

Attachment B7(b)

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

3.0 APPROACH

URBAN DESIGN

ADDRESSED IN

PLANNING PROPOSAL REQUIREMENT

The built form should be developed in line with the design process described in the NSW Government Architect Better Placed strategy.

ADDRESSED IN

Urban Design Report
Appendix 710

A full review of design options, including redevelopment, renovation and adaptive re-use options

Chapter 3.0
Appendix 72

SSP STUDY REQUIREMENT

ADDRESSED IN

Urban Design

2.5 Prepare an options analysis that examines a variety of appropriate options for the distribution of land use and building bulk in relation to the layout of the public domain. Document the various options including an assessment of how the options respond to the identified constraints and opportunities, and have been used to inform the final proposal.

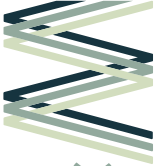
Chapter 3.0
Appendix 72

The renewal of Waterloo South into a great urban place that delivers on the Waterloo vision and objectives is a key part of Waterloo South's transformation that requires a unique, balanced and evidence based approach

This chapter provides an overview of the balanced and evidence based approach to the development of an indicative Concept Proposal for Waterloo South. This informs every stage of the masterplan process from early design thinking, where unique scenarios and ideas are investigated, through strategic directions to be tested against the project vision and principles, to concept plan options that respond to key design drivers and explore different approaches to illustrate the vision and design principles for Waterloo South. A holistic approach to the Estate was used during options testing to develop a Preferred Masterplan that considered the renewal of the overall Estate. The staging of planning for the Estate into three stages, with Waterloo South being delivered ahead of Waterloo Central and Waterloo North provides the opportunity to renew areas of the Estate that will have the least impact on existing residents whilst allowing key public domain infrastructure to be delivered early.

The approach to the renewal of Waterloo South into a great urban place is based on:

- An integrated multidisciplinary project team, with project specific skills and experience, passionate about making a difference and being part of a broader purpose, to benefit our cities and neighbourhoods
- Adverse project team including experienced and emerging multi-disciplined designers and technical specialists, with an emphasis on attracting those from an Aboriginal heritage background to support cultural diversity and thought leadership
- Leading best practice methodology with an evidence based and public domain led approach
- An iterative design process of analysis, propositions, evaluation, benchmarking and review
- Technical planning studies and Technical and Innovation Working Groups (TIWGs) that provide an evidence base for decision making and space for innovation, recognising the interrelationship between different technical considerations
- Placemaking best practice in place based integrated urban design
- Engagement with stakeholders and the community
- Governance comprised of collaborative advisory groups and Design Review Panels



3.1 METHODOLOGY AND DESIGN PROCESS

A methodology bespoke to the masterplan process that is tailored to the unique qualities of the project, place and community, to ensure best practice public domain led and evidence based design excellence approaches are embedded in the process

AN INTEGRATED AND INNOVATIVE APPROACH

The methodology for the Waterloo Estate is an **Integrated Working Model** that encompasses:

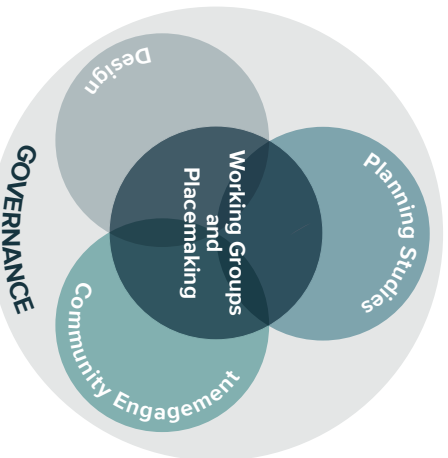


Fig. 3.11 Integrated working model

Planning studies comprised of global, best-practice case-study research and analysis at every stage to understand the elements that make up great urban places and to establish a unique set of benchmarks appropriate to Waterloo.

Stakeholder and community engagement throughout the process, from establishing a vision, through baseline summaries and options testing, to a preferred option, to provide feedback on key issues and inform the development of the Waterloo South Indicative Concept Proposal.

A **Design Process** that is public domain led, unique, balanced and evidence based, exploring a range of propositions and scenarios, including technical consultant studies to establish baselines, opportunities for innovation, and review of proposals for technical performance.

Design **Working Groups** that synthesise the Planning Studies, Community Engagement feedback and Design Process, to measure the performance of different options and guide design development.

Placemaking framework and strategy, using case study analysis, to develop a set of Place Performance Measures specifically for Waterloo to aid decision making and support a balanced and evidence based approach.

Governance comprised of Design Review Panels and advisory groups that provide an ongoing review at each stage of the process, as an integral part of a design excellence pathway approach.

PROJECT FRAMEWORK

The methodology commences with the establishment of the Project Proposition and the formation of the Project Vision, Objectives and Principles with the client, through stakeholder and community engagement.

An analysis of the context including specialist technical consultant studies provides a baseline that, with the Project Proposition, Vision Principles and Objectives, sets the Project Framework. This becomes the evidence base for the design process and the organisation of the many technical streams into five main themes which are used throughout the design process to present the design work and gather feedback.

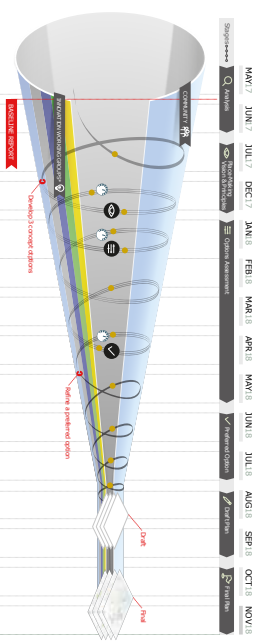


Fig. 3.1.2 The masterplan design process

- Legend:
- Assessment against performance measures
 - Charities
 - Options testing
 - Preferred option
 - Stakeholders' reviews and workshops
- Technical and Innovation Working Groups (TIWG's):
- Sustainability & Infrastructure
 - Environment & Open Space
 - Transport, Streets & Connectivity
 - Economics, Retail, Services & Arts/Culture
 - Housing Diversity & Livability

The methodology is a unique, balanced and evidence based approach, to the development of the Waterloo South Indicative Concept Proposal, comprised of the Project Framework which establishes a base and the Design Process that subsequently follows

DESIGN PROCESS

The design process that follows integrates propositions with technical inputs, testing, workshops, community and stakeholder engagement, and design reviews in an iterative process that, along with analysis and performance measures, guides the development from early propositions, to plausible options to be explored and tested, to a preferred option.

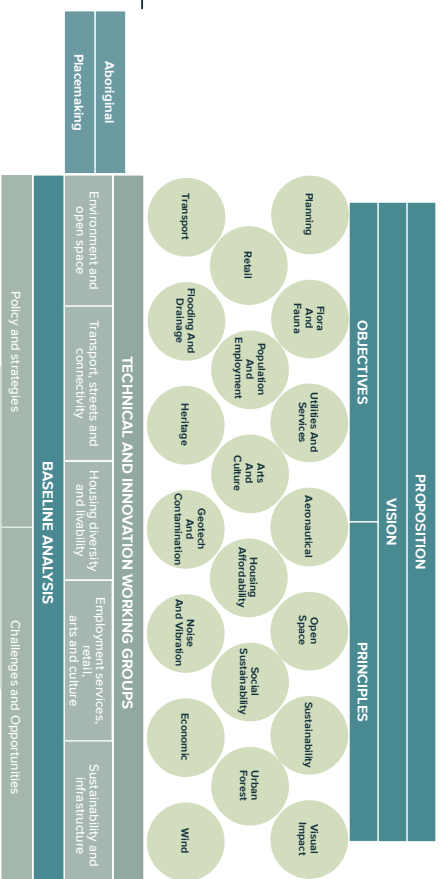
Technical and Innovation Working Groups (TIWGs) of different consultants explore key cross-disciplinary themes, to investigate opportunities for innovation and interrogate the Baseline Analysis, whilst ongoing Placemaking and Aboriginal cultural studies continue to further augment and refine the design approach.

The Baseline Analysis presents opportunities and challenges that, along with the Placemaking Framework, results in Key Design Insights and early design ideas to guide development of the design thinking. The Placemaking Framework is used to tell the special story of the place and the community, so that the design process recognises and strengthens the existing attributes that makes them unique and special. In a balanced and evidence based approach that is unique to the Estate.

Early design thinking (refer to Appendix 7.2) tests various scenarios and combinations of parameters to explore the resultant outcomes in terms of spatial organisation, built form responses and urban character. Uniquely different approaches are tested to their limits in order to understand the place characteristics, opportunities and challenges that emerge from each.

Stakeholder and Design Workshops, and reviews with Project Working Groups and the Government Architect of NSW, provides critical analysis and feedback in an ongoing governance model. Place Performance Measures, derived from ongoing Case Study

PROJECT FRAMEWORK



DESIGN PROCESS

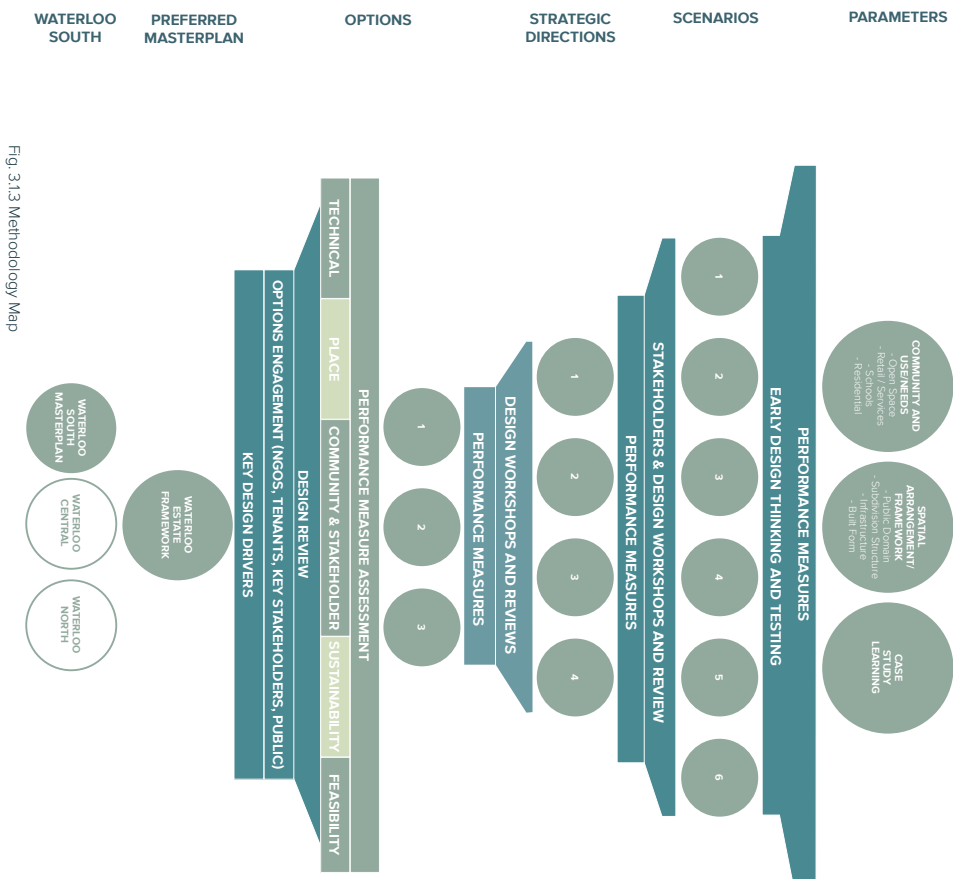


Fig. 3.13 Methodology Map



Fig.3.21 Options testing models

3.2 MASTERPLAN PROCESS

- 3.2.1 **Baseline and Context Analysis**
- 3.2.2 **Visioning and Engagement**
- 3.2.3 **Placemaking and Case Study Analysis**
- 3.2.4 **Early Design Thinking and Scenarios**
- 3.2.5 **Strategic Directions**
- 3.2.6 **Concept Plan Options**
- 3.2.7 **Options Testing**
- 3.2.8 **Preferred Masterplan 2019**
- 3.2.9 **City of Sydney Alternate Plan**
- 3.2.10 **Consultation with City of Sydney**
- 3.2.11 **Kit of Parts (Non-Residential Uses)**
- 3.2.12 **Features**

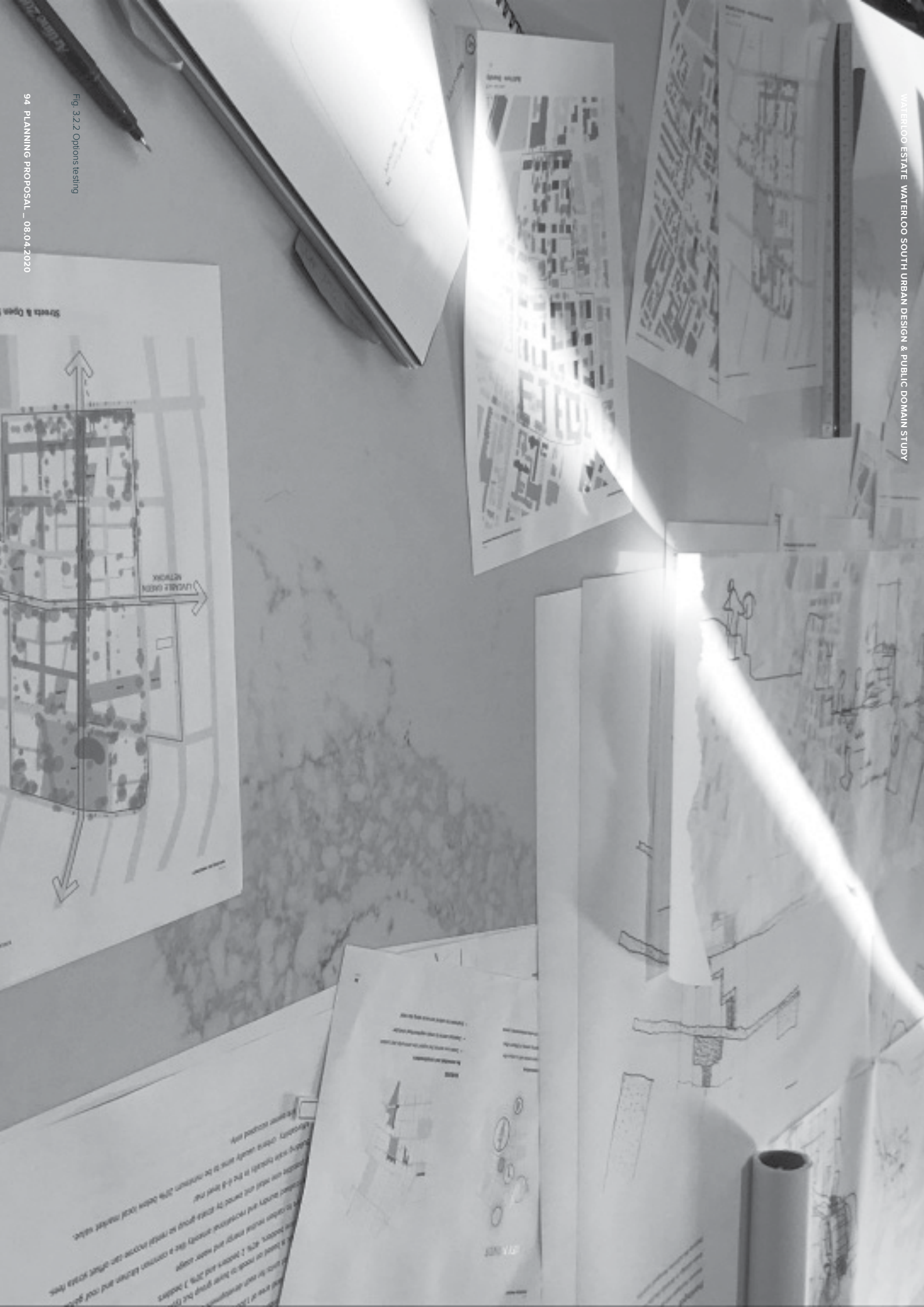


Fig. 3.2.2 Options testing

3.2.1 BASELINE AND CONTEXT ANALYSIS

The masterplan process for Waterloo South has been evidence based, technically integrated, iterative, consultative, and benchmarked against global best practice case studies and Place Performance Measures developed uniquely for the Estate

The Estate is home to many people from different walks of life, each with a connection to a place that is distinctive in its topography, landscape, extensive social housing and strong sense of community. It has evolved over time and is comprised of many layers. The first step in the masterplan process has been to explore and analyse those social and physical layers to understand the unique qualities of the people and place.

Waterloo has a complex cultural identity, being an important place for Aboriginal people as the traditional homeland of the Gadigal people, and a significant place for many other Indigenous people through more recent, cultural and political events and movements. It is highly multicultural, with 58% of residents born overseas compared to 47.7% in the City of Sydney and 36.7% in Greater Sydney. Currently there is also a high proportion of residents over 65 compared to the City of Sydney and Greater Sydney, which influences the needs in the area, and so the quantum and types of housing, services and amenities provided will need to grow and evolve over time to meet the needs of changing demographics.

Many physical layers of the Estate have been explored and investigated to understand the opportunities and constraints to be considered in its renewal. These include the traditional landscape and what is still evident, the evolution of the block structure and its degree of permeability, the surrounding open space network and its connectivity, existing trees and opportunities for retention, interfaces with adjacent areas and what may change over time, important views and vistas to and from the Estate, and the distribution of built form density and scale. Related to these layers were also considerations for stormwater and flooding mitigation, and the location of existing infrastructure and potential upgrade requirements.

The many layers were grouped and investigated by **Technical and Innovation Working Groups (TIWGs)** under five themes: Environment and open space; Transport, streets and connectivity; Housing diversity and liveability; Employment, services, retail, arts and culture; and Sustainability and infrastructure. The TIWGs were comprised of consultants from different disciplines who examined the layers from different perspectives to understand their broader implications and apply those insights to an understanding of the opportunities and constraints as part of the context and baseline analysis.

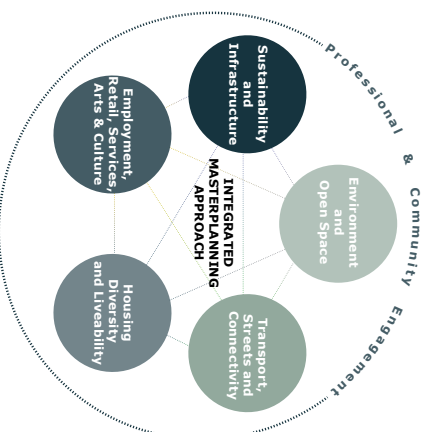


Figure 3.2.3 The Technical and Innovation Working Groups (TIWGs)

One of the key layers is the street and block structure. The social housing developments gradually replaced Waterloo's terrace houses and altered the fine grain block pattern to what it is today. Currently the Estate is an 'island', physically disconnected from the surrounding context and comprised of large blocks, which does not encourage walking and cycling. With an increase in residents, services, amenities and employment opportunities, an increase in ground level permeability with priority for pedestrians and cyclists will better connect people to places and other forms of active transport including the new metro station.

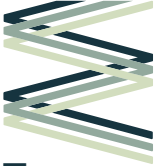
Another key layer is housing diversity and liveability. The existing buildings, that met the standards of the time when constructed, are distributed across the Estate in distinct groupings ranging from low-rise 3-4 storey walk-up to medium-rise 5-8 storey apartment buildings, to high-rise 17 storey slab buildings

and tall 30 storeys tower buildings, with an average age of 44 years against a benchmark economic life of 60 years. Their design and construction are not inherently flexible and their campus style setting with poorly defined private, communal and public open space does not make a positive contribution to the quality of the open space or public domain. None of the existing buildings would meet the current expectations for liveability, servicing and amenity that new buildings would offer, and constraints such as poor orientation, low ceiling heights, inadequately sized or no balconies, low noise and thermal insulation, and inflexible layouts and construction, does not currently make them very suitable or desirable for adaptation into social or private housing.

Other broader considerations, related to the potential for new buildings, include the maximum height of buildings in relation to Sydney Airport's PanOps (Procedures for Air Navigation Services - Aircraft Operations), solar access to areas within and adjacent to the Estate, and the effects of external noise sources, wind conditions, and air quality at different heights.

The context and baseline analysis reveals Waterloo's ongoing cycle of growth and renewal. It has changed from a thriving wetland, to a refuge for displaced Gadigal people, to a place of early industry and workers housing that accommodated many new immigrants, to the larger social housing developments in its current form. The last evolution gradually replaced the original buildings and block pattern. Each cycle has brought with it changes to the building stock to suit the particular needs of the time, resulting in a lot pattern and built form that is layered and diverse. The context and baseline analysis suggests that a layered response, with a diversity of uses, height and built form, could be both appropriate and contextual in the ongoing cycle of renewal.

Refer to Appendix 71 for further information



KEY DESIGN INSIGHTS

Insights drawn from the context analysis inform the renewal of Waterloo into a great urban place

The key design insights draw together the research, analysis and investigation of the twenty one technical studies and other supporting technical studies and combine the constraints, opportunities and key aspects of the context analysis. They develop themes that cross cut between the technical aspects of the analysis that inform the masterplan urban design and public domain response.

Out of the context and baseline analysis of the Estate, **Ten Key Design Insights** have been established to inform the development of a masterplan that would support a diverse and growing community. These cover a broad range of considerations including:

- Waterloo's role in the '30 minute city'
- The need for new and hard working public spaces
- Streets that both connect and are places in themselves
- Increased pedestrian permeability to connect people, places and transport
- Increased ground level activation and access to services
- Integration of the natural environment, sustainability and access to nature
- The celebration, respect and incorporation of Aboriginal heritage and design
- Built form that is flexible and adaptable over the life of the masterplan
- Need for activity centres with more services, retail, cultural, and leisure opportunities
- The need to support the health and well-being of a diverse community through new social and cultural infrastructure

1 Waterloo needs to work for global and local Sydney



Fig. 3.2.3 Key design insight 1
Source: Eveleigh Railway Workshops 1926, Alchemy, Eveleigh Stories

Increased density at Waterloo supports Sydney's growth as set out in 'A Metropolis of Three Cities'; Connecting Waterloo to local and global opportunities is vital

The analysis shows how significant emerging employment areas are walkable or within 30 minutes on public transport from Waterloo.

- Connections to surrounding employment areas can be reinforced to help increase access to opportunities for Waterloo residents and those who reside in surrounding neighbourhoods. In fostering such connections with and around Waterloo, new opportunities for employment, retail, services, infrastructure can emerge.
- Social infrastructure is required to support increased and healthy access to opportunities, and the education, and health needs that a diverse community requires for people to take advantage of them.
- Diverse housing models can also support workspaces.
- The culture and heritage of 'productive' Waterloo can be celebrated as 'Made in Waterloo'.

2 Waterloo needs new and harder working public spaces



Fig. 3.2.4 Key design insight 2
Source: City of Sydney, 2012

The Waterloo community will grow significantly over time and will place greater pressure on existing and future public spaces

The built form that will be delivered to house this larger community will place greater pressure on the public spaces people share. The analysis sets out the needs for new public domain as part of this growth.

- Enhanced connections can be made to surrounding parks like Alexandria Park and Redfern Park.
- A new public park can provide facilities for all ages to play, relax and exercise.
- New pocket parks and green spaces can be integrated.
- New and existing trees and landscape features can give character to the public spaces and support the areas' important ecology.
- New community gardens and allotments can celebrate the 'productive' history of Waterloo and offer the community the opportunity to grow their own food.
- The design of streets and spaces can adapt over time to the changing needs of the community.
- The integration of art and culture through the public domain can reflect the identity of Waterloo and assist in developing a sense of place for residents.

3 Waterloo's streets need to be great to move through and enjoy



Fig. 3.2.5 Key design insight 3
Source: Eats Beats Street, Kensington Street, 2018

With a larger community, the existing streets will need to adapt to balance dual roles, providing legible and safe movement and as active places for people to use

The study shows how the existing streets, although varied in character and use, are primarily residential, with little active frontage. In places of increased density, the streets need to be both legible and safe for movement, as well as active places for people to use.

- Streetscape design can support people using the street and those moving through it.
- Integrated movement systems for pedestrians, cyclists and public transport can help to reduce reliance on and use of private cars.
- Streets can support public use by incorporating places to sit, meet and play.
- Integrated infrastructure can support the programming of the public domain for art, cultural and community activities.
- New public open space can be connected with regional walking and cycling paths.
- Traditional public space offerings can be complemented by vertical green spaces that utilise innovative approaches.

4 Waterloo needs to be a more walkable place



Fig. 3.2.6 Key design insight 4
Source: Want Community? Build Walkability, Sarah Kobos, 2016

A larger Waterloo community will require enhanced walkability with new connections and a finer grain network for increased health and well being

Waterloo is already well located for walking, to local amenities, centres and activities. Increased walkability will help create healthy communities where the things you need and use will be closer and more accessible.

- Better walking environments help reduce private car usage, with good walkable connections to local transport including the metro, bus links and car share schemes.
- Trees and landscape elements can create shade and cover for walking routes all year round.
- Routes and loops can be made legible and clear with good way-finding, places of interest and activities at key points.
- Active frontages and a diversity of uses can create interest at ground level.

5 Waterloo's ground level needs to work hard

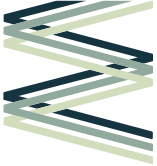


Fig. 3.2.7 Key design insight 5
Source: Preview: Sydney Contemporary 2018, Andrew McIlroy, 2018

Over time, the size of the Waterloo community will increase, but the area of the Estate will not change

The 'ground level' of the Estate therefore will need to work hard to deliver the increased services the community needs. Increased residential density needs the ground plane to balance safety and accessibility with activity and enjoyment.

- Community spaces and community buildings can be flexible and multi-functional. They can adapt to a growing community's needs over time.
- Achieve 'activation ready' spaces.
- Streets and public spaces can be programmed with uses and activities that help create safe, vibrant and interesting places throughout the day and night.
- Local shops, services, health centres and public places can be integrated with residential buildings.



6 Waterloo needs to integrate sustainable design

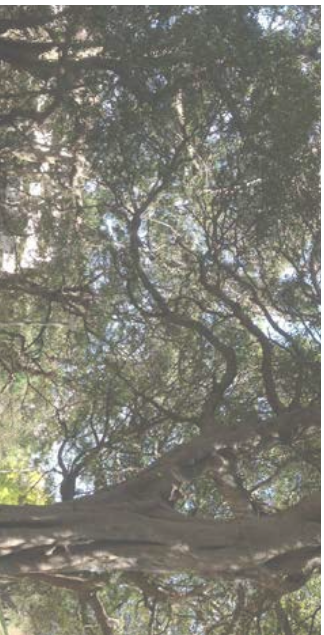


Fig. 3.2.8 Key design insight 6

Waterloo Estate has existing natural assets, and increased connectivity provides opportunities for planning and design by integrating the natural environment from the outset

The renewal of urban areas requires, new buildings and spaces to meet sustainability targets throughout the process.

- To reduce the cost of living through energy efficient spaces and places.
- The urban forest can be enhanced to enrich the cultural, ecological and social importance of the canopy.
- The Estate can contribute to the Sydney 'Green Grid':
- Design can integrate climate change mitigation and adaptation for more extreme weather, specifically flooding and heat waves.
- Design can integrate green walls, green pavements and roofs, and bio-retention systems.
- Planning can be adaptable to new technologies that create opportunities for cleaner and more efficient living, such as electric vehicles.
- The community can learn from traditional knowledge systems and practice of custodianship to instill a culture of sustainability within the Estate.
- Streetscape design can use the natural topography and integrate water sensitive urban design (WSUD) strategies to assist with flood mitigation.
- Biophilic design can help contribute to health and productivity through access to nature.

7 Waterloo celebrates and respects its' Aboriginal heritage



Fig. 3.2.9 Key design insight 7

Waterloo and the Redfern area has significant meaning for the Aboriginal and Torres Strait Islander people. This important history must be respected

Aboriginal culture should be incorporated into the design of the future Waterloo Estate from the outset.

- To recognise and acknowledge the key events in Aboriginal and Torres Strait Islander history that have taken place within the Estate's buildings and public spaces, and in adjoining areas.
- To recognise the history of the Aboriginal community's displacement, and their part in the creation of a diverse and inclusive community, through inclusion of support and employment services specifically geared towards Aboriginal people.
- To embed Waterloo within Sydney's emerging Ochre Grid.
- To celebrate the Gadigal landscape features such as Mount Carmel that have strong physical connections to the use of the landscape as a 'place of abundance', and as a strategic look out connecting Sydney Harbour to Botany Bay.
- To incorporate the Aboriginal seasons when designing spaces and buildings.
- To appreciate, learn from and support contemporary urban Aboriginal lifestyles through the inclusion of facilities and services that cater to the needs of the ongoing Aboriginal population in the area.

8 Waterloo's built form needs to be adaptable to change over time

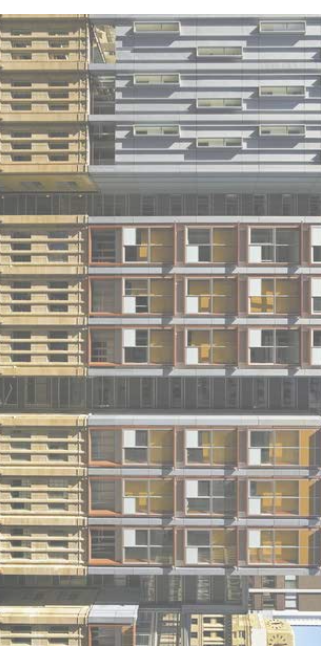


Fig. 3.2.10 Key design insight 8
Source: TonkinZulianiGreer Architect, 2005

Waterloo's lot structure and buildings have adapted through cycles of renewal – today the overlay of terraced streets and campus buildings give the Estate a distinctive residential character

In the coming cycle, the increase in the size of the community will require flexible plots, flexible buildings and flexible unit typologies.

- To plan for the range of housing types, tenures and providers that will help create a mixed community.
- To build adaptable accommodation that meets the specific needs of the diverse communities.
- To design buildings that are suitable for the changing needs of occupants, throughout their lifetime.
- To recognise the Aboriginal concepts of kinship and extended family that require homes to be flexible to accommodate regular temporary guests.
- To incorporate the smaller, historic plot structures alongside large plots to encourage fine grain housing models in contrast to larger sites.

9 Waterloo needs a balanced new activity centre



Fig. 3.2.11 Key design insight 9
Source: 'This Month in Atlanta: July 2018: Emory University, 2018

Waterloo's community will require new activity centres with new retail, culture and leisure services

Although there are clusters of existing services nearby, and adjoining centres in Redfern Village and Green Square, Waterloo doesn't currently have a defined centre. Communities of increased density require increased retail services to support daily needs.

- To address the under provision of services within the Estate and deliver the policy requirements for retail, social infrastructure and amenity.
- To support the valuable existing retail and cultural places that the community already enjoys.
- To strengthen walkable links to adjoining centres such as Green Square and Redfern Village.
- Waterloo Metro Station can be a centre of gravity and meeting place for the community.
- Activity centres need to be adaptable to future trends in retail and social infrastructure.

10 Waterloo needs to promote health and well being across the diverse community



Fig. 3.2.12 Key design insight 10
Source: TheSoucalista: Home Interior Design & Decoration Ideas

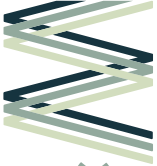
Waterloo is a community of many different cultures, but within the Estate there are many similar social challenges that these communities face

As the Estate changes – bringing people with different backgrounds together – new social, creative and cultural infrastructure is required to address these challenges and promote physical and mental well-being for all.

- The existing cultural diversity of Waterloo can be an important part of its future.
- New social infrastructure can promote the well-being of both existing and new people within a diverse community.
- New cultural and creative infrastructure to support the social cohesion and well-being of the diverse community.
- To address the shortage of community facilities and increase access to services that target people's physical and mental well-being.



Fig. 3.2.13 Bakery Lane, Brisbane



3.2.2 VISIONING AND ENGAGEMENT

Key issues raised by community and stakeholders inform the masterplan response

The approach to early design thinking, after completion of the Estate wide context and baseline analysis, followed an extensive visioning and engagement process. This was designed to ensure input from a broad range of people of different ages and cultural backgrounds, as well as non-Government organisations, and community groups with a strong presence in the area. The visioning phase of the community engagement program was extensive, with a range of opportunities for the community to have their say, with approximately 1,570 participants that included residents from the Waterloo Social Housing Estate, residents from the private sites within the Estate, the surrounding neighbourhood as well as from the broader community, reflecting the diversity of the area.

The findings from the visioning phase were organised and presented according to five themes that were developed with key community and other stakeholders: Culture and community life; Transport, streets and connections; Housing and neighbourhood design; Community facilities, services and shops; and Environment and open space. The findings highlight the community desire for a safe, welcoming and vibrant place that:

- Captures Waterloo's unique identity
- Retains and strengthens its culture and diversity
- Respects its Aboriginal culture and history
- Maintains its strong sense of community

The community also value the natural environment, green open space and trees. The visioning and engagement process informed a set of vision principles, reflecting the community's vision for the area, that guided early design thinking and preparation of scenarios for further design work.

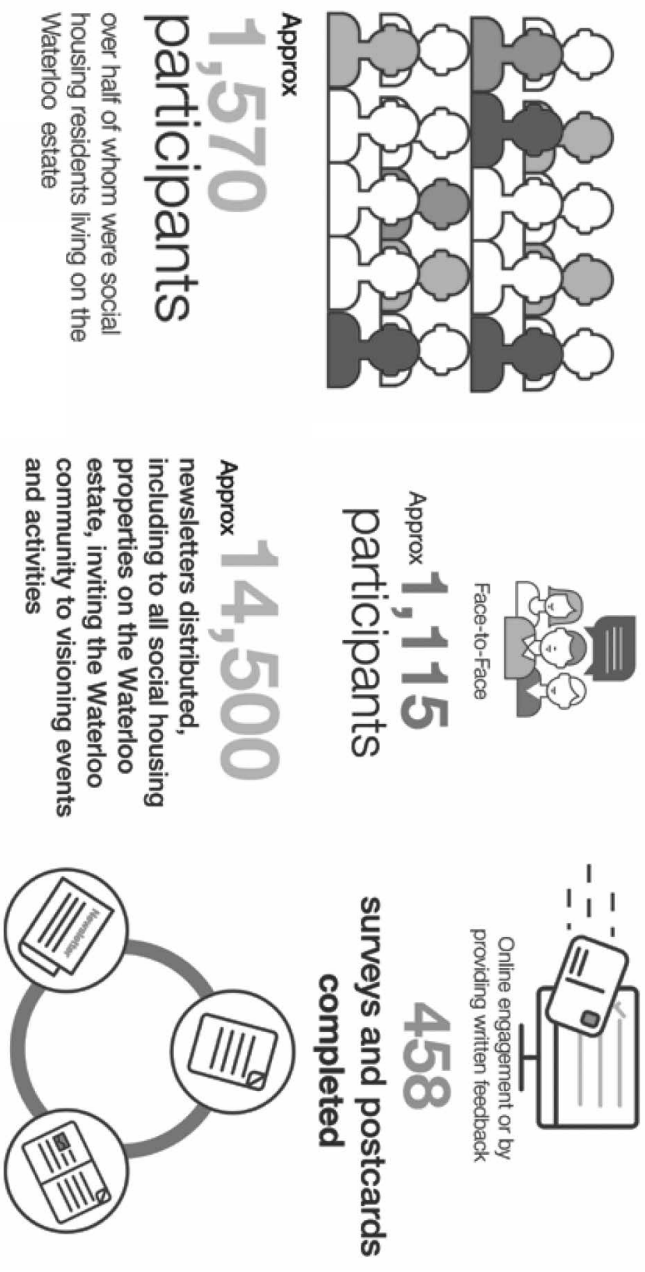
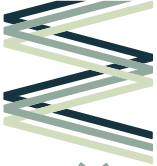


Fig. 3.2.14 Visioning engagement snapshot



Fig. 3.215 Residents at the Community Day
Source: 'Let's Talk Waterloo', KIA, 2018



3.2.3 PLACE MAKING AND CASE STUDY ANALYSIS

Case studies and best practice across a variety of themes inform the masterplan framework and provide an understanding on how design elements can be integrated to create a specific urban experience

ENVIRONMENT AND OPEN SPACE



Fig. 3.2.16

- Joynton Avenue Tree Retention, Zetland
- Maintaining significant existing trees within the public domain as Waterloo's future green urban setting.
- Lowering urban heat island effect through shade provided by plantings and bio swale systems.
- Activating street frontage for communities to create a pedestrian prioritised central spine on George Street.



Fig. 3.2.17

- Passeig de St Joan Boulevard, Barcelona
- Promoting the street as a sustainable urban open space, plenty of tree plantings to create natural shade and introduces native species to achieve biodiversity.
- Adapting multi-use open spaces along the pedestrian prioritised street as a new urban green zone that activates building frontage and neighbourhoods as well.



Fig. 3.2.18

- Square Roots, Brooklyn
- A high-tech indoor farming accelerator in the heart of Brooklyn, New York, working to ensure that city residents can source fresh, sustainable produce twelve months a year. In a major urban centre like New York City, where fresh produce can be tough to find Square Roots is proving the potential of indoor, climate-controlled agriculture.



Fig. 3.2.19

- Green Laneways, Melbourne
- Melbourne City is greening its existing laneways to be more liveable
- Reduces heat island affect. Mitigates and filters stormwater whilst providing habitat.
- Where greening is not achievable, invited world-class street artists compliment laneway greening with murals chosen by the community.



Fig. 3.2.20

- Singapore
- The city-state has made considerable efforts to integrate nature into its vertical spaces to help reduce the effects of urban heat island.
- The city manages biophilic design through its Landscaping for Urban Spaces and High-Rises (LUSH) Programme.

TRANSPORT, STREETS AND CONNECTIVITY



Fig. 3.2.21

- Passeig de St Joan, Barcelona
- Promoting the street as a sustainable urban open space, plenty of tree plantings to create natural shade and introduces native species to achieve the biodiversity aspect.
- Adapting multi use open spaces along the pedestrian prioritised street as a new urban green zone that activates building frontage and neighbourhoods as well.

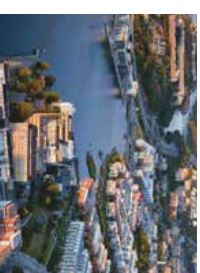


Fig. 3.2.22

- Hammarby Sjöstad, Stockholm
- Hammarby Sjöstad demonstrates the capacity for a strong urban community to exist in association with an environmentally considered precinct and, a variably programmed communal space.
- Urbanspace, greenspace and programmed space are reliant on one another to perform, with each finding benefits from the presence of the other.



Fig. 3.2.23

- Southeast False Creek, Vancouver
- A range of uses provide a mix of active and passive frontages across the precinct supported by a range of public and private open spaces for increased amenity.
- Slim residential towers and human scaled street walls create a built environment that responds to the eye level view.



Fig. 3.2.24

- City Of Vinge, Fredrikssund
- The Delta District in the future city Vinge is an example of how landscaping can create dual functions: promote better communities and prevent flooding. A man-made delta and creeks handle rainwater and provide the city district with unique qualities for residents to gather around.



Fig. 3.2.25

- Copenhagen Cycle Strategy
- City of Copenhagen Bicycle Strategy 2011-2025 is a comprehensive policy to support infrastructure and growth of bicycle use as an everyday means of transport. Aims: Increase commuters that cycle to work or education to 50%.
- Increase number of cycle tracks by 80%.
- Reduce cyclist average travel time by 15 minutes.

Refer to Appendix 7.6 for further information

HOUSING AND LIVEABILITY



Fig. 3.2.26

Central Park, Sydney

- Open space more intensively used and supported.
- Green space is folded vertically onto walls and up to rooftop gardens, not just on the ground plane.
- Sustainable features at different scales.



Fig. 3.2.27

Herzberg Public Housing, Vienna

- Variety of residential typologies facilitating different ways of living.
- Different urban-design typologies: Point block buildings; residential courtyard building with access balconies & a multi-family townhouse. The range of apartment types allows for flexibility / combinations according to present needs. Large outdoor terraces, communal gardens at ground level.



Fig. 3.2.28

L101 Baugruppe, Berlin

- Cooperative building, engaged occupants. Below market price units.
- Flexible combination of floor plans enables small residential units as well as large units.
- Floor plans can adapt to various living conditions and requirements.
- Shared communal open spaces at ground level and sense of communal ownership.
- Neighbourliness.



Fig. 3.2.29

Safe Streets, Safe City, Calgary

- A pioneering report published in 2007 to recommend actions to address public safety and social issues which negatively affect the Calgary community.
- Recommendations are offered to improve the general situation in Calgary. They range from short-term policing-oriented actions to long-term community revitalization actions.



Fig. 3.2.30

Tanner Springs, Portland, Oregon

- Site includes important references to the previous heritage and form.
- Integration between nature and passage, with the wetlands serving as an important visual and practical feature for the site.
- WSUD does not have to be atypical; it can work as a feature within the site, when combined with public art and boardwalk.

EMPLOYMENT, SERVICES, RETAIL, ARTS AND CULTURE



Fig. 3.2.31

Bryant Park, New York

- Bryant Park is a place to stretch out, dine and relax. It also provides a multitude of free and engaging activities.
- Create social opportunities at a centre of the city: To make Waterloo a liveable city having a role of offering a place for interaction, cooperation and participation of communities.



Fig. 3.2.32

Kings Cross Masterplan, London

- Mixed-use, urban regeneration project in central London and a major transport hub for the city. Located on the site of former rail and industrial facilities, the 67-acre (27 ha) redevelopment is ongoing, involving restoration of historic buildings and new construction, with the entire plan organised around internal streets and 26 acres (10.5 ha) of open space to form a new public realm for the area.



Fig. 3.2.33

Indigenous Portraits by Matt Andate

- Matt Andate's street murals depict indigenous figures inspired by time spent in Aboriginal communities in the Northern Territory.
- The placement of the art work in highly visible areas is deliberate. It is a method of reminding the people in the inner city of the indigenous heritage and the voices of those past and present.



Fig. 3.2.34

Public Space Booking, Helsinki

- Nearly every Helsinki City Library has space which can be rented for different purposes, such as meetings, activities, exhibitions, team work, sports, making and lectures.
- The meetings rooms are specifically designed for holding meetings and gatherings. Multi-purpose facilities and team work spaces are suitable for team work, meetings and gatherings.



Fig. 3.2.35

Elephant Park, London

- A 22-hectare development site within a strategically important 122-hectare opportunity area. The development has been guided by a planning document produced in conjunction with the Greater London Authority which outlines specific delivery objectives including market and affordable housing and commercial floorspace amounts, job targets and sustainability requirements.

SUSTAINABILITY AND INFRASTRUCTURE



Fig. 3.2.36

Chophouse Row, Seattle

- A world-class example of fine grain mixed-use and transformational placemaking.
- Although part of a larger development area, Chophouse Row feels like its 'own place' with intimate and activated laneways.



Fig. 3.2.37

Enghaveparken, Copenhagen

- A historic neoclassic park in the Vesterbro district going through a modernisation and climate adaptation upgrade.
- The new park design is adaptable to storing large amounts of rainwater. The main defining characteristic is the one-meter terrain drop from west to east, which basically shapes the park into a gigantic duspipan.



Fig. 3.2.38

Low2no, Helsinki Finland

- An approach to engineering and construction which results in a sustainable built environment and creates the preconditions for 'ecological urban life.
- Comes from the phrase "from low carbon to no carbon". It is an ongoing development project in Helsinki Finland which seeks to promote a gradual transition from low-carbon to carbon-free urban construction.



Fig. 3.2.39

Rad Lab Pocket Park, San Diego

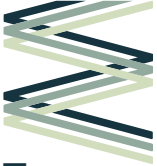
- Creating various uses that people have been seeking in the vacant spaces in order to enliven the precinct as an 'urban room'.
- Variety of sizes, purposes and users: understanding different needs and demands from all ages to encourage social interaction and engagement.



Fig. 3.2.40

Cheonggyecheon River Transformation Incheon, South Korea

- Environmental benefits included increased floor protection, reduced urban heat island effect and pollution.
- Economic benefits through increased surrounding land prices by 30-50%
- Social benefits by encouraging use of public transport and as an attraction that draws visitors



PLACE CASE STUDY LEARNINGS

The best-practice placemaking case studies have been selected and analysed based on how the learnings inform the development of Waterloo's place character - layered, proud, distinct and resilient - which are the fundamental qualities which define the Estate and make it special.

Refer to Appendix 7.6 for further information

HINDLEY WEST, ADELAIDE

Adelaide's first main street has dramatically changed over time. The Hindley West placemaking pilot was a project to facilitate a shared future vision between multiple stakeholders in a rapidly changing precinct.

JEWELL STATION PRECINCT, MELBOURNE

An example of 'urban acupuncture' - a small scale intervention to tackle multiple challenges. It is a successful pocket park that started as a community-focused design process to activate an underutilised space near a train station. The learnings from these projects are:

Provide on-the-ground support

A place facilitator can help to develop partnerships between community and council face to face.

Share the story

Communication and engagement with the community and stakeholders throughout the process is important through an iterative design development process to establish appetite for the project, garner energy and optimism for change and bring multiple stakeholders together

Guide delivery and negotiation

Simplify the bureaucracy and process of delivering the community's ideas through negotiating leases and dual tenancies, meeting with property owners to share the vision for the precinct, arranging the co-funding of art, cultural and revitalisation programs.

Anticipate the unexpected

Provide flexible spaces that allow the space to be used and loved even when no events are taking place, providing a sense of ownership to the community.

Co-locate with other uses

Co-location to provide a linking element between activity hubs and the station and connect these through a public domain that encourages play and lingering.



Fig. 3.2.41 Hindley West Placemaking Pilot, Adelaide
Source: <https://climg.jindaily.com.au>, 2019



Fig. 3.2.42 Jewell Station precinct, Melbourne
Source: <https://www.jpss.org>, 2019

MURU MITTIGAR, PENRITH

An indigenous-owned social enterprise supporting local Darug people and the wider Aboriginal community. It is committed to making a significant, measurable and lasting difference in advancing Aboriginal culture.

WYNYARD QUARTER PLACEMAKING, AUCKLAND

The guiding framework for the urban regeneration of a 37 hectare area over 20+ years that uses important Maori concepts as principles for the redevelopment and has extended into all decision-making, such as the naming of the spaces. The learnings from these projects are:

Focus on doing and implementing

Develop programs that activate the public spaces to encourage early visitation that includes children's workshops, food trucks and markets to engage the community.

Get hands-on and make learning fun

Provide a range of engaging educational programs for the community that includes a bush resources walk, art classes, and cultural talks to share indigenous culture and knowledge.

Provide pathways to financial security

Provide a dedicated space for community financial services which include counselling, education and community services.



Fig. 3.2.43 Muru Mittaggar, Penrith
Source: <https://MuruMittigar.com.au>, 2018



Fig. 3.2.44 Wynyard Quarter Placemaking, Auckland
Source: <https://www.wynyrd-quarter.com.nz>, 2019

ARCOLA THEATRE, LONDON

An experimental theatre located in a culturally diverse area which encourages innovative ideas, and celebrates the diverse local community. By rethinking the theatre building as a platform open to engaging in a wider range of innovative projects, and by mixing income streams, they have created a space which is socially, environmentally and financially sustainable.

ONE LOVE CITY, COPENHAGEN

A crowd-sourced public event which transformed a public square into a lively cultural marketplace and social meeting place. The adventure-playground style installation was left intentionally flexible to encourage spontaneity. The learnings from these projects are:

Ensure equitable access

Provide opportunities to residents who may not usually be able to afford it, e.g., 'pay what you can' days for services, edible landscapes.

Build strong partnerships

Recognise and build on existing community initiatives and help drive local sustainability initiatives by building connections to existing organisations.

Keep things local

Retain and build upon the existing local businesses and sharing economy to instil a sense of pride and establish a local micro-economy through local bars, shops and cafés, and markets populated with local artisan goods.

Facilitate shared learning

Bring community and cultural organisations together, to equip people with lessons learnt, and act as a catalyst for institutions involved to rethink broader cultural and public space strategies across the Precinct.



Fig. 3.2.45 Arcola Theatre, London
Source: <https://www.arcolatheatre.com>, 2019



Fig. 3.2.46 One Love City, Copenhagen
Source: <https://detours.biz/projects/one-love-city>, 2019

ECO CARLTON PROJECT, MELBOURNE

A platform between residents, local action groups, architects, and developers that focused on environmental efficiency and sustainability.

INCREDIBLE EDIBLE, TODMORDEN

A movement of food growing across the town's public spaces, and among the town's people, challenging traditional notions of the public realm. The learnings from these projects are:

Make sustainability practical

Deliver on-the-ground projects that could include the establishment of community gardens, a coffee grounds collection and composting scheme with local businesses.

Tailor teaching to tenure type

Deliver workshops specifically directed at the existing community, offering advice on simple things for environmental savings.

Orient new communities

Bring together a diverse mix of residents (age, ethnicity, housing tenure) in a safe and small-scale environment, to facilitate bonding between neighbours and to establish a socially-inclusive united front in advocating environmentally friendly living practices.

Engender civic pride

Engendering a sense of belonging and ownership will make Waterloo everyone's responsibility, and help increase safety and reduce crime and vandalism.

Generate tourism to generate revenue

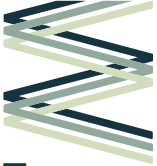
Make Waterloo a destination.



Fig. 3.2.47 Eco Carlton Project, Melbourne
Source: <https://www.diorregional.com>, 2019



Fig. 3.2.48 Incredible Edible, Todmorden, Todmorden
Source: <http://cainitiliving.com>, 2019



DENSITY CASE STUDY LEARNINGS

Case studies were analysed using a range of metrics to understand density in different contexts. The case studies have been analysed based on how the learnings inform the masterplan response to the design and experience of the Estate.

Refer to Appendix 7.6 for further information

DESIGN

Everyone feels welcome

Design for diversity, equality and variety.



Fig. 3.2.49 Nine Elms, London
Source: <http://www.nineelms.com>, 2019

Design for all ages and abilities

Diversity can be preserved and nurtured through tenure, mix and size of, both residential and non-residential uses that are provided in the area and the range of community facilities provided to support them.

A welcoming and inclusive precinct

Delivery of social facilities in the first stage will enable the master plan to adapt and deliver on the right to return for social residents.

Social connectedness

Connections to a broader network of places linking to the wider area need to be considered to strengthen diversity.

Keep it flexible

Renewal takes time and passes through many hands.



Fig. 3.2.50 Elephant & Castle, London
Source: <https://www.elephantandcastle.org.uk>, 2019

Flexible ground plane

Flexibility needs to be built into the public domain and urban form. Allow room for flexibility, rather than setting strict and prescriptive requirements.

Public domain

The public domain needs to provide a variety of spaces and diverse programme to allow for different users and activities.

Flexible dwellings

Within buildings, flexibility needs to be considered to allow for the reconfiguration of floor plans for different numbers of people per dwelling, or different life stages. This will allow for adaptive reuse of buildings beyond its original design life.

Mix it up

A range of uses, typologies, tenures and site densities.



Fig. 3.2.51 Woodwards, Vancouver
Source: <http://vancouverneon.com>, 2019

Mixed use in podiums

As density increases, the offering must be intensified, including transport, open space, and mix of uses. Providing supporting land uses (such as retail, social infrastructure, entertainment and businesses) will create vibrancy.

Tenure blind

Social housing works best in a mixed community that allows for different tenures to be provided.

Intermediate dwelling typologies

Flexibility needs to be built into the lot structure to support intermediate typologies in the future.

Good things come in small packages

Successful urban environments are often complex places made of simple elements.



Fig. 3.2.52 Joyce Collingwood, Vancouver
Source: <https://vancouver.ca>, 2019

Micro and vertical neighbourhoods

Vertical mixed use within a single structure supports different scales of social interaction and helps to engender a sense of belonging and ownership.

Character areas

Distinct architecture, use of green elements, provision of open space and of areas of activity create a vibrant mixed-use precinct.

Access to daily needs within 200 metres of building entries

Providing supporting land uses (such as retail, social infrastructure, entertainment and businesses) will serve the needs of the local population as well as those who pass by everyday.

Communal spaces and social corners

Urban precincts don't need to rely on the ground plane to provide all of their 'green' needs, a range of open space typologies supports different scales of social interaction.

Connected green infrastructure network

Biophilic design.



Fig. 3.2.53 Tanjong Pagar, Singapore
Source: <https://thehoneycombers.com>, 2019

Biophilic design principles

Integrate biophilic design to connect people to nature for increased health and well-being.

Contributory open space

Provide access to identifiable open space within 200 metres of building entries to encourage active transport modes and increased health and well-being.

Urban forest and green grid

The greenery of parks and tree-lined streets help to temper the intensity of built form. To mitigate heat island effects and provide urban relief for residents, green walls and roofs should be considered.

Productive landscapes and community gardens

The public domain needs to work harder. Productive landscapes provide multiple benefits that includes connecting people to nature, reducing living costs for increased liveability and promoting social interaction.

EXPERIENCE

Know your community

Who are the users and what do they need?



Fig. 3.2.54 Regent Park, Toronto
Source: <http://urbanorion.ca>, 2019

Community vision and needs response

To ensure the experience of a place is positive and responds to the community's requirements, the community's needs and desires need to be understood. Understanding the Waterloo community's vision and desires for gathering areas, flexible dwelling typologies, staging, local services, safety, sense of community, accessibility and specific public domain programming help inform the masterplan response.

Options testing engagement

Design with sufficient community engagement from the outset to ensure the community is taken through the journey and that their voices are heard.

Start with the spaces

"First life, then spaces, then buildings"
Jan Gehl



Fig. 3.2.55 Hudson Yards, New York
Source: hudsonyardsnewyork.com, 2019

Public domain led design process

The public domain will have to work hard. Consideration needs to be given to the quality of the public realm, its scale to function as gateways to transit, while still being intimate and activated so as not to be overbearing or empty outside peak hours.

Walkable pedestrian priority precinct

Consider how people dwell within spaces - liveable places allow social interaction. Once these spaces have been shaped, then use the spaces to shape the buildings.

The eye level view

Perceived density is a matter of human scale



Fig. 3.2.56 Central Park, Sydney
Source: Turf Design, 2019

Everyday experience

Design with the pedestrian in mind. The experience of users needs to be prioritised by streets. The quality of these spaces together with programmatic activities will inform the overall sense of place and level of safety.

Pedestrian scale and fine grain detailing

Provide a fine grain to allow more frequent variation in the ground floor activity to be seen at walking speed, and different sections of a street to build up and be replaced over time, creating a more complex place over time.

Active frontages

Concentrate activation on building corners to create an interface between buildings of different developments.

Lot diversity

Provide lot diversity to create a fine urban texture for permeability that supports pedestrian networks. Slim residential towers, podium-level courtyards, and human-scaled street walls result in a built environment that is sensitive to the eye level view.

Celebrate the past and the present

Avoid generic responses to specific places



Fig. 3.2.57 Bercy, Paris
Source: <https://en.convention.parisinfo.com>, 2019

Cultural, environmental and heritage retention and representation

Understanding the complexity of the area's layered history will assist in ensuring existing assets (both physical and social e.g. the community skill base and cultural diversity) are leveraged in the renewal of the place and celebrate its local identity.

Storytelling and integrated public art

Public art needs to relate to its context and reflect local identity, to interpret an area's history and make it accessible to the community. Key aspects for Waterloo include:

- Multi-cultural diversity
- Placemaking
- Local making
- Food production
- Integral aboriginal culture

Lead with public benefits

Build trust and liveability from the outset



Fig. 3.2.58 Woodberry Down
Source: <https://propertyhouse.co.uk/>, 2019

Transport

Higher densities close to transport options locate people closer to opportunities and reduce dependence on cars.

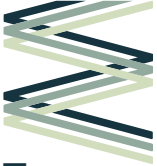
Public benefits

Lead with public benefits such as social infrastructure that meets an identified need within the existing community. Public benefit projects may be physical or programmatic and set an important foundation for trust as well as supporting collective well-being and a benchmark for quality. This includes:

- Public domain and open space
- Local community facilities
- Services and shops
- Employment

Staging

The scale of transformation in renewal areas means that existing and incoming residents and visitors may be subject to decades of construction. Consider staging to minimise disruptions to existing residents.



PLACE PERFORMANCE MEASURES

The renewal of Waterloo South provides the opportunity to create a great and inspiring inner city community for the 21st century, a place where residents can lead full and satisfying lives in a growing Sydney

Through the analysis of case studies, global best practice place metrics and local place making research, a set of Place Performance Measures has been developed specifically for Waterloo to aid decision making and support a balanced and evidence based approach. A short list was adopted for concept options testing whilst a long list of place performance measures has informed the planning framework and Indicative Concept Proposal for Waterloo South and will help support future decision making.

The suite of Place Performance Measures have been developed specifically for the Estate to aid decision making. They are indicators, and when used in conjunction with other community building measures, facilitate an understanding of how Waterloo as a place will perform and be experienced. They are one of a suite of measures for Waterloo that includes the project proposition, feasibility, stakeholder and community feedback, sustainability and technical measures. Used collectively, they provide a balanced and evidence based decision making approach to the renewal of Waterloo South and in the future, the renewal of Waterloo Central and Waterloo North.



Fig. 3.2.59 The relationship of Placemaking to other performance measures

METHODOLOGY

The process of selecting Place Performance Measures for Waterloo starts with Waterloo's Placemaking Framework & Strategy that identifies the future place character, place principles and strategy themes for Waterloo. A focus on qualities highly valued by the community, and features that promote health and happiness, give the performance measures local Waterloo relevance.

The Place Performance Measures are a compilation of recognised global best practice place metrics and local place making research. They are organised under the Waterloo objectives and principles under the five overarching objectives for Waterloo: Environment and Open Space; Transport and Connectivity; Housing; Culture and Design; and Services and Amenities.

A rationale, method and measure relevant to Waterloo is further expanded under this framework. A short list was adopted for concept options testing. A long list of Place Performance Measures was adopted for the Preferred Masterplan for the Estate. The Place Performance Measures were further refined through consultation with the City of Sydney, this refined long list informs the planning framework and the Waterloo South Indicative Concept Proposal, and will help support future decision making. The Place Performance Measures evolved throughout the masterplan process, where measures have been embedded into the masterplan framework, they have been excluded from the refined long list. This long list informs the Development Control Plan, future tender EOI packages, the design excellence process, and development agreements.

KEY FINDINGS

Through an analysis of the case studies and global best practice, Place Performance Measures were identified across a variety of elements that could add to Waterloo as a unique place within Sydney and enable Waterloo to be benchmarked against the world's most progressive precincts. These measures provide and understanding of how Waterloo South as a place will perform and be experienced.

Refer to Appendix 7.6 for further information

PLACE PERFORMANCE MEASURES

The list of Place Performance Measures that inform the Waterloo South Indicative Concept Proposal:

- **Open Space and Environment**
 - Landscape Replacement Area Control
 - Urban Forest
 - Skyview Factor
 - Sunlight to Parks
 - Sunlight to Streets

- **Transport and Connectivity**
 - Intersection Density & Small Block
 - Parking
 - Mobility on Demand Network

- **Housing**
 - Sub Precinct Completeness
 - Vertical Village
 - Open Space Accessibility

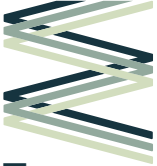
- **Culture and Design**
 - Community Resilience
 - Adaptable Ground Floors
 - Building Entries
 - Building Frontage

- **Services and Amenities**
 - Productive Landscapes
 - Parks as Places
 - Edible Landscapes
 - Ground Plane Space Diversity
 - Ground Plane Transparency

Refer to Appendix 7.10 for further information



Fig. 3.2.60 Incredible Edible Todtnorden
Source: <https://ourlocality.org/>, 2020



KEY DESIGN DRIVERS

Waterloo has been shaped over time and these influences set the context for change going forward

Key Design Drivers, specific to Waterloo, were defined to inform the masterplan, and create an authentic place, that reflects and builds upon the unique qualities that were revealed through the masterplan process of context analysis, visioning, early design thinking, placemaking, options testing case studies, and performance measures. These are a Shared Community, Living Culture, Blue/Green, Keep It Local, and Urbanity.

SHARED COMMUNITY



Fig. 3.2 61 Family Day on Waterloo Green
Source: Counterpoint Community Services Facebook Page, 2018

A culturally diverse community bonded through adversity, resilience and active engagement. Waterloo already has a distinct neighbourhood character and this is a notable strength to retain and build upon for the future renewal of the Estate for the existing and evolving community

People in Waterloo are diverse in age, culture and background. Waterloo has historically been a welcoming place for people from all places. The cycles of renewal and waves of immigration over time has seen the influx of people of all ages, demographics and races into the Estate. This diversity has led to independent yet inclusive groups, with a common connection of stories, events and support.

This history of Waterloo has created the proud, distinct, resilient and layered community character that it has today. This diverse and hands-on community can be celebrated through opportunities for expression, storytelling and engagement.

LIVING CULTURE



Fig. 3.2 62 Bushfood
Source: Tourism Australia / Oliver Stewie, 2017

Waterloo has a distinctly embedded cultural identity that has evolved over time. The existing Estate is home to people from all places and its character is tied intrinsically to the people that have shaped its history. Recognising and reflecting the Aboriginal and multi-cultural stories will be important to connect Waterloo to the past, present and future

Waterloo is defined by over 60,000 years of continuous Aboriginal association with land and country, including contemporary cultural practice and living traditions. The Aboriginal and Torres Strait Islander population has fluctuated over time and there are themes of struggle and survival, particularly in relation to the greater Redfern area as a Koori meeting place. The waves of immigrant workers, Chinese market gardeners, Lebanese merchants, Greek and Russian workers and its industrial past have also shaped Waterloo as a place and community. The cultural diversity of the existing community that call Waterloo home is reflected through festivals, gatherings and other events.

Aboriginal culture and heritage is intrinsic to the past, present and future of Waterloo as a place and community. The opportunity exists to embed Aboriginal culture and respond to the needs of the Aboriginal population in planning and design, in order to acknowledge and share the strong Aboriginal influence on the place's identity and at the same time recognising the other cultures that have shaped Waterloo.

BLUE / GREEN



Fig. 3.2 63 Community Garden
Source: Johnny Weeks for The Guardian, 2018

Remnants of the original Gadigal landscape can still be seen while others, like the presence of water, have disappeared. Connecting to the cultural significance of traditional landscape elements will be a key aspect in the renewal of the Estate into a great urban environment

The wetlands of Waterloo are a key part of the Estate's cultural and environmental heritage, as a source of food and materials and a place of gathering for the Aboriginal people. There are remnants of the original Gadigal landscape still in evidence within Waterloo, such as Mount Carmel and the topography, while other previously dominant elements such as the historical presence of water have disappeared.

This presents opportunities to reinterpret the landscape qualities of the place across time and deliver a vibrant public realm which is productive and hyper-functional.

KEEP IT LOCAL



Fig. 3.2 64 Waterloo Estate Market

Waterloo's heritage as a productive place is still evident in its current day sharing economy. Recognising and supporting this 'Made in Waterloo' ethos will be important for Waterloo to be 'of its place'

Waterloo has long been associated with a culture of making. From industrialisation around the mid 19th century onwards, the area has been a hubbed for entrepreneurial spirit and trade-based, utilitarian professions. More recently there has been a resurgence of crafts and innovation in the area, attributed to affordable making spaces and connection with cultural and technology institutions.

The opportunity exists to embed Waterloo's history of industry, craftsmanship, business and production. This culture of making can be reinterpreted as a guiding theme for the provision of employment, education and cultural expression in Waterloo.

URBANITY

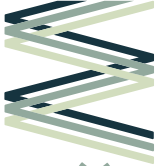


Fig. 3.2 65 Jewell Station pop-up event, Melbourne
Source: <https://www.betterblock.org>, 2018

As Waterloo becomes denser the public domain and ground plane need to both work harder and be more flexible, to accommodate for a range of uses and users, to adapt to changing needs over time, and to support the range of social interactions that are necessary for a liveable neighbourhood

With the new Waterloo Metro Station, the Estate is set to become a new activity centre with increased density. Connecting the growing community to global and local opportunities will be vital to Waterloo's renewal into a great urban place. Hand in hand with density, urbanity will be a vital component to making it a liveable neighbourhood. Urbanity is the spatial and social interactions that combine to make up the experience of urban life. Spatial elements include the provision of physical infrastructure such as community centres, service providers and services associated with social housing. Waterloo also plays host to a number of community events which see residents come together, along with visitors, for celebrations and other purposes.

These physical elements facilitate both informal and formal connectors: from friendships and interactions with neighbours, to local facilities and services. These social services, networks and connectors can be supported and nurtured in Waterloo, particularly through inclusive and accessible spaces.



3.2.4 EARLY DESIGN THINKING AND SCENARIOS

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

Early design thinking explored a number of Scenarios, and stretched these ideas to their limits, in order to understand the place characteristics, opportunities, and challenges that emerged from each. The Scenarios explored each focused on a set of key influences and were characterised as:

- **How Green?** Considered the optimisation of new and existing landscape and open space
- **How Low?** Looked at suppressing the building heights as low as possible with little height diversity
- **How Connected?** Considered maximised ground level connectivity and a fine grain block structure
- **How Centred?** Looked at consolidated activity and open space around the Metro Quarter
- **How Diverse?** Looked at dispersed activity centres throughout the Estate
- **How Blue?** Considered access and connection to nature and water as its key influences

This early design thinking was the starting point for developing strategic directions to be tested against the project vision and principles for the Estate.

Refer to Appendix 7.2 for further information

HOW GREEN?

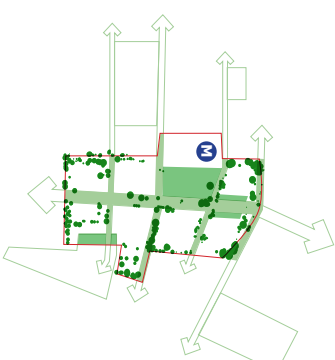


Fig. 3.2.66

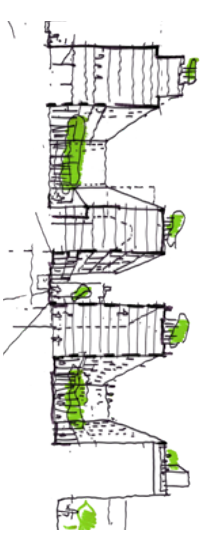
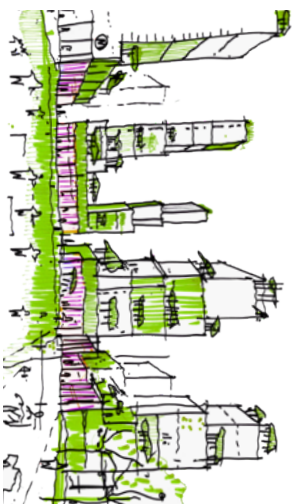
How Green? Considered the benefits and outcomes of optimising the landscape, open space and contributory open spaces.

HOW LOW?



Fig. 3.2.67

How Low? Considered the potential outcomes of suppressing the height of development and reducing the number of tall buildings.



CASE STUDY LEARNINGS



Fig. 3.2.68
Park Royal Hotel
Singapore



Fig. 3.2.69
Passaig De St Joan
Boulevard



Fig. 3.2.70
Hammarby Sjöstad
Stockholm, Sweden



Fig. 3.2.71
City Of Vinge
Fredrikskund

HOW CONNECTED?

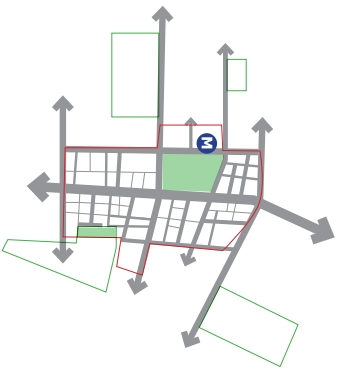
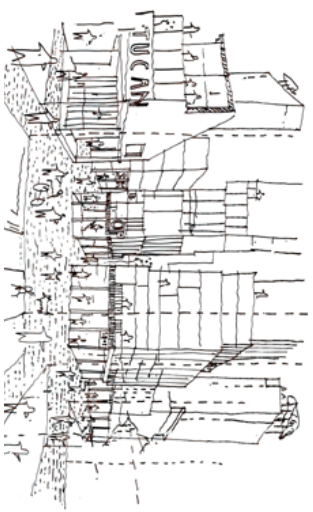


Fig. 3.2.72

How Connected? Considered the potential outcomes of maximising ground level connectivity and granular built form.



HOW CENTRED?

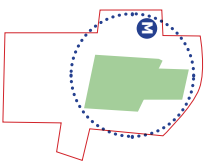
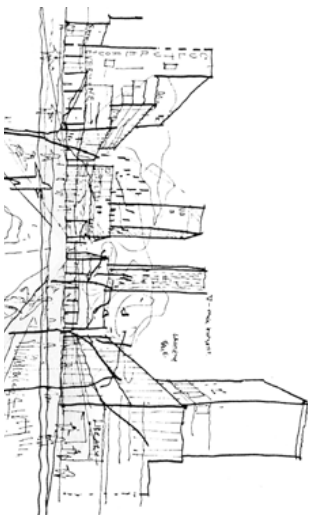


Fig. 3.2.73

How Centred? Considered the potential outcomes of a central park and activity centre.



HOW DIVERSE?

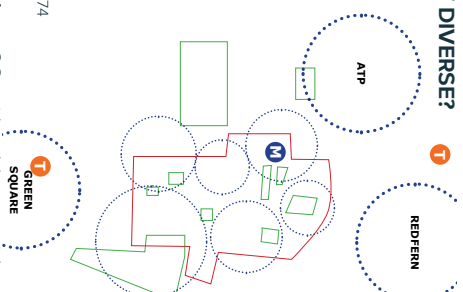
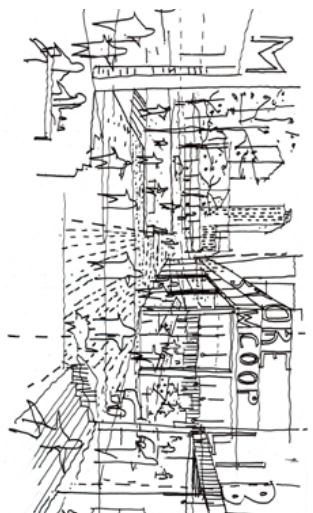


Fig. 3.2.74

How Diverse? Considered the potential outcomes of prioritising multiple new activity centres.



HOW BLUE?

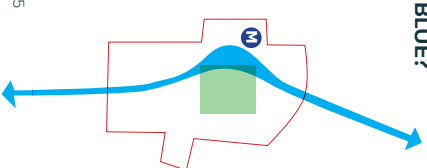


Fig. 3.2.75

How Blue? Considered the potential outcomes of prioritising health and well-being and the connection to water and nature.

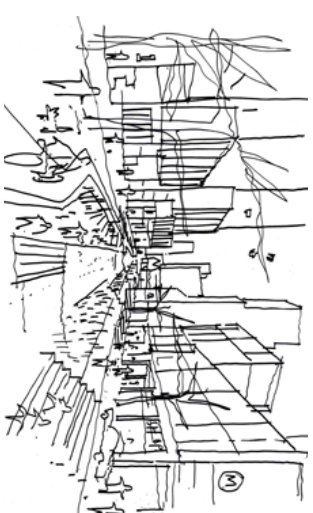


Fig. 3.2.76

Central Park, Sydney



Fig. 3.2.77

Giltet Square, London, UK



Fig. 3.2.78

Lower Yonge Precinct
Toronto, Canada



Fig. 3.2.79

Elephant Park
London, UK



Fig. 3.2.80

Chophouse Row
Seattle, Washington



Fig. 3.2.81

Bankside Urban Forest
London, UK



Fig. 3.2.82

Cheonggyecheon River
Transformation Incheon,
South Korea



Fig. 3.2.83

Tanner Springs
Portland, Oregon



CATALOGUE OF DESIGN IDEAS

Key design elements emerged that provided specific place qualities; some were interchangeable while others were unique and specific to a particular option

The catalogue of design ideas are a set of place characteristics that emerged from the testing of scenarios. These informed the development of the concept plan options, Preferred Masterplan and Waterloo South Indicative Concept Proposal.

Refer to Appendix 7.2 for further information



Fig. 3.2.84 **Pedestrian Boulevard** to retain existing canopy Create a green spine connection that promotes community interaction through food production and edible landscapes.



Fig. 3.2.85 **Consistent street edge**



Fig. 3.2.86 **Green arrival** at metro station Create a sense of arrival into green space by co-locating the park next to the metro station.



Fig. 3.2.87 **Shared courtyard** spaces



Fig. 3.2.88 **Built form with park address** Provide additional amenity by increasing built form frontage to landscape.



Fig. 3.2.89 **Hierarchy of streets and social spaces**



Fig. 3.2.90 **Central park** connected to central spine



Fig. 3.2.91 **Blue Green** connections



Fig. 3.2.92 **Integrated water management**



Fig. 3.2.93 **Variety of street level interfaces**



Fig. 3.2.94 **Central activity hub**



Fig. 3.2.95 **Diversity of open spaces**



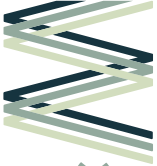
Fig. 3.2.96 **Frontage to landscape**



Fig. 3.2.97 **Fine grain** uses



Fig. 3.2.98 **Diversity of neighbourhoods**



3.2.5 STRATEGIC DIRECTIONS

The Strategic Directions explored distinctly different approaches to accommodating the project proposition

The early design work formed the starting point for developing the Strategic Directions which also were informed by the 10 Key Design Insights from the Baseline Report, key stakeholder and technical study inputs from the TIWGs, community and stakeholder engagement, and the fundamentals of the project delivery proposition, program and concept studies. Three Strategic Directions explored distinctly different approaches to accommodating a similar project proposition and 'kit-of-parts' of non-residential uses.

All three Strategic Directions were tested and found to support the project vision and principles for the Estate. Each contained primary design elements, some of which were common to all, that in combination characterised each approach.

Strategic Direction 1 comprised a variety of parks, community services, spaces and events connected by fine grain pedestrian focused streets, building on Waterloo's existing natural, social and built form diversity.

Strategic Direction 2 comprised connecting parks, community services, spaces and events through a continuous walkable 'blue-green' corridor connecting people to Waterloo's unique natural and cultural heritage.

Strategic Direction 3 comprised a centralised Waterloo village around a primary park with a walkable 'green line' connecting people to key community services, spaces and events.

Through a process of testing, review and analysis the three Strategic Directions were all found to be worthy and plausible options which were then further developed into the three Concept Plan Options: Waterloo Estate, Waterloo Village Green and Waterloo Park.

Refer to Appendix 7.2 for further information

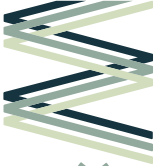
STRATEGIC DIRECTION 1



Fig. 3.2.99 Strategic Direction 1 Open Space and Public Domain

A diversity of Public Domain and Open Spaces are provided across the Estate with Waterloo Green retained as the primary park. Each space provides a specific response to the existing and future qualities of that particular part of the site, enhancing micro neighbourhoods.

Additional fine grain pedestrian focused streets provided throughout the Precinct encourage walking and cycling.



3.2.6 CONCEPT PLAN OPTIONS

The Concept Plan Options explored how to deliver the project vision, principles and project proposition for the Estate with different characteristics to create three distinct urban places

The Concept Plan Options tested three different approaches to the masterplan to deliver the vision for Waterloo. Each Concept Plan Option tested a combination of different key elements to provide an understanding of the unique place characteristics created as a result, and the strengths, opportunities and challenges of delivering these elements.

Waterloo Estate Concept Plan Option was most influenced by How Diverse and How Connected with a fine grain block structure, referencing the historic street pattern of Waterloo, and a diversity of smaller neighbourhood parks and plazas. Taller building heights, and retail, services and community facilities were dispersed evenly throughout the Estate.

Waterloo Village Green Concept Plan Option was most influenced by How Centred, How Connected, How Green, and How Blue. Landscaped links connected open space outside the Estate to the main Village Green, centred in the Estate's north, with integration

BUILT FORM AND LOT STUDY ANALYSIS

The distribution of built form and the proposed building envelopes have been tested for their potential to satisfy the controls contained in the proposed planning framework as well as applicable state and local government policies. Detailed lot studies have been conducted on a selection of different lots, chosen to represent a broad range of different lots and building types across the Estate.

of landscape and water into the pedestrian links, and larger landscaped setbacks to retain significant trees. Taller building heights were organised around primary open spaces and links, and a significant retail, services and community hub was located adjacent to the Metro Quarter, with secondary locations around the Village Green and along a pedestrianised and landscaped George Street.

Waterloo Park Concept Plan Option was most influenced by How Centred and How Blue. Here the central park was also a landscaped arrival place to and from the Metro Quarter. George Street was widened, landscaped and pedestrianised as an open space in itself, with water integrated as both a feature and for stormwater management. The block structure was more regular and less fine grain, taller building heights and retail, services and community facilities were organised around Waterloo Park and along the George Street Pedestrian Boulevard.

This has confirmed the ability of the masterplan, and building envelopes, to satisfy SEPP65 and the Apartment Design Guide's objectives for building separation, apartment sizes, floor to ceiling heights, circulation from a core, solar access, natural ventilation, the quantum of communal open space and its solar access, and any amenity effects onto adjacent sites.

Refer to Appendix 72 for further information

WATERLOO ESTATE CONCEPT PLAN OPTION



Fig. 3.2.102 Waterloo Estate Concept Plan Option



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

KEY ELEMENTS

- ① **Urban plaza next to metro**
Arrival at a mixed-use urban plaza next to metro station.
- ② **Retention of Waterloo Green**
- ③ **Variety of streets & lots**
Supports a highly walkable neighbourhood.
- ④ **Variety of open spaces**
Distributed throughout for improved access.
- ⑤ **George Street Pedestrian Boulevard**
20 metre wide north-south connector.
- ⑥ **Variety of built form**
Supports a diverse range of housing options.
- ⑦ **Social corners**
Supports diversity of open space and retention of trees



Fig. 3.2.103 View from Cope Street to Waterloo Station
Source: Tim Throsby (Illustrator), 2018



Fig. 3.2.104 View from George Street to Waterloo Green
Source: Tim Throsby (Illustrator), 2018

WATERLOO VILLAGE GREEN CONCEPT PLAN OPTION



KEY ELEMENTS

- ① **Centralised park**
Provides a village focused primary park.
- ② **Unique street grid**
Considers future urban growth and access to the metro station.
- ③ **George Street Pedestrian Boulevard**
20 - 25 metre wide north-south landscaped connector.
- ④ **Blue-green link**
Aligns desire lines to the metro station with landscaped environment.
- ⑤ **Unique lot structure**
Supports unique architectural responses and a diverse range of building types.
- ⑥ **Environmentally responsive built form**
Supports increased amenity.

Fig. 3.2.105 Waterloo Village Green Concept Plan Option



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

WATERLOO PARK CONCEPT PLAN OPTION



KEY ELEMENTS

- ① **Public park next to metro**
A "green" arrival to Waterloo provides a recreational anchor for the Estate.
- ② **George Street Pedestrian Boulevard**
Provides a 30 metre wide north-south "green spine" that provides a series of parks.
- ③ **Courtyard style blocks**
- ④ **Publicly accessible courtyards**
- ⑤ **Through site link network**

Fig. 3.2.108 Waterloo Park Concept Plan Option



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



Fig. 3.2.106 View from Cope Street to Waterloo Station
Source: Tim Throsby, 2018



Fig. 3.2.107 View from the Metro Quarter to the Estate
Source: Tim Throsby, 2018



Fig. 3.2.109 View from Cope Street to Waterloo Station
Source: Tim Throsby, 2018



Fig. 3.2.110 View along George Street Pedestrian Boulevard
Source: Tim Throsby, 2018



3.2.7 OPTIONS TESTING

Key feedback and issues raised by the community and stakeholders on the options inform the masterplan response

Ongoing communication and engagement with social housing residents, private landowners, local stakeholder groups and the broader community throughout the planning process, and into delivery and operation of the Estate is key to the success of the renewal of Waterloo South. The Concept Plan Options went through an options testing phase of consultation with the community and stakeholders.

Consistent with the visioning process, the options were presented and feedback collated under the five themes of Culture and community life; Transport, streets and connections; Housing and neighbourhood design; Community facilities, services and shops; and, Environment and open space. The summary of feedback from the community and stakeholder sessions highlights the key considerations and formed the basis of the development of a Preferred Masterplan.

Feedback on the three renewal options was mixed, with participants identifying a number of elements of each of the options for consideration in preparation of a preferred master plan for the Waterloo Renewal rather than a single preferred option.

Environment and open space confirmed strong support for the masterplan to include **community gardens** at ground as well as rooftop gardens, to balance **retention of existing trees** with new ones, and provide **a range of community gathering spaces**. A **diversity of different types and sizes of open spaces** should be provided rather than fewer larger spaces, with at least one large space for community events. George Street should be a series of landscaped spaces, not just a thoroughfare, and the landscaped pedestrian links should be accessible and contribute to a **walkable neighbourhood**.

Transport, streets and connections confirmed strong support for making the Estate a **pedestrian priority precinct**, integrating **safe cycle routes**, with slow to shared streets and **safe, accessible and direct** connections to local bus stops and the metro station, services and community facilities.

Housing and neighbourhood design confirmed strong support to incorporate **more spacious and better designed dwellings with balconies**, a better mix of types and sizes, and an **even distribution of social and private dwellings** across the Estate. Views were mixed on building heights with many preferring the option with a maximum of 32 storeys, some expressing limited support for 40 storeys or higher, and others who thought the number of buildings was a more important consideration than their heights. The common factor was that the **appropriate arrangement of any tall buildings must consider the amenity** of the public, communal and private open spaces, as well as the amenity of the dwellings themselves.

Community facilities, services and shops confirmed their high level of importance to **support existing and new residents**. The masterplan should **provide more opportunities** for learning, health and childcare, and community rooms, creative and multi-purpose spaces. There should be a **primary activity hub** clustering community facilities, services and shops in the vicinity of the Metro Quarter and provision for further community facilities, services and shops to be spread out across the Estate for **equitable access and opportunities for growth** with a growing community.

Culture and community life confirmed that a **wide range of public activity areas** should be included such as ground level community gardens, youth facilities, dog parks, play areas and space for entertainment and events. The masterplan should also incorporate opportunities to **recognise and celebrate Aboriginal culture and heritage**, and to provide facilities and places that support **knowledge sharing about Aboriginal culture**.

Refer to Appendix 7.2 for further information



Fig. 3.2111 Options Testing
Source: "Let's Talk Waterloo", Elton, 2018



ENVIRONMENT AND OPEN SPACE

- Incorporate **green space** wherever possible.
- **Equitable access to parks and open space areas** for residents living in different parts of the precinct, including the southern part of the Precinct.
- **Safe, pleasant and welcoming** - accessible and usable for people of all ages and abilities.
- Transform **George Street** into a green **Pedestrian Boulevard as a series of interconnected parks**.
- Support **pedestrian safety**.
- Consider capital and maintenance costs to ensure **development sustainability**.
- **Stormwater strategy** needs to consider reducing maintenance requirements for the city, providing for root zones of street trees, stormwater detention within larger open space and combining in-street strategies with augmentation of the trunk drainage.
- Locate community gardens where they will achieve 6 hours sunlight every day to meet City of Sydney policy.



Fig. 3.2.112 Options Testing



TRANSPORT, STREETS AND CONNECTIONS

- Easy access to a range of **transport options**.
- **Safe and direct connections** to local bus stops and Waterloo Metro Station.
- Design pedestrian paths and cycle ways to provide **equitable access** and safety.
- Provide access for **emergency services and community transport services**.
- Address **traffic congestion**.
- Include innovative parking solutions like decoupled and unbundled spaces.
- Consider bicycle parking and end of trip facilities.
- Basement, servicing and parking strategy.
- Street parking.



Fig. 3.2.113 Options Testing



HOUSING AND NEIGHBOURHOOD DESIGN

- **Mixed views on building heights** and types.
- More spacious and better designed apartments - **high quality homes** that meet the diverse needs of residents, respond to changing lifecycle needs, provide indoor and outdoor space, improved safety and security, and storage space.
- **Mixed views on the retention of the existing buildings** Mataval and Turanga.
- **Aboriginal affordable housing**.
- Consider water reduction strategies and passive design to reduce energy consumption.
- Tall buildings should be slender to reduce visual bulk and scale (for solar access) and strategies to mitigate wind.
- Address operation of publicly accessible courtyards - clearly define public and private uses.



Fig. 3.2.114 Options Testing



COMMUNITY FACILITIES, SERVICES AND SHOPS

- **Recognise and celebrate Aboriginal culture** and heritage as intrinsic to the past, present and future of Waterloo as a place and community.
- Support **knowledge sharing** about Aboriginal culture among the broader local community and visitors to provide opportunities for **community learning, healing and pride**.
- **Bring people together** by supporting social interaction and provide opportunities for **learning, growth and leadership**.
- Provide **a range of educational facilities and programs** to meet the needs of existing and future residents.
- Enable residents to access employment and acquire the skills to run their own businesses through **employment assistance and small business support services**.
- Assist elderly residents to **age in place** through on-site aged care facility and age-related support services.
- **Health and wellness** facilities and programs.
- **Aboriginal employment and engagement**.

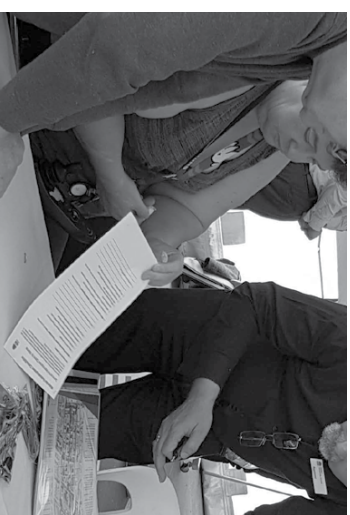


Fig. 3.2.115 Options Testing



CULTURE AND COMMUNITY LIFE

- Waterloo should remain **an authentic place with its own character** and where current residents continue to enjoy a strong **sense of community and belonging**.
- Provide opportunities for people to meet and socialise and for it to continue to be **a welcoming place** for all members of the community.
- Include a range of spaces to **support community life** including places for residents to meet, socialise and gather for larger scale events.
- Community gardens, dog parks, **play areas for kids and activities for young people**.
- Tell the multiple stories of Waterloo to **connect the past and future** in Waterloo.
- Recognise and reflect **Aboriginal and multicultural stories**.
- Address how **placemaking** is integrated.

3.2.9 CITY OF SYDNEY ALTERNATE PLAN

CITY OF SYDNEY ALTERNATE PLAN

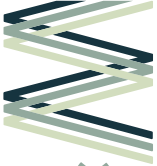
The alternate plan for the Estate proposed approximately 5,000 to 5,300 dwellings with a mix of 50% social : 20% affordable : 30% market dwellings.

The City of Sydney developed an Alternate Plan that was exhibited in March 2019. The Alternate Plan stated the following key principles:

- Reduce community disruption.
- Consider Aboriginal and Torres Strait housing.
- Rescale the neighbourhood.
- Reduce the need for excessive private dwellings.
- Retention of existing towers & slab buildings.
- Build upon the existing street grid.
- Improve pedestrian connections.
- Respect the existing green grid.
- A larger signature park located next to the metro station.



Fig 3.2.117 City of Sydney Alternate Plan - March 2019
Source: City of Sydney, 2019



3.2.10 CONSULTATION WITH CITY OF SYDNEY

Key feedback and issues raised by the City of Sydney on the Preferred Masterplan informed the development of the Waterloo South Indicative Concept Proposal

Collaboration for shared planning outcomes

A collaborative approach to strategic planning is particularly important for precincts and corridors where 'placed based' strategies require a coordinated approach to ensure their delivery will align with the growth strategies for these areas. Effective collaboration must be underpinned by governance arrangements established in the early phases of planning to identify roles and responsibilities, resourcing, and accountability. Review processes to monitor and measure infrastructure delivery should also be put in place to ensure the collaboration process is transparent and effective. Such governance arrangements can provide greater certainty to the community that strategies and plans can be delivered within time-frames and budgets, be optimally managed into the long term, and achieve desired outcomes for industry and the community.

The Preferred Plan underwent a consultative collaborative phase with the City of Sydney to agree on a way forward. Feedback on the Preferred Masterplan identified a number of elements for consideration based on the key principles stated within the City of Sydney Alternate Plan:

Reduce community disruption

To allow all residents the opportunity to return to the Estate to maintain community cohesion. This can be better achieved through a reduction in typical building size and careful staging.

Consider Aboriginal and Torres Strait housing

Work with the various communities so that a significant and specific proportion of the social (affordable rental) housing is designated for the Aboriginal and Torres Strait Islander community

Rescale the neighbourhood

The majority of dwellings will be in buildings of comparable height and floor plate.

Reduce the need for private dwellings

Reduce the need for new buildings by retaining, refurbishing and updating existing tower and slab buildings within the Estate.

Build upon the existing street grid

Reinforcing the existing street grid helps to define this locality by maintaining good accessibility with high legibility.

Improve pedestrian connections

The large blocks in the north should be broken down with safe through-site links for improved pedestrian permeability. George Street and its trees should be maintained for residential access.

Respect the existing green grid

It should aim to target 35per cent large trees, 10 per cent civic scale trees; with no more than 40per cent in any one family, 30 per cent in any one genius and 10 per cent in any one species for diversity and resilience. Thirty per cent of the area is City of Sydney road reserve currently providing 38 per cent of the canopy coverage (356 trees). The green grid should extend beyond the site along footpath and cycle connections.

Provide a large signature park next to the future metro station

Consolidate the small and large parks into a single park.

Preferred park location

The preferred park position would be bounded by Cope Street, Raglan, George and Wellington Streets and would involve the closing of Cooper Street.

Key outcomes from this process centred on agreement on the following:

- Lower built form (up to 32 storeys)
- Larger central park
- Wider streets
- Tree retention targets
- Possible retention of slab and tower buildings
- No reduction in existing street widths
- George Street to remain in its current configuration in the short term with a process to move towards pedestrian prioritisation in the future.
- Regional cycle path to remain along George Street
- Location of large park adjacent to the Waterloo Metro Station
- Clarified definition of solar access to parks to be a fixed location
- A secondary park located to the south of the Estate for more equitable access
- Renewal of the Estate to be in three stages, with Waterloo South delivered first ahead of Waterloo Central and Waterloo North

ALIGNMENT CONSIDERATIONS

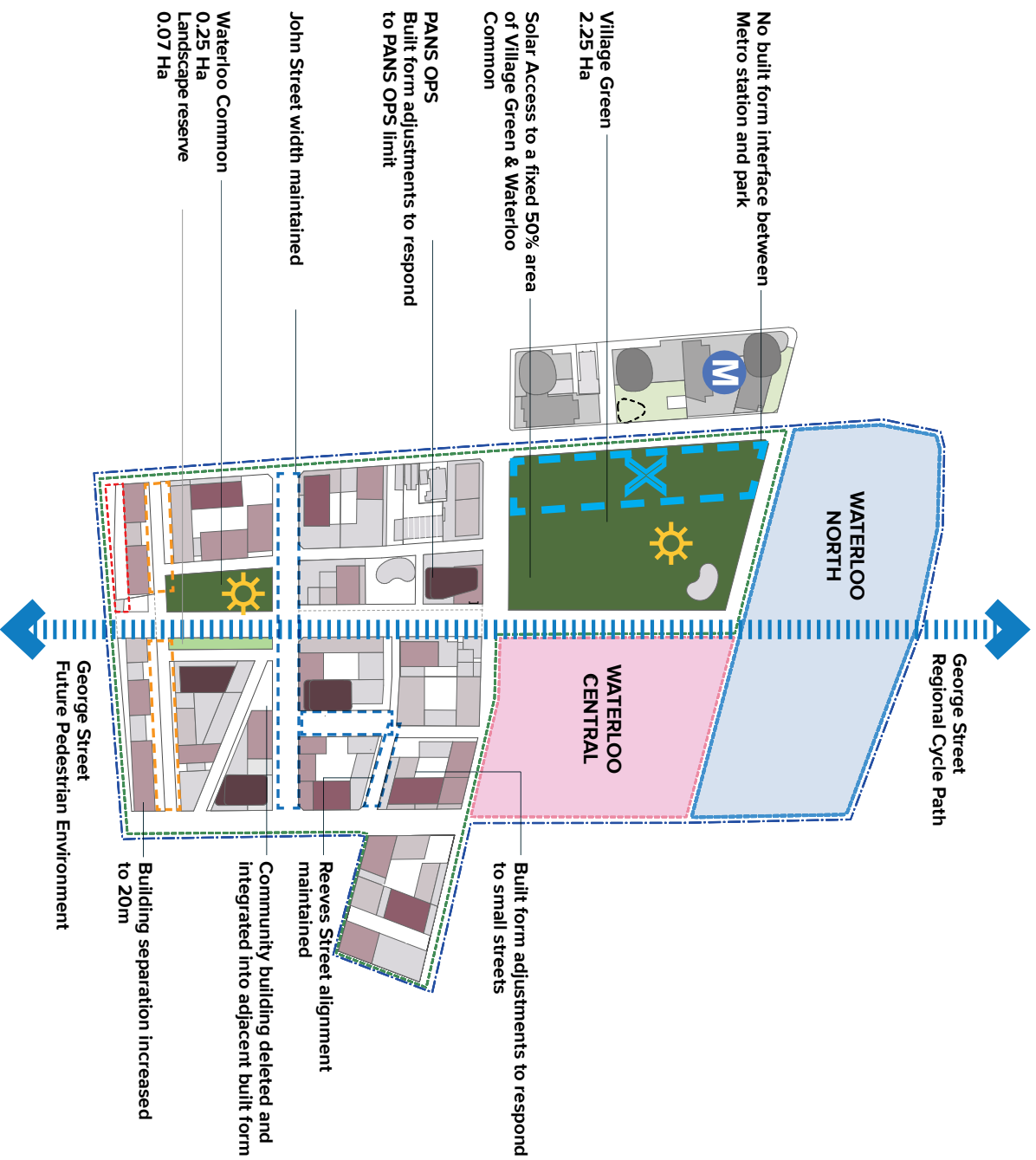
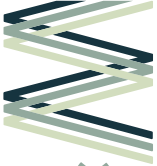


Fig. 3.2.118 Summary of Considerations



3.2.11 KIT OF PARTS (NON-RESIDENTIAL USES)

Providing supporting land uses, with a mix of uses that includes retail, social infrastructure, entertainment and businesses will be important to create vibrancy

Planning for non-residential uses for Waterloo South needs to consider the diverse needs of the existing community, and the changing characteristics of the community over time as the renewal progresses. The mix of retail, services and community uses needs to cater to the diverse local community, which consists of social housing tenants, young professionals, students and other workers, of Aboriginal and non-Aboriginal background. The kit of parts of non-residential uses has been developed throughout the masterplan process with consideration to:

- Existing community needs
- Vision and objectives for the Precinct
- The needs of the future community
- Benchmarking against the offerings at other high density residential locations across Sydney (that includes Potts Point/Macleay Street and Wolli Creek)

The retail and ancillary non-retail offer is based on meeting the needs of local residents and workers; both existing and future; and also to draw people in from across the broader region through uses that activate the Estate in the evenings and on weekends, with the future Waterloo Metro Station facilitating movements for 18 hours a day.

Community and cultural facilities will need to be flexible, and planned in partnership with local service providers who understand the needs of the local communities. This includes co-locating facilities to ensure they are well-located close to public transport and other facilities. Ongoing consultation with service providers will confirm the capacity of existing services and facilities to meet the needs of existing and future residents, including private and social housing residents.

Refer to Appendix 7A for further information



Fig. 3.2.119
Source: <https://esperanceide.com>, 2019



Fig. 3.2.120
Source: <https://www.firstchoicebd.com.au>, 2019



Fig. 3.2.121
Source: <http://www.thecomunure.co>, 2019



Fig. 3.2.122 "It's possible to love a bank"
Source: <https://www.rakethingmag.com.au>



Fig. 3.2.123
Source: LAHC, 2018



Fig. 3.2.124 Storytime
Source: <https://www.proubild.com.au>, 2019



Fig. 3.2.125
Source: <https://dynamic.architecture.com.au>



Fig. 3.2.126 Bike repair workshop
Source: LAHC, 2018



Fig. 3.2.127
Source: LAHC, 2018



Fig. 3.2.128
Source: <https://inlatk.com>, 2019



Fig. 3.2.129 Easter egg painting
Source: Turner, 2019



Fig. 3.2.130
Source: <https://www.rmycph.com.au>, 2019



Fig. 3.2.131 Rock climbing
Source: LAHC, 2018



Fig. 3.2.132
Source: <https://cityofsydney.nsw.gov.au>, 2019

3.2.12 FEATURES

Through the options development and testing, a range of key features for the Indicative Concept Proposal emerged that were integral to the renewal of Waterloo South into a great urban place. These are:



Fig. 3.2.133

A distinctly Waterloo public domain with a strong local character and community belonging.



Fig. 3.2.134

Integral Aboriginal culture and placemaking.



Fig. 3.2.135

A highly connected active transport hub.



Fig. 3.2.136

A pedestrian priority walkable precinct.



Fig. 3.2.137

Accessible and inclusive green environment and hierarchy of open spaces.



Fig. 3.2.138

Gathering areas and communal spaces supporting social connectedness.



Fig. 3.2.139

A high performing and activation ready public domain and non-residential uses.



Fig. 3.2.140

An accessible range of local community facilities, services and retail to meet everyday needs.



Fig. 3.2.141

Accessible jobs and educational opportunities.



Fig. 3.2.142

A mix and choice of tenure blind social, affordable and private dwellings.



Fig. 3.2.143

User and contextual responses to built form.



Fig. 3.2.44

Blue line



Fig. 4.04 Indicative CGI: Cope Street facing north, Waterloo Village Green pavilion
Source: Virtual Ideas, 2020

4.0 FRAMEWORK

PLANNING PROPOSAL REQUIREMENT

The built form should be developed in line with the design process described in the NSW Government Architect Better Placed strategy:

- A precinct plan that integrates:
 - Public domain
 - Infrastructure
 - Staging
 - Building types
 - Height distribution and massing

Provide a Public Domain Plan identifying any proposed public spaces, walkways, laneways, shared paths and streets, including an accurate CAD set-out showing the boundaries of any streets, walkways or other public spaces and servicing considerations to the public domain.

ADDRESSED IN

Urban Design Report
Appendix 710

Chapter 4.0 - 6.0

Appendix 73

Appendix 74

Appendix 78

Appendix 75

Chapter 6.2

Chapter 4.0

Chapter 6.0

Appendix 73

SSP STUDY REQUIREMENT

Urban Design

2.6 Prepare a precinct plan that integrates: the public domain plan, community facilities plan, indicative subdivision plan, infrastructure plan, staging plan and building types and massing for the site. Demonstrate how this fits within the overall State Significant Precinct and surrounding context.

ADDRESSED IN

Chapter 4.0 - 6.0

Appendix 73

Appendix 74

Appendix 75

Appendix 77

Appendix 78

Chapter 4.0 - 6.0

Appendix 74

Chapter 4.0 - 6.0

Appendix 73

Chapter 4.0 - 6.0

Appendix 73

Appendix 75

Chapter 4.0

Chapter 6.0

Appendix 73

Appendix 72.1

Public Domain: Public Open Space & Streets

3.4 Provide an open space plan for the precinct, locating precinct park(s) derived from site analysis, benchmarking assessment and urban design principles. Demonstrate how accessibility to the new park(s) is maximised by surrounding street interfaces, and location in relation to slope, and how the flexibility and extent of use is maximised by locating away from busy roads, noise and pollution, how size is suitable for the number and types of users, and location in relation to existing parks optimises use for the surrounding community

3.6 Provide a layout plan of the public streets, lanes and walkways, identifying street hierarchy, typologies, movement patterns for all modes of travel, connectivity to existing context and the development lots. Provide detailed sections and plans for typical conditions in each type of street, demonstrating innovative and best practice design for high density, highly connected, and active transport priority environments.

3.9 Provide a public domain plan incorporating the open space plan and street layout and demonstrate how it responds to the analysis and the urban design principles.

3.13 In all of the above, demonstrate consideration and application of City of Sydney public domain codes where appropriate, including the Streets Code and Technical Specifications, Legible Sydney Wayfinding Strategy and Design Manual, and any other relevant City of Sydney draft Codes.

Chapter 4.0 - 6.0
Appendix 73

Chapter 4.0 - 6.0
Appendix 73

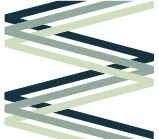
Chapter 4.0 - 6.0
Appendix 73

An urban village which respects the character of Waterloo, connects people to nature and enhances access to amenities, services and transport

This chapter describes the Waterloo South Indicative Concept Proposal. An urban village which respects the character of Waterloo, connects people to nature and enhances access to amenities, services and transport. It illustrates the central features of the masterplan that respond to the vision and objectives and key design insights from the baseline and context analysis, their placemaking and place performance potential, and the incorporation of feedback from the community and stakeholder engagement processes and options testing as key design drivers.

The public domain, open space, urban and built form elements that define the physical character of the masterplan are also outlined. These illustrate the physical framework and layers of the masterplan, with the public domain, open space and landscaped elements shaping the built form response, all of which were uniquely derived through the masterplan process.

The Waterloo South Indicative Concept Proposal aligns with state and local government policies and strategies to locate Sydney's growing population close to active transport options, combined with employment opportunities, housing choice and access to services, amenities and open space. The balanced and evidence based approach to developing the vision, objectives, insights, principles, measures, frameworks and drivers has also resulted in a masterplan that is uniquely Waterloo, that recognises and celebrates the history and many layers of the people and place, that builds upon the attributes that makes the Estate unique and retains the qualities and characteristics that will make it a distinctive, welcoming and authentic place that will evolve over the life of the masterplan.



WATERLOO SOUTH

17,900m² RETAIL, SERVICES & COMMUNITY

3,048 DWELLINGS

LEGEND

1 VILLAGE GREEN

Supports community gatherings, events, recreation, productive landscape and water management

2 WATERLOO COMMON

Provides open space for neighbourhood gathering, productive landscape, play and water management

3 GEORGE STREET ACTIVE SPINE

A 20 - 25m wide tree lined, landscaped movement corridor connecting the community to key destinations

4 WATERLOO METRO STATION

Sydney Metro station

5 RETAIL AND SERVICES HUBS

Provide a mix of local retail and services

6 COMMUNITY HUBS

Provide community gathering space and community services

7 BLUE LINE

A pedestrian connection between key destinations that reflects the local water story

8 COMMUNITY GARDENS

Provide productive opportunities for the community to grow and harvest produce

9 ACTIVITY PLAY ZONES

Provide opportunities for active uses including play space, picnic areas, fitness and youth zones

10 ACCESSIBLE LOCAL MOVEMENT ROUTE

Provides a route that connects key spaces, destinations and amenities that is safe and accessible for all ages and abilities

INDICATIVE CONCEPT PROPOSAL



Fig. 4.11 Waterloo South Indicative Concept Proposal

4.1 MASTERPLAN FRAMEWORK

An urban village which respects the character of Waterloo, connects people to nature and enhances access to amenities, services and transport

The vision for Waterloo South creates a distinctive urban village that connects the community to nature and Greater Sydney. The Waterloo South Indicative Concept Proposal recognises, retains and builds upon Waterloo's heritage and existing identity. Key design drivers have informed the urban design and public domain response to create three sub-precinct character areas that respond to the surrounding neighbourhood, with distinct characteristics and experiences.

SHARED COMMUNITY

Waterloo has a strong and resilient community bonded through common experience. To build upon this strength, the public domain and built form provides for a variety and mix of uses to support social interaction at different scales. A mix of community, services and shops responds to local everyday needs and supports social connectedness. The public domain will be supported by local programs that responds to the existing and future community's needs. The tenure blind mixed community and productive landscapes support affordable living.

A variety of spaces facilitate the social life of the community and the needs of old and young. Key elements are two new public open spaces, the Village Green and Waterloo Common. The north-south George Street alignment will be renewed into an Activity Street to connect the Estate. Urban plazas provide community anchors to each sub-precinct character area, and social centers promote more intimate social interactions. An accessible local movement route (ALMR) provides safe connections to promote active transport modes.



Fig. 4.12 Waterloo Common water play and plaza
Source: Virtual Ideas, 2020

LIVING CULTURE

The vision for Waterloo South reflects and builds upon the diverse cultural identity and Indigenous heritage to connect past, present and future Waterloo. This is recognised by the inclusion of edible landscapes in the public domain, multi-cultural community gardens, the provision of services that respond to the existing and future community's needs, and a place based public art strategy for Waterloo South that reflects the diverse contemporary culture. The location of services and facilities will be refined through an on-going commitment to working with the community in further shaping the spaces and services.



Fig. 4.13 'Big Roof' within Village Green
Source: Virtual Ideas, 2020

BLUE / GREEN

Blue / Green connects to the cultural significance of the traditional landscape and provides the opportunity to re-interpret the qualities of Waterloo into the future public domain. A network of landscaped open spaces that include public spaces, publicly accessible private space and private communal space connects people to nature. The finer grain green streets and pedestrian network supports the open space network and urban forest, and promotes health and well being, by providing access to green amenity and connection to nature through natural materials and forms. The Blue Line connects to the cultural significance of water by weaving the water story into the public domain through water play, water sensitive urban design (WSUD) and bio-filtration strategies that visibly celebrate water and provide a cultural interpretation through the public domain. The integration of biophilic principles will connect people to nature.



Fig. 4.14 WSUD
Source: Virtual Ideas, 2020

KEEP IT LOCAL

Waterloo's heritage as a productive place, a productive landscape for the Aboriginal people and post settlement as a place of industry and a maker and creative area, is reflected through the fine grained urban character. A mix of building frontages provide for a diversity of active uses at street level. The retention and adaptive re-use of existing heritage buildings and items of significance retain and build on the existing street character. With an overarching ethos of 'keeping it local', the character sub-precinct character areas stitch Waterloo South into the surrounding community.



Fig. 4.15 Waterloo Common community garden
Source: Virtual Ideas, 2020

URBANITY

A mix of housing and neighbourhood character areas reflects the diverse community and provides housing choice. The urban and built form enables these uses through building types and heights that support different types and scales of use. Adaptable basement, ground and first floor levels will enable the sustainable evolution of the ground plane to non-residential uses to meet the needs of the growing community. As Waterloo South is renewed, retaining the existing local character will be important. The offering must be intensified, including transport, open space, and mix of uses. Providing supporting land uses (such as retail, social infrastructure, entertainment and businesses) will create vibrancy.



Fig. 4.16 Local shops at Waterloo South
Source: Virtual Ideas, 2020



Fig. 4.2.1 Indicative CGI, George Street pocket park
Source: Virtual Ideas, 2020

4.2 MASTERPLAN STRUCTURE

- 4.2.1 Environment and Open Space
- 4.2.2 Transport, Streets and Connectivity
- 4.2.3 Housing and Neighbourhood Design
- 4.2.4 Community Facilities, Services and Shops
- 4.2.5 Culture and Community Life

“Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody”

Jane Jacobs*

This section illustrates the key elements of the masterplan under the five thematic layers that were identified by the community and stakeholders as critical to ensuring that the masterplan will deliver a great urban place.

The underlying framework for the masterplan is the size and location of the main public open spaces, the Village Green and Waterloo Common, and the secondary open space network of pocket parks, social corners and landscaped setbacks, all of which support the retention of the tree canopy and provide locations for its replenishment, which will enhance Waterloo South's landscape character:

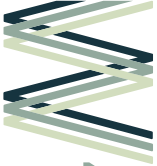
Waterloo will become a distinct urban village experience which connects people to each other, to nature and the greater city of Sydney. With the Metro Station on Waterloo's doorstep, an active transport hub surrounding the Metro Quarter will facilitate the regional gateway and provide a central location for retail, community services and community spaces.

With a large Village Green and Waterloo Common positioned along the George Street activity street and within a pedestrian priority precinct, public open space will be accessible to the community and support community gathering and a range of active and passive uses.

The green public domain will celebrate the layered natural and cultural history of Waterloo and its proud community. From the Waterloo wetlands, to the history of industry and innovation, to the lofty trees, the diversity of cultural backgrounds and the networks between neighbours, the stories and community voice will be shared and act as a link through the community.

A liveable and mixed community will be supported by local retail and community services and facilities including a variety of housing choices and building typologies. Active streets and small neighbourhood areas which reflect community character and responses to place support the daily life of the community.

4.2.1 ENVIRONMENT AND OPEN SPACE



Strengthening community and highlighting Waterloo's unique and resilient characteristics by creating an active, welcoming and safe environment

Waterloo South's public domain framework and strategy draws upon its existing significant and unique features to create an active, safe, adaptive and resilient public domain. This will promote community interaction and enable flexibility of use, catering to the diverse needs and lifestyles of the Estate's existing and future community.

Contributing to the existing network of open spaces, two new local parks provide distributed and equitable open space in the north and south of Waterloo South. Public open spaces are supported by a diverse range of open space typologies that include urban plazas, pocket parks, social corners, publicly accessible private spaces and private communal spaces.

Productive landscape opportunities are maximised throughout Waterloo South both within the public and private domain. This includes community gardens provided within the two local parks that cater for community members, irrespective where they reside, and promote social interactions at a community level.

Smaller community gardens are provided within private communal space both at ground and roof levels that serve and promote social interactions between residents. Edible landscape and bush tucker will be provided throughout the public and private domain as a resource for the community and connection back to Indigenous land management practices.

Water sensitive urban design (WSUD), water play and detention under the two new parks celebrates the historical and cultural significance of water. It provides a public domain with an ecological and sustainable response that aligns with regional and local strategies set by the NSW Government and the City of Sydney.

Refer to Appendix 7.3 for further information



Fig. 4.2.2 Environment and Open Space

PRIMARY PARKS

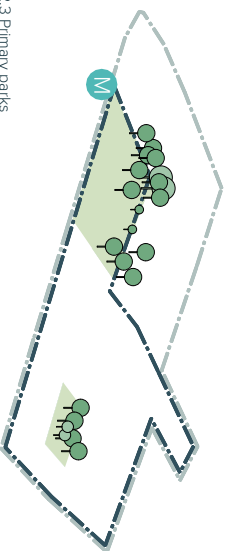


Fig. 4.2.3 Primary parks

Two key defining open spaces for Waterloo - the Village Green and Waterloo Common - provide an equitable distribution across Waterloo South

The two majors parks within the Estate are the Village Green and Waterloo Common. Both parks offer active and passive spaces for the community. The tree-lined spaces are connected to one another via the George Street actively street. 2.5 hectares of public open space are provided in these two parks, with an additional 0.07 hectares of landscaped open space next to Waterloo Common to retain existing trees.

URBAN FOREST STRATEGY

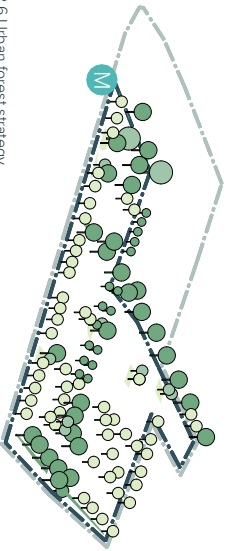


Fig. 4.2.6 Urban forest strategy

Building upon the City of Sydney's urban forest strategy, Waterloo South will provide a mature canopy that will provide shade and greenery to a target 30 percent of the total area of Waterloo South

The canopy cover will provide respite from the heat of the summer sun and will shade the streets across Waterloo South to reduce the effects of the urban heat island effect. A 3 : 1 replacement ratio for every high and moderate value tree will target 30 percent canopy cover, with 50% trees within the public domain. The types and diversity of species provided support flora and fauna and productivity through edible species. Bush tucker species will connect back to Indigenous culture.

PRODUCTIVE LANDSCAPES

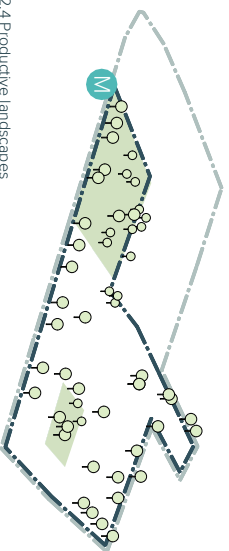


Fig. 4.2.4 Productive landscapes

Respecting the area's history as a productive landscape, edible planting and a range of community gardens are provided at different scales to promote social interaction among residents

The hierarchy of productive landscape includes community gardens provided in the Village Green and Waterloo Commons for the wider community and communal gardens, private food gardens and rooftop gardens within development lots for residential community within blocks. Thirty percent of the landscape will be provided as edible landscape both within the public and private domain.

TREE LINED VIEW CORRIDORS

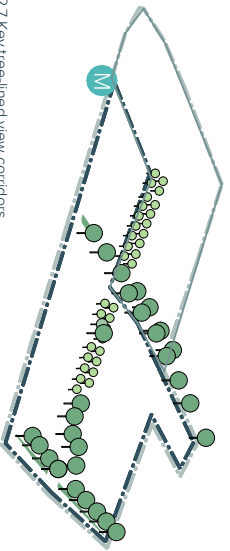


Fig. 4.2.7 Key tree-lined view corridors

Key tree lines along major view corridors are retained and enhanced through landscape setbacks that retain significant tree groupings

Landscape setbacks are provided for the retention of significant tree lines located along major view corridors in Wellington, Cope and George streets. The key tree lines along Reglan, Wellington and George streets as a group provide scale, canopy and amenity.

BLUE LINE

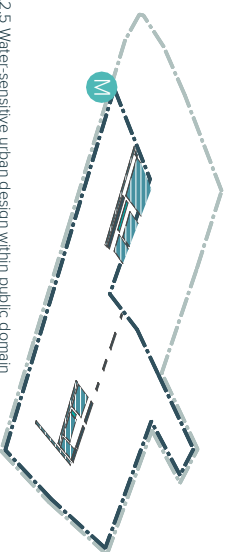


Fig. 4.2.5 Water-sensitive urban design within public domain

The cultural significance of water is celebrated through integrated water management that is embedded as part of the public domain through WSUD, water play and detention under the two local parks

Integrated water management will weave the site's water story. Technical flood management, WSUD strategies and play and learning features or elements will be integrated and provide interpretation of the Indigenous cultural significance of water, as a gathering place and a place for food and resources.

TREE RETENTION ZONES

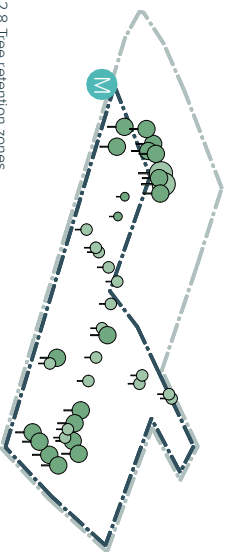
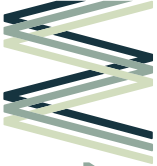


Fig. 4.2.8 Tree retention zones.

Significant tree clusters are retained through tree retention zones for medium and high value trees within development lots that balance flexibility for a range of architectural responses

Tree retention zones are provided for the retention of significant individual trees as well as clusters of trees located at the interface of the public and private domain. Significant fig groupings are located at key corners within Waterloo South and contribute significantly to the canopy cover.



4.2.2 TRANSPORT, STREETS AND CONNECTIONS

Establishing the Estate as a pedestrian priority precinct, Waterloo Station will connect the community to Greater Sydney, and the Metro Quarter active transport hub will provide retail, community services and facilities

Waterloo South will support a connected community, with ease of movement for pedestrians of all ages and abilities, cyclists and those using public transport. The present pedestrian network, limits efficient connections between key locations within the Estate and Greater Sydney through topographical and traffic challenges. With a renewed movement strategy, Waterloo South will become a pedestrian priority precinct. This will be through the adaptation of key movement networks (pedestrian, public transport and cycle) alongside considered locations for, and rates for car parking, an accessible movement route, and implementation of safe design principles.

The pedestrian and cycle network will bring activation to Waterloo's streets. Movement will be simplified and includes an Accessible Local Movement Route. This route has been designed to offer clear, safe and accessible connections, to all key destinations and activation hubs across Waterloo South, for all people of all ages and abilities. New shared slow streets, pedestrianised laneways and widened footpaths, will significantly improve active transport connections. The existing cycleway along George Street will be retained.

The existing public transport and cycle network will be strengthened by additions to the street grid and increased street functionality. Currently the main public transport service to the Estate is the Sydney bus network. The pedestrian connections towards these stops could be improved. With strengthened street connections, and the introduction of the Waterloo Metro Station, the connections between active transport modes, including cycling and walking, will be greatly improved. The future metro station is critical to Waterloo becoming part of the 30 minute city, as well as being an activity centre and hub for services itself. This is a primary consideration in the layout of key open spaces, connections and uses throughout Waterloo South.

Refer to Appendix 73 for further information

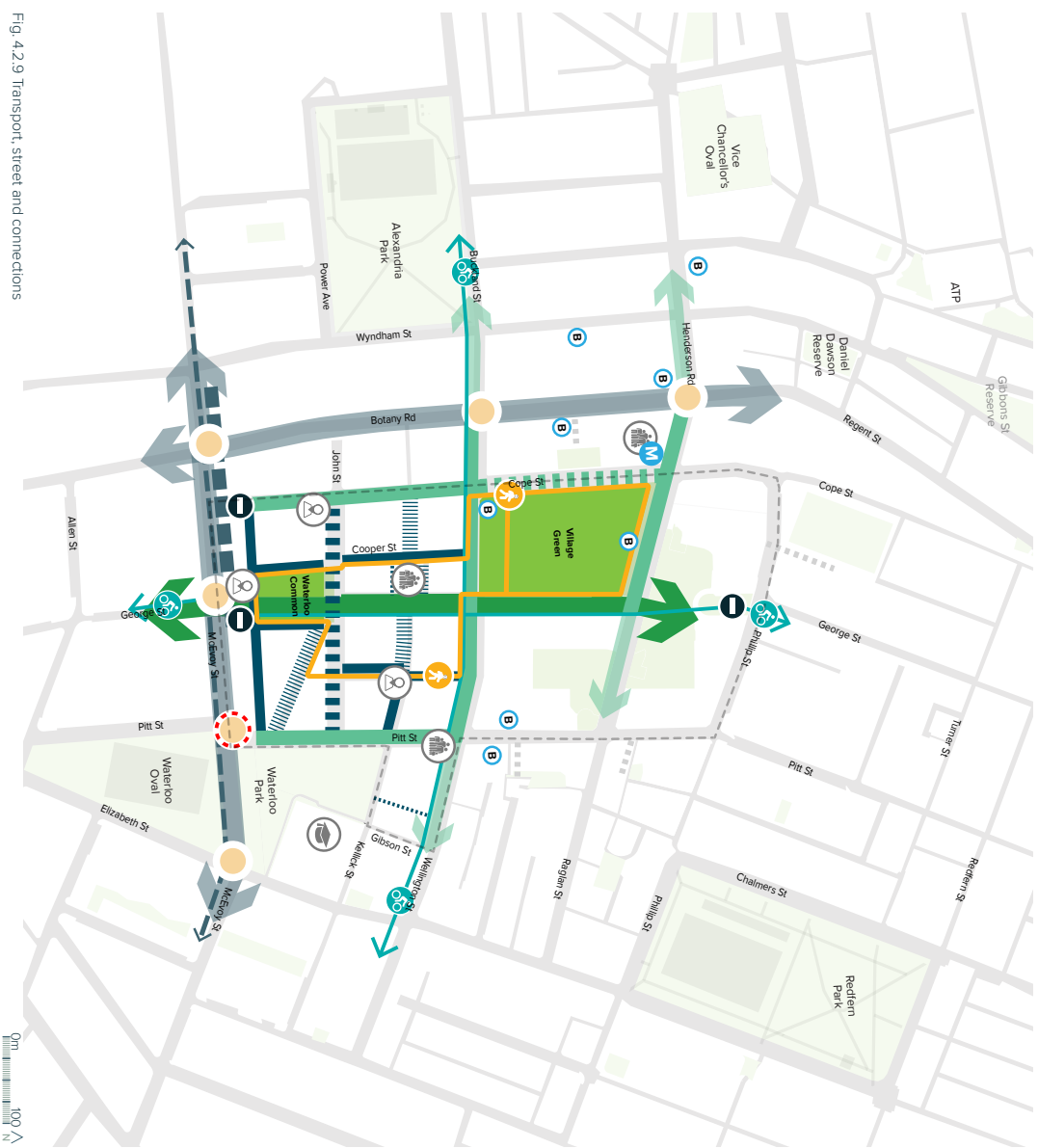


Fig. 4.2.9 Transport, street and connections

PEDESTRIAN PRIORITY PRECINCT

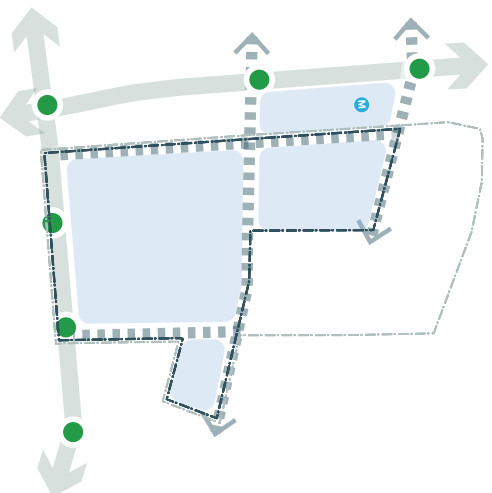


Fig. 4.2.10 Pedestrian priority precinct

Legend

- Local Streets
- Arterial Road
- Signalised Intersection
- Waterloo Station

Re-establishing Waterloo's streets as places for people, to provide a walkable urban place with 82 percent of Waterloo South's streets as slow streets

The fine grain street network and hierarchy has been developed with local streets, shared slow streets and laneways. Streets across Waterloo South will function at reduced speed levels, ranging from pedestrian only traffic to a maximum of 40 kilometres per hour along existing local streets.

The connected street network focuses on re-establishing the fine grain nature of Waterloo, providing safe and accessible corridors into residential areas of Waterloo South. With wider footpaths, shared paths, and increases in signalised and marked crossings, the ease of access for all people will be vastly improved. The clarity, safety and diversity of movement offered will promote and encourage active transport modes and connectivity.

ACCESSIBLE LOCAL MOVEMENT ROUTE

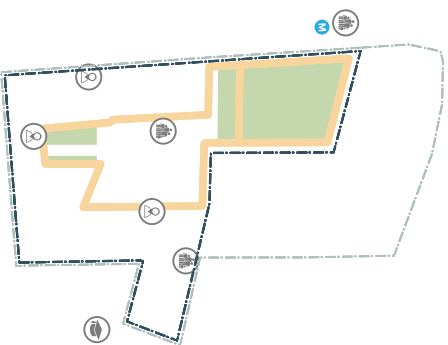


Fig. 4.2.11 Accessible local movement route

Legend

- Accessible local movement route
- Major Public Open Space
- Waterloo Station
- Educational Building
- Community Hub
- Social Corner

A place that is equal for all, with safe and accessible movement throughout the Estate

The Accessible Local Movement Route (ALMR) provides a safe and accessible walking and cycling route for all ages that connects key public spaces, destinations and amenities. The ALMR will facilitate an active community, encouraging movement and providing walkability throughout Waterloo South.

The ALMR will be characterised by clear wayfinding strategies, amenity stations, safe lighting, sun and shade, connection to key places (including the Metro Quarter, major parks and community buildings), public art and interpretation and ground level activation.

CYCLE NETWORK

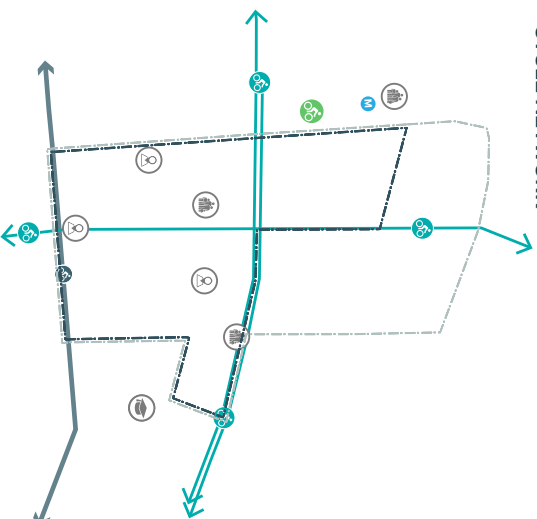


Fig. 4.2.12 Cycle network

Legend

- Dedicated Cycle Routes
- Shared Cycle Routes
- Shared Cycle Routes
- Sydney Park to Centennial Park
- Cycle Storage Location
- Metro Cycle Storage
- Waterloo Station
- Waterloo Station
- Educational Building
- Community Hub
- Social Corner

As a pedestrian priority precinct, cycle safety will be greatly increased, promoting a well connected and cycle friendly environment

All cycle paths will be part of the shared pathway network. Separated cycleways, pedestrian priority streets, and bicycle storage areas (short and long term) will encourage and promote active transport modes. With the improvements to George Street, the north-south regional cycle route will be retained and provide direct access to the future Waterloo Metro Station talong Raglan and Wellington streets.

PUBLIC TRANSPORT NETWORK

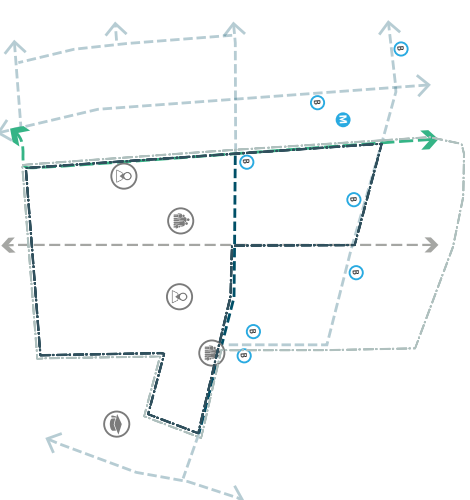


Fig. 4.2.13 Public transport network

Legend

- Bus route (outside Estate)
- Train alignment
- Metro alignment
- Bus Route
- Bus Stop
- Waterloo Station

A connected community, both locally and regionally

The Metro Quarter will be an important activity centre, connecting the Estate to the Greater Sydney area. Botany Road bus services will connect Central Sydney, Green Square and Redfern, from north to south, to the Estate and the Waterloo Metro Station. Bus routes east and west along Raglan and Wellington streets, with the inclusion of new stops, provides good bus connections to and from the adjacent areas of Waterloo and Alexandria.

The future Waterloo Metro Station will connect the Estate to key destinations within Greater Sydney, within 30 minutes of travel. These include Central Sydney, Chatswood to the north, Hurstville to the south and Parramatta to the west.

HIERARCHY OF CENTRES AND HUBS

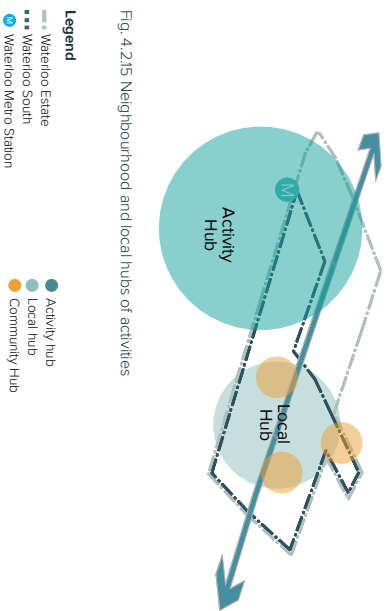


Fig. 4.215 Neighbourhood and local hubs of activities

A hierarchy of activity hubs within Waterloo South supports social interactions at various levels - neighbourhood, local and street

The Metro Quarter neighbourhood scale activity hub focused around the future Metro Station along Cope Street is supported by the George Street activity street - a local scale retail high street with a supermarket anchor.

The activity hub and spine are supported by small scale retail and community space located next to community anchors, pocket parks and social corners to support local social interactions. The scale of activity hubs respond to the sub precinct character areas to provide for a broad range of community and social interactions that are distributed across Waterloo South for equitable access and choice.

SHOPS AND SERVICES

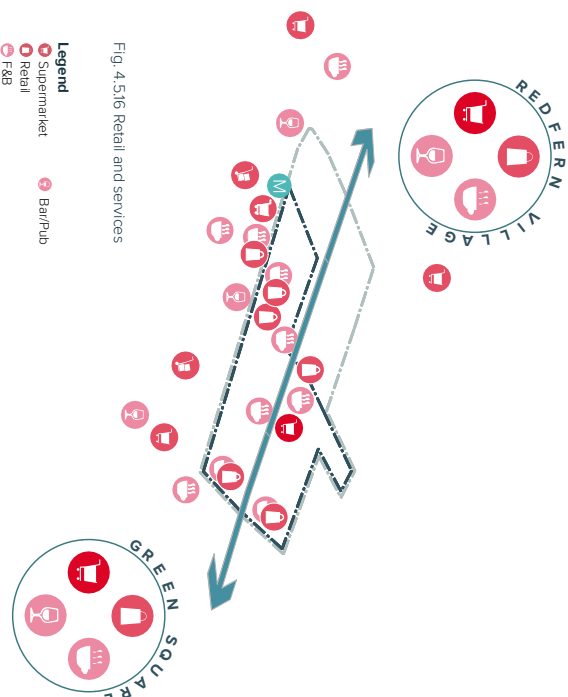


Fig. 4.516 Retail and services

Retail and services are connected directly to the future metro station by the new Blue Line that weaves the water story and associated public amenity through Waterloo South

Retail, community and cultural uses are distributed throughout Waterloo South along the Blue Line that provides direct connection from the future metro station, to the key places in Waterloo South, and outwards to the surrounding areas.

The distribution of local retail and services throughout Waterloo South provides equitable access to, and responds to the needs of, the community. A broad mix of frontage widths support diversity of scale and affordability.

SOCIAL AND COMMUNITY FACILITIES

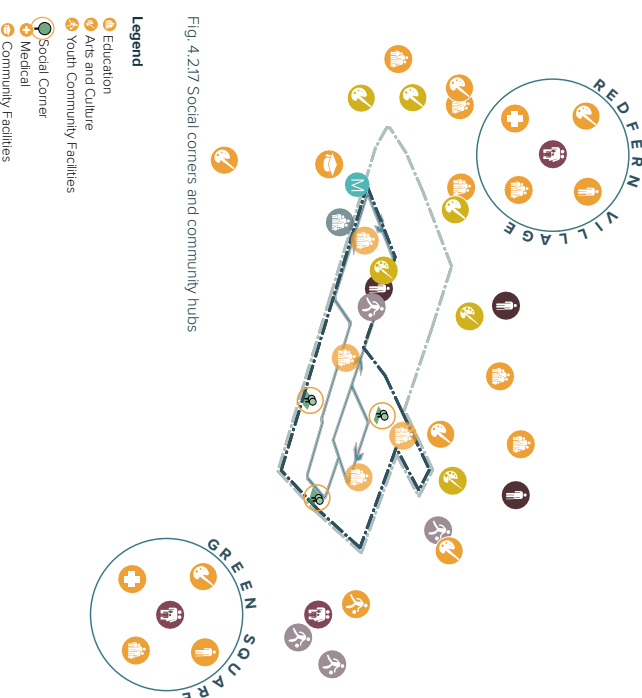


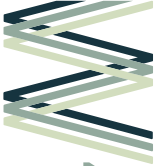
Fig. 4.217 Social corners and community hubs

An Accessible Local Movement Route provides safe, accessible and attractive connection that links social, community and cultural facilities

Key community buildings within each sub-precinct provide a community focus or anchor, and are co-located with larger open space typologies to provide for active and passive uses, and to support a range of social interactions.

In addition to the main community hubs, community uses associated with smaller open space typologies - pocket parks and social corners - provide for more intimate interactions. The Accessible Local Movement Route provides a safe, attractive and well-designed connection between these facilities (and amenities).

4.2.2.4 HOUSING AND NEIGHBOURHOOD DESIGN



A mixed community is provided in a variety of building typologies. Vertical neighbourhoods place more residents closer to nature and provide a liveable and distinct private domain to balance social life in the public domain

Waterloo South will provide approximately 3,048 new tenure blind dwellings in an urban village of mixed social (affordable rental) and private dwellings. This is supported by a mix of non-residential uses that responds to the needs of the existing and future community. Building heights across Waterloo South are distributed to define the street edge at the pedestrian scale and provide legibility and orientation at the local and neighbourhood level. The mix and range of tall buildings will create a visually interesting skyline, with slender forms, achieved through small floor plates, that respond to solar access and wind mitigation.

The framework for Waterloo South creates three distinct sub precinct areas, each with an identifiable place character, that retains and builds on the strengths of the surrounding neighbourhood.

The Village Green's location next to the Metro Quarter and Waterloo Metro Station reinforces its role as a neighbourhood activity centre with a civic character by providing 'a green arrival'. An urban transition zone (urban filter) supports and extends the Cope Street Plaza and accommodates active uses. At ground level, non-residential uses within the Metro Quarter provides day and night activation.

Maker Village in the south-west provides a transition between Waterloo Common to future development along Botany and Cope streets, with a mix of mid rise courtyard typologies and heights up to 32 storeys. Mid rise buildings provide a height transition and social corners provide landscaped buffers.

Hilltop Village in the south-west responds to the topography and existing mix of open space and historical built forms. The built form typologies respond to the adjacent residential character and scale as well as the change in topography.

Refer to Appendix 75 and 77 for further information



Fig 4.218 Indicative Cgt George Street facing north, Community hub plaza
Source: Virtual Ideas, 2019

STREET LEVEL EXPERIENCE

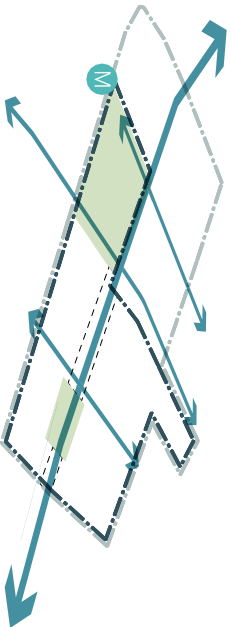


Fig. 4.2.19 Publicly accessible courtyards extend the public domain

The character of Waterloo South will be defined by the street level experience. Attractive public spaces and a well-designed connected street network will be supported by ground level activation along key routes

The public domain-led approach provides a localised environmental response that connects Waterloo South to its context and provides for a uniquely Waterloo public domain, to support the needs of the diverse and unique existing and future community. The open space and fine grain street network is supported by through site link connections across blocks for a high performing and activation ready ground plane.

LOCAL LEVEL EXPERIENCE

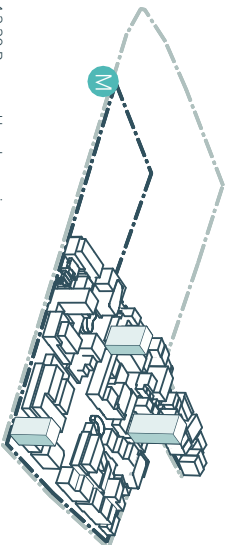


Fig. 4.2.20 Proposed local experience

At the local level, streetwall heights define the public domain and frame the street level experience

Heights between 4 - 8 storeys are provided across most of Waterloo South . To provide a human scale to the street experience, a maximum perceived height of 6 storeys is provided for buildings that are 8 storeys or 8 storeys with attics. Along key streets, this is achieved through setbacks. In other areas, a change in plane or material is provided. Flexible dwelling typologies are provided in a mixed and tenure blind community.

NEIGHBOURHOOD AND DISTRICT LEVEL EXPERIENCE

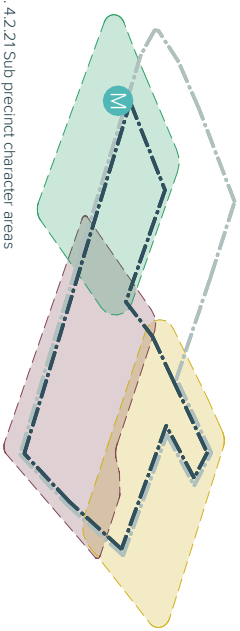


Fig. 4.2.21 Sub precinct character areas

At the neighbourhood level, the mix of building heights and typologies work with the three sub-precinct character areas and connect to the surrounding context

Each sub-precinct character area has a community building as an anchor and is characterised by a different mix of built form typologies and uses. Responding to the local past, present and future character, the sub-precinct character areas stitch Waterloo South into its surrounding context.



Fig. 4.2.22 A mix of frontages and uses provides a fine grain experience

Non-residential uses provide activation at street level. A mix of lot sizes and frontage widths creates a varied and fine grained pedestrian experience

The diversity of lot sizes, minimised vehicle and service entries and flexible building typologies supports a fine grained urban experience through a highly activated street level. Mixed use podiums provide for activation of the public domain. The diversity of frontages support a range of uses for variety and mix of experiences, providing for 'local' retail, services and facilities.

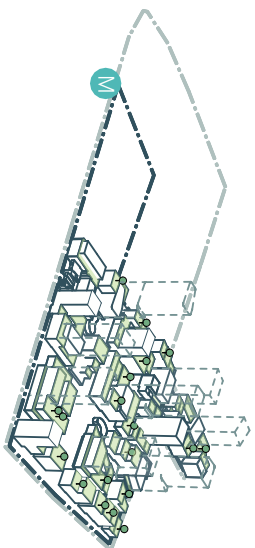


Fig. 4.2.23 Proposed community rooftop areas on podium level

Landscaped podium roofs and building façades provide increased greenery to Waterloo South and connects people to nature

Taller neighbourhood (15-20 storeys) buildings provide for a slender 'infill' form that meets the ground, to form an 'extruded' fine grain pattern along the street. Rooftop gardens on low-rise and mid-rise buildings increase community access to open space and provide additional typologies to the open space network. Enhanced amenity is provided due to their location, including increased solar access and views.

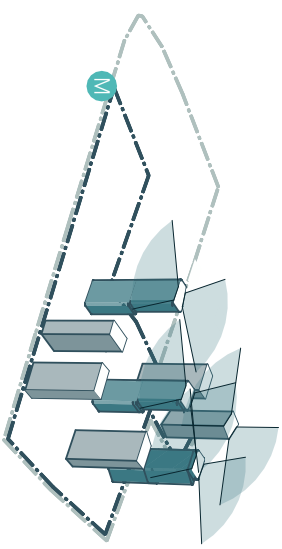
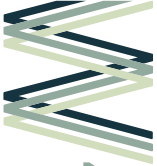


Fig. 4.2.24 Vertical villages

Tall, free-standing and landmark buildings will contribute distinct landmarks to the skyline that will reinforce the identity of Waterloo South and support wayfinding

Within taller buildings, vertical villages provide spaces that supports social interaction at a smaller scale, creating micro-neighbourhoods. Biophilic principles integrated into the building design can connect the community to nature through green façades and roofs.



4.2.5 CULTURE AND COMMUNITY LIFE

A landscaped and highly connected public domain will support community life and interaction, providing a range of opportunities to reflect on culture, engage the local community and keep residents active

Numerous activation opportunities are provided as part of the renewal of Waterloo South, to build upon existing opportunities. These include leveraging the existing maker and creative industries, the strong local character, the community's strong sense of belonging and the integral Aboriginal culture.

The key places will be hubs for activation within Waterloo South, providing equitable access to a mix of spaces for people of all ages. Community buildings are co-located next to public spaces including parks, plazas and social corners to facilitate community activities and interaction and create community anchors within each sub-precinct character area. The community buildings will provide spaces for local residents to access key services, promote artistic responses and maintain connections to surrounding residents and communities. The high performing and activation ready public domain and non-residential uses support social connectedness.

Play spaces and water-play, multi-sport, social areas, community gardens and temporary event spaces cater to all ages and abilities. The Blue Line integrates the water story throughout Waterloo South, offering a continuous stream of activation and reference to the indigenous water story, with a strong focus along the George Street activity street, the Village Green and Waterloo Common. The Accessible Local Movement Route will make accessible the range of local community facilities and services, as well as educational opportunities (both spatially and through the integration of the water story and bush tucker plants, within the public domain that relate back to the original landscape features of Waterloo.

The public art strategy for the public domain will embrace, reflect and celebrate the past, present and future Waterloo to create a welcoming new urban village. The existing multicultural diversity and the stories of the past and present will be celebrated through storytelling, integrated public art and activation of the public domain. The cultural and community life of Waterloo South is supported by the highly permeable and active ground plane that promotes community engagement and a sense of belonging. **Refer to Appendix 7.3 and 7.4 for further information**



4.2.5 CULTURE AND COMMUNITY LIFE

AMENITY AND ACTIVATION OPPORTUNITIES



PLAYSPACES

Fig. 4.2.26 Fairfield Park, Fairfield



BREAKOUT SPACE

Fig. 4.2.27 Pink Street, Lisbon



YOUTH FACILITIES

Fig. 4.2.28 Sonder Boulevard, Copenhagen



WATER SENSITIVE URBAN DESIGN

Fig. 4.2.29 Sydney Park, Sydney



WATERPLAY

Fig. 4.2.30 Goyder Square, Palmerston



TEMP EVENT SPACE

Fig. 4.2.31 Besiktas Fish Market, Turkey



DOORSTEP PLAY

Fig. 4.2.32 Passeig de Joan, Barcelona



MULTISPORT

Fig. 4.2.33 Campus Martius, Detroit



PASSIVE LAWN

Fig. 4.2.34 Chippendale Green, Sydney



ACTIVE LAWN

Fig. 4.2.35 Pirrama Park, Sydney



ART AND CULTURE

Fig. 4.2.36 First Nations Dance Rights, 2017



ENTERTAINMENT

Fig. 4.2.37 Bryant Park, NYC



PRODUCTIVE LANDSCAPE

Fig. 4.2.38 Brooklyn Gange, NYC

PUBLIC ART OPPORTUNITIES

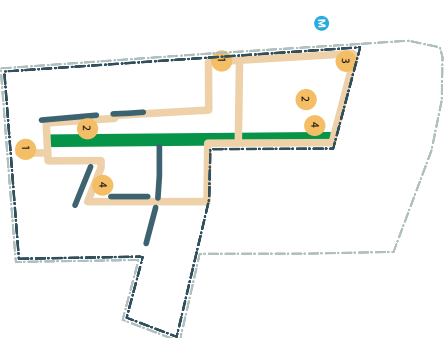


Fig. 4.1.39 Public art opportunities

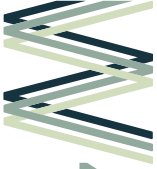
- Public art opportunities
- Accessible Local Movement Route (ALMR)
- George Street Active Street
- Laneways
- WSUD

0m 100m

Inclusive cultural integration throughout Waterloo South with public art potential for cultural expression, collaboration and wayfinding

There are many opportunities for public art to be integrated as an important element of the public domain. The primary locations for public art are streets and laneways, along the Accessible Local Movement Route and the open spaces next to community anchors, and integrated into the built environment. Whilst these areas are the primary places for public art, public art within the private domain will also contribute to the public canvas.

Opportunities for public art are maximised through the range of public art typologies. These include sculpture, lighting, temporary and fixed art, street art, murals, performance and event areas and pavement / facade art. As a significant aspect and voice for the Estate, the public art strategy will explore the contribution of these art forms to the identity of Waterloo South.



4.3 PUBLIC DOMAIN AND OPEN SPACE ELEMENTS

The public domain will celebrate the layered natural and cultural history of Waterloo and its proud community

Sustainable and regenerative design thinking underpins the key components of the Waterloo South's open space strategy:

The open space network of public and private open space provides equitable access to the Waterloo community by locating open space within 100 meters of building entries, as well as a diversity of open space typologies, to support social interaction at various scales.

George Street creates an open space spine connecting the two primary parks - Village Green and Waterloo Common.

The Accessible Local Movement Route ensures that the community are able to access key facilities, places and spaces across Waterloo South through safe, well designed and attractive connections.

The Water Story is an important reference to the Indigenous significance of water to culture and community and the historic presence of water to the area as a marshland, pre-colonisation.

Productive landscapes facilitate community connections, and provide education on sustainable urban production, referencing Indigenous cultural values and the areas heritage as a landscape of abundance for Aboriginal people.

Refer to Appendix 7.3 for further information

PRIMARY PARKS

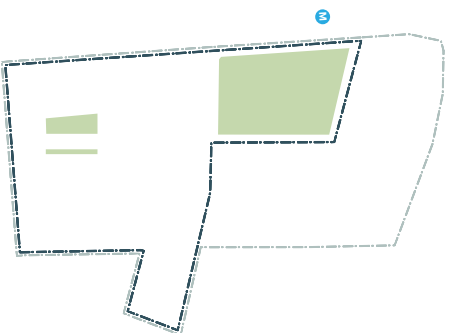


Fig. 4.3.1 Primary parks

- Legend**
- Waterloo South
 - Waterloo Metro Station
 - Primary Parks

Waterloo's defining public open spaces

The two major parks within Waterloo South are the Village Green and Waterloo Common. Both parks offer spaces for the community to gather, perform, create, reflect and communicate. Activation includes passive and active lawn, community gardens, play spaces and temporary event spaces.

GEORGE STREET ACTIVITY STREET

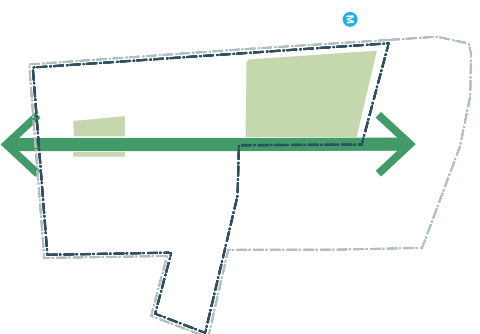


Fig. 4.3.2 George Street

- Legend**
- George Street Activity Street
 - Primary Parks

A wide tree lined, landscaped activity spine connecting the community to key destinations

George Street is transformed into an activity street with a green, tree lined character for pedestrians and cyclists of all ages. George Street is the transitional anchor for the east-west green links and connects the network of open spaces that includes the Village Green, Waterloo Common, pocket parks and pedestrian laneways.

THE BLUE LINE (THE WATER STORY)

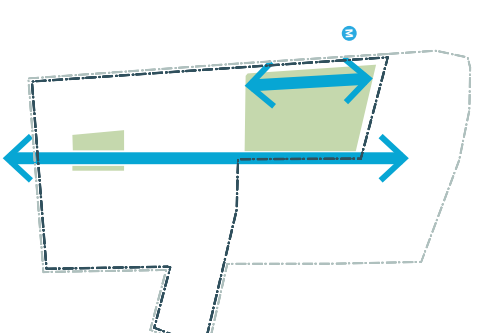


Fig. 4.3.3 Water Story

- Legend**
- George Street
 - Blue Line
 - Primary Parks

A pedestrian connection between key destinations that reflects the local water story

The Blue Line weaves itself through Waterloo South, beginning and ending at the gateway streets to the south-east and north and connecting to the surrounding neighbourhoods.

The Blue Line is defined by the presence of WSUD, water play and tree-pits. These provide environmentally responsive design solutions, increase activation and respond to the cultural significance of water to Indigenous people. Together with George Street, the Blue Line pays homage to the significance of water to the area, and anchors open space through Waterloo South.

GREEN GRID

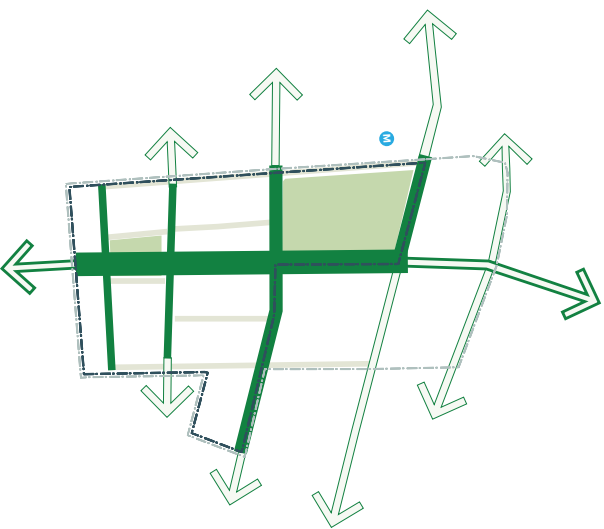


Fig. 4.3.4 Waterloo South Green Grid

- Green Streets
- Open Space Network

Green streets that connect Waterloo into Sydney's Regional Green Grid

The Green Grid weaves Waterloo South into Greater Sydney's existing Green Grid, strengthening regional open space connections. The streetscapes of Waterloo South maximise open space, and integrate Green Street policy and WSUD best practice. The greening of Waterloo South's streets will improve the streetscape conditions through shade and cooling, and offer more inviting space for public activation.

PRODUCTIVE LANDSCAPES

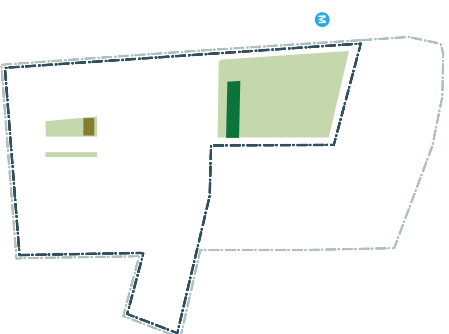


Fig. 4.3.5 Waterloo South Productive Landscapes

- Community Gardens - Village Green
- Community Gardens - Waterloo Common
- Primary Parks

Interactive, educational and productive landscapes for Waterloo's community

The Village Green community garden will be the largest productive landscape, with its central location maximising use. A second community garden in Waterloo Common will provide a more local feel due to the size and more intimate location. A number of edible landscape initiatives are distributed along George Street, pocket parks, communal courtyards and terraces. These initiatives reference bush tucker planting schemes through a modern interpretation that connects the natural heritage of the area to Waterloo South's future. Additional smaller scale productive landscapes are distributed through the private communal open space at ground level and rooftop levels within development lots that cater for residents.

URBAN PLAZAS



Fig. 4.3.6 Waterloo South Urban Plazas

- Plaza

The urban addition that provides community gathering space

A number of urban plazas are located throughout Waterloo South. These are co-located with community buildings and together provide community anchors to each sub-precinct character area. The plazas support an activation ready ground plane by offering flexible event spaces that allow the community to run and host initiatives including markets, exhibitions, festivals, celebrations, street performances and urban picnics.

POCKET PARKS AND SOCIAL CORNERS

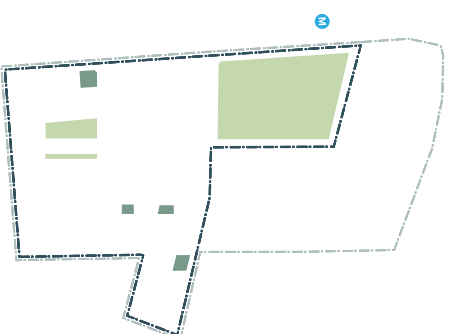
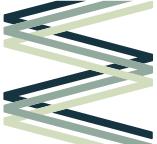


Fig. 4.3.7 Waterloo South Pocket Parks and Social Corners

- Pocket Parks & Social Corners

Facilitating social moments for the community

Throughout Waterloo South, pocket parks and social corners complete the social open spaces. Pocket parks and social corners are located next to pedestrian laneways, providing active and safe spaces for the community to entertain and inhabit amongst significant existing trees. Street art and temporary installations will enrich the spatial experience through reference to the past, present and future character of Waterloo South. Social corners are located at the intersection of two or more streets, and provide a high level of amenity through a north facing orientation and active uses at ground level. The setbacks are unique responses to the existing context and result in building forms and setbacks that are shaped by the landscape and public domain as Waterloo specific responses.



4.4 URBAN AND BUILT FORM ELEMENTS

Drawing on the historical fine grained urban context to integrate area's rich heritage

The urban and built form response for Waterloo South is underpinned by the provision of flexible and diverse typologies that respond to the human scale and pedestrian experience. Taller buildings provide height diversity to respond to the existing neighbourhood context as well as the emerging context of inner-city local centres.

The mix of block sizes and building heights support the open space typologies and fine grained street and pedestrian network of the public domain.

The range of building typologies respond to the sub precinct character areas and the proposed hierarchy of neighbourhood and local scaled centres.

Refer to Appendix 7.5 for further information

A VARIETY OF SETBACKS

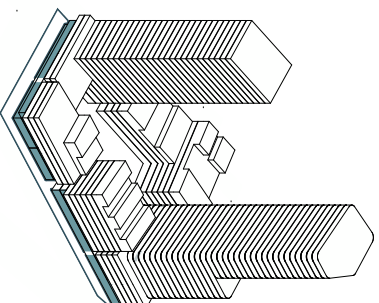


Fig. 4.4.1 Street level setbacks

Legend
● Street Setback

Public and private domain interfaces that promote social interaction

- Promotes active uses along key streets by providing space for social interaction.
- Provides space for landscaping and transition to private space along residential streets for increased privacy to dwellings.

URBAN STRUCTURE

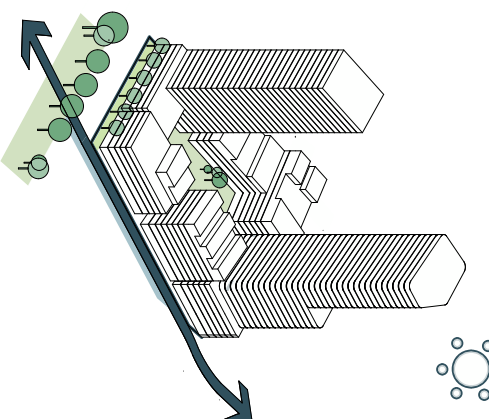


Fig. 4.4.2 Urban structure

↔ Street Alignment
● Open Space
☀ Solar Orientation

Height focused along the new alignment that connects Waterloo South to open space, the new metro station and key destinations

- Marks key junctions and alignments for greater legibility at the neighbourhood level.
- Provides amenity to dwellings through increased frontage to open space.
- Locates people close to open space, transport, services and amenities.

DIVERSITY IN SCALE

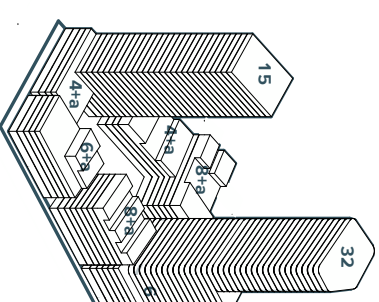


Fig. 4.4.3 Building scale

^{1,2} Building Height (in storeys)

Variety and a mix of scale, architectural design and character in the built form creates a diverse and enriching urban environment

- Creates a varied and visually interesting skyline.
- Defines the street edge to the existing and proposed street network.
- Provides amenity to public, semi-public spaces and streets, and private spaces.

GROUND LEVEL INTERFACE

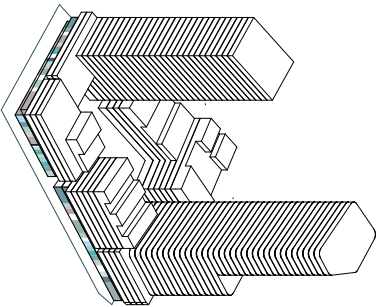


Fig. 4.4.4 Ground level interface

A fine grain ground plane that supports active uses enriches the public domain by providing a visually interesting pedestrian scaled street level experience

- Articulation and modulation provides visual diversity that promotes a vibrant environment.
- A greater number of entries every 100 metres provides for an active ground plane.
- A balance of transparent and open facades at lower levels for non residential uses creates engagement with the public domain and visibility of activities.
- Provides pedestrian through site connections and access points.
- Fine-grained, pedestrian scaled, built form amenity is provided through the mix and variety of frontage sizes.

STREETWALLS

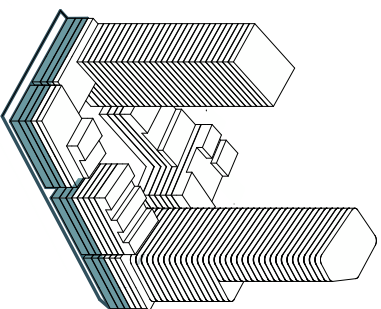


Fig. 4.4.5 Streetwall

Streetwalls that respond to the human-scale provide a well defined public domain and crafts the street level experience

- Provides a pedestrian experience that promotes walking and cycling by making it enjoyable with good amenity.
- Promotes passive surveillance for increased perception of safety.

RELATIONSHIP TO CONTEXT

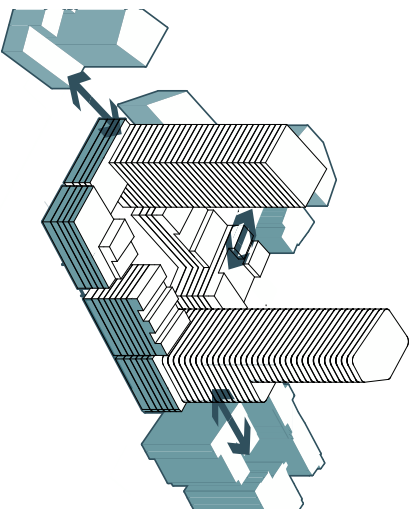


Fig. 4.4.6 Relationship to surrounding context

Height and massing transition that responds to existing and future context

- Provides a relationship to the existing context and considers the future context along the Botany Road Corridor.
- Defined building heights across Waterloo South development lots allows for more diversity and grain in the streets and public domain spaces and ensures amenity in the future built form.
- Builds upon the existing surrounding character.
- Height in less sensitive areas allows for lower heights adjacent to heritage conservation areas, and heritage items.

BUILDING DESIGN

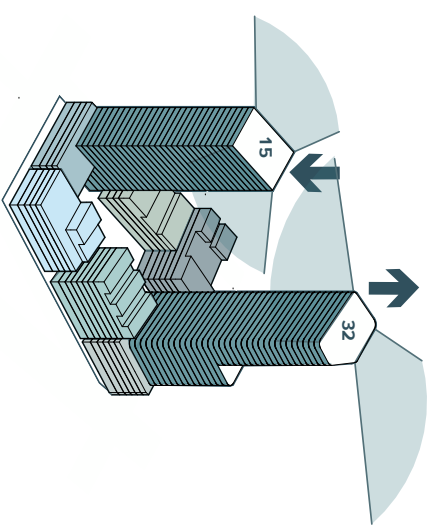


Fig. 4.4.7 Building design and composition

High quality building design that provides amenity for residents

- Passive environmental design solutions provides greater amenity and reduces costs to residents.
- High quality materials reduce maintenance costs and provide greater durability for the life cycle of a building.
- Facade variation provides a change in form, proportion, position, quantity and composition to provide visual interest. This can be achieved through building massing, materials, glazing extent and proportion, material finishes and colour, or architectural detail.

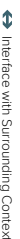




Fig. 50 Indicative Gait, Waterloo Common
Sources: VirtualIdeas, 2020

5.0 CHARACTER

PLANNING PROPOSAL REQUIREMENTS

PLANNING PROPOSAL REQUIREMENT	ADDRESSED IN
A precinct plan that integrates: <ul style="list-style-type: none"> • Public domain • Infrastructure • Staging • Building types • Height distribution and massing 	Chapter 4.0 - 5.0 Appendix 7.3 Appendix 7.4 Appendix 7.5 Appendix 7.7 Appendix 7.8
SSP STUDY REQUIREMENT	ADDRESSED IN
Urban Design	
2.6 Prepare a precinct plan that integrates: the public domain plan, community facilities plan, indicative subdivision plan, infrastructure plan, staging plan and building types and massing for the site. Demonstrate how this fits within the overall State Significant Precinct and surrounding context.	Chapter 4.0 - 6.0 Appendix 7.3 Appendix 7.4 Appendix 7.5 Appendix 7.7
2.11 Demonstrate how the urban design principles have informed the allocation and location of proposed land uses.	Chapter 4.0 - 6.0 Appendix 7.4
2.12 Integrate the public domain plan identifying proposed public park, square and streets and pedestrian/cycle paths.	Chapter 4.0 - 6.0 Appendix 7.3
2.17 Integrate the findings of other parts of this study and demonstrate how these have shaped the Public Domain Plan and the building typologies to meet their requirements. In particular, how the design of building types respond to ESD, wind, flooding, noise and pollution issues.	Chapter 4.0 - 6.0 Appendix 7.3 Appendix 7.5
Public Domain: Public Open Space & Streets	
3.9 Provide a public domain plan incorporating the open space plan and street layout and demonstrate how it responds to the analysis and the urban design principles.	Chapter 4.0 - 6.0 Appendix 7.3
3.13 In all of the above, demonstrate consideration and application of City of Sydney public domain codes where appropriate, including the Streets Code and Technical Specifications, Legible Sydney Wayfinding Strategy and Design Manual, and any other relevant City of Sydney draft Codes.	Chapter 4.0 - 6.0 Appendix 7.3

“You have an opportunity here to create something true to the character of Waterloo - don't turn it into another anonymous Sydney suburb - retain its feel & heritage...”

Survey respondent*

Placemaking activities defined three sub-precincts in the Indicative Concept Proposal for Waterloo Urban Village based on their existing and future place characteristics: Village Green, Maker Village and Hilltop Village. Within these sub-precincts reside the key places of the Estate: the Village Green and Waterloo Common. A pedestrian friendly George Street Activity Street connects them all together. The key places are hubs for activation, engagement, and social connectedness, and are anchored by mixed-use community hubs that will provide activation and programming of those spaces.

Village Green, to the west is centred around the metro station and Metro Quarter, it is in the transitional area between Redfern and Waterloo, and includes the prominent intersection of George Street and Raglan Street.

Maker Village, in the southwest of Waterloo South, retains evidence of its industrial past around Cope and McEvoy streets, has Waterloo Common at its centre, and is connected to the Village Green by George Street.

Hilltop Village, in the southeast of Waterloo South, is characterised by its steep topography and its interface with Our Lady of Mt Carmel Church and School, Waterloo Park and Waterloo Oval.

* "Let's Talk Waterloo - Visioning Report Key Findings", KJA, May 2018, p23.



Fig. 5.11 Indicative CGI: Waterloo Village Green community garden
Source: Virtual Ideas 2020

5.1 WATERLOO SOUTH

Waterloo Urban Village will be a group of sub-precinct character areas, that draw inspiration from the surroundings and enhances what makes them special, connected by a layered public realm

Waterloo's place character is defined by the specific, fundamental qualities that make it special. These qualities are drawn across the social, economic, cultural and environmental aspects that define the precinct as a place today that relates them to the vision going forward. The place character will provide place specific guidance to inform future development.

The place character of Waterloo is a community that is:

- Layered - Waterloo is the legacy of many hands and many stories
- Proud - Waterloo is a place deeply embedded in its locality
- Distinct - Waterloo is different, and that difference is worth celebrating
- Resilient - Waterloo is grounded by its perseverance over time

In evolving the framework for Waterloo South, sub precinct character areas have been explored as an opportunity to create unique places at the local scale, each with a distinct character. The three sub-precincts (pictured opposite) are the result of this exploration, each with an identifiable character statement as presented on the following pages.

For each sub-precinct, the current context of the surroundings as expressed through buildings, land uses, landscape elements and the street network has been analysed. The proposed future character of each sub-precinct is informed by this analysis, and offers directions for the built form and public domain that draws inspiration from the surroundings and enhances what makes the streets and places of Waterloo special.

WATERLOO SOUTH SUB-PRECINCT CHARACTER AREAS



Fig. 5.1.2 Sub-precinct character areas



5.2 VILLAGE GREEN

A green arrival into the heart of Waterloo urban village - the Village Green

CURRENT CONTEXT

Village Green is anchored by the major thoroughfare and commercial hub of Botany Road, and the area is a place of commercial and social exchange. Village Green is well-connected, with east-west streets reinforcing the traditional gridded urban structure and providing connections to destinations such as the Australian Technology Park.

At the nexus of a number of residential suburbs, the area has a transitional nature, bridging the leafy Alexandria Park and historic workers cottages of Wellington Street with Redfern Station Precinct, a contemporary transit interchange and growing urban hub. The surrounding street scope is highly varied in character, and showcases a long history of trade.

Many commercial and light industrial buildings have been modified and repurposed to accommodate changing needs. They sit alongside heritage churches and pubs, residential and mixed use development, and a number of distinctive buildings at major intersections. The material palette includes brick, masonry and subway tiles.

Commercial buildings are low-rise, feature narrow frontages, bold sign writing, generous awnings, and some alfresco dining, all of which creates a sense of intimacy and attracts pedestrian activity, undeterred by the vehicular traffic of Botany Road. Facades, particularly on corner locations, are transparent and open up or provide visual interest to the public realm. Public art, both formal and informal, add character and express the community's sense of identity.



Fig. 5.2.1 The Cauliflower Hotel



Fig. 5.2.2 Corner of Botany Road & Raglan Street



Fig. 5.2.3 Street art along Raglan Street



Fig. 5.2.4 Corner of Botany Road & Buckland Street



Fig. 5.2.5 Shops along Raglan Street

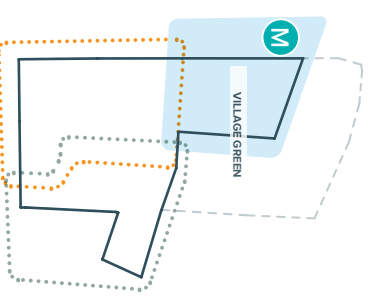


Fig. 5.2.6 Corner of Botany Road & Raglan Street



Fig. 5.2.7 Potential Uses in the Village Green

- Legend**
- ① Open lawn
 - ② Activity zone (i.e. play spaces, Multi-sports courts, picnic areas)
 - ③ Community garden/small urban farm
 - ④ Big roof pavilion, Gadigal Garden
 - ⑤ Blue line water story
 - ⑥ Park Amenities (i.e. BBQ, picnic areas)



The Village Green is characterised by its vibrancy and liveliness, with the Metro Quarter providing active uses and services that reflect the long history of trade and activity in the area. The Village Green will maximise connectivity with a green arrival that brings the community together and connects it to Greater Sydney

FUTURE CHARACTER

Village Green will combine the dynamism of the new Waterloo Metro Station and Metro Quarter, and the social and recreational appeal of the Village Green. The daily life of the community will be supported by an engaging mix of uses that stay active around the clock and invite activity at the street level.

- The future character will be shaped by:
 - A public domain integrated with public art to activate and differentiate the Village Green, encouraging play, exchange and engagement with the landscape.
 - Cope Street will become a central seam providing both north-south and east-west connectivity, characterised by a pedestrian focus.
 - The Blue Line through WSUD, water play and tree-pits.

The synergy between the Village Green and the transport hub will be the defining relationship which makes this sub-precinct unique. At the heart of the Village Green the proposed Gadigal Garden will combine a new distinctive community hub and multifunctional plaza, forming a continuous public realm which encourages play, exchange and engagement with the landscape.

The Blue Line weaves the area's water story along George Street and the Village Green through WSUD, water play and tree-pits. These provide environmentally responsive design solutions, increase activation and respond to the cultural significance of water to Indigenous people. Together with George Street, the Blue Line pays homage to the significance of water to the area, and anchors open space through Waterloo South.

LOOK AND FEEL

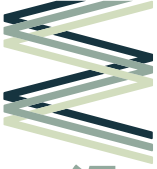


Fig. 5.2.8 Waterloo Village Green: Character collage

FUTURE CHARACTER



Fig. 5.2.9 Illustrative Village Green (mood) character collage



5.3 MAKER VILLAGE

Maker Village will be a vibrant local neighbourhood immersed in a history of manufacturing

CURRENT CONTEXT

Maker Village is steeped in a history of manufacturing. The surrounding streets, centred on Cope Street and the busy McEvoy Street, still reveal traces of an industrial past.

Contemporary apartment buildings are mixed amongst large-format commercial warehouses and low-rise industrial structures, with some repurposed and adapted. Whilst the predominant lot pattern is medium and coarse in scale, there are pockets of fine grain development, such as the early 19th Century terraces along John Street.

McEvoy Street is a defining edge and one of the earliest streets that was established in the area, forming the original boundary between residential development and the dam to the south. George Street runs perpendicular,

providing a convenient and efficient active transit link towards the emerging neighbourhood of Green Square.

Victorian terraced housing in the area is made recognisable by its ornate detailing and balconies, while newer apartment buildings along McEvoy Street feature protruding forms, dominant balconies, and a varied roof profile with some sawtooth forms. There are a number of heritage-listed buildings including the former Waterloo Pre-School.

Brick is the predominant material in the area, which reinforces the industrial character and is featured across industrial and residential buildings old and new.



Fig. 5.3.1 Corner of John Street and Cope Street



Fig. 5.3.2 Corner of John Street and Cope Street



Fig. 5.3.3 View south along Cope Street



Fig. 5.3.4 Modern apartments along McEvoy Street



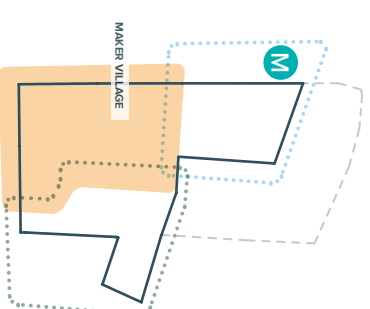
Fig. 5.3.5 Modern apartments along McEvoy Street



Fig. 5.3.6 Corner of John Street and Cope Street



Fig. 5.3.7 Illustrative Maker Village



Maker Village centres around Waterloo Common, a civic scale neighbourhood park, will house productive and creative activity and continue to celebrate Waterloo's proud spirit of industry

FUTURE CHARACTER

Maker Village will be a vibrant neighbourhood, featuring Waterloo Common and the Blue Line. It will buzz with productive and creative activity and continue to celebrate Waterloo's proud spirit of industry.

Waterloo Common will be a major community amenity, addressing the lack of usable open space to the south and connecting to the Village Green along the George Street. This neighbourhood scale park will serve as a continuation of the productive and engaging public realm.

Waterloo Common will be bound by laneways that will help establish the precinct as a pedestrian focused place and provide convenient connections to the Village Green, Hilltop Village and neighbouring communities and open spaces.

- The future character will be shaped by:
- Waterloo Common, a neighbourhood scaled park.
 - A highly walkable and permeable pedestrian network of laneways, providing convenient connection to the neighbouring precincts and adaptable ground floor uses will support street trading and vitality. John Street as a defining east-west connection will frame views up towards Mount Carmel.
 - Fine grain terrace typology will be reflected along Cope Street and materials and architectural elements will draw inspiration from both industrial buildings and traditional terrace houses. Defined balconies (particularly on corners) and varied roof forms to add visual variety.
 - Mid-rise built form at the edges of the park will provide a transition between the open space and taller buildings.
 - Fine grain retail and warehouse typologies will encourage making and production uses.
 - Highly active ground floor uses surrounding the new community hub and plaza.
 - Awning elements will support pedestrian activity, alfresco dining and street trading.
 - Adaptable ground floor addressing the laneway to the north of McEvoy Street to mitigate the effect of heavy movement flows, allow for the preservation of mature trees, and accommodate potential future road widening.
 - Retention of existing trees particularly at the corner of Cope Street and John Street.

LOOK AND FEEL

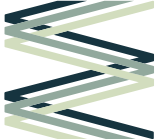


Fig. 5.3.8 Maker Village: Character collage

FUTURE CHARACTER



Fig. 5.3.9 Illustrative Maker Village (mood) character collage



5.4 HILLTOP VILLAGE

Hilltop Village is characterised by its topography and nearby historic buildings

CURRENT CONTEXT

Hilltop Village is characterised by its topography and nearby historic buildings which reflect early settlement. The area is largely residential with a mix of mid-rise apartment buildings and low-rise Victorian cottages and terraces. Some contemporary buildings make reference to the area's industrial past, with brick detailing, timber cladding, tiled façades and sawtooth roof forms.

The oldest surviving buildings still standing in Waterloo, Our Lady of Mount Carmel Church and School, are situated atop the sloped site, and the old Ithalenae Town Hall is nearby to the east. Little Waterloo Dam, an important resource for the early establishment of the area, would have been located to the south. Waterloo Park and Waterloo Oval offer places for active and passive

recreation, and add to the layered landscape qualities with mature trees and undulating topography. Laneways and green street reserves in the area complement the public realm at the local scale.

Different building details and configuration brings variety and visual diversity to the streetscape to the north, despite a consistent terrace typology. A number of buildings feature ground floor courtyards and upper storey balconies, which provide passive surveillance to the street.



Fig. 5.4.7 Illustrative Hilltop Village



Fig. 5.4.1 Laneway off Pitt Street



Fig. 5.4.2 Our Lady of Mt Carmel Catholic Primary



Fig. 5.4.3 Modern apartments opposite Waterloo Oval



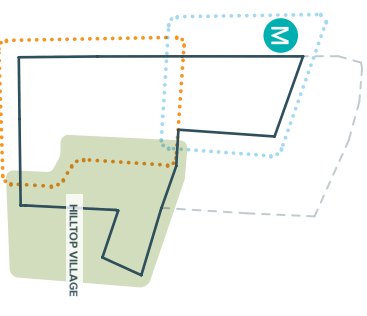
Fig. 5.4.4 Waterloo Oval



Fig. 5.4.5 Waterloo Park



Fig. 5.4.6 Dwellings along Wellington Street



Hilltop Village will be a place of discovery with laneways and pocket parks stitched into the historic surroundings and layered landscape

FUTURE CHARACTER

Hilltop Village will be a place of discovery, with laneways and pocket parks stitched into the historic surroundings and layered landscape.

Pitt Street will continue south to provide connectivity to McEvoy Street, and Wellington Street will continue to be a defining edge to the north. Connecting these major streets with the Blue Line, Accessible Local Movement Route and the neighbouring sub-precincts, new internal laneways will invite playful exploration and reference the historic grid.

The varied fine grain character of nearby terraces will be reflected in Hilltop Village. Streets will be addressed by low and mid-rise buildings with multiple street entries and facade articulation. Tower buildings will be generally set back from the street wall edge.

There will be small open spaces at street corners, and a plaza to the south anchored by a new community hub.

These interstitial outdoor places will complete the layered public realm and provide ample opportunities for creative expression and communal activity.

LOOK AND FEEL



Fig. 5.4.8 Hilltop Village: Character collage

- The character will be shaped by:
- New laneways, which are pedestrian focused, intimate in scale and intentionally offset.
 - A predominantly residential precinct, it will feature low and mid-rise buildings with fine grain treatment in keeping with the existing streetscape character, particularly along laneways and the Blue Line.
 - John Street as a view corridor up to the historic church and school, characterised by generous trees and considerable change in topography.
 - Wellington Street and the Blue line will feature varied non-residential uses with active facades at the ground plane and awning elements to support pedestrian activity, alfresco dining and street trading.
 - Tower buildings to be designed as vertical villages. A new community hub to provide a spectrum of places to gather and interact, reflecting the comfortable residential character of the area.

FUTURE CHARACTER



Fig. 5.4.9 Illustrative Hilltop Village (mood) character collage