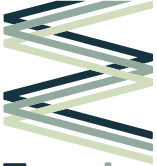


Attachment B7(e)

**Urban Design and Public Domain Study
Appendix 2 Options – Waterloo Estate
(South) – Land and Housing Corporation**

7.2 OPTIONS

7.2.1	Options Testing	280
7.2.2	Early Design Thinking	288
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	Place Performance Measures	



7.2.1 OPTIONS TESTING

PUBLIC OPEN SPACE

PRIMARY PARKS

Understanding opportunities and constraints to create an open space framework that meets the needs of the community

To best align with open space requirements, to provide 15% of the site area as open space (City of Sydney Open Space, Sports and Recreation Needs Study, Vol 2, 2016), a number of different locations for parks were explored. Options provided a better understanding of the Estate's opportunities and constraints such as topography, flooding and stormwater. With this understanding Waterloo Estate aims to provide an open space framework that maximises the opportunity to provide parks with flexibility and the capacity to meet the diverse needs of the community.

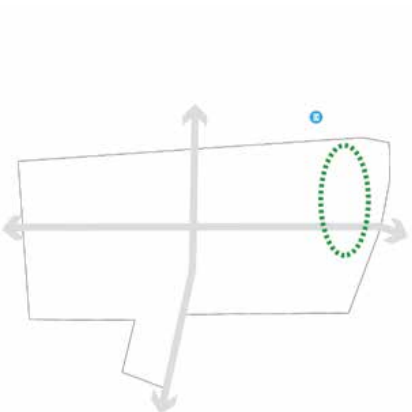


Fig. 72.1 Primary park Option 1

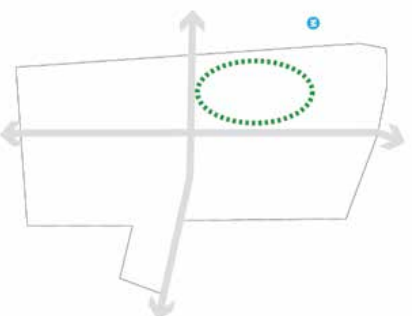


Fig. 72.2 Primary park Option 2

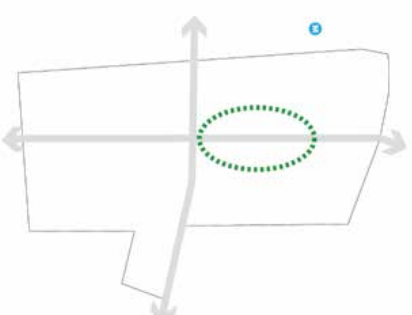
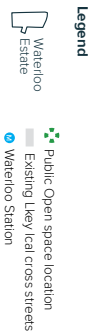
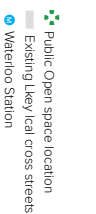


Fig. 72.3 Primary park Option 3



OPTION 1



OPTION 2



OPTION 3

Summary

- Compound shape with east/west orientation.
- Northern location reduces 400m catchment within the Estate.
- Three street frontages.
- Topography not level.
- Does not have potential to assist in stormwater detention.
- No control over building height and shade to north.
- Close to but not adjoining Waterloo Metro.

- Compound shape with north/south orientation.
- Central location increases 400m catchment within the Estate.
- Four street frontages.
- Topography generally level.
- Has potential to assist in stormwater detention.
- Control over building height and shade to north as part of Estate.
- Immediately adjoins Waterloo Metro Station and Metro Quarter (with the majority of Metro Quarter frontages shared).

- Compound shape with north/south orientation.
- Central location maximises 400m catchment within the Estate.
- Three street frontage.
- Topography generally level on west side but steeper on east side.
- No significant potential to assist in stormwater detention
- Control over building height and shade to north as part of Estate.
- Close to but does not immediately adjoin Waterloo Metro Station and Metro Quarter.
- George Street divides open space.

SECONDARY PARKS

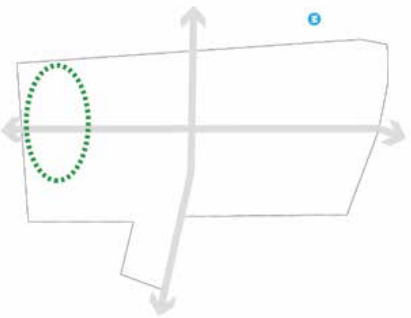


Fig. 7.2.4 Primary park Option 4

- Legend**
- Public Open space location
 - Existing Key /cal cross streets
 - Waterloo Estate
 - Waterloo Station

OPTION 4

- Compound shape with east/west orientation.
- Topography not level throughout.
- Four street frontages.
- Adjoins arterial road on south (McEvoy Street).
- No significant potential to assist in stormwater detention.
- George Street divides open space.

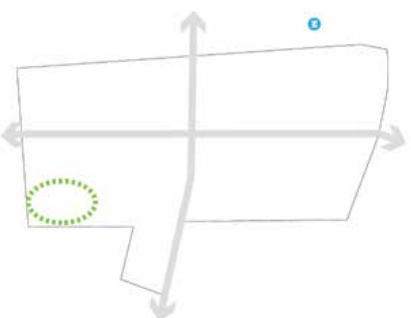


Fig. 7.2.5 Secondary park Option 1

- Legend**
- Public Open space location
 - Existing Key /cal cross streets
 - Waterloo Estate
 - Waterloo Station

OPTION 1

- Compound shape with north/south orientation.
- Two street frontages.
- Close to arterial road on south (McEvoy Street).
- Enhances Waterloo Park by extending total area.
- Topography relatively steep.
- Control over building height and shade to north as part of Estate.

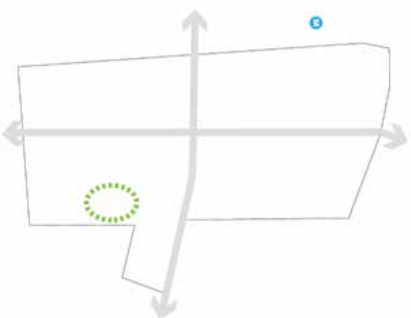


Fig. 7.2.6 Secondary park Option 2

- Legend**
- Public Open space location
 - Existing Key /cal cross streets
 - Waterloo Estate
 - Waterloo Station

OPTION 2

- Compound with square shape.
- Two street frontages.
- Away from arterial roads.
- Enhances Waterloo Park by extending total area and immediately adjoins small existing level area of park to east.
- Topography relatively steep.
- Control over building height and shade to north as part of Estate.

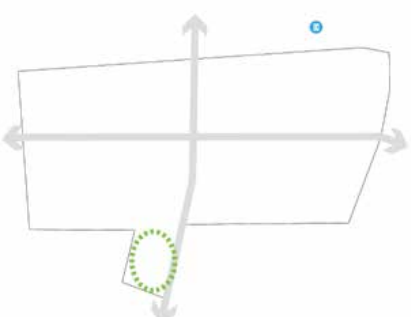


Fig. 7.2.7 Secondary park Option 3

- Legend**
- Public Open space location
 - Existing Key /cal cross streets
 - Waterloo Estate
 - Waterloo Station

OPTION 3

- Compound square shape with east/ west orientation.
- Four street frontages.
- Away from arterial roads.
- Enhances Waterloo Park by extending total area and immediately adjoins small existing level area of park to south.
- Topography relatively steep, but existing buildings create large level platform area.
- No control over building height and shade to north as not part of Estate, although currently low-rise HCA.



GEORGE STREET INTERIM OPTIONS

BETWEEN WELLINGTON & JOHN STREETS SECTION A

BETWEEN RAGLAN & WELLINGTON STREETS SECTION B

BETWEEN JOHN & MCEVOY STREETS SECTION C

Retention of existing condition

The existing George Street condition favours vehicular travel and parking. The cycleway runs north-south along the eastern edge. Often the wide carriageway reduces the space and opportunity available for comfortable pedestrian movement. The canopy coverage between Wellington and Raglan streets is minimal given the reduced verge along the eastern edge.

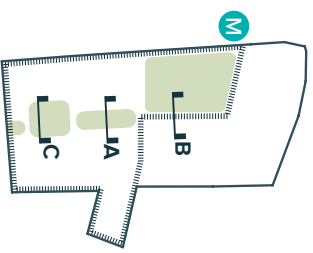
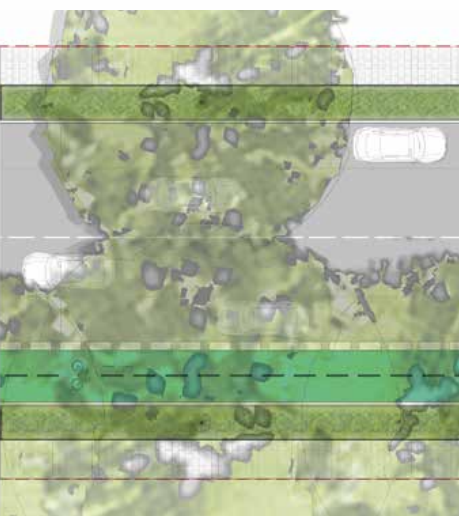
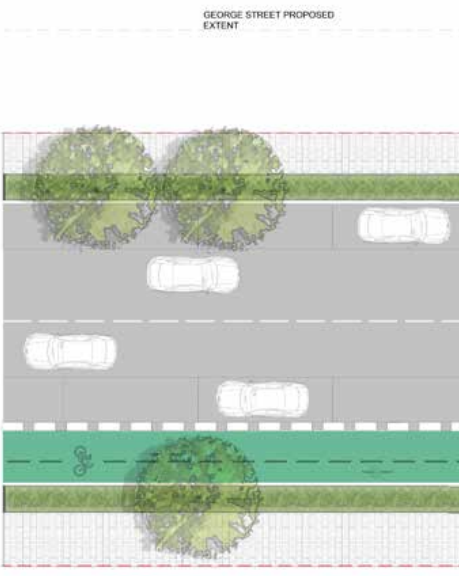
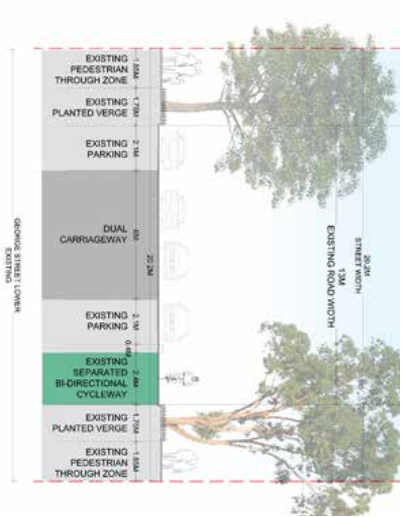
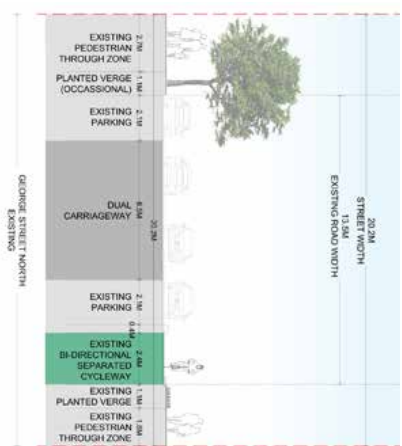
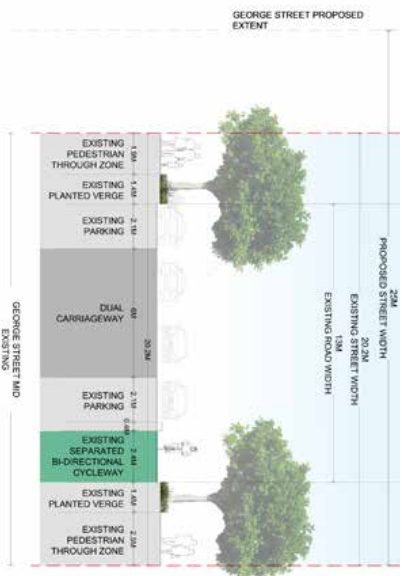


Fig. 72.8 George Street Mid 25m

Fig. 72.9 George Street North 20m

Fig. 72.10 George Street South 20m

**BETWEEN WELLINGTON & JOHN STREETS
SECTION A**

**BETWEEN RAGLAN & WELLINGTON STREETS
SECTION B**

**BETWEEN JOHN & MCEVOY STREETS
SECTION C**

Option 1

Option 1 is influenced by the addition to the eastern cycleway of a planted verge, buffering the existing cycleway from the carriageway. The planted verge will increase the opportunity for tree planting, particularly between Raglan and Wellington Street. However, it reduces the opportunity to improve the existing public through zone and public domain furniture zones on both the western and eastern edges.

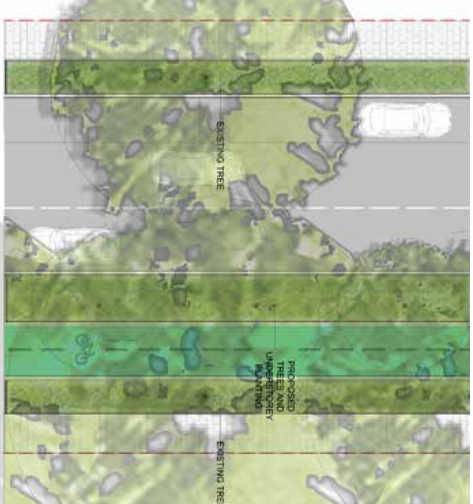
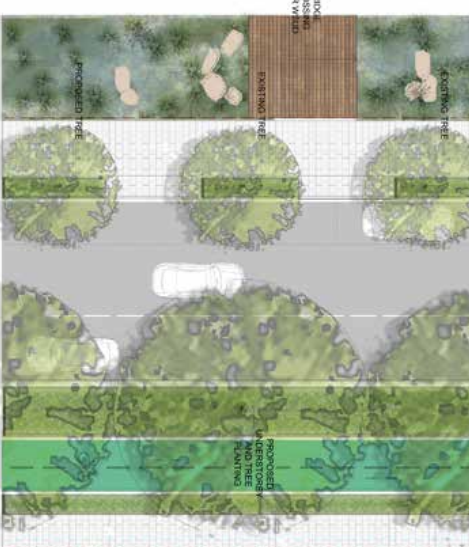
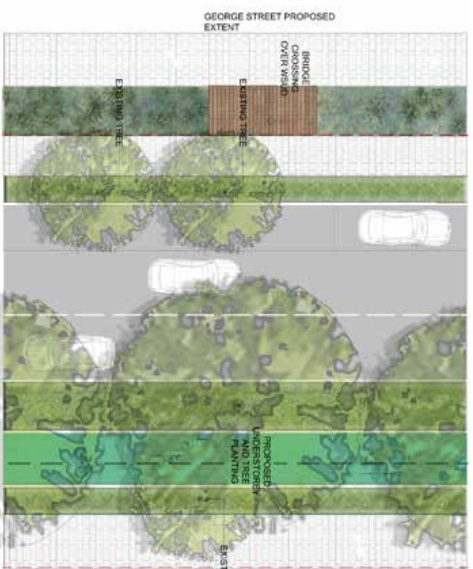
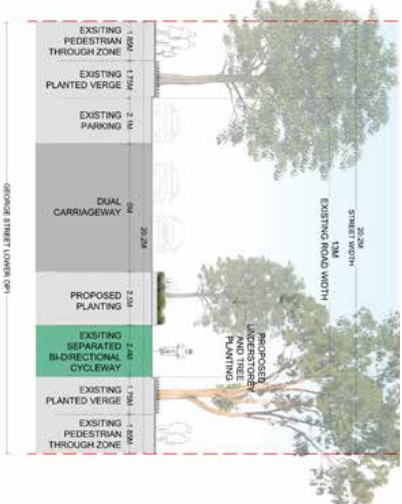
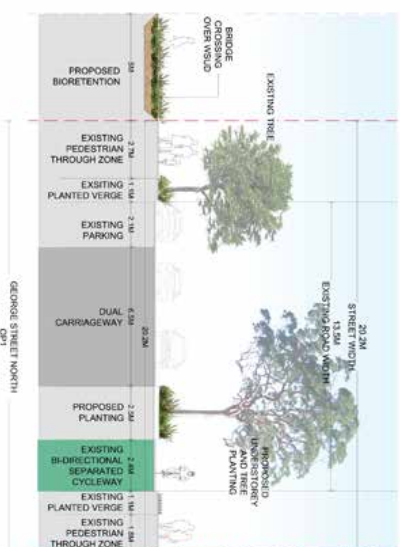
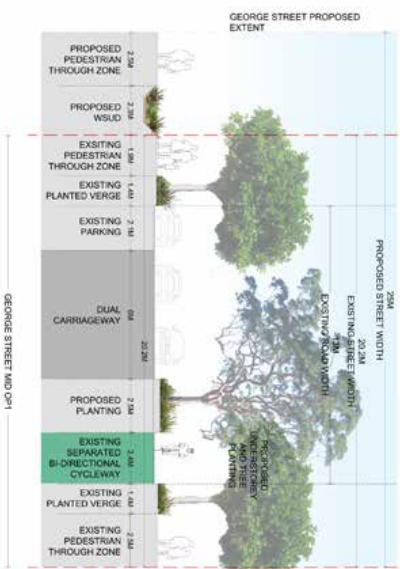
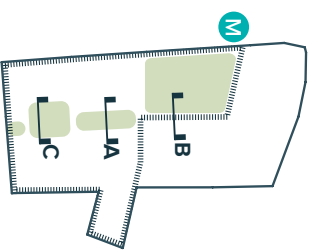


Fig. 7.2.11 George Street Mid 25m

Fig. 7.2.12 George Street North 20m

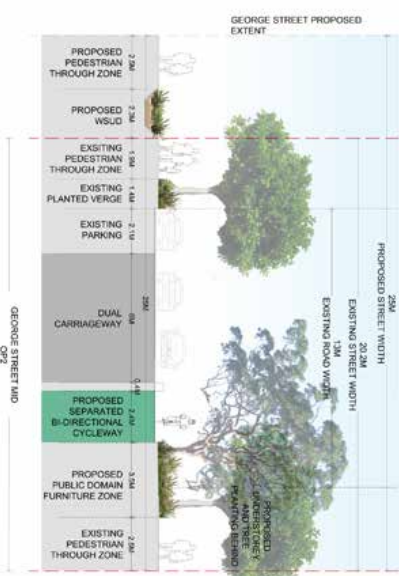
Fig. 7.2.13 George Street South 20m



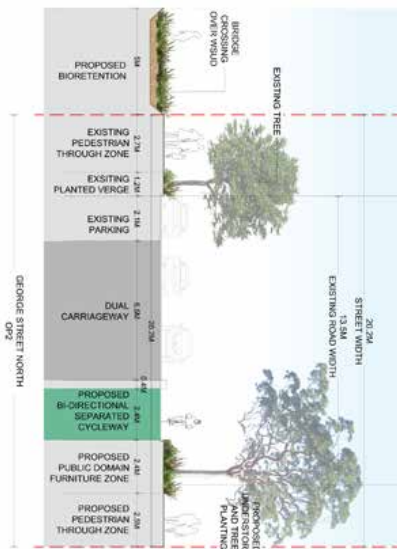


GEORGE STREET INTERIM OPTIONS

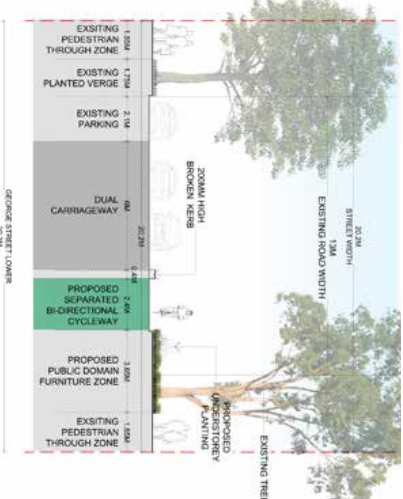
BETWEEN WELLINGTON & JOHN STREETS SECTION A



BETWEEN RAGLAN & WELLINGTON STREETS SECTION B



BETWEEN JOHN & MCEVOY STREETS SECTION C



Option 2 shifts the existing cycleway into the eastern parking lane. Whilst this option does increase the public domain furniture zone and pedestrian through zone, it does not maximise their potential across both the eastern and western edges along the entire length of George Street.

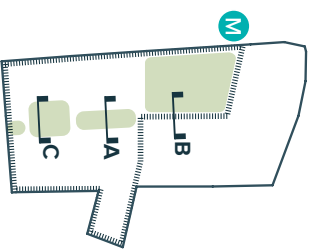


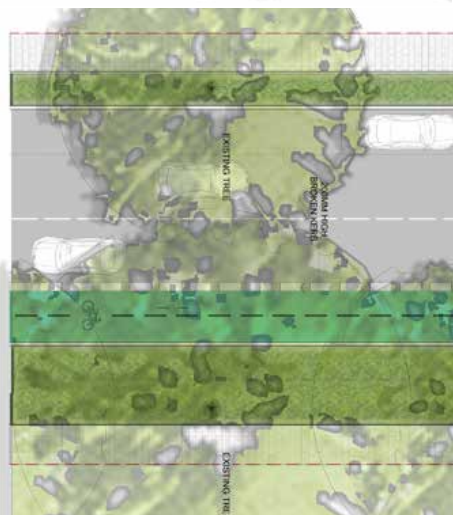
Fig. 7214 George Street North 20m



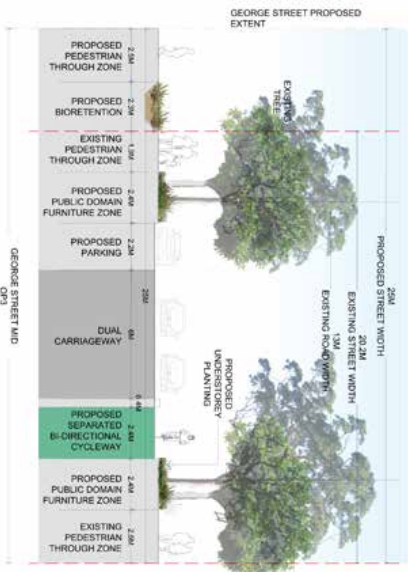
Fig. 7215 George Street North 20m



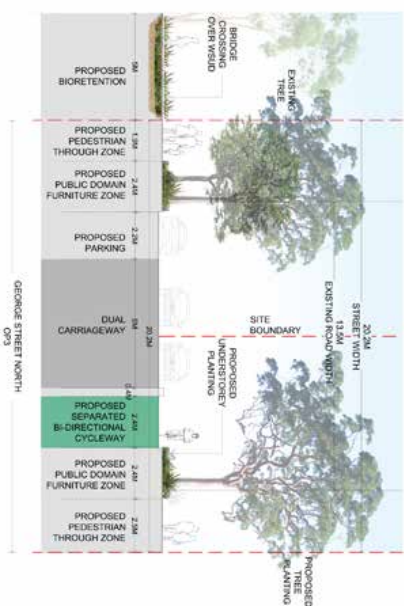
Fig. 7216 George Street South 20m



**BETWEEN WELLINGTON & JOHN STREETS
SECTION A**



**BETWEEN RAGLAN & WELLINGTON STREETS
SECTION B**



Option 3

Option 3 expands upon the concept of option 2. Whilst the cycleway remains shifted into the existing eastern parking lane, there are more improvements and modifications made to the adjacent footpath and public domain. The verges on both sides are widened to ensure the best opportunity for increased canopy coverage across the entire length of George Street. Similarly, the pedestrian through zone is maximised on both the eastern and western edges, allowing a clear movement zone from north to south, using the adjacent park interfaces and widening to further build upon this. A broken kerb separates the cycleway from the carriageway.

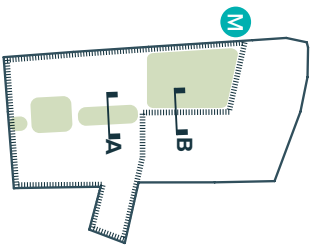


Fig. 72.17 George Street Mid 25m

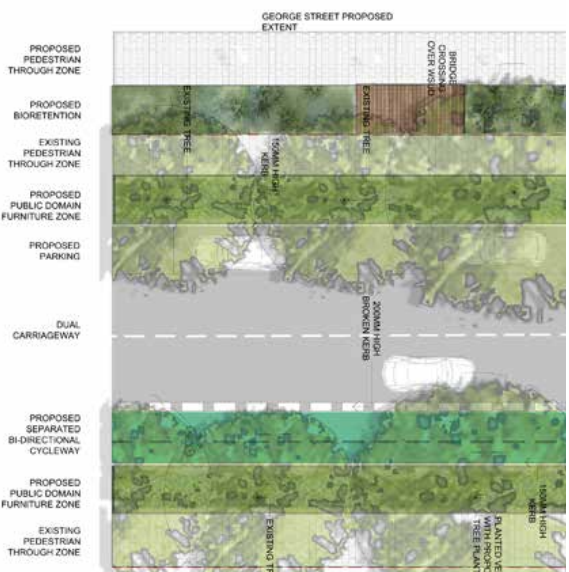
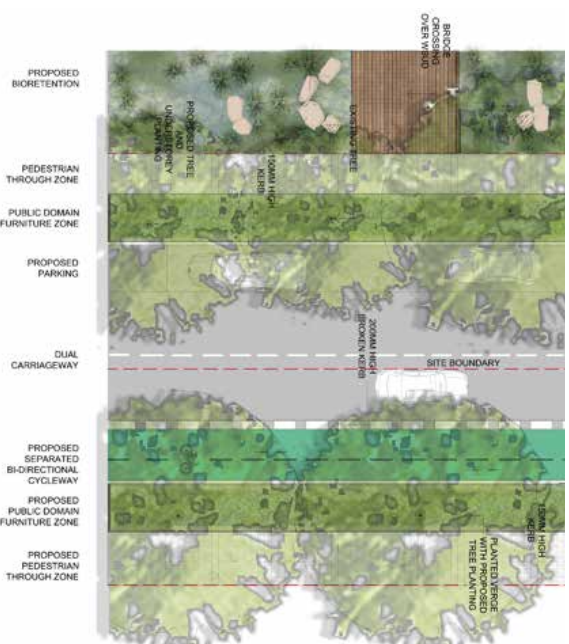
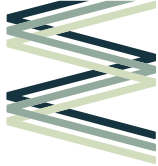


Fig. 72.18 George Street North 20m





TREE REPLACEMENT OPTIONS

Option 1 City of Sydney Tree Diversity Mix

Replacement trees provided in option 1 achieve a replacement ratio of 2 : 1 based on the City of Sydney policy for tree size diversity mix, with categorisation targets of:

Extra Large / Civic	10%	42
Large	35%	145
Medium	45%	189
Small	10%	42
TOTAL	100%	418

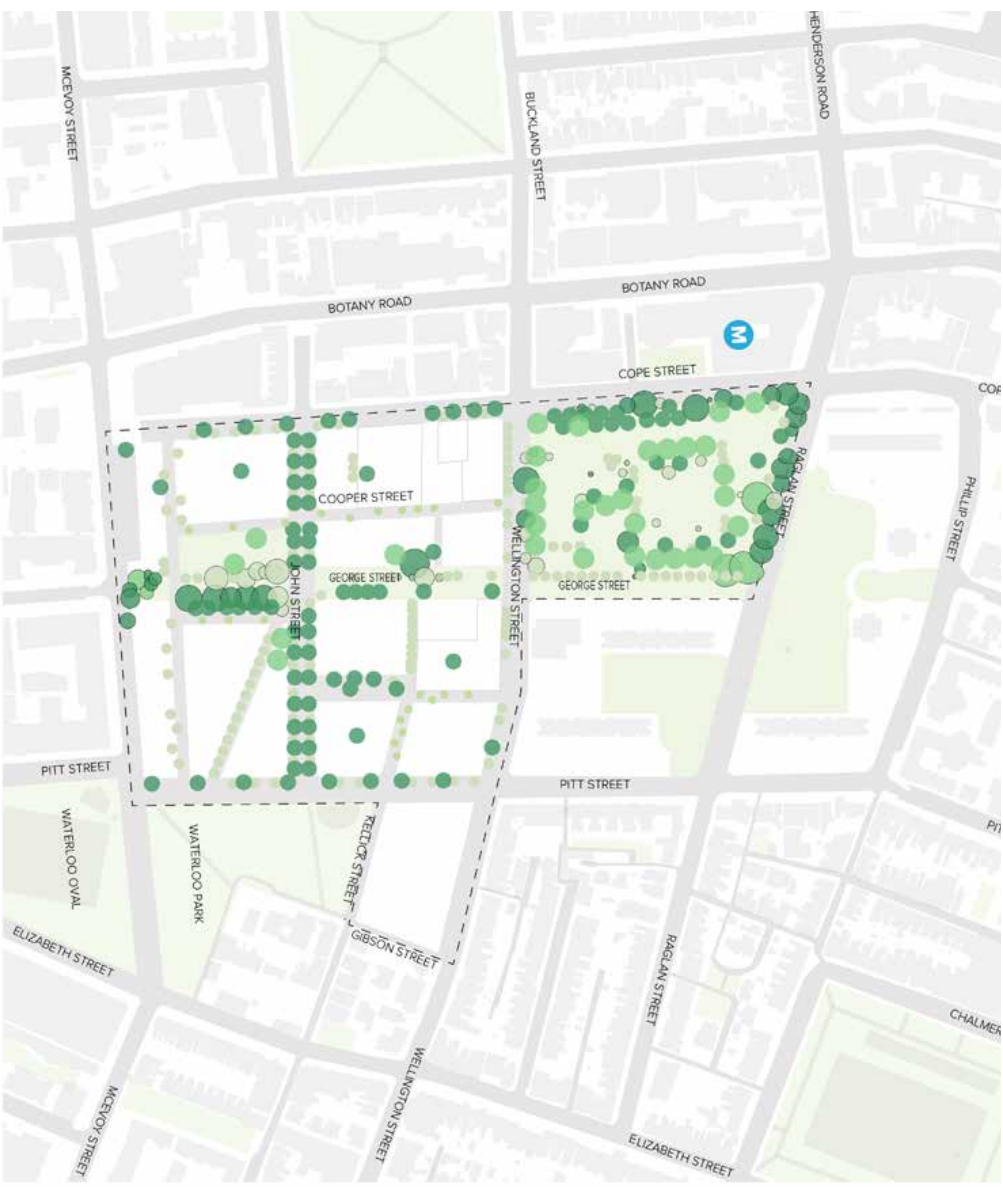


Fig. 7.219 City of Sydney mix achieves a 2 : 1 Tree replacement ratio

Option 2 Variation to the City of Sydney Tree Diversity Mix to achieve a higher replacement ration

Replacement trees provided in option 2 are developed to increase canopy coverage in a manner appropriate to the street forms provided, based on varying the City of Sydney tree size diversity mix:

Extra Large / Civic	6%	41
Large	33%	211
Medium	45%	294
Small	16%	104
TOTAL	100%	650

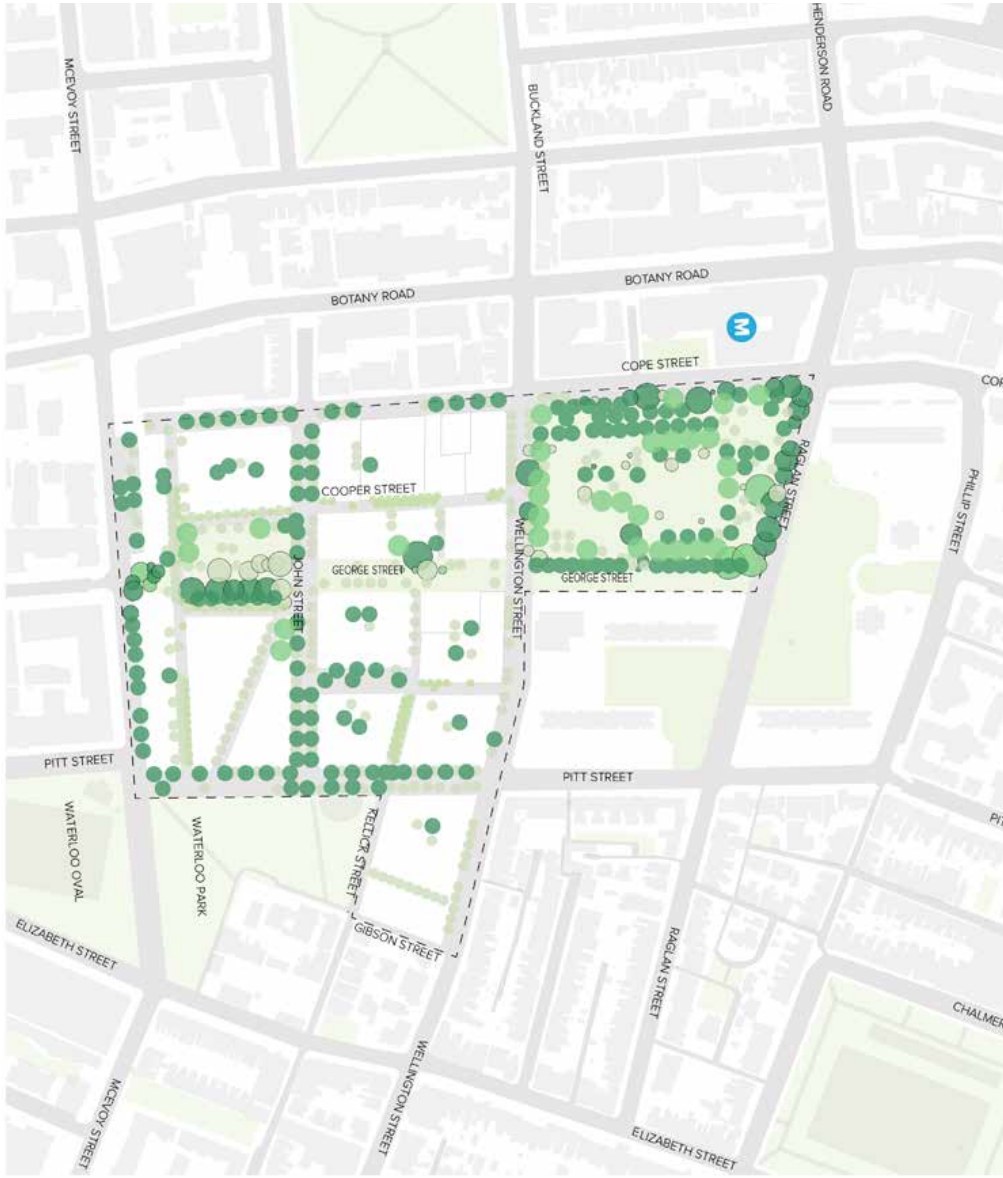
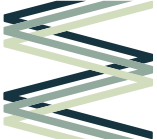


Fig. 7.2.20 Tree replacement option - Site specific



7.2.2 EARLY DESIGN THINKING

Six scenarios were explored, focusing on a set of influences or circumstances to understand the place characteristics that evolved

A set of strengths, potential outcomes and potential challenges of the place characteristics created through each scenario emerged.

Strengths

- Centrally located 2 hectare park
- Retains a portion of the current Waterloo Green
- Prioritises pedestrian and cycle movement
- Retains all moderate and significant trees within the new public domain
- Characterises Waterloo Station as a park environment
- Connects people to nature and food production
- Optimises age diversity objectives of play and rest with a new community route for all ages and abilities
- Improves the usability of Waterloo Park

HOW GREEN?

HOW LOW?

- Reduces the overall number of tall buildings
- Supports density and height focused on the Metro Quarter
- Creates shared courtyards
- Reinforces the major existing streets
- Supports fine grain retail

The Street Level Experience



Fig. 7.2.21: Multi-layered integration of vegetation

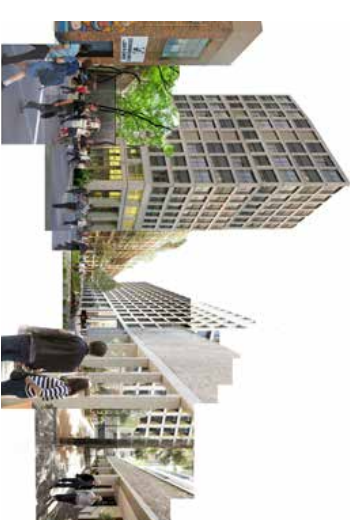


Fig. 7.2.22: Utilising height to benefit urban and open space relationship

Potential Outcomes

- 25 percent total open space (15% public open space and 10% contributory open space)
- Retain all moderate and significant trees (33%)
- Access to open space within 250m of Estate residents
- Range of heights from 4-32 storeys
- Retain elements of Waterloo Green

Potential Challenges

- Increased number of taller buildings
- Management challenge of increased open space
- Delivery challenge of green architecture

- Environmental performance of streets
- Environmental performance of open space
- Pressure on street widths for 'link-place' outcomes
- Large plots lack ability to provide diverse typologies
- 'Wall' effect created due to lack of break up of built form

HOW CONNECTED?

- Creates a greater hierarchy of streets and social spaces
- Reduces walking/journey times
- Creates more ground floor frontage with active street edges
- Creates smaller plots and a greater diversity of buildings
- Creates a variety of open spaces
- Supports a safe and connected pedestrian environment



Fig. 7.2.23. Creating hierarchy of movement and open space

- Greatest number of tall buildings
- Greater number of plots at various sizes
- Opportunity to form more fine grain developments
- Increased connectivity through the ground plane
- Greatest opportunity for non-residential ground plane
- Increased number of taller buildings
- Management and maintenance of increased public realm area

HOW CENTRED?

- Provides density and height at the centre of the site
- Provides sensitive interfaces with the existing context
- Creates a large and flexible park
- Provides a central activity centre supporting a local community gathering place at Waterloo Station



Fig. 7.2.24. Facilitating activity and community

- Activity centre created around the Metro Quarter
- Connection from new park to current Waterloo Green
- Provides most sensitive interface with built form context
- Increased built form with address to park
- Range in heights from 4-32 storeys
- Park is internalised within the Estate
- Compact centre creates largely residential quarters
- Flood management and mitigation

HOW DIVERSE?

- Finer grain uses that respond to the diverse character areas surrounding the Precinct
- Co-location of new uses with existing site qualities
- Adaptation and re-use of existing building fabric and spaces
- Diversity of plot sizes
- Provides a variety of open space typologies within 200 metres walking distance of Estate residents
- Co-location of open spaces with a variety of community uses



Fig. 7.2.25. Inter-mixing uses to encourage activity

- Activity centre created around the Metro Quarter
- Connection from new park to current Waterloo Green
- Provides most sensitive interface with built form context
- Increased built form with address to park
- Range in heights from 4-32 storeys
- Park is internalised within the Estate
- Compact centre creates largely residential quarters
- Flood management and mitigation

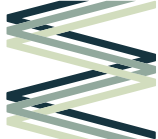
HOW BLUE?

- Reinforces the cultural significance of water
- Creates a direct connection between Waterloo Metro Station to sustainable transport links
- Reduces the urban heat island effect
- Maximises the integration of storm water management within the public realm
- Optimises child focused design and learning
- Increases the amount of built form frontage to high quality open space



Fig. 7.2.26. Use of blue and green elements form identity and improve open space enjoyment

- Activity centre created around the Metro Quarter
- Connection from new park to current Waterloo Green
- Provides most sensitive interface with built form context
- Increased built form with address to park
- Range in heights from 4-32 storeys
- Park is internalised within the Estate
- Compact centre creates largely residential quarters
- Flood management and mitigation



7.2.3 CONCEPT PLAN OPTIONS

Three concept plan options were explored to understand different place characteristics and outcomes

WATERLOO ESTATE



Fig. 72.27. A diverse use of built and open forms

Waterloo Estate explored a variety of parks, community services, spaces and events connected by fine grain pedestrian focused streets building on the diversity that characterises Waterloo's natural, social and built environment

Responds to the following community considerations:

- Responds to resident's aspirations for culture and community life with a variety of communal spaces for arts, recreation and recognition of Aboriginal culture and heritage.
- Respects the social significance of existing Waterloo Green for current residents.
- Acknowledges desire for improved housing and neighbourhood design with limited through traffic for quieter streets.
- Supports need for a diverse range of outdoor features for all peoples and ages.

WATERLOO VILLAGE GREEN



Fig. 7.2.28. Utilising green and blue elements as primary urban elements

Waterloo Village Green explored the characteristics of connecting parks, community services, spaces and events through a continuous walkable 'blue-green' corridor that connects people to Waterloo's unique natural and cultural heritage

Responds to the following community considerations:

- Recognises and celebrates the significant Aboriginal culture and heritage of the area.
- Responds to community desire for green spaces, gardens, trees and wildlife, and outdoor communal spaces for social connection and creativity.
- Acknowledges desire for improved access to transit, increased pedestrian pathways and limited through-traffic.

WATERLOO PARK



Fig. 7.2.29. Connecting local services and facilities through green spaces and routes

Waterloo Park explored the characteristics of a centralised Waterloo Village around the primary park with a walkable 'green line' connecting people to key community services, spaces and events

Responds to the following community considerations:

- Responds to community desire for open green spaces, gardens, trees and wild life.
- Addresses request to accommodate multiple public realm uses such as shaded resting areas, private courtyards, playgrounds, active recreation and community events.
- Supports need for cultural event spaces, a large community centre and recognition of Aboriginal culture and heritage.



OPEN SPACE APPROACH

Three approaches to the public domain and open space



WATERLOO ESTATE

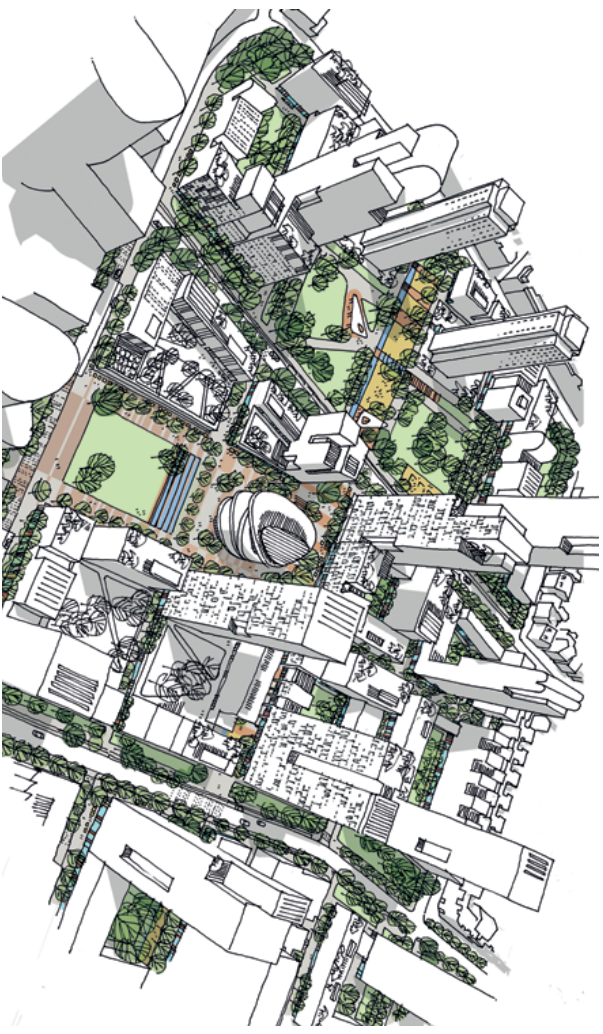


Fig. 72.30. Multiple built and open spaces provide a diverse identity

A social place celebrating the historical character of Waterloo with a mix of parks and streetscapes supporting a local village atmosphere

A combination of smaller parks, local retail streets and social corners offer residents and visitors greater choice of street life experiences and acknowledges the historical role of commerce in the area. The series of open spaces support a range of local resident amenity such as food gardens, playgrounds, arts and craft areas, Aboriginal culture spaces, sport courts, chess tables and BBQ areas for people of all backgrounds and ages to enjoy.



Fig. 72.31 View of Waterloo Green
Source: Tim Thomsby (illustrator), 2018

WATERLOO VILLAGE GREEN



Fig. 7.2.32. A central open space facilitates the community

A distinctive place which connects people to nature with enhanced connections to the Metro Station

The primary “Village Green” considers a diverse range of cultural, community and recreational amenity spaces for local residents and visitors of all ages to appreciate. Commercial, cultural, and community use spaces are concentrated along the east-west green boulevards anticipating pedestrian flows to and from the Metro Station.



Fig. 7.2.33 View of Village Green
Source: Tim Throsby (illustrator), 2018

WATERLOO PARK



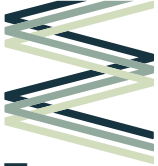
Fig. 7.2.34. Connecting the surroundings to a new hub

A comfortable place which acknowledges the Metro Station as a new regional ‘hub’ with a large community park

A new and expanded “Waterloo Park” is located next to the station. Consideration has been given for a diverse range of food, fitness, play, Aboriginal culture and community spaces within the park to make it safe and enjoyable for all ages. The park’s significant water features acknowledge the indigenous heritage of the site and naturally treat and store storm water. The park edges are activated by a mix of retail and community use facilities.



Fig. 7.2.35 View of Waterloo Park
Source: Tim Throsby, 2018



BUILT FORM APPROACH

Three approaches to urban and built form

WATERLOO ESTATE

Tall Buildings - Neighbourhood Level (16+ storeys)

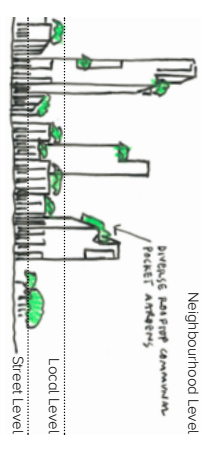
- Footprints between 600-675m².
- Maximised dual aspect or corner apartments.
- Excellent cross-ventilation opportunities
- Skinny 'pencil' tower that meets the ground.
- Potential for 'infill' tower within fine grain ground plane.
- Diverse distribution of height to follow rich and varied ground plane.
- High and low heights 'checker board' in plan to enable tight shared streets.

Mid Rise - Local Level (8-15 storeys)

- Building forms 'extruded' fine grain pattern to maintain vertical diversity allowing for micro sites within lots.
- Varied street scape with rich palette of form, material and character.
- Buildings 'frame' an internal network of publicly accessible open space allowing more corners.
- Roof scape provides communal green space with good amenity to support towers.

Low Rise - Street Level (1-6 storeys plus attic)

- Super fine grain similar to historic pattern allowing for adaptability to incorporate existing buildings, trees and topographical features.
- Increased permeability and intersection nodes.
- Maximum flexibility.



A broad range of residential building forms and heights distributed throughout the Precinct offer a variety of different housing options. Taller buildings are located in a manner which respects existing densities of the surrounding area. Streets are primarily defined by low-rise buildings offering a more pedestrian friendly experience.

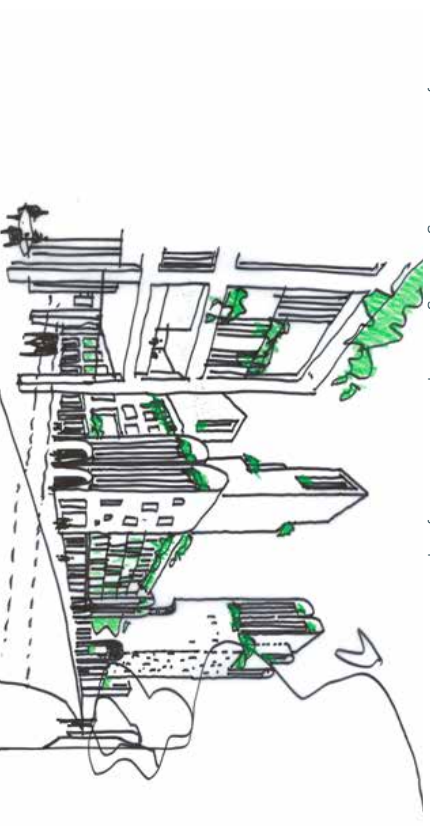
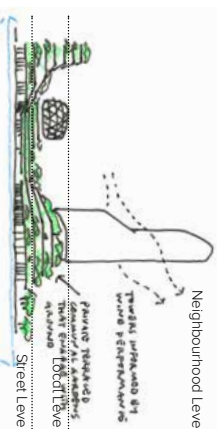


Fig. 72.36. Diversity in built form

WATERLOO VILLAGE GREEN

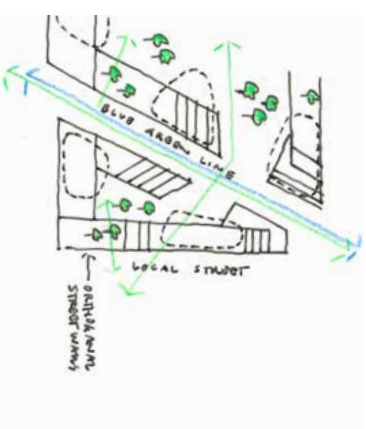
Tall Buildings - Neighbourhood Level (16+ storeys)

- Footprints between 600-900m².
- Responds to natural elements and environmental factors.
- Independent from plinth to allow for civic and community uses at base.
- Tall buildings become 'place' markers for each micro community.
- Opportunity for high performance buildings that minimise impacts to neighbours.



Mid Rise - Local Level (8-15 storeys)

- Buildings along 'disrupted' edge embrace the landscape with open air courtyards.
- Encourage change of scale through landscape between street and rooftop gardens.
- Height varied or terraced to introduce landscape at each level.
- Edges to Precinct perimeter adopt similar change in scale.



Low Rise - Street Level (1-6 storeys plus attic)

- Introduce finer grain that enjoys aspect to landscape edges.
- Reduced wind and heat impacts at street level.
- Increased green aspect at street level.

A variety of block shapes, residential building forms and heights allow for interesting architectural responses for home types and streetscapes with taller buildings located along wider east-west boulevards.

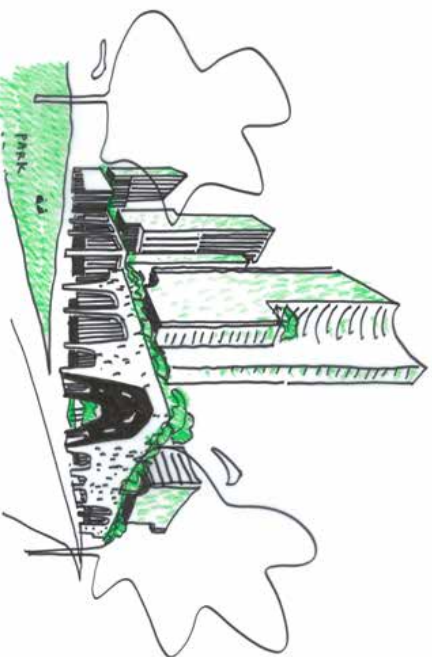
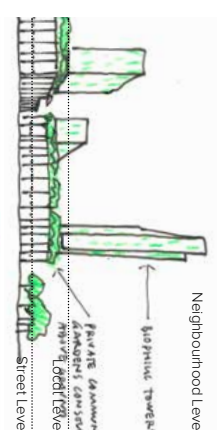


Fig. 7.2.37. Open space is framed by a diverse surrounding urban fabric.

WATERLOO PARK

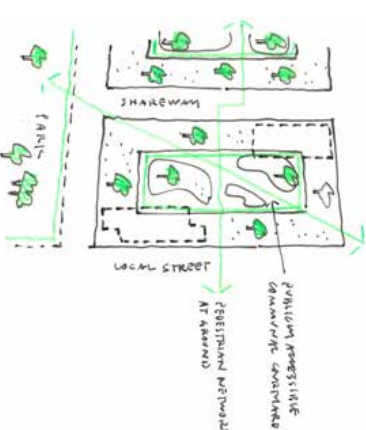
Tall Buildings - Neighbourhood Level (16+ storeys)

- Footprints between 600-900m².
- Oriented to maximise solar performance and views to open space.
- Disengaged from plinth to allow elevated private communal open space with good amenity.
- Tall buildings strengthen edges of key open space (eg. Central Park, New York City)
- Efficient floor plates.



Mid Rise - Local Level (8-15 storeys)

- Building forms continuous perimeter street edge.
- Supports rooftop gardens for private communal activity in winter.
- Building forms backdrop to street tree canopy scale.
- Maintains good surveillance to all internal courtyard and perimeter public domain.
- Finer grain and materiality to suit street scale.



Low Rise - Street Level (1-6 storeys plus attic)

- Finer grain to support flexibility and economic sustainability for all uses and activities.
- Potentially recessed or zero lot line to create depth and variety along edge.
- Opportunity for street accessed terraces.
- Encourages ground level publicly accessible courtyards.

Residential buildings are arranged in a courtyard style supporting more uniform building heights and opportunities for more local communal spaces throughout the neighbourhood. Taller buildings are located around the park and along George Street.

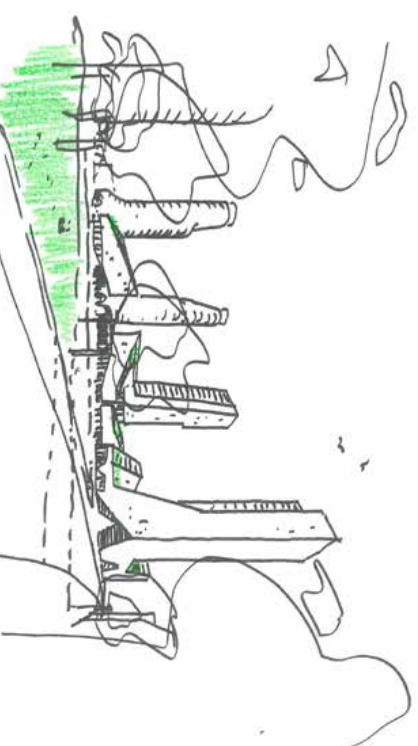


Fig. 7.2.38 Integration of green space and built form to key movement routes



STAGING APPROACH

Analysis and comparison of the possible staging and delivery of the three approaches provided an understanding of the strengths, potential outcomes and potential challenges

LOT STRUCTURE

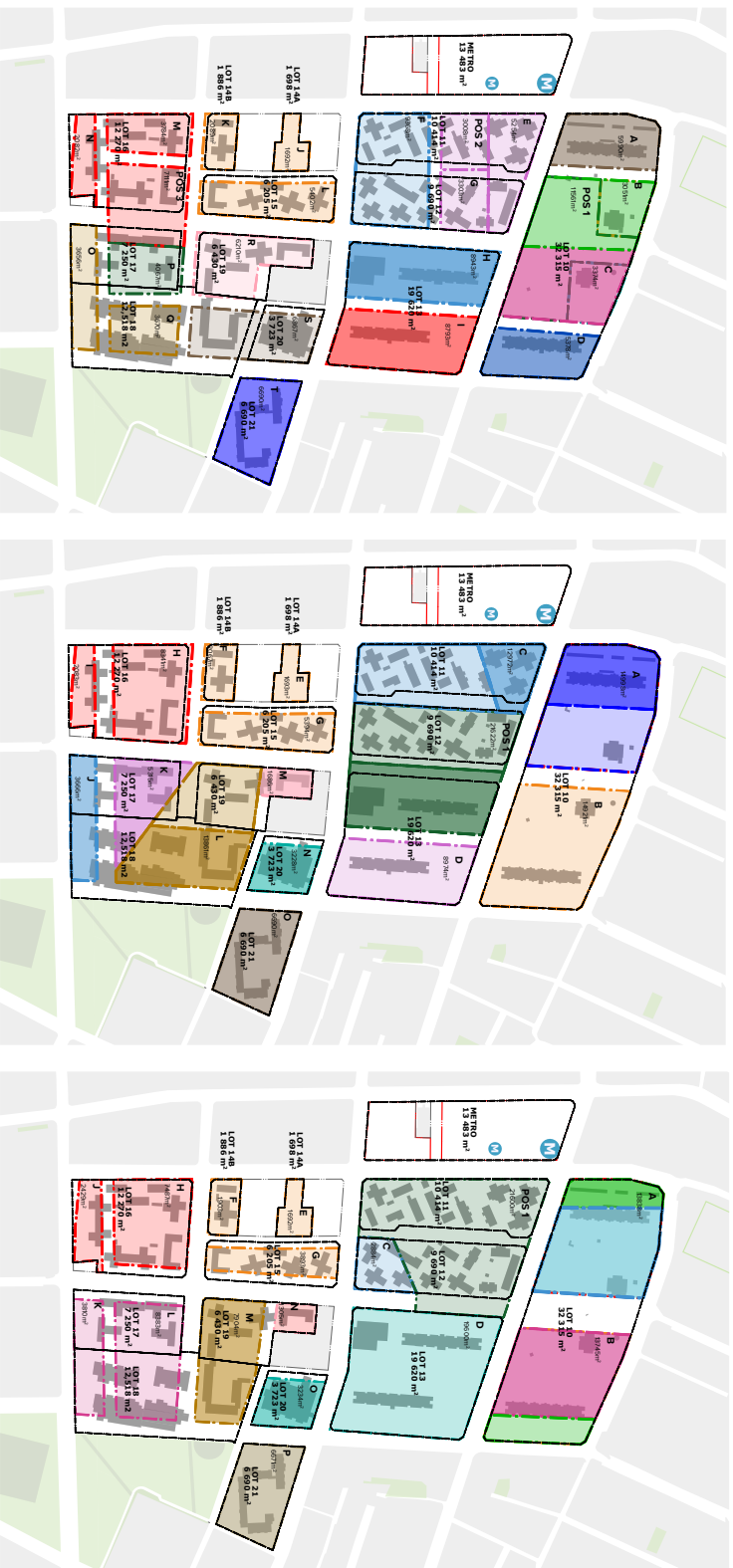


Fig. 72.39. Indicative future lot arrangements

STAGING 5 YEARS

5 YEAR COMPARISON



Fig. 72.40. Comparison of initial stages of development



STAGING 10 YEARS

10 YEAR COMPARISON



WATERLOO ESTATE



WATERLOO VILLAGE GREEN



WATERLOO PARK

Legend
Potential Staging Lots

Fig. 72.41. Comparison of mid-stages of development



STAGING 15 YEARS

15 YEAR COMPARISON



WATERLOO ESTATE

Fig. 72.42. Comparison of latter-stages of development



WATERLOO VILLAGE GREEN



WATERLOO PARK





STAGING 20 YEARS

20 YEAR COMPARISON

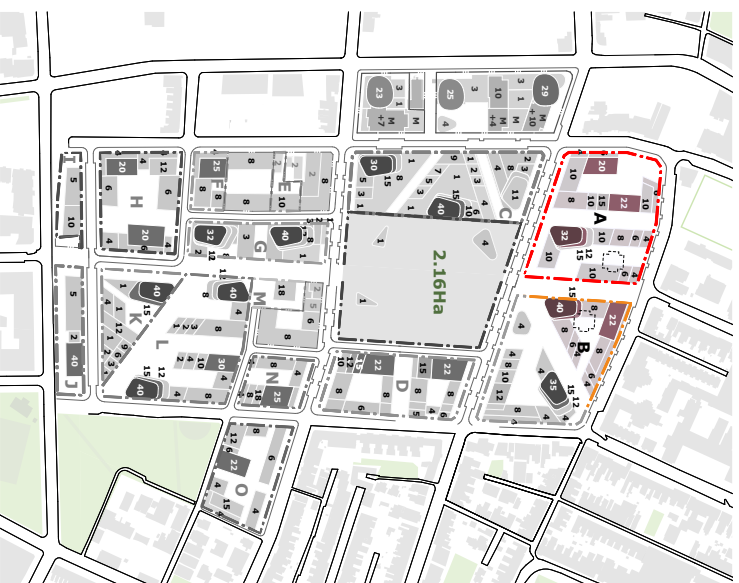
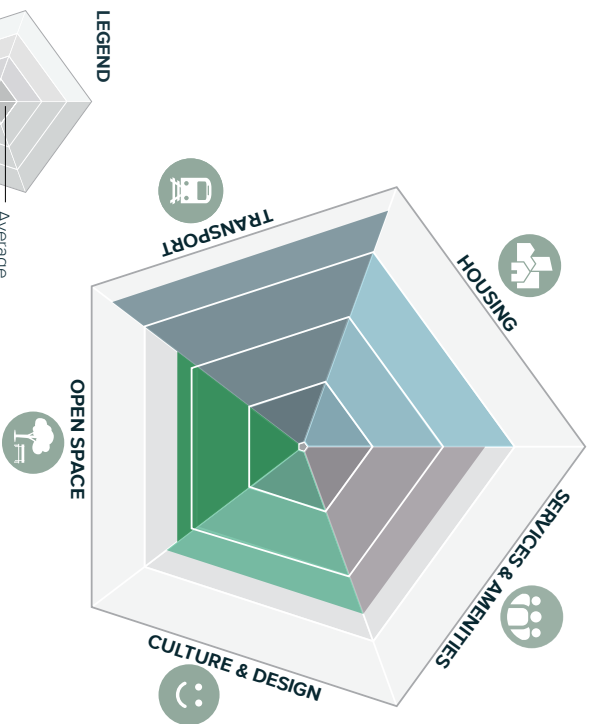


Fig. 72.43. Comparison of final stages of development

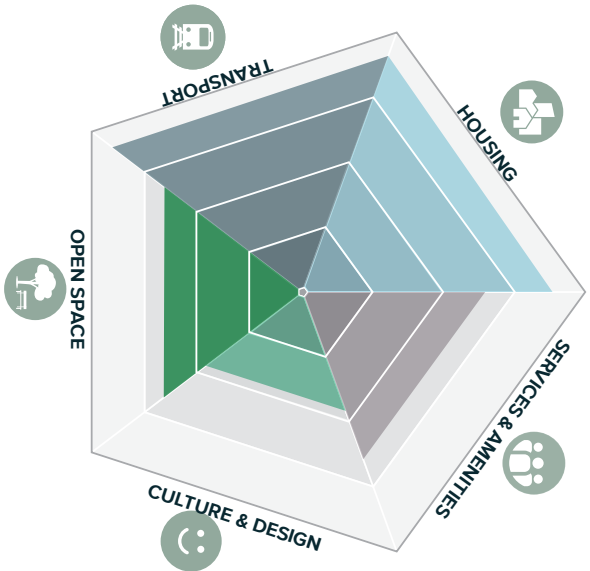
7.2.4 OPTIONS ASSESSMENT

PLACE PERFORMANCE MEASURES

WATERLOO ESTATE



WATERLOO VILLAGE GREEN



WATERLOO PARK

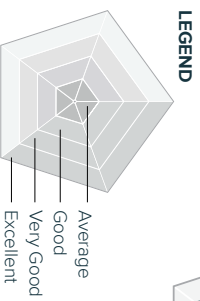
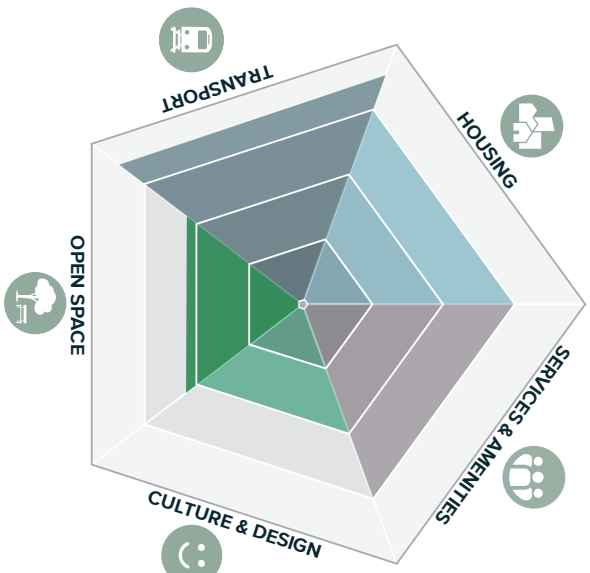
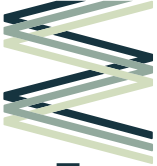







Fig. 72.44. Place Performance Measures



PLACE PERFORMANCE SCORECARD

CONCEPT PLAN OPTIONS

OBJECTIVE	MEASURE	METRIC	CONCEPT PLAN OPTIONS								
			Base Target	Stretch Target	Waterloo Estate	Village Green	Waterloo Park				
 Transport & Connectivity A well connected inner city location.	Walk Score	Walkability measure	95	100	100	98	95				
	Intersection Density	Percentage increase of intersection density over existing place per km ²	35%	45%	112%	54%	100%				
	Block Size	Maximum dimension of block sizes	S	40%	S	50%	S	S	18%		
			M	30%	M	25%	M	M	41%		
	L	30%	L	25%	L	L	21%	M	41%		
Streets as Places	Number of potential activities per street	3 activities / block	5 activities / block	3	3	3	3				
 Open Space & Environment High quality public spaces and a sustainable urban environment.	Tree Retention Ratio	Percentage of existing high and moderate value trees retained	50%	70%	42%	45%	41%				
	Tree Replacement Ratio	Replacement ratio for every high and moderate value tree removed	3.0 : 1	3.6 : 1	3 : 1	3 : 1	3 : 1	3 : 1			
	Green View Index	Percentage of canopy cover visible in the public domain at eye level	30%	36%	66%	50%	46%				
	Landscape Replacement Area	Percentage of	80%	100%	55%	78%	59%				
	Building Entries	Number of building entries per 100 metres of building facade	10	15	11	10	12				
 Culture & Design A safe and welcoming place to live and visit.	Adaptable Ground Floor Frontage	Linear metre of active ground floor space	5,000 m	8,000 m	5,385 m	4,885 m	4,263 m				
			Floor to floor ceiling height	4.5 m - GL 3.6 m - L1	5.0 m - GL 3.6 m - L1	4.5 m - GL 3.6 m - L1	4.5 m - GL 3.6 m - L1	4.5 m - GL 3.6 m - L1			
	Lot Frontage Widths	Mix of lot frontage widths (XS, S, M, L & XL)	Depth and height of pedestrian shelter at the ground plane	3.2 m H x 3m D	3.2 m H x 3m D	3.2 m H x 3m D	3.2 m H x 3m D	3.2 m H x 3m D			
				XS	20%	XS	20%	XS	20%	XS	2.5%
				S	20%	S	20%	S	S	10%	S
M	20%	M	20%	M	22.5%	M	M	32.5%	M	2.5%	
L	20%	L	20%	L	55%	L	L	45%	L	50%	
XL	20%	XL	20%	XL	20%	XL	XL	10%	XL	15%	
 Housing A fully integrated urban village of social (affordable rental) and private housing.	Micro-Neighbourhoods	Number of micro-neighbourhoods	6	9	9	10	8				
	Vertical Village	Ratio of private communal space per resident	1 / 50 residents	1 / 40 residents	1 / 50 residents	1 / 45 residents	1 / 45 residents				
	Open Space Accessibility	Percentage of building entries to be within 100m of open space	80%	100%	95%	95%	93%				
 Services & Amenities New improved services, facilities and amenities to support a diverse community.	Productive Garden Space	Area of productive garden provided per bedroom	0.5m ² / room	0.6m ² / room	0.5m² / room (20% in public domain)	0.5m ² / room (25% in public domain)	0.5m ² / room (30% in public domain)				
	Parks as Places	Number of activities per public open space	10 activities / park	12 activities / park	Waterloo Green - 11 George Street - 3 Urban Plaza - 5 South Park - 10	Central Park - 14 George Street - 3	Primary Park - 14 George Street - 8				
	Edible Landscapes	Percentage of edible species	30%	45%	30%	30%	30%				

LEARNINGS

OBJECTIVE

CONCEPT PLAN OPTIONS

Waterloo Estate

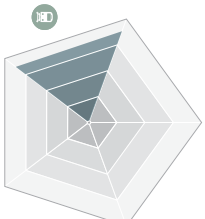
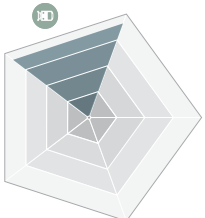
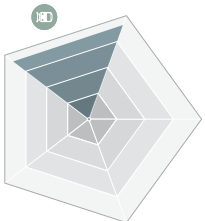
Village Green

Waterloo Park

KEY LEARNINGS



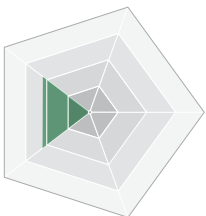
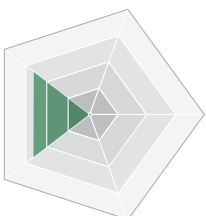
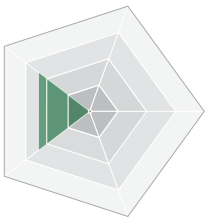
Transport & Connectivity
A well connected inner city location.



All concept plan options perform very well, given the proximity to the Metro station and a walkable street grid network, however the Waterloo Estate and Village Green concept plan options perform slightly better.



Open Space & Environment
High quality public spaces and a sustainable urban environment.



All concept plan options perform well in terms of urban greenery. However, the Village Green concept plan option performs slightly better than the Waterloo Estate and Waterloo Park concept plan options because of better tree retention results and landscape replacement area.



Culture & Design
A safe and welcoming place to live and visit.



The Waterloo Estate and Village Green concept plan options score highly. However, the Waterloo Estate concept plan option scores the highest because it provides the greatest amount of adaptable ground floors, building entries and lot diversity, contributing to a place with fine grain and high adaptability.



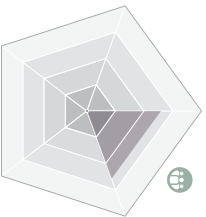
Housing
A fully, integrated urban village of social (affordable rental) and private housing.



While the Waterloo Park and Village Green concept plan options provide quality housing density, the Waterloo Estate concept plan option provides the opportunity an additional micro neighbourhood whilst providing a comparable diversity of dwelling types with a high degree of open space accessibility.



Services & Amenities
New improved services, facilities and amenities to support a diverse community.



The diversity of parks within the Waterloo Estate concept plan option provides a substantially increased opportunity for productive gardens, place activation and edible landscapes allocated across the precinct.

