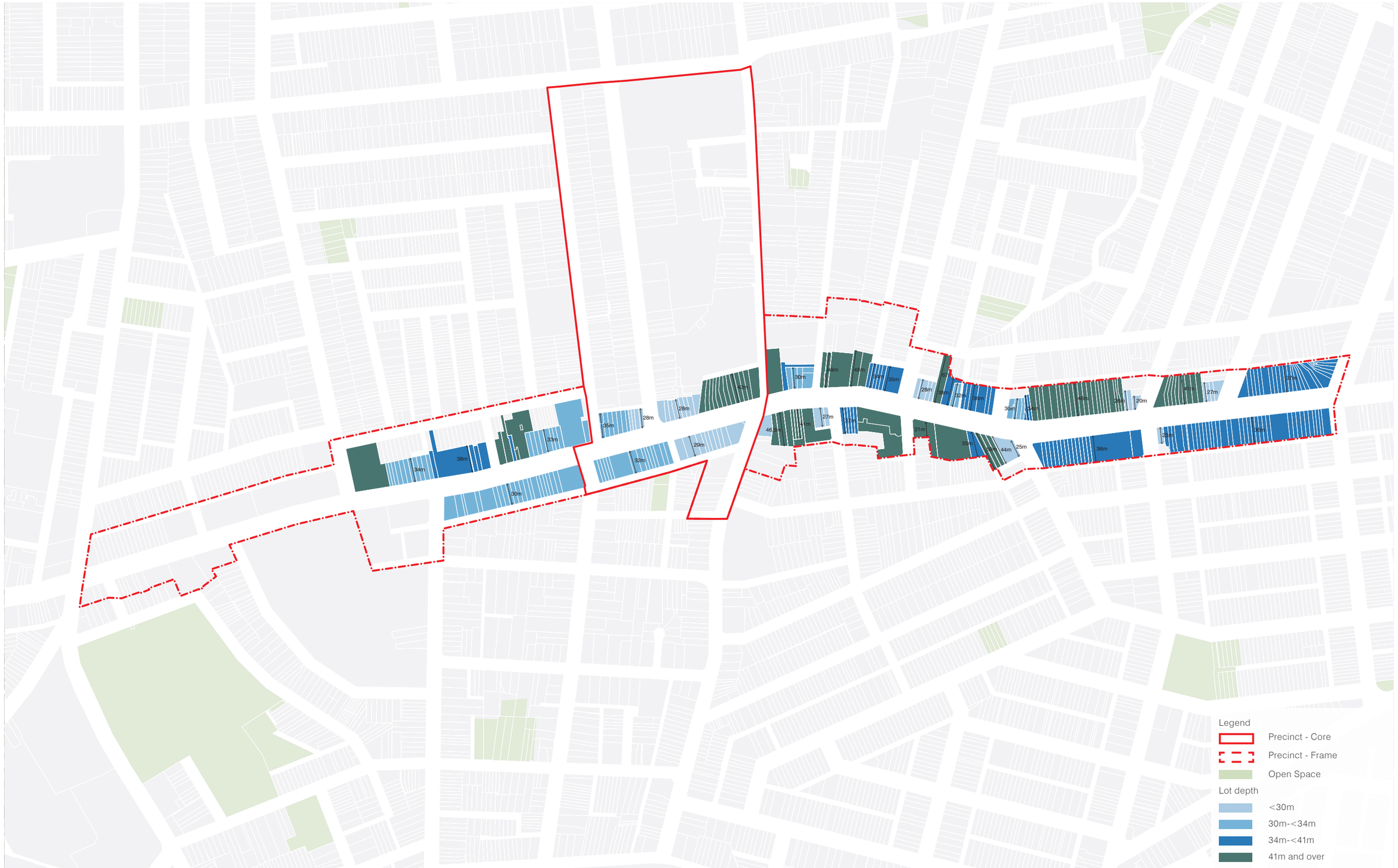
1. demonstrate that sites along Parramatta Rd can achieve FSR 3:1 and
2. determine the additional height to be incentivised for provision of a through-site link.

Testing is provided based on two typical lot depths of sites along Parramatta Rd: 33m lot depth and >45m lot depth (46.5m type), to test against constraints such as residential floorplate depths and ADG minimum building separation requirements.



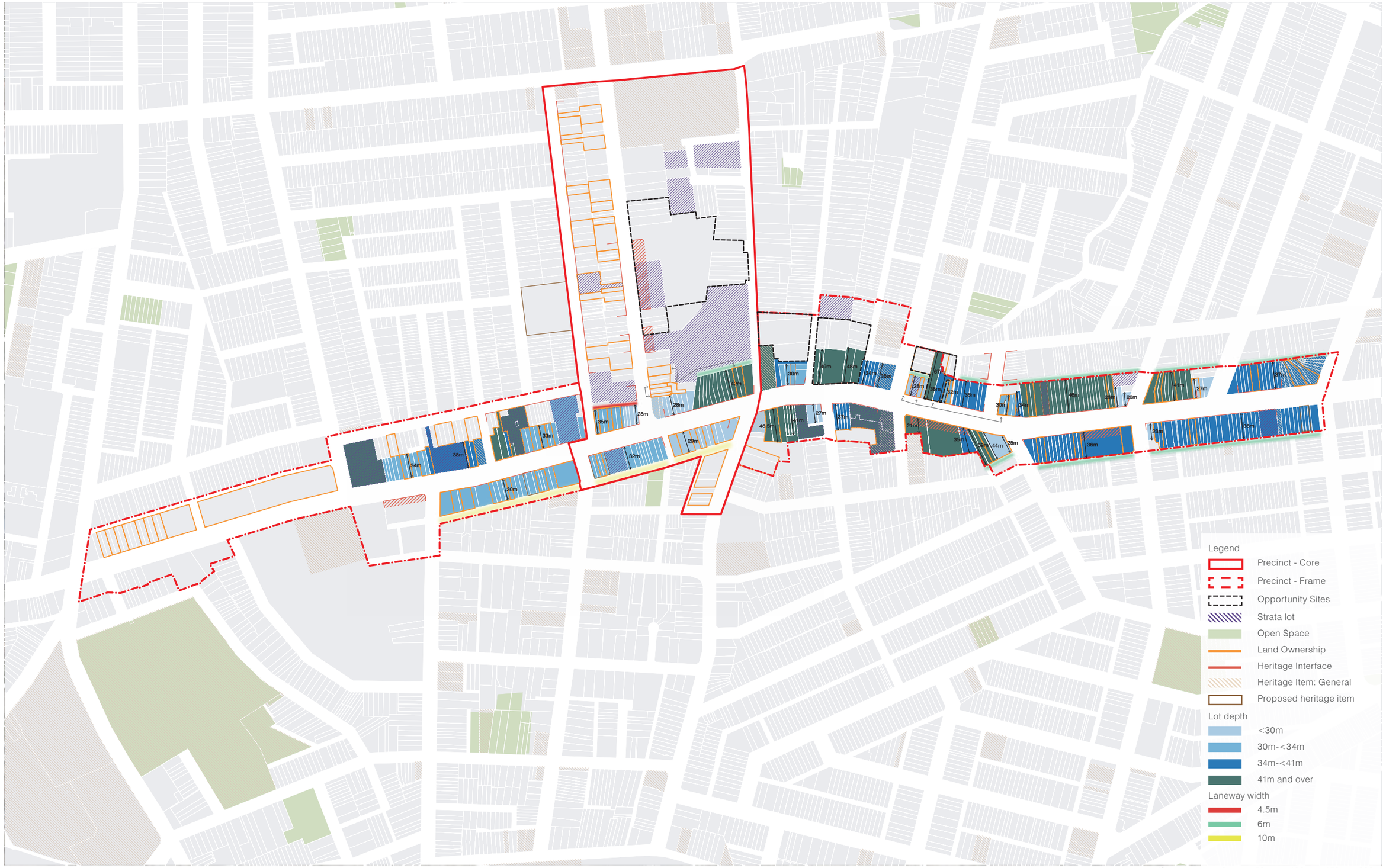
Architectus' 2016 Draft Structure Plan with indicative locations for through-site links

Densities along Parramatta Road



Lot depths for sites along Parramatta Road

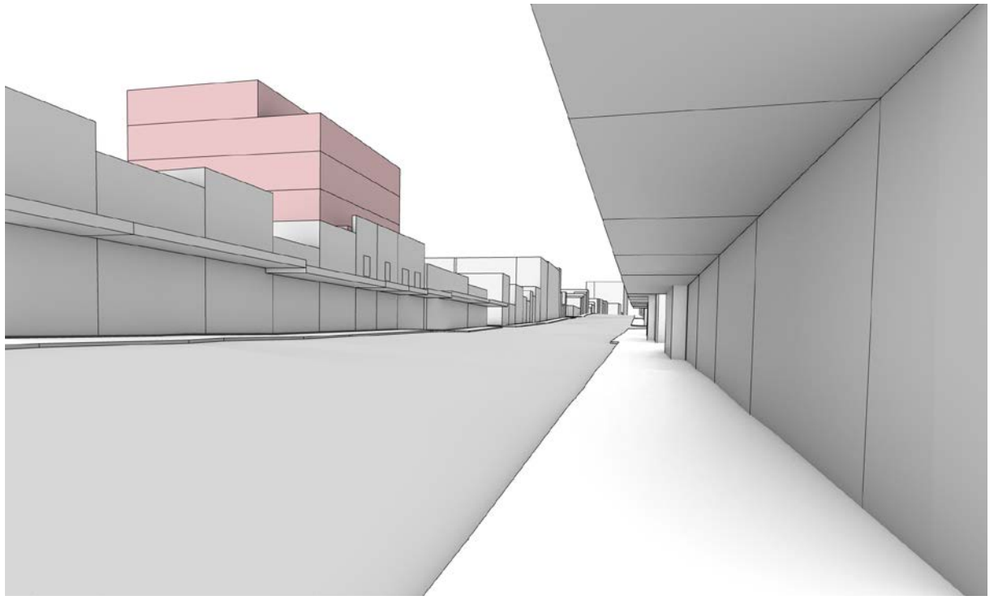
Densities along Parramatta Road



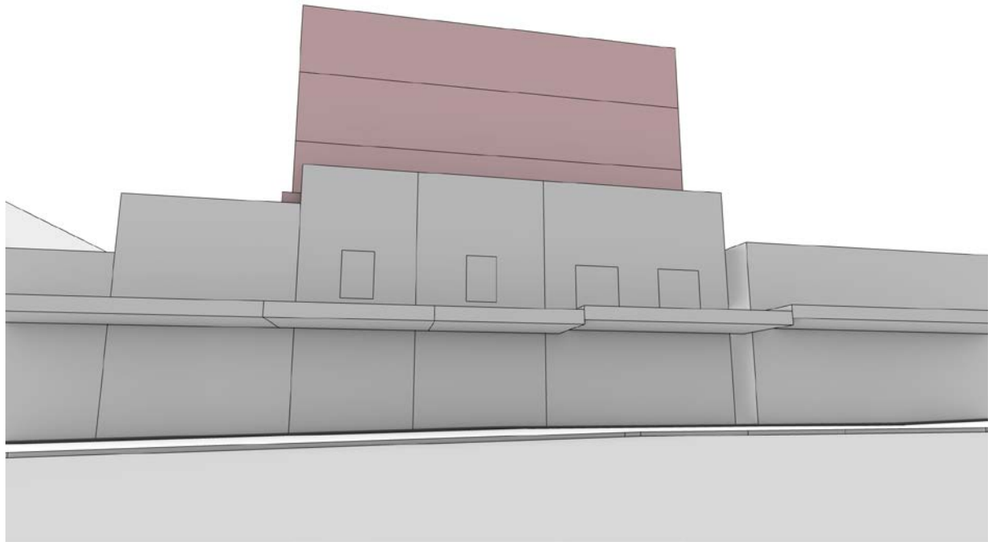
Lot depths for sites along Parramatta Road - Constraints Overlay

Preferred option (6 storeys - 9m front setback to top storey)

The following pages present the preferred scenario for Parramatta Road including view testing and FSR testing across a range of site depths. A range of options were considered (see Appendix II of this document) prior to deciding on this approach as preferred.



View from east Parramatta Rd

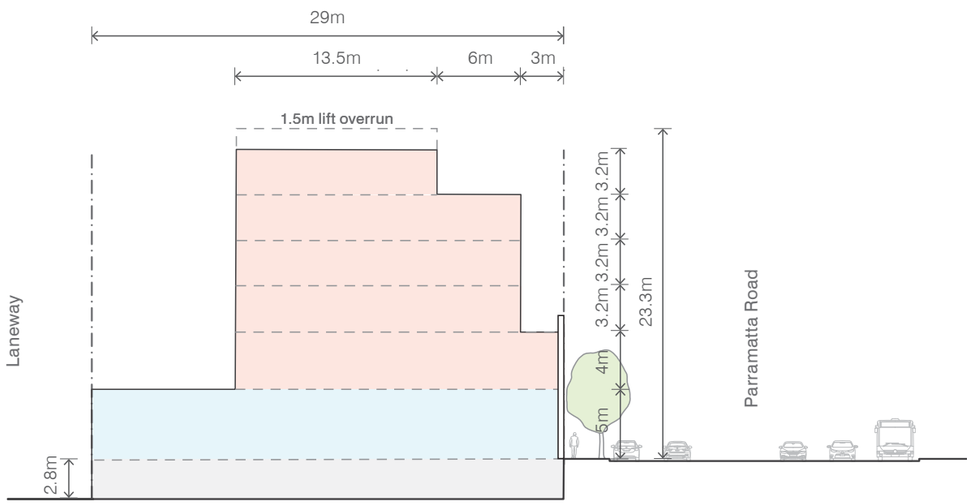


View from opposite side Parramatta Rd

Test Site 18m wide, 29m deep (466, 468, 470 Parramatta Rd)

Site area	522m²			
	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	522	443.7	377.1	5
L1	405	303.8	258.2	4
L2	351	263.3	223.8	3.2
L3	351	263.3	223.8	3.2
L4	351	263.3	223.8	3.2
L5	243	182.3	154.9	3.2
Lift overrun				1.5
Total	**2223**	**1719.5**	**1461.5**	**23.3**
FSR (n:1)	**3.3**			
No. of dwellings (NLA/67m²)		**20**		

*Residential max floorplate 22.5m deep

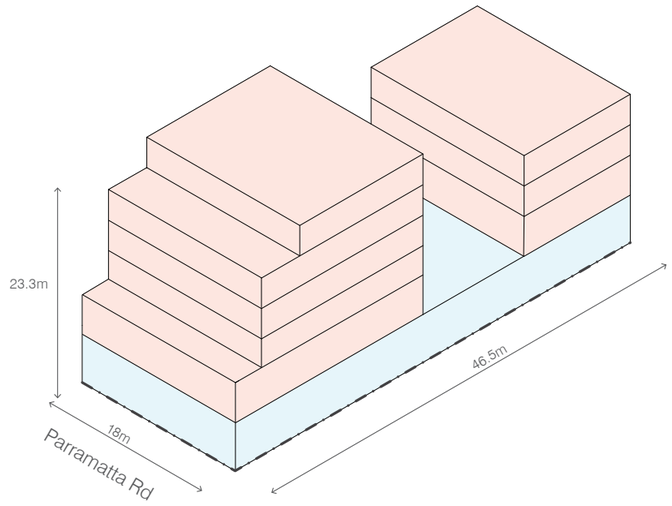


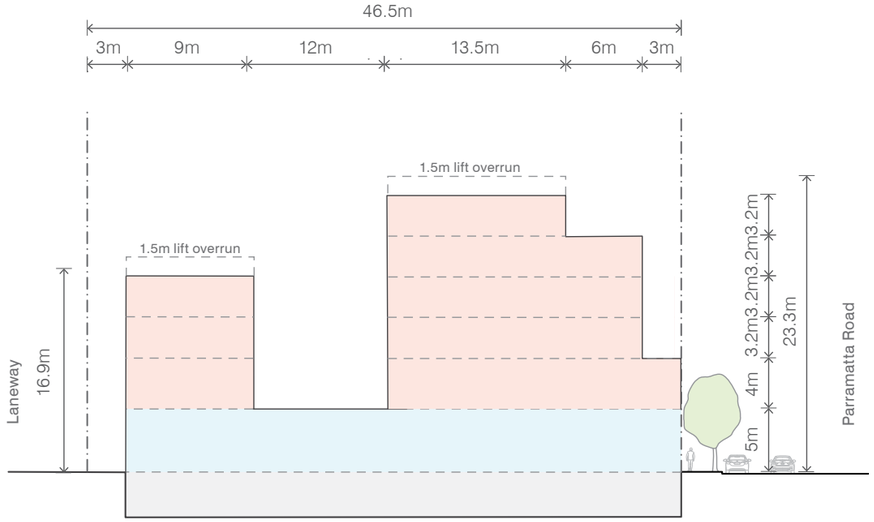
Densities along Parramatta Road

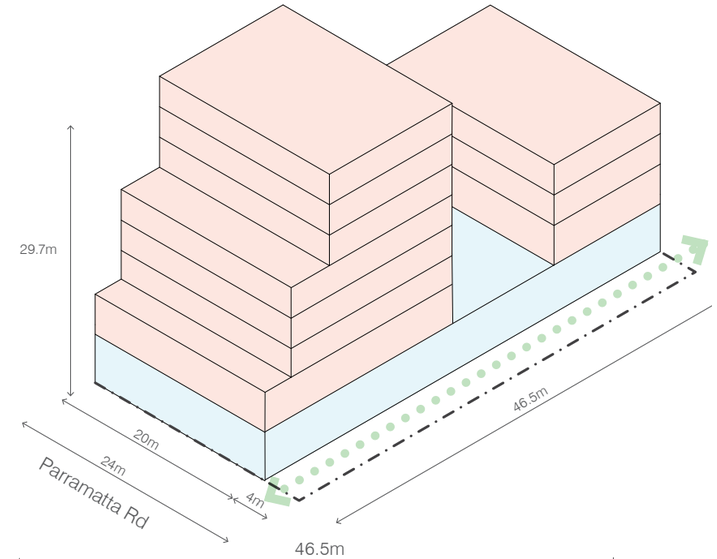
1

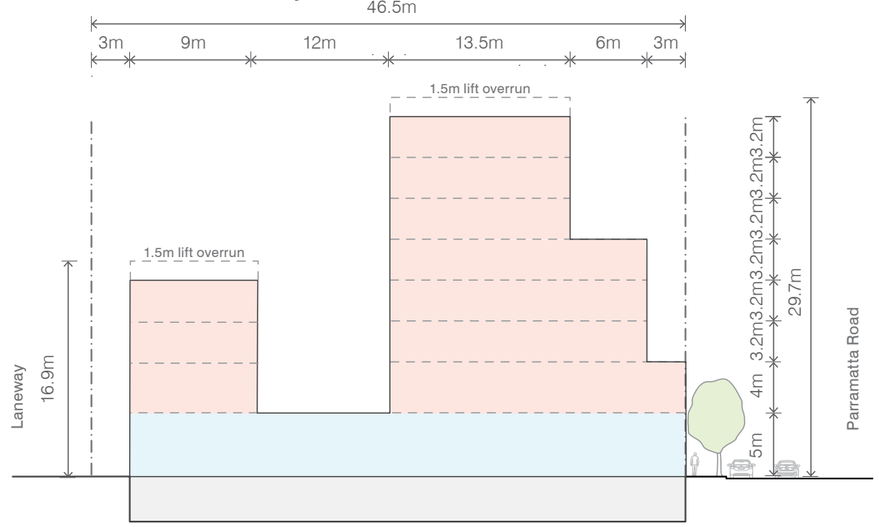
Lot depth 46.5m

- This typology is based on deep lots with rear laneway or easement access, and a building at the front and rear.
- 18m is minimum site with for lot amalgamation (to provide basement carparking with rear lane/ easement access.
- 24m is minimum site with for lot amalgamation to access the bonus height of 2 storeys (resulting in overall building height of 8 storeys) with the provision of a 4m wide mid-block connection.









Site Boundary
Residential
Commercial
Through-site link

A 18m site width

FSR	3:1
Site width min.	**18m**
Site depth	46.5m
Site area	837m²
Front setback	3m from 2nd-5th storey from boundary
Upper storey front setback	9m from 6th storey from boundary
Side setback	0m
Rear setback	0m
GFA	2473m²
Residential GFA	1762m²
Commercial GFA	711m²
Street wall	2 storeys at front, 4 storeys at rear
Height	23.3m (6 storeys)
Dwelling Yield	31 dwellings

*Height inclusive of 1.5m for lift overrun

B 24m site width (Bonus height)

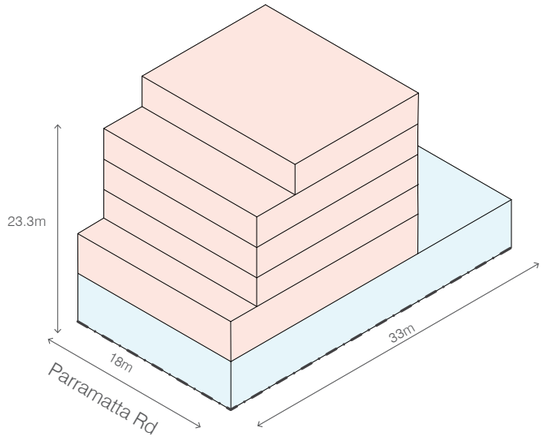
FSR	3:1
Site width min.	**24m (built form width 20m)**
Site depth	46.5m
Site area	1116m²
Front setback	3m from 2nd-5th storey from boundary
Upper storey front setback	9m from 6th storey from boundary
Side setback	0m, 4m wide through-site link
Rear setback	0m
GFA	3378m²
Residential GFA	2587m²
Commercial GFA	790m²
Street wall	2 storeys at front, 4 storeys at rear
Height	29.7m (8 storeys)
Dwelling Yield	42 dwellings

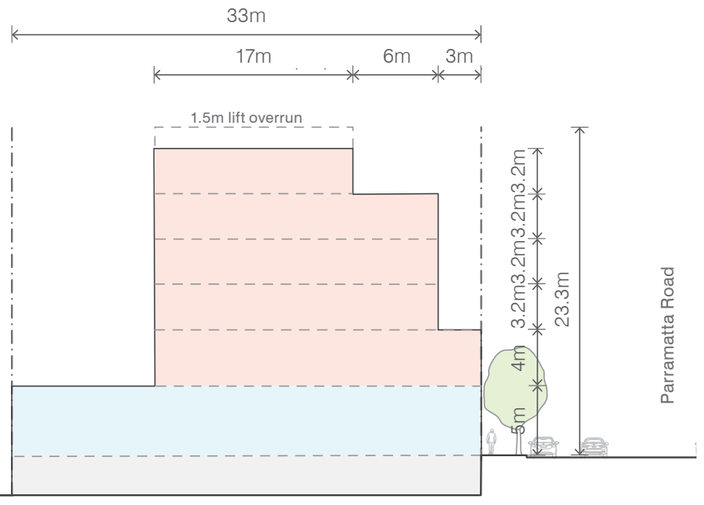
Densities along Parramatta Road

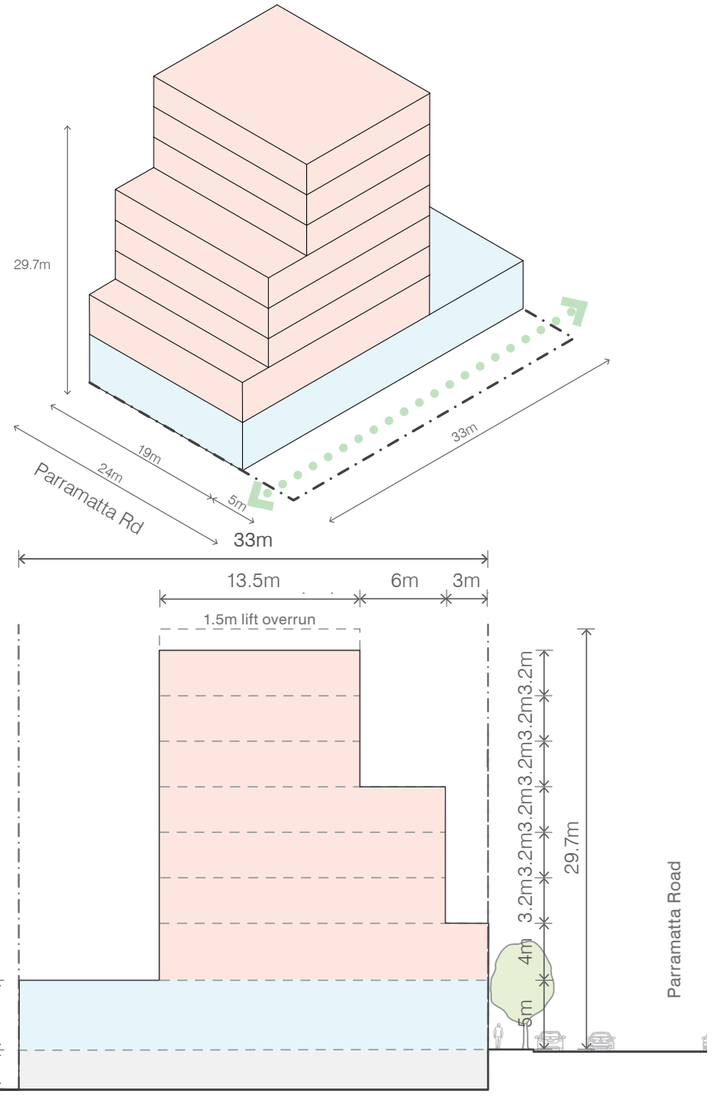
2

Lot depth 33m

- This typology is based on lots that can only accommodate a building at the front with rear laneway or easement access.
- 18m is minimum site with for lot amalgamation (to provide basement car-parking with rear lane/easement access).
- 24m is minimum site width for lot amalgamation to access the bonus height of 2 storeys (resulting in overall building height of 8 storeys) with the provision of a 5m wide mid-block connection.







A 18m site width

FSR	3:1
Site width min.	**18m**
Site depth	33m
Site area	594m^2
Front setback	3m from 2nd-5th storey from boundary
Upper storey front setback	9m from 6th storey from boundary
Side setback	0m
Rear setback	0m
GFA	1780m^2
Residential GFA	1275m^2
Commercial GFA	505m^2
Street wall	2 storeys at front, 1 storey at rear
Height	23.3m (6 storeys)
Dwelling Yield	16 dwellings

B 24m site width (Bonus height)

FSR	2.86:1
Site width min.	**24m**
Site depth	33m
Site area	792m^2
Front setback	3m from 2nd-5th storey from boundary
Upper storey front setback	9m from 6th storey from boundary
Side setback	0m, 5m wide through-site link
Rear setback	0m
GFA	2264m^2
Residential GFA	1346m^2
Commercial GFA	918m^2
Street wall	2 storeys at front, 1 storey at rear
Height	29.7m (8 storeys)
Dwelling Yield	17 dwellings

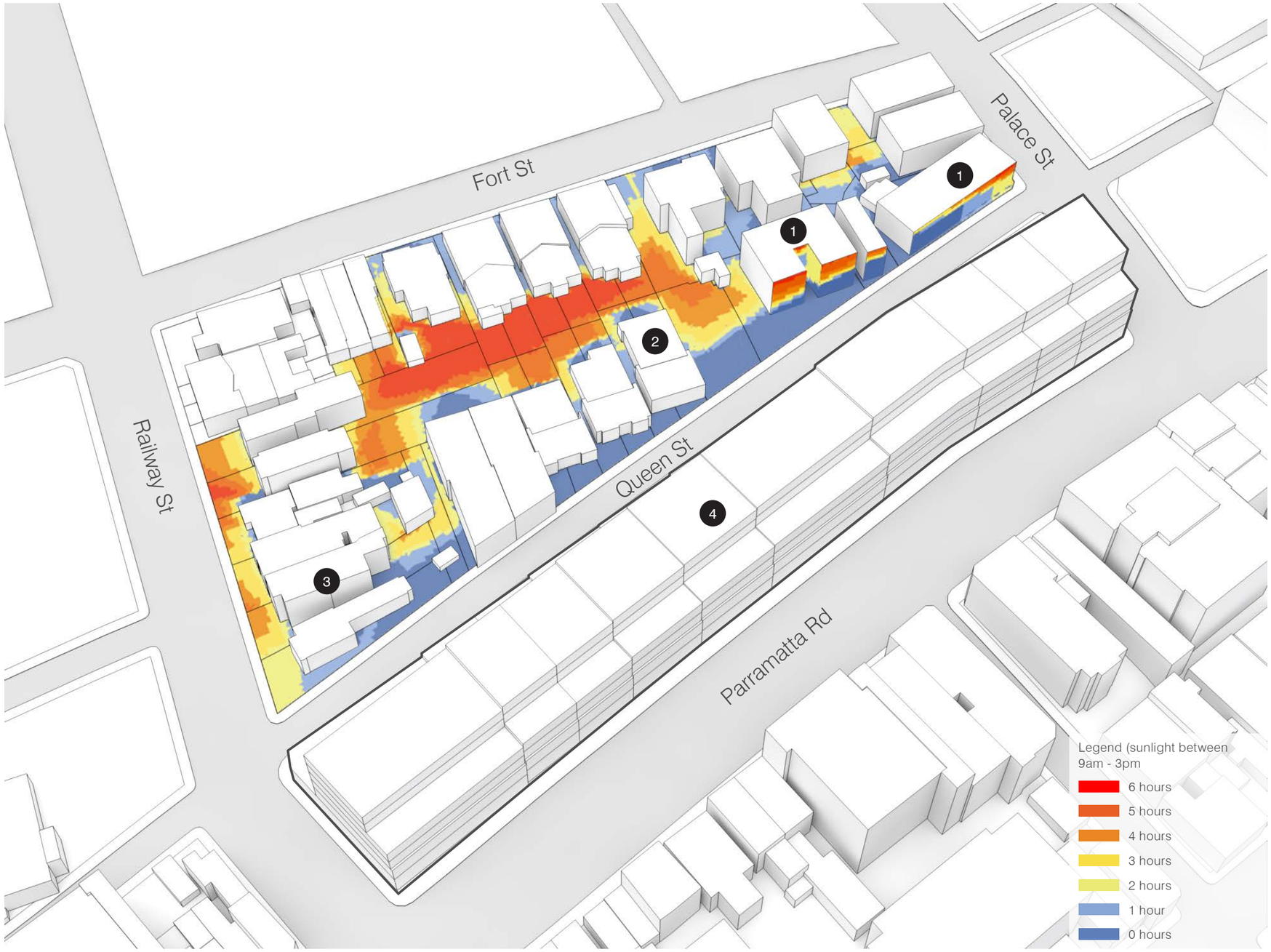
Solar access to neighbouring open space and apartments - Winter Solstice (June 21)

There are a broad range of conditions in the blocks south of the Parramatta Road sites. One example block with a range of conditions and interfaces has been modelled to understand typical impacts for solar access. Note that this study assumes all lots are developable, in order to assess the greatest potential impact.

1. Existing apartment buildings (21A Queen St Petersham and 1 Palace St).
2. North-south orientated lots. Solar access is maintained to primary usable open spaces at the south of these lots.
3. East- west orientated lots
4. Proposed redeveloped sites along Parramatta Rd. (Note this testing is based on an earlier option of building massing, however the rear building line is the same).

There are some cases of apartment buildings and east-west oriented lots where there is greater potential for overshadowing of open spaces and living room windows, and the simple massing shown does not demonstrate solar access which meets the 2 hour threshold. In these cases it is expected that more detailed testing, design and consideration of controls and objectives at a DA stage will need to be undertaken to determine appropriate development. This may require a slight reduction from the proposed FSR on some sites.





Solar access to neighbouring open space and apartments - Winter Solstice (June 21)

The following solar access diagram demonstrates the impact to private open spaces for a block at the east of the study area. This block has east-west orientated lots and north-south orientated lots, with garages located at the north end of the lots that fronting the lane behind the sites proposed for redevelopment.

1. North-south orientated lots. Solar access is maintained to primary usable open spaces.
2. East- west orientated lots
3. Proposed redeveloped sites along Parramatta Rd. (Note this testing is based on an earlier option of building massing, however the rear building line is the same).

Compared to the previous block, as the address of the north-south oriented lots are to the south side of the block, there is arguably no impact to living areas for these lots. Impact caused by overshadowing is primarily to the garages and sheds at the north or rear of these lots. Due to this condition, impact to solar access for the private open spaces for these lots is also minor. There are some cases of east-west oriented lots where there is greater potential for overshadowing of open spaces and living room windows, and the simple massing shown does not demonstrate solar access which meets the 2 hour threshold.

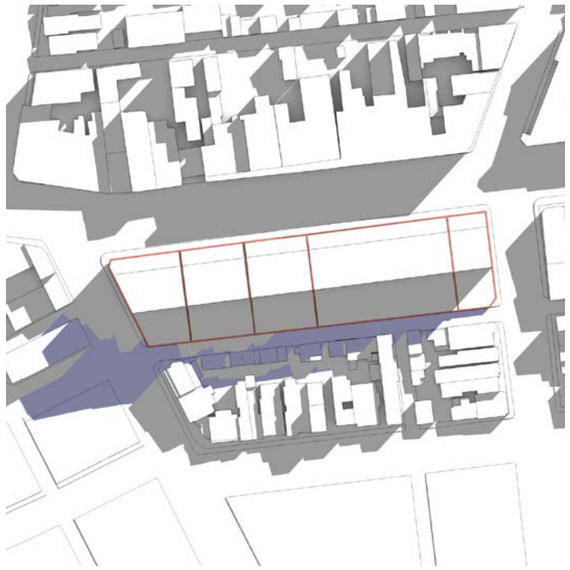




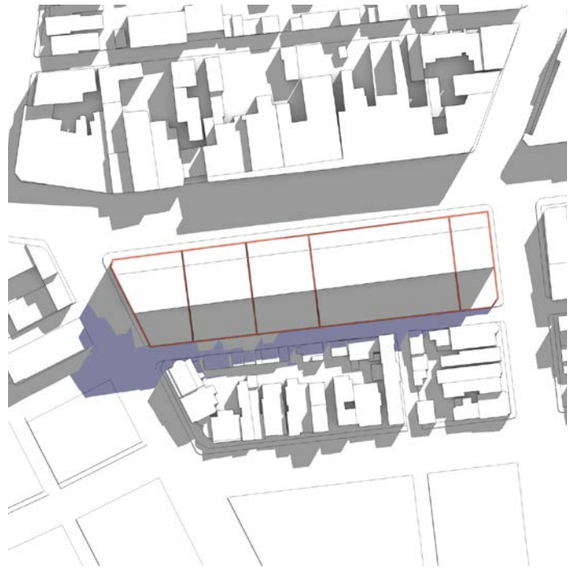
Parramatta Rd East

6 storey - Overshadowing analysis - winter solstice (June 21)

Additional overshadowing created by proposed development along Parramatta Rd highlighted in blue.



9am



10am



11am



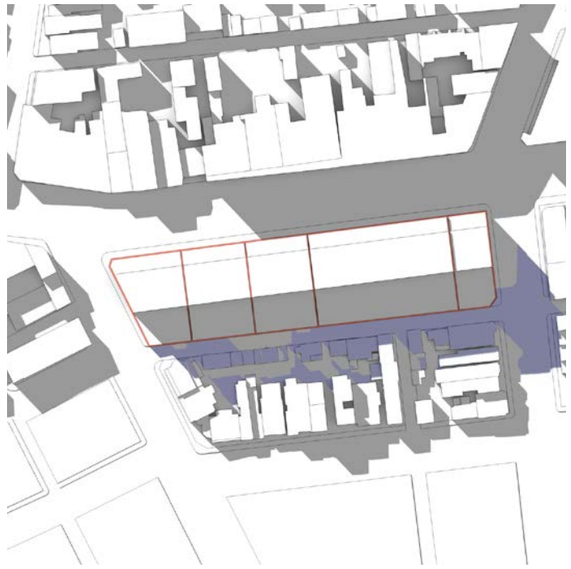
12pm



1pm



2pm



3pm

LEP Recommendations

LEP recommendations

- Maximum 6 storey height (with setback of 3m from 2nd-5th storey from boundary, 9m from 6th storey from boundary), 2 storey street wall, ground level commercial/retail at front, and 4 storey street wall at rear of sites.
- Provide height bonus of additional 2 storeys maximum (above the 6 storeys) to incentivise provision of through-site link/mid-block connections as public benefit.
- Testing demonstrates that minimum site width of 24m is required to provide a minimum 4m wide through-site link.
- The proposed height may not be appropriate on all contributory items within heritage conservation areas or for sites adjacent to heritage items.

Existing LEP controls (IWLEP 2022)	
LZN	E1 Local Centre
FSR	1.5:1 (including bonus for active street frontages for sites north of Parramatta Rd)
HOB	14m (south of Parramatta Rd) Undefined (north of Parramatta Rd)

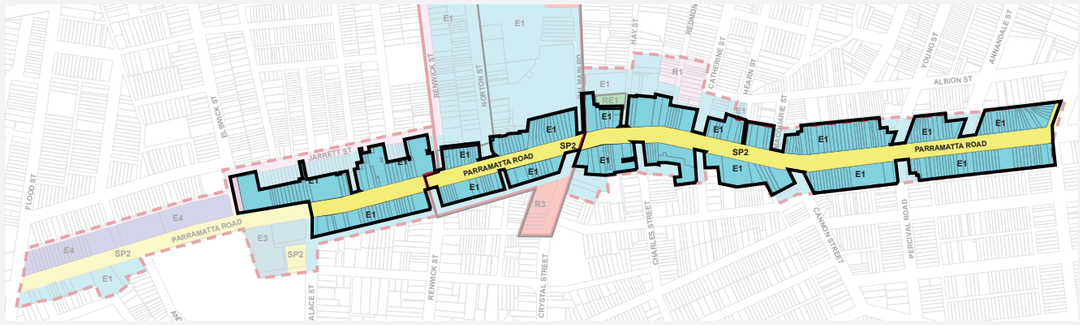
PRCUTS recommendations (2016)	
LZN	B2 Local Centre
FSR	3:1
HOB	22m

Draft Structure Plan Controls (2021)	
LZN	E1 Local Centre
FSR	3:1
HOB	20m

Final recommendations	
LZN	E1 Local Centre
FSR	3:1
HOB	23.5m (6 storeys)*

* Plus two storey height bonus to incentivise provision of through-site link / mid-block connections as a public benefit

Land Zoning



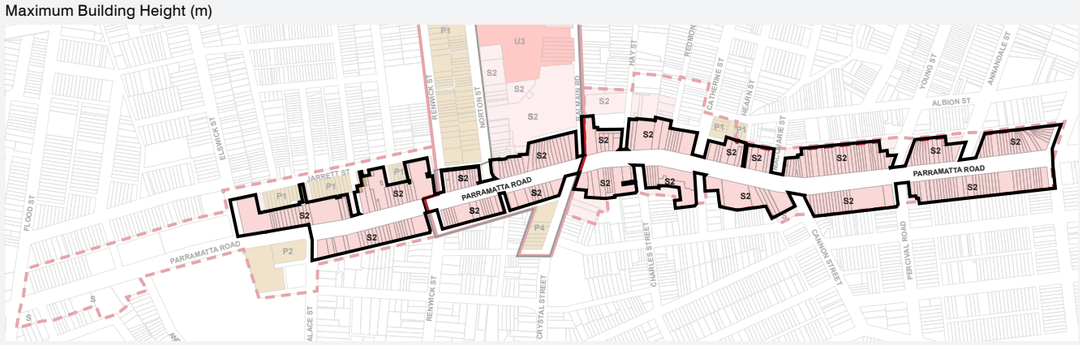
E1 Local Centre

Floor Space Ratio Legend (n:1)



V1 3

Maximum Building Height (m)



S2 23.5

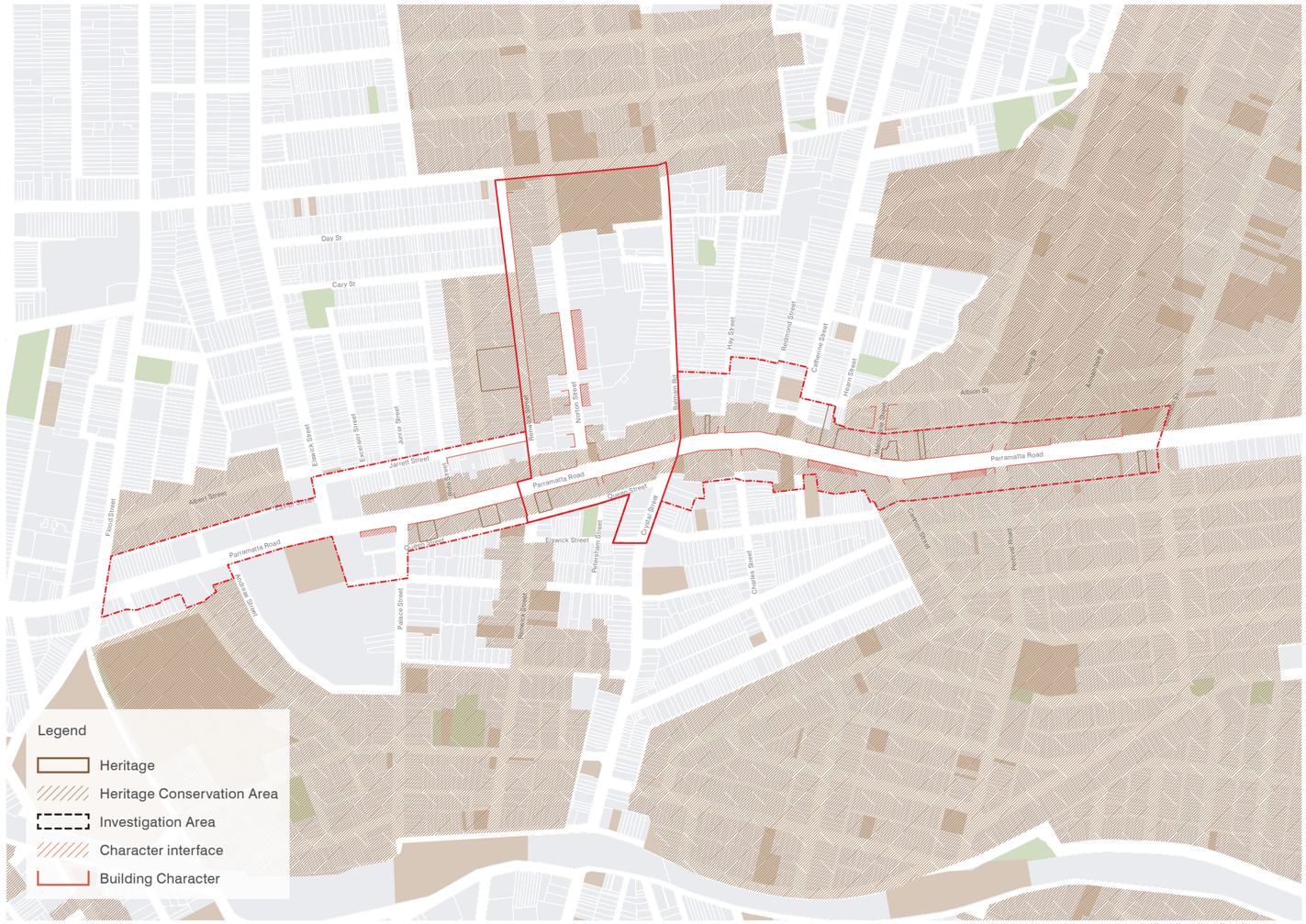
1.11 Heritage

Issue

Heritage – Advice on the principle regarding retaining existing development controls for existing heritage and potential heritage items. How to manage transitions between developments adjacent to heritage items and adjacent to or containing contributory items - Architectus' previous work acknowledged that the 6 storeys and 4 storey street wall was unlikely to be appropriate on these sites. Guidance sought to implement these provisions.

Recommendations

- Existing FSR and heights to be uplifted for existing heritage items and potential heritage items to match adjacent lots, under the caveat that redevelopment to the maximum controls may not be possible
- Redevelopment of adjacent properties to the maximum proposed controls may not be possible due to setbacks that may be required to heritage items
- Future redevelopment on sites with heritage items or in heritage conservation areas should consider current NSW Heritage Office and AIA guidelines on heritage:
  - Design In Context: Guidelines for Infill Development in the Historic Environment by Heritage New South Wales and AIA"
  - "Better Placed: Design Guide for Heritage" by Heritage Council of NSW and Government Architects NSW document



Leichhardt Precinct Heritage Map

1:7,500 0 75 150 225 300M

1.12 Summary of recommendations

Issue	Architectus recommendations	Further controls for LEP/DCP
Issue 1 2-18 Crystal Street, Petersham Advice sought on proposed zoning and controls – existing E1 zoning should be retained or rezoned to R3 Medium Density residential. Advice also sought on appropriate development controls (FSR/heights/setbacks/street frontage heights/appropriate ground floor uses etc.)	Land Use - R3 - Medium Density Residential FSR - 2.2:1 Height* - 18m	– 3m setback from Crystal St – 2m setback from Queen St – 5m setback from Petersham Ln – 0m setback from Elswick St – 4-storey street wall with 5m setback from building line for fifth storey on Crystal St, Queen St and Petersham Ln site boundary – redevelopment to follow lot amalgamation pattern identified in previous section on this issue; any proposal to redevelop that does not follow pattern to be assessed on a case by case basis
Issue 2 4 – 98 Jarrett Street, Leichhardt Advice sought on proposed zoning and building/development controls considering the interface with the rear of properties along Parramatta Road.	Land Use - E1 - Local Centre FSR - 2.2:1, 3:1 Height - 17m	– 0m setback from Jarrett St – min. 4m setback from rear boundary with 3m further setback from building line from third storey above – 2-storey street wall with 5m setback from third storey and above from building line
Issue 3 10-12 Renwick Street, Leichhardt FSR/heights in the Structure Plan as per Architectus' 2016 recommendations. Peer review advice sought on the future development controls considering the interface with neighbouring properties.	Land Use - E1 - Local Centre FSR - 1:1 + 0.5 bonus for active frontage Height* - Undefined	– Nil
Issue 4 592 - 610 Parramatta Road, Petersham Retain existing E3 zoning and adopt PRCUTS density and height controls to reflect the scale of existing and future development. Peer review advice sought.	Land Use - E3 - Productivity Support FSR - 3:1 Height* - 17.5m	– 0m setback from front and side boundary – min. 6m setback from rear boundary
Issue 5 - Opportunity Sites Advice also sought on mechanisms to incentivise the provision of public benefits in the redevelopment of opportunity sites and the type of public benefits sought for each key opportunity site. If bonus FSR and heights are considered appropriate, identify the incentives for each opportunity site.		

*Heights proposed include assumed rounding for the purpose of an LEP. Rounded heights can be revised. Indicative minimum heights for an LEP control are shown in Table 1 - Numeric summary of development scenarios.

Summary of recommendations

Issue	Architectus recommendations	Further controls for LEP/DCP

Opportunity Site 1	Land Use - E1 - Local Centre
	
	FSR - 3:1
	
	Height* - 23.5m (6 storeys), 26m (7 storeys), 32m (9 storeys)
	
	Proposed new 18m wide through-site link for pedestrians and cyclists between Norton Street and Balmain Road
	
	Provide a new landscaped plaza 25m wide fronting Norton Street as shown in the key plan
		– Site 1
		  – 0m setback to Norton St site boundary
		  – 5 storey street wall with 3m setback from building line for sixth storey above
		– Site 2
		  – 0m setback to Norton St site boundary
		  – 4-storey street wall with 1.5m setback from building line for fifth storey
		– Site 3
		  – 6m setback to site boundary on Balmain Rd
		  – 5-storey street wall with 3m setback from building line for sixth storey above
		– building separation, communal open space, and deep soil, solar access requirements as per ADG

Opportunity Site 2	Land Use - E1 - Local Centre, RE1 - Public Recreation
	
	FSR - 1.9:1, 3:1 (nil for RE1)
	
	Height* - 23.5m (6 storeys, nil for RE1)
	
	Proposed new through-site link (for pedestrians and cyclists) and public open space as shown in the key plan
		– Site 1
		  – 2-storey street wall (or as existing facade in HCA) on Parramatta Road with 3m setback from third to fifth storey, 9m setback from boundary for sixth storey
		  – 4.5m setback to the rear on the ground level to accommodate through-site link and additional 9m to residential uses from building line above first storey
		– Site 2
		  – 1.5m setback from site boundary on Hay St and Redmond St
		  – 3-storey street wall to Redmond St with 3m setback from building line for fourth storey
		  – 4-storey street wall to Hay St with 3m setback from building line above fourth storey
		  – 9m setback from north site boundary above ground floor on Redmond St
		  – 6m setback from north site boundary from second to fourth storeys, 12m from fifth storey and above on Hay St
		– Site 3
		  – 1.5m setback from site boundary on Balmain Rd and Hay St
		  – 3-storey street wall to Hay St with 3m setback from building line for fourth storey
		  – 4-storey street wall to Balmain Rd St with 3m setback from building line for fifth
		  – storey above
		  – 9m setback from north site boundary from second storey and above on Hay St
		  – 9m setback from north site boundary from second to fourth storeys, 12m from 5th storey and above on Balmain Rd
		– building separation, communal open space, deep soil, solar access requirements as per ADG

*Heights proposed include assumed rounding for the purpose of an LEP. Rounded heights can be revised. Indicative minimum heights for an LEP control are shown in Table 1 - Numeric summary of development scenarios.

Summary of recommendations

Issue	Architectus recommendations	Further controls for LEP/DCP

Opportunity Site 3	Land Use - E1 - Local Centre
	
	FSR - 1.9:1, 3:1
	
	Height* - 17m (4 storeys), and 23.5m (6 storeys)
	
	Proposed new through-site link (for pedestrians and cyclists) as shown in the key plan
		– Site 1
		  – 0m setback to Parramatta Road
		  – 2-storey street wall (or as existing facade in HCA) on Parramatta Road with 3m setback from third to fifth storey, 9m setback from boundary for sixth storey
		  – 6-9m setback to the rear boundary at ground level to accommodate a through site link with additional 6m setback above ground floor
		
		– Site 2
		  – 0m setback to Albion Street and Catherine Street
		  – 3 storey street wall along Albion Street with a 3m setback to the fourth storey
		  – 6m setback to east boundary with additional 3m setback above first storey
		
		– Building separation, communal open space, and deep soil, solar access requirements as per ADG

Issue 6 - Densities along Parramatta Road With reference to Leichhardt Council's 2016 Parramatta Road and Norton Street urban design study, clarification is sought regarding Architectus' proposed densities of FSR 3:1 along Parramatta Road and Norton Street with 'bonus for public benefits' (Refer to Architectus Structure Plan p.54) – what height and FSR bonuses should be considered in return for public benefits? Guidance sought on appropriate LEP mechanisms to implement these provisions.	Land Use - E1 - Local Centre FSR - 3:1 Height* - 23.5m	– 2-storey street wall (or as existing facade in HCA) on Parramatta Road with 3m setback from third to fifth storey, 9m setback from boundary for sixth storey – bonus height for provision of through-site link cap at 8-storeys
Issue 7 - Heritage Advice on the principle regarding retaining existing development controls for existing heritage and potential heritage items. How to manage transitions between developments adjacent to heritage items and adjacent to or containing contributory items - Architectus' previous work acknowledged that the 6 storeys and 4 storey street wall was unlikely to be appropriate on these sites. Guidance sought to implement these provisions.	– Existing FSR and heights to be uplifted for existing heritage items and potential heritage items to match adjacent lots, under the caveat that redevelopment to the maximum controls may not be possible – Redevelopment of adjacent properties to the maximum proposed controls may not be possible due to setbacks that may be required to heritage items	

*Heights proposed include assumed rounding for the purpose of an LEP. Rounded heights can be revised. Indicative minimum heights for an LEP control are shown in Table 1 - Numeric summary of development scenarios.

Summary of recommendations

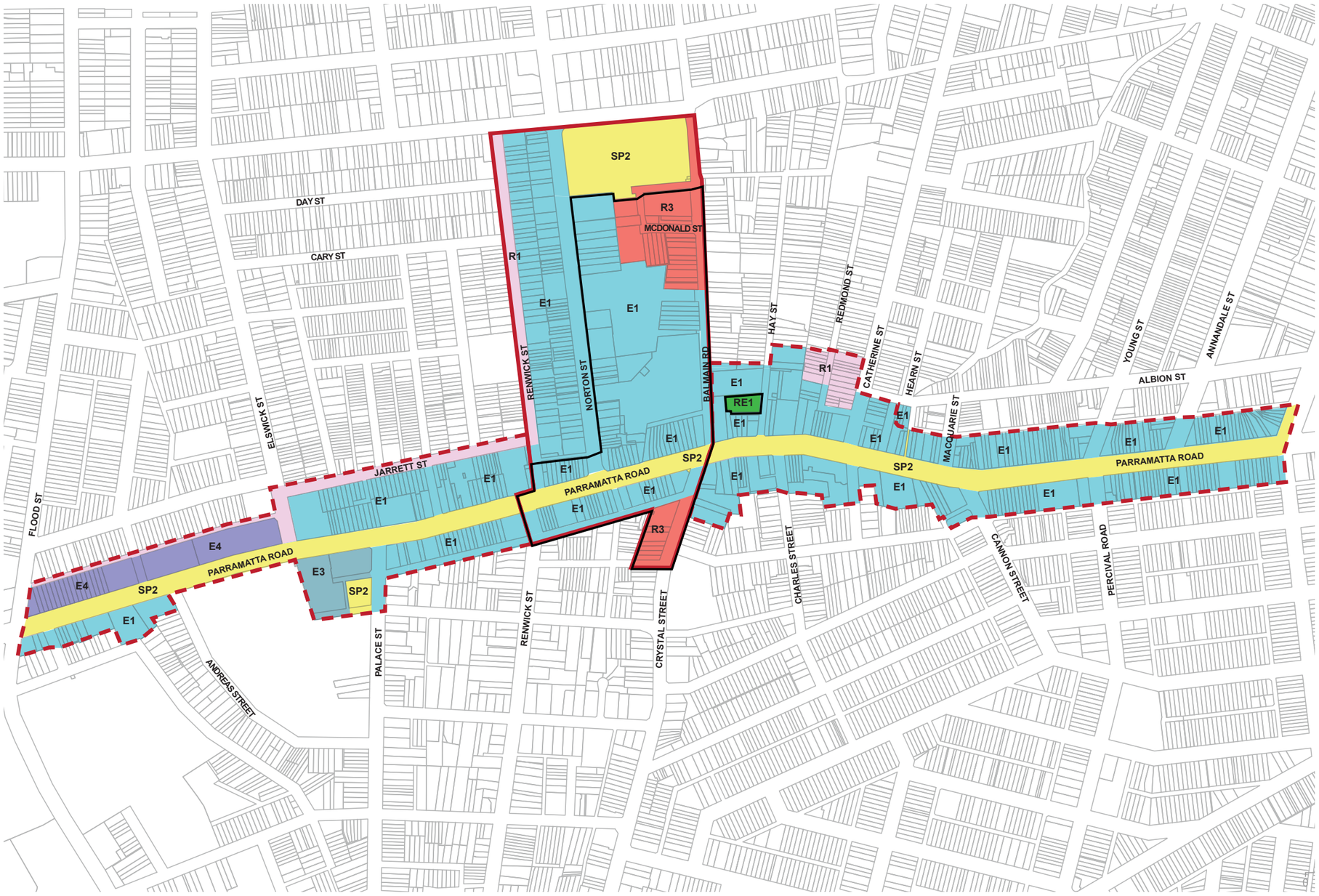
Site	Architectus recommendations	Further controls for LEP/DCP
Area A	**Land Use** E1 - Local Centre **FSR** 2.7:1 (A1) 1.9:1 (A2) **Height*** 26.5m (A1) 20.5m (A2)	**Site amalgamation** – Refer to following Lot Amalgamations map **Building and Street wall heights** – Refer to following Height in Storeys and Street Frontage Height maps – Consistent street wall height, and upper storey setbacks along Norton St – Transition in building height to be provided towards rear of sites, set back at least 17m above 5 storeys **Built form typologies** – Anticipated typology is shop top housing. Refer to image p34 of this document as illustration of anticipated development form. **Setbacks and site coverage** – Refer to following Setbacks map – Setback to north of at least 6m from first storey above. (This allows for both an open to sky or 1-storey covered link and ensures adequate setback to Leichhardt Public School). – Setback to north boundary of at least 4m from building line above 3 storeys. – No restriction on site coverage except for abovementioned setbacks and required ADG boundary setbacks. **Landscaping** – Ensure provision for deep soil zone at north setback, if open to sky link provided. **Vehicular access and parking** – Refer to Circulation map on following pages

Area B	**Land Use** R3 - Medium Density Residential (RFB as permissible land use)
	
	FSR 1.4:1 (B1)
	2.3:1 (B2-1)
	2.1:1 (B2-2)
	1.5:1 (B2-3)
	1.9:1 (B3)
	
	Height* 15.5m (B1)
	
	25m (B2-1)
	21.5m (B2-2, B2-3)
	
	21.5m (B3)
		Site amalgamation
		– Refer to following Lot Amalgamations map
		Building and Street wall heights
		– Refer to following Height in Storeys and Street Frontage Height maps
		– Consistent street wall height, and upper storey setbacks along Norton St and McDonald St.
		– Transition in building height to be provided from south of B2 towards McDonald St, and to lot B1 at north
		Built form typologies
		– Anticipated typology is residential flat buildings. Refer to image p34 of this document as illustration of anticipated development form.
		Setbacks and site coverage
		– Refer to following Lot Amalgamations map
		– **Site B1:**
		  – minimum 3m building setback to all site boundaries
		  – upper storey setback of 2m from building line above 3 storeys
		– **Site B2:**
		  – 0m setback at south for continuation of street wall on Balmain Rd
		  – 5m building setback to Balmain Rd, upper storey setback of 2m from building line above 3 storeys
		– **Site B3:**
		  – minimum 3m building setback to McDonald St
		  – upper storey setback to McDonald St of 2m from building line above 3 storeys, 7m from building line above 4 storeys
		– No control on site coverage except for abovementioned setbacks, ADG required boundary setbacks and the provision of minimum deep soil zones
		Landscaping
		– Streetscaping and public domain improvements in the setback to Balmain Rd to be provided keeping in character of recent improvements further south on Balmain Rd.
		– Minimum deep soil provisions per site as per ADG
		Vehicular access and parking
		Refer to Circulation map on following pages.

*Heights proposed include assumed rounding for the purpose of an LEP. Rounded heights can be revised. Indicative minimum heights for an LEP control are shown in Table 1 - Numeric summary of development scenarios.

1.13 Final LEP Recommendations

Land Zoning



Legend

- Precinct - Core
- Precinct - Frame
- Parramatta Road Corridor LEP Stage 1 Implementation

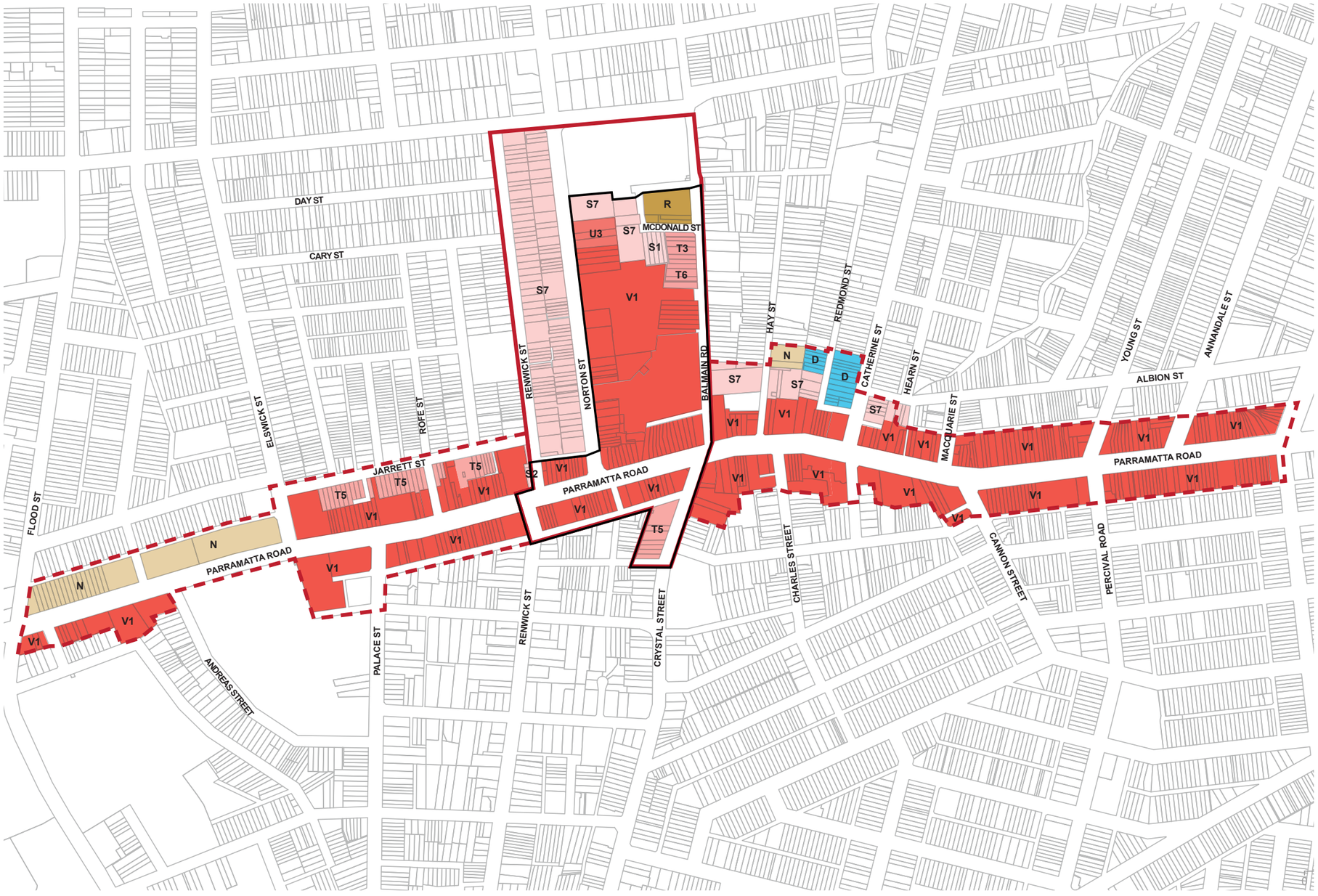
Land Zoning

- E1 Local Centre
- E3 Productivity Support
- E4 General Industrial
- R1 General Residential
- R2 Low Density Residential
- R3 Medium Density Residential
- SP2 Special Infrastructure
- RE1 Public Recreation
- Stage 1 Implementation

1:6,000 0 60 120 180 240 300M

Final LEP Recommendations

FSR



Legend

- Precinct - Core
- Precinct - Frame
- Parramatta Road Corridor LEP Stage 1 Implementation

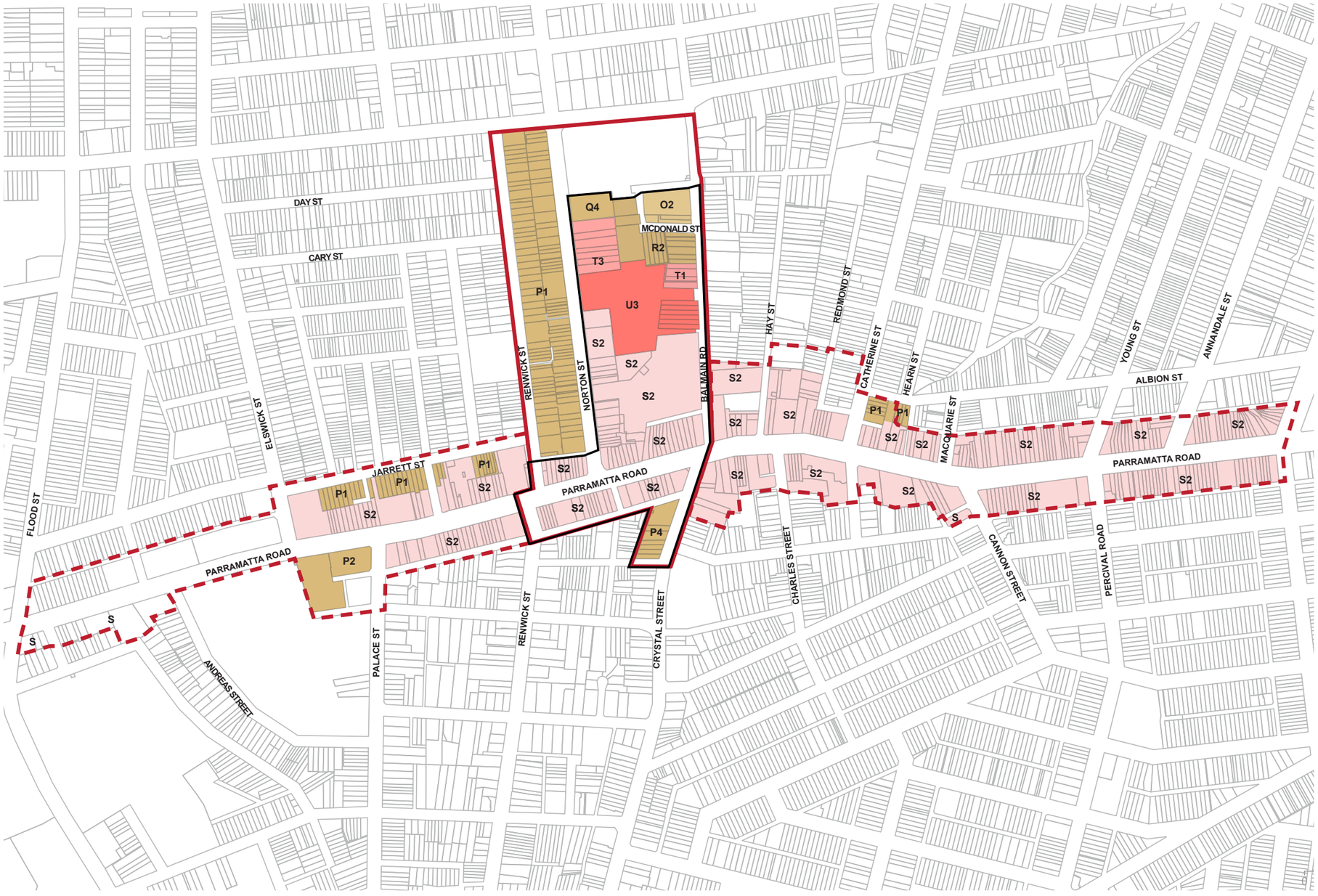
Floor Space Ratio Legend (n:1)

D	0.5
N	1
R	1.4
S1	1.5
S7	1.9
T3	2.1
T5	2.2
T6	2.3
U3	2.7
V1	3.0

1:6,000 0 60 120 180 240 300M

Final LEP Recommendations

Height of Buildings



Legend

- Precinct - Core
- Precinct - Frame
- Parramatta Road Corridor LEP Stage 1 Implementation

Maximum Building Height (m)

O2	15.5
P1	17
P2	17.5
P4	18.5
Q4	20.5
R2	21.5
S2	23.5
T1	25
T3	27
U3	32

1:6,000 0 60 120 180 240 300M

Overview of Development Scenarios

Three development scenarios have been developed through the course of this work. A design and yield summary is presented below. Scenario 3 is the final scenario developed and the preferred basis for final controls.



Development Scenario 1

- A2 - 5 storeys with open to sky east-west link next to Leichhardt Public School
- Amalgamation and redevelopment of all existing lots within Site Investigation Area B



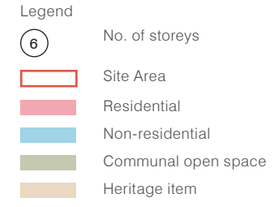
Development Scenario 2

- A1 and B2 remain as in Scenario 1
- A2 - 4 storeys. No setback to the northern site boundary for first storey of commercial. Potential for covered east-west through site link
- Sites B1 and B3 assumed to not turn over due to strata constraints



Development Scenario 3 - Preferred scenario as basis for recommended controls

- A1, B1 and B3 as in Scenario 1
- A2 - as in Scenario 1
- Site B2 is split up into smaller sites that would require fewer lot amalgamations. Slight increase in average FSR across these sites, compared to Scenario 1. Continuous street wall built form to Balmain Rd is retained.
- RFB development on Site B2-3 of up to 6 storeys



1:2,500 0 25 50 75 100M

Appendix I - North Leichhardt Investigation Area - Scenarios considered

		PRCUTS (2016)		Proposed LEP Stage 1		Scenario 1 Massing		Scenario 2 Massing		Scenario 3 Massing	
		FSR (n:1)	HOB (m)	FSR (n:1)	HOB (m)	FSR (n:1)	HOB (m)	FSR (n:1)	HOB (m)	FSR (n:1)	HOB (m)
Site Investigation Area A											
A1	93 & 95 Norton St	3:1	22m	3:1	23m	2.7:1	26.5m	2.7:1	26.5m	2.7:1	26.5m
A1	97 Norton St	1.9:1	17m	3:1	23m						
A2	99 Norton St	1.9:1	17m	1.9:1	18m	1.9:1	20.1m	1.9:1	17m	1.9:1	20.1m
Site Investigation Area B											
B1		1.9:1	17m	1.9:1	18m	1:4:1	15.1m			1:4:1	15.1m
B2		1.9:1	17m	1.9:1	18m	1.9:1	24.7m	1.9:1	24.7m		
B2-1		1.9:1	17m	1.9:1	18m					2.3:1	24.7m
B2-2		1.9:1	17m	1.9:1	18m					2.1:1	21.5m
B2-3		1.9:1	17m	1.9:1	18m					1.5:1	21.5m
B3		1.9:1	17m	1.9:1	18m	1.9:1	21.5m			1.9:1	21.5m

Table 1 - Numeric summary of development scenarios

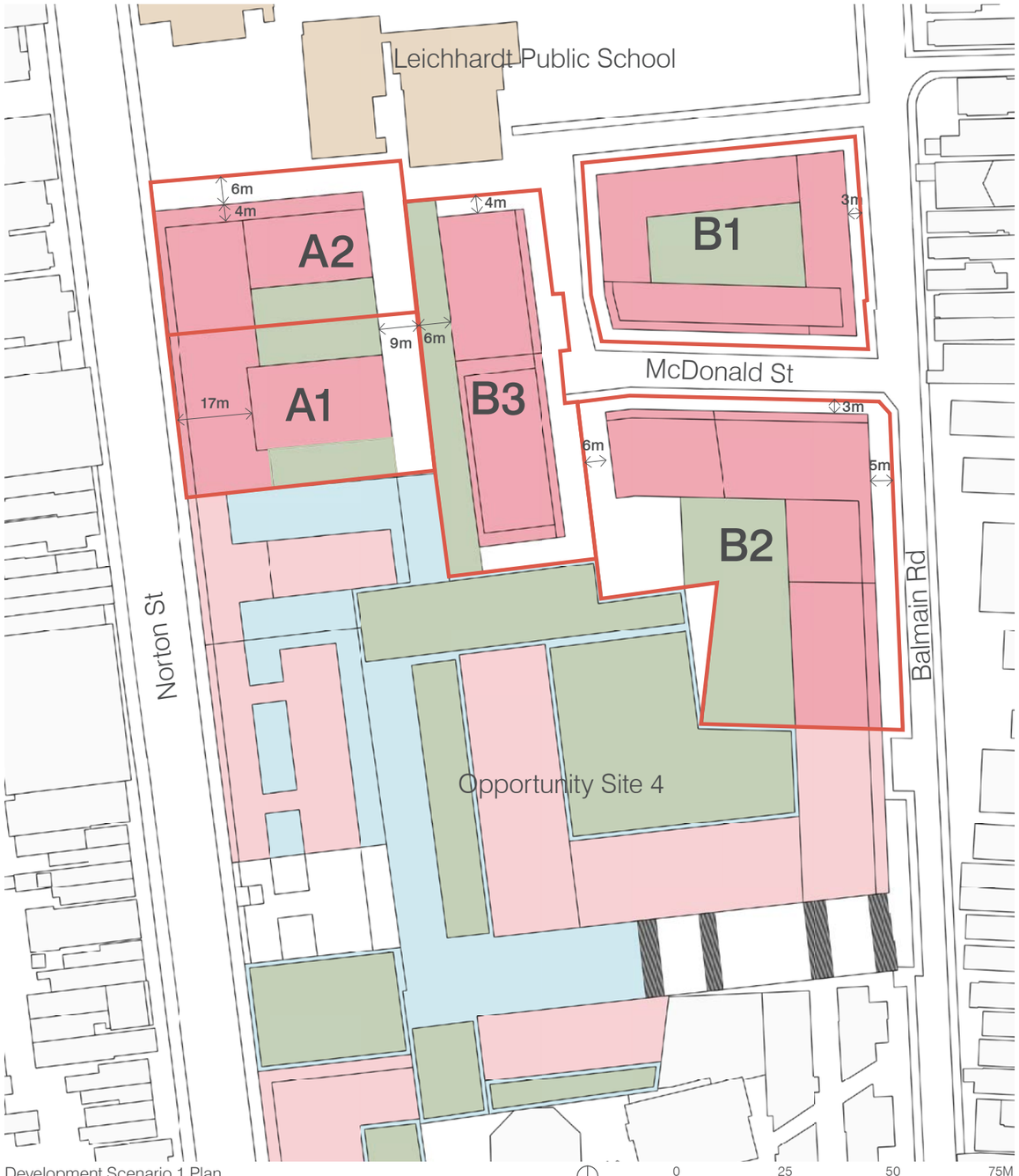
Development Scenario 1
is premised on the below lot amalgamations and redevelopment:

1. **Site Investigation Area A**
   - **Site A1:** amalgamation of 93, 95 and 97 Norton St
   - **Site A2:** 99 Norton St, which currently is Norton St Cinema
2. **Site Investigation Area B**
   - **Site B1**: amalgamation of 74, 76 and 76A Balmain Rd and 1 McDonald St as one lot. 76A is currently strata townhouses containing 20 dwellings.
   - **Site B2**: amalgamation of 56, 58, 60, 62, 64, 66, 68, 70, 72 Balmain Rd and 2, 4, 6A, 6, and 8 McDonald St
   - **Site B3**: amalgamation of 8A, 10-12 and 14 McDonald St. 8A and 14 McDonald St is strata multi dwelling housing containing 15 and 7 dwellings respectively.

- The typologies tested are single and double-loaded perimeter block apartments, with maisonettes at ground level for Site Investigation Area B and shop top apartments for Site Investigation Area A.

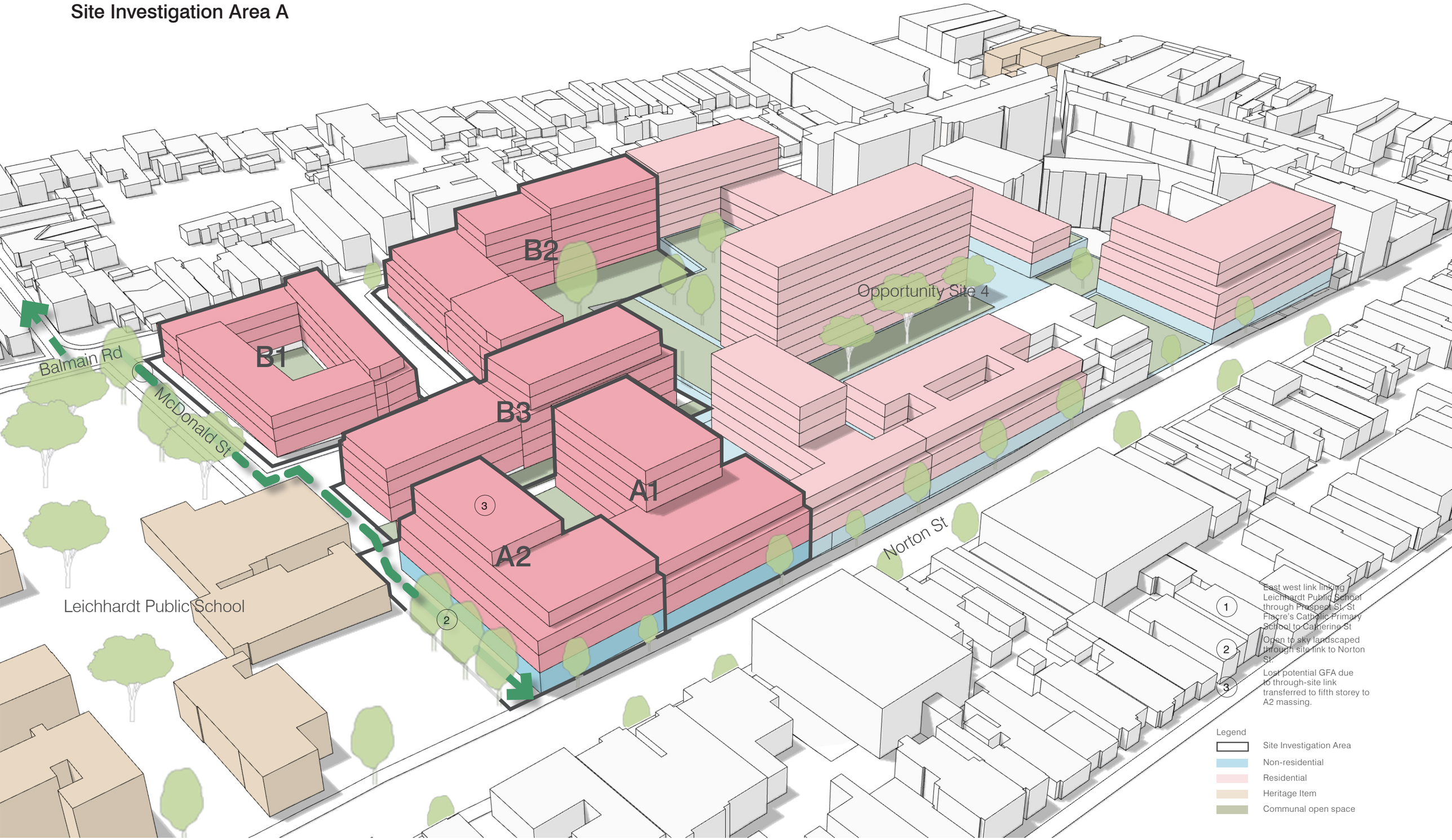
Key urban design considerations incorporated:

- Transition from the 8 storeys at Opportunity Site 4 on Balmain Road down to 4 storeys at the north end of site B2. The street wall transitions down from 5 storeys at Opportunity Site 4 down to 3 storeys at the north end of B2 and at B1.
- Sections 1 and 2 on the following pages show the proposed massing at Sites B1 and B2 is responsive to context on the east side of Balmain Rd.
- Opposite Site B2 on Balmain Rd are 2 detached dwellings and 3-4 storey RFBs. The 3-storey street wall on Balmain Rd at Site B1 is responsive in scale to the predominantly single storey dwellings opposite. The properties opposite the Site Investigation Area B are not within a heritage conservation area nor contain any heritage items.
- The bulk and scale of massing on A2 is set back from the northern boundary and interface to heritage-listed Leichhardt Public School to minimise direct overlooking of the school's outdoor play area. The setback tested is 6m for the first 3 storeys and an additional 4m for the upper 2 storeys.
- Open to sky link through A2 connecting Balmain Rd/McDonald St to Norton St, provided in the setback to Leichhardt Public School. It is assumed in this scenario that the link would run through part of the school's lot.
- 4 storeys along Norton St (3-storey street wall, with set back upper storey)



Development Scenario 1 Plan

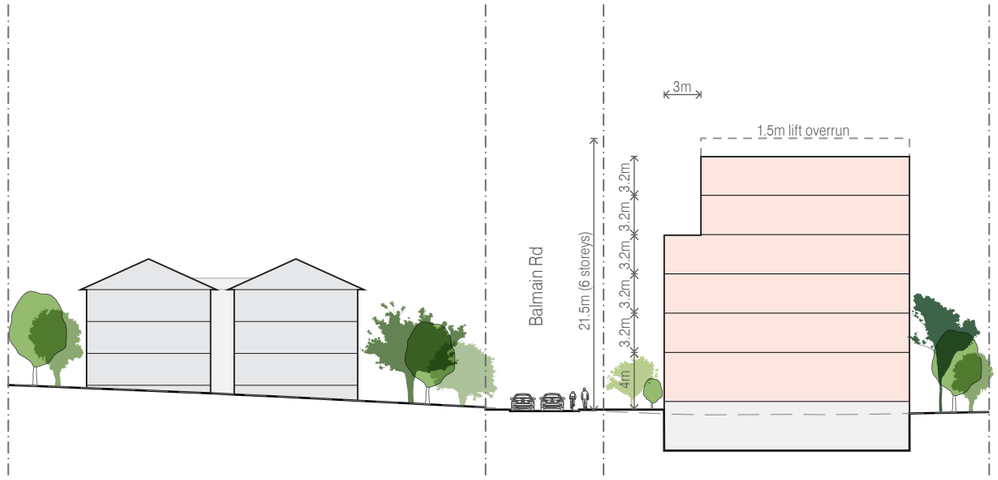
Site Investigation Area A



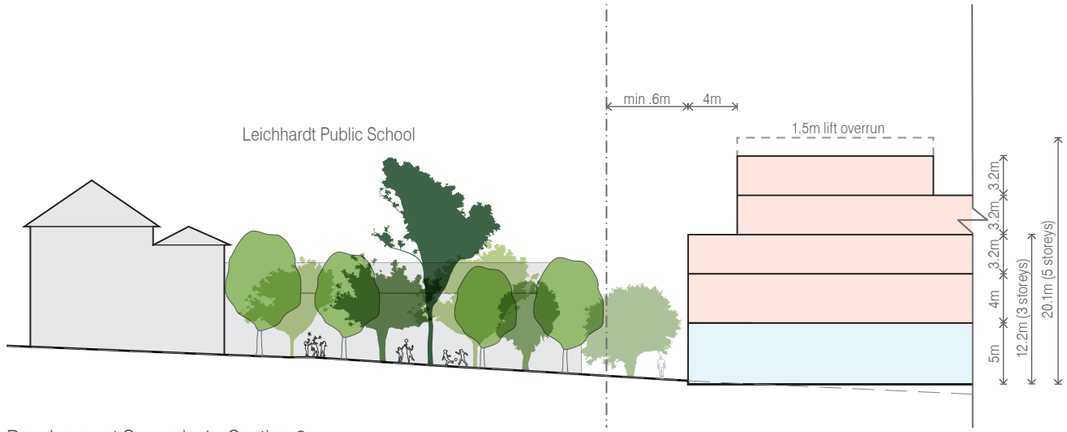
Site Investigation Area B



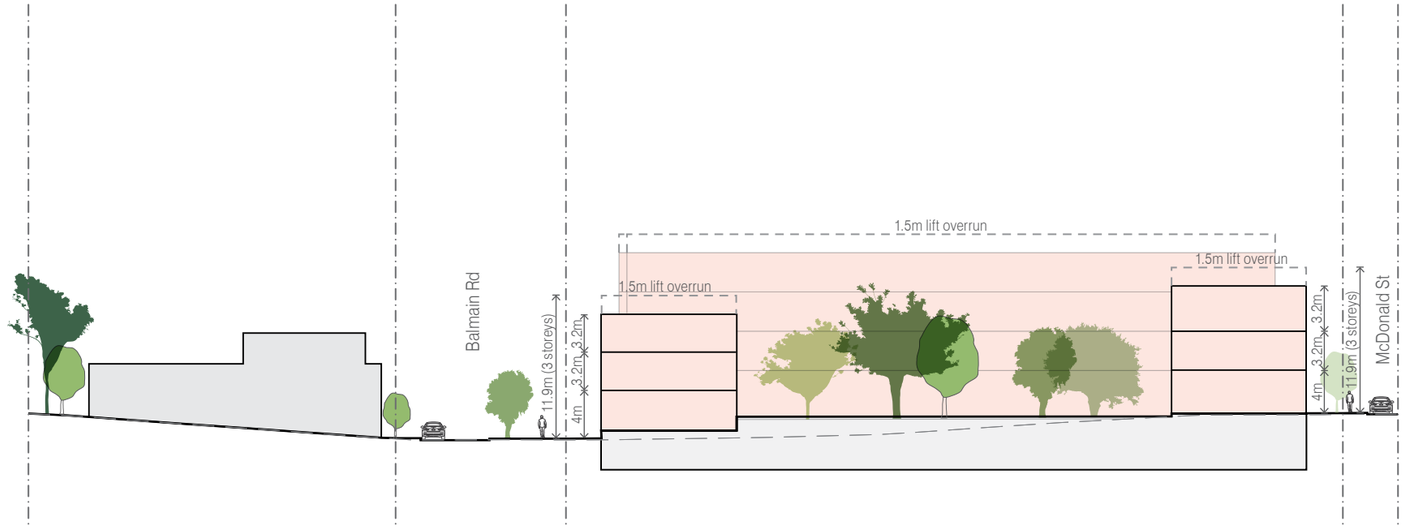
Appendix I - North Leichhardt Investigation Area - Scenarios considered



Development Scenario 1 - Section 1



Development Scenario 1 - Section 3



Development Scenario 1 - Section 2



Scenario 1 - Site Investigation Area A Yield

Site Investigation Area A1

Site area	2160m²	
Communal Open Space	758m²	35%

	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G (Commercial)	1819.5	1546.6	1314.6	5
L1	1304.4	978.3	831.6	4
L2	1304.4	978.3	831.6	3.2
L3	1229.6	922.2	783.9	3.2
L4	614.3	460.7	391.6	3.2
L5	614.3	460.7	391.6	3.2
L6	614.3	460.7	391.6	3.2
Lift overrun				1.5
Total	**7500.8**	**5807.6**	**4936.4**	**26.5**
FSR (n:1)		**2.7**		
No. of dwellings (NLA/67m²)		**54**		

Site Investigation Area A2

Site area	2066m²	
Communal Open Space	713m²	35%

	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G (Commercial)	1407.4	1196.3	1016.8	5
L1	1150.4	862.8	733.4	4
L2	1150.4	862.8	733.4	3.2
L3	906.0	679.5	577.6	3.2
L4	456.3	342.2	290.9	3.2
Lift overrun				1.5
Total	**5070.5**	**3943.6**	**3352.1**	**20.1**
FSR (n:1)		**1.9**		
No. of dwellings (NLA/67m²)		**34**		

Land use	**GBA to GFA Efficiency**
Commercial/Retail	85%
Residential	75%



Development Scenario 1 Key Plan

1:2,500 0 25 50 75 100M

Scenario 1 - Site Investigation Area B - Yield

Site Investigation Area B1

Site area 2880m²

Communal Open Space 1598m² 55%

	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	1649	1236.8	1051.2	4
L1	1649	1236.8	1051.2	3.2
L2	1649	1236.8	1051.2	3.2
L3	472	354	300.9	3.2
Lift overrun				1.5
Total	**5419**	**4064.3**	**3454.6**	**15.1**
FSR		**1.4**		
No. of dwellings (NLA/67m²)		**51**		

Site Investigation Area B2

Site area 4521m²

Communal Open Space 1115m² 25%

	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	592	444	377.4	4
L1	2279	1709.3	1452.9	3.2
L2	2279	1709.3	1452.9	3.2
L3	2279	1709.3	1452.9	3.2
L4	2155	1616.3	1373.8	3.2
L5	900	675	573.8	3.2
L6	900	675	573.8	3.2
Lift overrun				1.5
Total	**11384**	**8538**	**7257.3**	**24.7**
FSR (n:1)		**1.9**		
No. of dwellings (NLA/67m²)		**108**		

Site Investigation Area B3

Site area 2880m²

Communal Open Space 1258m² 44%

	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	1533.8	1150.4	977.8	4
L1	1533.8	1150.4	977.8	3.2
L2	1533.8	1150.4	977.8	3.2
L3	1380.9	1035.7	880.3	3.2
L4	603.2	452.4	384.5	3.2
L5	603.2	452.4	384.5	3.2
Lift overrun				1.5
Total	**7188.7**	**5391.5**	**4582.8**	**21.5**
FSR (n:1)		**1.9**		
No. of dwellings (NLA/67m²)		**68**		

Land use	GBA to GFA Efficiency	GFA to NLA Efficiency
Commercial/Retail	85%	85%
Residential	75%	85%

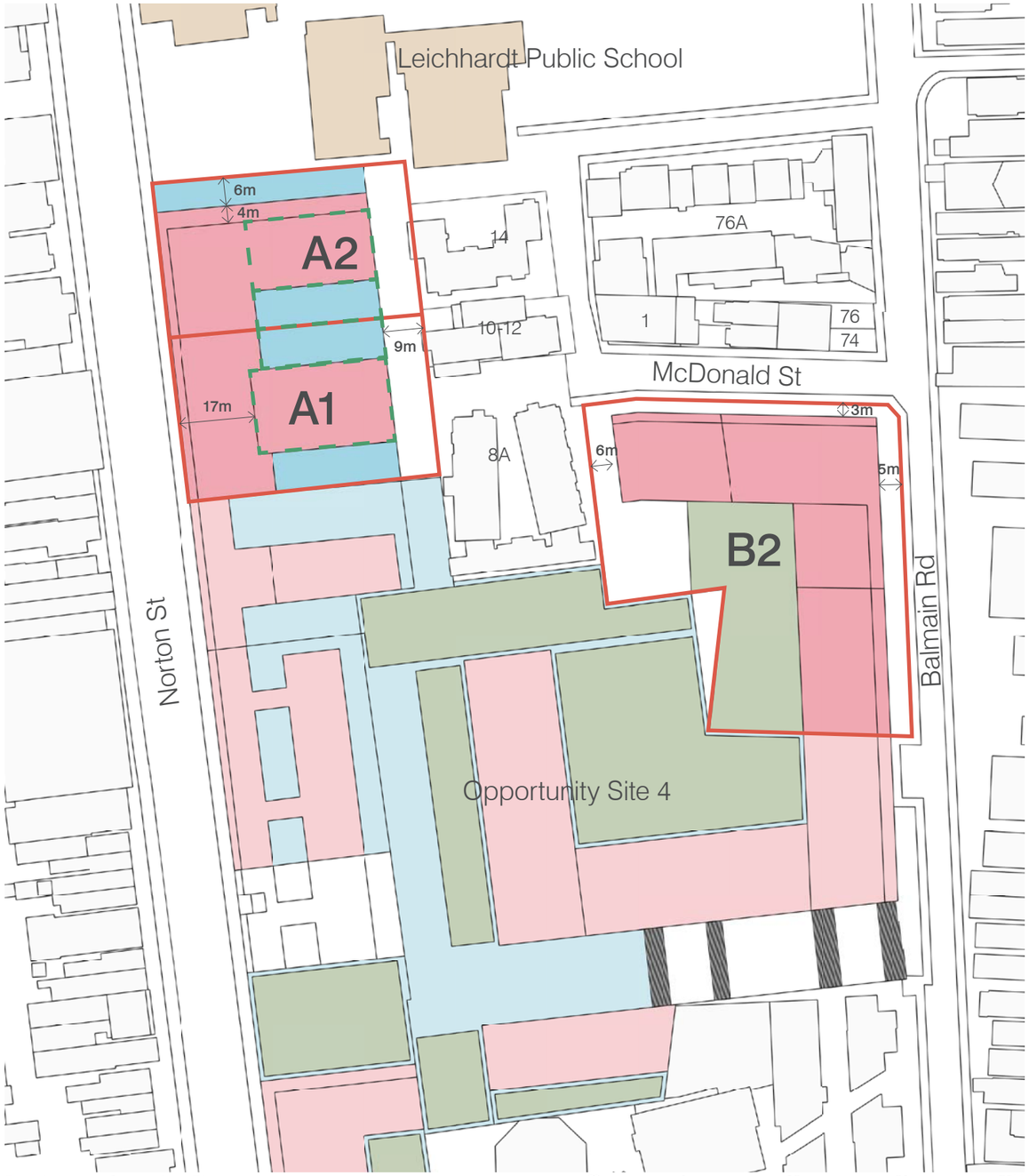
Development Scenario 2
is premised on the below lot amalgamations and redevelopment.

1. **Site Investigation Area A**
   - **Site A1** is as per Scenario 1
   - **Site A2:** lot amalgamation as per Scenario 1. Refer to Key urban design considerations for built form massing description.
2. **Site Investigation Area B**
   - **Site B1**: Strata development 76A Balmain Rd is not redeveloped as it is unlikely to turn over. There is a semi-detached dwelling at 74 and 76 Balmain Rd and a detached dwelling at 1 McDonald St. These lots all have a site area of less than 250m^2. If 74, 76 Balmain Rd and 1 McDonald St were amalgamated, the lot area would be 680m^2, which is unsuitable for redevelopment into a RFB. If these lots were to be amalgamated, the short site dimension of 11m would be unsuitable depth for townhouses.
   - **Site B2** is as per Scenario 1.
   - **Site B3:** Strata developments at 8A and 14 McDonald St are assumed not to be redeveloped in this scenario as they are unlikely to turn over. 10-12 McDonald St is constrained by strata lots on either side and has a site area of 450m^2, which is not suitable for redevelopment into a RFB. Based on existing controls, the maximum FSR for this site is 0.7:1. The FSR of the existing built form is approximately 1.2:1, and there appear to be at least 2 dwellings on this lot. The site is assumed not to be redeveloped in this scenario, as it is unlikely to result in any uplift.

– The typologies tested are single and double-loaded perimeter block apartments, with maisonettes at ground level for Site B3, and shop top apartments for Site Investigation Area A.

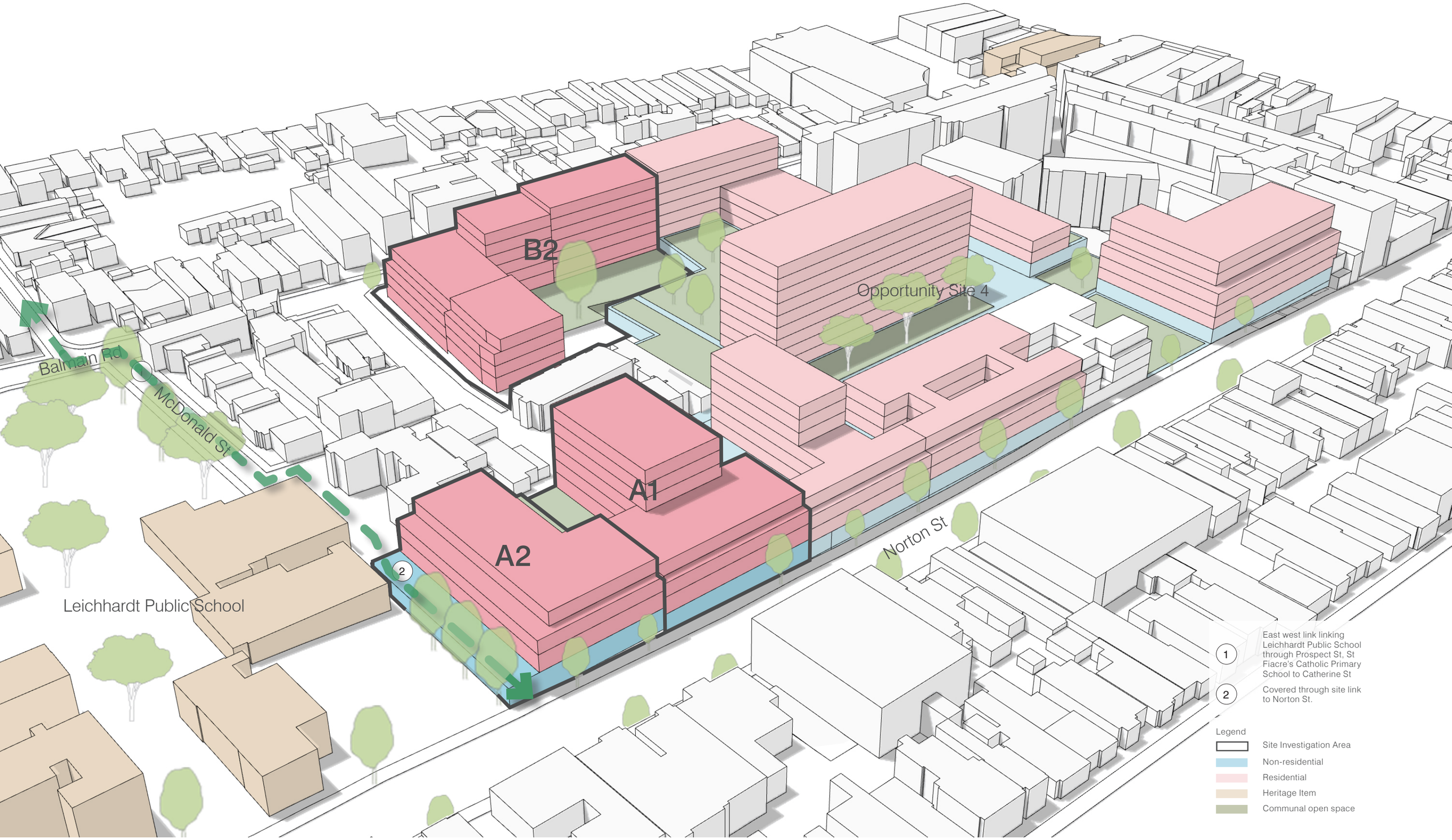
Key urban design considerations incorporated:

– **Site A2**: The first floor of commercial has 0m setback to the northern site boundary, which minimises direct overlooking of the shop top housing over the school. There is potential for a covered link however it is not an ideal outcome. Total height is 4 storeys compared to 5 storeys in Scenario 1. There is a setback of 6m for the second and third storeys, and an additional 4m for the upper storey.

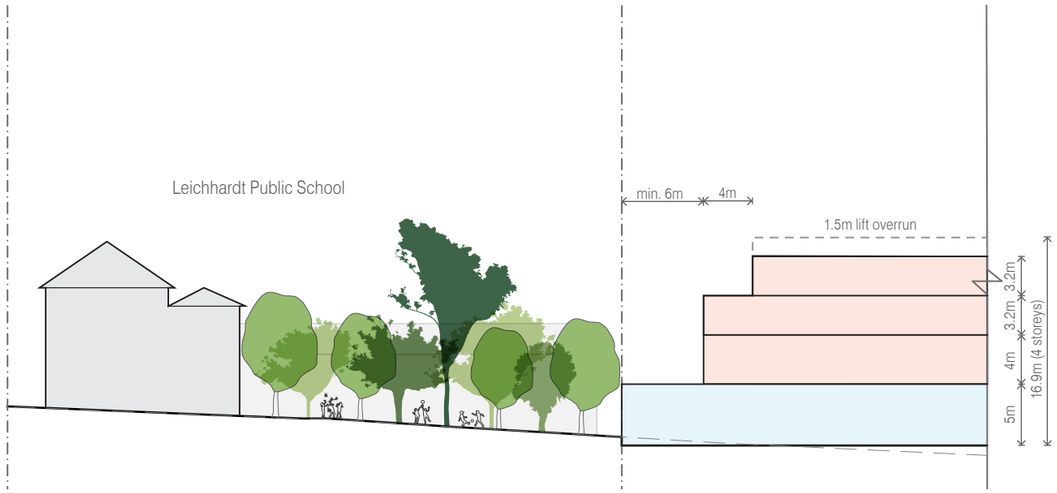


Development Scenario 2 Plan

Appendix I - North Leichhardt Investigation Area - Scenarios considered



Scenario 2 - Site A2 Yield



Development Scenario 2 - Section 1



Development Scenario 2 Key Plan

1:2,500 0 25 50 75 100M

Site Investigation Area A2

Site area	2066m²	
Communal Open Space	1109m²	53%

	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G (Commercial)	1728	1468.8	1248.5	5
L1	1150	862.5	733.1	4
L2	1150	862.5	733.1	3.2
L3	906	679.5	577.6	3.2
Lift overrun				1.5
Total	**4934**	**3873.3**	**3292.3**	**16.9**
FSR (n:1)		**1.9**		
No. of dwellings (NLA/67m²)		**30**		

Development Scenario 3
is premised on the below lot amalgamations and redevelopment.

1. **Site Investigation Area A**
   - **Site A1**: is as per Scenario 1
   - **Site A2**: is as per Scenario 1
2. **Site Investigation Area B**
   - **Site B1**: is as per Scenario 1
   - **Site B2** is split into smaller sites that would each entail the amalgamation of between 4 to 5 lots.
   - **Site B2-1** is an amalgamation of 56, 58, 60, 62 Balmain Rd.
   - **Site B2-2** is an amalgamation of 64, 66, 68, 70, 72 Balmain Rd.
   - **Site B2-3** is an amalgamation of 2, 4, 6A, 6, 8 McDonald St.
   - **Site B3:** is as per Scenario 1.

– The typologies tested are single and double-loaded perimeter block apartments, with maisonettes at ground level for sites within Site Investigation Area B, and shop top apartments for Site Investigation Area A.

Key urban design considerations incorporated:

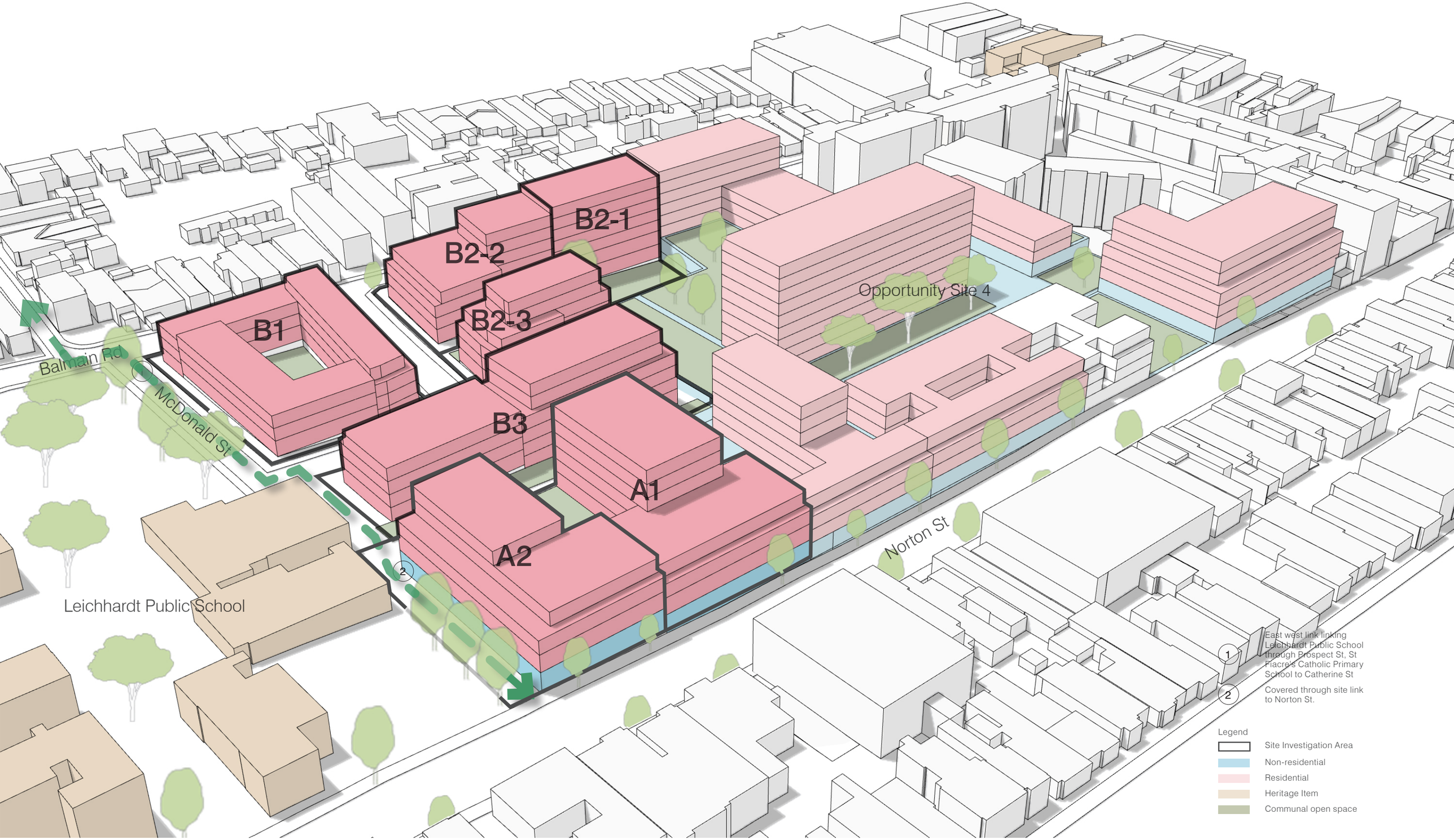
Site B2: In the amalgamation of a smaller number of lots into three sites, consideration was given to:

– Continuous street wall to Balmain Rd, hence 0m side boundary setbacks, appropriate residential floor plate depth of 20m, and generous communal open space with high amenity.

– A higher FSR for Site B2-3 was tested, compared to the FSR that would be achieved based on the built form in Scenario 1. A maximum of 6 storeys was tested, consistent with the southern end of the massing at Site B3.



Development Scenario 3 Plan


B1
B2-1
B2-2
B2-3
B3
A1
A2
Opportunity Site 4
Balmain Rd
McDonald St
Leichhardt Public School
Norton St
1
2
East west link linking Leichhardt Public School through Prospect St, St Fiacre's Catholic Primary School to Catherine St
Covered through site link to Norton St.
Legend
Site Investigation Area
Non-residential
Residential
Heritage Item
Communal open space

Appendix I - North Leichhardt Investigation Area - Scenarios considered



Scenario 3 - Site B2 Yield

Site Investigation Area B2-1

Site area 1474m²

Communal Open Space 633m² 43%

	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	671.6	503.7	428.2	4
L1	671.6	503.7	428.2	3.2
L2	671.6	503.7	428.2	3.2
L3	671.6	503.7	428.2	3.2
L4	671.6	503.7	428.2	3.2
L5	570.6	428.0	363.8	3.2
L6	570.6	428.0	363.8	3.2
Lift overrun				1.5
Total	**4499.5**	**3374.6**	**2868.4**	**24.7**
FSR (n:1)		**2.3**		
No. of dwellings (NLA/67m²)		**42**		

Site Investigation Area B2-2

Site area 1650m²

Communal Open Space 767m² 46%

	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	962.4	721.8	613.5	4
L1	962.4	721.8	613.5	3.2
L2	962.4	721.8	613.5	3.2
L3	903.2	677.4	575.8	3.2
L4	329.0	246.8	209.7	3.2
L5	329.0	246.8	209.7	3.2
Lift overrun				1.5
Total	**4448.4**	**3363.3**	**2835.8**	**21.5**
FSR (n:1)		**2.0**		
No. of dwellings (NLA/67m²)		**42**		

Site Investigation Area B2-3

Site area 1397m²

Communal Open Space 406m² 29%

	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	568.1	426.1	362.2	4
L1	568.1	426.1	362.2	3.2
L2	568.1	426.1	362.2	3.2
L3	530.4	397.8	338.1	3.2
L4	313.5	235.1	199.9	3.2
L5	313.5	235.1	199.9	3.2
Lift overrun				1.5
Total	**2861.7**	**2146.3**	**1824.3**	**21.5**
FSR (n:1)		**1.5**		
No. of dwellings (NLA/67m²)		**27**		



Development Scenario 3 Key Plan

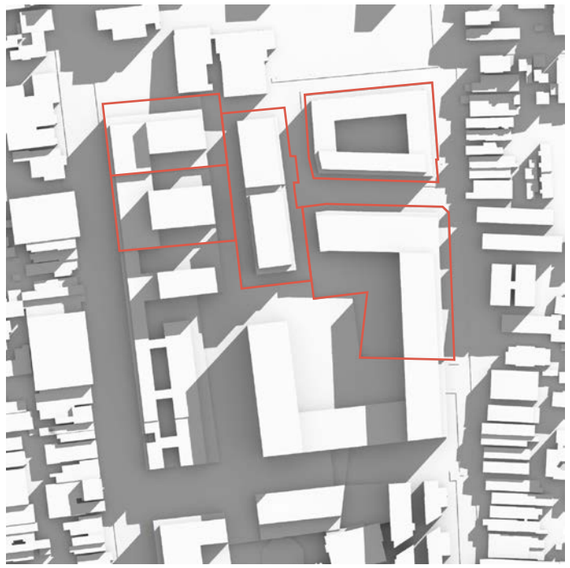
1:2,500 0 25 50 75 100M

Scenario 1 - Overshadowing analysis - winter solstice June 21)

This study illustrates the overshadowing impact to the subject site and surrounding existing and proposed development between 9am and 3pm on June 21.

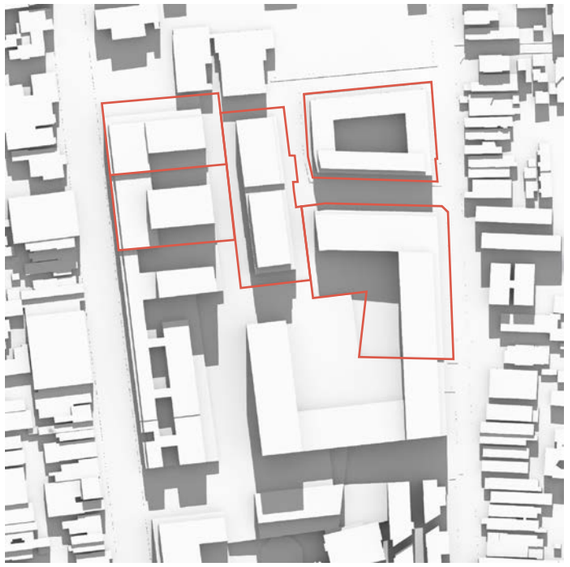
Summary

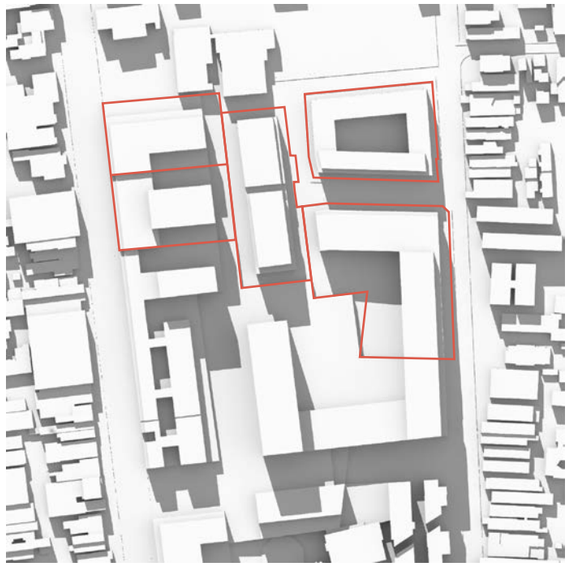
- Overshadowing impacts to the properties on the east side of Balmain Rd occur from about 2pm onwards.
- The overshadowing impact of proposed built form is contained to each site. The studies on the following pages demonstrate how solar access to communal open space and apartments can be achieved for built form massing on each site.
- The proposed built form has minor overshadowing to the sites to the south. The height of proposed built form has been considered to minimise impact to the site at the south, and to contain most of the overshadowing impact to streets.

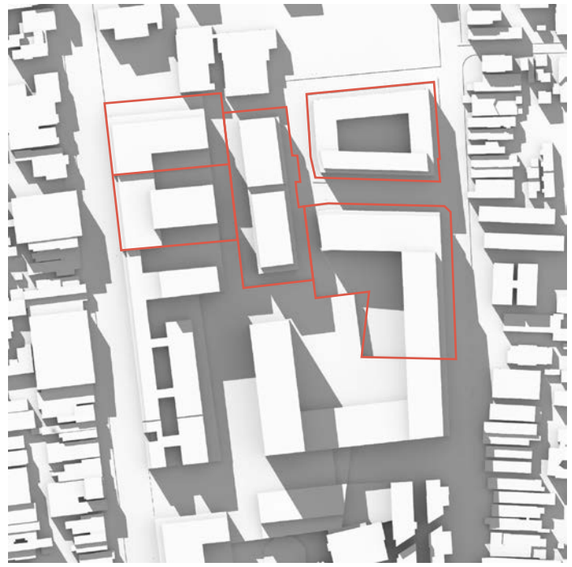

9am

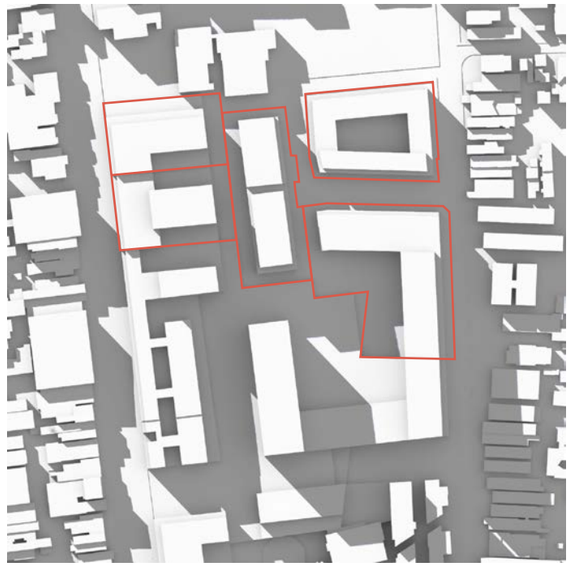

10am


11am


12pm


1pm


2pm

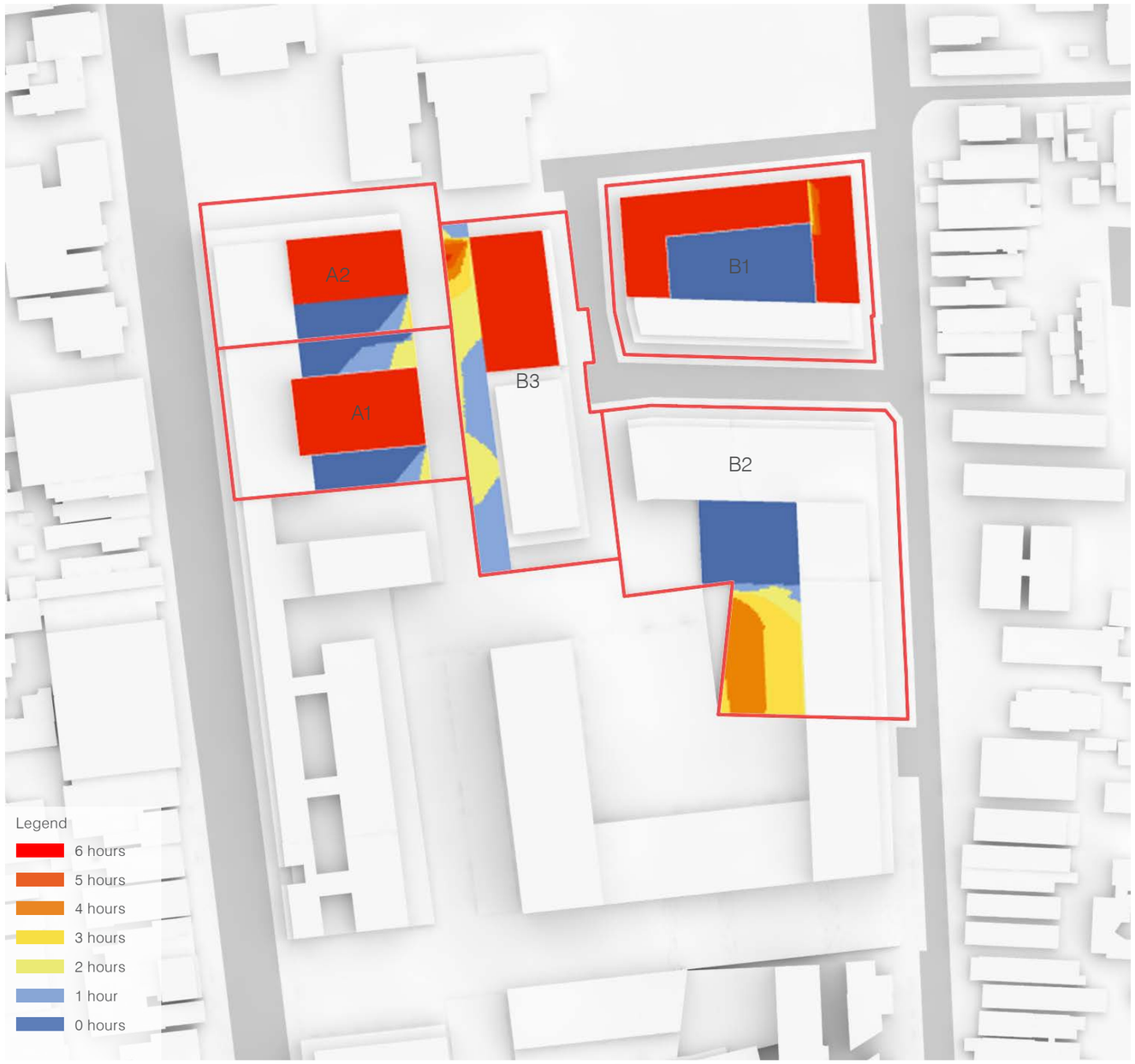

3pm

Scenario 1 - Solar access to communal open space - winter solstice (June 21)

This heat map analysis describes the number of hours of sunlight to the proposed open space areas within subject site, assessed between 9am and 3pm on June 21.

Results
Communal open space for each Site Investigation Area includes space at ground level and at rooftops. The diagram and summary table below indicates that Objective 3D-1 of the ADG is achievable for each site.

Site	Percentage achieving at least 2 hours between 9am and 3pm on June 21
A1	100% (rooftop)
A2	100% (rooftop)
B1	100% (rooftop)
B2	53%
B3	100% (rooftop)



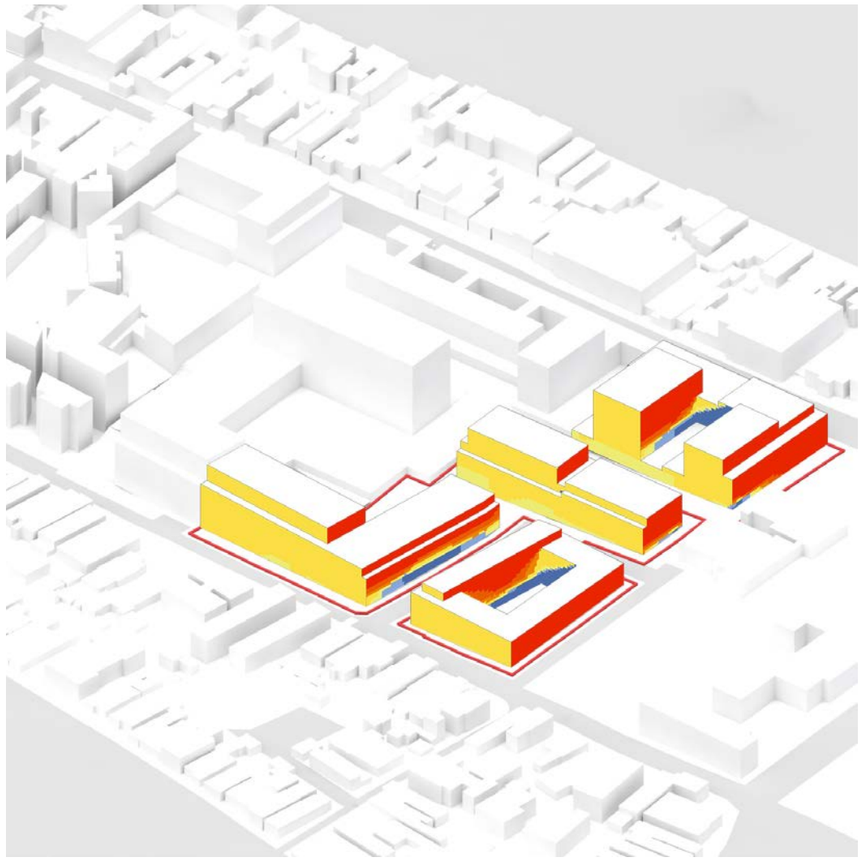
Heat map - number of hours of sun between 9am and 3pm at Winter Solstice (June 21)

Scenario 1 - Solar access to facades - winter solstice (June 21)

This heat map analysis describes the number of hours of sunlight to the proposed development facades (as a built form massing), assessed between 9am and 3pm on June 21.

Summary

– The majority of the north and east facades of the proposed built form massing achieve at least 2 hours of solar access. This demonstrates that Objective 4A-1 of the ADG is achievable.



NE



NW

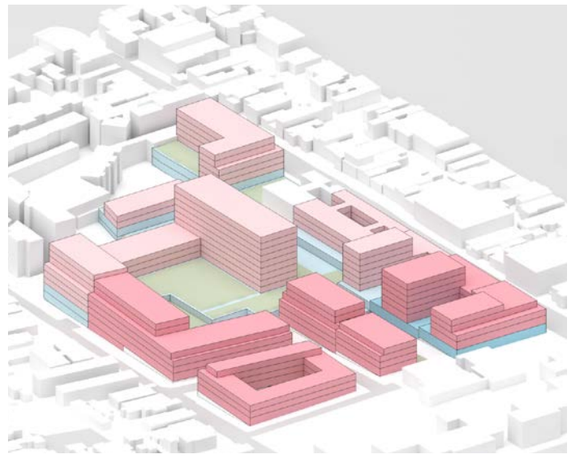
Legend

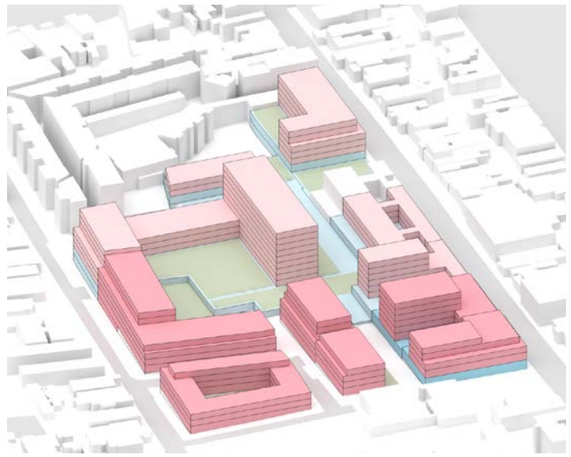
- 6 hours
- 5 hours
- 4 hours
- 3 hours
- 2 hours
- 1 hour
- 0 hours

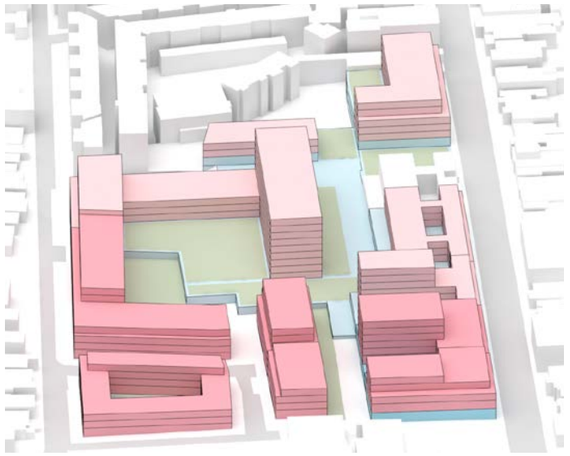
Scenario 1 - Sun-eye Views

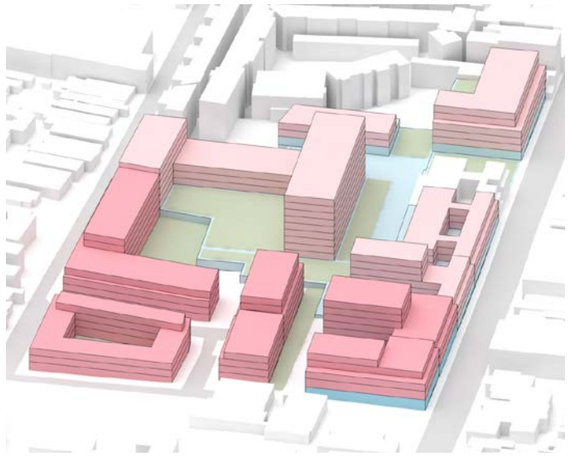
Perspective views from the projection of the sun, between the hours of 9am and 3pm, provide an understanding of solar access to the proposal and impact to surrounding context. These views are captured over the winter solstice (June 21), where the sun is lowest in the sky, and representing the 'worst case scenario' in terms of solar access.

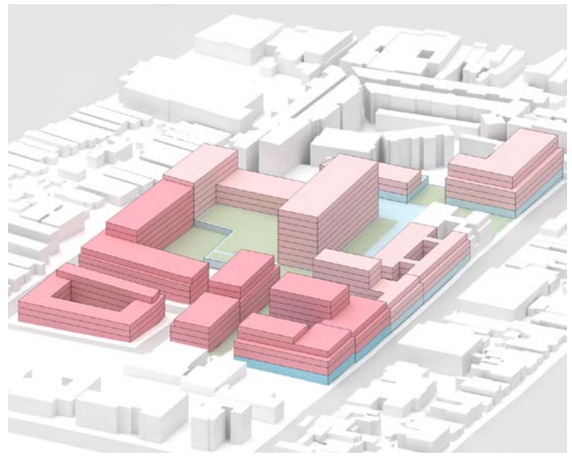

9 am


10 am


11 am


12 am


1 pm


2 pm

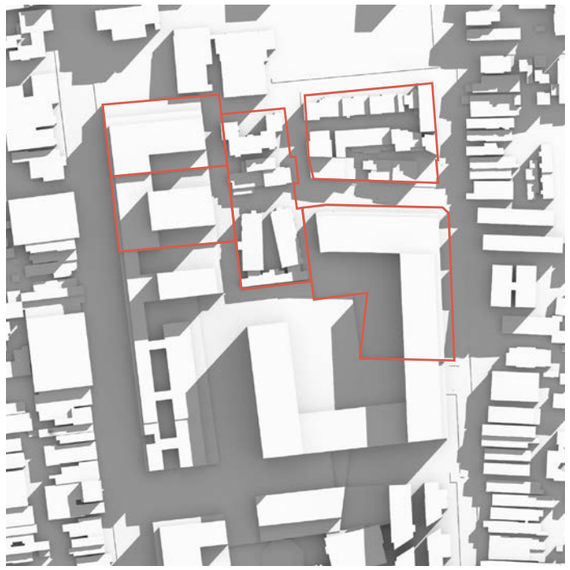

3 pm

Scenario 2 - Overshadowing analysis - winter solstice June 21)

This study illustrates the overshadowing impact to the subject site and surrounding existing and proposed development between 9am and 3pm on June 21.

Summary

- The proposed massing at Site Investigation Area A and B do not overshadow the existing townhouses at Site B1.
- The massing at A1 overshadows part of the existing multi dwelling units at 8A McDonald St from 2pm onwards. The units at the south-west of the development do not receive much existing sun and may not already achieve 2 hours to primary living space and outdoor space at winter solstice. The following pages include a facade heat map for this property, however a more detailed study would be required to ascertain and assess the impact to individual units.

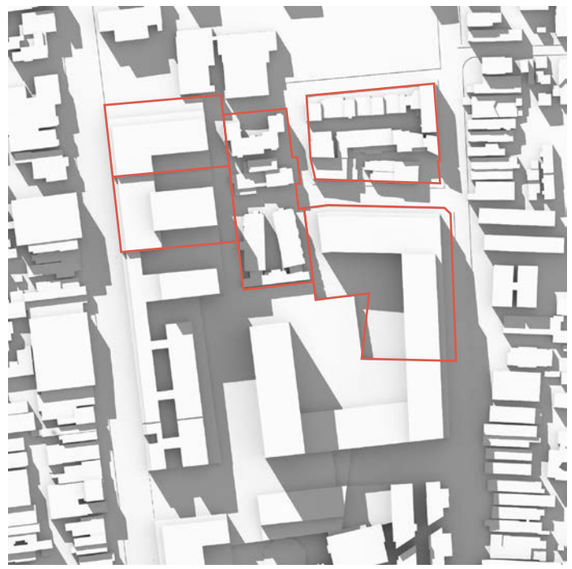

9am

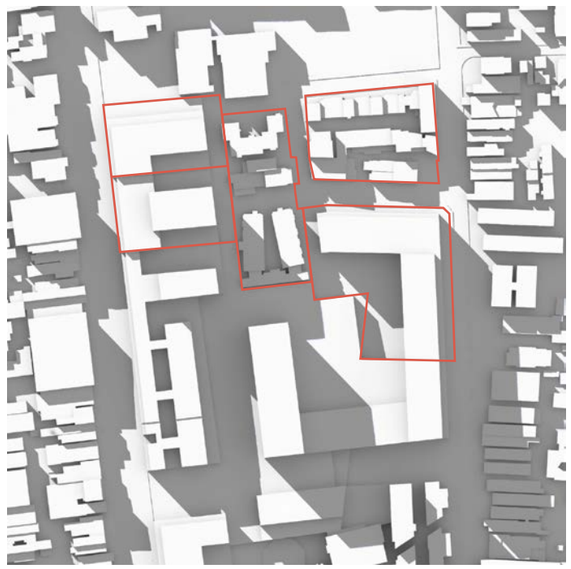

10am


11am


12pm


1pm


2pm


3pm

Scenario 2 Strata - Solar access to facades - winter solstice (June 21)

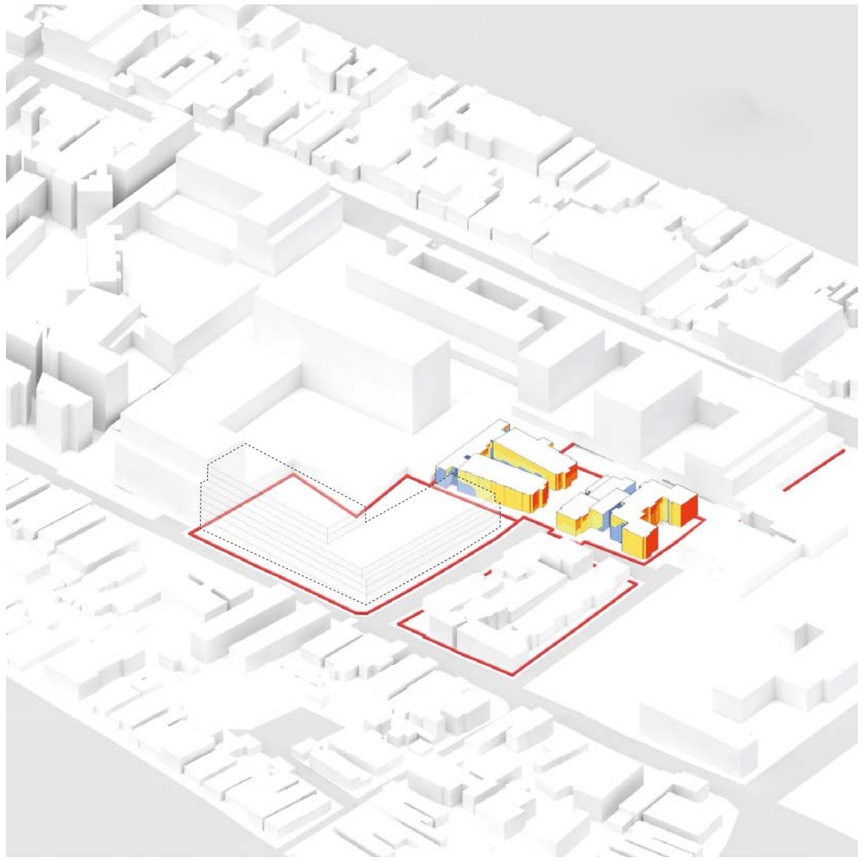
This heat map analysis describes the number of hours of sunlight the adjacent strata properties at McDonald St, assessed between 9am and 3pm on June 21.

Summary

– The following diagrams indicate that the northern facade of the property at 8A McDonald St achieves less than 2 hours of solar access between 9am and 3pm. It appears from the aerial below that solar access to the units and private open spaces at this facade would be quite limited already. A more detailed study taking into account the unit layout of this property would be required to determine the number of units impacted and any potential reduction of sunlight to their living areas and private outdoor spaces.



Oblique aerial showing existing strata properties in Site Investigation Area B



NE



NW

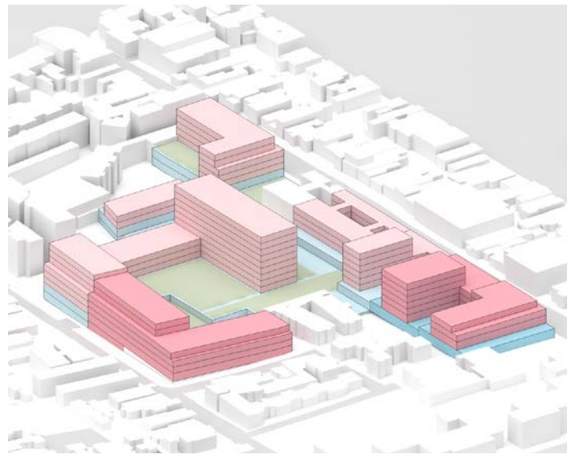
Legend

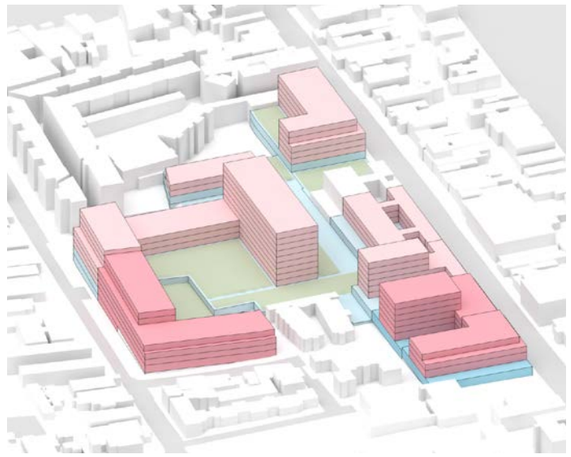
- 6 hours
- 5 hours
- 4 hours
- 3 hours
- 2 hours
- 1 hour
- 0 hours

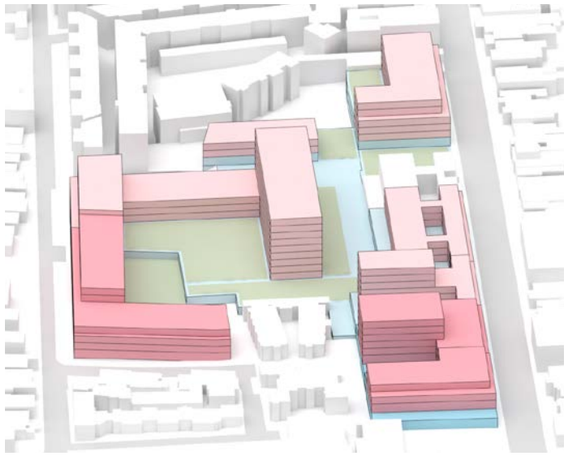
Scenario 2 - Sun-eye Views

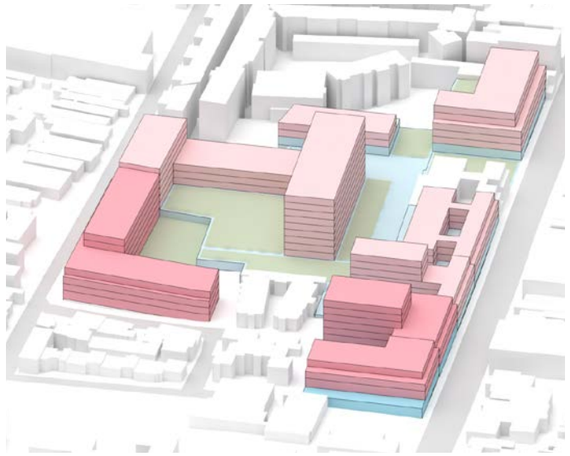
Perspective views from the projection of the sun, between the hours of 9am and 3pm, provide an understanding of solar access to the proposal and impact to surrounding context. These views are captured over the winter solstice (June 21), where the sun is lowest in the sky, and representing the 'worst case scenario' in terms of solar access.

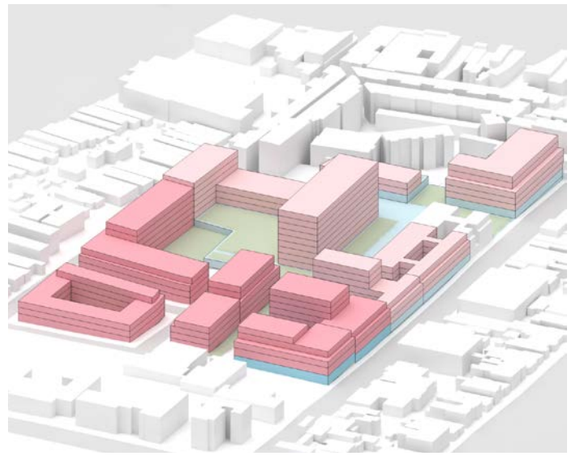

9 am


10 am


11 am


12 am


1 pm


2 pm

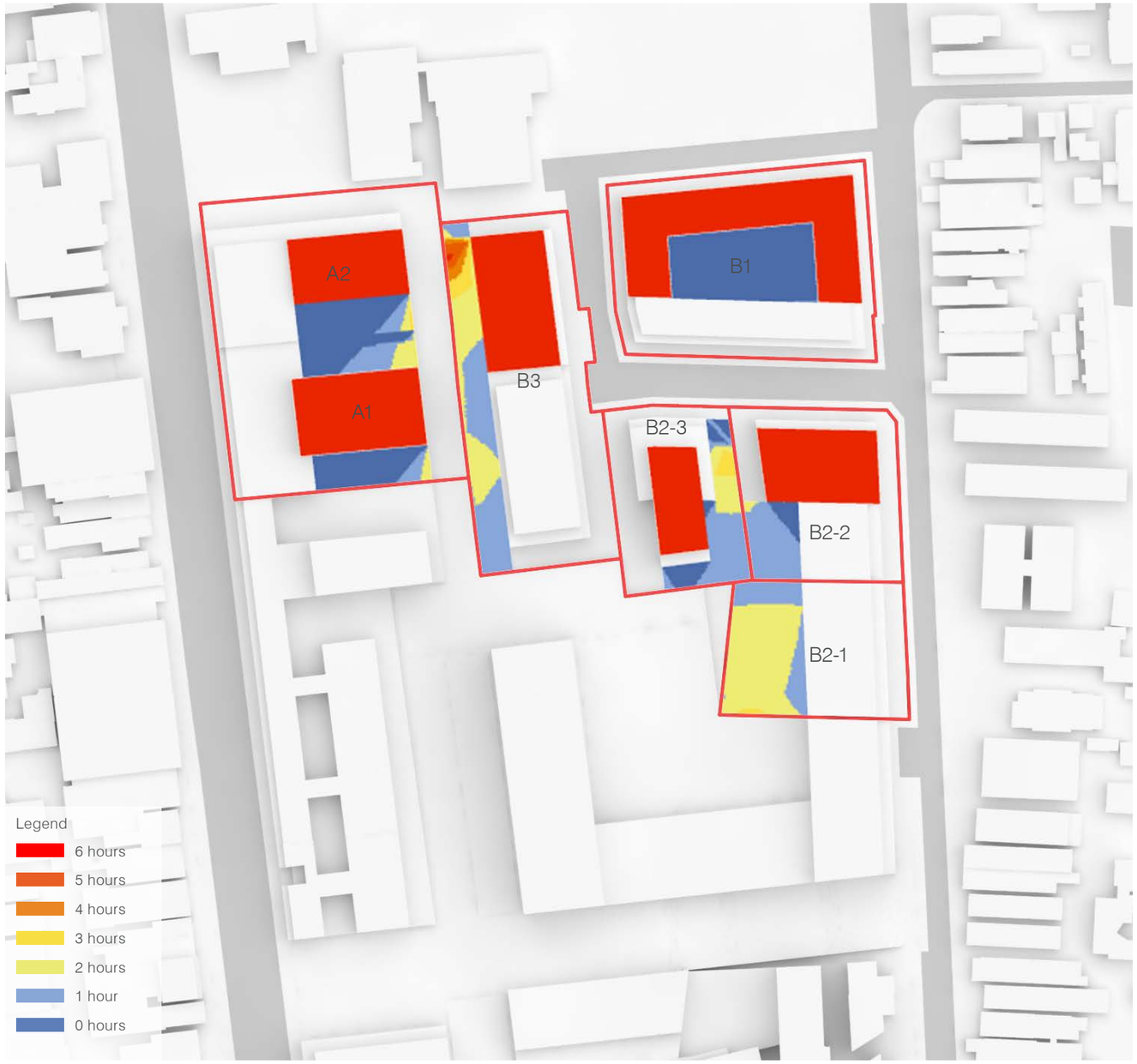

3 pm

Scenario 3 - Solar access to communal open space - winter solstice (June 21)

This heat map analysis describes the number of hours of sunlight to the proposed open space areas within subject site, assessed between 9am and 3pm on June 21.

Results
Communal open space for each Site Investigation Area includes space at ground level and at rooftops. The diagram and summary table below indicates that Objective 3D-1 of the ADG is achievable for each site.

Site	Percentage achieving at least 2 hours between 9am and 3pm on June 21
A1	100% (rooftop)
A2	100% (rooftop)
B1	100% (rooftop)
B2-1	68%
B2-2	100% (rooftop)
B2-3	100% (rooftop)
B3	100% (rooftop)

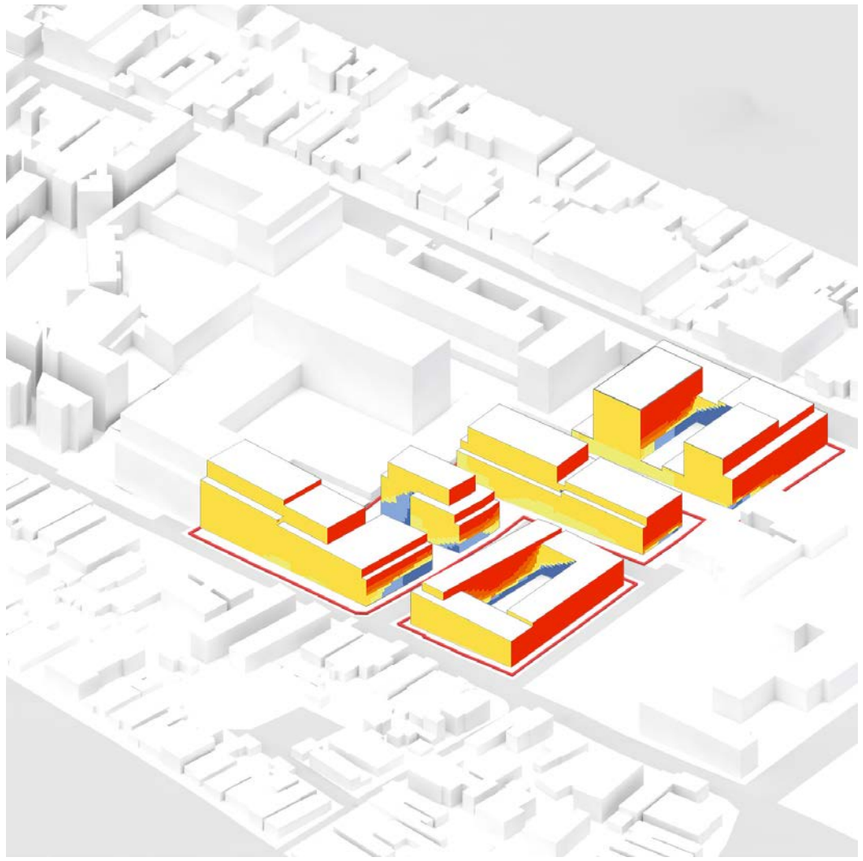


Scenario 3 - Solar access to facades - winter solstice (June 21)

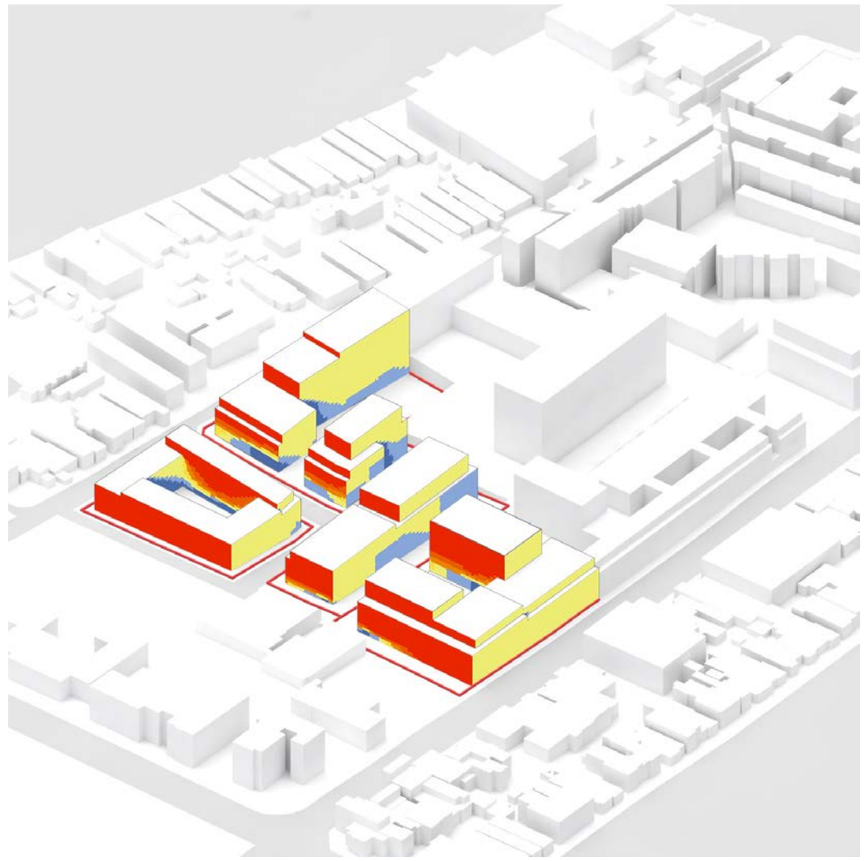
This heat map analysis describes the number of hours of sunlight to the proposed development facades (as a built form massing), assessed between 9am and 3pm on June 21.

Summary

– The majority of the north and east facades of the proposed built form massing achieve at least 2 hours of solar access. This demonstrates that Objective 4A-1 of the ADG is achievable.



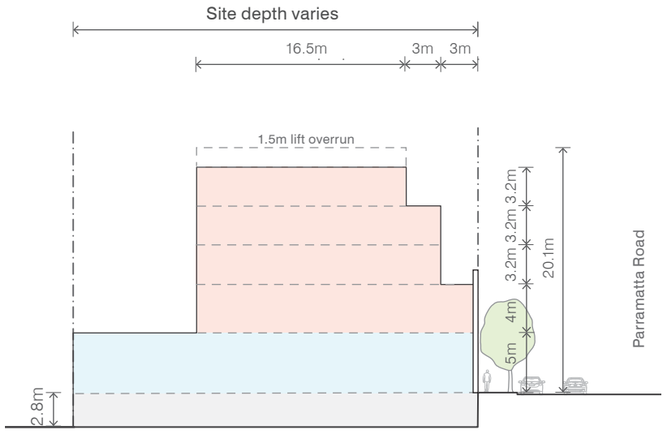
NE



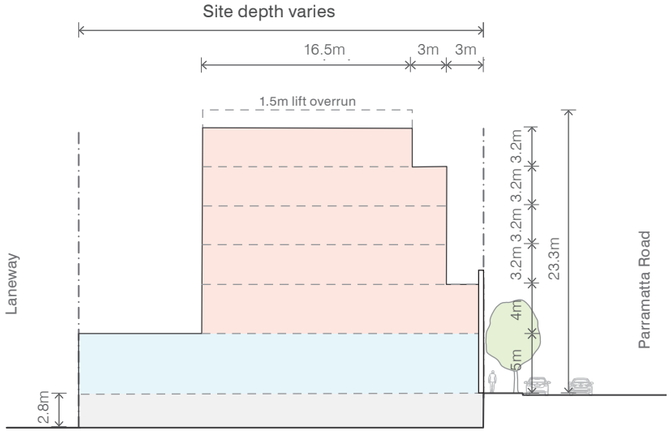
NW

FSR Summary Table of Options for min. 18m wide sites, variable depth

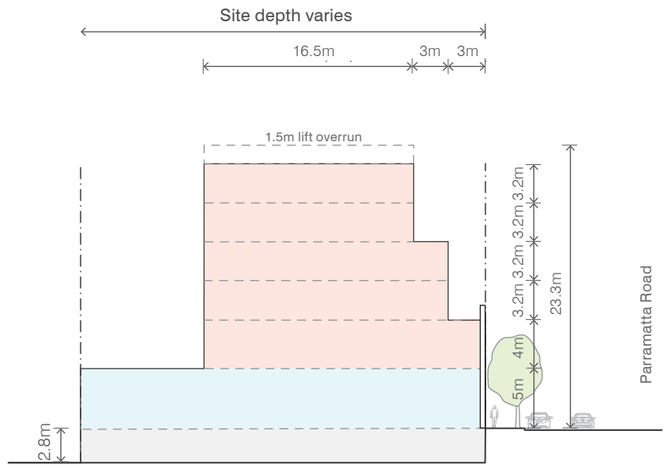
Site Depth (m)	FSR Option 1 - 5 storeys	FSR Option 2a - 6 storeys 6m front setback to top storey	FSR Option 2b - 6 storeys 9m front setback to top storey	FSR Option 3a - 6 storeys 6m front setback to top 2 storeys	FSR Option 3b - 6 storeys 9m front setback to top 2 storeys
29	2.9	3.4	3.3	3.3	3.1
30	2.8	3.3	3.2	3.2	3.1
32	2.7	3.1	3.1	3.1	2.9
33	**2.6**	**3.1**	**3.0**	**3.0**	**2.9**
35	2.6	3.0	2.9	2.9	2.8
36	2.5	2.9	2.8	2.8	2.7



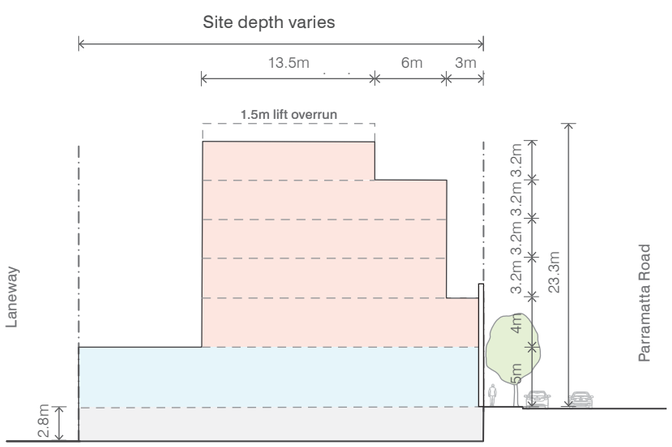
Option 1 - 5 storeys
(2 + 2 + 1)



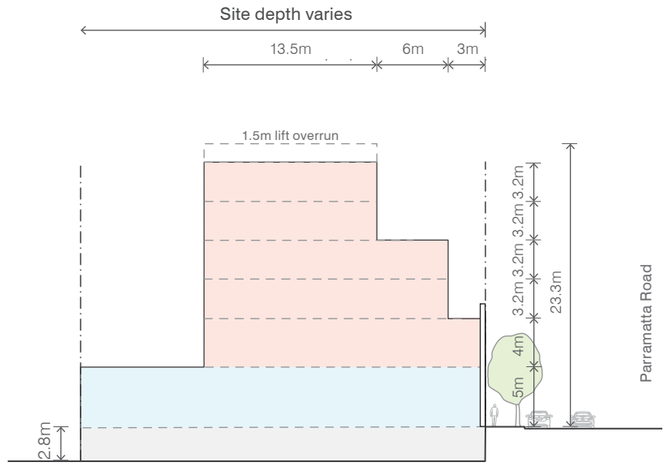
Option 2a - 6 storeys
6m front setback to top storey (2 + 3 + 1)



Option 3a - 6 storeys
6m front setback to top 2 storeys (2 + 2 + 2)



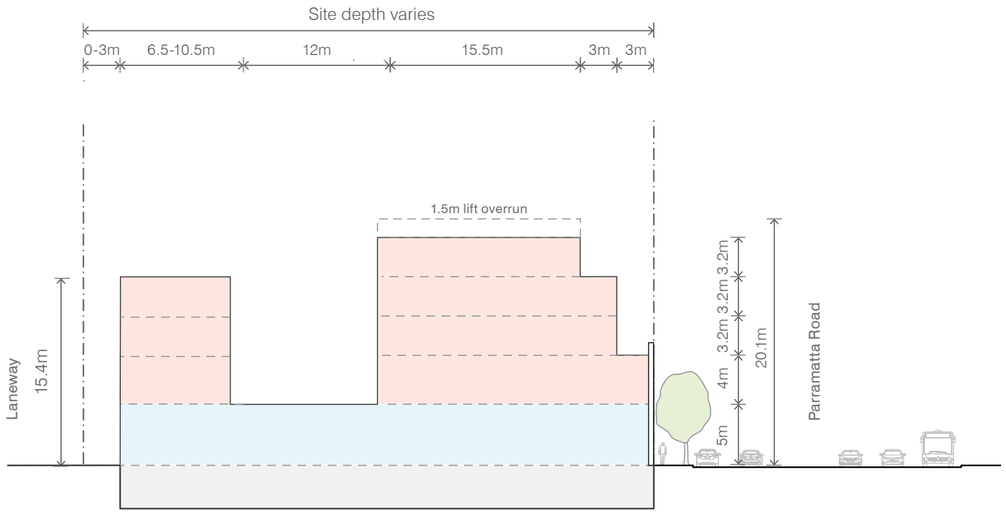
Option 2b - 6 storeys
9m front setback to top storey (2 + 3 + 1)



Option 3b - 6 storeys
9m front setback to top 2 storeys (2 + 2 + 2)

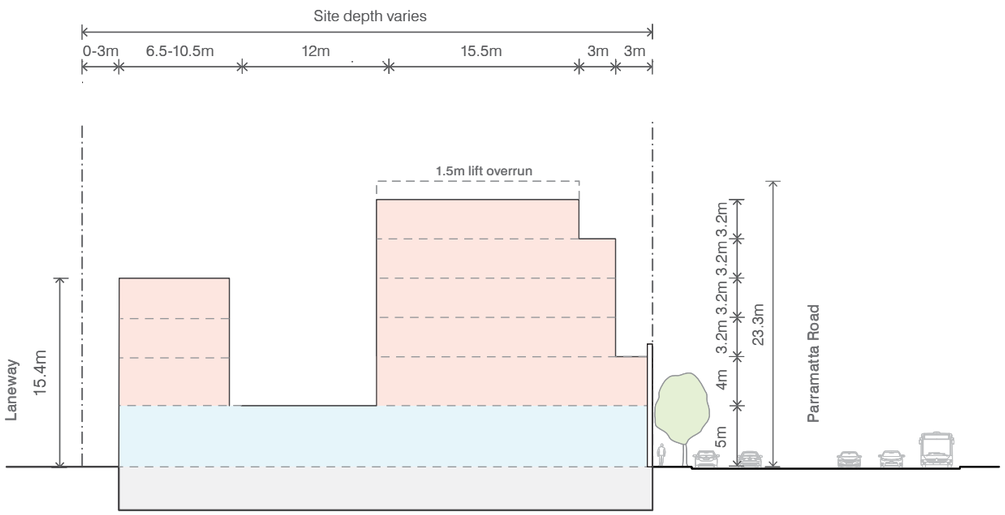
FSR Summary Table of Options for min. 18m wide sites, variable depth

Site Depth (m)	FSR Option 1 - 5 storeys	FSR Option 2a - 6 storeys 6m front setback to top storey	FSR Option 2b - 6 storeys 9m front setback to top storey	FSR Option 3a - 6 storeys 6m front setback to top 2 storeys	FSR Option 3b - 6 storeys 9m front setback to top 2 storeys
41	2.6	3.0	2.9	3.0	2.9
42	2.6	3.0	2.9	2.9	2.8
46.5	**2.5**	**2.9**	**2.8**	**2.8**	**2.7**
48	2.5	2.9	2.8	2.8	2.7

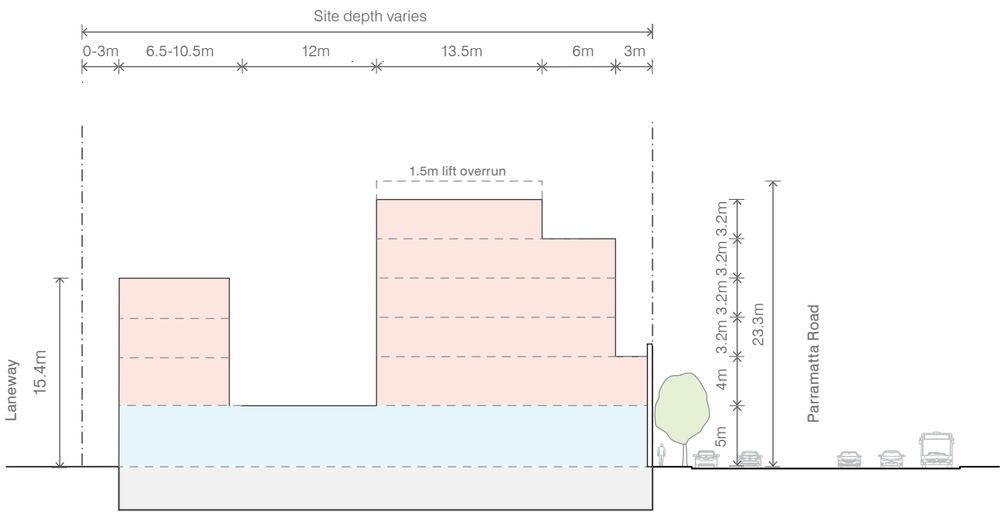


Option 1 - 5 storeys
6m front setback to top storey (2 + 2 + 1)

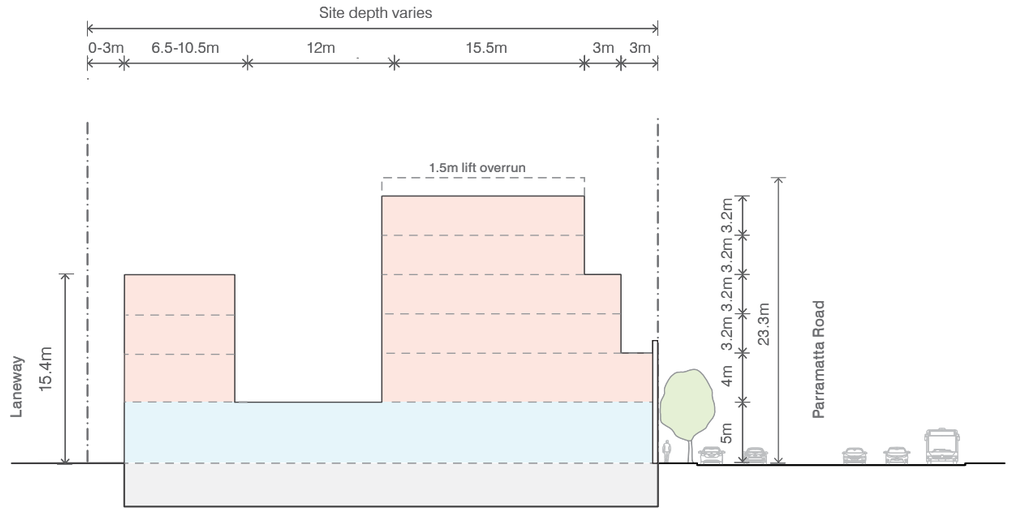
Appendix II - Parramatta Road - Scenarios considered



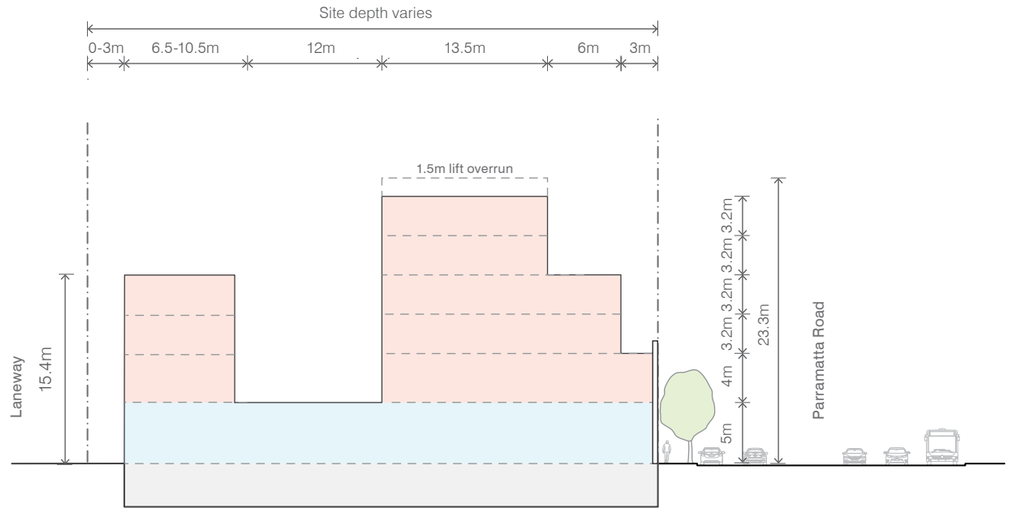
Option 2a - 6 storeys
6m front setback to top storey (2 + 3 + 1)



Option 2b- 6 storeys
9m front setback to top storey (2 + 3 + 1)

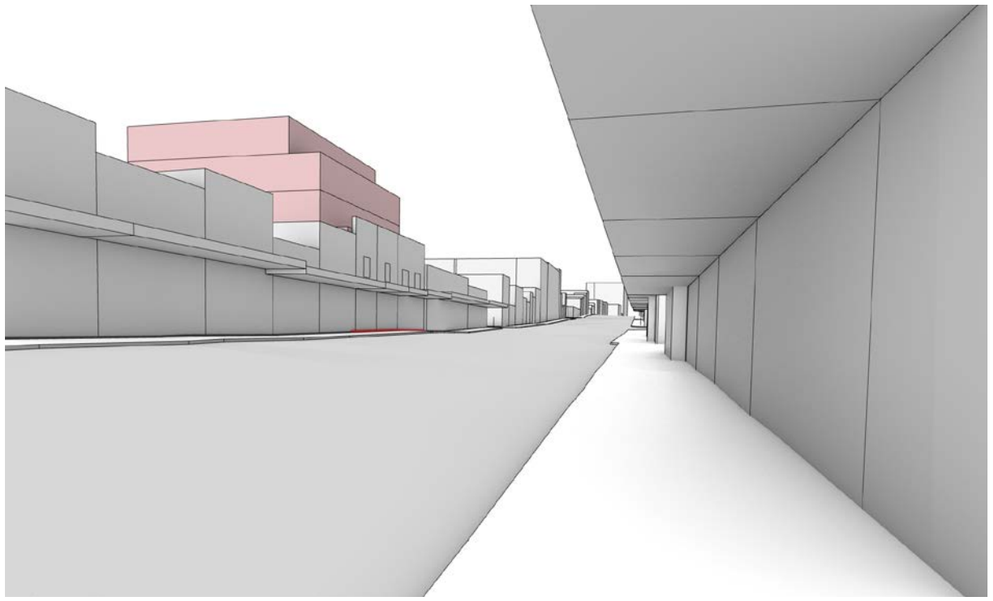


Option 3a - 6 storeys
6m front setback to top 2 storeys (2 + 2 + 2)

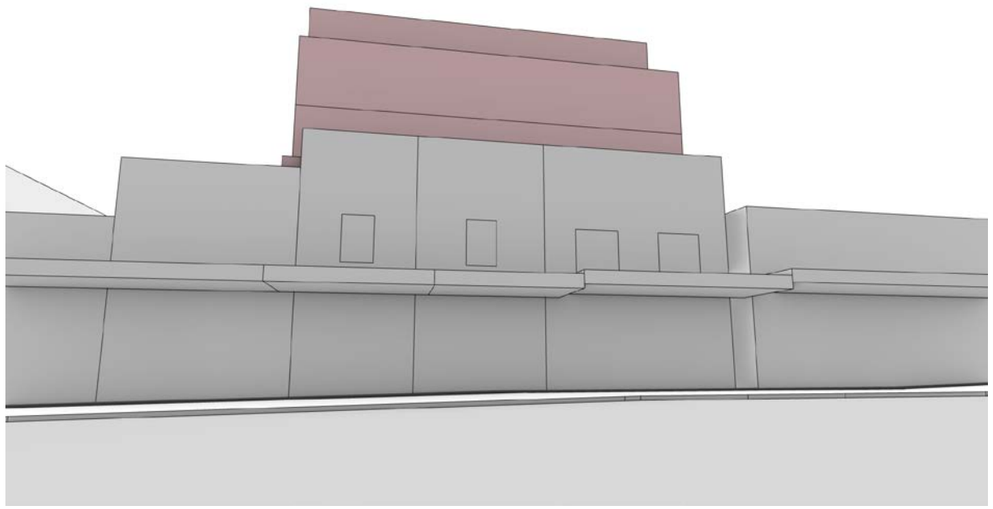


Option 3b - 6 storeys
9m front setback to top 2 storeys (2 + 2 + 2)

Option 1 (5 storeys)



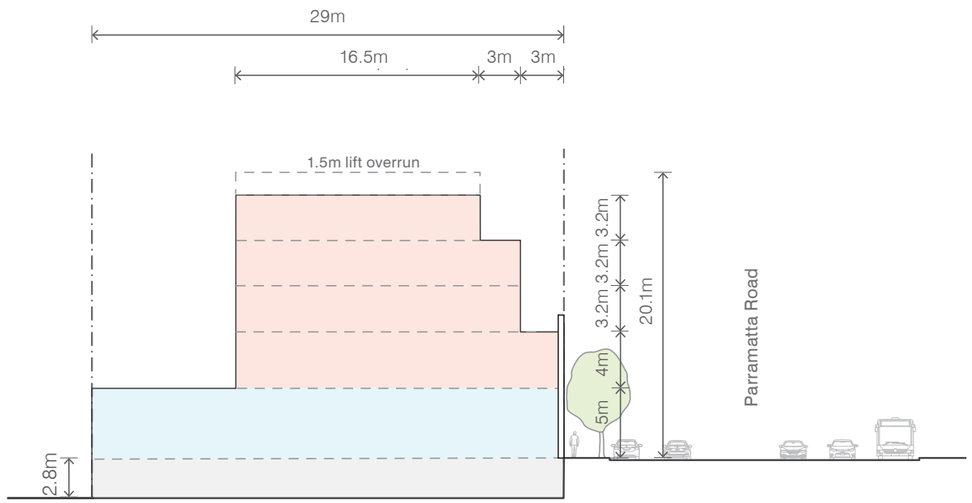
View from east Parramatta Rd



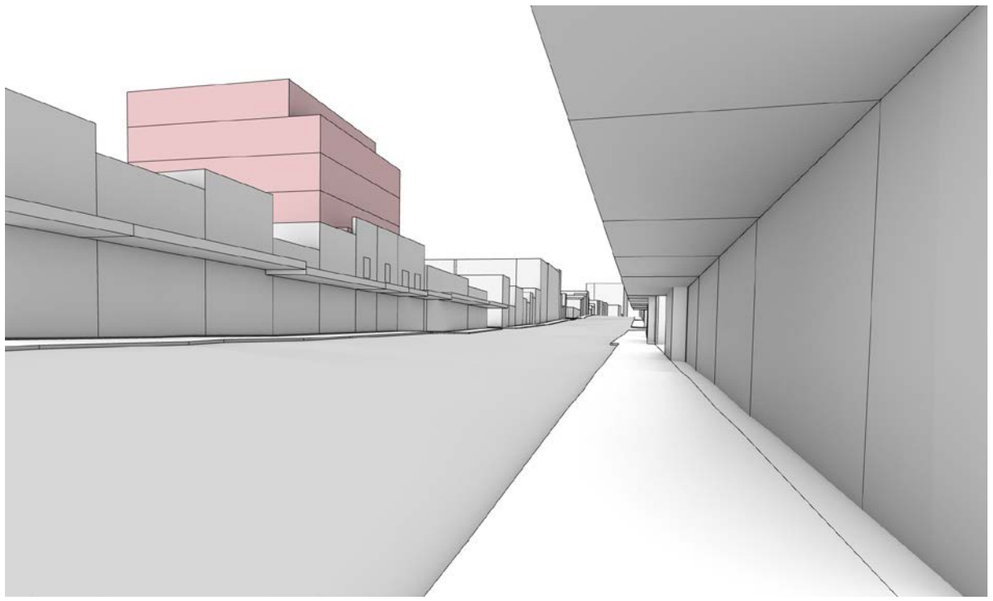
View from opposite side Parramatta Rd

Test Site 18m wide, 29m deep (466, 468, 470 Parramatta Rd)

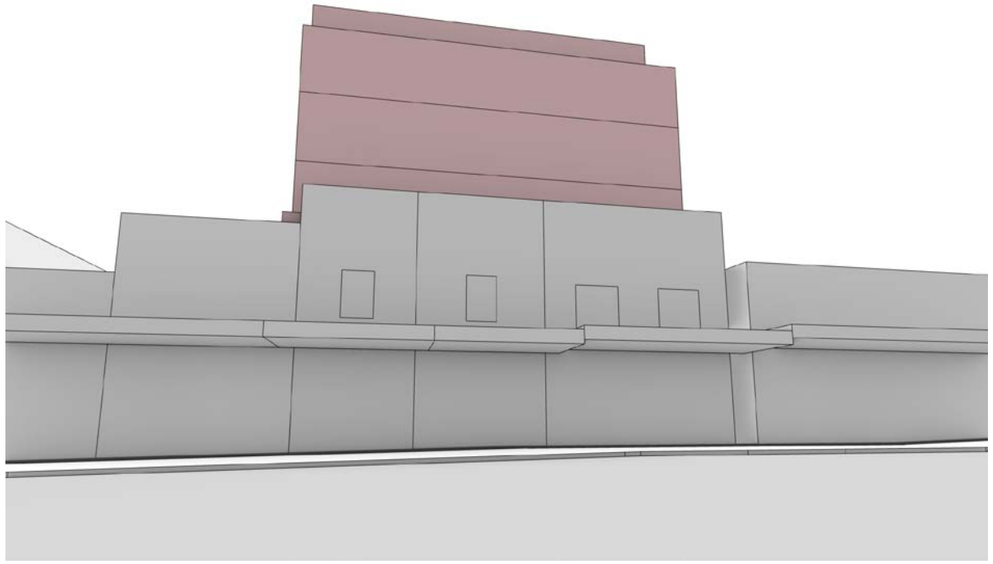
Site area	522m²			
	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	522	443.7	377.1	5
L1	405	303.8	258.2	4
L2	351	263.3	223.8	3.2
L3	351	263.3	223.8	3.2
L4	297	222.3	189.3	3.2
Lift overrun				1.5
Total	**1926**	**1496.7**	**1272.2**	**20.1**
FSR (n:1)	**2.9**			
No. of dwellings (NLA/67m²)		**21**		



Option 2a (6 storeys - 6m front setback to top storey)



View from east Parramatta Rd

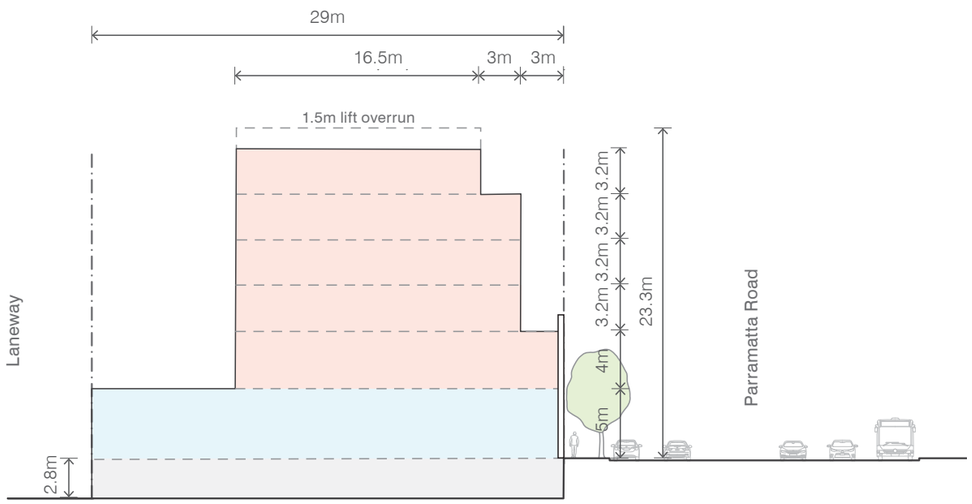


View from opposite side Parramatta Rd

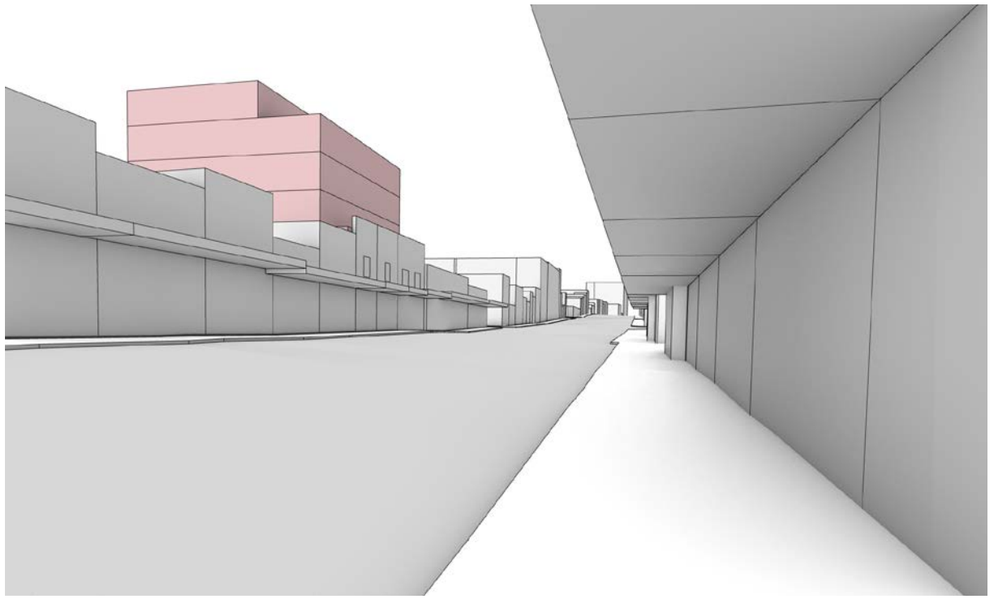
Test Site 18m wide, 29m deep (466, 468, 470 Parramatta Rd)

Site area	522m²			
	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	522	443.7	377.1	5
L1	405	303.8	258.2	4
L2	351	263.3	223.8	3.2
L3	351	263.3	223.8	3.2
L4	351	263.3	223.8	3.2
L5	297	222.3	189.3	3.2
Lift overrun				1.5
Total	**2277**	**1760**	**1496**	**23.3**
FSR (n:1)	**3.4**			
No. of dwellings (NLA/67m²)		**22**		

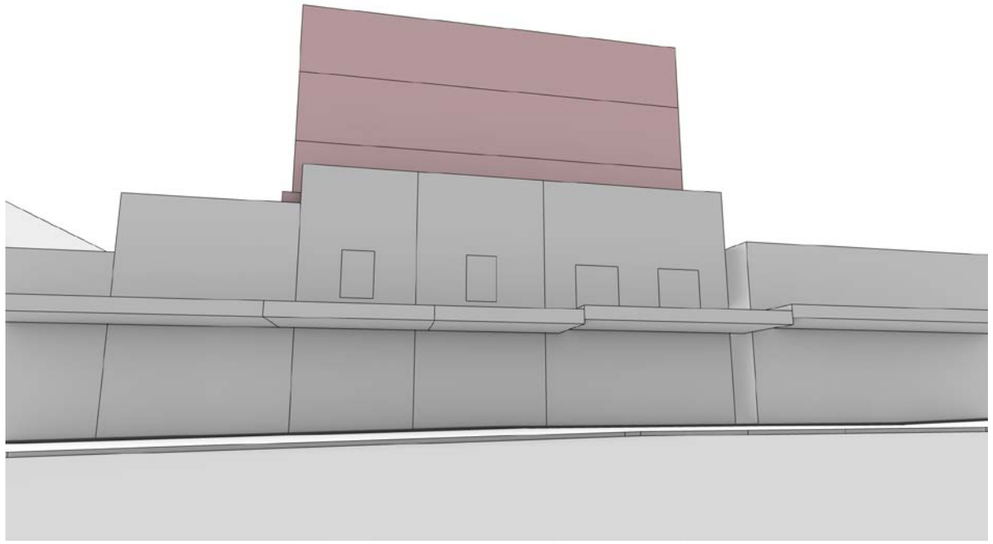
*Residential max floorplate 22.5m deep



Option 2b (6 storeys - 9m front setback to top storey)



View from east Parramatta Rd

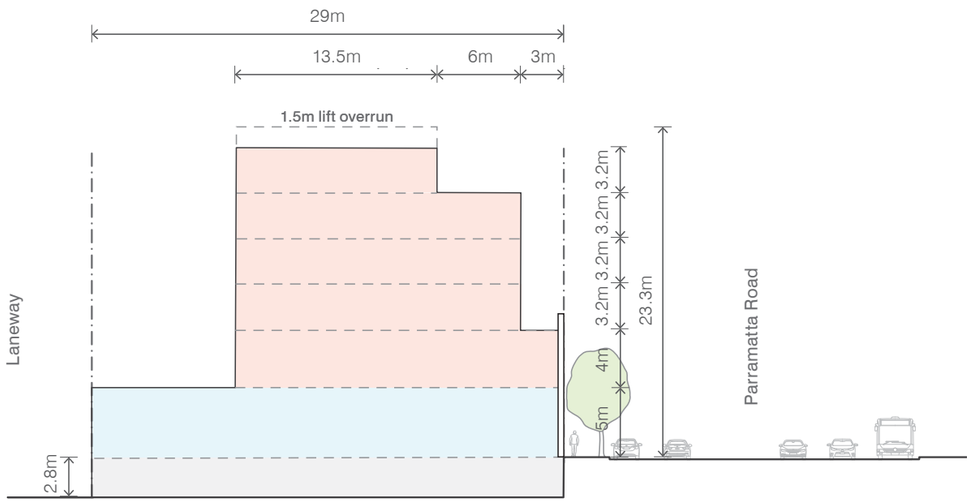


View from opposite side Parramatta Rd

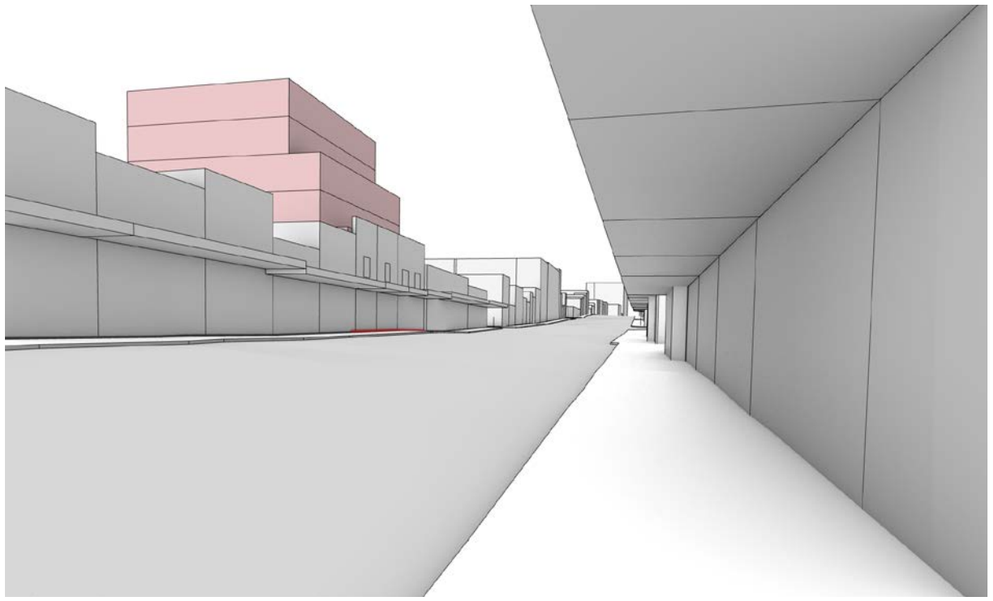
Test Site 18m wide, 29m deep (466, 468, 470 Parramatta Rd)

Site area	522m²			
	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	522	443.7	377.1	5
L1	405	303.8	258.2	4
L2	351	263.3	223.8	3.2
L3	351	263.3	223.8	3.2
L4	351	263.3	223.8	3.2
L5	243	182.3	154.9	3.2
Lift overrun				1.5
Total	**2223**	**1719.5**	**1461.5**	**23.3**
FSR (n:1)	**3.3**			
No. of dwellings (NLA/67m²)		**20**		

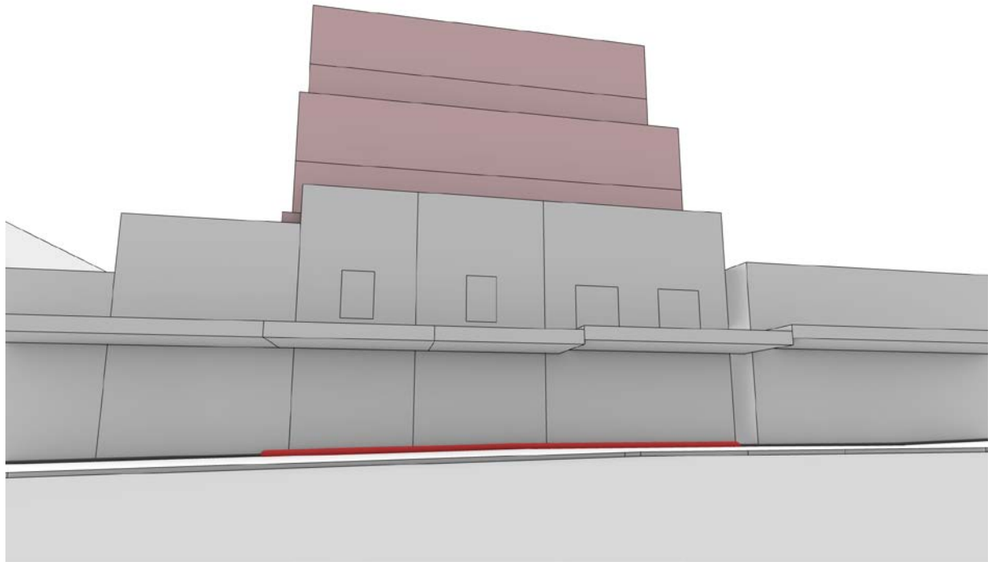
*Residential max floorplate 22.5m deep



Option 3a (6 storeys - 6m front setback to top storey)



View from east Parramatta Rd

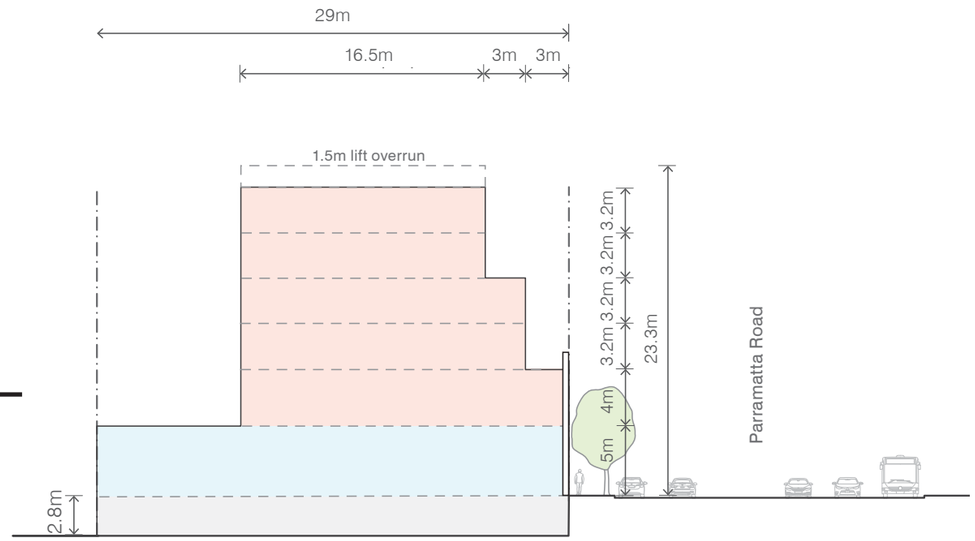


View from opposite side Parramatta Rd

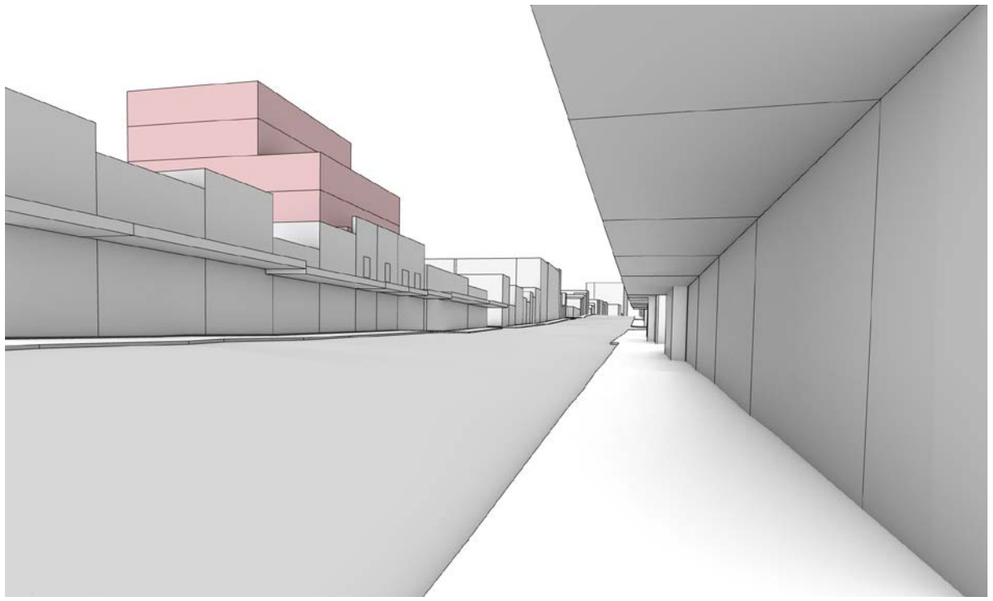
Test Site 18m wide, 29m deep (466, 468, 470 Parramatta Rd)

Site area	522m²			
	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	522	443.7	377.1	5
L1	405	303.8	258.2	4
L2	351	263.3	223.8	3.2
L3	351	263.3	223.8	3.2
L4	297	222.3	189.3	3.2
L5	297	222.3	189.3	3.2
Lift overrun				1.5
Total	**2223**	**1719.5**	**1461.5**	**23.3**
FSR (n:1)	**3.3**			
No. of dwellings (NLA/67m²)		**21**		

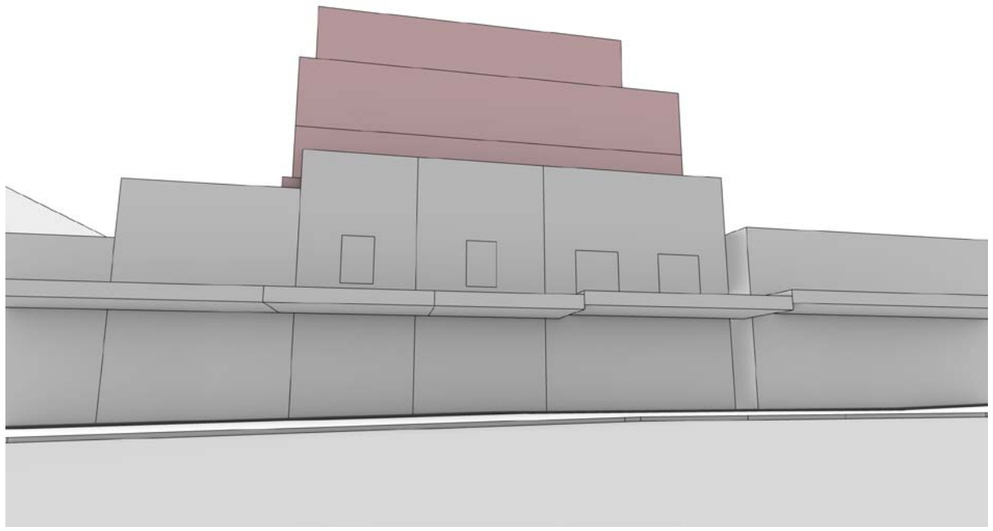
*Residential max floorplate 22.5m deep



Option 3b (6 storeys - 9m front setback to top storey)



View from east Parramatta Rd

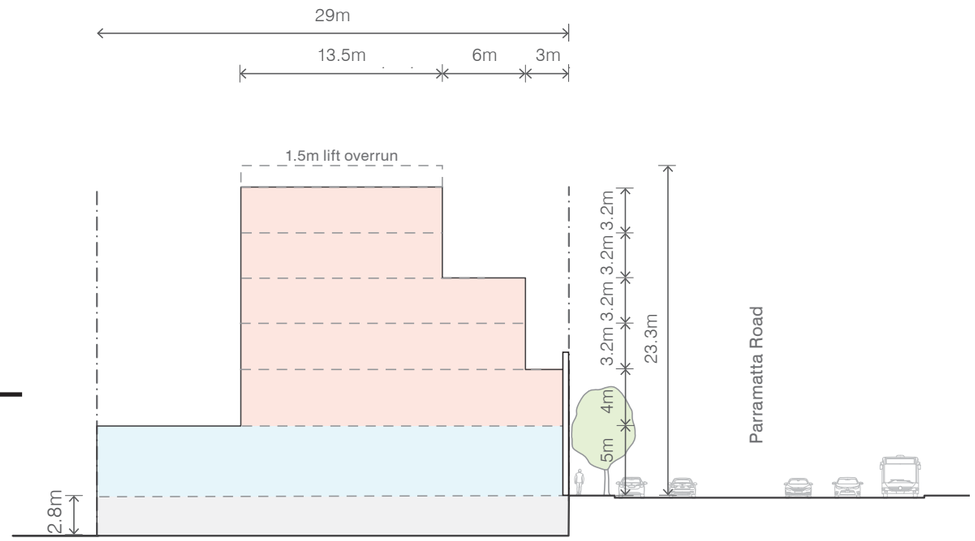


View from opposite side Parramatta Rd

Test Site 18m wide, 29m deep (466, 468, 470 Parramatta Rd)

Site area	522m²			
	GBA Floorplate (m²)	GFA Floorplate (m²)	NLA Floorplate (m²)	Height (m)
G	522	443.7	377.1	5
L1	405	303.8	258.2	4
L2	351	263.3	223.8	3.2
L3	351	263.3	223.8	3.2
L4	243	182.3	154.9	3.2
L5	243	182.3	154.9	3.2
Lift overrun				1.5
Total	**2115**	**1638.5**	**1392.7**	**23.3**
FSR (n:1)	**3.1**			
No. of dwellings (NLA/67m²)		**20**		

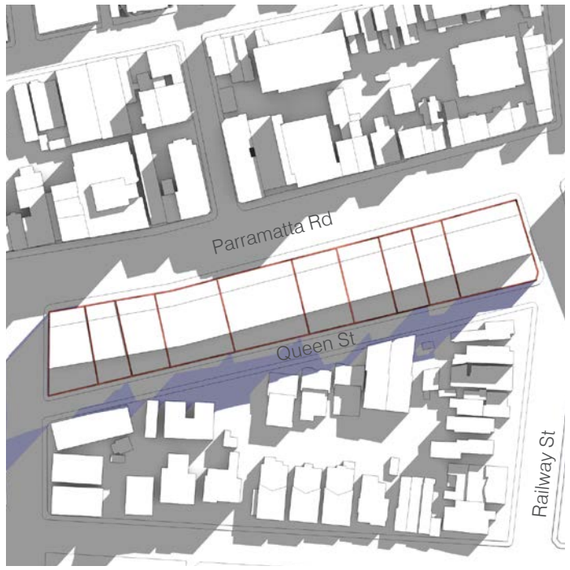
*Residential max floorplate 22.5m deep



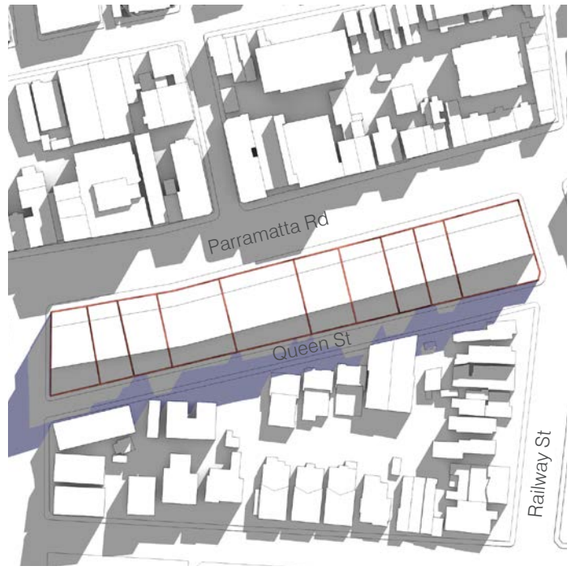
Parramatta Rd West

5 storey - Overshadowing analysis - winter solstice (June 21)

Additional overshadowing created by proposed development along Parramatta Rd highlighted in blue.



9am



10am



11am



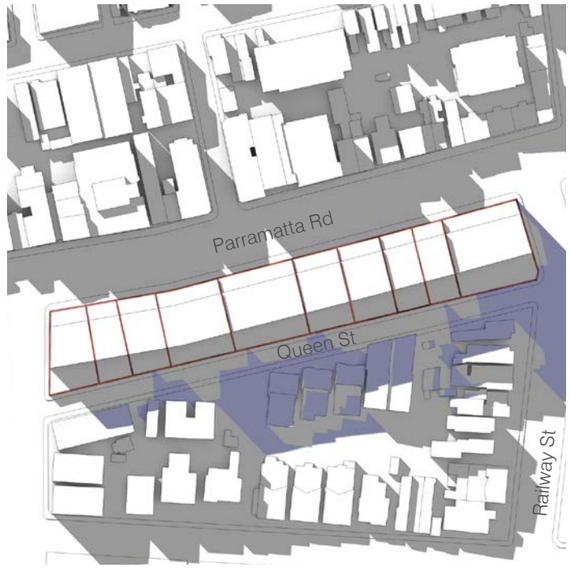
12pm



1pm



2pm



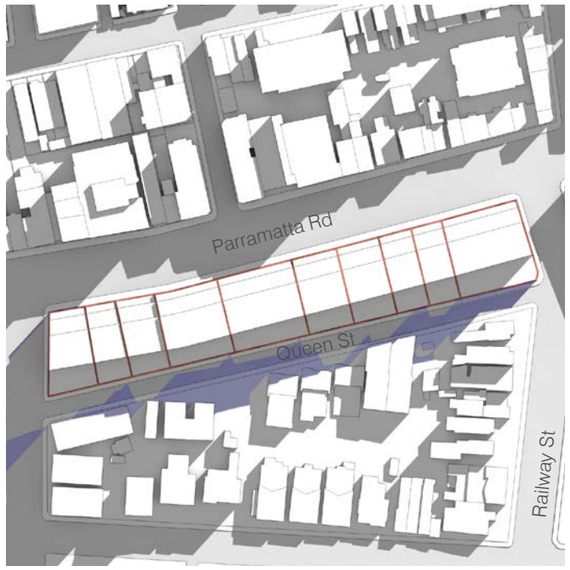
3pm

Parramatta Rd West

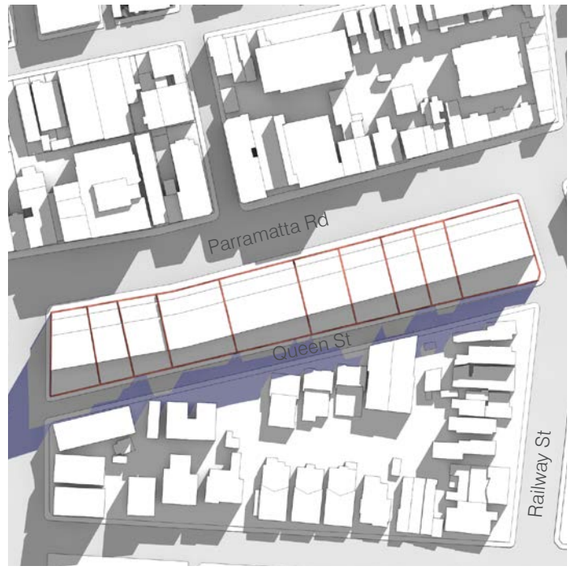
6 storey - Overshadowing analysis - winter solstice (June 21)

Additional overshadowing created by proposed development along Parramatta Rd highlighted in blue.

Note: the Option represented is Option 2b however the overshadowing impact will be the same for 2a, 2b, 3a, 3b due to the rear building line being the same up to 6 storeys.



9am



10am



11am



12pm



1pm



2pm



3pm

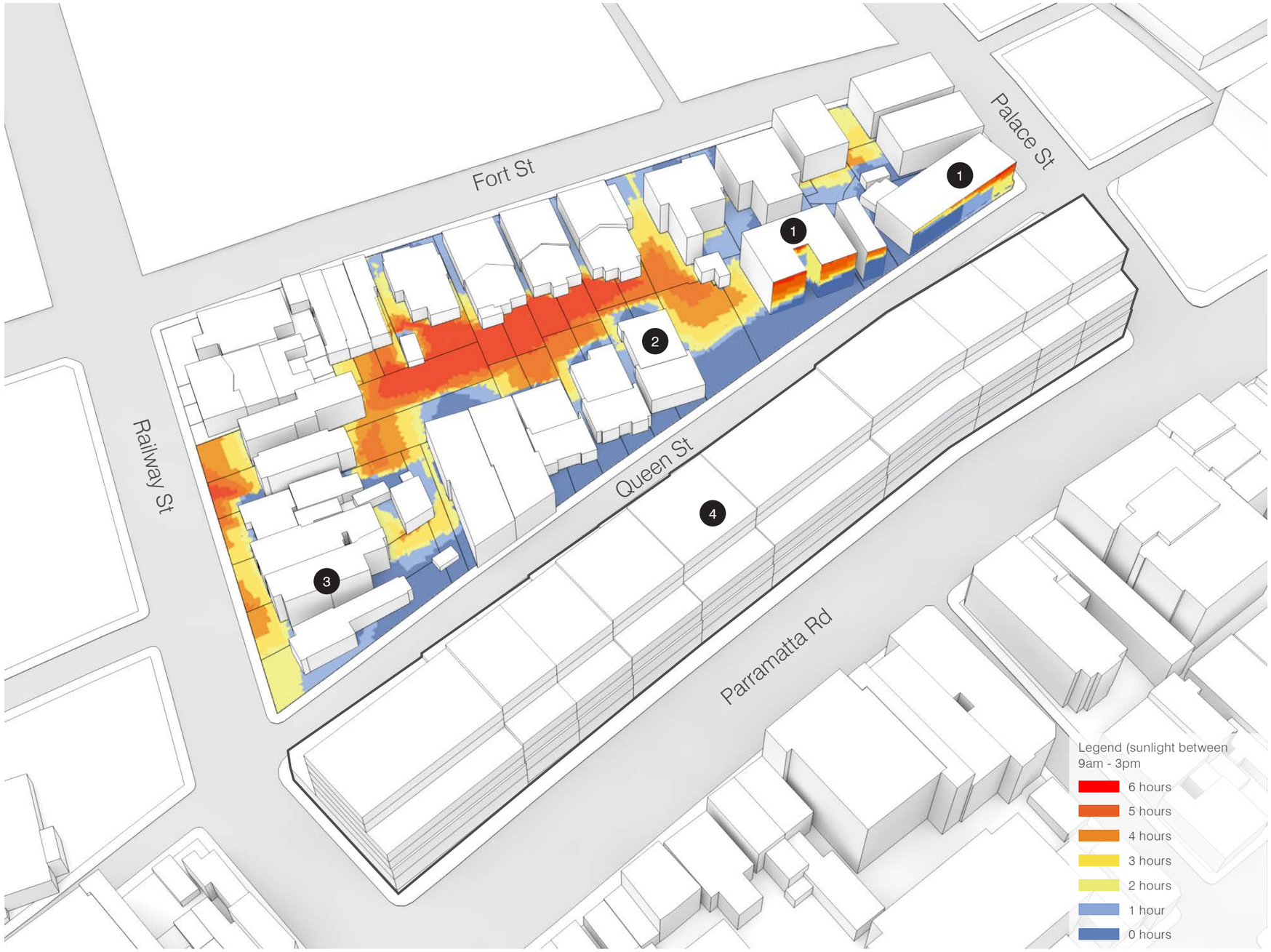
Solar access to neighbouring open space and apartments - Winter Solstice (June 21)

There are a broad range of conditions in the blocks south of the Parramatta Road sites. One example block with a range of conditions and interfaces has been modelled to understand typical impacts for solar access. Note that this study assumes all lots are developable, in order to assess the greatest potential impact.

1. Existing apartment buildings (21A Queen St Petersham and 1 Palace St).
2. North-south orientated lots. Solar access is maintained to primary usable open spaces at the south of these lots.
3. East- west orientated lots
4. Proposed redeveloped sites along Parramatta Rd. (Note this testing is based on an earlier option of building massing, however the rear building line is the same).

There are some cases of apartment buildings and east-west oriented lots where there is greater potential for overshadowing of open spaces and living room windows, and the simple massing shown does not demonstrate solar access which meets the 2 hour threshold. In these cases it is expected that more detailed testing, design and consideration of controls and objectives at a DA stage will need to be undertaken to determine appropriate development. This may require a slight reduction from the proposed FSR on some sites.





Solar access to neighbouring open space and apartments - Winter Solstice (June 21)

The following solar access diagram demonstrates the impact to private open spaces for a block at the east of the study area. This block has east-west orientated lots and north-south orientated lots, with garages located at the north end of the lots that fronting the lane behind the sites proposed for redevelopment.

1. North-south orientated lots. Solar access is maintained to primary usable open spaces.
2. East- west orientated lots
3. Proposed redeveloped sites along Parramatta Rd. (Note this testing is based on an earlier option of building massing, however the rear building line is the same).

Compared to the previous block, as the address of the north-south oriented lots are to the south side of the block, there is arguably no impact to living areas for these lots. Impact caused by overshadowing is primarily to the garages and sheds at the north or rear of these lots. Due to this condition, impact to solar access for the private open spaces for these lots is also minor. There are some cases of east-west oriented lots where there is greater potential for overshadowing of open spaces and living room windows, and the simple massing shown does not demonstrate solar access which meets the 2 hour threshold.

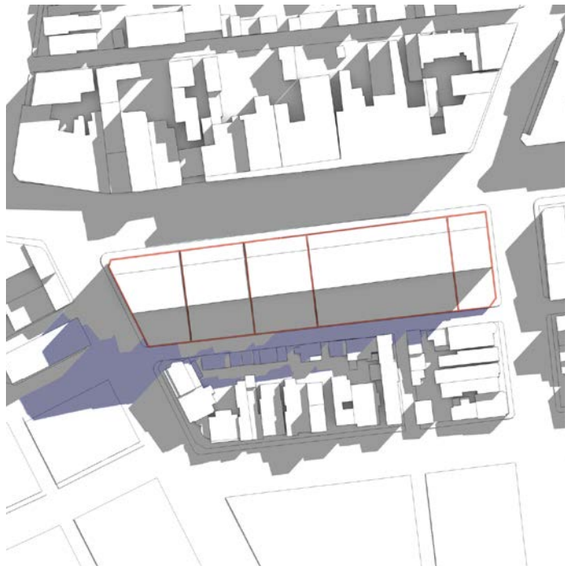




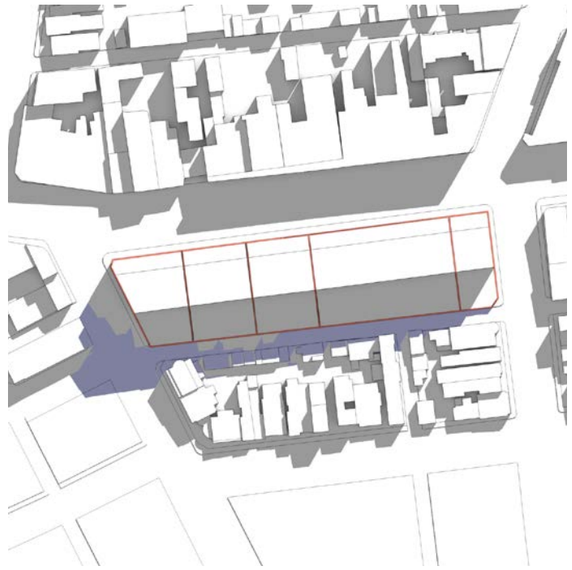
Parramatta Rd East

6 storey - Overshadowing analysis - winter solstice (June 21)

Additional overshadowing created by proposed development along Parramatta Rd highlighted in blue.



9am



10am



11am



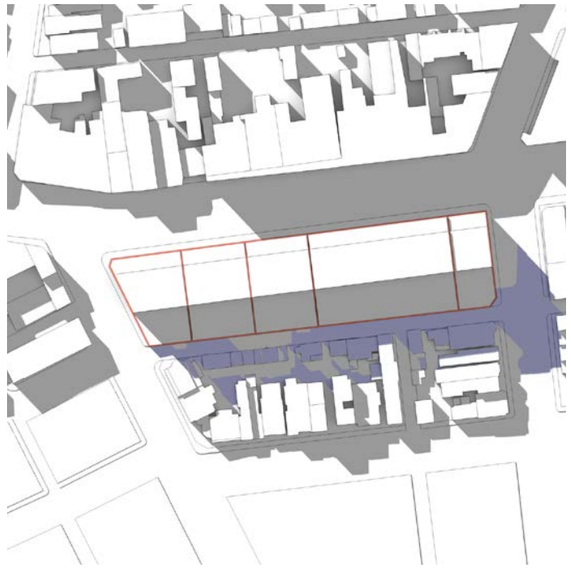
12pm



1pm



2pm



3pm

architectus™

Taverners Hill Precinct

Parramatta Road Corridor - Urban Design Peer Review (2023 Updates)

Prepared for: Client
Date: September 19, 2023

Architectus Australia Holdings Pty Ltd.
ABN 90 131 245 684

Nominated Architect
Managing Director
Ray Brown
NSWARB 6359

Adelaide
Lower Ground Floor
57 Wyatt Street
Adelaide SA 5000
Australia
T +61 8 8427 7300
adelaide@architectus.com.au

Melbourne
Level 25, 385 Bourke Street
Melbourne VIC 3000
Australia
T +61 3 9429 5733
F +61 3 9429 8480
melbourne@architectus.com.au

Perth
QV1 Upper Plaza West
250 St. Georges Terrace
Perth WA 6000
Australia
T +61 8 9412 8355
perth@architectus.com.au

Sydney
Level 18, MLC Centre
19 Martin Place
Sydney NSW 2000
Australia
T +61 2 8252 8400
F +61 2 8252 8600
sydney@architectus.com.au

architectus.com.au

Project and report	Parramatta Road Corridor - Urban Design Peer Review - Taverners Hill Precinct	
Date	September 19, 2023	
Client	Inner West Council	
Document no.	K:\230218.00\Docs\C_Client\C05_REPT\210510_TavernersHillFinalPackageFolder\230815_TavernersHillFinalPackage	
Version and date issued	Issue A (Final issue) - 03/06/21	Approved by: Greg Burgon
	Issue B (Draft update to client) - 18/07/23	Approved by: Greg Burgon
	Issue C (Final updated report) - 21/08/23	Approved by: Greg Burgon
	Issue D (Revised final report) - 20/09/23	Approved by: Greg Burgon
Report contact	Greg Burgon Principal Urban Designer	
This report is considered a draft unless signed by a Director or Principal	Approved by: Greg Burgon	

1.1 Background and Purpose of report

Background

Inner West Council is preparing a Planning Proposal to amend the Draft Inner West Local Environmental Plan for the Parramatta Road Corridor Urban Transformation Strategy (PRCUTS) precincts including Leichhardt, Taverners Hill and part of Kings Bay.

Council have prepared draft structure plan maps and design guidelines for these precincts which encompass changes to existing planning controls and take into consideration the recommendations of PRCUTS.

Purpose of this report

Architectus has been engaged by Inner West Council to give peer review advice on Council's draft structure plan maps and guidelines which will inform the LEP/ DCP controls. The fine grain design guidelines apply to individual precincts - Kings Bay, Taverners Hill and Leichhardt, as well as to general urban design issues across the three precincts.

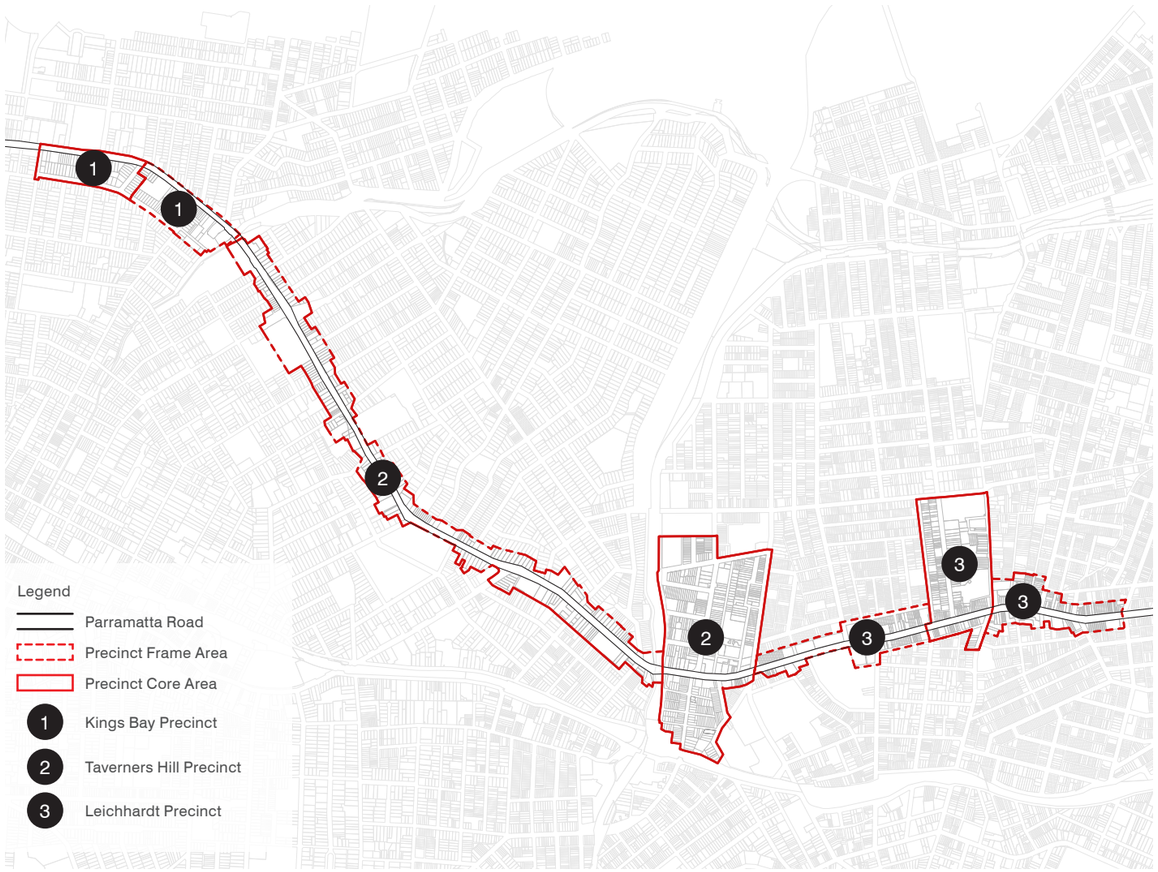
Three reports have been prepared (one for each precinct) and structured according to the specific issues which Council have identified and are seeking peer review advice on. This report covers the Kings Bay Precinct.

2023 Update to Urban Design Report

Following the issue of the Urban Design reports in 2021, Council submitted a Planning Proposal in May 2022 to the Department of Planning & Environment (DPE) for Gateway Determination. In October 2022 DPE provided Gateway Determination to proceed to public exhibition subject to conditions.

Further to this, and providing the basis for this round of updates to the Urban Design Reports, Council require floor to floor height assumptions for residential storeys to align with updates to the NCC, which was updated in May 2022, and, subsequently any impacted LEP HOB recommendations.

In addition the Employment Zones Reforms came into effect 25 April 2023 and zones have been amended to reflect the new zones. The exception to this is when referencing recommendations of the PRCUTS (2016), when the zone in place at that time is used.



Parramatta Road Corridor study area map

Approach

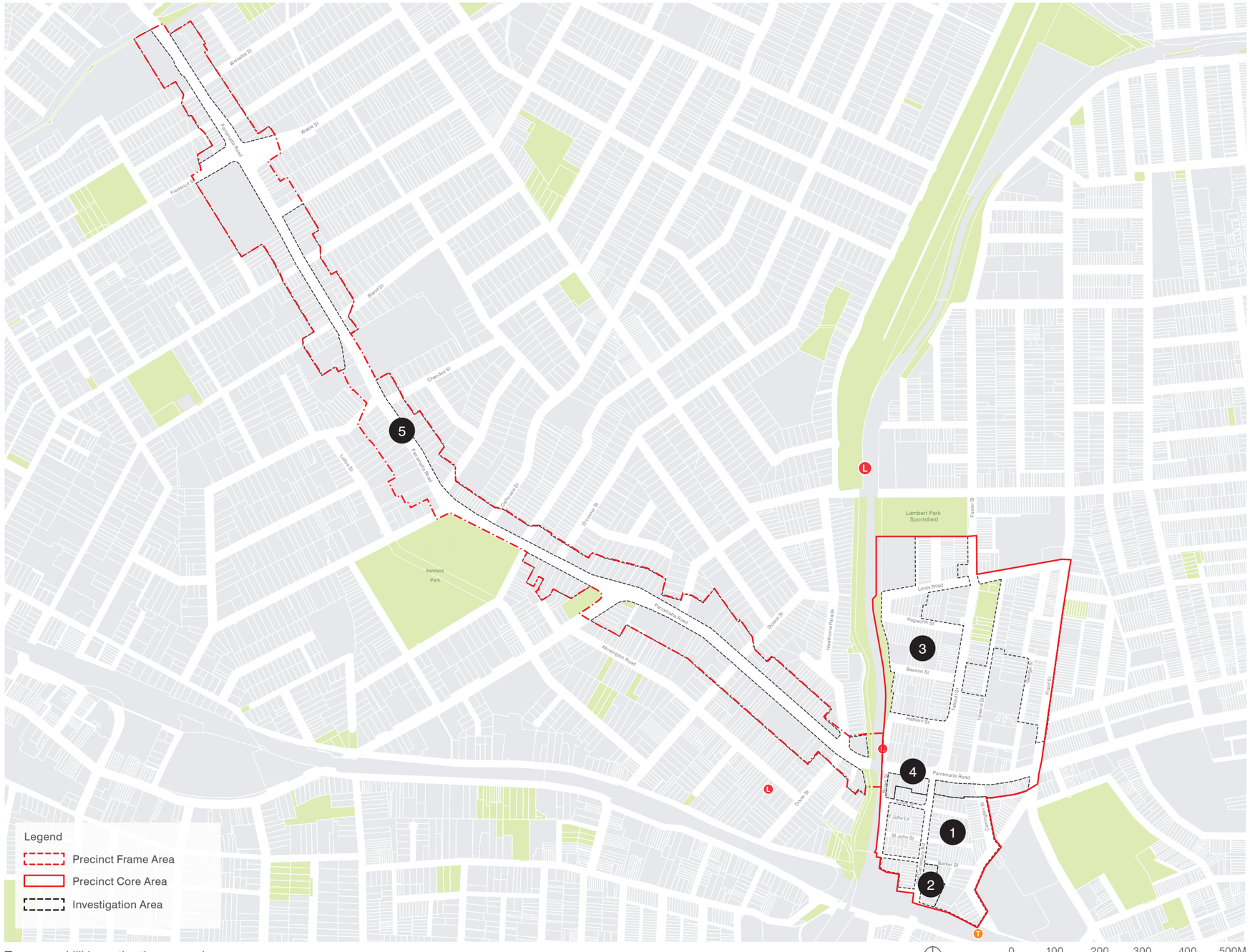
This report includes five main investigation areas within the Taverners Hill Precinct:

- Investigation Area 1 - Residential - South Taverners Hill
- Investigation Area 2 - Residential - South Taverners Hill (Old Canterbury Rd and Barker St Sites)
- Investigation Area 3 - Residential - North Taverners Hill
- Investigation Area 4 - E3 - Precinct Core Area
- Investigation Area 5 - E3 - Precinct Frame Area

Within each investigation a set of issues has been identified by Council which are considered sequentially in this report. Consideration of each issue may include some or all of the following sections as relevant:

- Existing, PRCUTS, and Draft Structure Plan LEP controls
- Existing character analysis
- Development constraints and opportunities
- Built form typology study
- Precedent imagery
- Solar analysis and overshadowing
- Recommendations

The final chapter of this report includes a summary of Architectus' key recommendations and summary tables of yield across the precinct based on this.



Taverners Hill investigation areas key map

Background and Purpose of report

General commercial and residential assumptions

Zone / Land use	GBA to GFA Efficiency	Floor to floor height	
E3 Productivity Support	90%	5m	Ground - floor to floor (inclusive of 1m slope/topography allowance)
		3.6m	Typical upper levels (sufficient for commercial floor to floor height)
		1.5m	Lift overrun
RFB	75%	4m	Ground - floor to floor (inclusive of slope/topography allowance)
		3.2m	Typical upper levels (sufficient for residential floor to floor height)
		1.5m	Lift overrun

Definitions

ADG	Apartment Design Guide (accompanying State Environmental Planning Policy 65)
FSR	Floor Space Ratio
GFA	Gross Floor Area
HOB	Height of Building
IWC	Inner West Council
IWLEP	Inner West Local Environmental Plan 2022
LZN	Land Zoning
NLA / NSA	Nett Lettable Area / Nett Saleable Area
PRCUTS	Parramatta Road Urban Transformation Strategy 2016
RFB	Residential flat building
SEPP65	State Environmental Planning Policy 65

Employment Zone Reform Equivalent Zone Table (Inner West LEP 2022)

Business and Industrial Zone	Employment Zone
B2 Local Centre	E1 Local Centre
B4 Mixed Use	MU1 Mixed Use
B6 Enterprise Corridor	E3 Productivity Support
IN2 General Industrial	E4 General Industrial

1.2 Residential Investigation Area 1

Issue

Provide medium density residential to the south of Parramatta Road

Peer review advice is sought on the proposed zoning and built form controls. Noting PRCUTS recommends townhouses and terrace type dwellings for this area in the supporting guidelines.

Investigation area



LEP controls

The residential investigation area to the south of Parramatta Road is currently zoned R2 Low Density residential with a building height of 9.5m and 0.6:1 - 1.1:1 FSR depending on lot site size.

PRCUTS recommends increasing residential density in this area, upzoning to R3 Medium Density, 12m HOB and 1.4:1 FSR.

Draft Structure Plan controls
The IWC Draft Structure Plan controls under consideration support PRCUTS' recommendations, including the retention of existing development controls for existing and proposed heritage items.

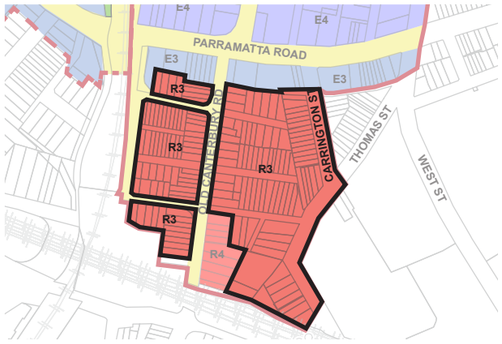
One of the objectives of this character area, as identified by PRCUTS, is to 'preserve the leafy, residential and low scale character of this part of the Precinct including pattern of grain, building typology and historic housing character'.

In keeping with PRCUTS' recommendations, townhouses and terrace type dwellings have been explored for this area.

Existing LEP controls (IWLEP 2022)	
LZN	R2
FSR	0.6:1 - 1.1:1 (sliding scale applies)
HOB	9.5m

PRCUTS recommendations (2016)	
LZN	R3 - Medium Density residential
FSR	1.4:1
HOB	12m and 17m for R3 Zones

Draft Structure Plan (2021) controls under consideration



LZN R3 - Medium Density residential



FSR 1.4:1 (0.6:1 for potential heritage properties under investigation)



HOB 12m (9.5m for potential heritage properties under investigation)

Character

Housing and lots

- The South Taverners Hill area is bounded by Cadigal Reserve (part of Hawthorne Canal) to the west, Parramatta Road to the north and Lewisham Station to the south.
- The area is predominantly single-storey residential consisting of Federation style detached and semi-detached dwellings, approximately 5-6m in height.
- There are some weatherboard cottages on Barker St, with a typical 2m setback, some with verandahs. The attached weatherboard cottages on 11-13 Old Canterbury Road are listed as heritage items.
- More recent development includes medium-density two-storey terraces and townhouses (2–4 St John St, 38-40 Old Canterbury Rd, 29-31 Cook St), with a mixed provision of on-street and off-street car parking.
- Sites fronting Cook Street and St John Street (to the western side of the study area) have secondary access to the rear via St John Lane. Additionally, several sites along Barker Street have secondary access via St John Street. These streets are relatively quiet as they are dead-end.
- 10m wide lots are generally located on Old Canterbury Rd and narrow lots with frontages less than 6m on the streets running east-west, and on Carrington St.
- Existing lots have setbacks to the street front that are approximately 2m, and minimal separation between dwellings which are built to the boundary and in some cases have side setbacks of approximately 1m.

Streets

- The streetscape is predominately leafy and green with significant mature tree coverage on the verges and streets.
- The area is generally hard-surfaced with sections of verges that are planted with low-height native trees. Carrington St is quite wide at 20m with grass verges.









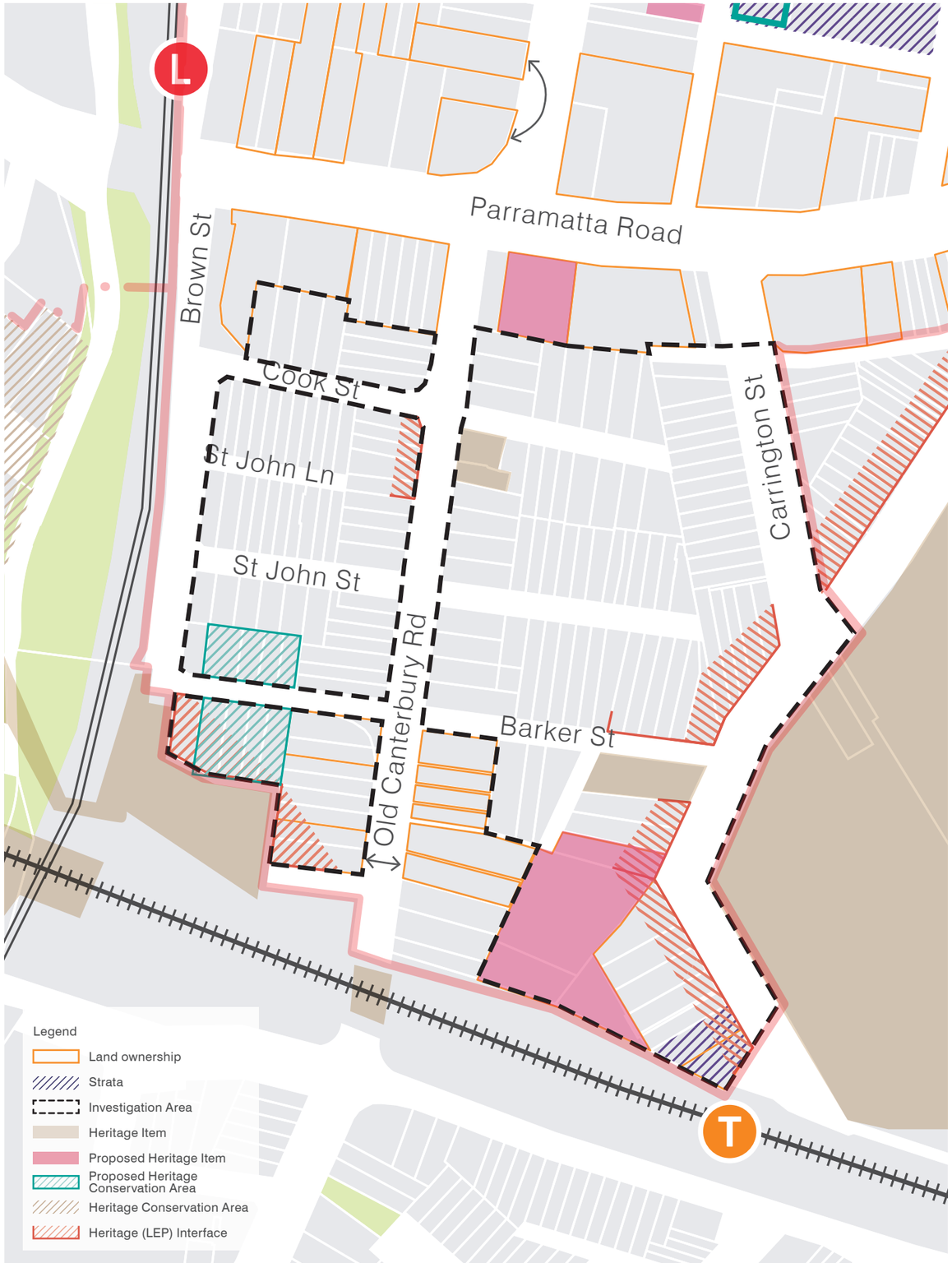
01 Barker St - Federation houses are characteristic of south Taverners Hill
02 St John St - light industrial
03 Thomas St - existing green and planted verges and front setbacks
04 Thomas St from Lewisham Station

Development constraints and opportunities

- Small residential lots under fragmented ownership makes amalgamation difficult.
- Many lots have narrow street frontages under 6m making subdivision difficult.
- Narrow streets with on street parking and minimal footpath space impacts pedestrian experience.
- A complex vehicle movement network related to the Brown St bridge bypass creates some local street congestion.
- There is a new heritage conservation area proposed along Barker Street west and the Lewisham Hotel on Parramatta Road. Any proposed development to take heritage interfaces into consideration.
- Proposed heritage item at 794 Parramatta Road (Lewisham Hotel)
- Block bound by Barker Street and Old Canterbury Road adjacent to the railway is zoned for higher density residential.
- Overhead power lines would impact redevelopment.
- Good access to public transport - within 400m walking distance (5 minute walk) from Lewisham Train Station and Taverners Hill Light Rail Station.
- Good amenity generally and proximity to Greenway.
- Existing and proposed heritage items along Thomas Street. Opportunity Sites have been strategically selected to manage heritage interfaces.

Preliminary ideas

- Preserve the leafy, residential and low scale character of this part of the Precinct including pattern of grain, building typology and historic housing character.
- Take advantage of proximity to the train and light rail stations by providing increased residential density and reduced parking.
- Narrow streets suggest either amalgamation, or a more modest approach to residential height may need to be considered.



Taverners Hill south constraints map

Built form typology study

The following study has been undertaken to identify existing character and lot patterns including street frontage, lot depth and access, to inform requirements for subdivision and amalgamation and possible future built form typologies within the investigation area.

A study based on subdivision of lots with terrace/ townhouse typologies was initially tested, as this typology was considered to be responsive to the fine grain character of the area.

However there were a number challenges to realise this approach including:

- the absence of planning mechanism to ensure that any additional floorspace would only go towards creation of new dwellings as a result of subdivision
- unintentional bulk and scale impacts due to additional FSR where subdivisions are not proposed
- reliance on-street car parking
- impact on existing tree cover as lots get subdivided and redeveloped, particularly for subdivision down the site depth
- the development of battle-axe subdivisions

This testing is covered in “Appendix I - South Taverners Hill - Dwelling studies” on page 59.

In consultation between Architectus and Council, the above impacts were considered to be greater than the benefit that this development approach would provide in terms of dwelling yield. Subsequently, residential flat buildings on amalgamated lots, strategically located close to Lewisham Station, were tested and is proposed as the preferred approach.

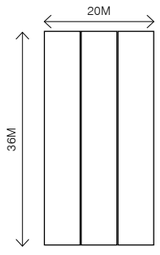
Character

To retain the existing character of the investigation area, part of two blocks bounded by Carrington St, Barker St and Brown St have been strategically selected for concentrated increased residential density given their proximity to public transport and B2 zoned land on the south side of the rail line.

The relatively deep lots of about 45m allow ample open space for tree cover while increasing the dwelling yield in the precinct which would work with overland flow constraints.

Amalgamation assumptions

Minimum 20m street frontage (typical 3 lot amalgamation) and minimum 36m lot depth.



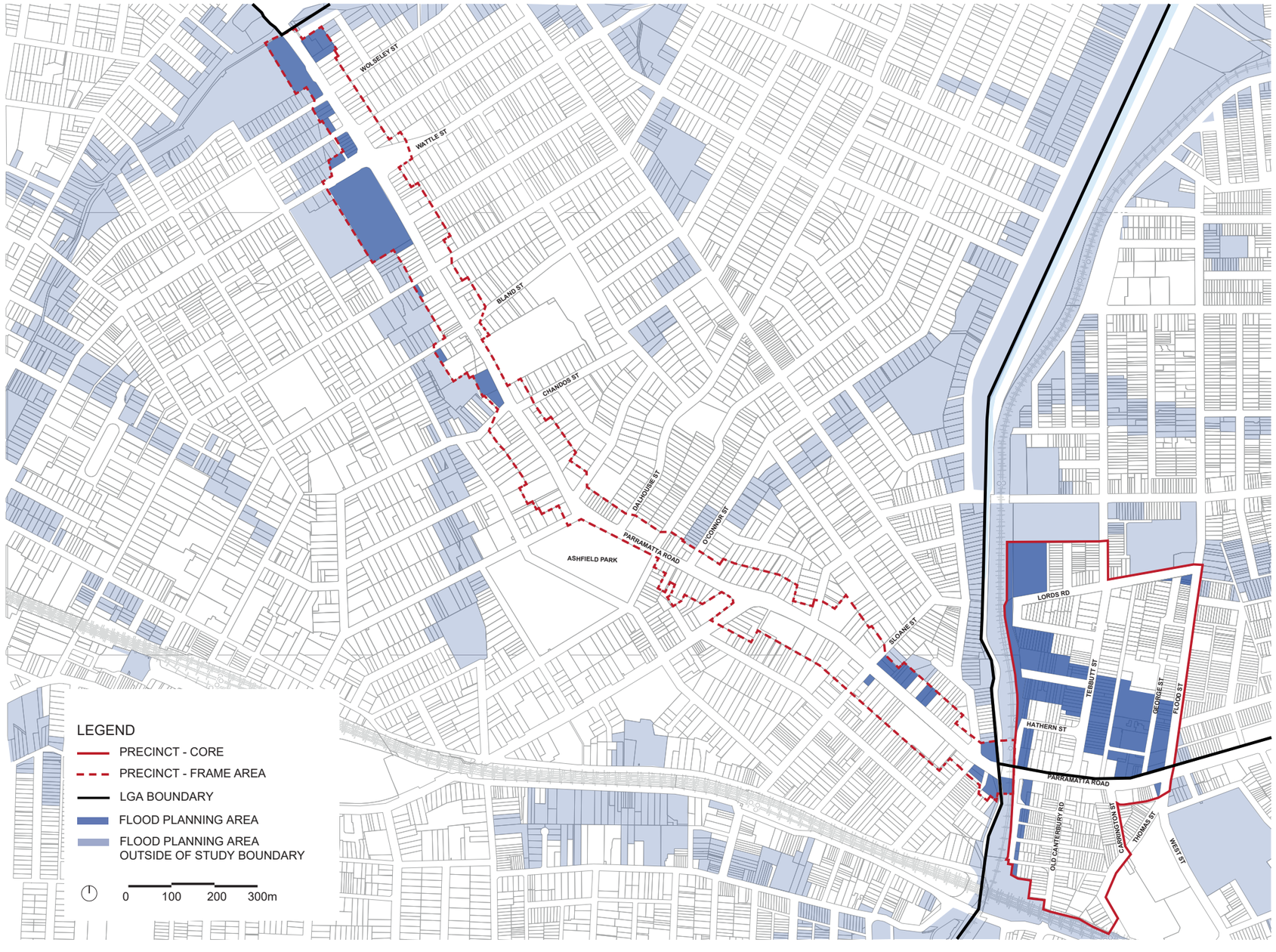
Proximity to public transport
The proposed blocks for residential flat buildings are located within 400 metres walking distance to Lewisham Station. The sites provide an opportunity to provide limited parking due to proximity to public transport.



RFB typology key map and tested lot amalgamation pattern

Overland flow

The typology testing and selected sites are subject to hydrological engineering advice, with regard to minimum landscape area, setbacks and impacts of basement car parking.



Taverners Hill Flood Map
Source: Inner West Council

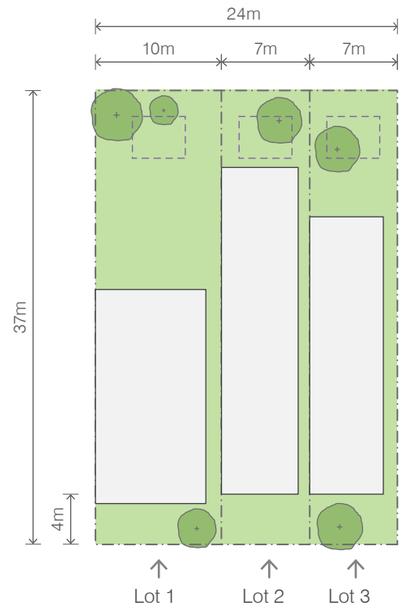
This map is from Inner West Council Floodplain Risk Management Studies and Plans. Council is reviewing its flood management plan for this area which might result in changes to the flooding lots

RFB Type 1 - Narrow infill apartment

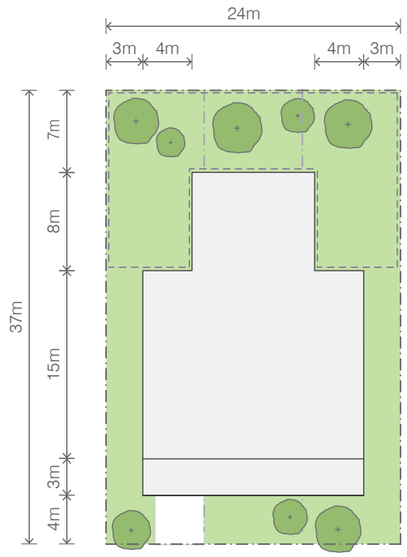
The following RFB typology is based on the amalgamation of 3 existing lots. This typology is adaptable to deep sites and amalgamation of lots with narrow frontages; this typology ensures a regular street pattern and is based on the Narrow Infill Apartment (ADG Appendix 4). This typology maintains existing street character through landscaped front setbacks, reduces driveway crossovers, and retains existing vegetation at the rear. This typology is slightly deeper than the indicative plan with adjustments to account for greater lot depth.



RFB typology key map and tested lot amalgamation pattern



Plan of existing dwellings and lots



Plan of proposed RFB

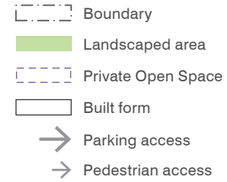
Existing dwellings' metrics

Lot	1	2	3
FSR	**0.5:1**	**0.7:1**	**0.6:1**
Max. FSR (under existing LEP)	0.6:1	0.8:1	0.8:1
Site width	10m	7m	7m
Site depth	37m	37m	37m
Site area	371m^2	270m^2	252m^2
GFA	180m^2	193m^2	148m^2
Height	5m (7m – 2 storey at rear)		
Site coverage	43%	64%	53%
Private open space	211m^2	98m^2	120m^2
Front setback	3m	4m	4m
Rear setback	16m	6m	10m
Side setback	0-1m	0-1m	0-1m
Upper storey front setback	N/A		
Street wall	1 storey		
Parking	On street		
Landscaped area	57%	36%	47%
No. of dwellings	1	1	1

Proposed RFB metrics

FSR	1:1
Site width	24m
Site depth	37m
Site area	894m^2
GFA	881m^2
Height*	11.9m (3 storeys)
Site coverage	46%
Communal open space	278m^2
Front setback	4m
Rear setback	7m
Side setback	3m
Upper storey front setback	3m
Street wall	2-storey
Parking	Basement
Landscaped area	10% deep soil (ADG recommendation for sites 650-1500m^2)
No. of dwellings	11

*Height inclusive of 1.5m for lift overrun





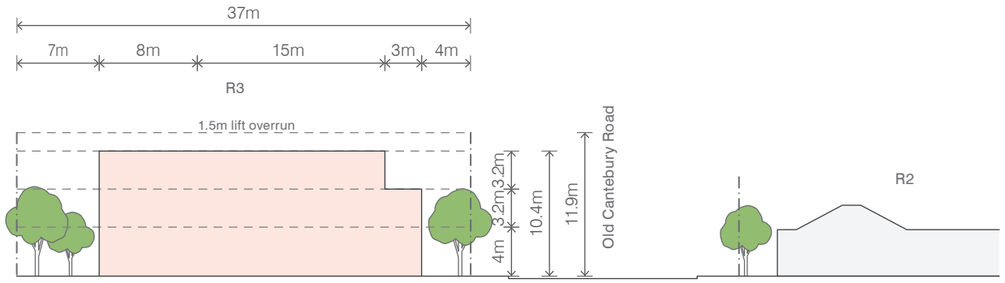
Indicative apartment plan
Source: Apartment Design Guide, 2015

1:500 0 5 10 15 20 25M

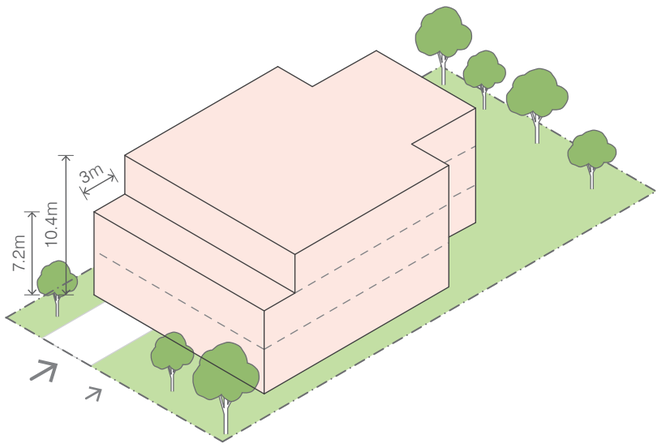
RFB Type 1 - Narrow infill apartment

General parameters for typology:
- Lot depth - min.. 30m
- Lot size - approximately 720m²-1,000m²
- Street frontage - min. 20m
- Access & Car parking -
  Driveway to basement car-park
- Communal Open Space - 25% Site area (ADG)

Note the sites tested (typically 3-lot amalgamations) meet the minimum recommended parameters for this RFB typology below:
- Min.. lot size - 720m²
- Min. street frontage - 20m



Section diagram of proposed RFB



Axo diagram of proposed RFB



RFB typology key map and tested lot amalgamation pattern

Maisonette apartment typology

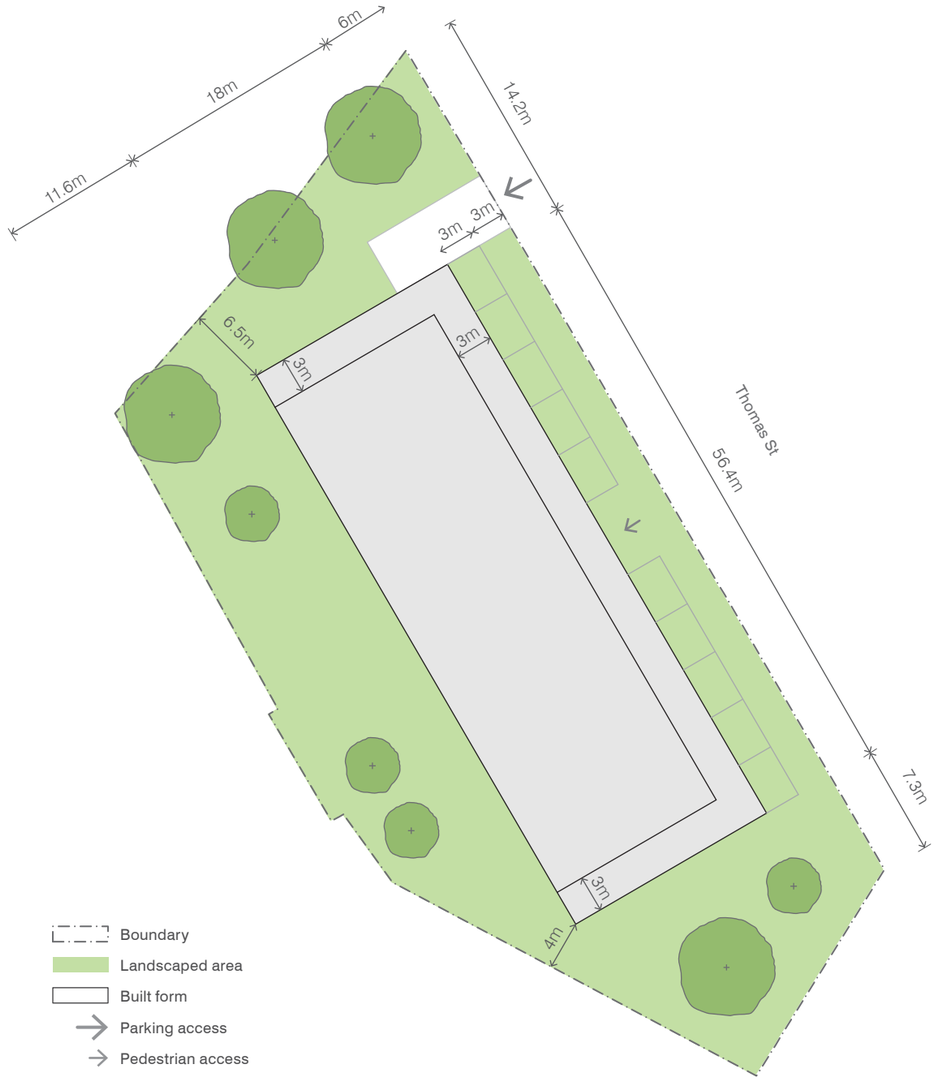
General parameters for typology:

- Lot depth - 30m
- Lot size - 1500-2500m^2
- Street frontage - 40m
- Access & Car parking - Basement car parking



Note: RFB shown in elevation

Section diagram of proposed RFB



Plan of proposed RFB - Maisonette



RFB typology key map and tested lot amalgamation pattern

Proposed maisonette apartment metrics

FSR	1:1
Site width	78m
Site depth	35m
Site area	2499m^2
GFA	2425m^2
Height*	15.1m (4 storeys)
Site coverage	37%
Communal open space	1432m^2
Front setback	6m
Rear setback	6m min..
Side setback	6m
Upper levels setback	3m
Street wall	2 storeys
Site Coverage	40%
Parking	Basement
Landscaped area	15% deep soil (ADG recommendation for sites >1500m^2)
Existing dwellings	11
Additional dwellings	25

*Height inclusive of 1.5m for lift overrun

Recommendations

LEP recommendations

Architectus recommends to retain the existing LEP zoning and characteristics of R2 - Low Density Residential for south Taverners Hill investigation area, north of Barker Street. This varies from PRCUTS' recommendation to upzone the entire area to R3 - Medium Density Residential. This is to retain as much of the fine grain character of the area as possible, and due to the impacts of small lot subdivision typologies as discussed under "Built form typology study" on page 10. No changes are proposed to the FSR and HOB controls for the blocks north of Barker Street, as well as parts of the blocks south of Barker St which are heritage items or adjacent to heritage items.

RFBs are proposed within strategically located blocks in the south of Barker Street, close to Lewisham Station, while the remainder of this investigation area is not proposed for change.

The testing suggests that a reduction in PRCUTS' recommended 1.4:1 FSR to 1:1 is required to retain green front setbacks and existing landscape character to go alongside RFB developments.

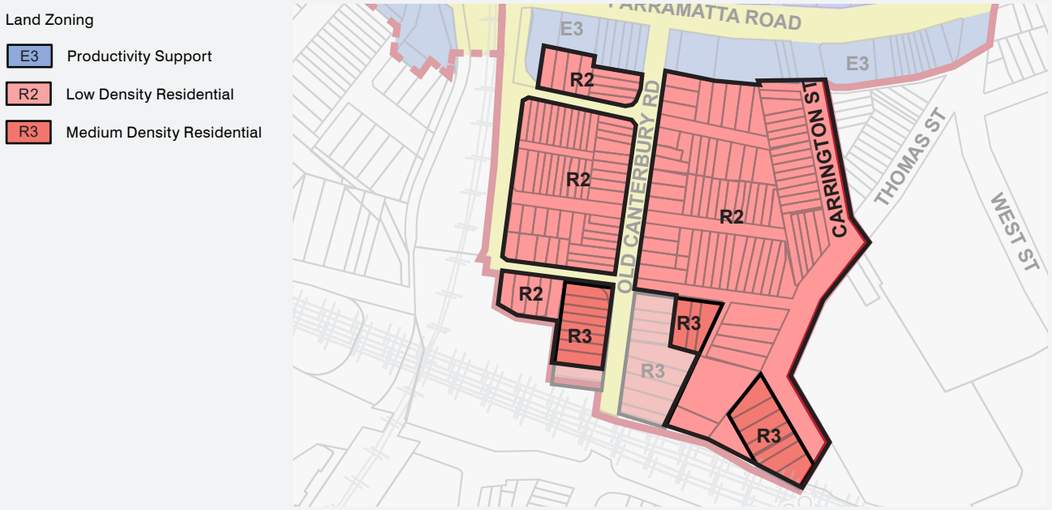
As the Draft IWLEP does not permit RFBs within R3 zoning, Architectus recommends these areas are zoned R3 with RFBs as an additional permitted land use. It is proposed that existing controls for existing and potential heritage items and heritage conservation areas be retained.

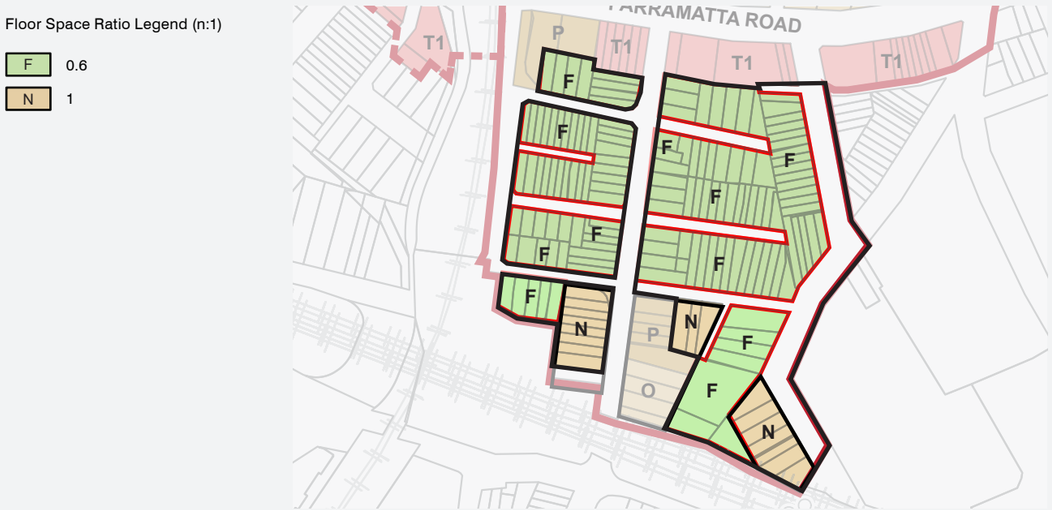
Existing LEP controls (IWLEP 2022)	
LZN	R2 - Low Density Residential
FSR	0.6:1 - 1.1:1
HOB	9.5m

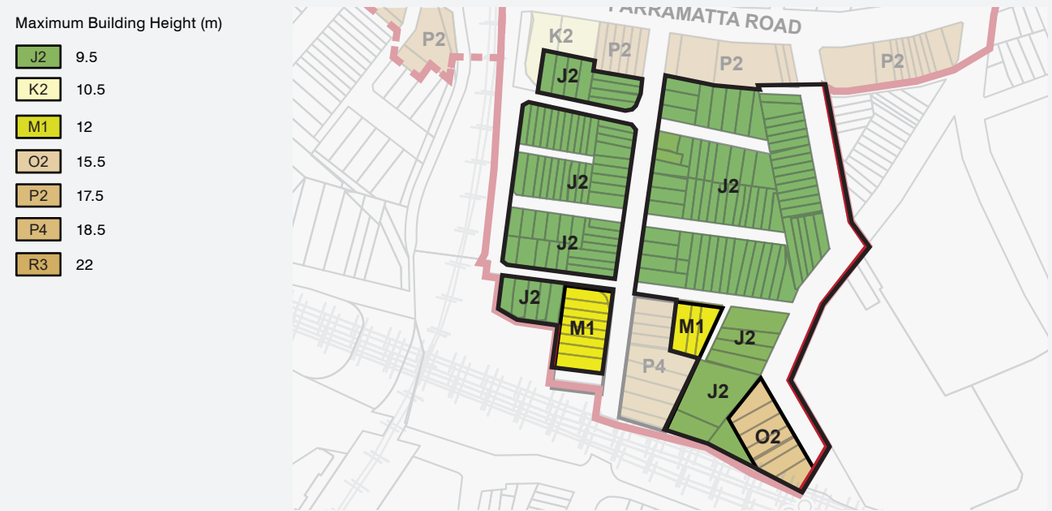
PRCUTS recommendations (2016)	
LZN	R3 - Medium Density Residential
FSR	1.4:1
HOB	12m

Draft Structure Plan Controls (2021)	
LZN	R3 - Medium Density Residential
FSR	1.4:1
HOB	12m

Final recommendations (2023)	
LZN	R2 - Low Density Residential; R3 + RFBs adjacent to Opportunity Sites
FSR	1:1 (R3 + RFB), 0.6:1 - 1.1:1 (R2, Potential Heritage items and Heritage Conservation Areas)
HOB	9.5m, 12m (3 storeys, R3 + RFBs), 15.5m (4 storeys, R3 + RFBs)







1.3 Residential Investigation Area 2

Issue

35-53 Old Canterbury Road, Lewisham

Facilitate higher density residential uses in line with PRCUTS recommendations given the good proximity to public transport - peer review advice is sought regarding the appropriate density, height and built form controls.

Investigation area



LEP controls

This investigation area is currently zoned R4 High Density Residential with a building height of 17m, and FSRs of 1:1 and 1.1:1 FSR.

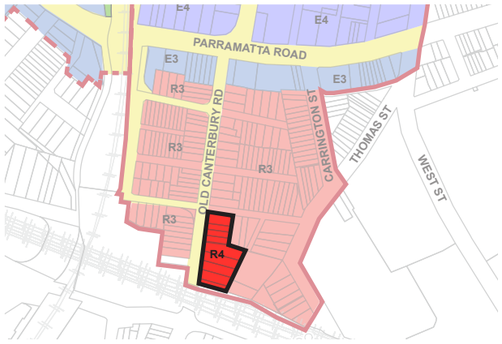
PRCUTS recommends down-zoning the area to R3 Medium Density Residential, consistent with the recommendation for the entire block. It proposes an increased FSR of 2.2:1 and recommends to retain the existing 17m HOB.

Draft Structure Plan controls
The IWC Draft Structure Plan controls under consideration support the existing LEP R4 zoning and PRCUTS' 2.2:1 FSR and 17m HOB.

Existing LEP controls (IWLEP 2022)	
LZN	R4 - High Density Residential
FSR	1:1 and 1.1:1
HOB	17m

PRCUTS recommendations (2016)	
LZN	R3 - Medium Density Residential
FSR	2.2:1
HOB	17m

Draft Structure Plan controls under consideration (2021)



LZN R4 - High Density residential



FSR 2.2:1



HOB 17m

Character

Housing and lots

- Existing streetscape comprises of single storey dwellings with pitched roofs, approximately 5-6m in height.
- Some sites to the southern side of the study area have driveways fronting Old Canterbury Road.
- Relatively deep, wide lots. Individual site depths between 30-45m and frontage widths between 7-13m.
- Average street setback of 4m with soft landscaping to the front of the building line. The southern part of the study area has deeper setbacks of approximately 6-8m.
- Minimal separation between dwellings which are built to the boundary and in some cases have side setbacks of approximately 1m.

Streets

- The streetscape is predominately leafy and green with significant mature tree coverage within the nature strip along Old Canterbury Road.
- Old Canterbury Road is a major local vehicle connection. Some on street parking is provided, southbound, outside of peak hours.
- The busy road and narrow footpaths impact on pedestrian amenity.









01 Existing single storey dwellings within R4 area, adjacent to rail line. Corridor overpass runs along the southern boundary of the investigation area.
02 Old Canterbury Road looking north and at R4 sites to right
03 Existing streetscape along Old Canterbury Road
04 Barker St looking west towards Old Canterbury Rd and R4 site

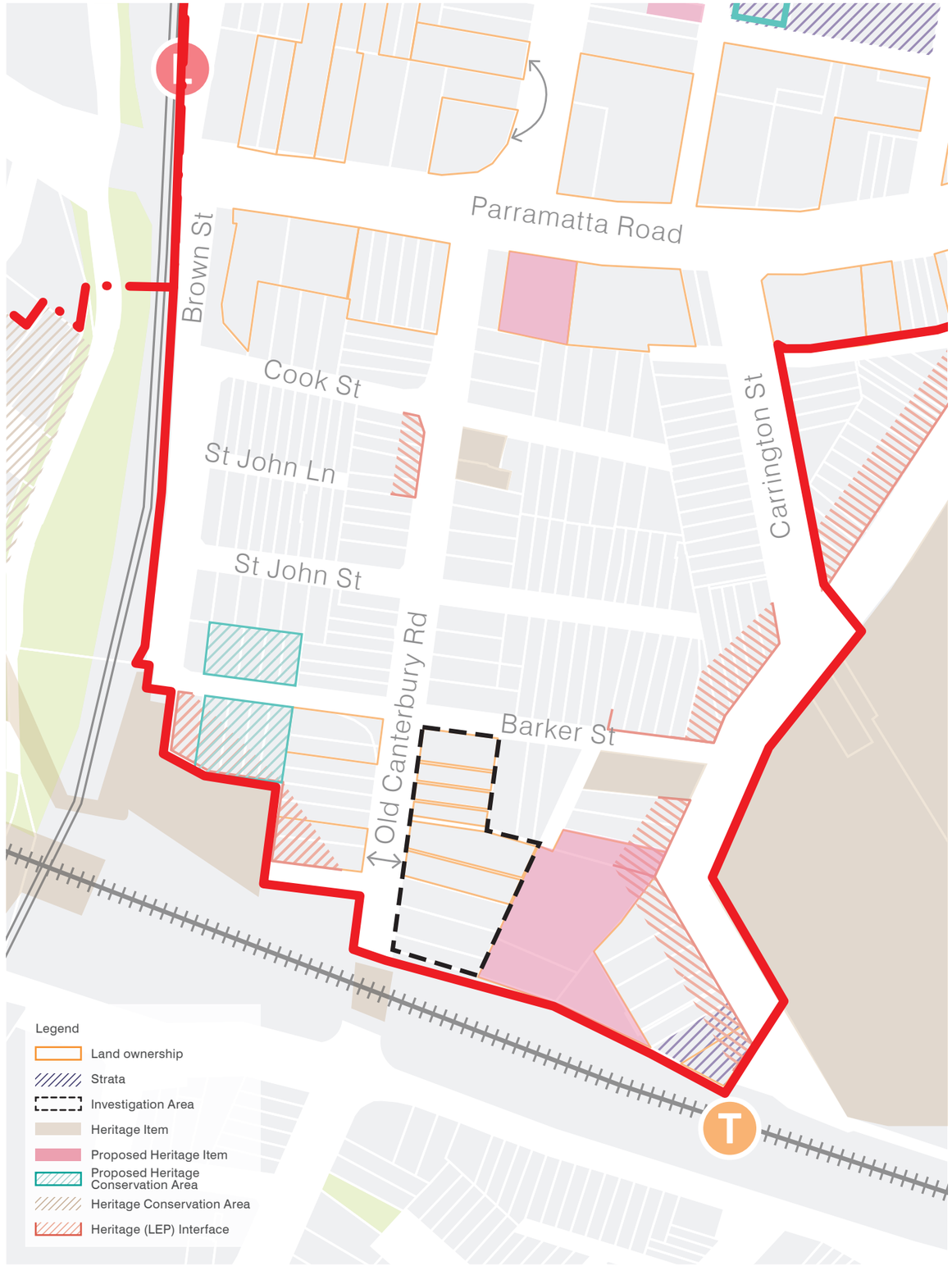
Residential Investigation Area 2

Development constraints and opportunities

- Collective land ownership within the investigation area provides potential for amalgamation of lots and larger developments.
- Train line and rail corridor overpass runs along the southern border of the investigation area – Lewisham Station is within 400m walking distance.
- Potential for noise pollution due to proximity to the railway corridor and Old Canterbury Road.
- Old Canterbury Road is the primary road in this investigation area and can become heavily congested in peak hours.
- Existing and potential heritage items adjacent to the investigation area.
- Several mature street trees within investigation area along Old Canterbury Road.

Preliminary ideas

- Provide increased residential close to public transport. Reduce parking requirements as much as possible to support active and sustainable transport.
- Increased setback to street level to facilitate improved interface with Old Canterbury Road and pedestrian access to Lewisham Station.
- New development to consider sensitive interface with potential heritage item to the east.
- New development to consider retention of existing mature street trees along Old Canterbury Road.



Taverners Hill south constraints map

Built form typology study

The following study has been undertaken to identify lot patterns including street frontage, lot depth and access, to inform requirements for subdivision and amalgamation and possible future built form typologies within the investigation area.

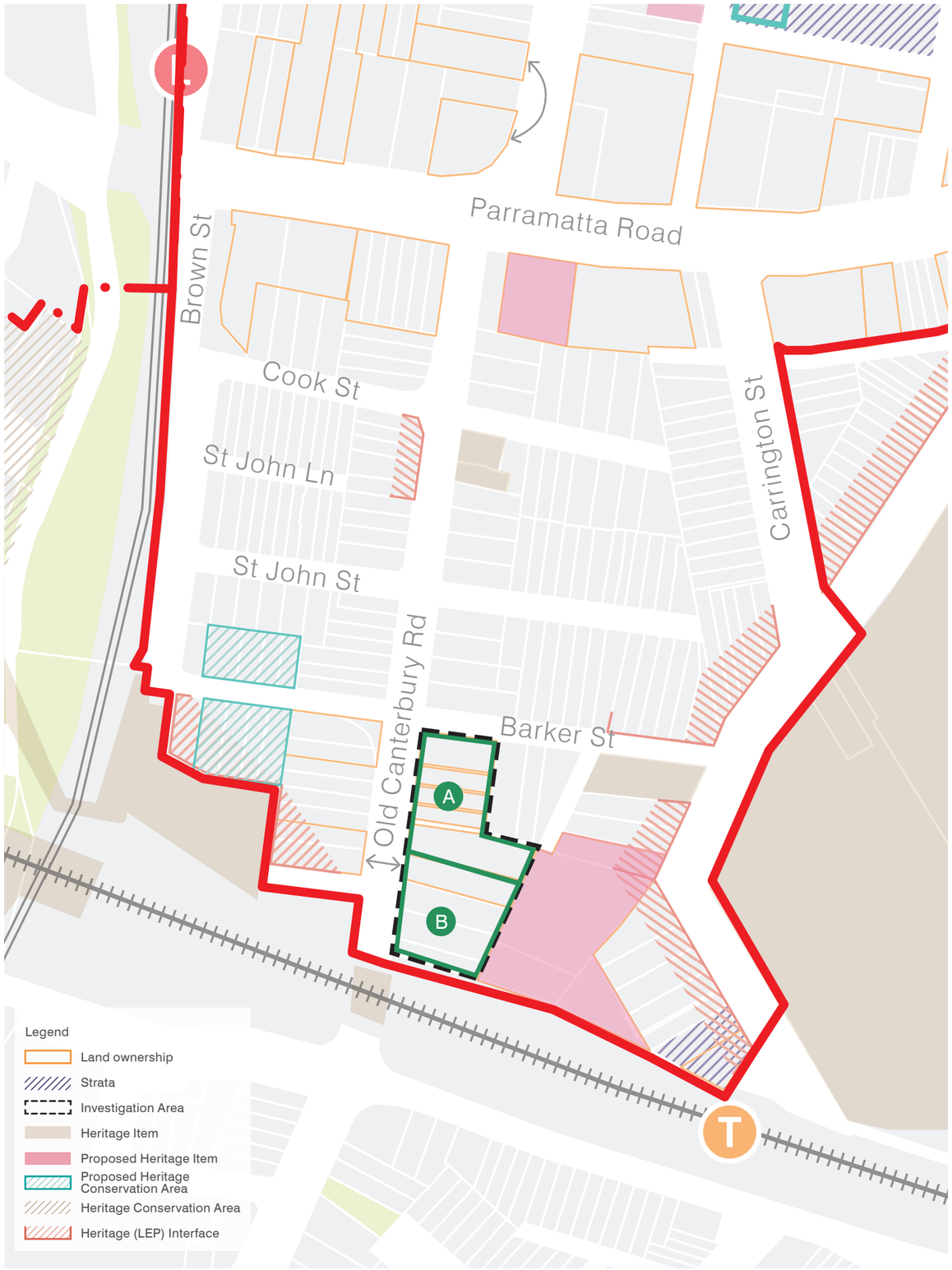
It is acknowledged that owners of the lots within Site A have put forward a proposal to amalgamate. A maisonette typology was tested as the starting point for this investigation area, given the potential resulting street frontage and site area. The typology is based on entrances to two storey terrace dwellings from street with apartment style dwellings above the terraces accessed from a ground floor lobby. This maintains the fine grain character of the investigation area, which is one of the intentions behind PRCUTS' recommendations.

Lot depth + Access assumptions

As an amalgamated corner lot, Site A has potential for access to basement parking via Barker Street. There is adequate site depth to allow for basement access to the rear of the site. As an amalgamated site, access to basement parking can be accommodated for Site B from Old Canterbury Road. As the typology has ground level dual-aspect apartments, the depth is limited to 18m as per ADG requirements.

Frontage to Old Canterbury Road

Both opportunity sites have frontages to Old Canterbury Road - a busy thoroughfare connecting Summer Hill, Lewisham and Dulwich Hill with Parramatta Road. There is potential to develop the interface with the street along this portion of Old Canterbury Road that is in close proximity to Lewisham Station.

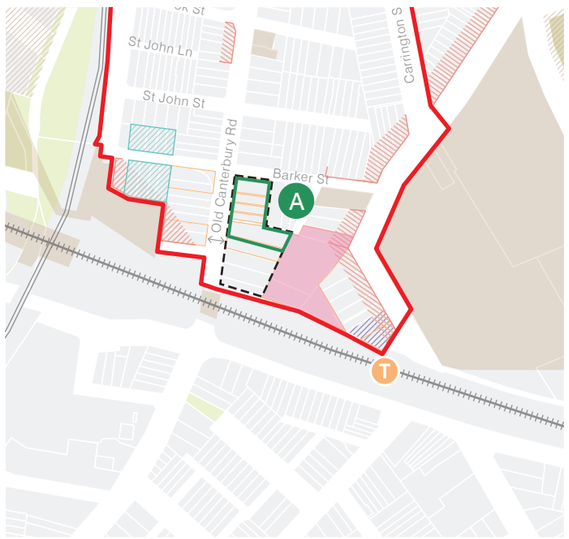


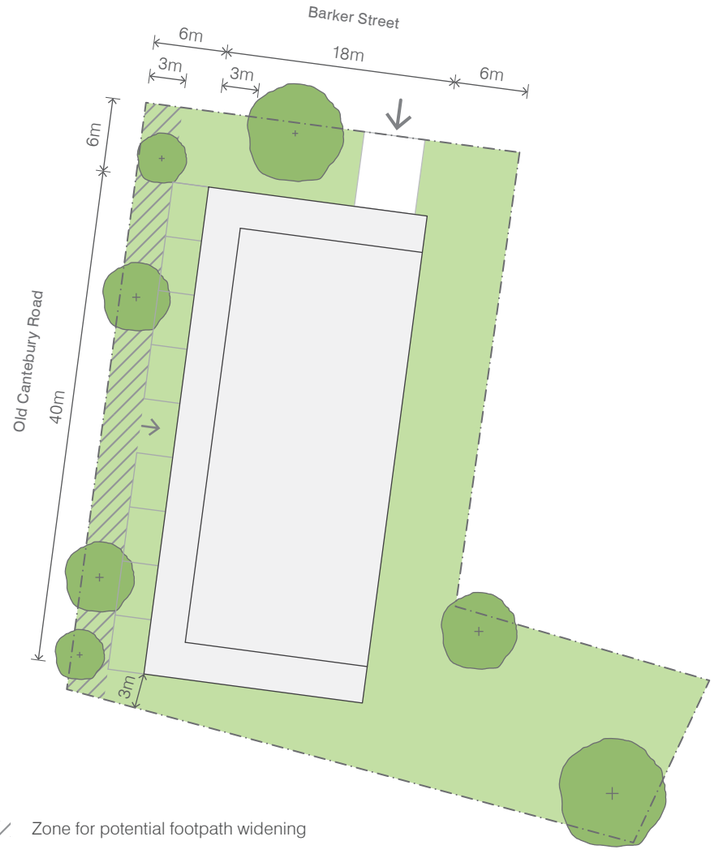
Map of sites for testing

Site A - North
maisonette apartment typology

General parameters for typology:
- Lot depth - 30m
- Lot size - 1500-2000m^2
- Street frontage - 40m
- Access & Car parking -
  Basement car parking (reduced parking to benefit from proximity to Lewisham Station)

Key map of proposed sites for maisonette apartment typology





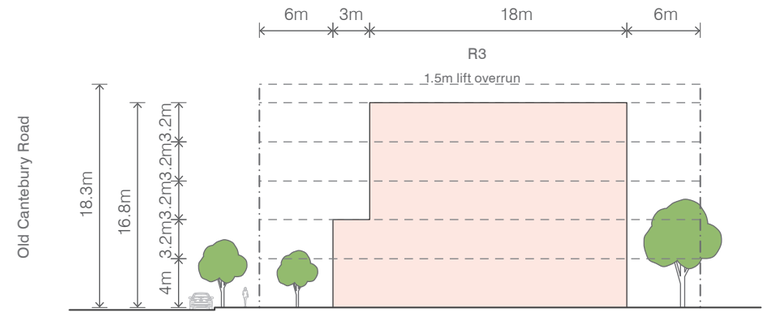
Zone for potential footpath widening

Plan of proposed RFB Maisonette

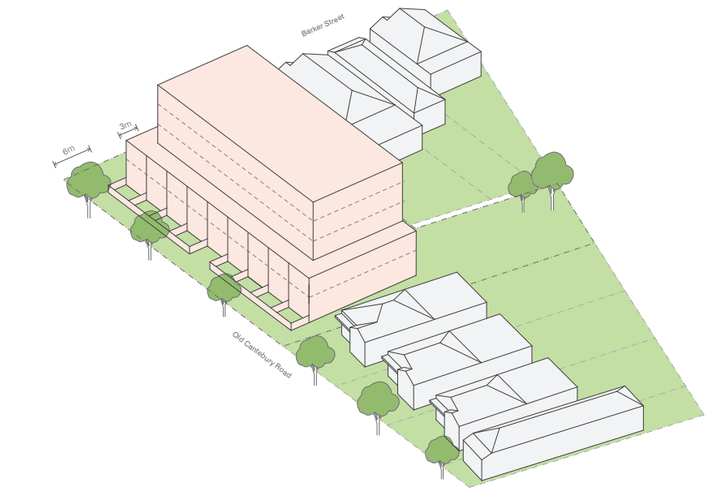
Proposed

FSR	1.2:1
Site width	48m
Site depth	30-40m
Site area	1825m^2
GFA	2232m^2
Height*	18.3m (5 storeys)
Site coverage	40%
Communal open space	626m^2 (min. 25% site area as per ADG)
Front setback	6m
Rear setback	6m min..
Side setbacks	3m to first two levels and 6m above
Upper levels front setback	3m from building line to 3rd storey and above
Street wall	2 storeys
Site Coverage	40%
Parking	Basement (reduced parking requirements)
Landscaped area	15% deep soil (ADG recommendation for sites >1500m^2)
Total no. of dwellings	25

*Height inclusive of 1.5m for lift overrun



Section of proposed RFB Maisonette



Axo of proposed RFB Maisonette with existing context

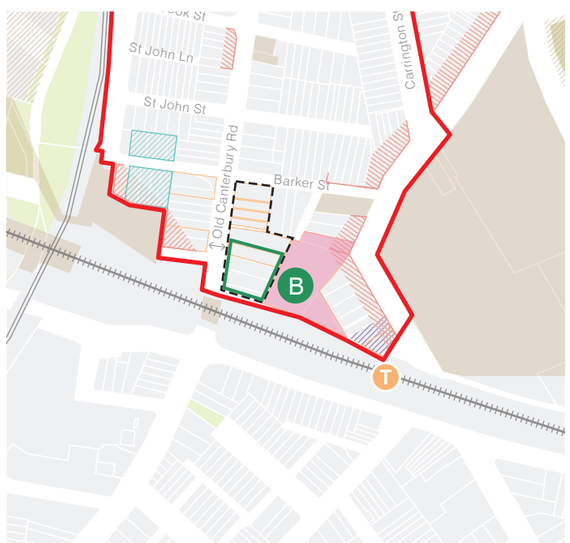
Boundary
Landscaped area
Built form
Parking access
Pedestrian access

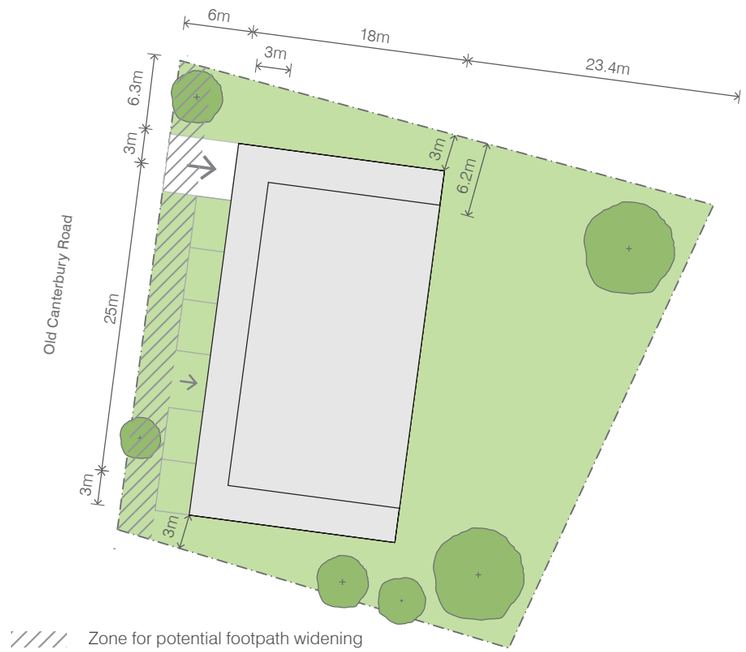
1:500 0 5 10 15 20 25M

Site B - South
maisonette apartment typology

General parameters for typology:
- Lot depth - 30m
- Lot size - 1500-2000m^2
- Street frontage - 40m
- Access & Car parking -
  Basement car parking (reduced parking to benefit from proximity to Lewisham Station)

Key map of proposed sites for maisonette apartment typology





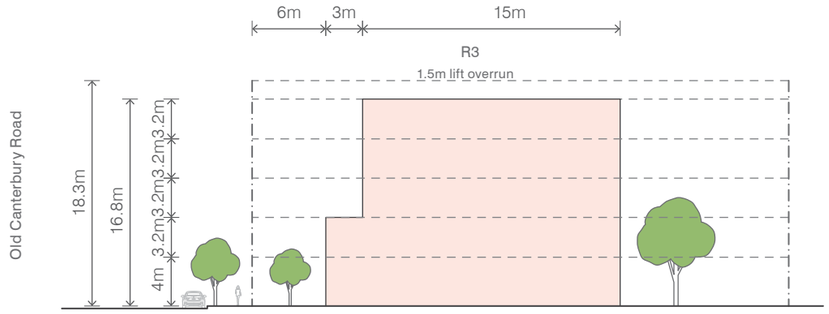
Zone for potential footpath widening

Plan of proposed RFB Maisonette

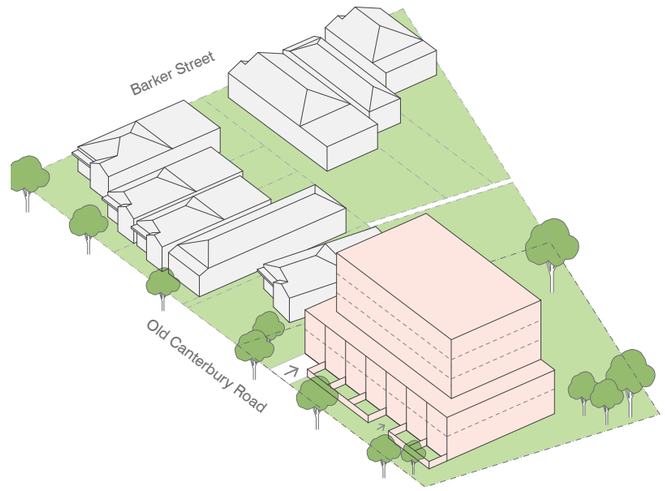
Proposed

FSR	1:1
Site width	41m
Site depth	48m
Site area	1717m^2
GFA	1697m^2
Height	18.3m (5 storeys)
Communal open space	725m^2
Front setback	6m to first two storeys
Rear setback	6m min..
Side setback	3m to first two storeys and 6m to above storeys
Upper level front setback	3m from building line to 3rd storey and above
Street wall	2 storey
Site Coverage	34%
Parking	Basement (reduced parking requirements)
Landscaped area	15% deep soil (ADG recommendation for sites >1500m^2)
Total no. of dwellings	23

*Height inclusive of 1.5m for lift overrun



Section of proposed RFB Maisonette



Axo of RFB Maisonette with existing context

Boundary
Landscaped area
Built form
Parking access
Pedestrian access

1:500 0 5 10 15 20 25M

Overshadowing testing - 21st June (winter solstice)

South Taverners Hill

The below testing shows overshadowing impacts on 21st June (winter solstice). It illustrates that proposed R3 + RFB apartments can meet ADG solar access and overshadowing requirements.

9am



11am



1pm



1:1,250 0 25 50 75M

Recommendations

LEP recommendations

Architectus supports PRCUTS' recommendation to down-zone the existing R4 - High Density Residential zoned investigation area to R3 Medium Density Residential with residential flat buildings as an additional permitted use. This recommendation varies from the Draft Structure Plan controls which maintains the existing R4 zoning. This is in order to maintain consistency with the land zoning and RFBs between north and south Taverners Hill which fall within different former council areas and LEPs (RFBs are not permitted land use in R3 zoning under former Marrickville Council LEP).

Regarding FSR, our testing demonstrates that in order to achieve the PRCUTS and Draft Structure Plan FSR targets of 2.2:1, the resultant RFB would require 9 storeys which is not in keeping with the density or character of the area and would adversely impact the setting and views of nearby and adjoining heritage items and HCA (both existing and proposed). It would also be inconsistent with the height recommendation – there is a mismatch of proposed FSR and height controls in this location. The results of the testing support an FSR of 1.2:1 on the northern site. 1.1:1 has been retained on the southern site per existing controls. Architectus proposes an increased height of 18.5m (5 storeys) in order to attain this FSR on these sites, one of which is L-shaped and the other being quite a deep lot.

Existing LEP controls (IWLEP 2022)	
LZN	R4
FSR	1:1 and 1.1:1
HOB	17m

PRCUTS recommendations (2016)	
LZN	R3 - Medium Density Residential
FSR	2.2:1
HOB	17m

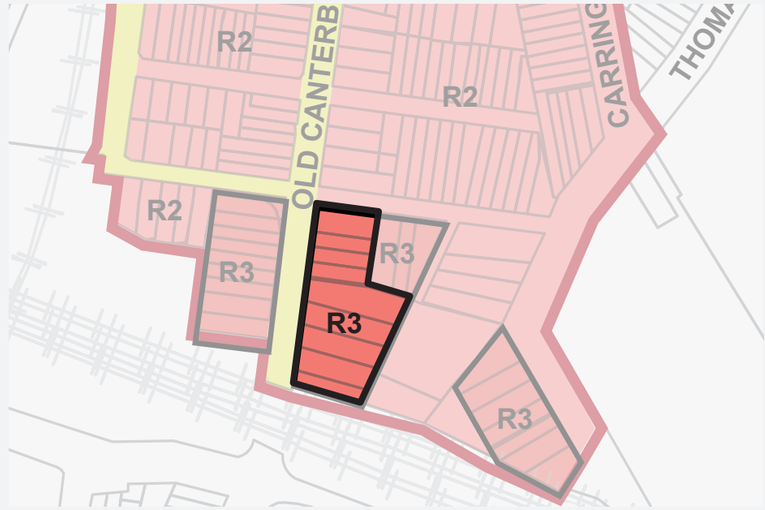
Draft Structure Plan Controls (2021)	
LZN	R4 - High Density Residential
FSR	2.2:1
HOB	17m

Final recommendations	
LZN	R3 - Medium Density Residential + RFB
FSR	1.2:1 and 1.1:1
HOB	P3 - 18.5m (5 storeys)

Land Zoning

R2 Low Density Residential

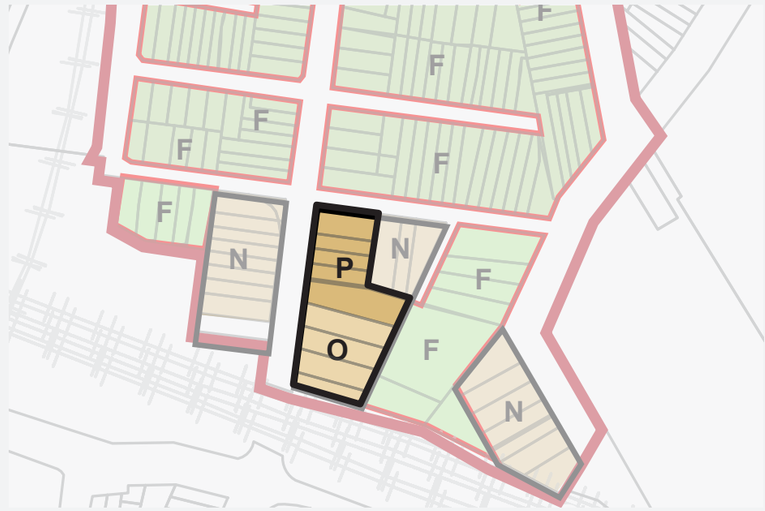
R3 Medium Density Residential



Floor Space Ratio Legend (n:1)

O 1.1

P 1.2



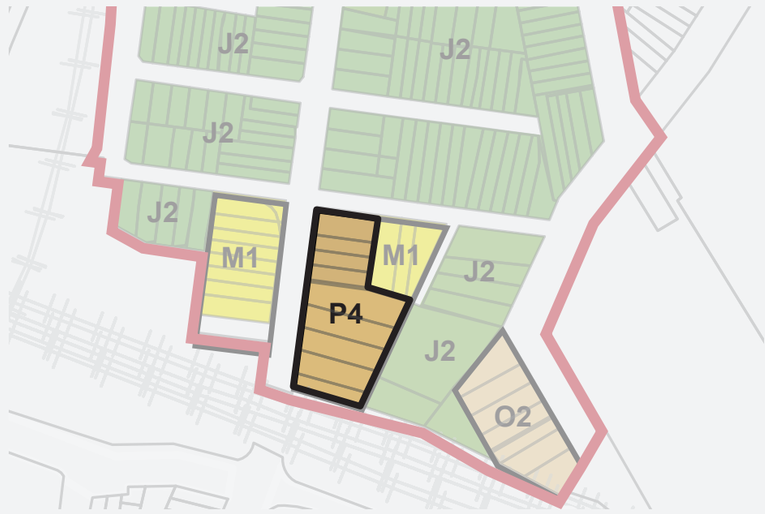
Maximum Building Height (m)

J2 9.5

M1 12

O2 15.5

P4 18.5



1.4 Residential Investigation Area 3

Issue

Existing land use zoning, density and height has been retained for residential zoned land north of Parramatta Road however it is acknowledged that there may be potential to consider increased density and height - peer review advice is sought on appropriate zoning and built form controls. Noting PRCUTS recommends townhouses and terrace type dwellings for this area in the supporting guidelines.

Investigation area



LEP controls

The residential area to the north of Parramatta Road is currently zoned R1 Low Density Residential with 0.5:1 - 0.8:1 FSR. Currently there are no HOB controls in the LEP.

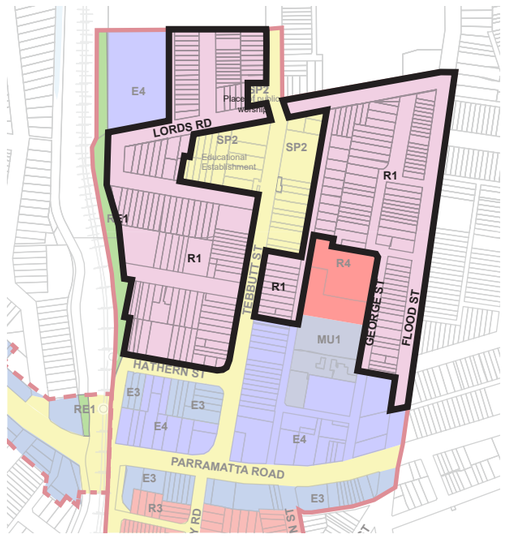
PRCUTS recommends increasing residential density in this area, upzoning to R3 Medium Density Residential, and up to 12m HOB and 1.4:1 FSR.

Draft Structure Plan controls
The IWC Draft Structure Plan controls under consideration support the existing LEP controls favouring lower density while recognising the potential for additional density in this area.

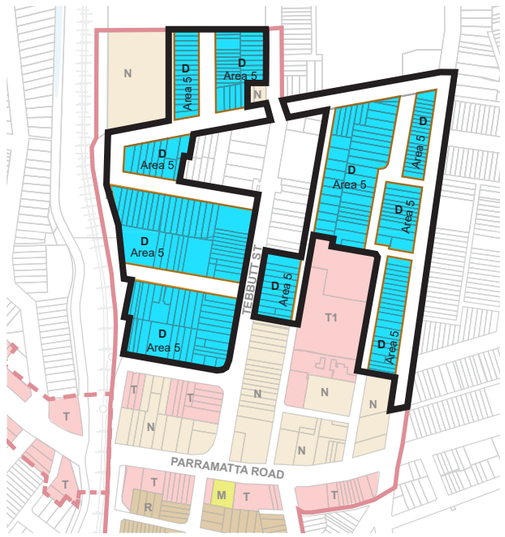
Existing LEP controls (IWLEP 2022)	
LZN	R1 - General Residential
FSR	0.5:1 - 0.8:1 (sliding scale applies)
HOB	Controls undefined

PRCUTS recommendations (2016)	
LZN	R3 - Medium Density Residential
FSR	1:1 and 1.4:1 mix
HOB	12m and 8.5m mix

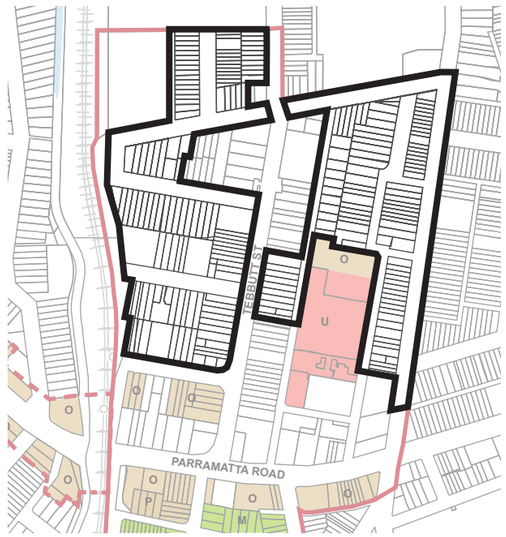
Draft Structure Plan controls under consideration (2021)



LZN R1 - Low Density Residential



FSR 0.5-0.8:1 (sliding scale applies)



HOB Controls undefined

Character

Housing and lots

- Low-scale post-war dwellings including semi-detached and free standing cottages of historic housing character.
- More recent developments include medium-density two-storey terraces and townhouses as well as multiple high density apartments ranging from 4 to 8 storeys along Upward Street, ‘Oasis Leichhardt’ and ‘Leichhardt Green Apartments’.
- Existing dwellings present as one and a half storeys along the streetscape, and are typically constructed of brick with pitched tiled roofs.
- Sites along Davies, Upward and Regent Streets have rear access.
- Lots are predominately narrow and deep.
- Streets predominately have a 3m front setback with soft landscaping and canopy trees forward of the building line.

Streets

- Streets are wide with generous footpaths and verges.
- Generally the streets are wide enough to accommodate on street parking on both sides and two lanes of traffic with the exception of George and Upward Streets in the east of the investigation area.
- Some front or rear driveway access. The recent development on Upward Street provides basement parking access from George Street.
- The streetscape is predominately leafy and green with significant mature tree coverage on the verges and streets.
- The Inner West Light rail and Greenway bounds the investigation area along the west and provides a green corridor.
- Interspersed through the area are local parks, playgrounds and schools that contribute to the neighbourhood’s leafy character.









01 Beeson St, wide streets and green verges
02 Tebbutt St duplexes, green verges and front landscaped setbacks

03 Beeson St LAHC Site
04 Treadgold St rear garages adjacent to front of dwellings on western side

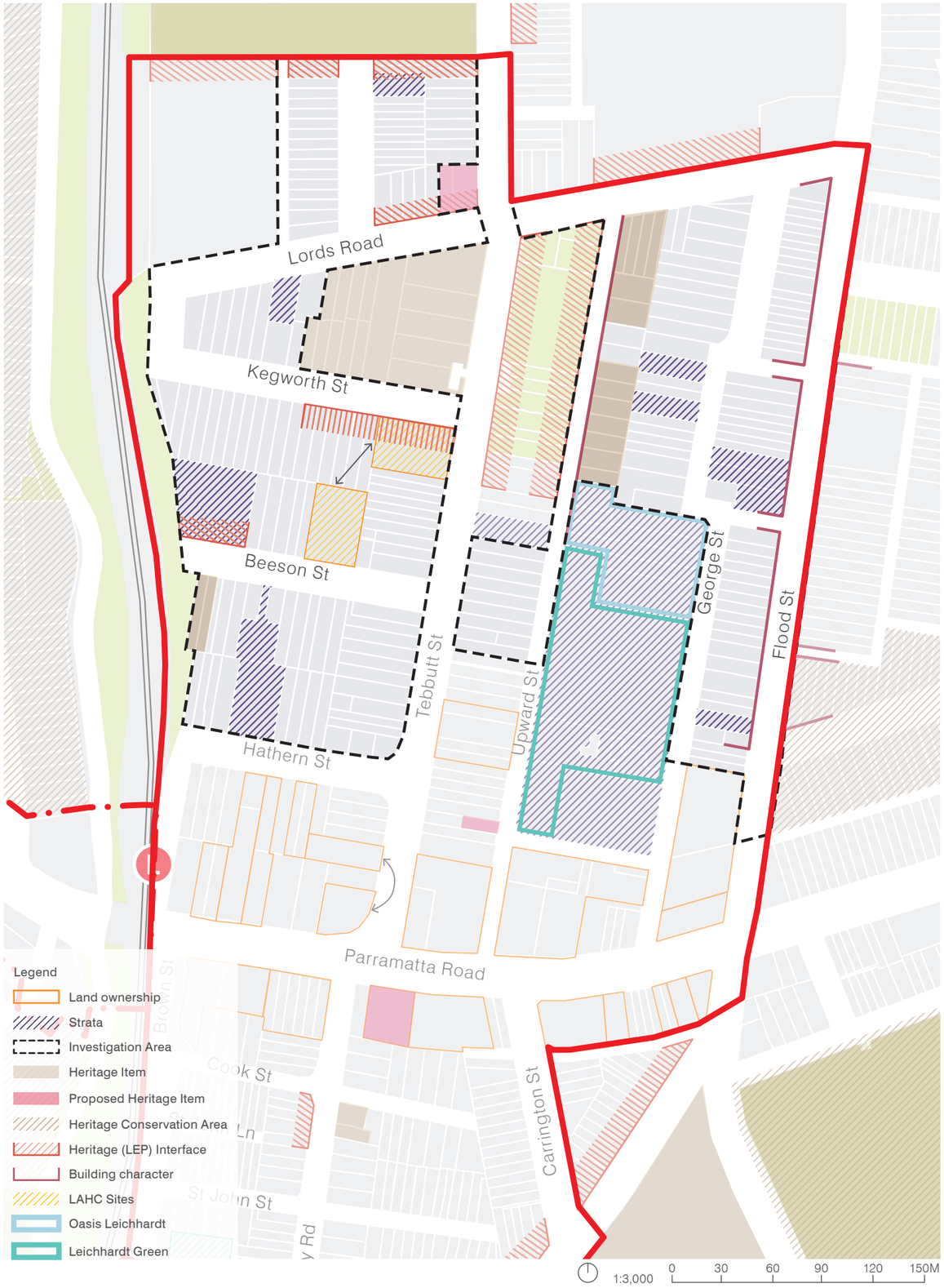
Residential Investigation Area 3

Development constraints and opportunities

- Small residential lots under fragmented ownership.
- Minimal lots under strata.
- Single and dual access lots.
- The northern and southern parts of the investigation area are within a 400m walking distance from Marion Light Rail Station and Taverners Hill Light Rail Station, respectively.
- Access to the Greenway which runs along the entire western boundary of the investigation area.
- Investigation area is largely unconstrained by heritage items and heritage conservation areas with the exception of a row of heritage-listed cottages along the northern end of Upward Street and two dwellings on Beeson St.
- Sensitive interfaces to the heritage cottages along Upward Street and Kegworth Public School.
- The recent Oasis and Leichhardt Green developments provide a catalyst for higher density typologies.
- Through site link: an opportunity for a through site link has been identified between 37 and 39 Tebbutt St, which would also address overland flow. *Note these are industrial zoned properties not within the investigation area.*
- The typology testing and selected sites are subject to hydrological engineering advice, with regards to minimum landscaped area, setbacks and impacts of basement car parking.
- LAHC sites: 54-56 Tebbutt St currently has 14 dwellings. Turning this site over under the proposed controls won't substantially increase the yield therefore we recommend no change to this site. 7 Beeson St currently has 10 dwellings; likewise turning this site over under the proposed controls won't substantially increase the yield. As a result, these sites have been excluded from our testing.

Preliminary ideas

- Opportunity for increased density close to Taverners Hill Light Rail Station.
- Opportunity for increased height in context of new high density development as well as industrial zone to the south of the investigation area.
- Explore consolidating density in key locations to retain existing fine grain character of remainder of the investigation area wherever possible.



Built form typology study

The following study has been undertaken to identify existing character and lot patterns including street frontage, lot depth and access, to inform requirements for subdivision and amalgamation and possible future built form typologies within the investigation area.

A study based on subdivision of lots with terrace/ townhouse typologies was initially tested (similar to residential area 1), as this typology was considered to be responsive to the fine grain character of the area.

However there were a number challenges to realise this approach including:
- ensuring that any additional floorspace would only go towards new dwellings as a result of subdivision
- impact on existing tree cover as lots get subdivided and redeveloped, particularly for subdivision down the site depth
- ensuring against the development of battle-axe subdivisions.

This testing is covered in “Appendix II - North Taverners Hill - Dwelling studies” on page 62.

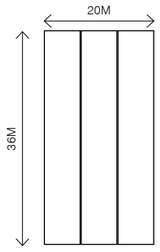
In consultation between Architectus and Council, the above impacts were considered to be greater than the benefit in terms of dwelling yield of this development pattern. Subsequently, residential flat buildings on amalgamated lots, strategically located close to Taverners Hill light rail stop, have been proposed as the preferred approach.

Character

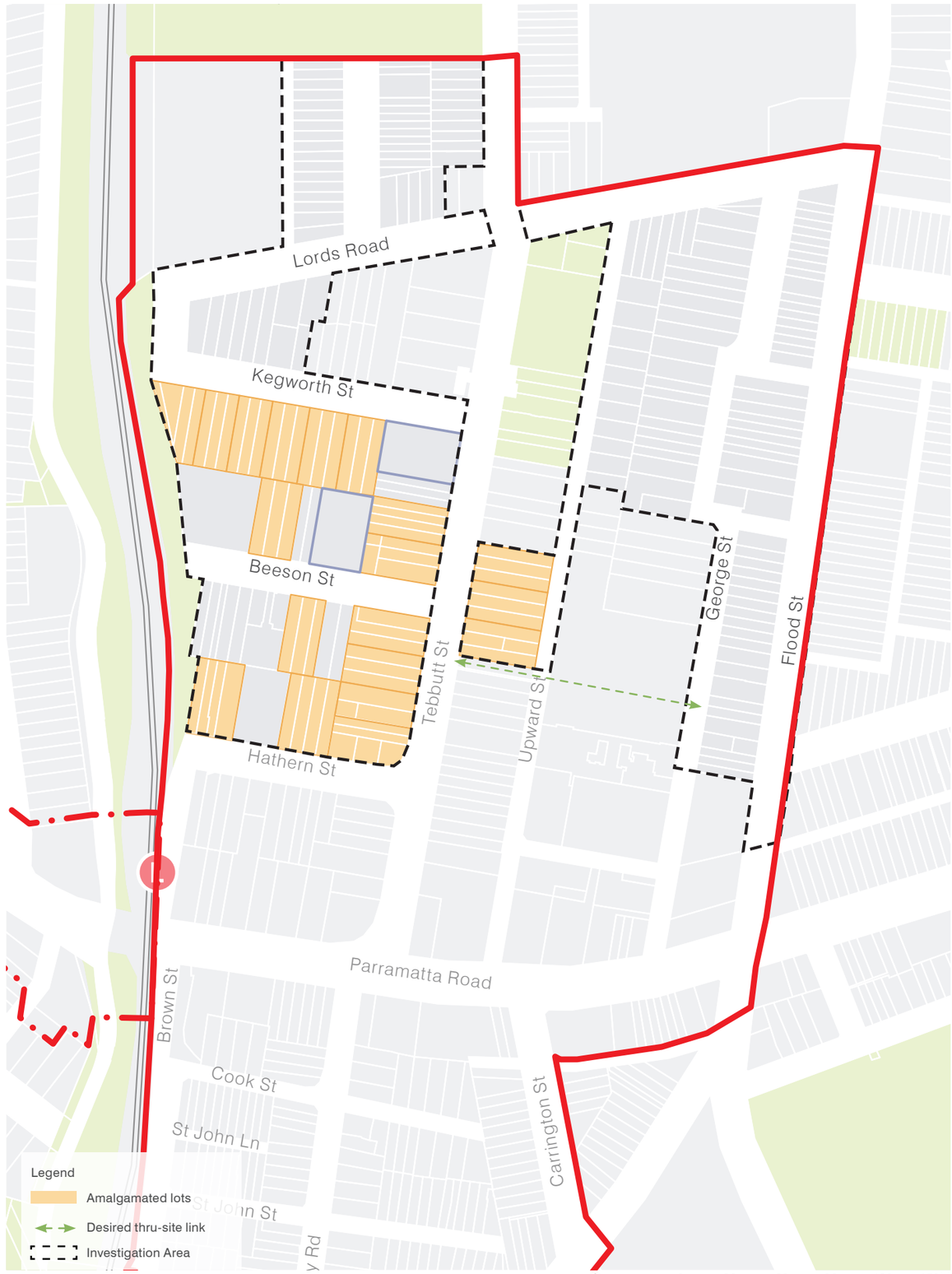
To retain the existing character of the investigation area, two blocks bounded by Kegworth Street, Tebbutt Street and Hathern Street, as well as part of the eastern block of Tebbutt Street have been strategically selected for increased residential density given these blocks’ proximity to public transport.

The relatively deep lots (approximately 45m) allow ample open space for tree cover while increasing the dwelling yield in the precinct. The relatively low building footprint (compared to 1-2 storey multi dwelling housing). Furthermore the wide streets (Kegworth St and Beeson St are 20 metres wide), with green front setbacks can accommodate this increase in height and density.

Amalgamation assumptions
Minimum 20m street frontage (typical 3 lot amalgamation) and minimum 36m lot depth.



Proximity to public transport
The proposed blocks for residential flat buildings are located within 800 metres walking distance to Taverners Hill Light Rail stop.



RFB typology key map and tested lot amalgamation pattern

Precedent images


01


03


02


04

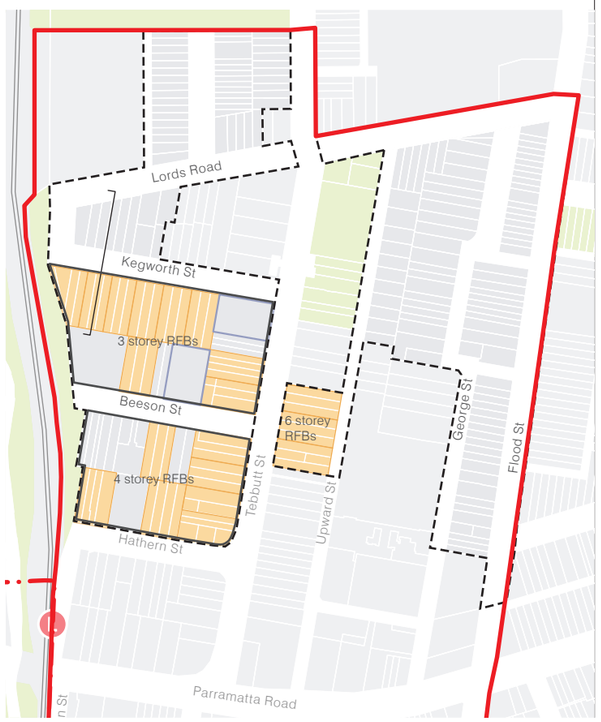
01 1538-1540 High St, Glen Iris, Ewert Leaf
02 Harold Park, Mirvac
03 Channel 9 Site Master plan, CHROFI
04 10 St George Road, Elsternwick, Ewert Leaf

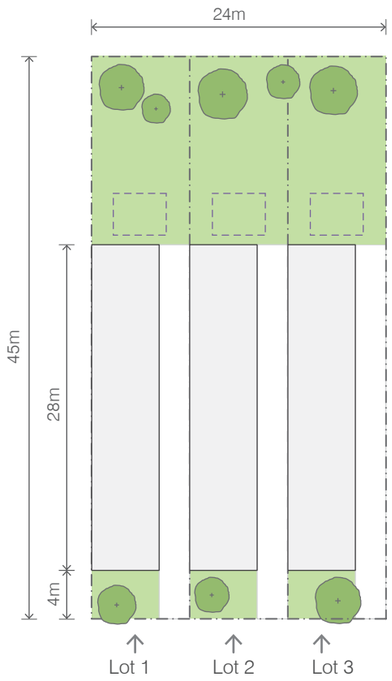
Built form typologies

RFB Type 1 - Narrow infill apartment

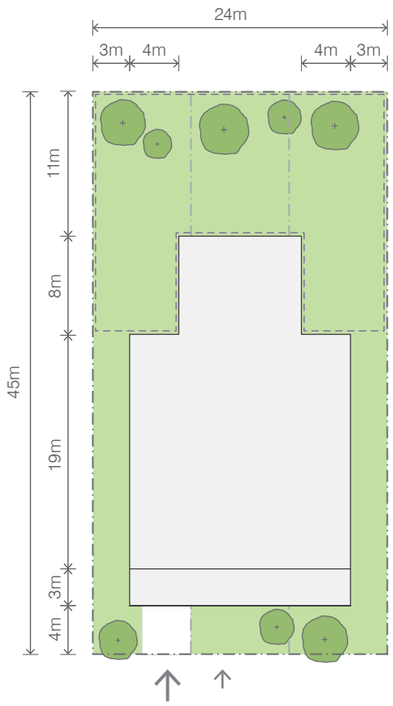
The following RFB typology is based on the amalgamation of 3-4 existing lots. This typology is adaptable to deep sites and amalgamation of lots with narrow frontages; this typology ensures a regular street pattern. This typology is based on the Narrow Infill Apartment (ADG Appendix 4). This typology maintains existing street character through landscaped front setbacks, reduces driveway crossovers, and retains existing vegetation at the rear.

Key map of tested lot amalgamation pattern for RFBs





Plan of existing dwellings and lots



Plan of proposed RFB typology

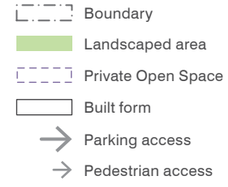
Existing dwellings' metrics

Lot	1	2	3
FSR as built	**0.4:1**	**0.4:1**	**0.4:1**
Max FSR (under existing LEP)	0.6:1	0.6:1	0.6:1
Site width	8m	8m	8m
Site depth	45.8m	45.8m	45.8m
Site area	367m^2	367m^2	367m^2
GFA	131m^2	131m^2	131m^2
Height	5m	5m	5m
Site coverage	40%	40%	40%
Private open space	122m^2	122m^2	122m^2
Front setback	4m	4m	4m
Rear setback	15m	15m	15m
Side setback	0-2.5m	0-2.5m	0-2.5m
Upper level setback	N/A		
Street wall	1 storey		
Parking	On-street	Off-street	On-street
Landscaped area	40%	40%	40%
No. of dwellings	1	1	1

Proposed RFB metrics

	3 storey	4 storey
FSR	**0.9:1**	**1.2:1**
Site width	24m	
Site depth	45m	
Site area	1,080m^2	
GFA	972m^2	1,296m^2
Height*	11.9m	15.1m
Site coverage	44%	48%
Communal open space	376m^2	368m
Front setback	4m	4m
Rear setback	min. 6m	min. 6m
Side setback	min. 3m	min. 3m
Upper level setback to the topmost storey from building line	3m	3m
Street wall	2-storey	3-storey
Parking	Basement	Basement
Landscaped area	10% deep soil (ADG recommendation for sites 650-1500m^2)	
No. of dwellings	13	18

*Height inclusive of 1.5m for lift overrun





Indicative apartment plan
Source: Apartment Design Guide, 2015

1:500 0 5 10 15 20 25M

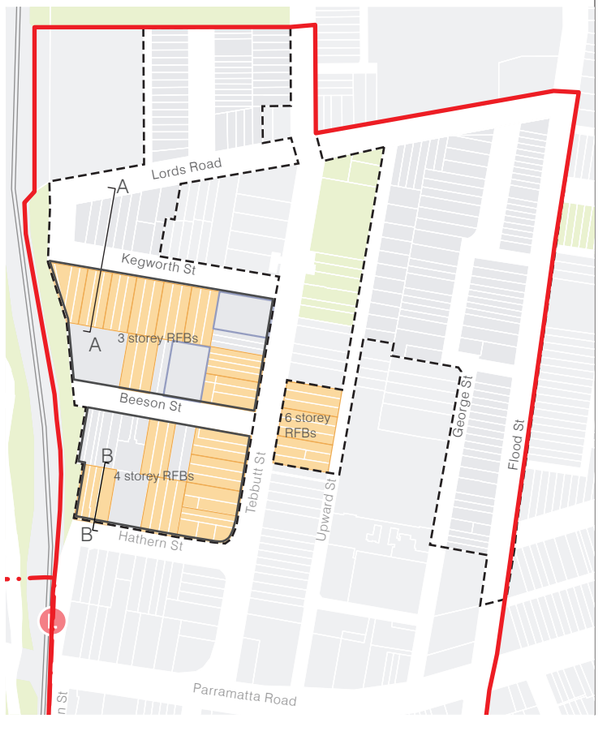
Built form typologies

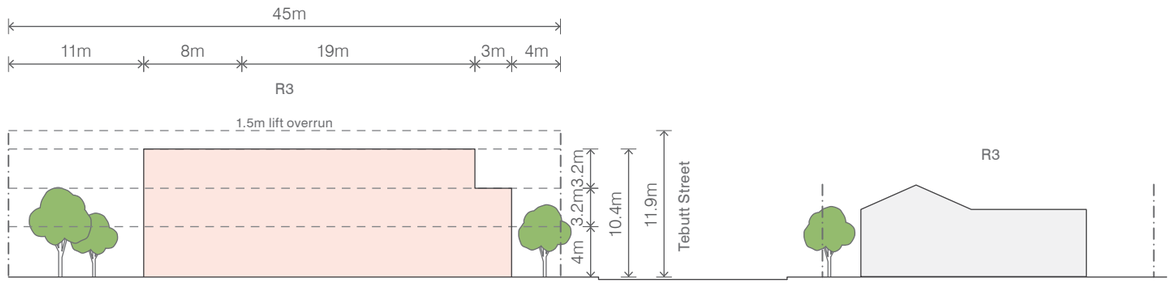
RFB Type 1 - Narrow infill apartment

General parameters for typology:
- Lot depth - 45m
- Lot size - approximately 1,000m²
- Street frontage - 20m min..
- Access & Car parking - Driveway to basement car-park

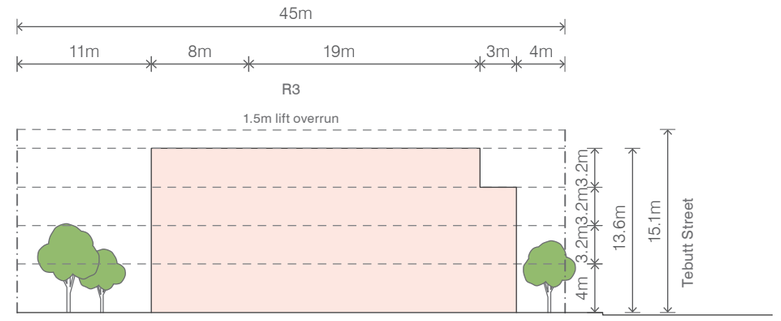
Note the sites tested (typically 3-lot amalgamations) meet the minimum recommended parameters for this RFB typology below:
- Min.. lot size - 720m²
- Min. street frontage - 20m

Key map of tested lot amalgamation pattern for RFBs

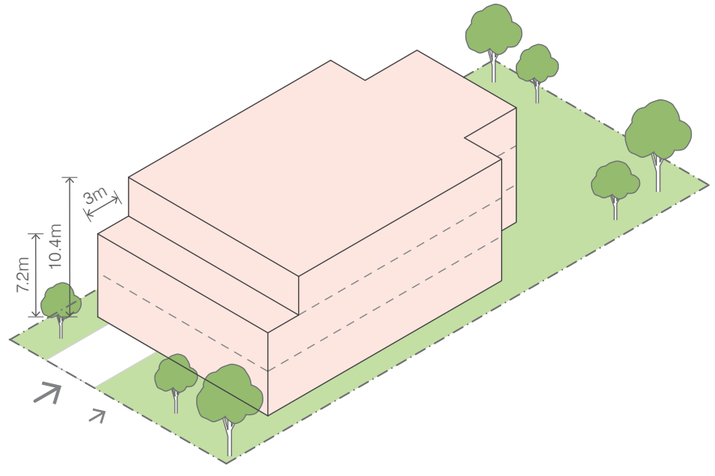




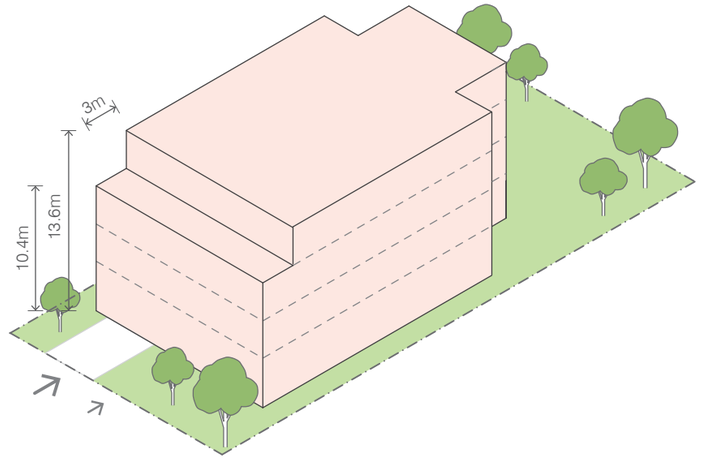
Section AA of proposed 3-storey RFB typology



Section BB of proposed 4-storey RFB typology



Axo of proposed 3-storey RFB typology

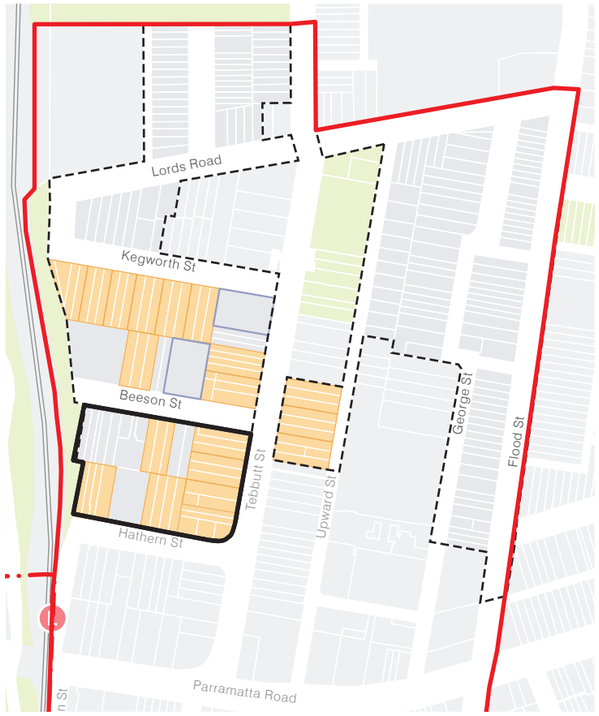


Axo of proposed 4-storey RFB typology

Overshadowing testing - 21st June (winter solstice)

Overshadow testing was undertaken for winter solstice, between 9AM to 3PM for potential future scenario of 4-storey RFBs in the block between Beeson and Hathern St. It indicates that it is possible for lots adjacent to proposed RFBs to retain solar access to private outdoor space and communal open space (50% of communal open space to achieve 2 hours between 9AM-3PM at winter solstice).

Reference study area for solar testing outlined



9am



11am



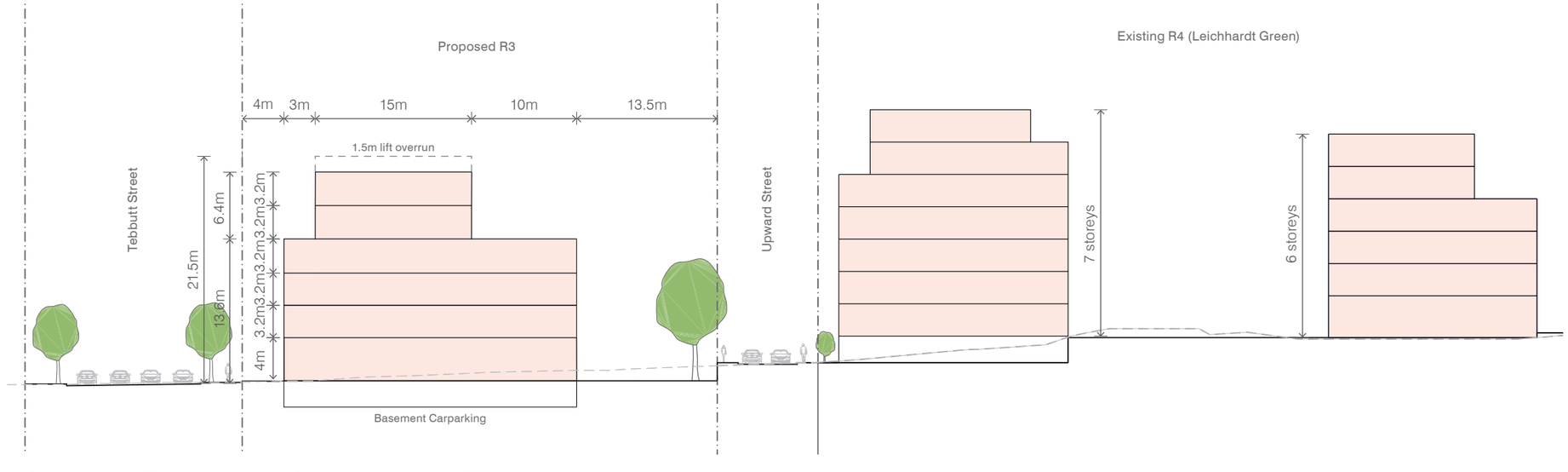
1pm



1:1,000 0 10 20 30 40 50M

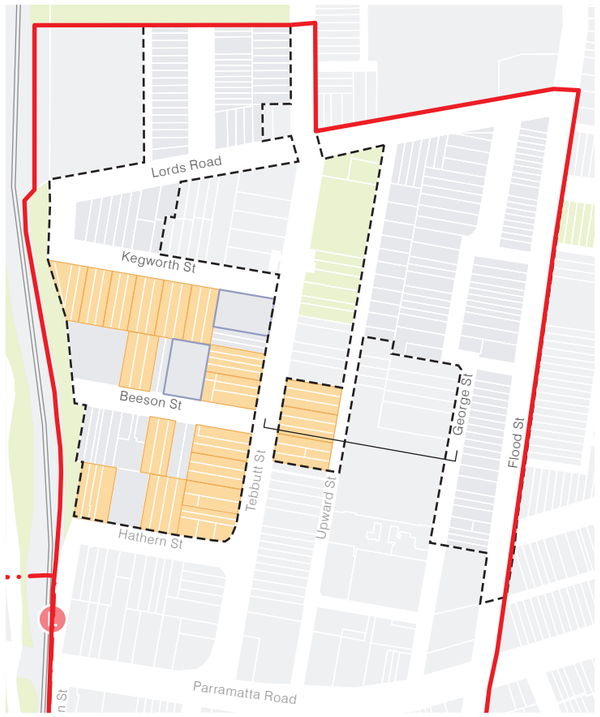
Tebbutt St 6-storey RFBs

The section diagram (on the right) indicates that proposed 6-storey RFBs on Tebbutt St can mediate the existing high-rise Leichhardt Green development on George Street. Overlooking issues can be mitigated through 6m rear (Upward St) setbacks. Planting this zone with trees and providing for fence/ screening on the Upward St boundary side can assist with direct overlooking issues from the neighbouring development. The 4-storey street wall with upper 2 storeys set back 3m on Tebbutt St responds to the proposed 3-storey and 4-storey RFBs in the two blocks between Hathern and Kegworth St.

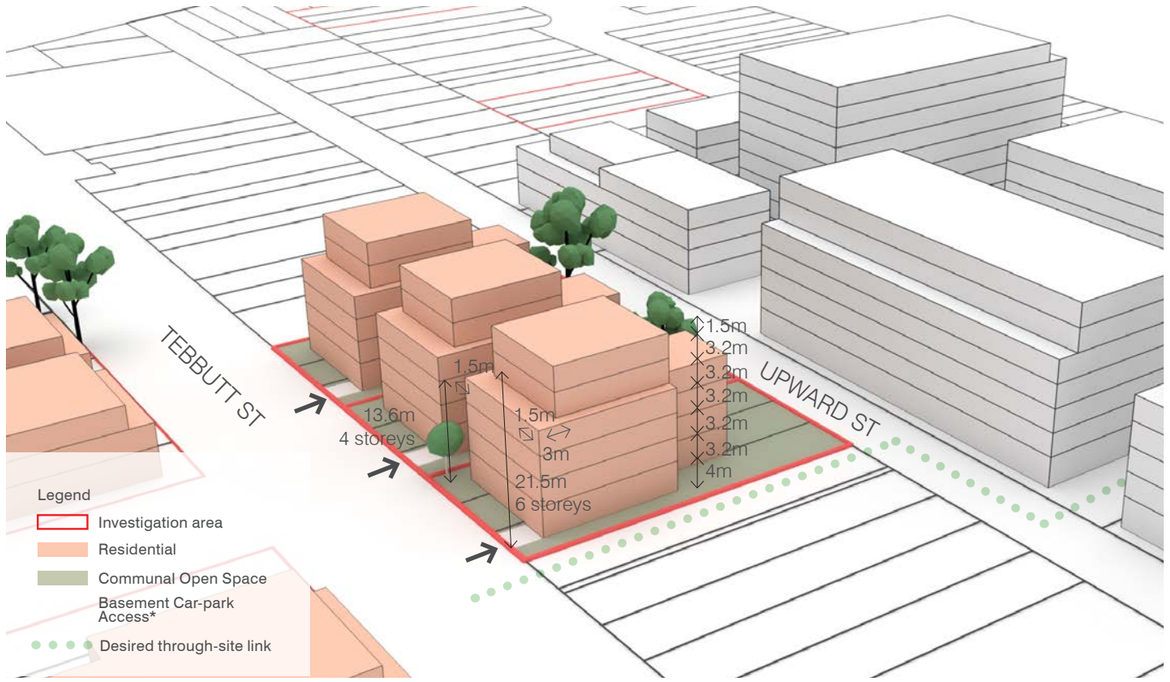


Section through Tebbutt and Upward St block with proposed RFB

Key map of proposed indicative lot amalgamation pattern for RFBs



3D View of proposed 6-storey RFBs



Proposed RFB metrics

FSR	1.4:1
Site width	23m
Site depth	45m
Site area	1035 sqm
GFA	1450 sqm
Height*	21.5m (6 storeys)
Site coverage	39%
Communal open space	460 sqm
Front setback to Tebbutt St	4m
Rear setback to Upward St	13.5m
Upper level front setback from building line to 5/6th storey (Tebbutt St)	3m
Side setback	min.. 3m, additional 1.5m to 5/6th storey
Upper level rear setback from building line to 5/6th storey (Upward St)	10m (or as required to satisfy ADG requirements)
Street wall	4-storey
Parking	Basement
Landscaped area	10% deep soil (ADG recommendation for sites 650-1500m^2)
Total no. of dwellings	19

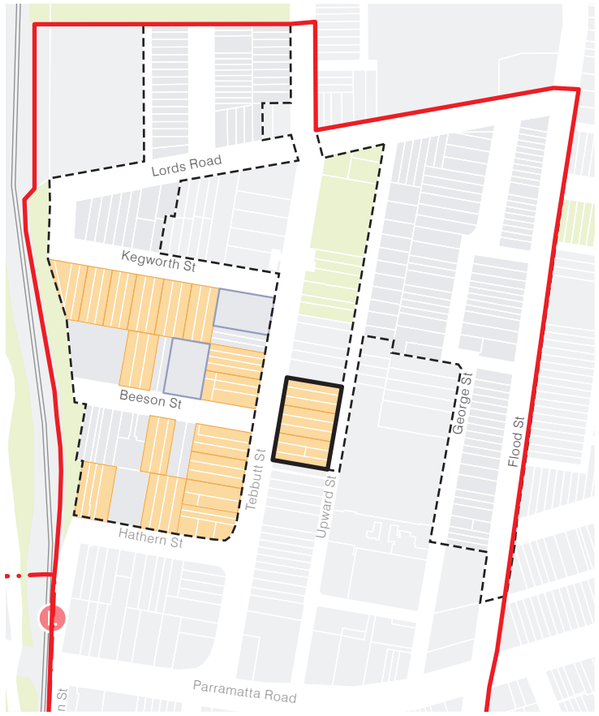
*Height inclusive of 1.5m for lift overrun

1:500 0 5 10 15 20 25M

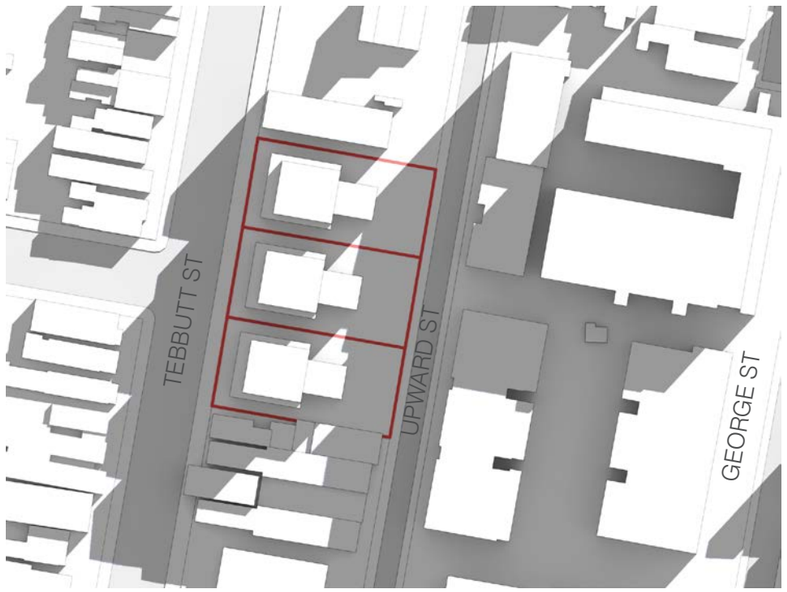
Overshadowing testing - 21st June (winter solstice)

Overshadow testing was conducted for winter solstice (21st June), between 9AM to 3PM. It indicates that it is possible for the proposed 6-storey RFBs to achieve solar access to apartments and communal open space as per ADG requirements.

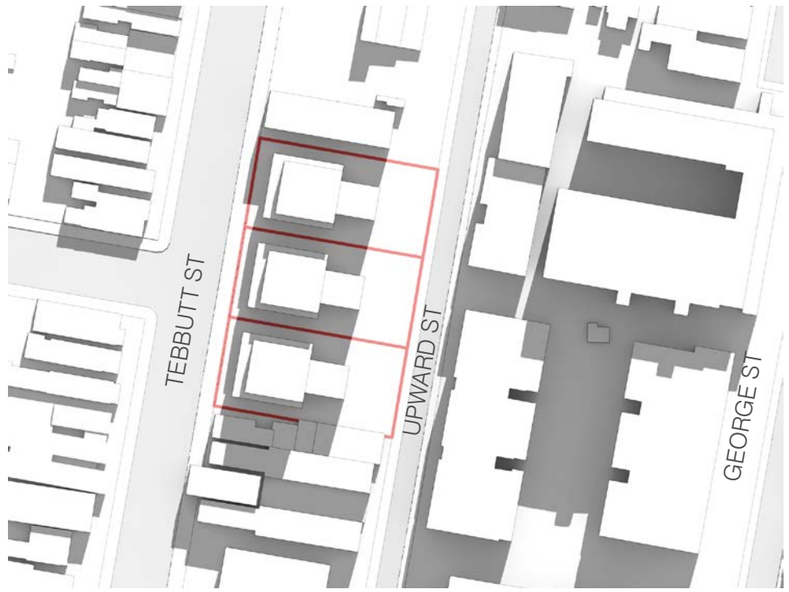
Reference study area for solar testing outlined



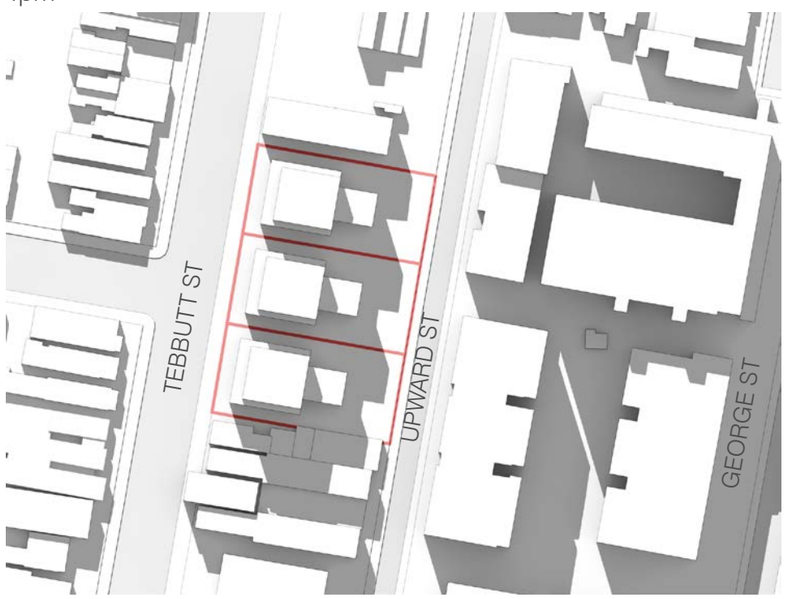
9am



11am



1pm



1:1,500 0 15 30 45 60 75M

Recommendations

LEP recommendations

The key recommendation in this investigation area is to uplift two blocks between Hathern St and Kegworth St, as well as the lots between Tebbutt St and Upward St to permit RFBs. It is recommended these blocks be upzoned to R3 with RFBs as a permitted land use.

It is recommended that the block between Hathern and Beeson St permit 4 storey RFBs (corresponding with FSR 1.2:1) due to:
- its proximity to the Taverners Hill Light Rail stop.
- having no detrimental impact to surrounding character as the block is adjacent to E4 zoned areas.

The block between Beeson and Kegworth St is recommended for 3 storey RFBs (corresponding with FSR 0.9:1) to respond to the proposed retention of R2 zoned area to the north.

The block between Tebbutt St and Upward St within the residential investigation area is recommended for 6 storey RFBs (corresponding with FSR 1.4:1) due to:
- its adjacency to R4 and MU1 developments (Oasis, and Leichhardt Green) which are up to 8 storeys
- its proximity to the Taverners Hill Light Rail stop

Architectus recommends retaining the R1 - General Residential for the remainder of the investigation area, as per the existing LEP and Draft Structure Plan. The HOB and FSR for the remainder of the study area is recommended for no change, to be consistent with the R1 zoning just outside the PRCUTS Core Area (IWLEP 2022). This is to retain the existing fine grain housing character of the area.

Note existing FSRs are recommended to be retained for heritage items.

Existing LEP controls (IWLEP 2022)	
LZN	R1 - General Residential
FSR	0.5:1 - 0.8:1 (sliding scale applies)
HOB	Controls undefined

PRCUTS recommendations (2016)	
LZN	R3 - Medium Density Residential
FSR	1:1 and 1.4:1 mix
HOB	12m and 8.5m mix

Draft Structure Plan Controls (2021)	
LZN	R1 - General Residential
FSR	0.5:1 (sliding scale applies)
HOB	Undefined

Final recommendations	
LZN	R1 - General Residential; R3 + RFB Medium Density Residential
FSR	0.5:1 (R1) (IWLEP 2022 sliding scale to be retained), 0.9:1 (3 storeys R3 + RFBs), 1.2:1 (4 storeys R3 + RFBs), 1.4:1 (6 storeys R3 + RFBs)
HOB	12m (3 storeys, R3 + RFBs), 15.5m (4 storeys, R3 + RFBs), 21.5m (6 storey R3 + RFBs), Undefined (for remainder of study area)

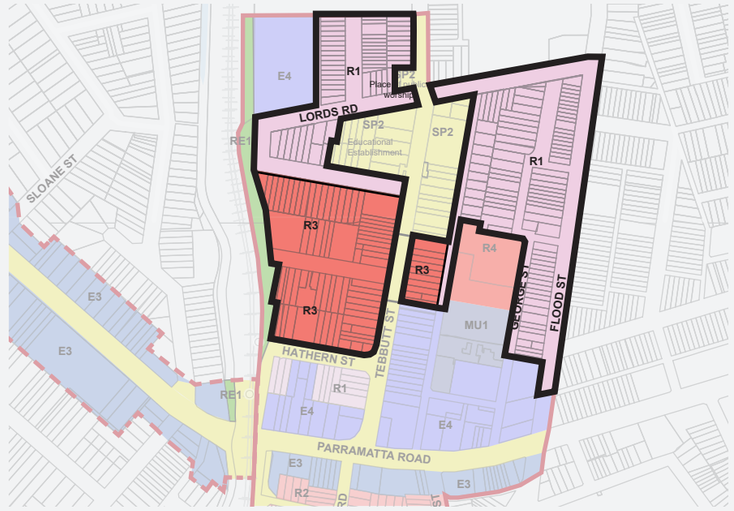
Residential yield

	No. of dwellings
Maximum capacity under existing controls	183
Maximum capacity under recommended controls	453
Additional capacity under recommended controls	270

Note refer to “Dwelling and Employment Yield Calculations” on page 44 for methodology

Land Zoning

MU1	Mixed Use
E3	Productivity Support
E4	General Industrial
R1	General Residential
R2	Low Density Residential
R3	Medium Density Residential



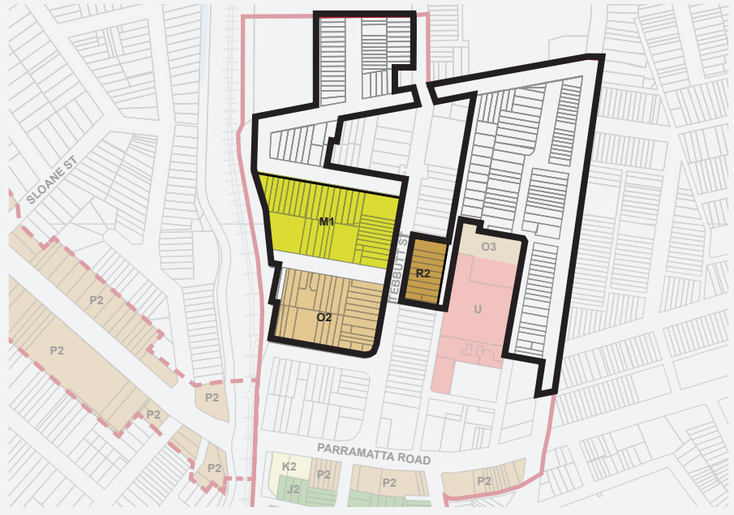
Floor Space Ratio Legend (n:1)

D	0.5
L	0.9
N	1
P	1.2
R	1.4



Maximum Building Height (m)

J2	9.5
K2	10.5
M1	12
O2	15.5
O3	16.0
P2	17.5
P4	18.5
R2	21.5
U	32



1.5 E3 Investigation Area 1

Issue 1

Proposed E3 sites to the north of Parramatta Road recommended for increased FSR and height - peer review advice sought.

Investigation area



LEP controls

The group of lots to the east of Taverners Hill light rail stop are proposed as E3 Productivity Support with an accompanying uplift in FSR, in Council's Draft Structure Plan.

PRCUTS' proposes changing these lots' zoning to R3 - Medium Density Residential. Council's Draft Structure Plan retains the remainder of the block as E4, as recommended in IWC Employment and Retail Lands Strategy.

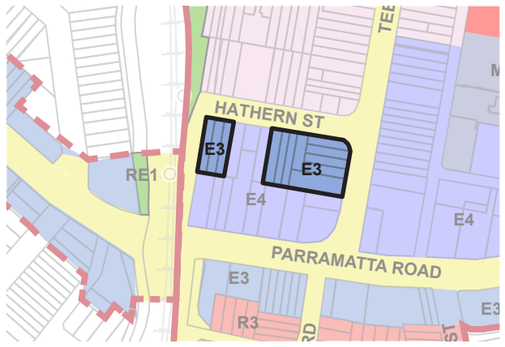
Existing LEP controls (IWLEP 2022)	
LZN	R1 General Residential
FSR	0.5:1 - 0.8:1 (sliding scale applies)
HOB	Undefined

PRCUTS recommendations (2016)	
LZN	R3 Medium Density Residential
FSR	1.4:1
HOB	17m

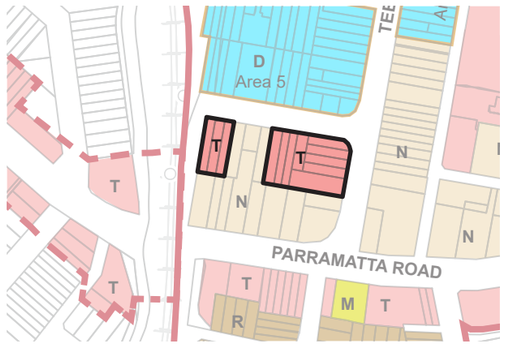
Recommendation

Based on testing (refer to Appendix III) it is difficult to obtain a workable E3 site at Hathern and Brown Streets. It is recommended that Council consider investigation of this entire block in a holistic way.

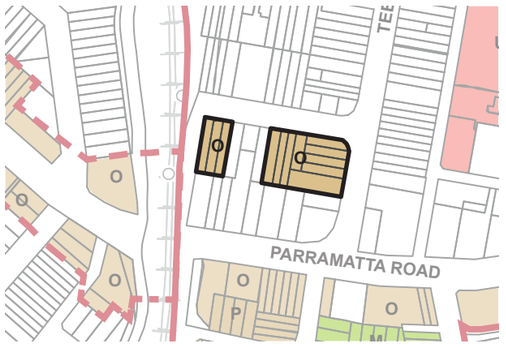
Draft Structure Plan controls under consideration (2021)



LZN E3 Productivity Support



FSR 2:1



HOB 16m

1.6 E3 Investigation Area 2

Issue 2

Advice sought on the appropriate built form controls for E3 zoned areas considering the interface with the residential areas to the rear of E3, and ensuring minimal amenity impacts on the residential properties, especially to the south of Parramatta Road.

Investigation area



LEP controls

This investigation area which consists of employment uses along the north and south side of Parramatta Road is currently zoned E3 Productivity Support with an FSR of 2:1 and HOB of 15m.

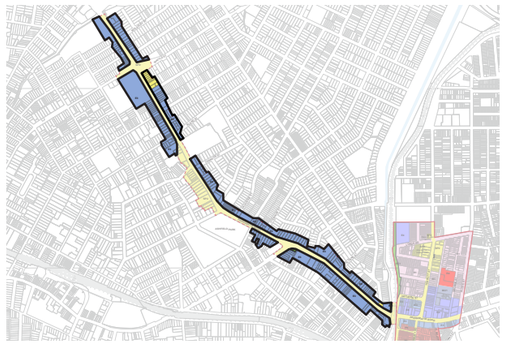
PRCUTS supports both the existing zoning and FSR but recommends increasing the existing height control of 15m to 16m.

Draft Structure Plan controls
The IWC Draft Structure Plan controls under consideration support all PRCUTS recommendations.

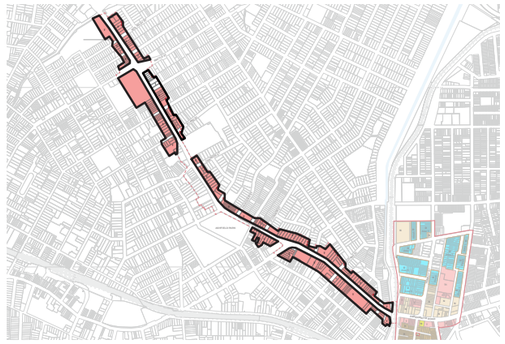
Existing LEP controls (IWLEP 2022)	
LZN	E3 Productivity Support
FSR	2:1 (south of Parramatta Road) and 1.5:1 (north of Parramatta Road)
HOB	15m (south of Parramatta Road) and 10m (north of Parramatta Road)

PRCUTS recommendations (2016)	
LZN	**B6 Enterprise Corridor**
FSR	2:1
HOB	16m

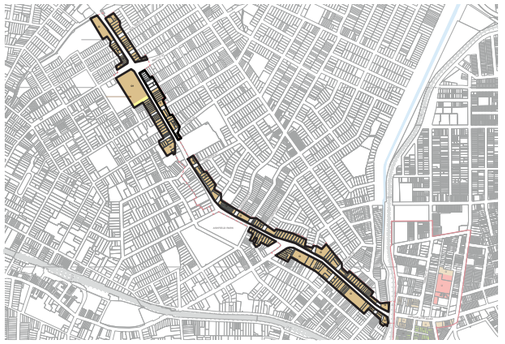
Draft Structure Plan controls under consideration (2021)



LZN E3 Productivity Support



FSR 2:1



HOB 16m

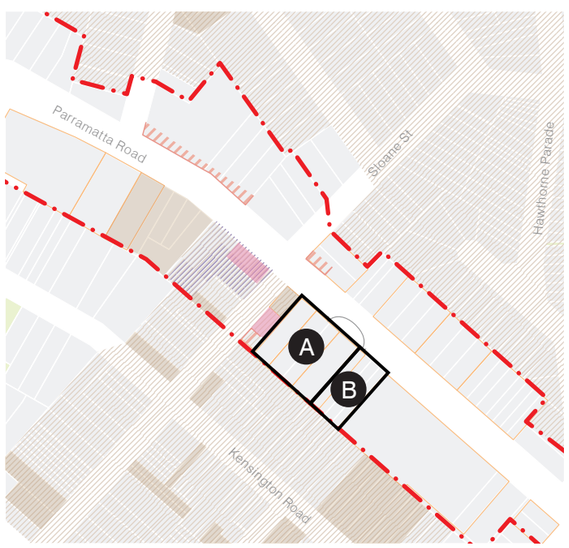
E3 Investigation Area 2

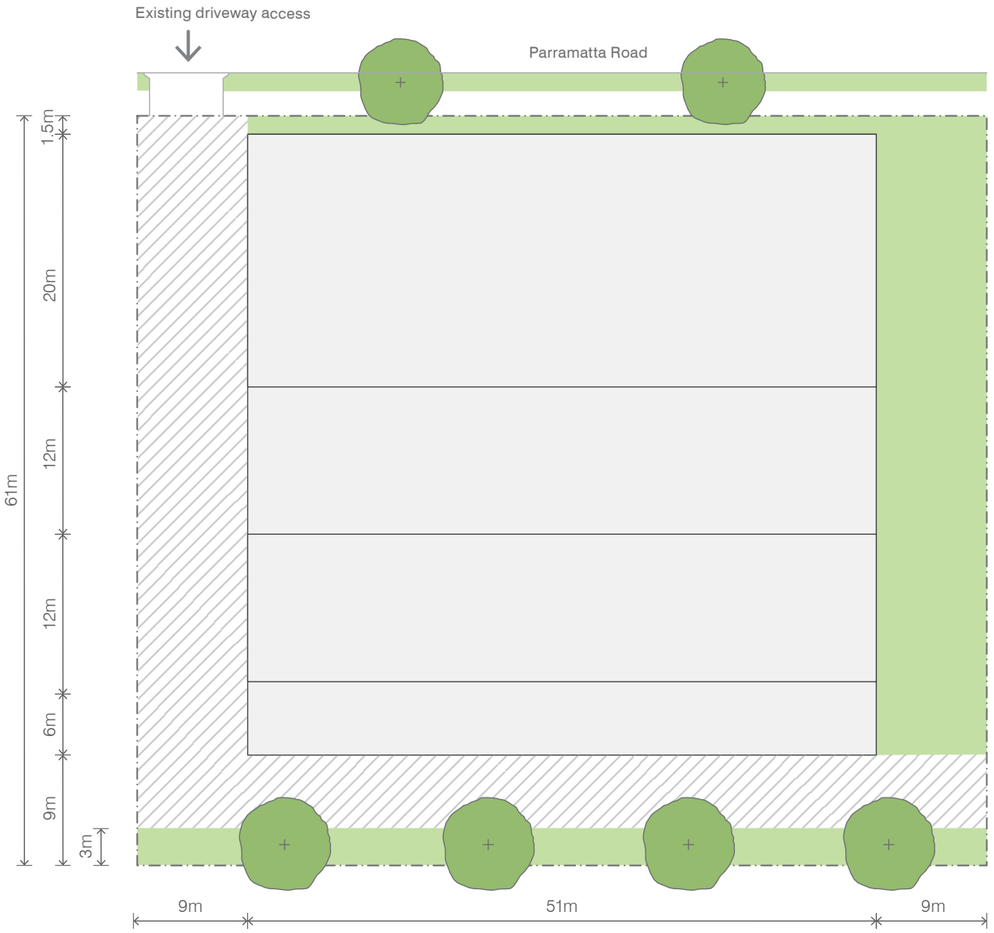
E3 Typology testing

The two sites were studied (1 at >2000m^2 and the other at <2000m^2) as this block encompasses a number of conditions which are prevalent throughout the Taverners Hill Frame Area:

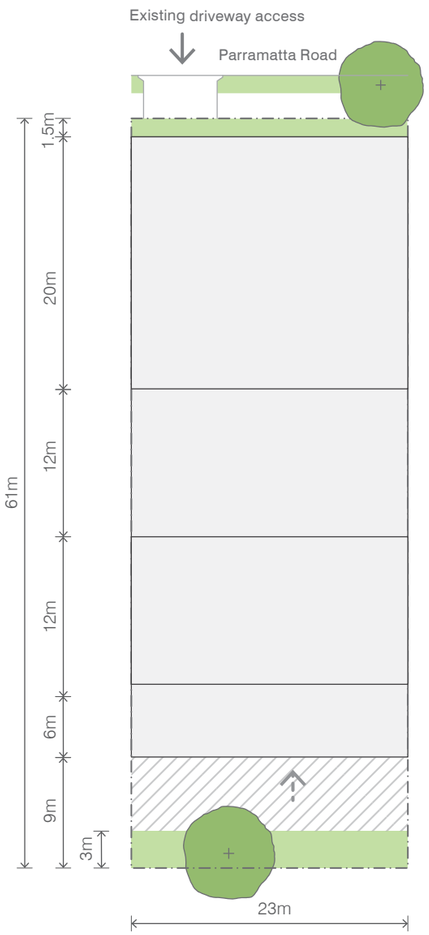
- R2 zoned area to the south and to the west of Site A, some with large green setbacks and some adjacent lots with no setback
- the adjacent residential is a heritage conservation area
- adjacent 48 Parramatta Road a heritage item.
- adjacent E3 zoned lots to the west are existing and proposed heritage items
- there will be mid-winter overshadow impact as the E3 zone is to the north of the R2 zoned area

These have been tested as a typology which includes smaller floorplate commercial uses over the ground floor as this is likely to achieve the highest FSR on potential sites. It is noted that other typologies of upper storey configuration may also be proposed in this area.





Plan of tested E3 typology



Plan of tested E3 typology

A

Sites >2000m^2 metrics

FSR	2:1
Site width	69m
Site depth	61m
Site area	4231m^2
GFA	8357m^2
Height	17.3m (4 storeys)
Front setback	1.5m
Rear setback	9m with additional 6m to 3rd storey
Side setback	9m
Street wall	4 storey
Site Coverage	61%
Parking	Basement

B

Sites <2000m^2 metrics

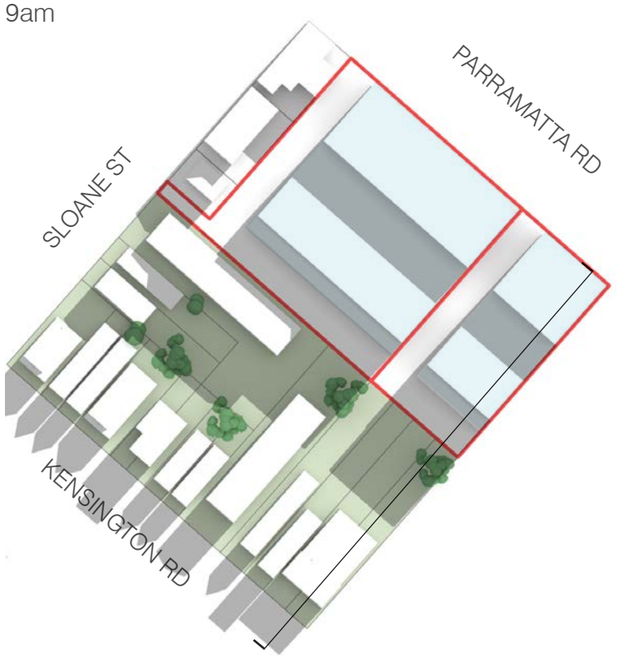
FSR	2:1
Site width	22.5m
Site depth	61m
Site area	1377m^2
GFA	2736m^2
Height	17.3m (4 storeys)
Front setback	1.5m
Rear setback	9m with additional 3m to 3rd storey
Side setback	0m
Street wall	4-storey
Site Coverage	83%
Parking	Basement

Overshadowing testing - 21st June (winter solstice)

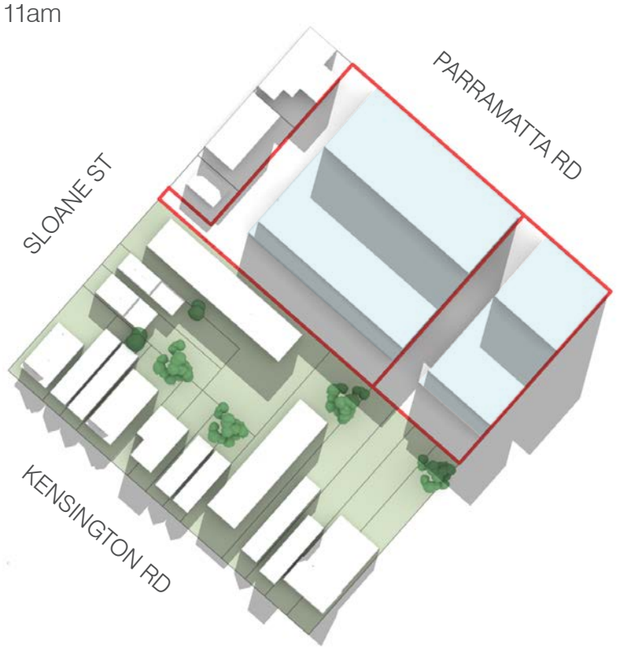
The below overshadowing testing diagrams indicate that the recommended setbacks and building envelope for E3 zones maintains solar access to adjacent dwellings' private outdoor space and living areas for 2 hours between 9am-3pm on 21st June.

Site A & Site B

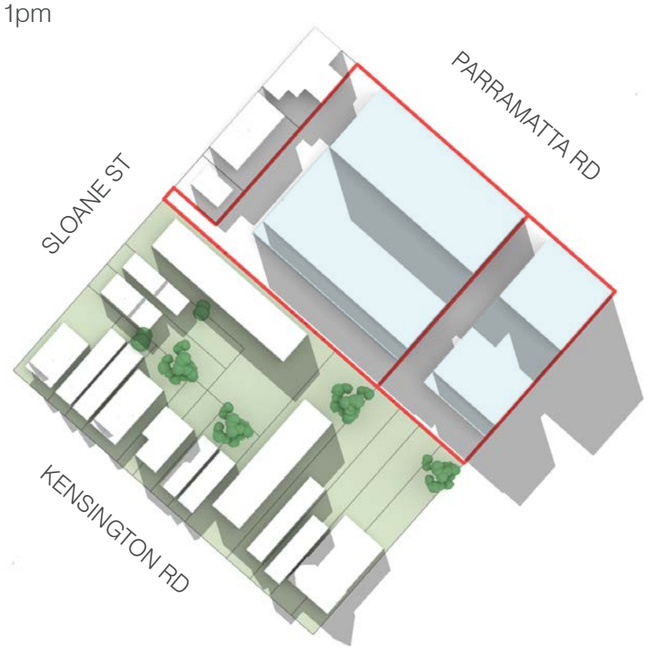
9am

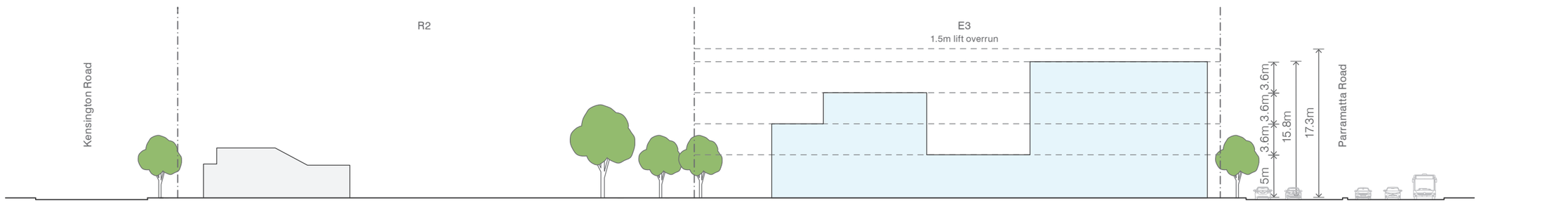


11am



1pm





Section diagram of E3 with existing R2 adjacent

1:500 0 5 10 15 20 25M

E3 Typology testing

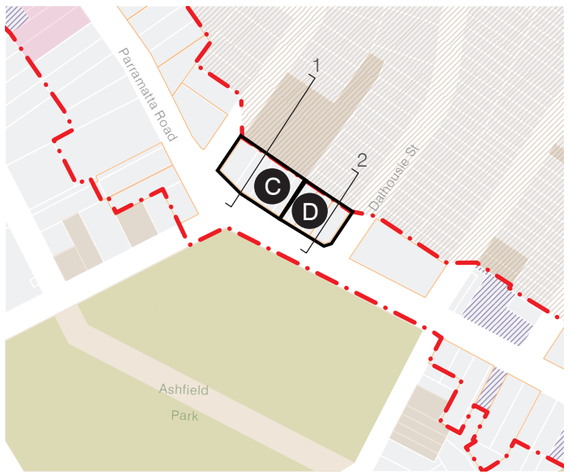
The following study, within the E3 Frame Area was undertaken on the block between Dalhousie Street and Rogers Avenue on the north side of Parramatta Road. The two sites were based on land ownership. The constraints of this site which warranted testing include:

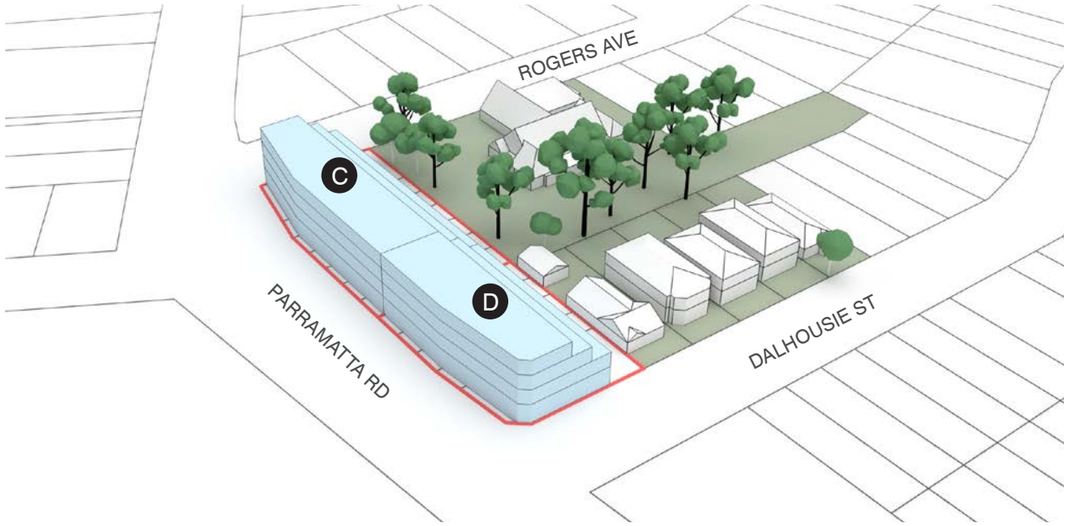
- adjacent to a heritage item on Rogers Ave
- adjacent to an R2 zone consisting of 1-2 storey detached dwellings and RFBs
- adjacent to heritage conservation area

Note that whilst the testing shows that FSR 2:1 is generally achievable on these sites, the maximum FSR may not be appropriate in instances where:

- sites are adjacent to heritage items/ Haberfield Heritage Conservation Area until further heritage investigation is undertaken
- sites to the south of Parramatta Road which cannot provide sufficient setbacks to low density residential area and may adversely impact on the solar amenity of these properties. This may be the case for properties which run parallel to Parramatta Road at the intersections with Parramatta Road.

Key map of tested sites in Taverners Hill north frame area



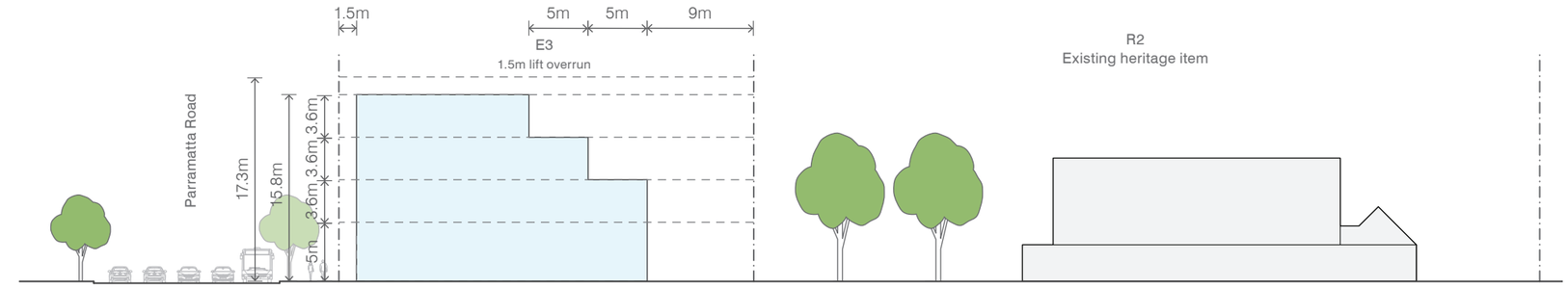


3D of E3 development on tested sites

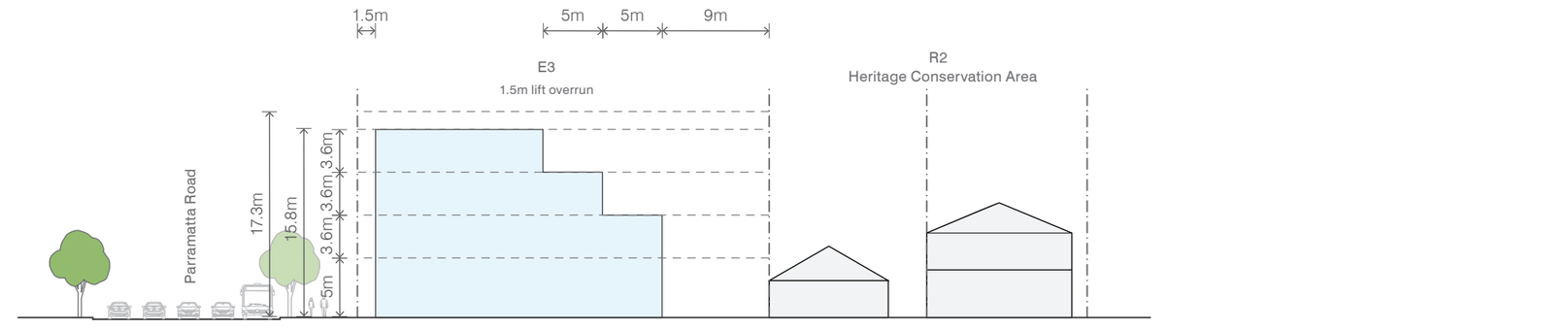
B6 metrics

Site	C	D
FSR	**2.1:1**	**2.1:1**
Site width	61m	45m
Site depth	35m	35m
Site area	2084m^2	1536m^2
GFA	4370m^2	3209m^2
Height*	17.3m (4 storeys)	17.3m (4 storeys)
Front setback	1.5m	1.5m
Rear setback	9m with additional 5m from 3rd storey onwards	9m with additional 5m from 3rd storey onwards
Side setback	0m	0m
Site Coverage	70%	70%
Street wall	4 storey	
Parking	Basement car parking	

*Height inclusive of 1.5m for lift overrun



Section diagram 1



Section diagram 2

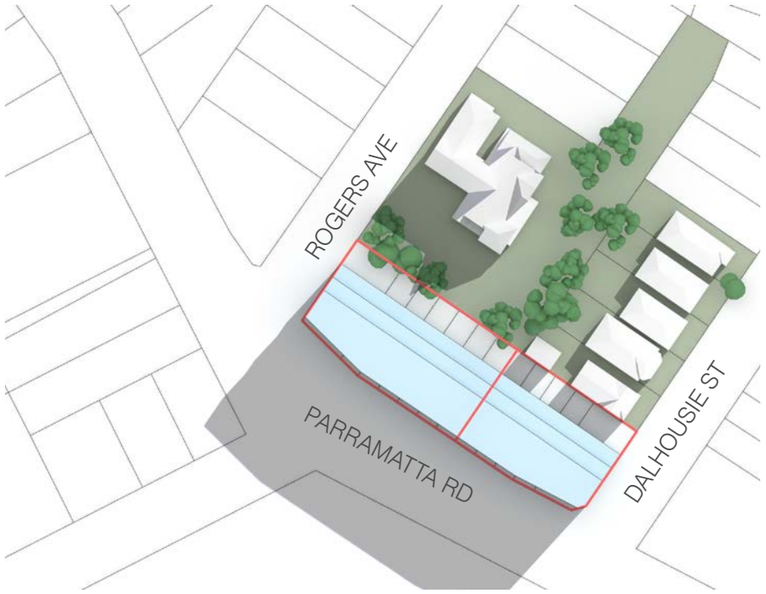
1:500 0 5 10 15 20 25M

Overshadowing testing - 21st June (winter solstice)

The below overshadowing impact of a E3 development is primarily on Parramatta Road on 21st June. The below diagrams indicate that the recommended setbacks and building envelope for E3 zones maintains solar access to adjacent dwellings' private outdoor space and living areas for 2 hours between 9am-3pm on 21st June.

Site C & Site D

9am



11am



1pm



1:2,000 0 20 40 60 80 100M

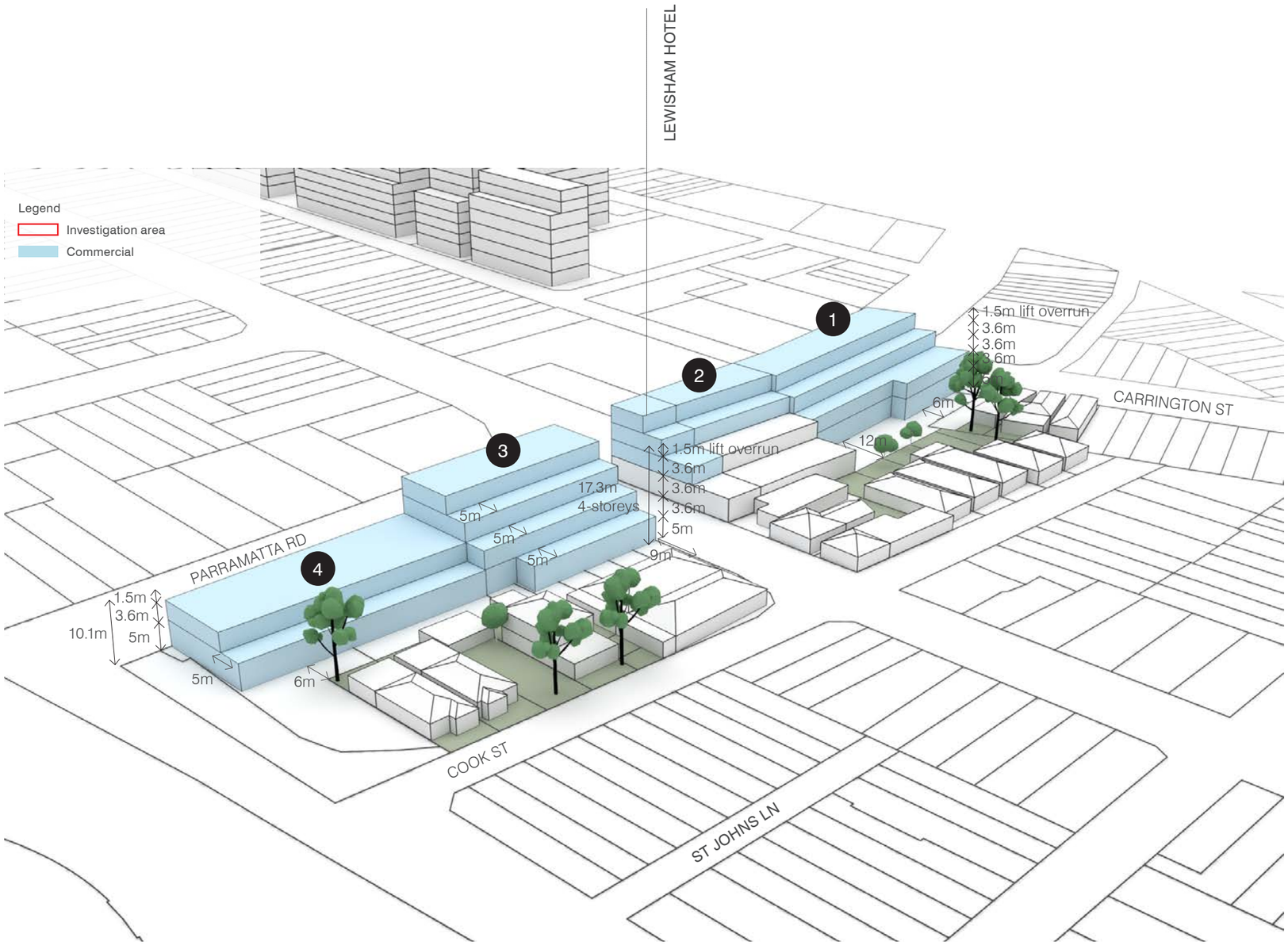
E3 Typology testing - south Taverners Hill

The following testing indicates the FSR in Council's Draft Structure plan is achievable on Sites 1-3. The recommended height is 4 storeys (maximum 17.5m) for sites 1-3. This proposed maximum building height can maintain adequate solar access to adjacent residential zoned lots' open space and living areas. 794 Parramatta Road part of Site 2 has subsequently been identified as a proposed heritage item and development potential of Site 2 may be impacted.

Site 4 would encounter difficulty reaching the FSR without having an undesirable overshadowing impact on adjacent residential lots to the south due to the shallow depth of this site, and the L-shaped lot to the west. The recommendation for Site 3 is 2-storeys max. height and FSR 1:1.

E3 metrics

Site	1	2	3	4
FSR	2:1	2:1	2:1	1.2:1
Site area (m^2)	1,836m^2	1,175m^2	1,335m^2	1,650m^2
GFA (m^2)	3,651m^2	2,350m^2	2,615m^2	1,913m^2
Height (m)	17.3m	17.3m	17.3m	10.1m
Height (storeys)	4	4	4	2
Site coverage	70%	100%	59%	73%
Front setback (m)	0m	0m	0m	0m
Rear setback (m) (6-12m)	6m	N/A	6m	6m
Upper setback at rear (m)	5m	5m	5m	5m
Side setback (m)	0m	0m	0m	0m
Street wall	4 storey	4 storey	4 storey	2 storey
Parking	Basement car parking			



3D of B6 development on tested sites

Overshadowing testing - 21st June (winter solstice)

The following diagrams demonstrate that the proposed height and density, maintains solar access to the neighbouring R2 zoned dwellings to the south. (50% of private open space and living areas maintaining minimum 2 hours between 9am-3pm on 21st June).

11am



9am



1pm



1:1,500 0 15 30 45 60 75M

Recommendations

LEP recommendations

Architectus generally supports the draft structure plan controls and PRCUTS FSR of 2:1. The FSR and height of E3 sites at the west end of the block on Old Canterbury Road are to be reduced to 1.2:1 and 10.5m as any higher FSR/height would not be appropriate due to limited block depth, and setback for visual amenity and overshadowing to the R2 zoned lots to the immediate south.

Maximum height of building is recommended to be 17.5m to correspond with the tested E3 building form of 4 storeys.

As stated previously, the proposed E3 on the Hathern St, Tebbutt St block is recommended to be reconsidered and further investigated in a more holistic way with the rest of the E4 zoned block. The proposed E3 in south Taverners Hill area is recommended to have no change to FSR and HOB.

The FSR and HOB of Taverners Hill Frame area is recommended to be increased to 2:1 and 17.5m. However, this maximum FSR and height may not be achievable for some sites as discussed earlier in this section.

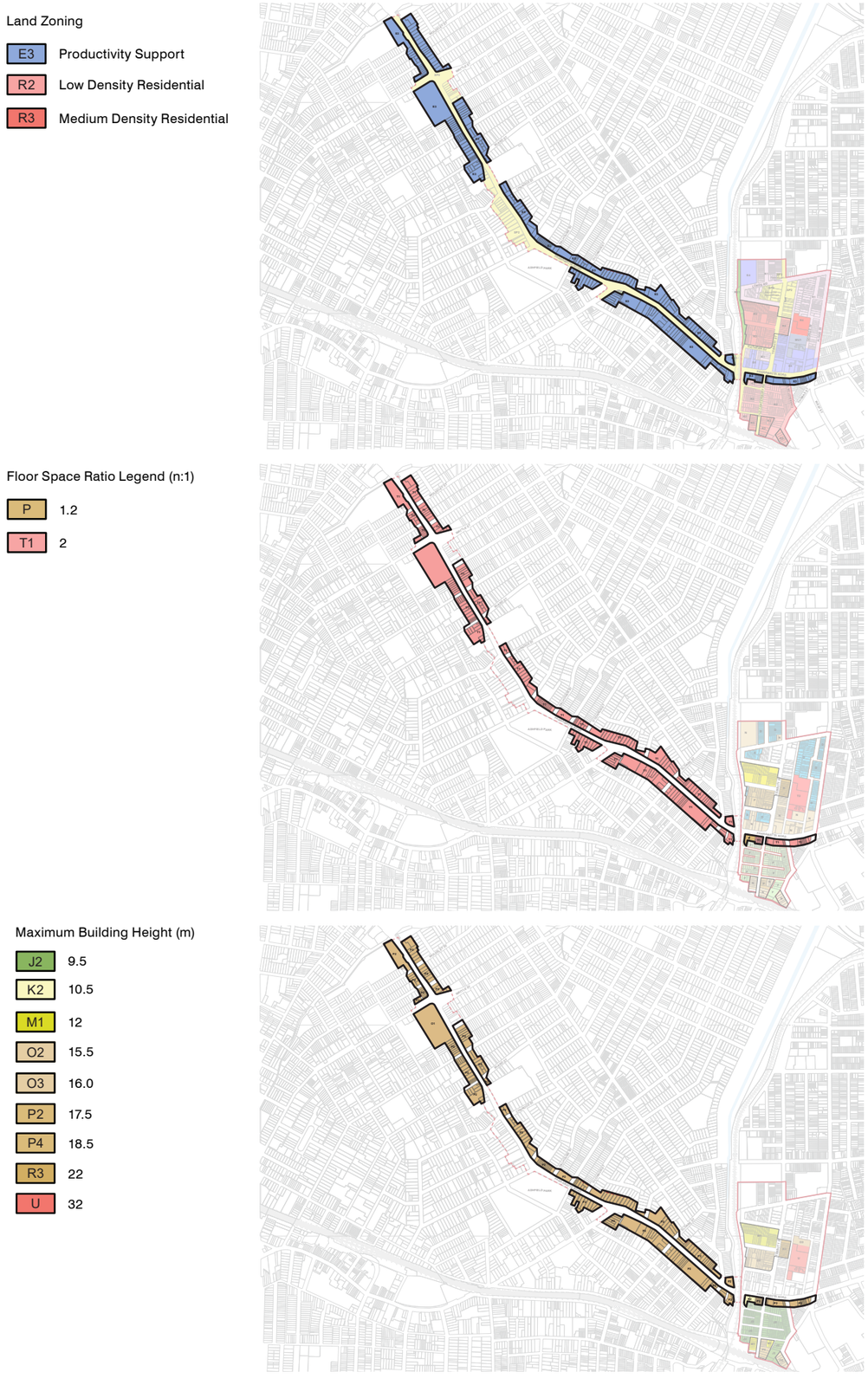
Note - refer to Kings Bay package for advice regarding ‘green edge setbacks’ - the recommendations of which also apply to this investigation area.

Existing LEP controls (IWLEP 2022)	
LZN	E3 Productivity Support
FSR	2:1
HOB	15m

PRCUTS recommendations	
LZN	B6 Enterprise Corridor
FSR	2:1
HOB	16m

Draft Structure Plan Controls	
LZN	E3 Productivity Support
FSR	2:1
HOB	16m

Final recommendations	
LZN	E3 Productivity Support
FSR	1.2:1, 2:1
HOB	10.5m, 17.5m



1.7 Summary of recommendations

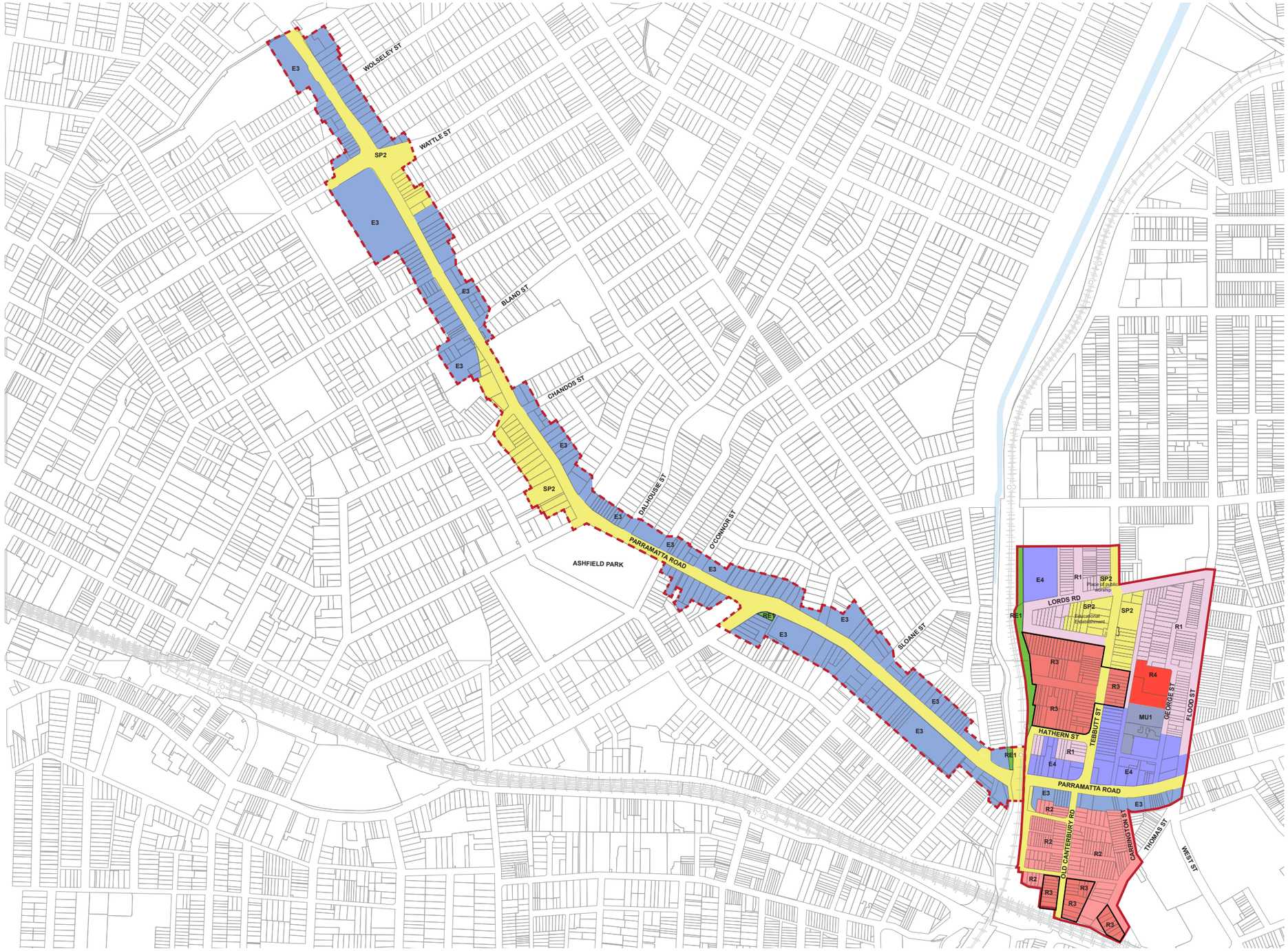
Issue	Architectus recommendations	Further controls for LEP/DCP
Residential Investigation Area 1 - Issue Provide medium density residential to the south of Parramatta Road Peer review advice is sought on the proposed zoning and built form controls. Noting PRCUTS recommends townhouses and terrace type dwellings for this area in the supporting guidelines.	Land Use - R2 - Low Density Residential, R3 + RFB - Medium Density Residential FSR - 0.6:1 - 1.1:1 for R2, 1:1 for R3 + RFB Height - 9.5m (2 storeys), 12m (3 storeys), 15.5m (4 storeys)	– min. 20m street frontage – min. site area 720m^2 for residential flat buildings – redevelopment to follow lot amalgamation pattern identified in previous section on this issue; any proposal to redevelop that does not follow pattern to be assessed on a case by case basis – landscaped zone within 4m front setback – 7m minimum rear setback – deep soil and communal open space as per ADG requirements – 2 storey street wall with 3m front upper storey setback – building façades to be articulated to reflect existing grain (12m)
Residential Investigation Area 2 - Issue 35-53 Old Canterbury Road, Lewisham Facilitate higher density residential uses in line with PRCUTS recommendations given the good proximity to public transport - peer review advice is sought regarding the appropriate density, height and built form controls.	Land Use - R3 + RFB - Medium Density Residential FSR - 1:1, 1.2:1 Height - 18.5m (5 storeys)	– 6m front setback with 3m landscaped private open space – provide individual entrances to ground level terraces off street – 6m minimum rear setback – deep soil and communal open space as per ADG requirements – 2 storey street wall with 3m front and side upper storey setback – building façades to be articulated to reflect existing grain (12m)

Summary of recommendations

Issue	Architectus recommendations	Further controls for LEP/DCP
Residential Investigation Area 3 - Issue Existing land use zoning, density and height has been retained for residential zoned land north of Parramatta Road however it is acknowledged that there may be potential to consider increased density and height - peer review advice is sought on appropriate zoning and built form controls. Noting PRCUTS recommends townhouses and terrace type dwellings for this area in the supporting guidelines.	Land Use - R1 - General Residential, R3 + RFB - Medium Density Residential FSR - 0.5:1 - 0.8:1 for R1 area, 0.9:1, 1.2:1, 1.4:1 for R3 + RFB Height - Undefined for exiting R1 area, 12m (3 storeys), 15.5m (4 storeys), 21.5m (6 storeys) Retain existing FSR/height controls for existing heritage items	– min. 20m street frontage – min. site area 720m^2 for residential flat buildings – redevelopment to follow lot amalgamation pattern identified in previous section on this issue; any proposal to redevelop that does not follow pattern to be assessed on a case by case basis – landscaped zone within 4m front setback – 6m minimum rear setback – deep soil and communal open space as per ADG requirements – 2-4 storey street wall with front upper storeys setback 3m – side setbacks as per ADG
E3 Investigation area - Issue 1 Proposed E3 sites to the north of Parramatta Road recommended for increased FSR and height - peer review advice sought.	No changes to existing LEP controls are proposed.	– Based on testing (refer to Appendix III) it is difficult to obtain a workable E3 site at Hathern and Brown Streets. It is recommended that Council consider investigation of this entire block in a holistic way.
E3 Investigation area - Issue 2 Advice sought on the appropriate built form controls for E3 zoned areas considering the interface with the residential areas to the rear of E3, and ensuring minimal amenity impacts on the residential properties, especially to the south of Parramatta Road.	– Land Use - E3 - Productivity Support FSR - 1.2:1, 2:1 Height - 10.5m (2 storeys), 17.5m (4 storeys)	– 2-4-storey street wall – 6-9m rear setback to first two storeys, additional 5m for every upper storey where development is directly adjacent to residential zoned area to rear (for Sites 3 and 4, refer to page 41) – where development is backing onto a lane, demonstrate solar access requirements to adjacent residential dwellings can be achieved – where development is close to adjacent heritage items or conservation area, demonstrate that development is designed sympathetic to heritage – - 1.5m green edge setback for Frame Area

1.8 Final LEP recommendations

Land Zoning

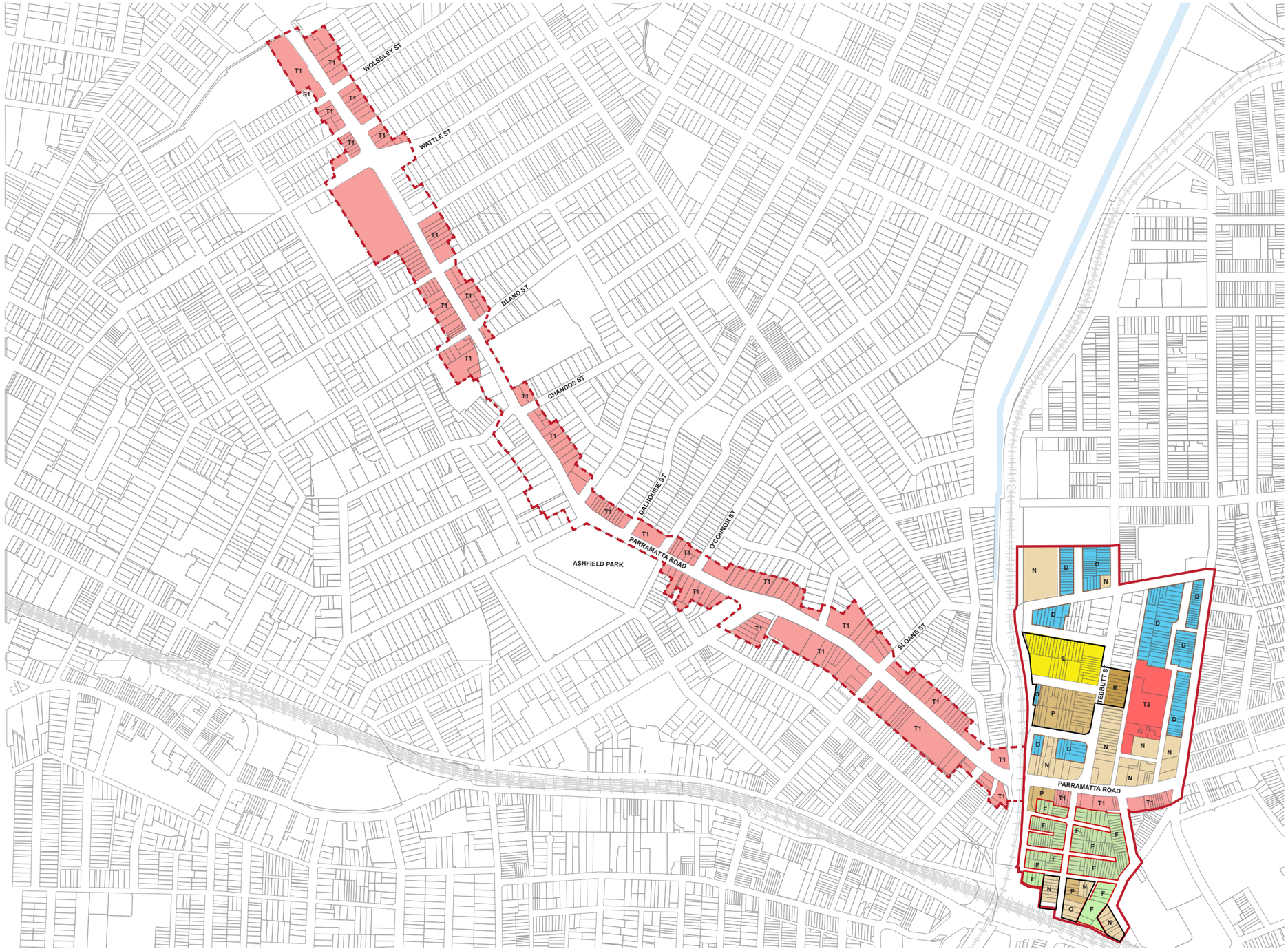


Land Zoning

- MU1 Mixed Use
- E3 Productivity Support
- E4 General Industrial
- R1 General Residential
- R2 Low Density Residential
- R3 Medium Density Residential
- SP2 Special Infrastructure
- RE1 Public Recreation
- Stage 1 Implementation

1:10,000 0 100 200 300 400 500M

FSR

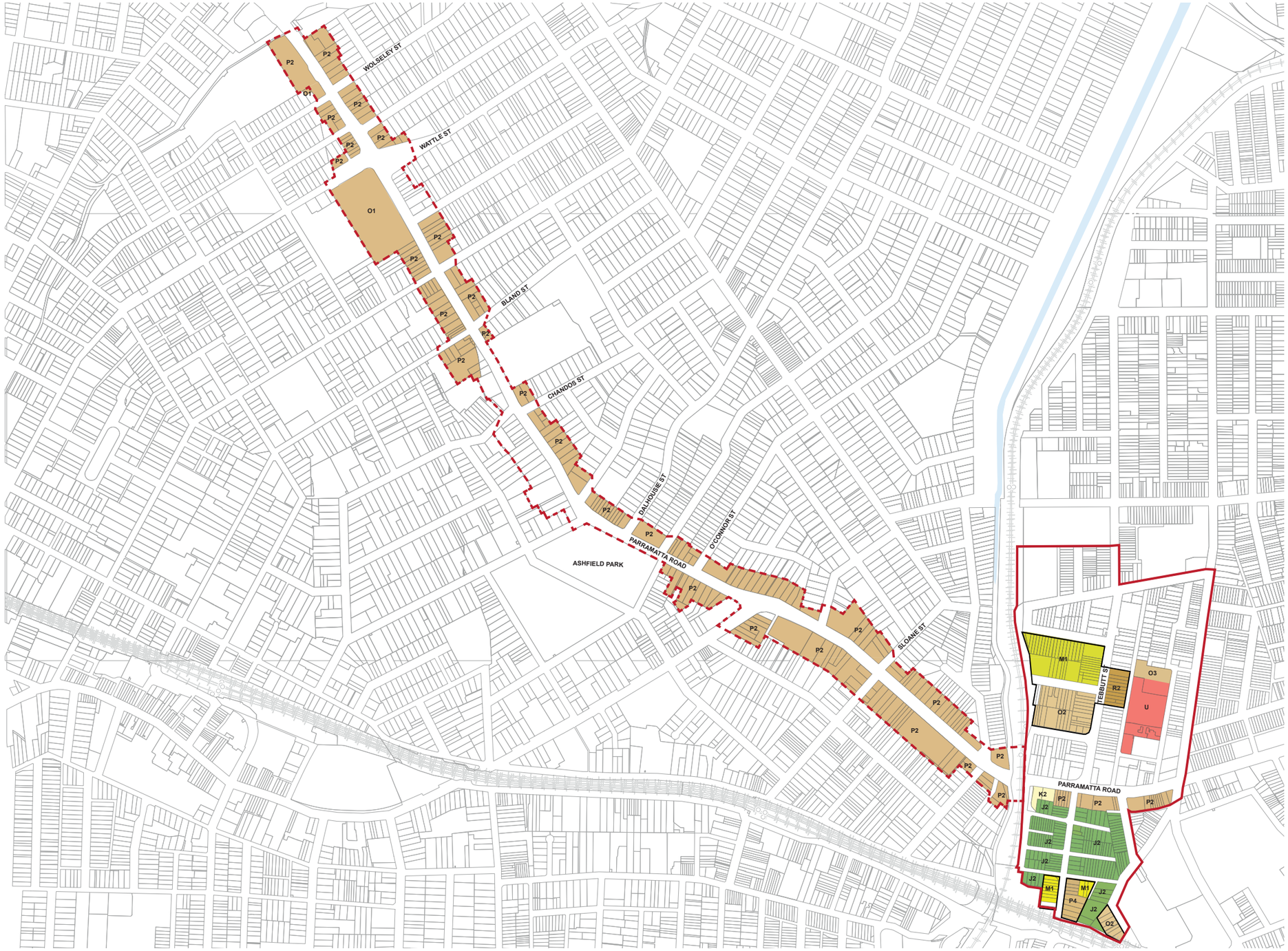


Floor Space Ratio Legend (n:1)

D	0.5
F	0.6
L	0.9
N	1
O	1.1
P	1.2
R	1.4
S1	1.5
T1	2
T4	2.15
	Stage 1 Implementation

1:10,000 0 100 200 300 400 500M

Height of Building



Maximum Building Height (m)

J2	9.5
K2	10.5
M1	12
O2	15.5
O3	16.0
P2	17.5
P4	18.5
R2	21.5
U	32
	Stage 1 Implementation

1:10,000 0 100 200 300 400 500M

architectus™

Built form typology study and assumptions

The following study has been undertaken to identify lot patterns including street frontage, lot depth and access, to inform requirements for subdivision and amalgamation and possible future built form typologies within the investigation area.

To retain the fine grain character of the area, in line with the recommendations of PRCUTS, subdivision of single lots and terrace/townhouse typologies have been explored as a preference to amalgamation and RFBs.

Subdivision/amalgamation assumptions and development approach

Lot Depth and access

Dwelling on front/back subdivided dual access lots

1 Development approach: Lots with a depth greater than 30m and dual access can be horizontally subdivided, allowing a dwelling on a minimum 15m single lot depth.

Street frontage

Dwelling on subdivided single access lot

2 Development approach: Lots with a minimum street frontage of 9m can be vertically subdivided, allowing for a dwelling with a minimum 4.5m single street frontage.

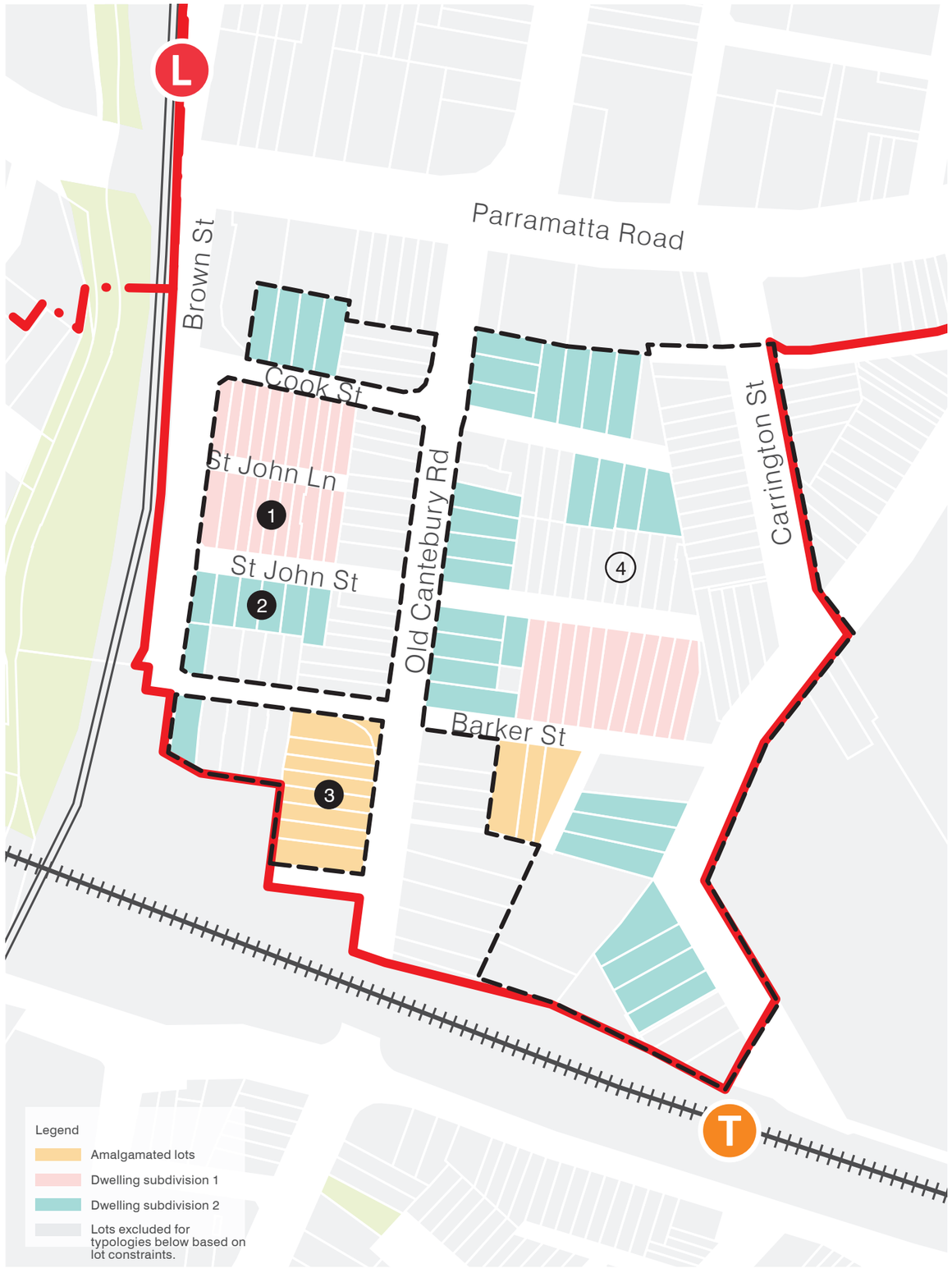
3 Residential Flat Building on amalgamated sites with basement car parking

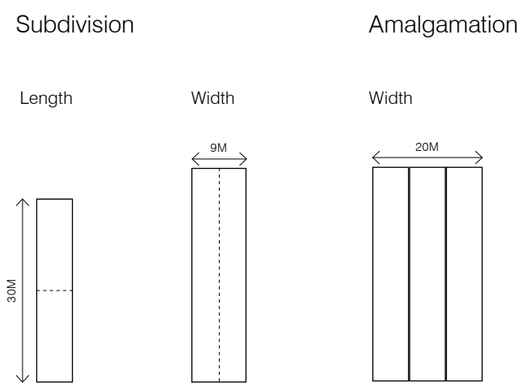
Lots can be amalgamated to provide 18m-24m street frontage while maintaining a regular pattern of built form responsive to the fine grain character of the area, and meeting the minimum frontage for a driveway to basement car parking. These have been co-located with the area zoned for R4 - High Density Residential to maintain a consistency in built form and density in south Taverners Hill close to the Lewisham Railway Station.

Other

Lots that do not meet minimum lot depth or street frontage requirements

4 The lots indicated in grey are either too narrow i.e. less than 9m street frontage or too shallow i.e. less than 30m deep, to allow for subdivision for an additional dwelling. Multi-dwelling terrace housing was considered for these lots but ultimately does not return substantial yield to justify the removal of existing character housing.





Built form typologies









01 Rear lot subdivision dwelling, Surry Hills
02 Duplex terrace

03 Residential flat building, Glen Iris Ewert Leaf
04 Harold Park, Mirvac

1

Dwelling on front/back subdivided dual access lot

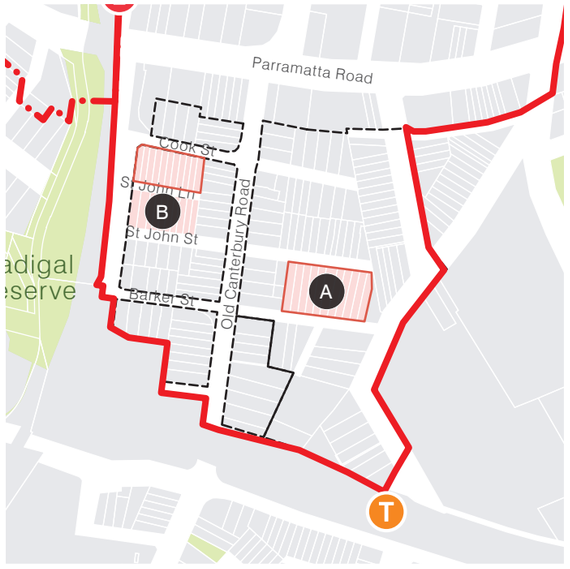
Minimum lot depth for subdivision
30m. Horizontal pattern of subdivision will convert existing backyard into a new lot and dwelling of minimum 15m depth.

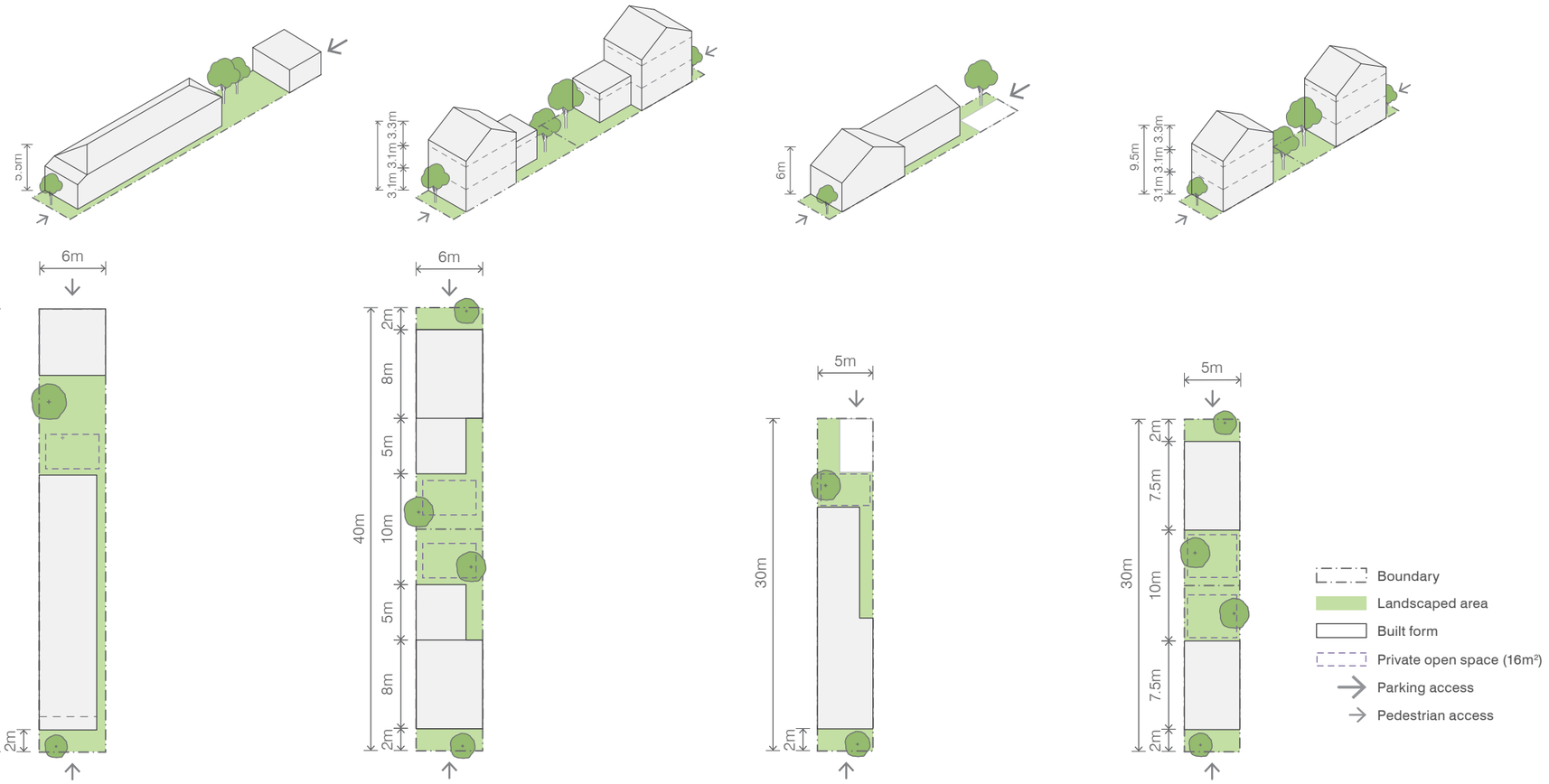
Parking
Zero off street car parking is proposed for subdivided lots given proximity to public transport. On-site parking would have an adverse impact on the character of the area and pedestrian amenity, including loss of trees, interrupted footpath, and the loss of street parking.

Vegetation
This subdivision pattern is most likely to impact existing vegetation in the backyard. Extra care should be taken to retain existing vegetation and mature trees wherever possible. Will not impact front setback.

Residential yield

Existing	32 dwellings
Additional	32 dwellings





A

Existing

FSR	0.4:1
Max. FSR (under existing LEP)	0.9:1
Site width	6m
Site depth	40m
Site area	240m²
GFA	97m²
Height	5.5m
Site coverage	48%
Private open space	Min. 16m²
Front setback	2m
Rear setback	0m
Side setback	1m
Parking	Off street
Landscaped area	43%

Proposed

FSR	1:1
Site width	6m
Site depth	20m
Site area	120m²
GFA	121m²
Height	9.5m
Site coverage	59%
Private open space	Min. 16m²
Front setback	2m
Rear setback	5m
Side setback	Nil
Parking	On street
Landscaped area	35%
Solar access - 50% of open space 3 hours between 9am - 3pm	
Additional dwellings	1

B

Existing

FSR	0.5:1
Max. FSR (under existing LEP)	1.1:1
Site width	5m
Site depth	30m
Site area	150m²
GFA	75m²
Height	5.5m
Site coverage	59%
Private open space	Min. 16m²
Front setback	2m
Rear setback	8m
Side setback	Nil
Parking	Off street
Landscaped area	33%

Proposed

FSR	1:1
Site width	5m
Site depth	15m
Site area	75m²
GFA	78m²
Height	9.5m
Site coverage	53%
Private open space	Min. 16m²
Front setback	2m
Rear setback	5m
Side setback	Nil
Parking	On street
Landscaped area	50%
Solar access - 50% of open space 3 hours between 9am - 3pm	
Additional dwellings	1

2

Dwelling on subdivided single access lot

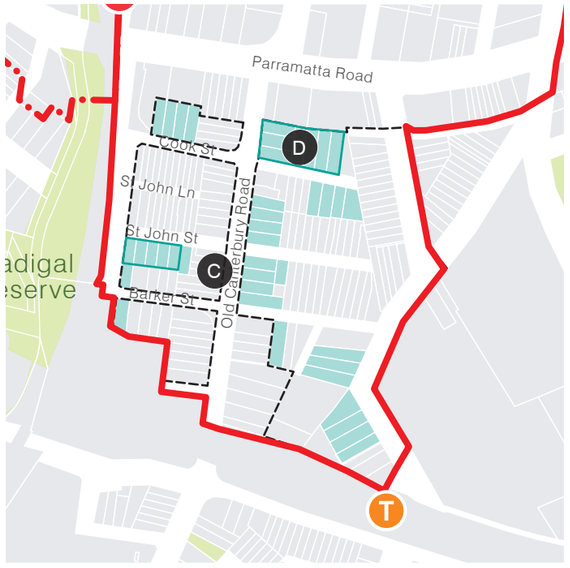
Minimum lot width for subdivision
Street frontages with a minimum of 9m present an opportunity to vertically subdivide, allowing a minimum 4.5m frontage per dwelling.

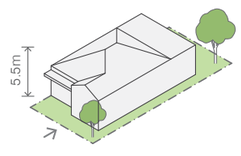
Parking
Zero off street car parking is proposed for subdivided lots given proximity to public transport. On-site parking would have an adverse impact on the character of the area and pedestrian amenity, including loss of trees, interrupted footpath, and the loss of street parking.

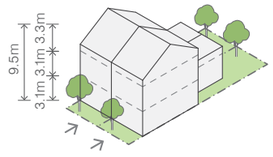
Vegetation
Extra care should be taken to retain existing vegetation and mature trees wherever possible in both front and rear setbacks.

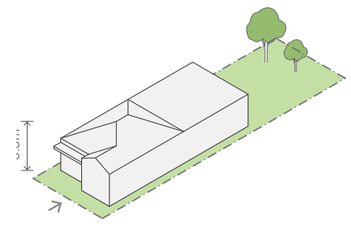
Residential yield

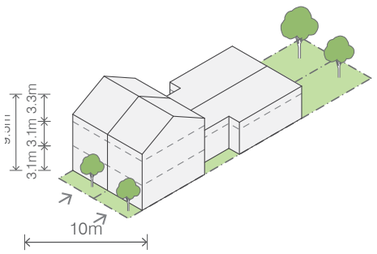
Existing	40 dwellings
Additional	40 dwellings

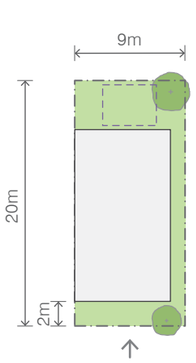








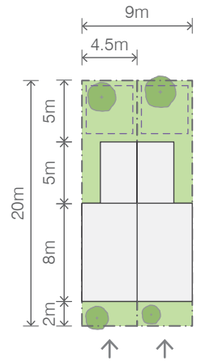




C

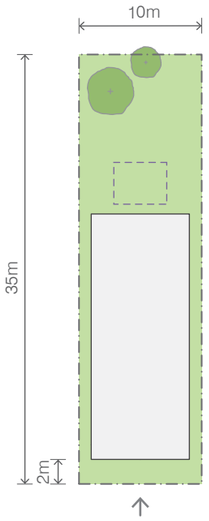
Existing

FSR	0.5:1
Max. FSR (under existing LEP)	1:1
Site width	9m
Site depth	20m
Site area	180m²
GFA	94m²
Height	5.5m
Site coverage	61%
Private open space	Min. 16m²
Front setback	2m
Rear setback	4m
Side setback	1m
Parking	On street
Landscaped area	30%



Proposed

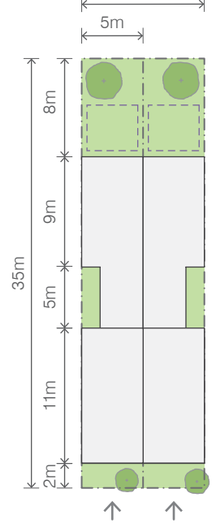
FSR	1:1
Site width	4.5m
Site depth	20m
Site area	90m²
GFA	89m²
Height	9.5m
Site coverage	57%
Private open space	Min. 16m²
Front setback	2m
Rear setback	5m
Side setback	Nil
Parking	On street
Landscaped area	43%
Solar access - 50% of open space 3 hours between 9am - 3pm	
Additional dwellings	1



D

Existing

FSR	0.4:1
Max. FSR (under existing LEP)	0.7:1
Site width	10m
Site depth	35m
Site area	350m²
GFA	136m²
Height	5.5m
Site coverage	46%
Private open space	Min. 16m²
Front setback	2m
Rear setback	13m
Side setback	1m
Parking	On street
Landscaped area	43%



Proposed

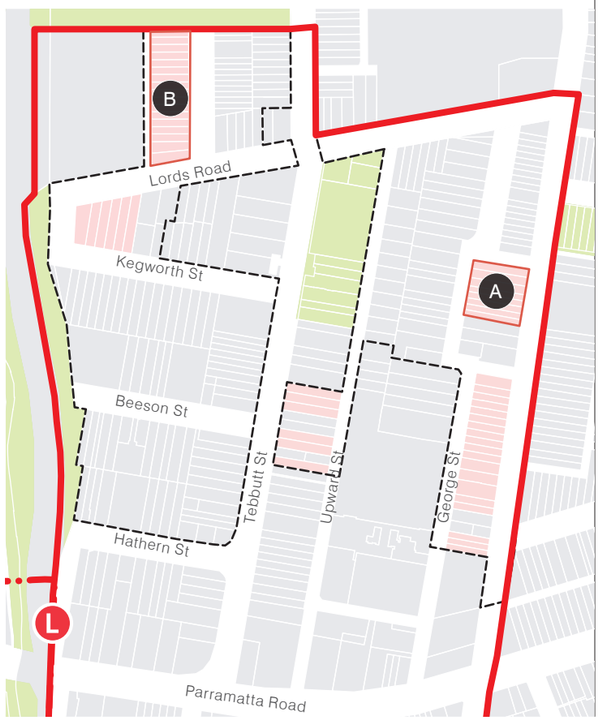
FSR	1:1
Site width	5m
Site depth	35m
Site area	175m²
GFA	168m²
Height	9.5m
Site coverage	70%
Private open space	Min. 16m²
Front setback	2m
Rear setback	8m
Side setback	Nil
Parking	On street
Landscaped area	29%
Solar access - 50% of open space 3 hours between 9am - 3pm	
Additional dwellings	1

Built form typologies

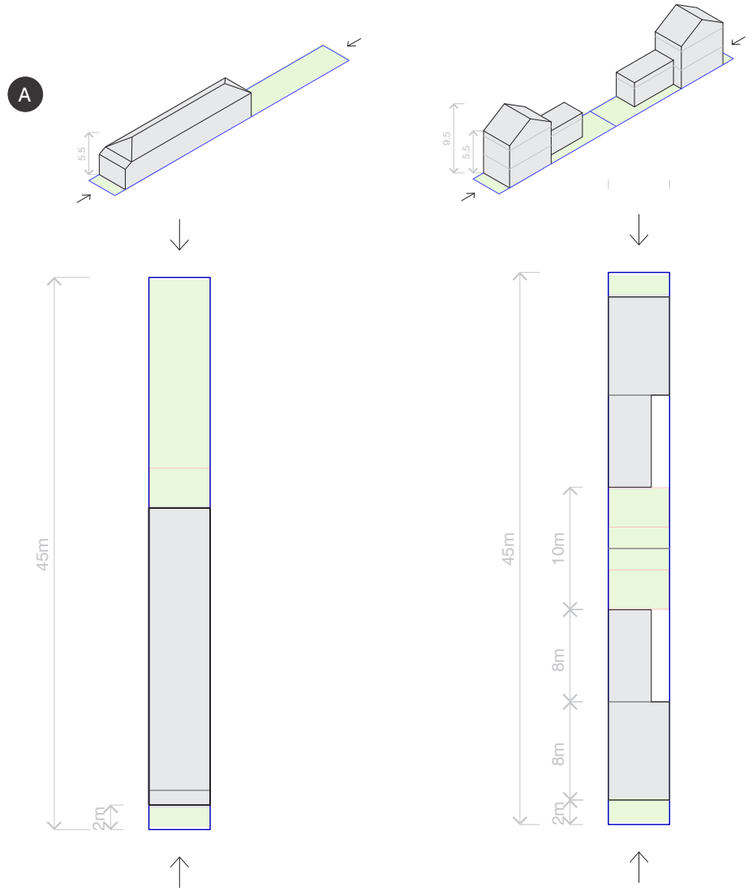
Dwelling on front/back subdivided lot

Residential yield

Existing	56 dwellings
Additional	56 dwellings



A



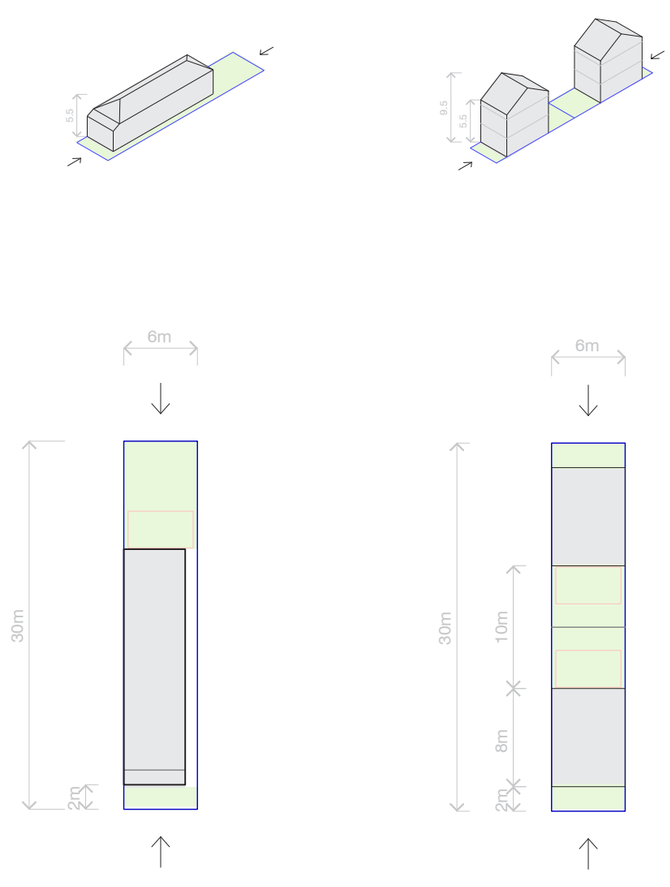
Existing

FSR	0.5:1
Max. FSR (under existing LEP)	0.9:1
Site width	5m
Site depth	45m
Site area	225m²
GFA	103m²
Height	5.5m
Site coverage	54%
Private open space	Min. 16m²
Front setback	2m
Parking	On street
Landscaped area	41%
Existing dwellings	1

Proposed

FSR	1:1
Site width	5m
Site depth	22.5m
Site area	112.5m²
GFA	108m²
Height	9.5m
Site coverage	59%
Private open space	Min. 16m²
Front setback	2m
Parking	On street
Landscaped area	46%
Additional dwellings	1

B



Existing

FSR	0.4:1
Max. FSR (under existing LEP)	1:1
Site width	6m
Site depth	30m
Site area	180m²
GFA	77m²
Height	5.5m
Site coverage	50%
Private open space	Min. 16m²
Front setback	2m
Parking	On street
Landscaped area	47%
Existing dwellings	1

Proposed

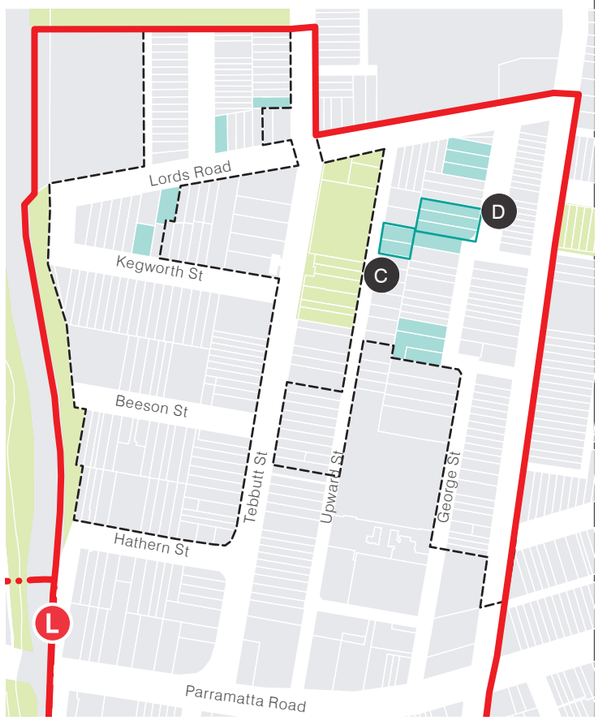
FSR	1.1:1
Site width	6m
Site depth	15m
Site area	90m²
GFA	102m²
Height	9.5m
Site coverage	53%
Private open space	Min. 16m²
Front setback	2m
Parking	On street
Landscaped area	50%
Additional dwellings	1

Built form typologies

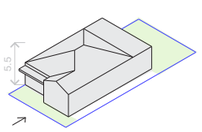
Dwelling on subdivided single access lot

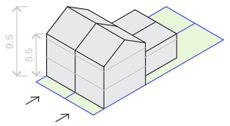
Residential yield

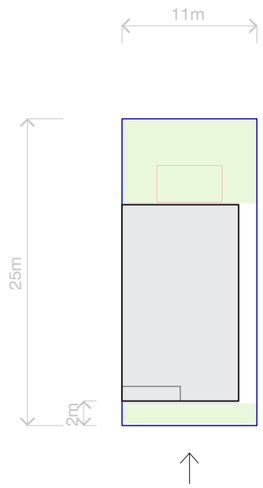
Existing	16 dwellings
Additional	16 dwellings

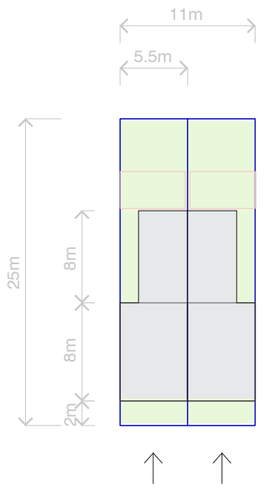


C









Existing

FSR	0.5:1
Max. FSR (under existing LEP)	0.8:1
Site width	11m
Site depth	25m
Site area	275m^2
GFA	129m^2
Height	5.5m
Site coverage	53%
Private open space	Min. 16m^2
Front setback	2m
Parking	On street
Landscaped area	55%
Existing dwellings	1

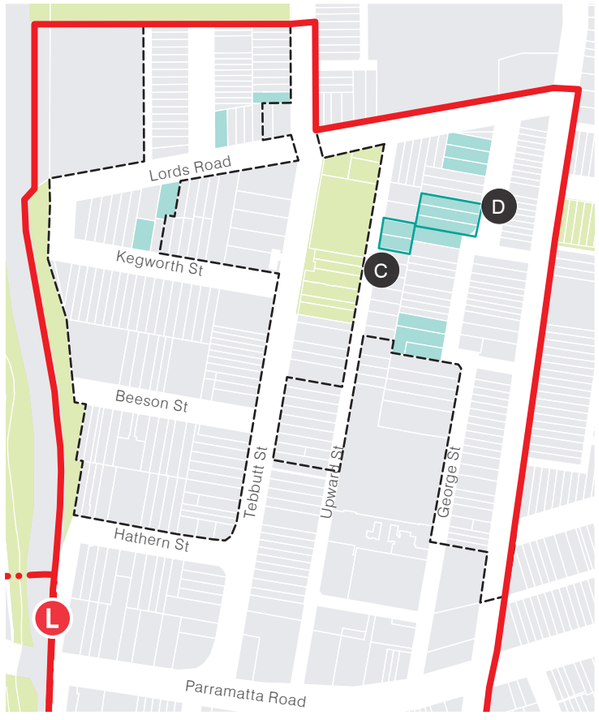
Proposed

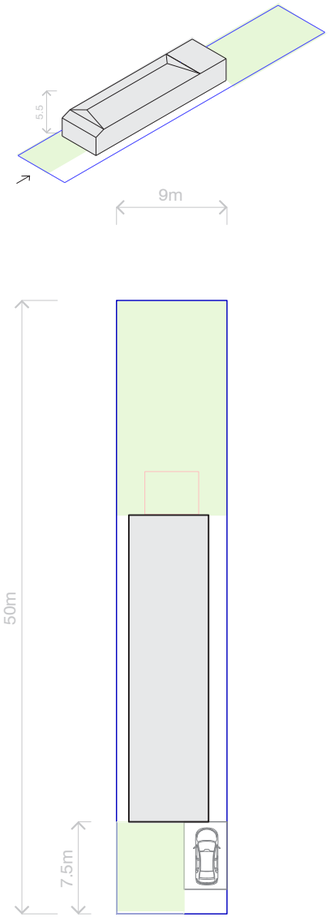
FSR	0.9:1
Site width	5.5m
Site depth	25m
Site area	137.5m^2
GFA	119m^2
Height	9.5m
Site coverage	54%
Private open space	Min. 16m^2
Front setback	2m
Parking	On street
Landscaped area	54%
Additional dwellings	1

Built form typologies

D

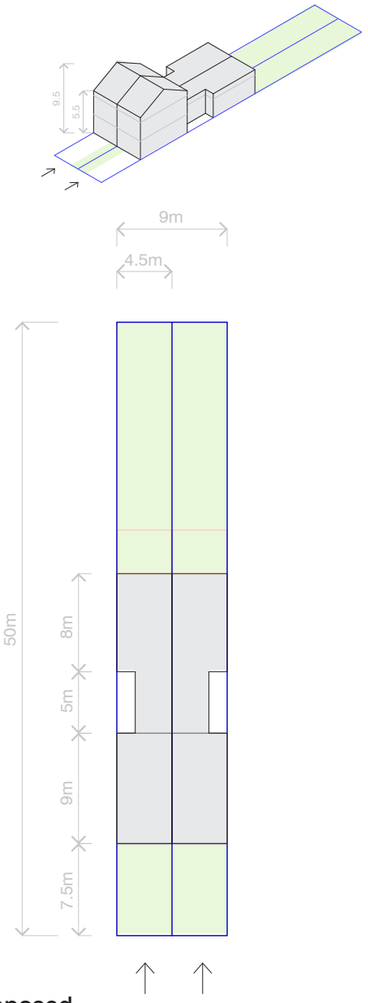
Dwelling on subdivided single access lot





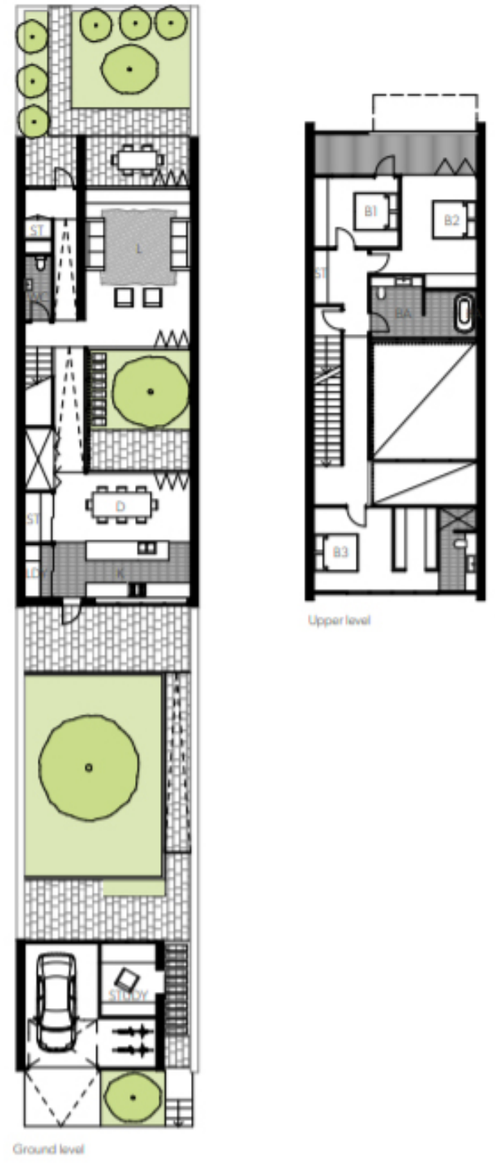
Existing

FSR	0.3:1
Max. FSR (under existing LEP)	0.6:1
Site width	9m
Site depth	50m
Site area	450m^2
GFA	138m^2
Height	5.5m
Site coverage	59%
Private open space	Min. 16m^2
Front setback	7.5m
Parking	On street
Landscaped area	36%
Existing dwellings	1



Proposed

FSR	0.6:1
Site width	4.5m
Site depth	50m
Site area	225m^2
GFA	129m^2
Height	9.5m
Site coverage	41%
Private open space	Min. 16m^2
Front setback	7.5m
Parking	On street
Landscaped area	41%
Additional dwellings	1

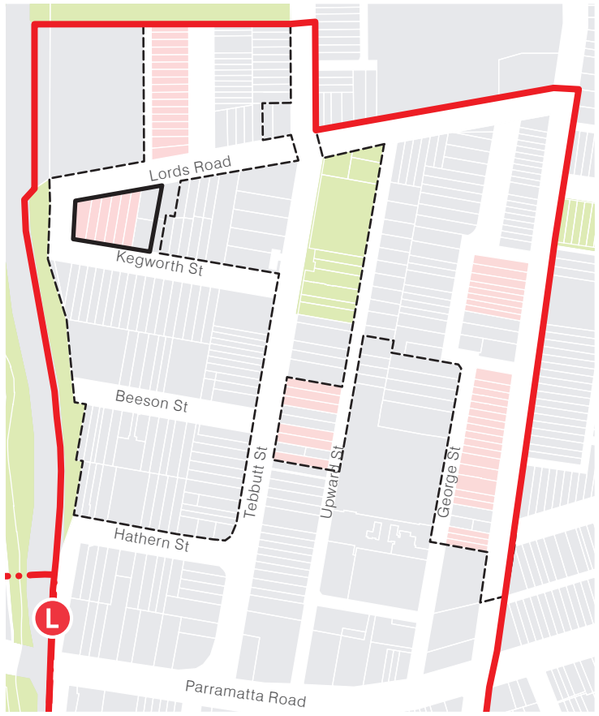


Indicative floor plan of terrace dwelling
Note: Internal courtyards provide natural daylight to the middle of the dwelling and assist ventilation. Note this typology does not include a rear garage.
Source: Medium Density Design Guide For Development Applications

Solar testing

Dwellings on a lot subdivision, whereby the lot had front and rear access, was tested for overshadow impacts, being identified as having more overshadowing impact than lots that are subdivided across the width. This is due to built form placed at the rear of lots, potentially adjacent to neighbouring lots' open space.

Reference study area for solar testing outlined



9am



11am



1pm



1:750 0 7.5 15.0 22.5 30M

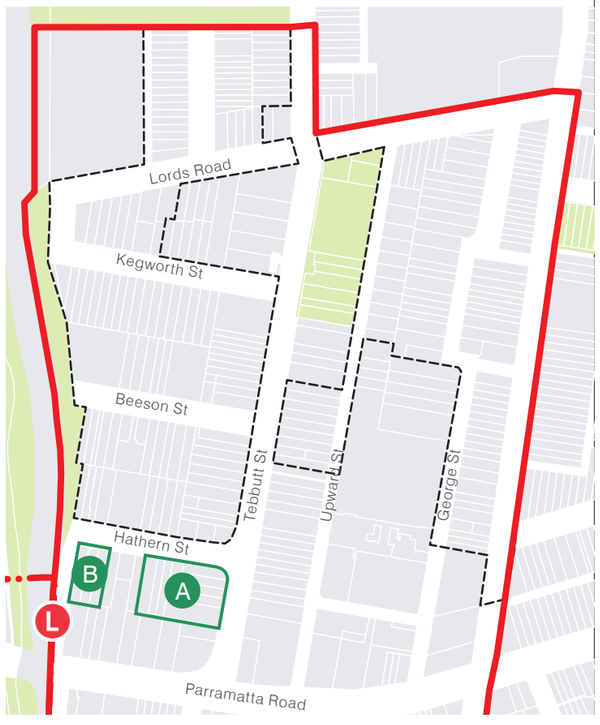
E3 Typology testing

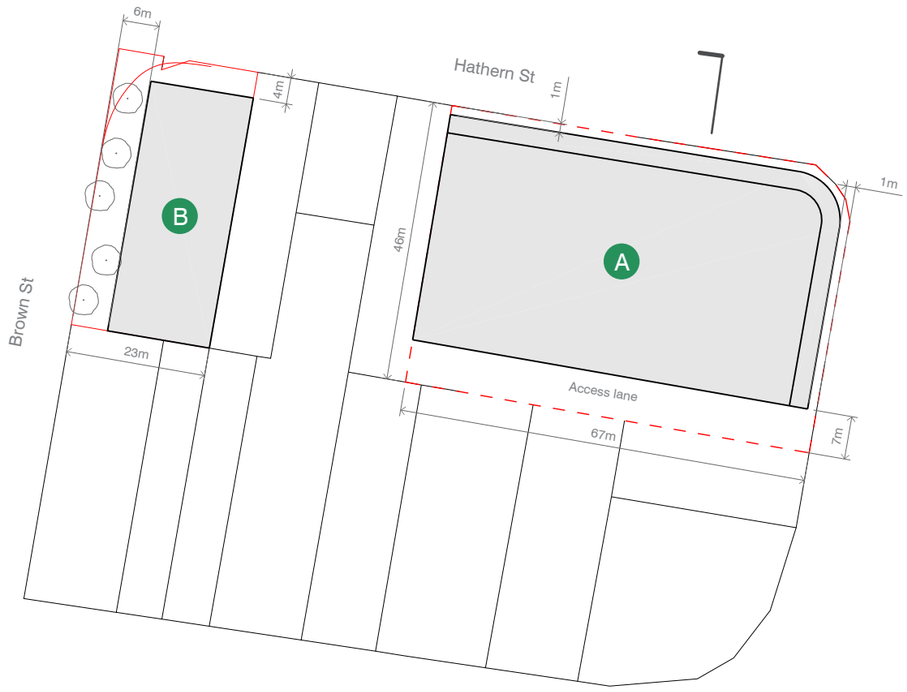
Site A

Built form testing shows it is feasible to achieve 2:1 FSR if these lots were to be amalgamated. Minimal front setback was tested to maintain a high FSR, whilst providing a rear access to basement car parking; there is potential for a rear access lane to be an easement to properties fronting Parramatta Road.

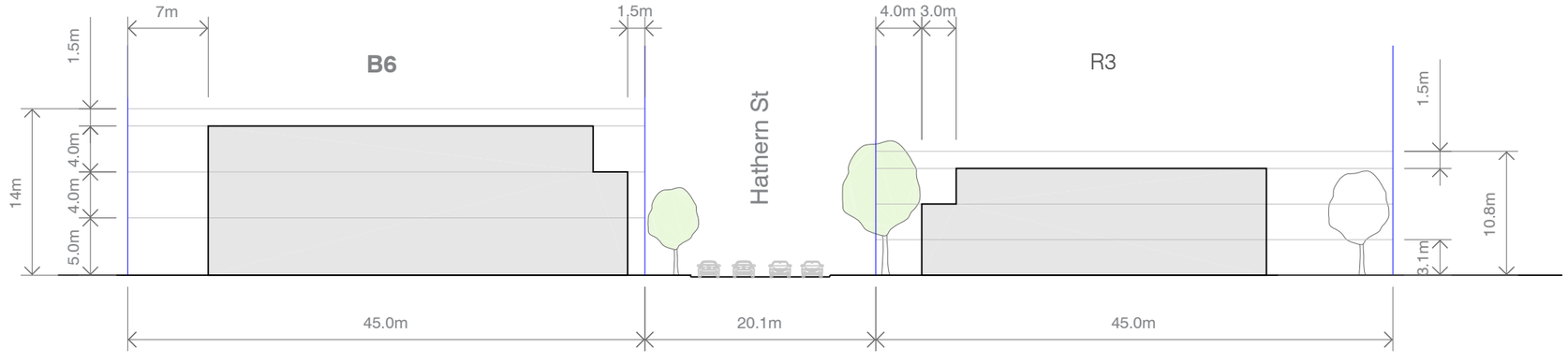
Site B

This lot (currently highly vegetated) is owned by RMS, Council suggests that it be formalised as public open space. If this is to pursued, this can be updated on the zoning maps and density and height can be removed from this lot. No supporting justification is required from Architectus - only map changes.





Sites	A	B
FSR	**2:1**	**1.3:1**
Site width	67m	23m
Site depth	46m	46m
Site area	3063m²	1039m²
GFA	5996m²	1400m²
Height	14.5m	14.5
Storeys	3	3
Front setback	1.5m	4m
Rear setback	7m	0m
Side setback	6m	0m
Site Coverage	80%	53%
Parking	Basement	



architectus™

Kings Bay Precinct

Parramatta Road Corridor - Urban Design Peer Review (2023 Updates)

Prepared for Inner West Council
Date: August 21, 2023

Architectus Australia Holdings Pty Ltd.
ABN 90 131 245 684

Nominated Architect
Managing Director
Ray Brown
NSWARB 6359

Adelaide
Lower Ground Floor
57 Wyatt Street
Adelaide SA 5000
Australia
T +61 8 8427 7300
adelaide@architectus.com.au

Melbourne
Level 25, 385 Bourke Street
Melbourne VIC 3000
Australia
T +61 3 9429 5733
F +61 3 9429 8480
melbourne@architectus.com.au

Perth
QV1 Upper Plaza West
250 St. Georges Terrace
Perth WA 6000
Australia
T +61 8 9412 8355
perth@architectus.com.au

Sydney
Level 18, MLC Centre
19 Martin Place
Sydney NSW 2000
Australia
T +61 2 8252 8400
F +61 2 8252 8600
sydney@architectus.com.au

architectus.com.au

Project and report	Parramatta Road Corridor - Urban Design Peer Review - Kings Bay Precinct	
Date	August 21, 2023	
Client	Inner West Council	
Document no.	K:\230218.00\Transfers\N12_Outgoing\230821_Final Reports_Kings Bay	
Version and date issued	Issue A (Final issue) - 01/06/21	Approved by: Greg Burgon
	Issue B (Draft update to client) - 17/07/23	Approved by: Greg Burgon
	Issue C (Final updated report) - 21/08/23	Approved by: Greg Burgon

Report contact	Greg Burgon Principal Urban Designer
This report is considered a draft unless signed by a Director or Principal	Approved by: Greg Burgon

1.1 Background and Purpose of report

Background

Inner West Council is preparing a Planning Proposal to amend the Draft Inner West Local Environmental Plan for the Parramatta Road Corridor Urban Transformation Strategy (PRCUTS) precincts including Leichhardt, Taverners Hill and part of Kings Bay.

Council have prepared draft structure plan maps and design guidelines for these precincts which encompass changes to existing planning controls and take into consideration the recommendations of PRCUTS.

Purpose of this report

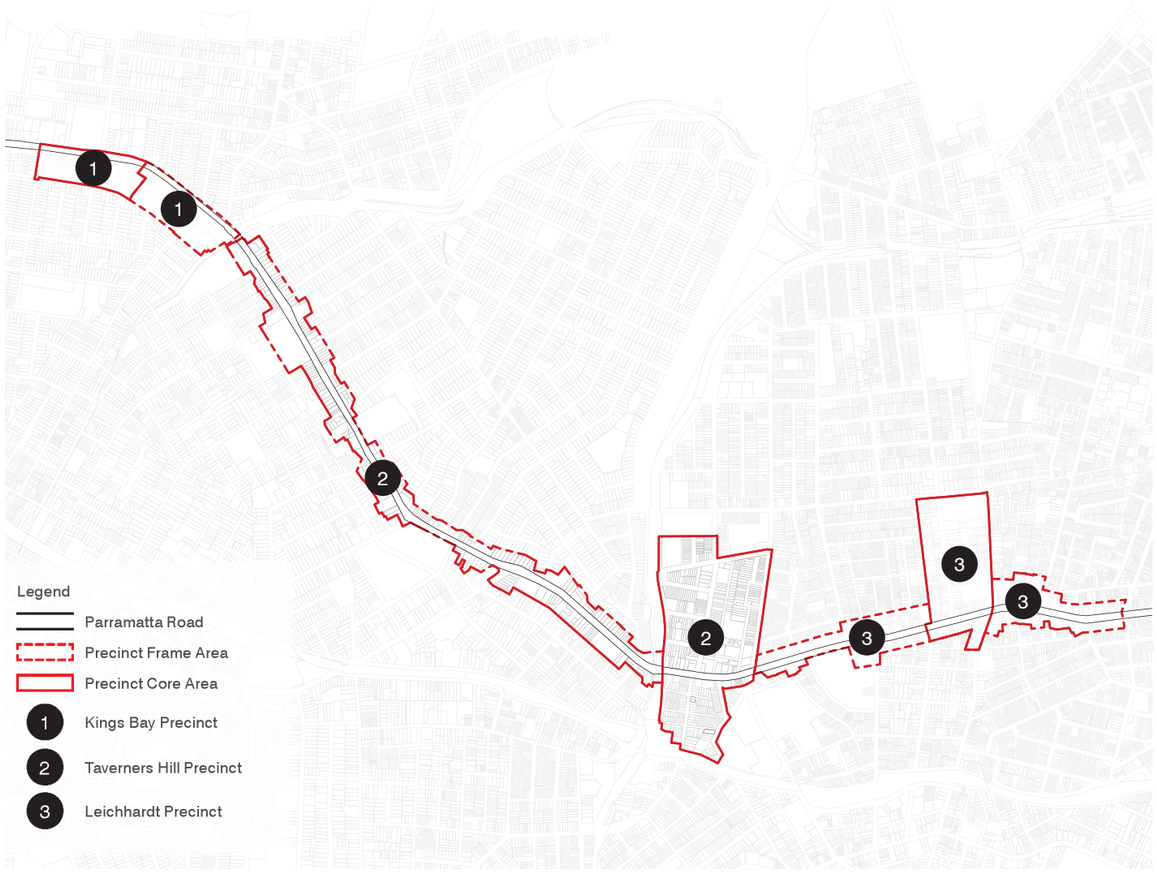
Architectus has been engaged by Inner West Council to give peer review advice on Council's draft structure plan maps and guidelines (2021) which will inform the LEP/DCP controls. The fine grain design guidelines apply to individual precincts - Kings Bay, Taverners Hill and Leichhardt, as well as to general urban design issues across the three precincts.

Three reports have been prepared (one for each precinct) and structured according to the specific issues which Council have identified and are seeking peer review advice on. This report covers the Kings Bay Precinct.

2023 Update to Urban Design Report

Following the issue of the Urban Design reports in 2021, Council submitted a Planning Proposal in May 2022 to the Department of Planning & Environment (DPE) for Gateway Determination. In October 2022 DPE provided Gateway Determination to proceed to public exhibition subject to conditions.

Further to this, and providing the basis for this round of updates to the Urban Design Reports, Council require floor to floor height assumptions for residential storeys to align with the revised NCC, which was updated in May 2022, and, subsequently any impacted LEP HOB recommendations. In addition the Employment Zones Reforms came into effect 25 April 2023 and zones have been amended to reflect the new zones. The exception to this is when referencing recommendations of the PRCUTS (2016), when the zone in place at that time is used.



Parramatta Road Corridor study area map

Approach

This report includes four main investigation areas within the Kings Bay Precinct:

- Investigation Area 1 - Productivity Support
- Investigation Area 2 - Residential
- Investigation Area 3 - Mixed Use Zone
- Investigation Area 4 - R3 Zone

Within each investigation area, a set of issues has been identified by Council which are considered sequentially in this report. Consideration of each issue may include some or all of the following sections as relevant:

- Existing, PRCUTS, and Draft Structure Plan LEP controls
- Existing character analysis
- Development constraints and opportunities
- Built form typology study
- Precedent imagery
- Solar analysis and overshadowing
- Recommendations

The final section of this report includes a summary of Architectus' key recommendations and summary tables of employment and dwelling yields across the precinct.



Kings Bay investigation areas key map

Background and Purpose of report

General Commercial and Residential assumptions

Zone / Land use	GBA to GFA Efficiency	Floor to floor height	
E3 Productivity Support	90%	5m	Ground - floor to floor (inclusive of 1m slope/topography allowance)
		3.6m	Typical upper levels (sufficient for commercial floor to floor height)
		1.5m	Lift overrun
RFB	75%	4m	Ground - floor to floor (inclusive of 1m slope/topography allowance)
		3.2m	Typical upper levels (sufficient for residential floor to floor height)
		1.5m	Lift overrun
E3 Productivity Support + Residential	E3 90% / Residential 75%	5m	Ground - floor to floor (inclusive of 1m slope/topography allowance)
		3.2m	Typical upper levels (sufficient for residential floor to floor height)
		1.5m	Lift overrun

Definitions

ADG	Apartment Design Guide (accompanying State Environmental Planning Policy 65)
FSR	Floor Space Ratio
GFA	Gross Floor Area
HOB	Height of Building
IWC	Inner West Council
IWLEP	Inner West Local Environmental Plan 2022
LZN	Land Zoning
NLA / NSA	Nett Lettable Area / Nett Saleable Area
PRCUTS	Parramatta Road Urban Transformation Strategy 2016
RFB	Residential flat building
SEPP65	State Environmental Planning Policy 65

Employment Zone Reform Equivalent Zone Tables (Inner West LEP 2022)

Business and Industrial Zone	Employment Zone
B2 Local Centre	E1 Local Centre
B4 Mixed Use	MU1 Mixed Use
B6 Enterprise Corridor	E3 Productivity Support
IN2 General Industrial	E4 General Industrial

Issue

In considering expansion of the E3 Productivity Support Zone (previously B6 Enterprise Corridor) to the rear of properties along Parramatta Road, as recommended in PRCUTS, peer review advice has been sought regarding the relationship of the E3 zone with adjacent residential areas.

Architectus has been requested to review approaches to manage the interface between different land uses especially the E3 land fronting Parramatta Road and the residential properties at the rear. There are concerns regarding the transition of building heights from E3 to adjacent residential areas.



Aerial key map of investigation area

LEP controls

The investigation area, which includes light industrial and retail uses to the south of Parramatta Road, is currently zoned E3 Productivity Support with a mix of 1.5:1 and 2:1 FSR and a mix of 10m and 15m HOB. This zone backs onto R2 residential lots to the south, consisting of mostly single storey detached dwellings.

PRCUTS recommends retaining B6 zoning for this investigation area and further proposes to extend this zoning into several existing R2 zoned lots to the south. Specifically, lots at No.42 Byron Street, No. 32, 30, 28, 26, 29, 27, 25 & 23 Scott Street, and No. 229 & 227 Croydon Road. PRCUTS recommends an increase in both FSR and HOB to 2.4:1 and 21m respectively.

Draft Structure Plan controls
The IWC Draft Structure Plan controls under consideration support the PRCUTS recommendations favouring the extension of E3 zoning and increasing the FSR and HOB.

Existing LEP controls (IWLEP 2022)	
LZN	E3 - Productivity Support and R2 - Low Density Residential
FSR	1.5:1 and 2:1 (0.7:1 for R2)
HOB	10m and 15m (8.5m for R2)

PRCUTS recommendations (2016)	
LZN	B6 - Enterprise Corridor
FSR	2.4:1
HOB	21m

Draft Structure Plan controls under consideration (2021)



LZN E3 - Productivity Support

Proposed additional sites for E3 zoning



FSR 2.4:1 (2:1/1.5:1 for potential heritage properties - these FSRs reflect retention of the existing controls for the subject sites)



HOB 21m (10m/15m for potential heritage properties)

Character

Lots + Existing developments

- Lots along E3 corridor down Parramatta Road accommodate car yards, show rooms, large retail spaces, service stations and fast food restaurants
- Predominately single storey warehouse developments approximately 5-9m high
- No existing rear setbacks to the residential zoned area to the south
- Several existing developments currently have deep setbacks to Parramatta Road, many accommodating front of house functions (such as car sales displays, show rooms or fast food drive thru areas)

Streets

- Investigation area fronts Parramatta Road with high traffic volumes and a hostile pedestrian environment
- Parking is currently located within the front setback of lots
- No existing planting along Parramatta Road

Access

- Several existing developments within the E3 zone have vehicular access directly from Parramatta Road
- Selected sites (No.636-No.624 Parramatta Road) with access from rear laneway off Croydon Road
- Existing easement access via No. 31 Byron Street to rear of sites at No.688 to No.674 Parramatta Road



01



03



02



04

01 Existing E3 sites along Parramatta Road
02 Existing E3 sites along Parramatta Road with proposed heritage item substation

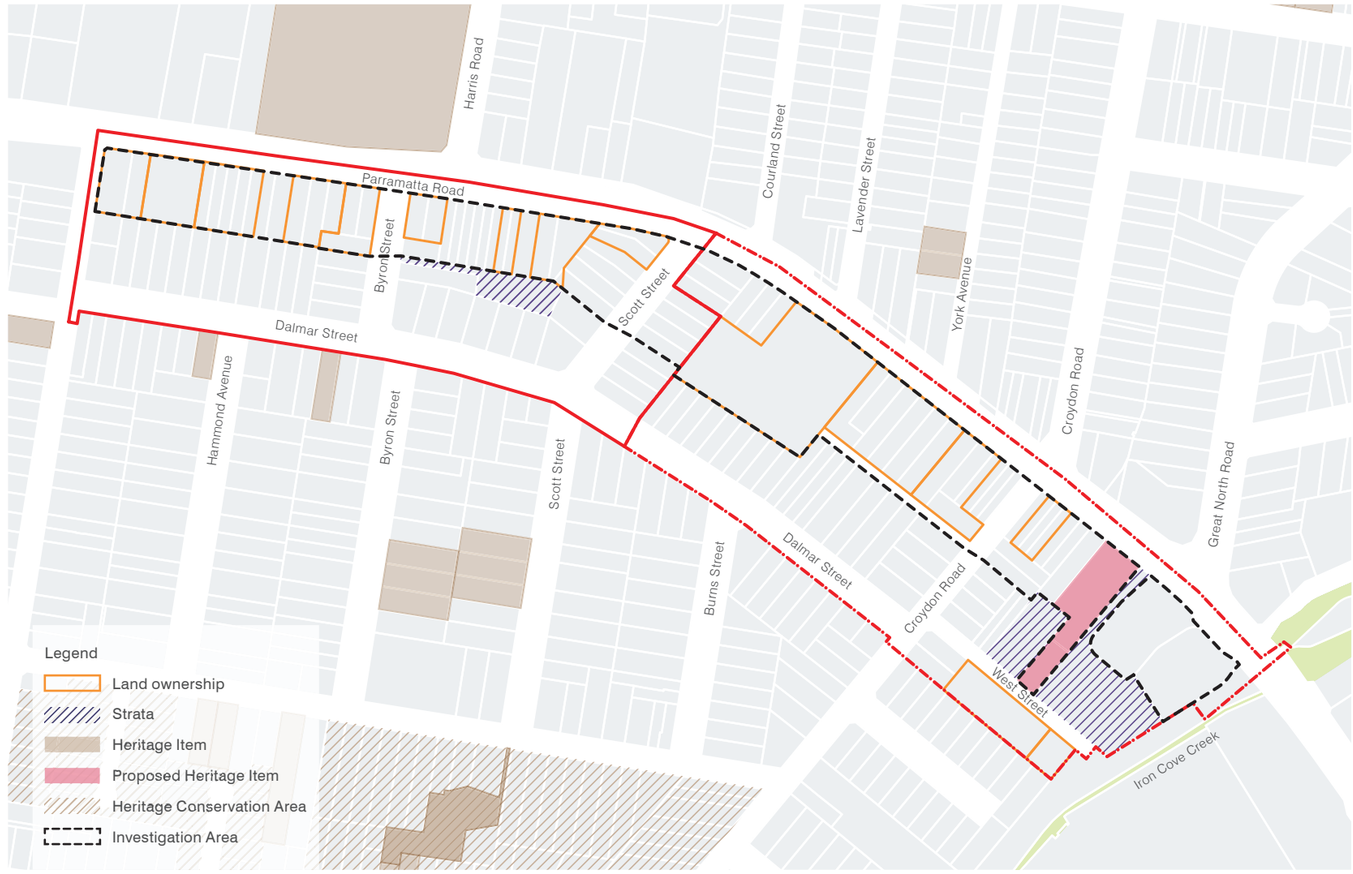
03 Transition between existing R2 (left) and E3 (right) sites along Byron Street.
04 Easement access from No. 31 Byron Street

Development constraints and opportunities

- E3 zone interfaces with low density residential dwellings to the south, impacting solar access, privacy and amenity
- Opportunity for redevelopment on larger amalgamated sites with several adjacent E3 lots along Parramatta Road with single ownership
- Some existing E3 sites have access from Parramatta Road. Consideration should be given to traffic, safety and pedestrian experience in the redevelopment of E3 sites
- Investigation area largely unconstrained by heritage and heritage conservation areas apart from the substation site in the eastern portion of the investigation area
- Sites fronting Scott Street may have opportunity to provide access to E3 sites as an alternative to access from Parramatta Road

Preliminary ideas

- Minimum rear setback requirements to be established to ensure solar access, privacy and amenity for residential zoned area to the south
- Existing access from Parramatta Road will need to be maintained however new access from Parramatta Road should be restricted where possible with side street access preferred
- Provision for access easement within rear setback area to be considered
- New development should be sympathetic to proposed heritage item to eastern side of investigation area

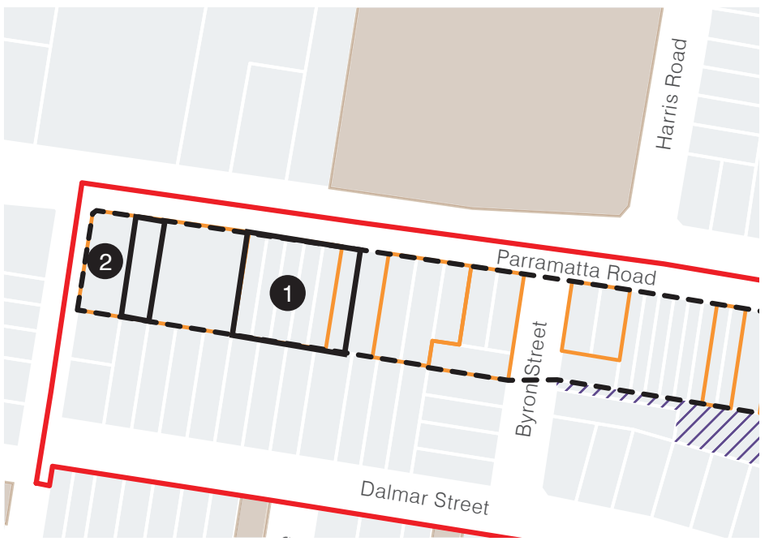


Kings Bay constraints map

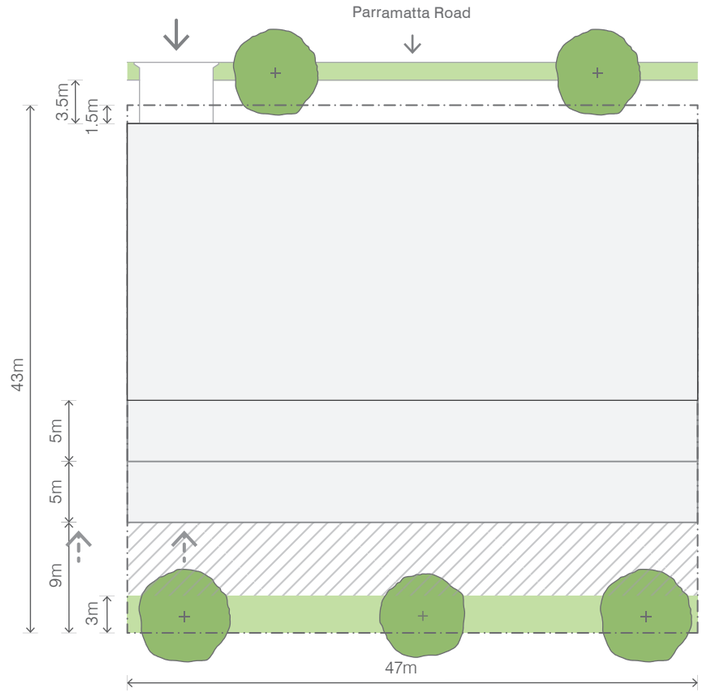
Built form typology study

The following study has been undertaken to identify lot area patterns to inform requirements for amalgamation and possible future built form typologies within the investigation area. Built form envelopes have been investigated for amalgamated sites of approximately 2000m², based on current land ownership patterns as well as the typical existing single E3 lot area size, which is approximately 500m². These two lot sizes were selected to broadly correspond to the range of land uses permitted by E3 e.g. business premises and warehouses for larger site areas and light industry, which can occupy smaller lots.

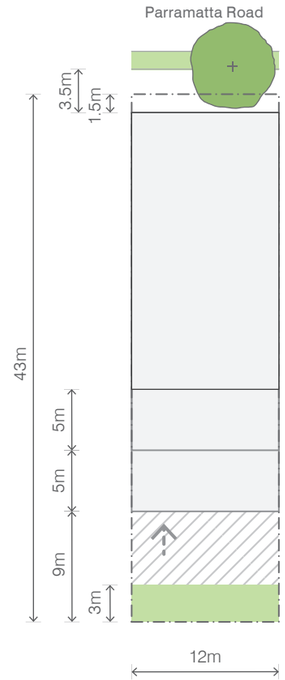
The ideal outcome for car-parking access for E3 lots on Parramatta Rd is via a rear lane or easement which is developed over time. The provision for an easement is accommodated by a 9m rear setback (which also mitigates any overshadowing to rear residential lots). Mid-block lots with existing access from Parramatta Road can be redeveloped; however lots without existing access would require access via a future easement.



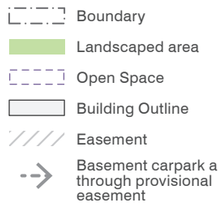
Key map of sites for typology testing



Site 1 plan



Site 2 plan



1

Amalgamated site over 2000m² metrics

FSR	2.4:1
Site width	47m
Site depth	43m
Site area	2000m²
Front setback	1.5m
Side setback	0m
Rear setback (min.)	9m
Floor to floor (ground level)	5m
Floor to floor (other)	3.6m
Parking	Basement
GFA	4810m²
Height	17.3m (4 storeys)

2

Typical E3 site metrics

FSR	2.4:1
Site width	12m
Site depth	43m
Site area	516m²
Front setback	1.5m
Side setback	0m
Rear setback (min.)	9m
Floor to floor (ground level)	5m
Floor to floor (other)	3.6m
Parking	Basement
GFA	1240m²
Height	17.3m (4 storeys)

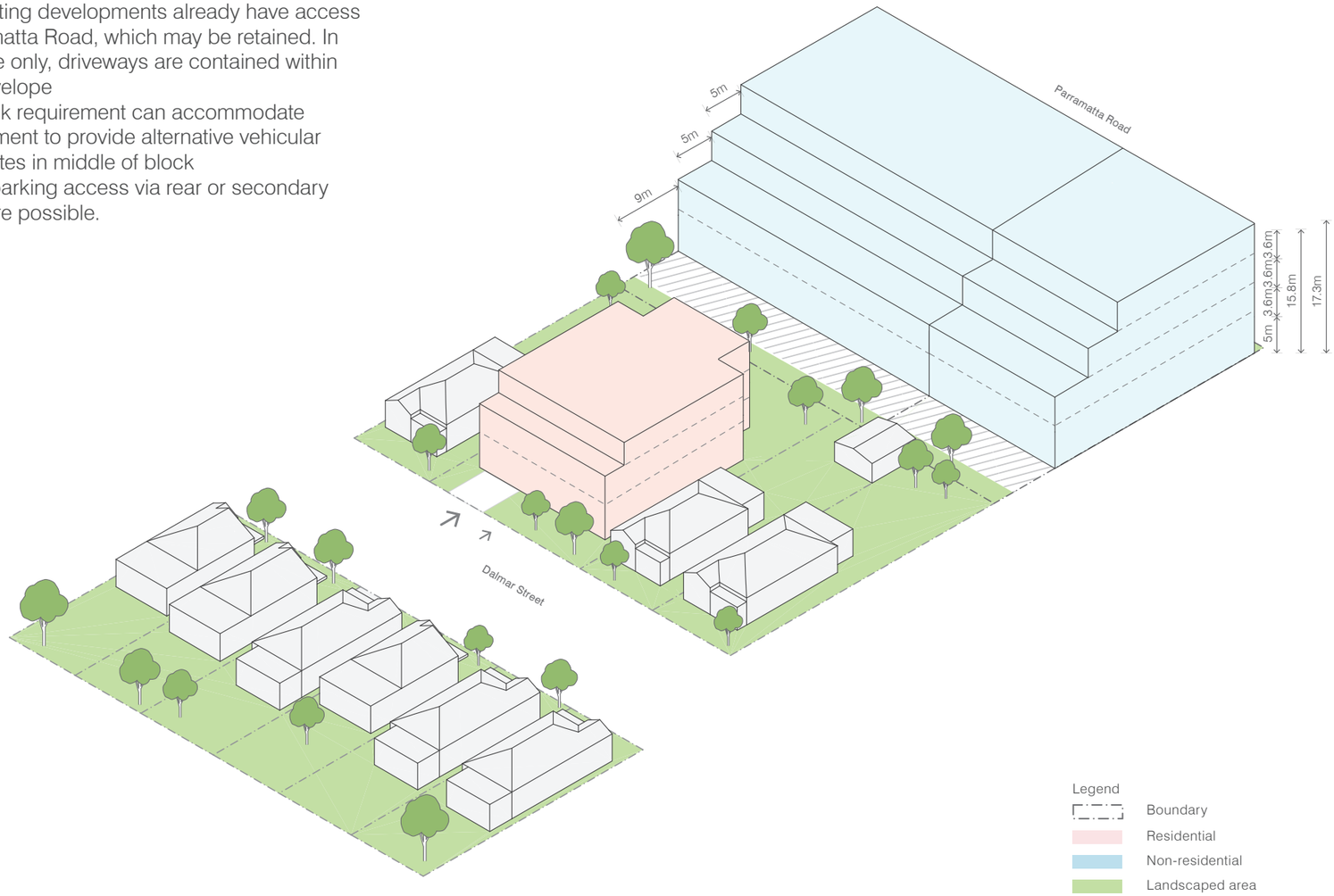
Investigation Area 1 - E3 Productivity Support

Assumptions
- E3 sites calculated at 90% GFA efficiency
- For purposes of GFA calculations: where provisions for basement parking encroach on ground floor area, mezzanine level is assumed
- Range of lot sizes depending on specific permitted development
- Two different site areas were investigated, to capture developments which require large or small sites

Setbacks
- Minimum rear setback of 9m to allow for solar access, privacy and amenity to residential zoning to south of investigation area
- Ground and first floor maintain 9m setback to rear boundary, then a further 5m setback to the third and an additional 5m setback to fourth storey
- 1.5m uniform front setback allowing for green edge along Parramatta Road
- 3m zone within rear setback area for planting

Building height and street wall
- 5m Ground floor, allowing more varied uses as well as the potential for a mezzanine floor
- 3.6m for the three floors above. Lower commercial floor to floor heights were investigated so as to minimise overshadowing on adjacent residential zoned areas to the south
- Overall building height of 17.3m (inclusive of lift overrun allowance)
- Street wall of 4 storeys or 16m.

Access
- Access from secondary streets preferable where possible
- Access from Parramatta Road not recommended. Several existing developments already have access from Parramatta Road, which may be retained. In this instance only, driveways are contained within building envelope
- Rear setback requirement can accommodate future easement to provide alternative vehicular access to sites in middle of block
- Basement parking access via rear or secondary streets where possible.

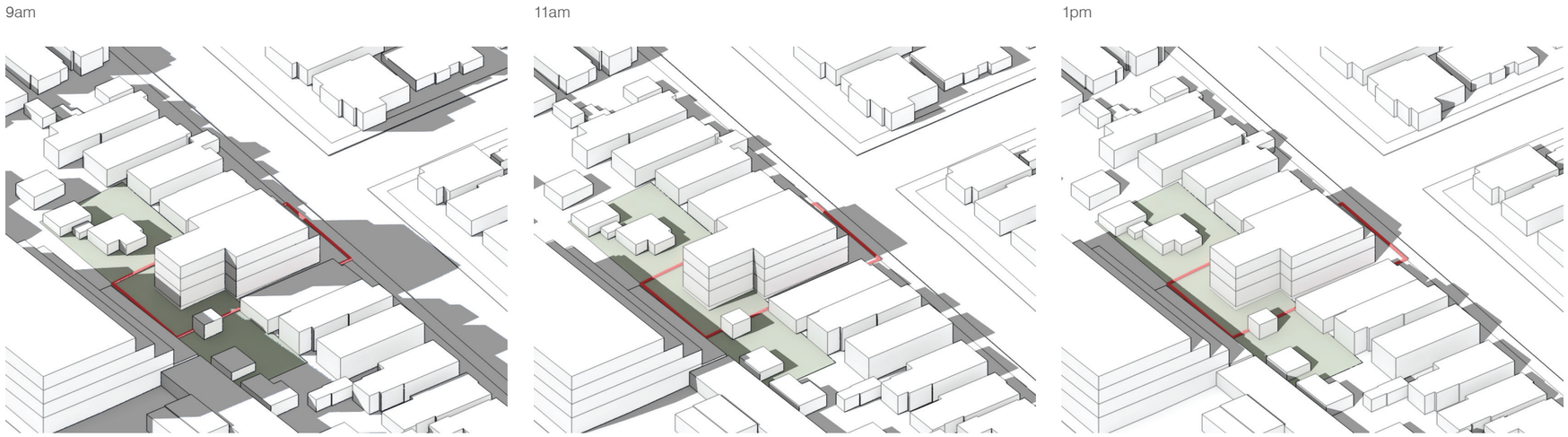


Axo diagram of E3 development with proposed RFB

Solar Analysis & Overshadowing

Solar access requirements
Minimum two hours of solar access between 9am-3pm on 21st June, is achievable to adjacent existing dwellings and 70% apartments in proposed RFBs. Accompanying shadow diagrams are taken at 9am, 11am and 1pm on the 21st June..

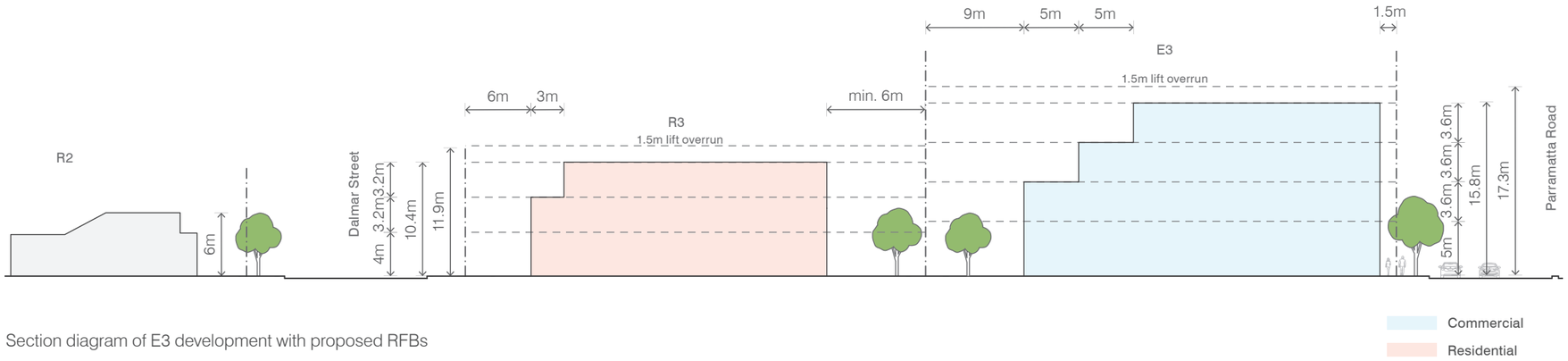
Summary
- Proposed R3 zoned sites to the southern side of the E3 corridor can achieve a minimum 2 hours of sunlight to open space
- Maximum building height of 17.3m (inclusive of lift overrun) within E3 corridor has been determined upon consideration of overshadowing impacts to proposed R3 zoned sites to south



Overshadowing analysis of E3 development with proposed RFBs from north-west



Reference study area for solar testing outlined



Section diagram of E3 development with proposed RFBs

Issue

Green edge setbacks (6m) recommended in PRCUTS have been suggested to be deleted as Council's Transport planners have advised that the widening of footpaths, new landscaping and cycling paths should be provided within the existing road carriageway without relying on the provision of setbacks from surrounding lots which may practically never be achieved. Advice was requested on whether any setbacks to Parramatta Road should be provided.

Recommendations

- Architectus supports Council's recommendation to delete the 6m green edge setbacks (proposed in PRCUTS)
- 6m continuous setback all along Parramatta Road is unrealistic as developments occur on an ad-hoc basis
- 1.5m front setback is recommended to soften the built form and make provision for tree canopy, landscaping/planting within the existing road reserve
- Instead of 6m green edge setback, large rear setback of 9m is recommended to achieve appropriate transition to residential area
- Provision for further landscaping, footpath widening and cycling paths within existing road reserve to occur in future
- Discussions required with adjoining Canada Bay Council to achieve complementary public domain outcomes along Parramatta Road



Parramatta Road E3 section with proposed 1.5m front setback

Indicative zone for future landscaping, footpath widening and cycle paths

E3 Recommendations

LEP recommendations

Architectus supports the PRCUTS and proposed Draft Structure Plan controls to expand the E3 Productivity Support zone to the rear of properties along Parramatta Road (highlighted areas) and 2.4:1 FSR for existing and proposed E3 sites in Kings Bay. While both recommend to increase the existing HOB to 21m, our findings support a lower height control of 17.5m (5m floor to floor height for ground floor and 3.6m floor to floor height for upper storeys) which allows for 4 storeys and is inclusive of lift overrun.

Justification
The recommendation to convert these particular sites to E3 will create a more defined divide between residential and commercial areas, as well as maximise the potential to achieve large floorplates suitable for E3 land uses; this is also considering that there are limited opportunities for large E3 sites in the wider area. This particularly applies to the E3 lots fronting Scott Street, which without further expansion present limited opportunity for meaningful renewal due to constrained lot sizes.

The testing suggests PRCUTS' recommended 21m HOB should be reduced to 17.5m including lift overruns. Street wall height to be no more than 4 storeys. This should be supported by a generous 9m rear setback to ensure the minimum solar access requirements of two hours to the residential zoned area to the south can be achieved. This height will also achieve a more appropriate transition to the residential area to the south.

Existing LEP controls (IWLEP 2022)	
LZN	E3- Productivity Support and R2 - Low Density Residential
FSR	1.5:1 and 2:1 (0.7:1 for R2)
HOB	10m and 15m (8.5m for R2)

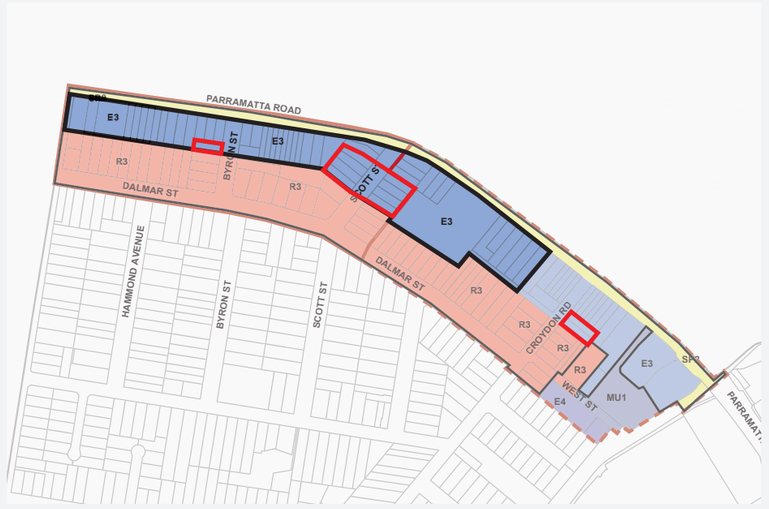
PRCUTS recommendations (2016)	
LZN	B6 - Enterprise Corridor
FSR	2.4:1
HOB	21m (5 storeys)

Draft Structure Plan Controls (2021)	
LZN	E3 - Productivity Support
FSR	2.4:1
HOB	21m (5 storeys)

Final recommendations (2023)	
LZN	E3 - Productivity Support
FSR	2.4:1
HOB	17.5m (4 storeys)

Land Zoning

- MU1 Mixed Use
- E3 Productivity Support
- E4 General Industrial
- R3 Medium Density Residential
- SP2 Infrastructure



Floor Space Ratio Legend (n:1)

- H 0.7
- N 1
- Q 1.3
- S1 1.5
- T3 2.1
- T7 2.4



Maximum Building Height (m)

- M1 12
- O2 15.5
- P2 17.5
- Q2 19.5
- R4 22.5
- S1 23

Proposed additional sites for E3 zoning



E3 + Residential Opportunity Sites 1 and 2

Analysis was undertaken to consider residential uses on existing E3 sites at the east of Kings Bay Frame Area along Parramatta Road and Croydon Road, which is 800m away from the proposed Five Dock Metro Station. This would enable increased residential development to be provided in vicinity of the committed transport infrastructure.

Character

- The adjoining West St is more urban in character, with existing multi-residential up to 4 storeys, as well as a light industrial building on the southern side of West St.
- Croydon Rd has no verge, and some low-height street planting, 3-4 storey developments would be in keeping with the immediate character.

Development constraints and opportunities

- The group of sites are just over 800 metres to the future Five Dock Metro Station.
- Croydon Station is 1.5 kilometres to the south, so there is potential for Croydon Road to be established as a strategic north-south link.
- There is potential for a development across Site 2 that would be an opportunity for Design Excellence to address the proposed heritage item on 590-594 Parramatta Road (substation).



Map of constraints with opportunity sites







01 Croydon Road and Parramatta Road intersection (view from Parramatta Road)

02 Croydon Road and Parramatta Road intersection (facing north)

03 Existing 2 storey buildings along Parramatta Road within proposed E3 + Residential zoning.

Investigation Area 1 - E3 Productivity Support

Use
- Commercial use at ground floor to promote businesses along Parramatta Road and provide for range of employment uses
- Residential for 4 upper storeys to increase dwelling capacity of area and make use of improved transport connections along Parramatta Road and accessibility (800m / 10 mins walk) to proposed Five Dock Metro Station

Setbacks
- Ground floor employment built to boundary facing Croydon Road
- 1.5m setback along Parramatta Road allowing for trees and planting
- 6-9m setback to residential on podium to south.
- 6m setback to residential on podium from Croydon Road
- 9m setback to residential from the proposed heritage item on the east of Site 2
- 6m further setback from building line to residential on 5th storey along Parramatta Road

Building height
- 5m commercial floor to floor height at ground level
- 3.2m floor to floor height for the 4 upper floors
- Overall building height 19.3m equivalent to 5 storeys (inclusive of 1.5m lift overrun)

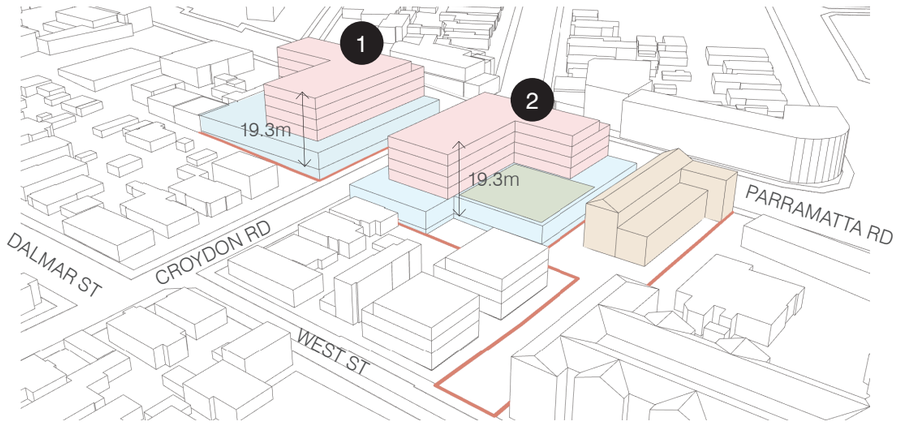
FSR
- FSR 2.4:1 is achievable for Site 1
- FSR 2.1:1 is recommended for Site 2 due to its shape and maximum recommended width of residential floorplate. Note that maximum FSR for Site 2 is subject to further information on proposed heritage item

Access + Parking
- Vehicular access to Site 1 via rear lane
- Vehicular access to Site 2 via Croydon Rd
- Note access subject to satisfaction of traffic safety issues

Efficiency
- Note: E3 + Residential GFA is calculated at 90% efficiency and 75% efficiency respectively



Plan of tested built form on opportunity sites



3D of built form testing (note - solar testing provided further in the report)

Opportunity Sites 1 & 2 metrics

E3 + Residential opportunity sites		
Site	**1**	**2***
FSR	2.4:1	2.1:1
Site width (m)	48.8	53.4m
Site depth (m)	53.3	60m
Site area (m^2)	2,672m^2	3,107m^2
GFA (m^2)	6,353m^2	6,395m^2
GFA (m^2) Commercial	2,340m^2	2,521m^2
GFA (m^2) Residential	4,013m^2	3,873m^2
Height (m)	19.3m	19.3m
Height (storeys)	5	5
Site coverage	100%	93%
Communal Open Space (m^2)	758m^2	975m^2
Deep soil	0m^2*	228m^2 (7%)
Front setback (m)	1.5m	1.5m
Rear setback (m) (Residential)	6m	9m
Side setback (m) (Residential)	6m	6m
Upper (5th storey) setback to building line along Parramatta Rd (Residential)	6m	6m
Street wall	4 storeys (to Parramatta Rd)	
Parking	Basement car-parking	
No. Of additional dwellings**	51	49

*Metrics for Opportunity Site 2 exclude proposed heritage item, which is to be redeveloped under a Design Excellence process. Final metrics subject to further details and survey of heritage item.

**Additional dwellings in typology testing have been based on individual floorplate calculations. These may slight vary from the final block by block yield calculations at the end of this report. This would apply to all typologies discussed in this report.

E3 + Residential Opportunity Site 3

Sites at 584 and 582 Parramatta Road have been further investigated for E3 and residential uses to align with Parramatta Road/ Croydon Road opportunity sites in order to achieve a coherent future character in the east of the investigation area.

Character

Lots + Existing developments

- Irregular lot geometry, each has an approximate street frontage of 35-40m and site depth of around 60m
- Existing developments comprise two large fast food outlets with drive thru access and a service station
- Deep existing setbacks to Parramatta Road to facilitate car parking and access
- MU1 Mixed Use zoned site to south side of opportunity site 3 with apartments (approximately 69 dwellings)

Streets

- Investigation area fronts onto Parramatta Road at intersection of Great North Road, which is heavily congested
- No existing planting along Parramatta Road
- Iron Cove Creek to eastern side of opportunity sites

Access + Parking

- Existing access from Parramatta Road services both sites
- Both sites include parking bays adjacent to Parramatta Road

Development constraints and opportunities

- Several strata sites surround the investigation area
- Proposed planning controls to consider proposed heritage item at 590-594 Parramatta Road, adjacent to this opportunity site
- Potential for servicing and access to be shared with existing MU1 site to the south of opportunity site, which has access to West Street

Preliminary ideas

- Rezone to support flexible employment uses on ground floor and residential uses above. Zoning in keeping with proposed E3 + Residential nominated for sites at the intersection of Croydon Road and Parramatta Road.
- Create additional public green space shared between the lots due to adjacent MU1 Mixed Use development.
- Maximise amenity benefit of new active transport corridor along Iron Cove creek
- Consolidate shared vehicular access to Parramatta Road with site at 586 Parramatta Road, which has also has vehicular access to West Street.
- Consider relationship to proposed heritage item to west site boundary



Map of constraints with opportunity site





01 Existing access to opportunity sites from West Street.
02 Existing opportunity sites frontage to Parramatta Road.

Built form study

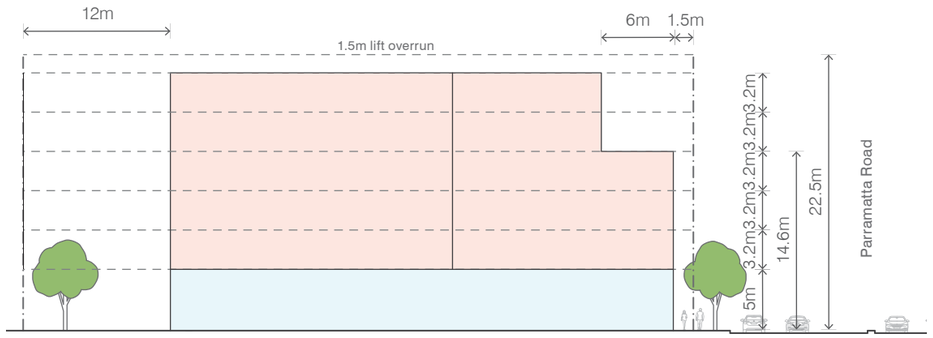
Use
- Commercial use on ground floor to promote businesses along Parramatta Road and provide for a range of employment uses
- Residential for 5 upper storeys to increase dwelling capacity of the area and make use of improved transport connections along Parramatta Road. Opportunity for increased density just over 800m walking distance from proposed Five Dock Metro Station

Setbacks
- 12m setback to rear boundary to allow for solar access, privacy and amenity to adjacent MU1 Mixed Use sites
- 1.5m front setback allowing for trees and planting along Parramatta Road
- Additional 6m setback to upper two residential floors from the building line along Parramatta Road
- Additional setback to existing driveway to provide for adequate access

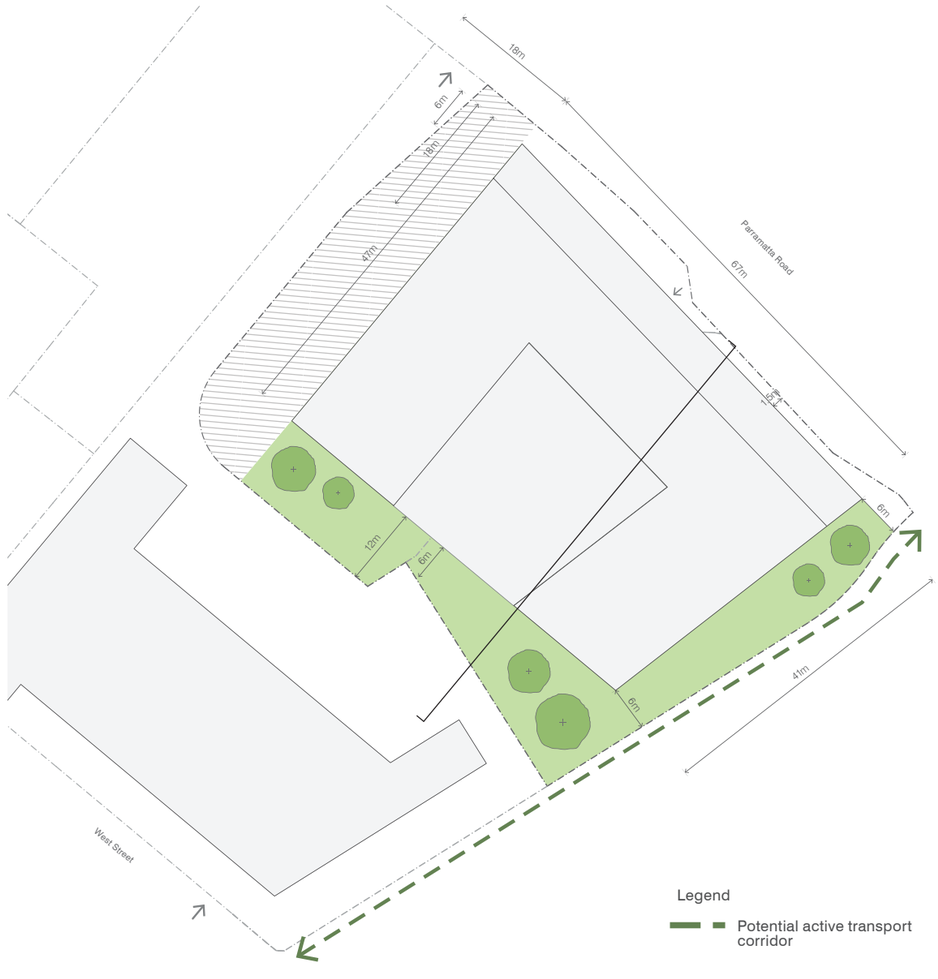
Building height
- 5m commercial floor to floor height at ground level
- 3.2m floor to floor height for the 5 upper floors
- Street wall height along Parramatta Road 14.6m or 4 storeys
- Overall building height 22.5m equivalent to 6 storeys

Access + Parking
- Additional setback provided to western site boundary to allow for potential driveway and access to basement car-parking

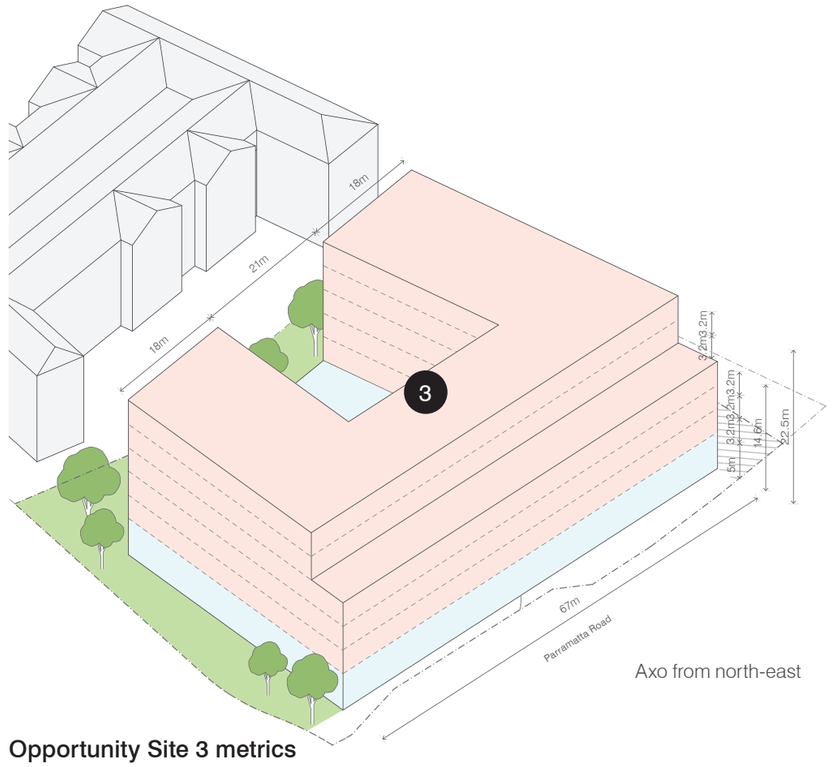
Efficiency
- Note: E3 + Residential opportunity site GFA is calculated at 90% efficiency and 75% efficiency respectively



Section



Plan of proposed building envelope



Axo from north-east

Opportunity Site 3 metrics

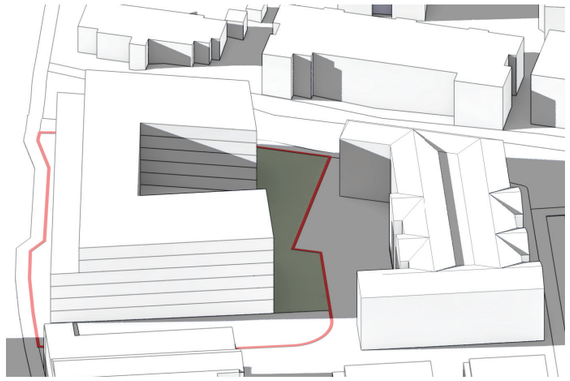
E3 + Residential opportunity sites	
FSR	2.1:1
Site width	82m
Site depth	61m
Site area	4,711m²
GFA (total)	9,753m²
GFA commercial	2,455m²
GFA residential	7,298m²
Height*	22.5m (6 storeys)
Total storeys	6
Site coverage	58%
Communal open space	622m²
Landscaped area	1036m² or 22%
Deep soil area	15% as per ADG for sites >2500m²
Front setback	1.5m
Rear setback	6 - 12m
Side setback (to creek)	6m
Upper setback to 5/6 storey along Parramatta Road from building line	6m
Street wall	14.6m (4 storeys)
Dwelling Yield	96

Solar Analysis & Overshadowing

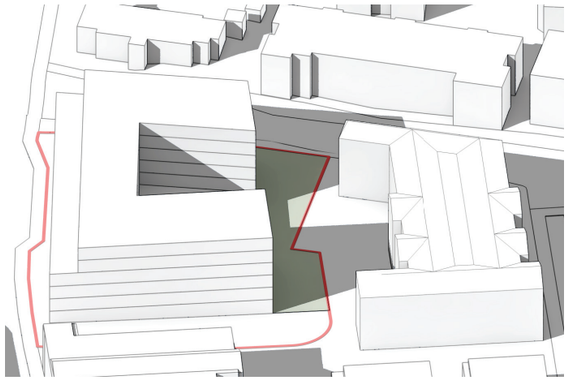
Solar access requirements
Minimum two hours of solar access between 9am-3pm on 21st June to 70% of apartments in new development as per ADG requirements. Accompanying shadow diagrams are taken at 9am, 11am and 1pm on the 21st June.

Summary
The following diagrams indicate ADG solar access requirements are achievable on Opportunity Site 3 and the existing E3 zoned site. Furthermore, the proposed setback to the western boundary of 18m is sufficient to achieve minimum solar access requirements for both Opportunity Sites 2 and 3 when both are redeveloped in future.

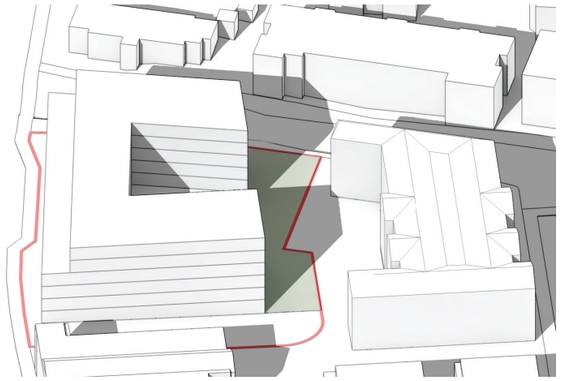
9am



11am

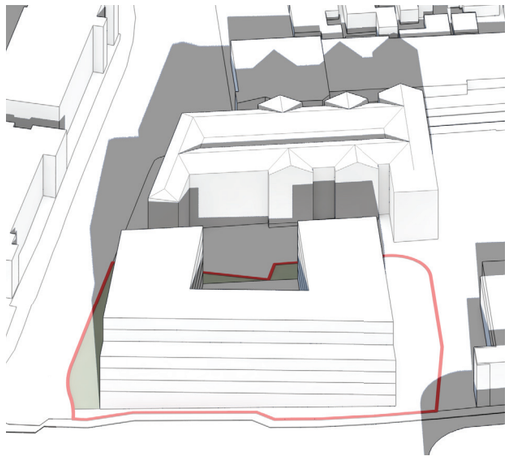


1pm

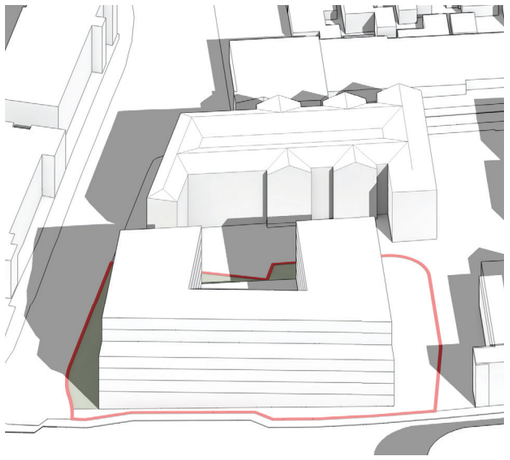


Overshadowing analysis of development from north-east

9am



11am



1pm



Overshadowing analysis of development from north-east

E3 + Residential: Precedent Imagery

The following precedents demonstrate the application of design principles to the Croydon Road study area (E3 + residential): defining street wall and built form articulation.





01 Foveaux St Mixed Use Apartments, SJB
02 The Wedge Studios, Hill Thalis

E3 + Residential Opportunity Sites Recommendations

LEP recommendations

Through the analysis of the E3 zoned investigation area along Parramatta Road, three opportunity sites have been identified for E3 (with residential flat buildings as an additional permitted land use for these sites) due to their strategic location to the proposed transport infrastructure.

Justification

Opportunity Site 1 & 2 - Croydon Road
The recommended FSRs are an outcome of testing for overshadowing, setback requirements to adjacent sites, the Parramatta Road street wall, as well as maintaining an appropriate transition to the surrounding sites, particularly to the proposed heritage item.

Opportunity Site 3 - McDonald's Site
Building heights and FSRs have been developed based on the unique constraints of the lot including its shape, depth, address to the existing residential building at the rear, access, adjacency to Iron Cove Creek, setbacks and open space requirements.

Note that larger setbacks to residential uses along Parramatta Road may be required if the development cannot appropriately mitigate noise and air quality issues from the existing traffic conditions on Parramatta Road. This is to be determined on a case-by-case basis at the development application stage for all opportunity sites.

Proposed Heritage Item
It is recommended to uplift the FSR and HOB controls for the proposed heritage item site corresponding to the controls of Opportunity Site 2. However, due to its proposed heritage significance, maximum FSR of 2.1:1 may not be achievable until detailed heritage investigation is undertaken.

Existing LEP controls (IWLEP 2022)	
LZN	E3 - Productivity Support and R2 Low Density Residential
FSR	1.5:1 and 2:1 (0.7:1 for Residential)
HOB	10m and 15m

PRCUTS recommendations (2016)	
LZN	B6 - Enterprise Corridor
FSR	2.4:1
HOB	21m

Draft Structure Plan Controls (2021)	
LZN	E3 - Productivity Support
FSR	2.4:1
HOB	21m

Final recommendations (2023)	
LZN	E3 - Productivity Support (with residential flat buildings as an additional permitted land use)
FSR	2.4:1 (Site 1) and 2.1:1 (Sites 2 & 3)
HOB	19.5m (Sites 1 & 2 - 5 storeys) and 22.5m (Site 3 - 6 storeys)

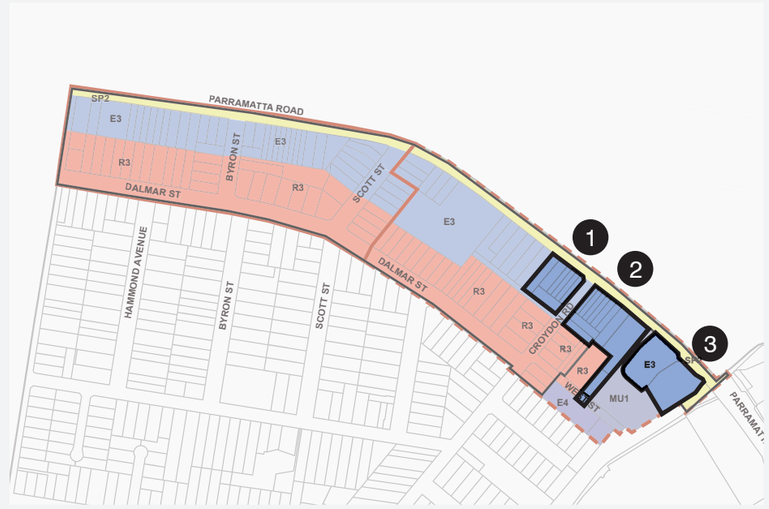
Residential yield

	No. of dwellings
Maximum capacity under existing controls	2
Maximum capacity under recommended controls	245
Additional capacity under recommended controls	243

Note refer to "1.6 Dwelling and Employment Yield Calculations" for methodology

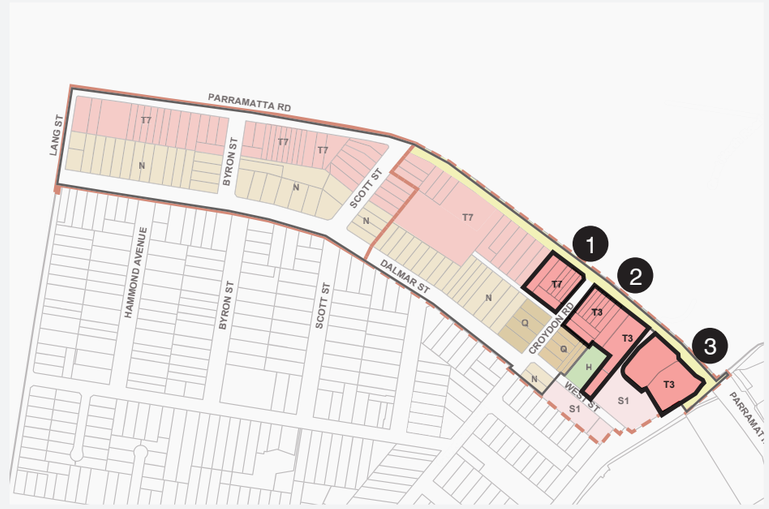
Land Zoning

- MU1 Mixed Use
- E3 Productivity Support
- E4 General Industrial
- R3 Medium Density Residential
- SP2 Infrastructure



Floor Space Ratio Legend (n:1)

- H 0.7
- N 1
- Q 1.3
- S1 1.5
- T3 2.1
- T7 2.4



Maximum Building Height (m)

- M1 12
- O2 15.5
- P2 17.5
- Q2 19.5
- R4 22.5
- S1 23



1.3 Investigation Area 2 - Residential

Issue

Council seek to retain the existing R2 Low Density Residential zoning in this area, however wish to investigate opportunities for medium density housing. Architectus' advice has been sought regarding the appropriate zoning, height, density and built form controls. This needs to consider appropriate transitions and solar access requirements for the residential areas from the E3 zoned land along Parramatta Road.



Aerial key map of investigation area

LEP controls

The residential area to the south of Parramatta Road is currently zoned R2 Low Density residential with 0.7:1 FSR and 8.5m HOB. Dwelling lots back onto commercial properties zoned E3 Productivity Support to the north.

PRCUTS recommends increasing residential density in this area, upzoning to R3 Medium Density, and up to 12m HOB and 1.4:1 FSR.

Draft Structure Plan controls
The IWC Draft Structure Plan controls under consideration support the existing LEP controls. An urban design review of the proposed PRCUTS controls was requested.

RFBs were investigated and seen as an opportunity to mediate the transition in built form from the E3 zoned area fronting Parramatta Road and the context of predominantly residential detached dwellings of Croydon, whilst addressing the dwelling targets set across the PRC precincts.

Existing LEP controls (IWLEP 2022)	
LZN	R2 - Low Density Residential
FSR	0.7:1, 0.5:1 for properties along West St.
HOB	8.5m

PRCUTS recommendations (2016)	
LZN	R3 - Medium Density Residential
FSR	1.4:1
HOB	12m

Draft Structure Plan controls under consideration (2021)



LZN R2 - Low Density Residential



FSR 0.7:1



HOB 8.5m

Character

Housing and lots

- Predominant housing Federation style and Californian Bungalow style.
- Typical 12m lot frontage, predominantly single-storey brick detached housing, 4m-6m setbacks, front boundary fencing and landscaped gardens
- Well-maintained footpaths with driveways to predominantly rear garages, some carport structures at front boundary
- Heritage items on Dalmar St (40, 52 Dalmar Street) inter-war Arts and Crafts and Californian Bungalow style
- Some historical residential flat buildings (18-22, 16 Dalmar St)
- West St is more urban in character with 3-storey and 4-storey brick residential flat buildings opposite light industrial brick warehouse, which is approximately 5m tall
- Croydon Rd between Parramatta Rd and Dalmar St is characterised by single-storey brick detached residential on small lots, with front gardens or solid walls at front boundary. The northern side is dominated by front setback car parking to businesses

Streets

- Wide streets, road verge on Dalmar St
- No verge on Croydon Rd
- Mix between off-street and on-street parking
- Predominantly low-height native street trees, some mature native trees east of Dalmar St





01 Typical dwellings along Scott Street
02 Residential flat buildings on Dalmar St



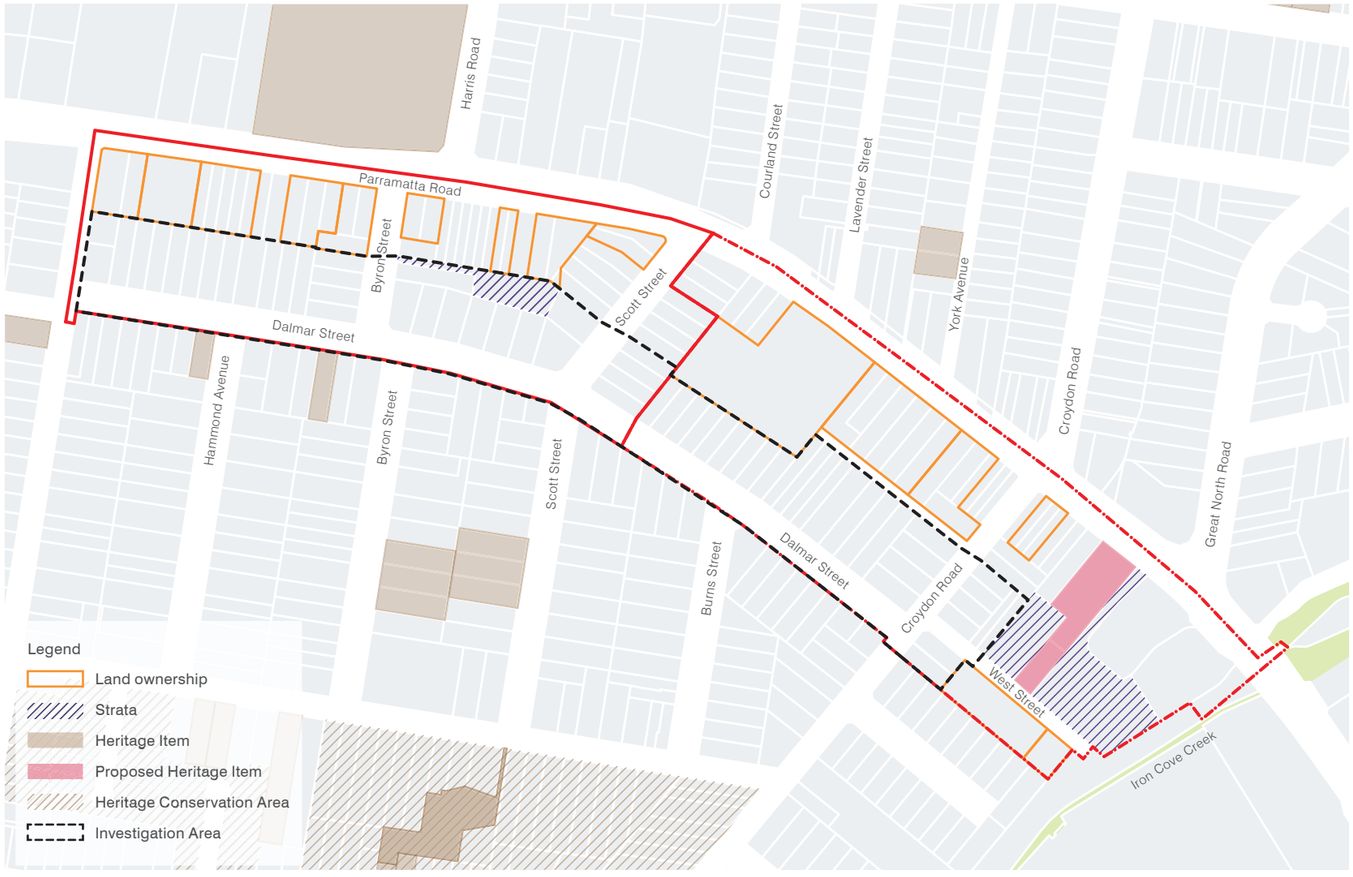
03 Medium density residential on West St

Development constraints

- Small residential lots under fragmented ownership
- Dwelling lots back onto commercial retail properties with E3 zoning to the north which has potential solar access impacts
- Investigation area is largely unconstrained by heritage items and conservation areas, however new development should be sympathetic to heritage items on southern side of Dalmar St and to the general residential character
- Investigation area is largely unconstrained by strata apart from one battle-axe lot between Byron and Scott Streets which has been excluded from testing

Preliminary ideas

- Ensure height transition and solar access impacts from E3 area to the north are appropriate
- Explore amalgamation and residential flat building typology. Establish a minimum lot width for amalgamated lots to ensure RFBs maintain integrity of street front character and limit streetscape dominated by garage entries
- Leverage proximity to proposed Five Dock Metro Station and improved public transport along Parramatta Road by providing additional residential density where appropriate
- Respond to existing character by ensuring sufficient landscaped area in front setback of new developments



Kings Bay constraints map

1:4,000 0 40 80 120 160 200M

Built form typology study

The following study has been undertaken to identify lot patterns including street frontage, lot depth and access, to inform requirements for subdivision and amalgamation and possible future built form typologies within the investigation area.

RFB typologies have been investigated to provide for a better transition between the E3 zoned lots on Parramatta Rd to the R2 zoned low-rise residential area to the south. This would require the amalgamation of existing lots. The following pages will discuss the following typologies developed for this study in more detail:

RFB 1A - Narrow lot infill

RFB 1B - Narrow lot infill (deep lot)

RFB 1C - Narrow lot infill (Croydon Road corner lot)

RFB 2 - Row house



RFB typology key map and desired lot amalgamation pattern

1:4,000 0 40 80 120 160 200M

Investigation Area 2 - Residential

A flood map has been included for reference; the outcomes of this study and its recommendations are subject to advice and coordination with hydrological engineers with regard to minimum site landscaped areas and overland flow paths.



Kings Bay Flood Map
Source: Inner West Council

This map is from Inner West Council Floodplain Risk Management Studies and Plans. Council is reviewing its flood management plan for this area which might result in changes to the flooding lots

Residential Flat Building precedent imagery

The following precedents demonstrate how residential flat buildings can be applied sensitively to a suburban context, through built form articulation to break down the building scale, materials, height responding to context scale (3–4 storeys), front setbacks, outlook of private open space, and planting in the setback areas.







01 Clovelly Apartments, Squillace Apartments
02 Finlayson Street Apartments, Candalepas Associates
03 21 Riversdale Road, Hawthorn, Ewert Leaf

RFB Type 1A - Narrow Infill Apartment

RFB 1 typology is based on the amalgamation of 2 existing lots. This typology is adaptable to deep sites and amalgamation of lots with narrow frontages. It has been designed to ensure a regular street pattern. Apartments face the street or are provided appropriate separation to orientate to the side or rear of the property within amenity standards. This typology is based on the 'narrow infill apartment' shown in the Apartment Design Guide (ADG Appendix 4) with adjustments to account for greater lot depth.

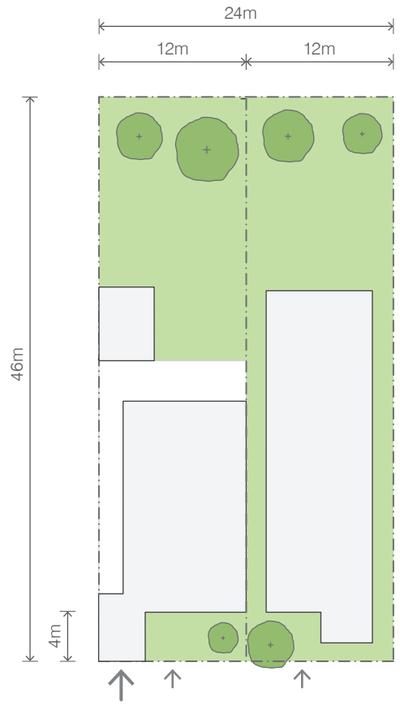
General parameters for typology:

- Lot depth - min. 30m
- Lot size - min. 720m²
- Street frontage - min 20m
- Access & Car-parking - Driveway to basement car park
- Communal Open Space - 25% Site area (ADG)

Note the sites tested for 1A, 1B, 1C (typically 2-lot amalgamations) meet the minimum recommended parameters for this RFB typology below:
- Min. lot size - 720m²
- Min street frontage - 20m



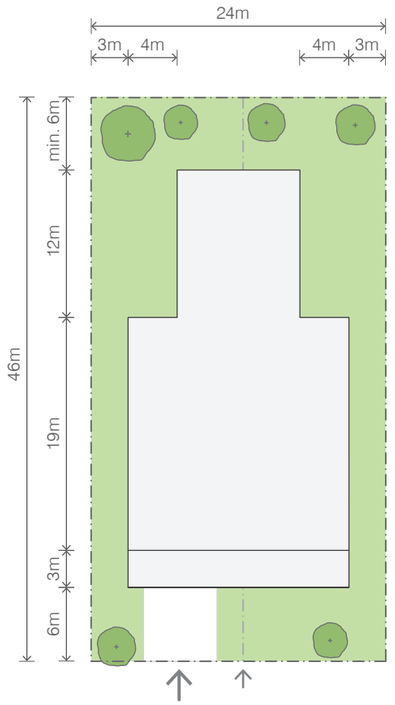
Key plan of lot amalgamation pattern for typology



Plan of existing dwellings and lots

Existing dwellings' metrics

FSR	0.4:1	0.4:1
Site width	12m	12m
Site depth	46m	46m
Site area	552m²	552m²
GFA	192m²	237m²
Height	5m	5m
Site coverage	36%	44%
Private open space	341m²	297m²
Front setback	4m	4m
Rear setback	Varies	
Side setback	1m	1m
Upper setback	N/A	
Street wall	1 storey	
Parking	Carport	On street
Landscaped area	Varies	
Dwellings	1	1



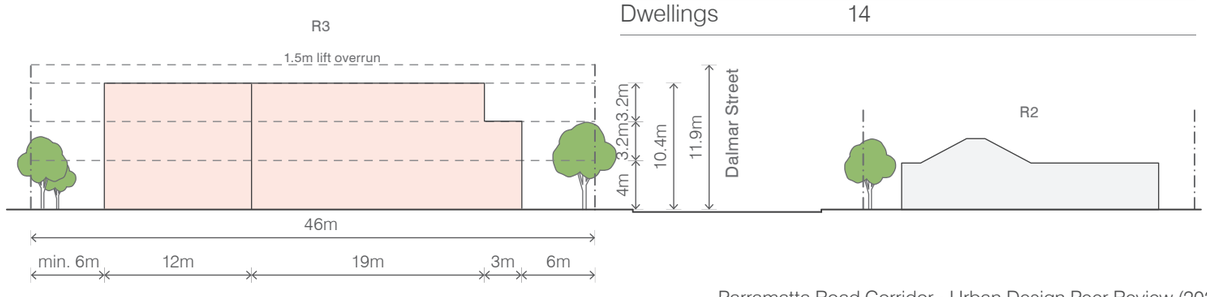
Plan of proposed dwellings and lots

Proposed RFB metrics

FSR	1:1
Site width	24m
Site depth	46m
Site area	1104m²
GFA	1121m²
Height	11.9m (3 storeys)
Site coverage	45%
Communal open space	356m
Front setback	6m min.
Rear setback	6m min.
Side setback	3m min.
Upper level setback	3m from building line
Street wall	7.2m (2 storeys)
Parking	Basement
Landscaped area	10% deep soil (ADG recommendation for sites 650-1500m²)
Dwellings	14



Indicative apartment plan 'narrow infill apartment'
Source: Apartment Design Guide, 2015



Section diagram of relationship of RFB to low density residential

RFB Type 1B - Narrow Infill Apartment

RFB 1B is based on lots equal to or deeper than 52m to generate greater dwelling yield; these are located to the east of the Kings Bay investigation area towards Croydon Rd. This typology is adaptable to deep sites and amalgamation of lots with narrow frontages. It ensures a regular street pattern. Apartments face the street or are provided appropriate separation to orientate to the side or rear of the property within amenity standards. This typology is based on the 'narrow infill apartment' shown in the Apartment Design Guide (ADG Appendix 4) with adjustments to account for greater lot depth.

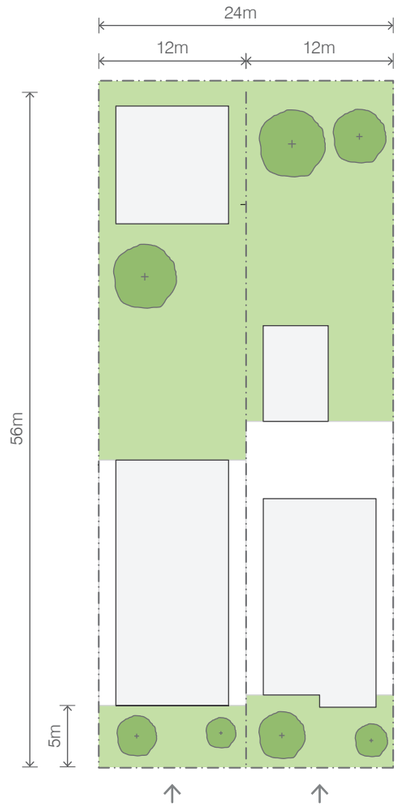
General parameters for typology:

- Lot depth - 50m
- Lot size - approximately 1000m²
- Street frontage - 20m min.
- Access & Car-parking - Driveway to basement car park
- Communal Open Space - 25% Site area (ADG)

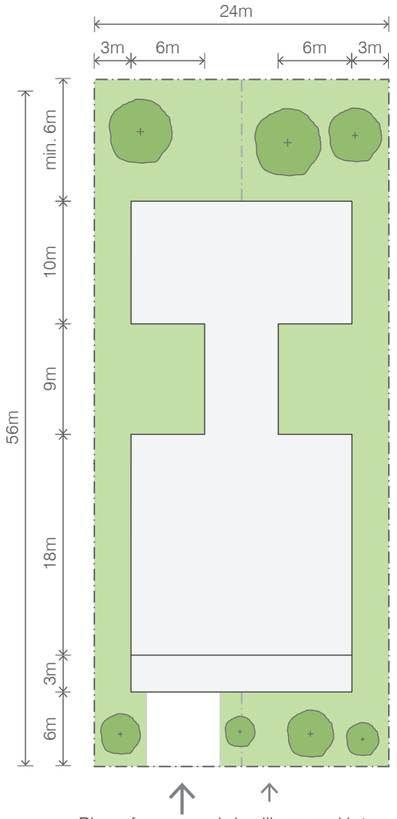
Note the sites tested for 1A, 1B, 1C (typically 2-lot amalgamations) meet the minimum recommended parameters for this RFB typology below.
- Min. Lot size - 720m²
- Min street frontage - 20m



Key plan of lot amalgamation pattern for typology



Plan of existing dwellings and lots



Plan of proposed dwellings and lots



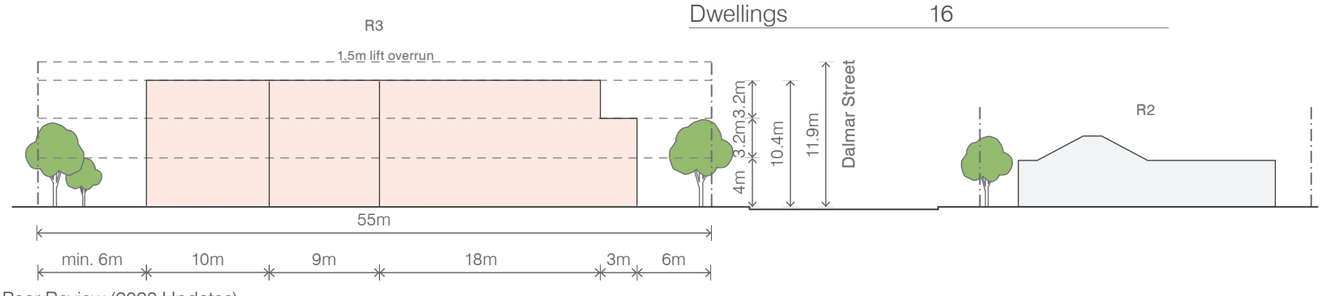
Indicative apartment plan 'narrow infill apartment'
Source: Apartment Design Guide, 2015

Existing dwellings' metrics

FSR	0.4:1	0.3:1
Site width	12m	12m
Site depth	56m	56m
Site area	672m²	672m²
GFA	272m²	205m²
Height	5m	5m
Site coverage	40%	30%
Private open space	406m²	473m²
Front setback	5m	5m
Rear setback	0m	25m
Side setback	1m	1m
Upper setback	N/A	
Street wall	1 storey	
Parking	On street	
Landscaped area	Varies	
Dwellings	1	1

Proposed RFB metrics

FSR	1:1
Site width	24m
Site depth	56m
Site area	1,344m²
GFA	1,337m²
Height	11.9m (3 storeys)
Site coverage	50%
Communal open space	336m² min.
Front setback	6m
Rear setback	6m min.
Side setback	3m
Upper level setback	3m from building line
Street wall	7.2m (2 storeys)
Parking	Basement
Landscaped area	10% deep soil (ADG recommendation for sites 650-1500m²)
Dwellings	16



Section diagram of relationship of RFB to low density residential

RFB Type 1C - Narrow Infill Apartment - Croydon Road

General parameters for typology:

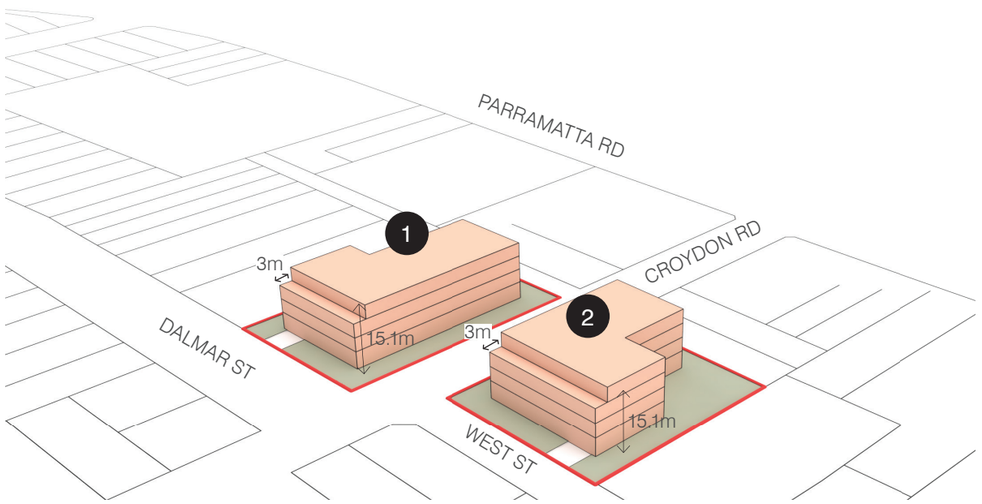
- Corner Lot
- Lot depth - 46-55m
- Lot size - approximately 1850-2000m²
- Street frontage - 36-40m (Dalmar St & West St)
- Access & Car-parking - Basement car-parking
- Communal Open Space - 25% Site area (ADG)
- No. of storeys - 4 storey RFBs were tested and considered to be acceptable on these sites with the follow justification:
  - Sites are located in the proximity of existing medium density residential developments on West St, where existing controls allow for height up to 23m
  - 4-storey also enables a height transition from the proposed 5-storey E3+Residential Opportunity Sites to the north.
- Note the sites tested for 1A, 1B, 1C (typically 2-lot amalgamations) meet the minimum recommended parameters for this RFB typology below.
  - Min.. lot size - 720m²
  - Min. street frontage - 20m



Key plan of lot amalgamation pattern for typology



Plan of tested 4-storey RFBs



3D of tested 4-storey RFBs

Proposed RFB metrics

Site	1	2
FSR	1.3:1	1.3:1
Site width (m)	36.6	40.2m
Site depth (m)	55.7	46.4m
Site area (m²)	2,036m²	1,866m²
GFA (m²)	2,657m²	2,345m²
GFA (m²) Commercial	0m²	0m²
GFA (m²) Residential	2,657m²	2,345m²
Height* (m)	15.1m	15.1m
Height (storeys)	4	4
Site coverage	44%	43%
Communal Open Space (m²)	506m²	471m²
Front setback (m)	6m	6m
Rear setback (m)	6m	6m
Side setback	6m	6m
Upper storey setback from building line (to Dalmar and West St)	3m	3m
Street wall (Dalmar and West St)	10.4m (3 storeys)	
Street Wall (Croydon Road)	13.6m (4 storeys)	
Parking	Basement car-parking	
Landscaped area	15% deep soil (ADG recommendation for sites >1,500m²)	
Dwellings	34	30

*Height inclusive of 1.5m for lift overrun

Solar Analysis

The following diagrams indicate the solar impacts of E3 + residential development on Opportunity Sites 1 and Site 2 (corner of Parramatta and Croydon Road), and 4-storey RFBs to the south of these sites. Natural ground slope has been factored in by way of the allowance given in the floor to floor height of the first storey (see assumptions page at the beginning of document).

Solar access requirements
Minimum two hours of solar access to surrounding properties. Accompanying shadow diagrams are taken at 9am, 11am and 1pm on the 21st June.

Summary
The shadow analysis indicates that it is possible to meet solar access requirements as per ADG.

9am



11am



1pm



Solar analysis midwinter (June 21):
RFB Type 1 C and E3+Residential development to the north

RFB Type 2 - Row Apartments

The configuration of existing lot on the block bounded by Byron St, Dalmar St and Scott St does not fit the parameters for a narrow lot infill RFB when assuming all lots in this block are to be amalgamated and turned over. The proposed typology is based on the 'row apartment' type in the Apartment Design Guide (ADG Appendix 4), which is suited to wide frontage, shallow lots. This typology can be adapted to suit corner lots. For the purposes of this study 25 Byron St and 45-49 Dalmar St are amalgamated, so as to not leave any resulting L-shaped adjoining lots which limit the redevelopment potential of this block.

General parameters for typology:

- Lot depth - 33m
- Lot size - approximately 1,000-2,000m²
- Street frontage - 33.5m
- Access & Car-parking - Driveway to basement car park
- Communal Open Space - 25% Site area (ADG)

Note the sites tested for 2 (2 to 3-lot amalgamations) meet the minimum recommended parameters for proposed RFB typology.
- Min. lot size - 720m²
- Min street frontage - 20m



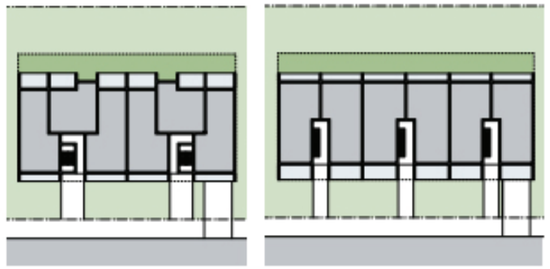
Key plan of recommended lot amalgamation pattern



Plan of tested 3-storey RFBs



3D of tested 3-storey RFBs



Indicative apartment plan 'narrow infill apartment'
Source: Apartment Design Guide, 2015

- redevelopment to follow lot amalgamation pattern identified for this block. Any proposal to redevelop that does not follow pattern to be assessed on a case by case basis. This is to avoid instances where mid-block sites are precluded from future redevelopment.

Proposed RFB metrics

Site	1	2	3
FSR	**1:1**	**1:1**	**1:1**
Site width (m)	44m	33.5m	72m (frontage)
Site depth (m)	44m	33m	33m
Site area (m²)	2,278m²	1,116m²	1,867m²
GFA (m²)	2,255m²	1,100m²	1,766m²
Height* (m)	11.9m	11.9m	11.9m
Height (storeys)	3	3	3
Site coverage	47%	49%	47%
Communal open space (m²)	690m²	244m²	511m²
Front setback (m)	6m	6m	6m
Rear setback (m)	6m min.	6m min.	6m min.
Upper storey setback (m)	3m	3m	3m
Street wall	2 storeys	2 storeys	2 storeys
Side setback (m)	6m	3m	6m
Parking	Basement		
Landscaped area	10% deep soil as per ADG recommendation for sites with an area of 650m² - 1,500m² and 15% deep soil for sites > 1,500m²		
Dwellings	28	14	22

*Height inclusive of 1.5m for lift overrun

Residential Recommendations

LEP recommendations

Architectus supports to upzone the R2 zoned investigation area to R3 Medium Density Residential as well as increase HOB to 12m (3 storeys), and 15m (4 storeys) at corner sites on Croydon Rd and West St/Dalmar St. The testing supports a reduction to PRCUTS' FSR recommendation from 1.4:1 to 1:1, and 1.3:1 at corner sites on Croydon Rd and West St/ Dalmar St.

Justification

This residential investigation area is positioned directly south of the E3 zoned area along Parramatta Road which has also been flagged for uplift as identified in previous sections of this study.

Medium density residential flat buildings are proposed to support this future employment growth and provide a better height transition and solar amenity from E3 to residential. Investigation included RFBs of 3 and 4 storeys and it is recommended to limit development to 3 storeys, as a 2-storey street wall with third storey setback of 3m is responsive to low-density housing along the south side of Dalmar Street. A maximum of 3 storeys for residential development along Dalmar St also minimises overshadowing impacts on adjacent lots.

Landscaped front setbacks and deep soil provisions (achieving larger deep soil zones for larger site areas) respond to the existing character of the area and enhances amenity. The proposed street front built-form pattern (typical 18m wide buildings on 20m lot widths) is responsive to existing street built-form pattern of 1 to 2-storey houses on narrow lots. An FSR of 1:1 is recommended to ensure adequate setbacks, communal open space and deep soil provisions.

The maximum height proposed at the intersection of Dalmar St and Croydon Rd is 4 storeys: 3-storey street wall with 4th storey setback. This provides a height transition from the 5-storey lots (E3 + residential), and responds to the 3 and 4-storey residential buildings on West St. The proposed height corresponds with the proposed FSR of 1.3:1.

Existing LEP controls (IWLEP 2022)	
LZN	R2 - Low Density Residential
FSR	0.7:1
HOB	8.5m

PRCUTS recommendations (2016)	
LZN	R3 - Medium Density Residential
FSR	1.4:1
HOB	12m

Draft Structure Plan controls (2021)	
LZN	R2 - Low Density Residential
FSR	0.7:1
HOB	8.5m

Final Recommendations (2023)	
LZN	R3 - Medium Density Residential + RFBs
FSR	1:1, 1.3:1
HOB	12m (3 storeys) and 15.5m (4 storeys)

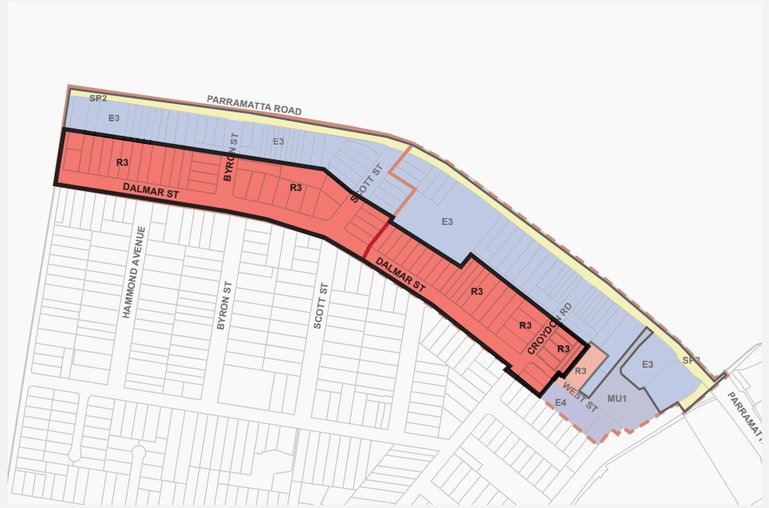
Residential yield

	No. of dwellings
Maximum capacity under existing controls	113
Maximum capacity under recommended controls	372
Additional capacity under recommended controls	259

Note refer to "1.6 Dwelling and Employment Yield Calculations" for methodology

Land Zoning

- MU1 Mixed Use
- E3 Productivity Support
- E4 General Industrial
- R3 Medium Density Residential
- SP2 Infrastructure



Floor Space Ratio Legend (n:1)

- H 0.7
- N 1
- Q 1.3
- S1 1.5
- T3 2.1
- T7 2.4



Maximum Building Height (m)

- M1 12
- O2 15.5
- P2 17.5
- Q2 19.5
- R4 22.5
- S1 23



1.4 Investigation Area 3 - MU1

Issue

Council's preliminary recommendation has been to retain existing FSR for this site as it is unlikely to develop due to existing strata. Architectus has been asked to review this.



Aerial key map of site

Existing LEP controls (IWLEP 2022)	
LZN	MU1 - Mixed Use
FSR	1.5:1
HOB	23m

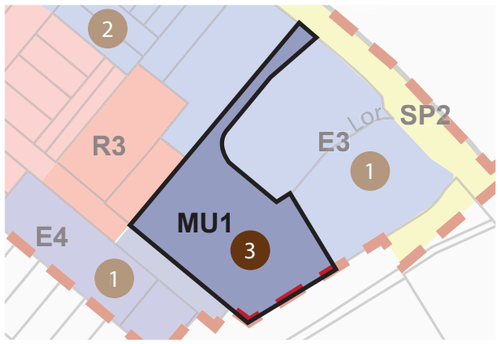
PRCUTS recommendations (2016)	
LZN	B6 - Enterprise Corridor
FSR	2.4:1
HOB	21m

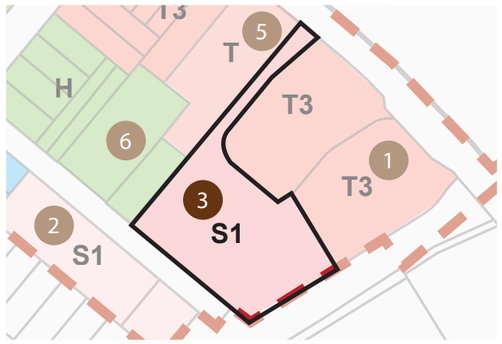
Recommendation

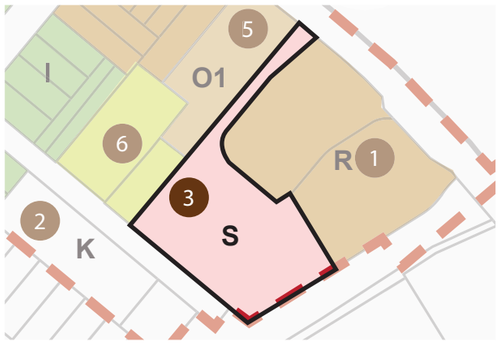
The site is currently zoned as MU1 - Mixed Use, however there is currently a 4-storey residential building with access from both West St, and Parramatta Rd. Currently there are 69 dwellings under strata, therefore it is unlikely that this site will be redeveloped to generate a higher residential yield.

Architectus supports the existing and draft structure plan controls to retain existing zoning, FSR and HOB.

Draft Structure Plan controls under consideration (2021)







LZN	MU1 - Mixed Use
FSR	1.5:1
HOB	23m

1.5 Investigation Area 4 - R3

Issue

6 – 10 West Street, Croydon is zoned R3 medium density in IWLEP 2022 but has the same FSR as the existing R2 Low Density Residential. PRCUTS recommends higher FSR and reduced building height.



Aerial key map of site

Existing LEP controls (IWLEP 2022)	
LZN	R3 - Medium Density Residential
FSR	0.7:1
HOB	12.5m

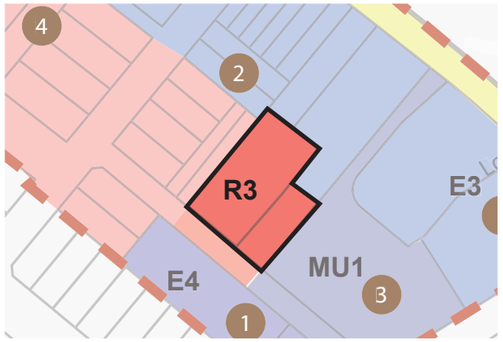
PRCUTS recommendations (2016)	
LZN	R3 - Medium Density Residential
FSR	1:4:1
HOB	12m

Recommendation

6-8 West St is currently zoned as R3 medium density. Site area 1,400m^2 and there are currently 2 x 3-storey residential buildings (6-8 West St) down the length of the site, with access to basement car-parking from West St. There are 27 dwellings under strata, therefore it is unlikely that this site will be redeveloped to generate a higher residential yield. It is recommended that the existing controls for 6-8 West St are retained.

10 West St is a vacant lot with site area of 508m^2, and is part of the proposed heritage item on 590-594 Parramatta Road. As such the FSR and HOB controls for this particular lot are proposed to be uplifted as per the proposed heritage item.

Draft Structure Plan controls under consideration (2021)



LZN R3 - Medium Density Residential



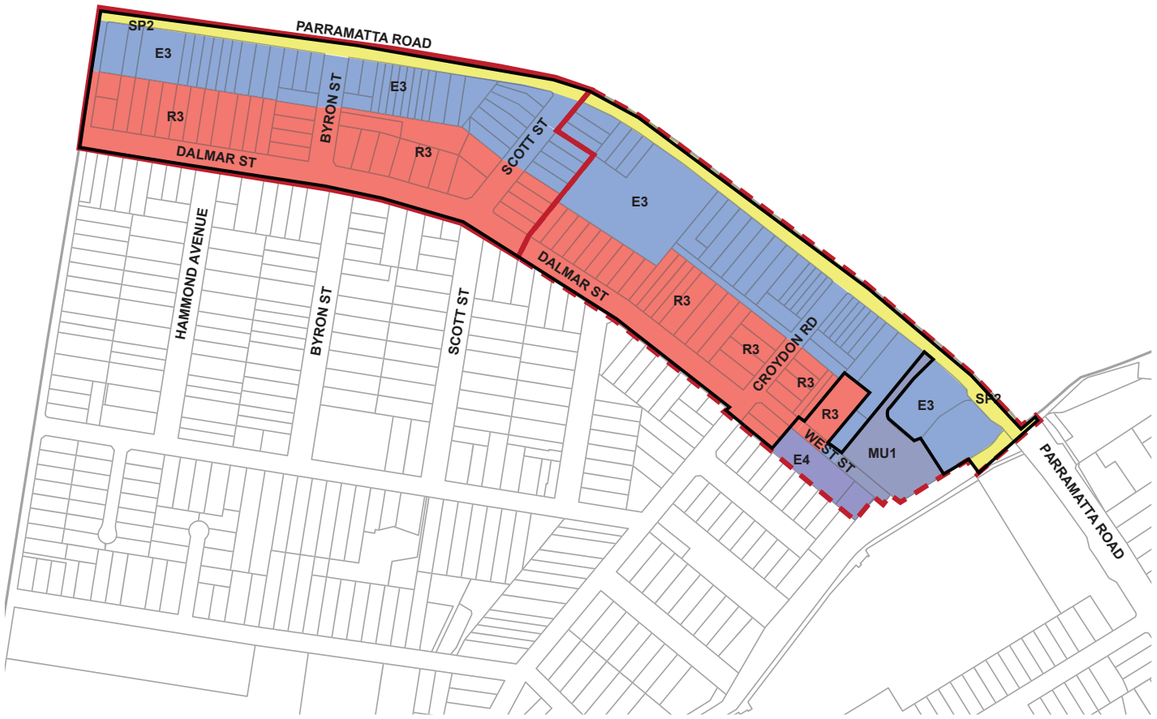
FSR 0.7



HOB 12.5m

1.6 Final LEP recommendations

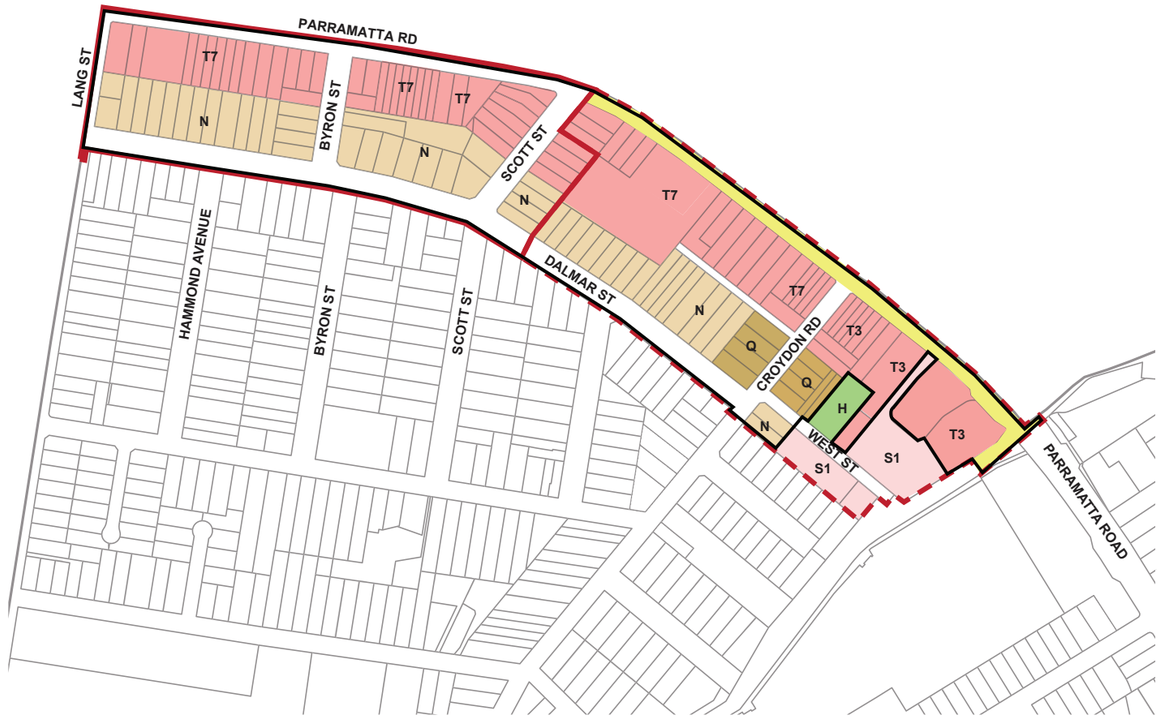
Issue	Architectus recommendations	Further controls for LEP/DCP
Expand the E3 Productivity Support zone to the rear of properties along Parramatta Road as recommended in PRCUTS – peer review advice sought considering the relationship with the adjacent residential areas. Manage the interface between different land uses especially the E3 land fronting Parramatta Road and the residential properties at the rear. For peer review, note that there are concerns regarding the transition of building heights from E3 to adjacent residential areas. Green edge setbacks (6m) recommended in PRCUTS are suggested to be deleted as Council's Transport planners have advised that the widening of footpaths, landscaping and new cycling paths should be provided within the existing road carriageway without relying on the provision of setbacks from surrounding lots which may practically never be achieved. The substantial 6m setback will also reduce the redevelopment potential of these lots which are not very deep. Feedback sought on whether any setbacks to Parramatta Road should be provided.	Land Use - E3 - Productivity Support (with residential flat buildings as an additional permitted land use for opportunity sites) FSR - 2.4:1 and 2.1:1 Height - 17.5m (4 storeys), 19.5m (5 storeys) and 22.5m (6 storeys)	– 4-storey street wall – 9m rear setback to 2 storeys then an additional 5m per storey above 2 storeys – 1.5m front setback to Parramatta Road – Access preferred via secondary streets or rear through easements
Retain existing R2 low density residential housing with the potential to investigate opportunities for medium density housing - peer review advice sought regarding the appropriate zoning, height, density and built form controls. Consider appropriate transitions and solar access requirements for the residential areas from the E3 zoned land along Parramatta Road.	Land Use - R3 - Medium Density Residential (with residential flat buildings as an additional permitted land use) FSR - 1:1 and 1.3:1 Height - 12m (3 storeys) and 15.5m (4 storeys)	- min. 20m street frontage - min. site area 720m^2 for residential flat buildings - redevelopment to follow lot amalgamation pattern identified in previous section on this issue, particularly for block between Byron St and Scott St. Any proposal to redevelop that does not follow pattern to be assessed on a case by case basis - landscaped zone within 6m front setback - 6m minimum rear setback - deep soil and communal open space as per ADG requirements - 2-3 storey street wall with front upper storey setback 3m - building façades to be articulated to reflect existing grain of south side of Dalmar St (12m lot widths)
586 Parramatta Road and 12 West Street, Croydon - Retain existing FSR for the mixed-use site as it is unlikely to redevelop (strata) - peer review advice sought	Land Use - MU1 - Mixed Use (no change) FSR - 1.5:1 (no change) Height - 23m (no change)	N/A
6 – 8 West Street, Croydon is zoned R3 medium density in IWLEP 2022 but has the same FSR as the existing R2 low density residential. PRCUTS recommends higher FSR and reduced building height - peer review advice sought regarding the proposed controls.	Land Use - R3 - Medium Density Residential (no change) FSR - 0.7:1 (no change) Height - 12m (no change)	N/A



Land Zoning (LZN) map

Land Zoning

- MU1 Mixed Use
- E3 Productivity Support
- E4 General Industrial
- R3 Medium Density Residential
- SP2 Infrastructure
- Stage 1 Implementation



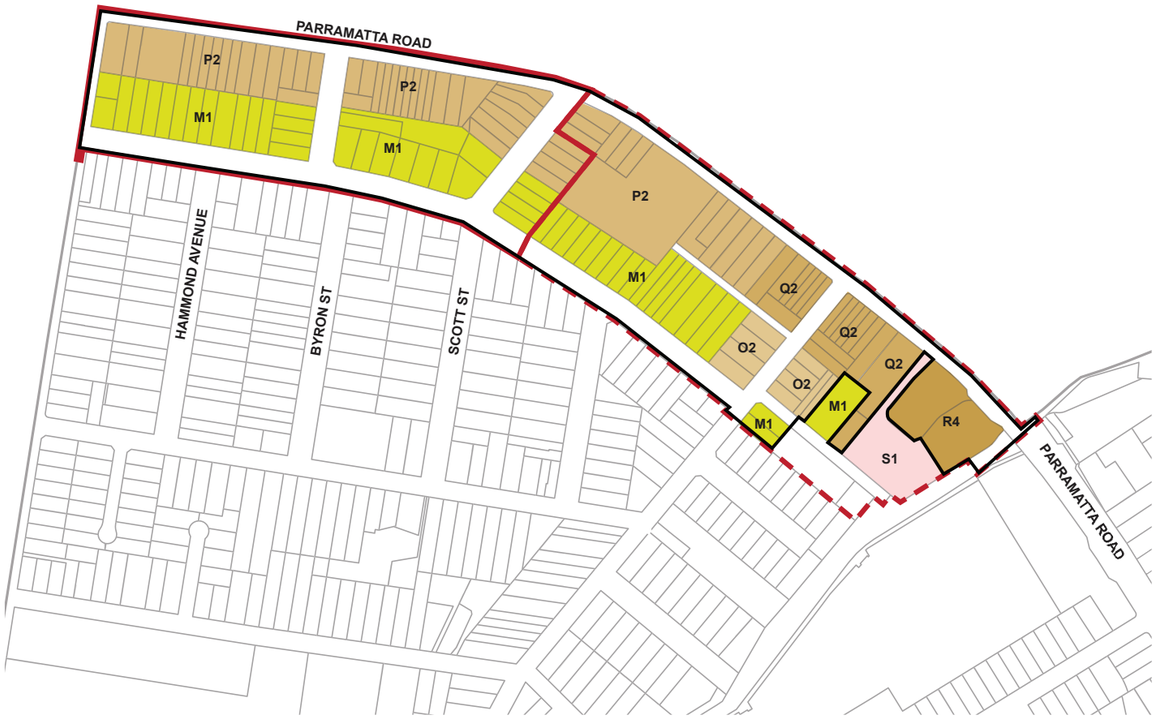
Floor Space Ratio (FSR) map

Floor Space Ratio Legend (n:1)

- H 0.7
- N 1
- Q 1.3
- S1 1.5
- T1 2
- T3 2.1
- T7 2.4
- Stage 1 Implementation

1:5,000 0 50 100 150 200M

Final LEP recommendations



Height of Building (HOB) map

Maximum Building Height (m)

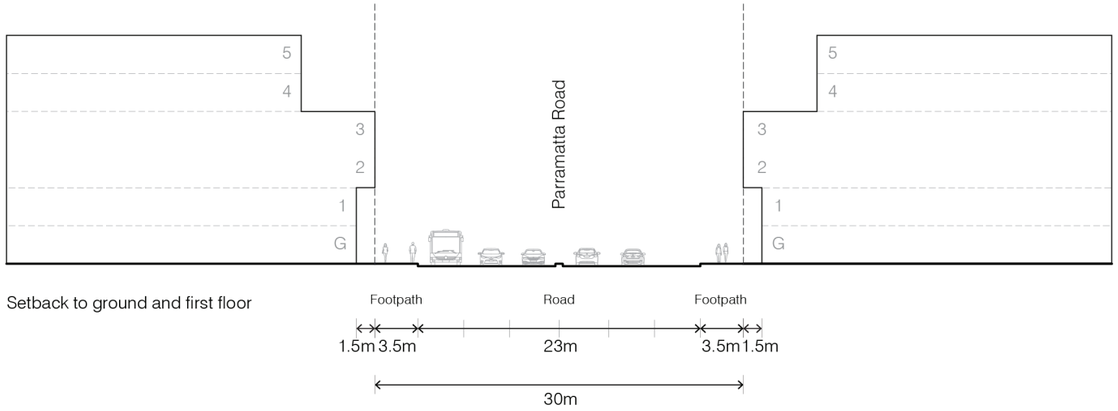
M1	12
O2	15.5
P2	17.5
Q2	19.5
R4	22.5
S1	23
	Stage 1 Implementation

1:5,000 0 50 100 150 200M

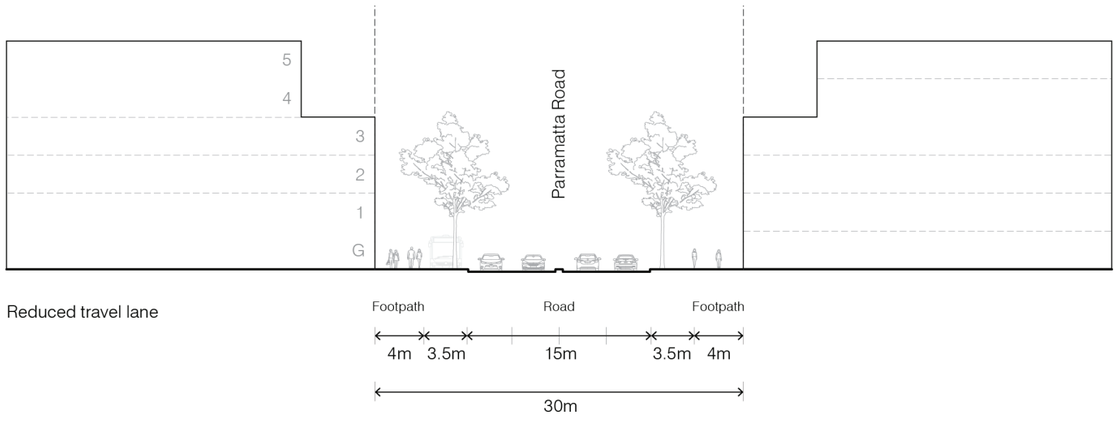
1.7 Appendix I - Green Edge Setbacks

The diagrams on this page are section studies of various scenarios: 1.5m setback to ground and first floor with second and third floor overhang, no setback and reduced travel lane, and existing condition with street planting.

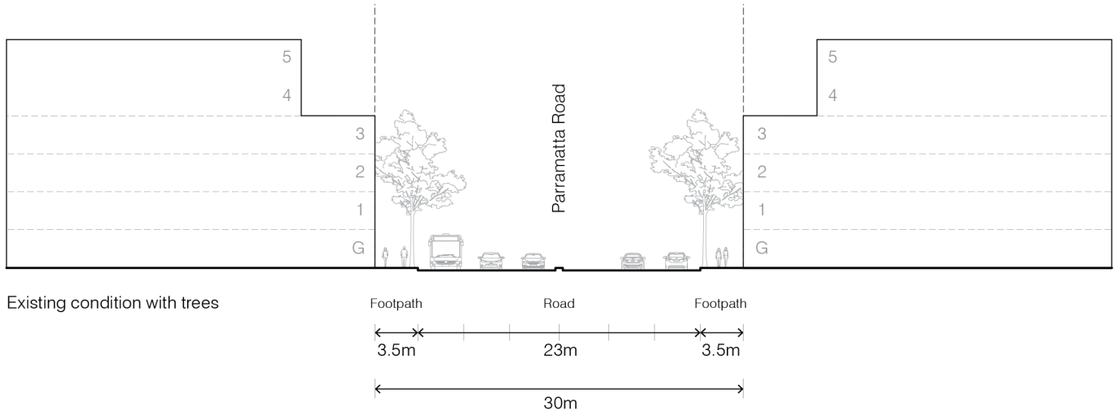
These have informed the final recommendation for a 1.5m front setback of built form to Parramatta Road. Architectus supports Council's recommendation to delete the 6m green edge setbacks proposed in PRCUTS with a preference for amenity improvements to Parramatta Road to occur within the 30m road corridor.



Setback to ground and first floor



Reduced travel lane



Existing condition with trees