

# Waterloo South

Planning Proposal



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Ethos Urban

3. Draft Development Control Plan

Ethos Urban

4. Consistency with Strategic Planning Framework

Ethos Urban

5. Urban Design and Public Domain Study

Turner Studio and Turf

6. Consultation and Visioning Report

Elton and KJA

7. Visual Impact Study

Cardno

8. Transport Study

Jacobs

9. Housing Diversity and Affordability Study

10. Utilities and Infrastructure Servicing Study

**AECOM** 

11. Social Baseline Report

GHD

12. Social Sustainability Report

Elton

13. Climate Change Adaptation Report

**AECON** 

14. Heritage Impact Statement

Urbis

15. Aboriginal Cultural Heritage Study

Urbis

16. Urban Forest Study

Arterra

17. Flora and Fauna Study

EcoLogical Australia

18. ESD study

**AECOM** 

19. Water Quality, Flooding and Stormwater Study

AECOM

20. Noise and Vibration Assessment

SLR

21. Air Quality Study

SLR

22. Light Spill Study

SIR

23. Pedestrian Wind Environment Study

Windtech

24. Aeronautical Study

- Strategic Airspace
- 25. Geotechnical and Contamination Study *AECOM*
- 26. Population and Demographics Study *id.*
- 27. Economic Development, Local Retail and Services Study *MacroPlan Dimasi*
- 28. Feasibility and Economic Benefits Letter of Assurance *HillPDA*
- 29. Public Art Plan
  Milne & Stonehouse and Sue Boaden

### Acronyms

1% AEP Statistical flood event occurring once every 100 years

BASIX Building Sustainability Index

CoS The City of Sydney
CAD Computer Aided Design

CPTED Crime Prevention Through Environmental Design

DCP Development Control Plan

DPE NSW Department of Planning and Environment

DECCW Former Department of Environment Climate Change and Water (now OEH)

EPA NSW Environmental Protection Agency
ESD Ecologically Sustainable Development

FACS NSW Department of Family and Community Services

FSR Floor Space Ratio

GSC Greater Sydney Commission
HTS Household Travel Survey

ICOMOS International Council on Monuments and Sites

JTW Journey to Work

LAHC NSW Land and Housing Corporation

LEP Local Environmental Plan

OEH NSW Office of Environment and Heritage

PMF Probable Maximum Flood

RMS NSW Roads and Maritime Services

SDCP Sydney Development Control Plan 2012

SEPP State Environmental Planning Policy

SLEP Sydney Local Environmental Plan 2012

SR Study Requirement
SSP State Significant Precinct

SSA Social Sustainability Assessment
Sydney Greater Sydney Metropolitan Area

UGNSW UrbanGrowth NSW Development Corporation

TfNSW Transport for New South Wales
TOD Transit Oriented Development
UNSW University of New South Wales

USYD University of Sydney

Waterloo The suburb of Waterloo

Waterloo Estate State Significant Precinct

Waterloo Metro Quarter Waterloo Metro Quarter State Significant Precinct

Waterloo SSP study area The Waterloo Estate and Waterloo Metro Quarter State Significant Precincts

WSUD Water Sensitive Urban Design

## **Executive Summary**

This report has been prepared by the NSW Land and Housing Corporation in support of a Planning Proposal to amend the *Sydney Local Environmental Plan 2012* to facilitate the renewal of Waterloo South. It provides an outline of the proposal for Waterloo South, explains the intended effect of the proposed planning framework and sets out the strategic justification for making the plan.

#### Background and Planning Process to Date

LAHC, as the owner and manager of social housing dwellings within the Waterloo Estate, has committed to renewal of the Estate in accordance with *Future Directions for Social Housing in NSW* and the subsequent Communities Plus initiative. The Estate will be renewed over approximately 20 years into an integrated and inclusive mixed-tenure community, replacing and providing fit for purpose social (affordable rental) housing and private market housing.

To enable a coordinated renewal approach that minimises disruption for existing tenants and allows for the upfront delivery of key public domain elements such as public open space, renewal will be undertaken in three stages:

- Waterloo South;
- Waterloo Central; and
- Waterloo North.

Waterloo South has been identified as the first stage for renewal. The comparatively lower density of social housing dwellings spread over a relatively large area makes Waterloo South strategically ideal as a first subprecinct, as new housing can be provided with the least disruption for existing tenants, while key public domain elements such as public open space that is well designed, more energy and water efficient, benefiting existing and future residents and the wider community.

This Planning Proposal addresses the Matters for Consideration raised by the CoS in their Request to Prepare a Planning Proposal of 19 February 2020 (which incorporate the previous SSP Study Requirements). Detailed consideration of each Matter for Consideration and Study Requirement is provided in the technical assessments that accompany this report.

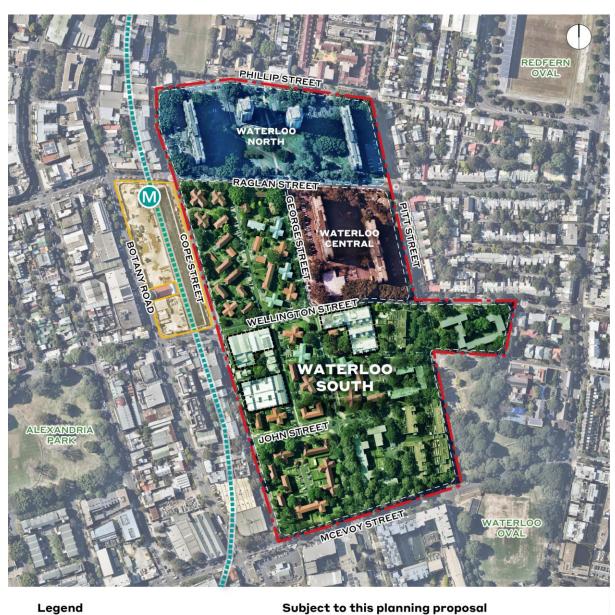
#### Renewal of Waterloo South

Waterloo South includes land bounded by Cope, Raglan, George, Wellington, Gibson, Kellick, Pitt and McEvoy Streets, and has an approximate gross site area of 12.32 hectares (approximately 65% of the total Estate). Waterloo South currently comprises 749 social housing dwellings owned by LAHC, 125 privately owned dwellings, and commercial properties on the south-east corner of Cope and Wellington Streets. A map of Waterloo South and relevant boundaries to other stages in the Waterloo Precinct is provided at Figure 1.

A vision for Waterloo South has been established to guide its renewal, which is detailed in **Chapter 4** of this report. A set of principles for renewal have also were also developed, which are centred on the following themes:

- Culture and Heritage
- Communal and Open Space
- Movement and Connectivity
- Character of Waterloo
- Local Employment Opportunities
- Community Services, Including Support for Those who are Vulnerable

- Accessible Services
- Design Excellence



### The Estate Private Properties Waterloo Metro Quarter Waterloo Metro Station ■ Materloo Metro Station ■ ---- Sydney Metro Alignment

Figure 1 | Waterloo South

Source: Ethos Urban

#### Subject to this planning proposal

Waterloo South

#### Subject to future planning and planning proposal

Waterloo North Waterloo Central

#### The Indicative Concept Proposal

The vision and principles for renewal have been used to guide the design of an Indicative Concept Proposal that illustrates an achievable design solution under the proposed planning framework for Waterloo South. It has been used as the basis for testing, understanding and communicating the potential development outcomes of the proposed planning framework.

The Indicative Concept Proposal focuses on public space and includes critical elements of the public domain that will deliver benefits for the local community including:

- Approximately 2.57 hectares of public open space representing 17.8% of the Estate (Gross Estate area existing roads) proposed to be dedicated to the City of Sydney Council, comprising:
  - Village Green a 2.25 hectare park located next to the Waterloo Metro Station; and
  - Waterloo Common and adjacent 0.32 hectares located in the heart of the Waterloo South precinct.
  - The 2.57 hectares all fall within the Waterloo South Planning Proposal representing 32.3% of public open space (Gross Waterloo South area – proposed roads)
- Retention of 52% of existing high and moderate value trees (including existing fig trees) and the planting of three trees to replace each high and moderate value tree removed.
- Coverage of 30% of Waterloo South by tree canopy.
- Approximately 257,000 sqm of GFA on the LAHC land, comprising:
  - Approximately 239,100 sqm GFA of residential accommodation, providing for approximately 3,048 dwellings (comprising a mix of market and social (affordable rental) housing dwellings);
  - Approximately 11,200 sqm of GFA for commercial premises, including, but not limited to, supermarkets, shops, food & drink premises and health facilities; and
  - Approximately 6,700 sqm of community facilities and early education and child care facilities.

The existing and proposed land allocation for the Waterloo South precinct is summarised in **Table 1** below.

Table 1 | Breakdown of allocation of land within Waterloo South

Land allocation	Existing	Proposed
Roads	3.12ha / 25.3%	4.38ha / 35.5%
Developed area (Private sites)	0.86ha / 6.98%	0.86ha / 7%
Developed area (LAHC property)	8.28ha / 67.2%	4.26ha / 34.6%
Public open space (proposed to be dedicated to the City of Sydney)	Nil / 0%	2.57ha / 20.9% (32.3% excluding roads)
Other publicly accessible open space (Including former roads and private/LAHC land)	0.06ha / 0.5%	0.25ha / 2%
TOTAL	12.32ha	12.32ha

The Indicative Concept Proposal for the Waterloo South is shown in Figure 2.



Figure 2 | The Indicative Concept Proposal Masterplan

Source: Turner

#### Proposed Amendments to SLEP 2012

The existing planning framework for Waterloo South is unable to deliver the vision and intended outcome for the renewal of Waterloo South. As such, amendments to the SLEP 2012 are proposed. The following planning controls are proposed to apply to Waterloo South:

- Land use zoning:
  - The B4 Mixed Use zone will apply to the proposed developable areas, permitting a broad range of land uses to accommodate population-serving employment uses as well as residential uses.
  - The RE1 Public Recreation zone will apply to the Village Green and Waterloo Common to allow for the use of land for public open space or recreational purposes.
  - The SP2 Infrastructure (Classified Road) zone will apply at the northern side of McEvoy Street to accommodate the McEvoy Street Road Widening in accordance with the Alexandria to Moore Park Connectivity Upgrade.
- Proposed maximum height of buildings shown on an amended Height of Buildings Map.
- Maximum Floor Space Ratio (FSR) controls.
- Land Reservation Acquisition:

- Clauses 5.1 and 5.1A will apply to Waterloo South, to identify the relevant authority to acquire land reserved for public recreation and classified roads.
- Design Excellence:
  - Clause 6.21 will apply to Waterloo South, which relates to design excellence.
  - Clause 6.21(5)(a)(i) will be extended to apply to Waterloo South, which requires a competitive design process to be held for buildings over 55 metres tall on land within Central Sydney.
- Car Parking Ancillary to Other Development:
  - Part 7 Division 1 will apply to Waterloo South, with the most restrictive parking rates being applied, reflecting its location near Waterloo Metro Station and minimising the maximum parking rates permissible at the site.
  - Land Use and Transport Integration Category A will apply to the site.
  - Public Transport Accessibility Level Category D will apply to the site.
- Acid Sulfate Soils:
  - Clause 7.14 will apply to Waterloo South, with Class 5 categorisation proposed.
- Large retail development outside of Green Square Town Centre and other planned centres:
  - Clause 7.23 relating to restricted retail development will not apply to any LAHC-owned land in Waterloo South, reflecting Waterloo's role as an identified planned centre that is likely to include future development for shops or markets with a gross floor area of greater than 1,000m<sup>2</sup>.
  - Clause 7.23 will continue to apply to privately owned sites in Waterloo South.
- Locality and Site Identification:
  - Waterloo South will be identified on the Locality and Site Identification Map to allow for site-specific provisions to be included in the SLEP 2012.
- Site-specific provisions:
  - An inclusionary zoning provision is proposed, requiring a minimum of 5% of the total residential floor space at Waterloo South be provided as affordable housing.

Once the proposed amendments to the SLEP 2012 are gazetted, the SSLEP 1998 will no longer apply to any land within Waterloo South.

#### **Draft Development Control Plan**

A draft site-specific DCP accompanies this Planning Proposal and includes detailed controls to inform future development within Waterloo South. The site-specific DCP will be inserted into 'Section 5: Specific Areas' of the Sydney DCP 2012. The draft DCP has been informed by the Indicative Concept Proposal and the recommendations provided in the accompanying technical reports. Matters addressed in the DCP include:

- Locality statement
- Urban strategy
- Urban strategy
- Local infrastructure and public space
- Public open space
- Existing and new streets
- Bike routes and facilities
- Tree Canopy
- Waterways and stormwater management

- Built form
- Height of buildings
- Building alignment and setbacks
- Public art
- Fences
- Heritage
- Noise
- Staging and implementation
- Sustainability

#### Infrastructure Contributions and Delivery Mechanisms

The increased population in Waterloo South will create more demand for some forms of local, regional and state infrastructure. The Planning Proposal identifies the required quantum of infrastructure needed to support the development. This includes the delivery, within the precinct, of significant public benefits through new and expanded public open space, streets, community facilities, child care and affordable housing. Infrastructure to be delivered in stages, as renewal proceeds, will meet much of the additional demand generated by population growth in the precinct. Some local infrastructure elsewhere in the City of Sydney will be used by residents, workers and visitors to Waterloo South, and will likely require additional capacity. Prior to any development application being approved LAHC will negotiate an agreement with the City of Sydney regarding any appropriate contributions offset against the City of Sydney Development Contributions Plan.

State and Regional infrastructure demand generated by the proposal includes additional capacity for primary and high schools, transport infrastructure and services. LAHC has consulted with the Department of Education and confirmed that demand can be met within existing schools capacity. Waterloo Metro Station will significantly increase the capacity of the transport network, and reduce reliance on private vehicles and demands on the local and regional road network. While population increases will result in more demand for other state level services (for example health care), planning for these services generally takes into account broader patterns of population growth and demographic changes, and is not specifically attributed to particular renewal projects. It is important to note that any value created through the rezoning of the land subject to the planning Proposal will be used for the renewal and increase of social (affordable rental) housing. For this reason, a specific "public benefit" planning agreement is not required for state and regional infrastructure.

#### Strategic Justification

Waterloo South has a unique and changing strategic context. The Greater Sydney Region Plan and Eastern City District Plan seek to align growth with infrastructure, including transport, social and green infrastructure. With the catalyst of Waterloo Metro Station, there is an opportunity to deliver urban renewal to Waterloo South that will create great spaces and places for people to live, work and visit.

The Planning Proposal has strategic and site-specific merit and is consistent with the strategic planning framework in that it:

- Supporting the Premier's Priorities by:
  - Delivering greener public spaces by increasing the proportion of homes in urban areas within 10 minutes' walk of quality green, open and public space.
  - Greening our city by increasing tree canopy and green cover in Waterloo South.
- Implements the Greater Sydney Region Plan and gives effect to the Eastern City District Plan by:
  - Aligning infrastructure with growth by locating more dwellings, including social (affordable rental)
    housing, within walking distance of Waterloo Metro Station, Redfern Station and Green Square
    station and contributing to the 30-minute city.

- Resulting from a collaborative planning process that has included CoS, the local community and a range of NSW Government agencies.
- Including services and infrastructure to meet the local community's needs and to ensure a healthy, resilient community, including delivery of local open space, community facilities, water cycle management works and social (affordable rental) housing.
- Increasing the supply of housing, including replacement and new social (affordable rental) housing.
- Increasing urban tree canopy cover and providing new public open space that is accessible enhancing
  the availability and variety of public parks in the local area.
- Gives effect to the CoS LSPS and Housing Strategy by:
  - Delivering more housing in Waterloo, a location identified for population growth.
  - Contributing to an expanded and improved network of open space and recreation facilities through new and more pedestrian friendly streets, new public parks and other publicly accessible spaces throughout the precinct.
  - Providing more than 20% of the site area of Waterloo South as public open space.
  - Improving the accessibility of the public domain for people of all ages and abilities, in particular catering for the needs of Waterloo residents.
  - Targeting 30% of residential floor space as social (affordable rental), exceeding the 25% advocacy target for affordable housing on NSW Government sites.
  - Providing for a mix of housing types and sizes to meet projected needs of a diverse and growing community.
  - Protecting and enhancing the natural environment by managing stormwater runoff, protecting and enhancing urban bushland and biodiversity through tree retention, new tree planting and landscaping and minimum standards for canopy cover and landscaped areas.
- Is consistent with CoS Community Strategic Plan.

## 1 Introduction

#### 1.1 Overview

This report has been prepared by the NSW Land and Housing Corporation in support of a Planning Proposal to amend the Sydney Local Environmental Plan 2012 and the South Sydney Local Environmental Plan 1998. It provides an outline of the renewal proposal for Waterloo South, explains the intended effect of the proposed planning framework and sets out the justification for making the plan.

This Planning Proposal has been prepared in accordance with Section 3.33 of the *Environmental Planning & Assessment Act 1979* (EP&A Act), 'A Guide to Preparing Planning Proposals', Nominated State Significant Precinct Study Requirements issued by the Department of Planning and Environment in May 2017 (updated in March 2018), and the Matters for Consideration and Planning Proposal Checklist issued by the City of Sydney Council on 19 February 2020. It:

- Describes the Waterloo South and the local, district and regional context.
- Sets out the planning process undertaken so far, including consultation with the community.
- Establishes a vision and principles for renewal of Waterloo South.
- Describes the proposed planning framework.
- Provides a strategic assessment and justification for the proposed planning framework.
- Addresses key issues, as set out in the Study Requirements.
- Makes conclusions and recommendations for the next steps to progress the planning framework.

This report should be read in conjunction with the relevant technical study reports and urban design report appended.

The renewal of Waterloo Estate is planned to proceed in stages over approximately 20 years to enable a coordinated renewal approach that minimises disruption for existing tenants and allows for the up-front delivery of key public domain elements such as public open space. Aligned to this staged approach, Waterloo Estate comprises three separate, but adjoining and inter-related stages:

- Waterloo South.
- Waterloo Central.
- Waterloo North.

Waterloo South is the first stage for renewal. The lower number and density of existing social housing dwellings spread over a relatively large area, makes Waterloo South ideal as a first sub-precinct, as new housing can be provided with the least disruption for existing tenants. Waterloo South also contains the key proposed public domain elements, such as new parks and community facilities, that will mean the Waterloo community has access to new local infrastructure early in the renewal program.

#### 1.2 The NSW Land and Housing Corporation (LAHC)

LAHC is the owner of the land comprising Waterloo South and is responsible for the renewal of the Estate under the Communities Plus program. LAHC led the community engagement program and will continue to engage with the community throughout the planning process for Waterloo South and the wider Estate.

LAHC is responsible for the delivery of the priorities of the Government's social housing policy Future Directions for Social Housing in NSW. Future Directions is underpinned by three strategic priorities:

- More social housing.
- More opportunities, support and incentives to avoid and/or leave social housing.
- A better social housing experience.

Future Directions sets out the Government's vision to transform the social housing system. LAHC plays a critical role in increasing the supply of social and affordable housing through the \$22 billion Communities Plus building program.

Communities Plus - Under the Future Directions strategy, LAHC is delivering the Communities Plus program. The program is delivering up to 23,000 social housing dwellings, 500 affordable housing dwellings and 40,000 private dwellings.

#### 1.3 The Planning Proposal Process

In late 2019, the NSW Department of Planning, Industry and Environment (DPIE) announced a new approach to precinct planning to provide certainty and a way forward for more than 50 precincts and Growth Areas across Greater Sydney. This has led to a change in the planning approach for Waterloo Estate (including Waterloo South), from a State-led rezoning process (through an SSP Study) to a Council-led planning proposal process.

This Planning Proposal for Waterloo South is being prepared by LAHC. The Planning Proposal will set out the strategic justification for the proposal and provide an assessment of the relevant strategic plans, state environmental planning policies, ministerial directions and the environmental, social and economic impacts of the proposed amendment. The outcome of this planning proposal will be a revised planning framework that will enable future development applications for the redevelopment of Waterloo South.

#### 1.3.1 Request to Prepare a Planning Proposal

On 19 February 2020, LAHC received a request to prepare a Planning Proposal from the CoS. The request acknowledged the LAHC Preferred Masterplan, the CoS Alternative Proposal, and the alignment process that was undertaken. In addition, the request specified a number of matters for consideration, and confirmed the need to address the SSP Study Requirements. **Table 2** lists the SSP Study Requirement headings and the matters specified in the City of Sydney Request to Prepare a Planning Proposal and refers to where each matter is addressed in this report and/or the accompanying technical studies.

Table 2 | SSP Study Requirements and Planning Proposal Matters for Consideration

SSP Study Requirement	CoS Request to Prepare Planning Proposal	Reference for Response to Requirements
Vision, Strategic Context and     Justification	-	Chapter 4, Section 2.4, Chapter 6
2. Urban Design	Amenity Standards	Section 7.1.4, Attachment 5 (Urban Design and Public Domain)
3. Public Domain: Public Open Space and Streets	Public Domain, Streets and Parks	Section 5.1.3, Section 7.2.1, Attachment 5 (Urban Design and Public Domain)
4. Land Use and Planning Controls	DCP Controls	Section 5.2, Attachment 2 (LEP Maps), Attachment 3 (Draft DCP)
5. Transport	Minimise Car Parking	Section 7.3, Attachment 8 (Transport Study)
6. Housing	Supporting Housing Diversity and the Community Housing Sector	Section 7.4, Attachment 9 (Housing Diversity and Affordability Study)
7. State and Regional Infrastructure	Planning Agrooment	Section 5.4
8. Local Infrastructure and Contributions	Planning Agreement	Section 5.4
9. Utilities	-	Section 7.8, Attachment 10 (Utilities and Infrastructure Servicing Study)
10. Climate Change Mitigation and Adaptation	Sustainability Infrastructure (Water, Waste and Energy)	Section 7.9, Attachment 18 (ESD Report), Attachment 13 (Climate Change Adaptation Study)
11. Heritage	-	Section 2.3.7, Section 7.10, Attachment 14 (Heritage Impact Statement)
12. Aboriginal Cultural Heritage	-	Section 7.11, Attachment 15 (Aboriginal Cultural Heritage Study)
13. Biodiversity	-	Section 7.13, Attachment 17 (Flora and Fauna Study)
14. Urban Forest	Tree Canopy and Cover	Section 7.12, Attachment 16 (Urban Forest Study)
15. Urban Ecology	-	Section 7.13, Attachment 17 (Flora and Fauna Study)
16. Ecologically Sustainable Development	Sustainability Infrastructure (Water, Waste and Energy)	Section 7.9 , Section 7.14, Attachment 18 (ESD Study)
17. Water Quality, Flooding and Stormwater	-	Section 7.15, Attachment 19 (Water Quality, Flooding and Stormwater Study)
18. Noise, Vibration and Pollution	-	Section 7.16, Attachment 20 (Noise and Vibration Study), Attachment 21 (Air Quality Study)
19. Wind	Managing Wind Impacts	Section 7.19, Attachment 23 (Pedestrian Wind Environment Study)
20. Aeronautical	-	Section 7.20, Attachment 24 (Aeronautical Study)
21. Geotechnical and Contamination	-	Section 7.21, Attachment 25 (Geotechnical and Contamination Study)
22. Population Demographics	-	Section 7.5, Attachment 26 (Population and Demographics Study)
23. Social Sustainability Assessment	Community Uses GFA Staging to Minimise Disruption to Existing	Section 7.6, Attachment 12 (Social Sustainability Study), Attachment 5 (Urban Design Report)
24. Economic Development, Local Retail and Services	Social Housing Tenants	Section 7.22, Attachment 27 (Economic Development, Local Retail and Services Study)
25. Feasibility and Economic Benefits	-	Section 7.23, Attachment 28 (Feasibility and Economic Benefits Letter of Assurance)
26. Public Art	-	Section 7.24, Attachment 29 (Public Art Plan)

SSP Study Requirement	CoS Request to Prepare Planning Proposal	Reference for Response to Requirements
27. Consultation	Development Equity Between Public and Private Owned Sites	Chapter 3, Section 5.1.7, Section 6.5, Attachment 6 (Consultation and Visioning Report)
-	Development of Other Precincts	Section 5.1.6, Attachment 5 (Urban Design and Public Domain Study)

#### 1.4 The Planning Proposal and Development Processes

The outcome of this Planning Proposal will be a planning framework to guide the future design and development of buildings and public domain in Waterloo South. The planning framework will include statutory planning controls under the Sydney LEP 2012, a Development Control Plan and an infrastructure contributions framework. Altogether, the planning framework and outline of necessary supporting infrastructure are intended to achieve design excellence and a built form, public domain and local infrastructure and services that are appropriate to the Waterloo locality while enabling renewal of the precinct to realise opportunities from the new Waterloo Metro Station and new infrastructure provision.

While the Indicative Concept Proposal and the planning framework are intended to shape the future for Waterloo South, much of the detail of buildings and the public domain will be fully resolved through a detailed design process and development applications that will follow the establishment of new planning controls for Waterloo South. The planning framework established by the Planning Proposal will establish the ground rules for detailed design and assessment of development applications. As such, the Planning Proposal and the documentation that supports it is not a detailed design but is illustrative of intended outcomes for Waterloo South.

It is important to acknowledge that renewal of Waterloo South will occur over a period of approximately 10 to 12 years. The proposed planning framework is based on current knowledge and expectations in relation to development and land use outcomes, the need for housing, current best practices to manage and mitigate environmental impacts and integrate sustainability and resilience, and measures to encourage strong community building and cohesion. Over the renewal timeframe, there are likely to be changes to any number of these variables which may lead to different and better development outcomes. The proposed planning framework seeks to balance:

- Certainty, in relation to the vision, the overall development outcomes and the public domain.
- **Flexibility,** so that as the market and technology change and improve, or as innovative development solutions emerge encouraging new solutions to be applied.

By planning for Waterloo South before the Waterloo Central and Waterloo North stages, a number of benefits for the subsequent renewal processes are provided. These include:

- Delivery of major public domain works in the first stage of renewal, so that the first new residents, existing tenants in the Waterloo Central and Waterloo North, and future residents in those stages will all benefit from new public open spaces.
- The lower density portion of the Estate will be developed first, meaning the number of existing residents impacting by early stages of development will be minimised and LAHC can manage the temporary housing and longer term re-housing of tenants efficiently and to maintain community cohesion and important social networks.
- Consultation with CoS and LAHC can continue throughout the planning for Waterloo Central and Waterloo
   North so that future proposals for the Estate can be shaped by key stakeholders.

## 2 The Site

#### 2.1 Location

The site, known as Waterloo South, forms part of the Waterloo Estate and is located wholly within the City of Sydney LGA, approximately 3.3km south of the Sydney CBD, 1km north of Green Square and less than 1km south of Redfern Station. The Waterloo Estate Precinct comprises land bounded by Cope, Phillip, Pitt and McEvoy Street, and an area bounded by Wellington, Gibson, Kellick and Pitt Streets. It has an approximate gross site area of 18.98 hectares (14.4 hectares excluding roads). Waterloo Estate currently comprises 2,012 social housing dwellings owned by LAHC, 125 private dwellings, a small group of shops and community uses on the corner of Wellington and George Streets, and commercial properties on the south-east corner of Cope and Wellington Streets. The locational context of Waterloo Estate and the location of Waterloo South within the Estate is shown in **Figure 3**.

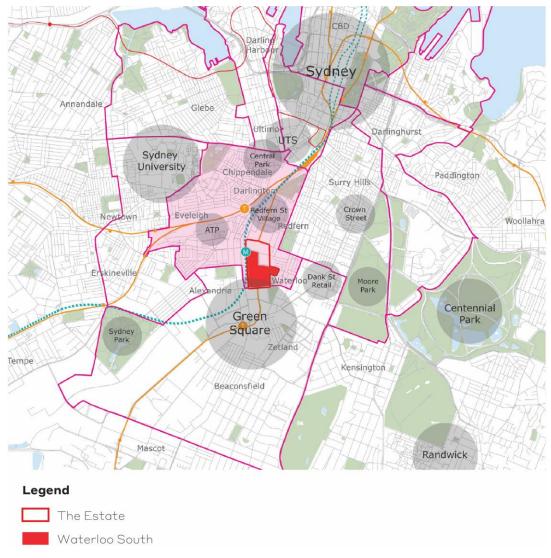


Figure 3 | Waterloo South location Plan

Source: Turner Studio

#### 2.2 Site Description

Waterloo South includes land bounded by Cope, Raglan, George, Wellington, Gibson, Kellick, Pitt and McEvoy Streets, and has an approximate gross site area of 12.32 hectares (approximately 65% of the total Estate).

Waterloo South currently comprises 749 existing social housing dwellings (owned by LAHC), 125 private dwellings, and commercial properties on the south-east corner of Cope and Wellington Streets. Existing social housing within Waterloo South is predominantly walk up flat buildings constructed in the 1950s and '60s, and mid-rise residential flat buildings (Drysdale, Dobell & 76 Wellington Street) constructed in the 1980s. These properties have high maintenance costs and are at the end of their economic life. Listed Heritage Items within Waterloo South include the Duke of Wellington Hotel, Electricity Substation 174 on the corner of George and McEvoy Streets, the terrace houses at 229-231 Cope Street and the Former Waterloo Pre-School at 225-227 Cope Street. The State Heritage listed 'Potts Hill to Waterloo Pressure Tunnel and Shafts' passes underneath the precinct.

North-west of Waterloo South is Waterloo Metro Quarter, in the block formed by Cope Street, Botany Road, Raglan Street and Wellington Street, with exception of the Waterloo Congregational Church. It has an approximate gross site area of 1.91 ha. Waterloo Metro Station is part of the Sydney Metro City and Southwest project, anticipated to be operational in 2024.

A map of Waterloo South and relevant boundaries, including its relationship to Waterloo Central, Waterloo North and Metro Quarter, is provided at **Figure 4**. A legal description of the lots within the Waterloo South site is provided at **Table 3**.

Table 3 | Legal Description of Waterloo South properties

1 0 1	' '
Lot Number	Deposited Plan
Lot 3	DP10721
Lot 14	DP10721
Lot C	DP105916
Lot B	DP105916
Lot A	DP105916
Lot 2	DP533678
Lot 3	DP533680
Lot 10	DP635663
Lot 11	DP635663
Lot 1	DP224728
Lot 1	DP533762
Lot 1	DP533679
Lot 1	DP77168
Lot 313	DP606576
Lot 1	DP225159
Lot 2	DP217386
Lot 3	DP217386



Figure 4 | Site Aerial showing Waterloo South and the Surrounding Waterloo Precinct Source: Ethos Urban

#### 2.3 Site and Context Analysis

#### 2.3.1 The local community

Waterloo South has a primarily residential role, containing over 850 dwellings, and relatively limited non-residential floorspace.

Waterloo's first inhabitants were Gadigal people of the Eora Nation. Aboriginal and Torres Strait Islander people have always lived in Waterloo. It has become a 'touch point' for peoples coming to the city for work opportunities, shelter and connections with community and family. Waterloo South and the Estate also hold great cultural significance to Aboriginal and Torres Strait Islander people and the broader community. Celebrating its history and heritage is incredibly important across this community to retain this legacy through redevelopment.

The relative lack of non-residential uses and floor-space means while some services and retail are available locally, residents need to leave the site to access a full range of employment, services and creative spaces. As a consequence, residents support the functioning of nearby retail dominated activity centres, in particular the Redfern Street Village.

The Waterloo Precinct is identified within the SEIFA index of socio-economic disadvantage 1st decile (most disadvantaged 10%). A number of other indicators support this level of socio-economic disadvantage, including just over 50% of residents having completed Year 12 or equivalent (compared to 82% in the City of Sydney and 65% in Greater Sydney). Household incomes are much lower in the Waterloo Precinct with around a half of residents earned between \$300 and \$649 per week, while one in eight earned \$1,000 or more per week, compared to 62% across the CoS LGA.

In addition, the population of the Waterloo Precinct<sup>1</sup>:

- is older (just under a third of residents were aged over 65 years in 2016 compared to 8% in the City of Sydney and 14% across Greater Sydney).
- is highly multicultural, with nearly 60% of residents overseas born in 2016 compared to 47.7% in the City of Sydney, and 36.7% for Greater Sydney. The proportion of overseas born residents has increased from 45% since 2011.
- has a larger proportion of Aboriginal and / or Torres Strait Islander people (6.2% compared to 1.1% in the City of Sydney and 1.5% across Greater Sydney).

#### 2.3.2 Land Use

Land uses within the site predominately comprise residential uses, but also include a range of non-residential uses such as community services and manufacturing/warehousing.

Outside of Waterloo South and the Estate, the locality has experienced significant redevelopment in recent years, including many higher density developments along Bourke, Lachlan and Danks Streets. These new developments have resulted in significant change to the character and density of the area as well as changes to the resident population, including attracting more tertiary students, people from culturally and linguistically diverse backgrounds, professionals, young families, couples without children as well as some older people looking to age in place. This trend will continue with the redevelopment of other surrounding areas, including Green Square and the Australian Technology Park.

 $<sup>^{</sup>m 1}$  Profile.id, Waterloo South, Population and Demographics Final Draft Report, March 2020

#### **Existing Building Typologies**

The Waterloo Estate comprises a range of building forms, ranging in scale from taller towers to low scale terrace forms. Six categories of existing building typologies have been distinguished across the Waterloo Estate, as described below.

- Towers Two 30 storey concrete towers (Turanga and Matavai) comprising approximately 200 units each, located north of Raglan Street (within Waterloo North).
- Slabs Four 16 storey concrete slab buildings (Marton, Daniel Solander, Joseph Banks, James Cook) comprising approximately 200 units each are located on the northern half of the Estate (within Waterloo Central and Waterloo North).
- **Medium-density** Series of concrete block and reinforced concrete structures (Drysdale, Dobell and Camella) ranging from 4–7 stories situated in the eastern and southern portions of the site.
- Low rise walk-ups Series of primarily 3 storey concrete and brick walk-up structures with varying orientations situated predominantly in the western and southern half of the site.
- Terrace housing Traditional 3 storey brick terrace homes situated at the western edge of the site.
- **Non-residential** Friendly Grocer and other small retailers, the Duke of Wellington Hotel and vehicle repair shops and manufacturing/warehouse uses are located throughout the Estate.

The distribution of building typologies across Waterloo South and the broader Estate is shown at **Figure 5**. Photographs of the six typologies are shown in **Figure 6**. As described above, the Waterloo South site comprises mostly low-rise walk up flats, with terrace housing located along the western boundary and medium density residential buildings in the eastern portion.

#### Housing

There are 749 existing social dwellings and 125 private dwellings in Waterloo South. Waterloo South has a slightly higher proportion of one bedroom dwellings (32.3%) than the City of Sydney (31.6%). More than half the dwellings in the estate have two bedrooms (1,159), despite nearly two thirds of households being single person.

Most households (76%) in Waterloo South are rented from a State or Territory Housing Authority (Waterloo SA1 study area), compared to less than 8% across the City of Sydney. Private rentals and mortgages have increased since 2011. Around 9.4% are rented from a real estate agent, and around 5% are owned with a mortgage (ABS 2016, refer to id.'s Population and Demographic Study at **Attachment 26**).

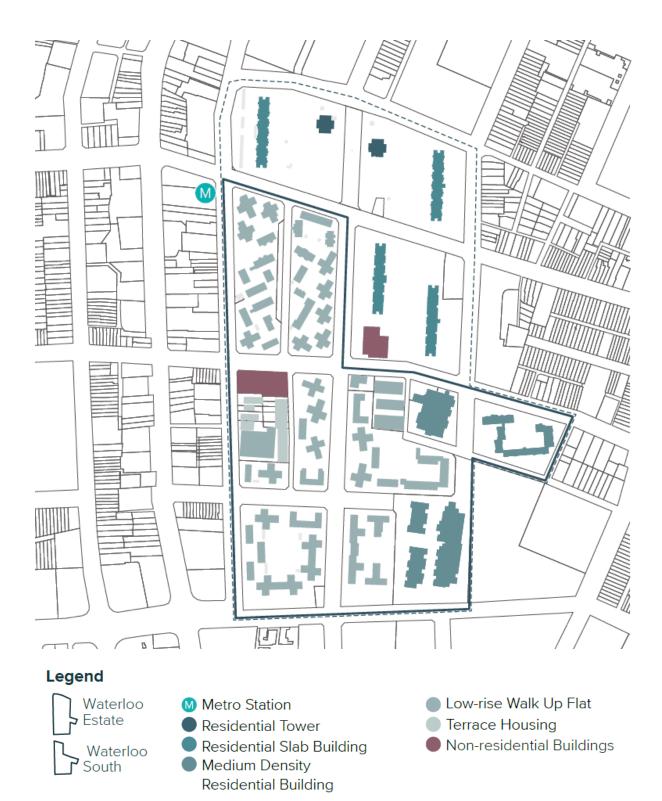
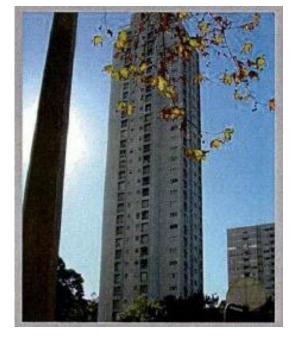


Figure 5 | Existing building typologies

Source: Turner Studio



Matavai tower



Slabs



Medium density

Figure 6 | Examples of building typologies

Source: Turner Studio



Low rise walk-ups



Terrace housing



Non-residential

#### Community Services, Arts and Culture

Waterloo has a rich tapestry of fine-grain community, cultural and arts services including community cultural organisations, event spaces, public art, youth services, creative enterprises and natural heritage (refer to locations in **Figure 7**). Waterloo also hosts a series of annual local festivals and events which attract a range of local and community participants.

Waterloo's existing arts and cultural resources are highly valued by the community and contribute to the area's sense of place and local identity. The night time economy remains restricted to a small collection of local pubs. The main entertainment, artistic and cultural offerings within proximity to the Estate are distributed around Redfern Village along Regent and Redfern Streets. The surrounding areas of Waterloo also offer a wide range of affordable spaces that support the city's creative and artistic uses.

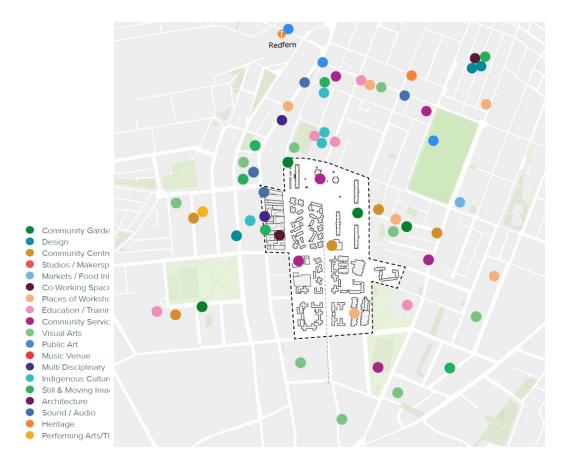


Figure 7 | Creative, cultural and community spaces within and surrounding the site Source: Central to Eveleigh Cultural Audit, FutureCity. Graphic prepared by Turner Studio

#### Local Retail and Services

The structure and hierarchy of retailing and centres in the local areas reflects the evolution of the local urban structure over many decades. While there are some clusters of retail activity, centres are not well defined: There is a mix of commercial and retail clustered around key transport nodes (like Redfern and Green Square); and dispersed or strip retail that are legacies from earlier patterns of economic growth and retail trade. Only recently have centres like Danks Street, Green Square and Redfern begun to emerge as key clusters or nodes of economic activity and community life, primarily driven by coordinated redevelopment programs and transport infrastructure improvements, particularly at Green Square. Retail centres, clusters and strips that service the local population catchment around the Estate are shown on Figure 8, and are described in more detail in the Economic Development, Local Retail and Services Study, 2020 (Attachment 27).

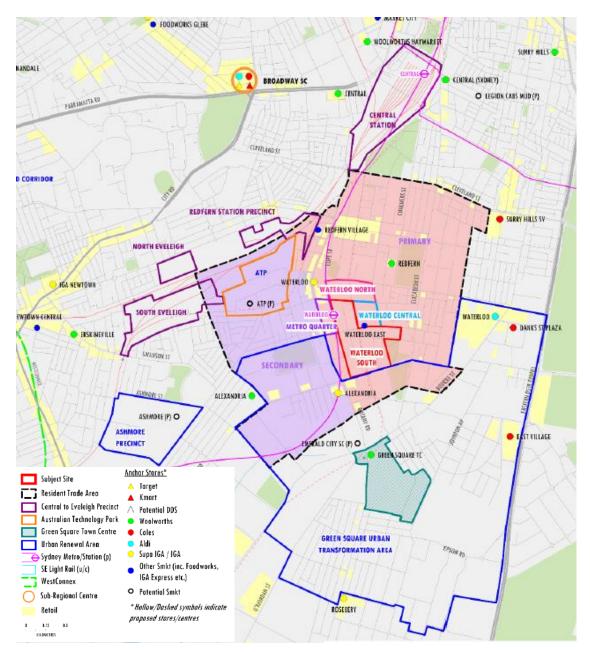


Figure 8 | Resident Trade Area and Competition

Source: MacroPlan Dimasi

#### 2.3.3 Transport

Jacobs has prepared a Transport Study for Waterloo South (refer to **Attachment 8**). An overview of the transport context of the site is provided in the following sections.

#### **Public transport**

#### Sydney Metro City & Soutwest and Waterloo Metro Quarter

The Waterloo Metro Station will provide access to the Sydney Metro City & Southwest, with connections to the suburban rail network at interchanges like Central Station (see **Figure 9**). Planned to commence operation in 2024, Sydney Metro City & Southwest will connect Chatswood through the Sydney CBD to Bankstown. The project involves the delivery of seven (7) new Metro Stations, including a new station at Waterloo. Once completed, Services have the capability to run every 4 minutes in each direction during peak times, but with capacity to increase to trains every 2 minutes carrying up to 40,000 people per hour. Waterloo Metro Station will provide unparalleled transport service for residents, workers and visitors of Waterloo.

On 9 January 2017, the Minister for Planning approved the Sydney Metro City & Southwest - Chatswood to Sydenham application lodged by Transport for NSW as a Critical State Significant Infrastructure project (reference SSI 15\_7400). The CSSI Approval also includes provision for the construction of below and above ground structures and other components of the future over station development (OSD) (including building infrastructure and space for future lift cores, plant rooms, access, parking and building services, as relevant to each site).

During September 2019, new planning controls were gazetted in the Sydney Local Environmental Plan 2012 for land within the Waterloo Metro Quarter. A Concept State Significant Development Application was approved for the integrated station development in December 2019. The approved DA establishes building envelopes, the public domain and a mix of land uses on the Metro Quarter, including residential accommodation, retail premises, entertainment facilities, business and commercial premises and community facilities.

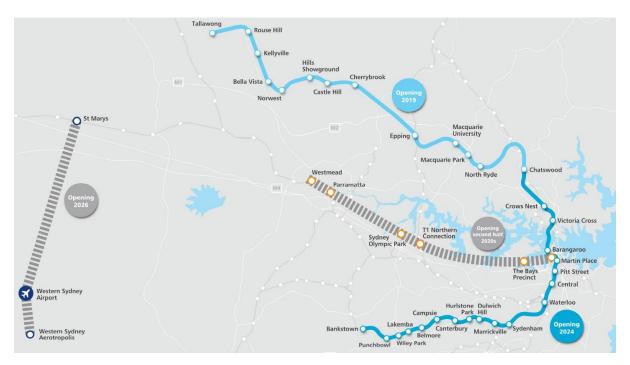


Figure 9 | Sydney Metro alignment

Source: Sydney Metro

#### Sydney Trains

The closest Sydney Trains rail stations are Redfern (approximately 1km to the north) and Green Square (approximately 1km to the south) (see **Figure 10**).

Four suburban rail lines are accessible via Redfern Station, giving direct access to a large number of Sydney's strategic centres, including major employment locations in the Sydney CBD, Parramatta, North Sydney and Macquarie Park. Services to the Sydney CBD are frequent during on and off-peak periods. During the one-hour AM peak, 43 suburban trains heading towards Central Station stop at Redfern Station. A limited number of intercity trains also stop at Redfern during the AM peak. Redfern Station is being upgraded with a new southern concourse that will provide station access from Marian Street in Redfern. The southern concourse will provide new station access (closer to Waterloo Estate than the current station and platform access points) and a new pedestrian crossing of the rail corridor. The Southern Concourse is currently in design and environmental assessment phases, with an Environmental Impact Statement to be placed on public exhibition later in 2020.

Green Square station is located on the T2 airport, Inner West and South Line. While providing direct access to the Sydney CBD and Sydney Airport, access to other strategic centres requires interchange with other lines. During the one hour AM peak, 10 suburban trains heading towards the CBD stop at Green Square Station.

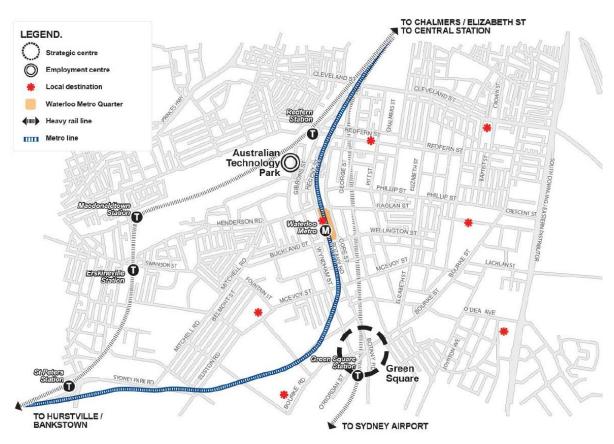


Figure 10 | Existing heavy rail line and proposed Metro line network map

Source: Jacobs

#### Bus

The bus network in and around Waterloo is heavily focussed on north-south travel, particularly for access to the Sydney CBD. Botany Road is a key bus corridor for these services connecting the Sydney CBD with Redfern, Waterloo, Alexandria, Green Square, Mascot and Botany. These north-south routes are typically frequent and operate during a wide span of hours.

Bus services also operate east-west routes, linking Randwick, Coogee, Bondi Junction, Moore Park and Kingsford to the east with Glebe, Newtown, Marrickville and Sydenham to the west. These routes serve an important cross-regional function and some pass through the Estate travelling on Wellington Street, Raglan Street, George Street and Cope Street. Botany Road in particular is a key bus route that offers opportunities for interchange with the Metro Station.

#### Active transport

#### Cycling

The cycling network currently provides access to a range of key destinations including the University of Sydney, Redfern Station, Sydney CBD, Newtown and Moore Park (refer to **Figure 11**). East-west movement is constrained by the existing heavy rail corridor to the west, which limits access particularly to Carriageworks and the University of Sydney. There are limited and sparsely located crossing opportunities, including Lawson Street at Redfern Station. The proposed Redfern Station Southern Concourse will provide an additional crossing of the rail corridor for pedestrians and cyclists.

CoS has identified 10 priority cycle routes across the inner city including through Waterloo South. Key routes include:

- City North to Green Square: Running north-south through Waterloo South, complete as far as Green Square with a separated cycleway on George Street.
- Sydney Park to Moore Park: Running east-west through Waterloo South, upgrades are identified on Buckland, Wellington, Morehead and Phillip Streets, Waterloo.
- **Newtown to Bondi Junction**: Running east-west through Redfern on Wells and Turner Streets, upgrades currently in progress.
- Sydney University to University of NSW: Running east west through Alexandria.
- Sydney Harbour to Botany Bay: Running north-south along Bourke Street, complete with separated cycleway for much of its length.

Cycling will be increasingly important to access the Waterloo Metro Station and key employment and education centres including South Eveleigh, Sydney CBD, Sydney University and UTS. Waterloo Metro Station is likely to be a key cycling destination and interchange node.

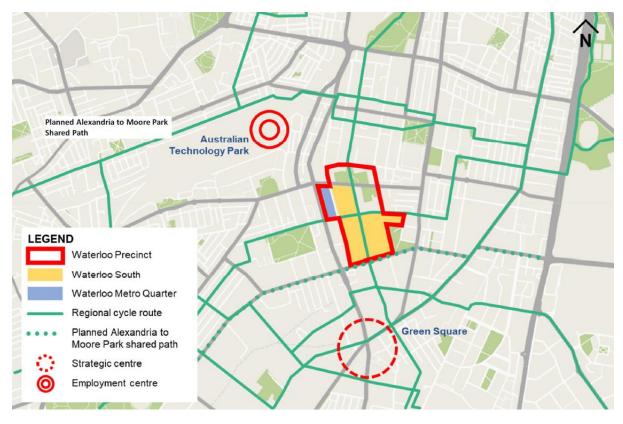


Figure 11 | Cycle network map

Source: Jacobs

#### Walking

On-street pedestrian paths are provided along the sides of each local street within Waterloo South. Waterloo South is accessible by walking to and from Redfern and Green Square Station, and the future Waterloo Metro Station, demonstrating the high level of accessibility Waterloo South will have to mass transit modes. The quality of paths is variable, and includes some relatively narrow, uneven bitumen paved surfaces. While local pedestrian permeability is facilitated by the grid street pattern, due to the traffic volumes of Botany Road and McEvoy Street, east-west and north-south pedestrian movement between Waterloo South and adjacent communities outside of the Estate is managed by pedestrian crossings at signalised intersections at:

- Botany Road and Henderson Roads.
- Botany Road and Wellington Street.
- McEvoy and George Streets.

#### Roads

Major roads in the vicinity of Waterloo South include Botany Road, Wyndham Street, McEvoy Street, and Henderson Road. Botany Road and Wyndham Street operate as a north-south one-way pair between Cleveland Street and Henderson Road providing a key link between Sydney Airport and its surrounding suburbs to the Sydney CBD and inner west. It is also the designated route for dangerous goods, providing an alternative for trucks that would otherwise travel through the Eastern Distributor tunnel. McEvoy Street and Henderson Road both run east-west, providing links between the inner-southern suburbs and the Sydney CBD or eastern suburbs.

#### Open Space and Landscape 2.3.4

#### Nearby open space and landscape

There are several existing and planned public open spaces located within close walking distance of Waterloo South. Key open spaces within this catchment area are outlined in Figure 12 below.



- Local Park
- Pocket Park
- Roof Garden
- Public Sports Facilities
- Private Sports Facilities
- Publicly Accessible Open Space
   Neighbourhood Playground
- Regional Playground
- Pocket Playground
- Trees

Figure 12 | Open space surrounding the Estate

Source: Turner Studio

#### Current internal open space and landscape

While there is some open space within Waterloo South, a majority of it is underutilised and lacks definition and purpose other than to provide visual amenity and a sense of openness.

There are currently no formalised public parks within the Estate. Existing open space areas are LAHC owned land that are predominantly private or communal space for residents. The northern open lawn areas/park are publicly accessible providing facilities such as bench seating co-located under or near tree clusters. Waterloo Green is part of the open space network within the Estate, and is a publicly accessible, LAHC owned space. Semi-enclosed open space to the west and east of the open lawn areas provide facilities such as community gardens, barbecue areas, outdoor fitness equipment and play spaces for local residents. While these open space areas are not Council owned, for residents of the Estate, they serve the same function as local or neighbourhood parks, providing opportunities for informal recreation, social interaction and community events.

#### 2.3.5 Natural environment

#### Water cycle

The site forms part of the Sheas Creek sub catchment for the Alexandra Canal. The majority of the Sheas Creek sub catchment is fully developed and consists predominantly of medium to high-density housing, commercial and industrial development with some large open spaces and recreational parklands. AECOM has prepared a Water Quality, Flooding and Stormwater Study for the Estate (refer to **Attachment 19**). There are some areas of localised flooding and the area is underlain by a relatively shallow water table.

#### Soils

The site is underlain by Quaternary Sediments (Qhd), described as medium to fine grained marine sand with podsols. The underlying bedrock is Ashfield Shale further underlain by Mittagong Formation and/or Hawkesbury Sandstone. The top of bedrock ranges from about RL+9.5 metres AHD in the north to about RL +6.5 metres AHD in the south.

The Acid Sulfate Soils (ASS) Map provided by the NSW Office of Environment and Heritage (OEH) shows no potential ASS occurrence in the Estate. The Sydney LEP shows privately owned lands within the site as Class 5 land, which is land where ASS are not typically found, but are adjacent to land that falls within ASS classes 1-4, and where ASS could be encountered if works are proposed that would lower the water table.

#### Vegetation and habitat

The Tree Retention Values Plan at **Figure 13**) shows the distribution and value of trees across Waterloo Estate. There are 940 trees in the Estate, predominantly located in the public domain, the streets and the semi-public areas surrounding the residential towers. A large majority of the existing trees are of 'low' retention value trees due to their small size or because they have been significantly misshapen by overhead power line clearance pruning.



Figure 13 | Retention value of existing trees Source: Arterra

# 2.3.6 Economy

The City of Sydney is the engine room for the Greater Sydney and NSW economy. Knowledge-based service industries make up the largest portion of economic output within the LGA, the largest being the finance and insurance sector (43%), followed by professional, technical and scientific services (13%) (CoS Economic Development Strategy, 2013). The employment composition of Sydney City is one of the major contributing factors to Sydney's role as a Global City.

Highlighting its role as a major employment hub within Greater Sydney, CoS had almost half a million (487,855) more jobs than employed residents. This 'jobs surplus' has been rising steadily, growing by more than 100,000 over the last decade (Profile.id, 2020 - **Attachment 26**).

The employment composition within the LGA is heavily skewed toward finance and professional services, with over 39% of jobs. Tourism, culture and leisure, retail, personal services and food and drink related jobs make up around 18% of total jobs within the LGA. The main industries of employment for working residents in Waterloo Precinct are:

- Health Care and Social Assistance (13%)
- Professional, Scientific and Technical Services (13%)
- Accommodation and Food Services (11%).

City of Sydney is also a recognised leader in the creative industries and digital economy. An identified industry cluster is focused around the Australian Technology Park. Between 2007-2012, the creative industries and tourist, cultural and leisure industry types all saw increases in the amount of floor space they occupied within the Redfern Street Village. This growth is anticipated to continue, with the Art and Recreations services industry category forecast to nearly double its employee base by 2036. The information media and telecommunications sector is anticipated to increase by 57% from 2016 to 2036.

#### 2.3.7 Heritage

There are a number of listed heritage items and heritage conservation areas (HCAs) located within and in the vicinity of the site. Descriptions of the heritage items are provided on the NSW Office of Environment and Heritage Database for each item outlined below.

- Former Waterloo Pre-school (225 Cope Street) including interior (Local) (SLEP 2012 I2077)
- Two storey Victorian terrace houses, c 1880 (Local) (SLEP 2012 I2078)
- Duke of Wellington Hotel including interior (Local) (SLEP 2012 I2085)
- Electricity Substation No 174, single storey Inter-War building (SLEP 2012 I2086)
- Potts Hill to Waterloo Pressure Tunnel and Shafts (State) (SHR ID 01630)

The location of the above items and conservation areas are illustrated within **Figure 14** and **Figure 15**. More detail on existing heritage items is available in the Heritage Impact Statement for Waterloo South (refer to **Attachment 14**).

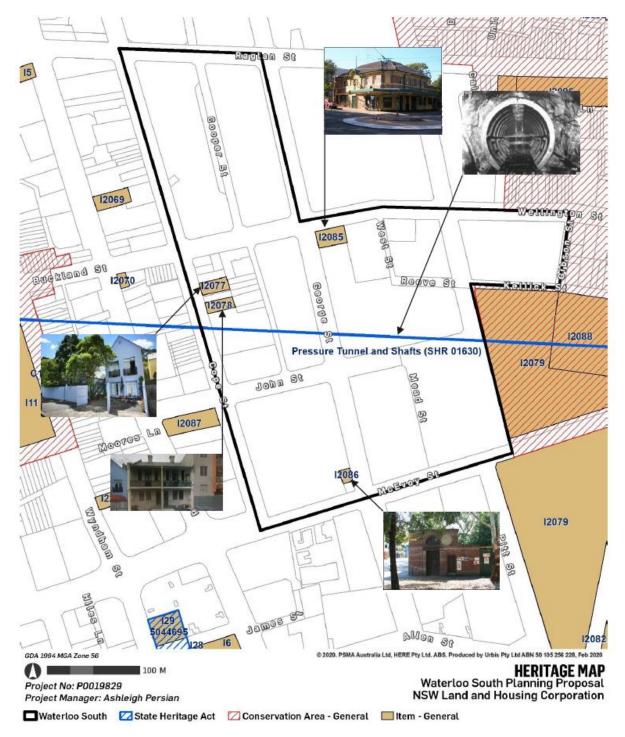


Figure 14 | Existing heritage items within the Waterloo South site

Source: Urbis

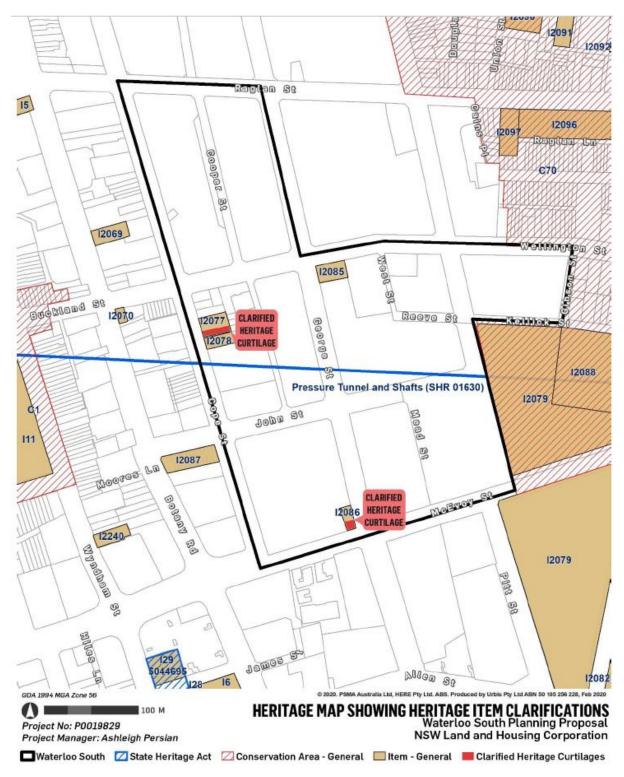


Figure 15 | Existing heritage items near Waterloo South

Source: Urbis

# 2.4 Strategic Planning Context

This section describes the key strategic planning policies that guide the planning and development of metropolitan Sydney and are relevant to Waterloo South. In conjunction, these plans and policies establish the strategic planning context for the proposal. **Figure 16** illustrates the structure and hierarchy of the strategic planning framework in Greater Sydney.

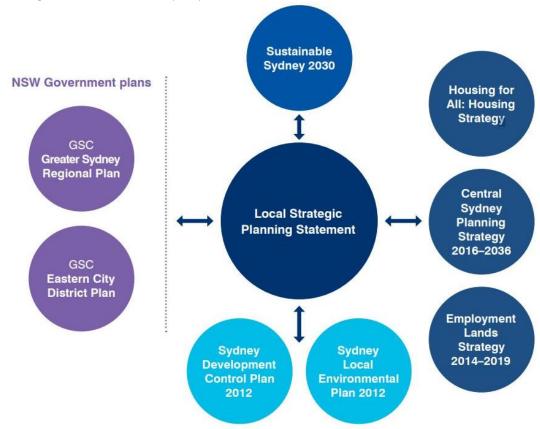


Figure 16 | Relationship of the NSW strategic planning framework

Source: City of Sydney Local Strategic Planning Statement

#### 2.4.1 Regional and District Plans and Strategies

In March 2018, the NSW Government finalised a suite of transport and land use strategic plans for Metropolitan Sydney. A Metropolis of Three Cities – The Greater Sydney Region Plan was prepared in parallel with Future Transport 2056 and the State Infrastructure Strategy, with the goal of aligning land use, transport and infrastructure planning for Greater Sydney as three unique but connected cities.

To implement this vision at the district and local level, the GSC also released the District Plans. The District Plans are the link between the Greater Sydney Region Plan and local planning, giving effect to the Directions of the Greater Sydney Region Plan at a District scale. This establishes a "line of sight" between regional, district and local strategic planning policies that will shape the eventual planning controls contained within local plans and/or State policies.

#### A Metropolis of Three Cities – The Greater Sydney Region Plan

The Greater Sydney Region Plan is a strategy for managing growth and change and guides integrated land use planning and infrastructure delivery over the next 20 years, with longer term vision extending 40 years. The plan seeks to reposition Sydney as a metropolis of three cities – the western parkland, central river and eastern harbour cities (refer to **Section 6.2.2**).

To support the vision of boosting Greater Sydney's liveability, productivity and sustainability, the GSC has established ten Directions for Greater Sydney over the next 40 years. These Directions will be used to guide future planning policy and infrastructure decisions within Greater Sydney to 2056.

#### The Directions are:

- 1 A city supported by infrastructure
- 2 A collaborative city
- 3 A city for people
- 4 Housing the city
- 5 A city of great places
- 6 A well-connected city
- 7 Jobs and skills for the city
- 8 A city in its landscape
- 9 An efficient city
- 10 A resilient city

As the population of Sydney continues to grow over the next 40 years, there will be need for more housing and improved infrastructure and services in inner city locations. The renewal of Waterloo Estate is aligned these directions. The strategic justification for the Waterloo South proposal specifically addresses the Directions, Priorities and Actions of the Greater Sydney Region Plan (refer to Section **6.2.2**).

#### Future Transport Strategy 2056 and Greater Sydney Services and Infrastructure Plan

Coinciding with the release of the Greater Sydney Region Plan and the District Plans, the NSW Government released *the Future Transport Strategy 2056*. The Future Transport Strategy sets out a 40 year framework and is underpinned by the Regional Services and Infrastructure Plan (which applies to regional NSW) and the Greater Sydney Services and Infrastructure Plan. The Future Transport Strategy sets six state-wide outcomes to guide investment, policy and reform and service provision:

- Transport services will be convenient and responsive to customer needs, with integrated services.
- Population and economic growth will support a stronger network of thriving centres across the state. The
  transport system will support the liveability of places with a road network that supports movement and
  place functions and walking and cycling facilities around centres.
- Connecting people and places in a growing city will enable efficient access for customers to the nearest centre and new industries and jobs growth in Regional NSW and Greater Sydney.
- A transport network that provides customers with efficient, safe and secure travel. As the population continues to grow, innovation and technology will allow for improved performance and safety across networks. Major passenger and road corridors will be upgraded with automated mobility and smart networks.
- Providing accessible services. The Sydney Metro and Light Rail are among the first projects to deliver fully
  accessible networks, with the whole transport network developed over time through the delivery of new
  assets or the repurposing of existing assets.
- Providing a sustainable network that will benefit our environment, economy and wellbeing. The transport system will be financially and environmentally sustainable through asset management and a network that is resilient and has a net zero emissions impact.

Waterloo Metro Station is a catalyst for renewal of Waterloo South and is part of the 'City-Shaping' Sydney Metro project. The Waterloo South Planning Proposal will effectively link population and economic growth with the transport network and efficient movement of people around the city.

#### Eastern City District Plan

The Eastern City District Plan (the District Plan) sets out the planning priorities and actions for growth and development within the Eastern City District over the next 20 years. The District Plan fills the gap between the Metropolitan Plan (the Greater Sydney Region Plan) and local planning, giving effect to the Greater Sydney Region Plan at a District scale.

The Eastern City District is forecast to grow by approximately 325,000 people, contributing 19% of Greater Sydney's population growth to 2036. This growth rate demonstrates a need to plan and meet the demands of a rapidly changing population. To respond to this demand, the District Plans seek to reshape Sydney as a 30-minute city, where people are within 30-minute access to key locations for employment and services. This will see greater focus on targeted development in existing, emerging and new centres around a transit node/rail station.

In particular, the District Plan acknowledges the role Waterloo will play in providing housing, including identifying Waterloo Metro Station as a catalyst for urban renewal in Waterloo. **Section 6.2.3** specifically addresses how the Waterloo South Planning Proposal will give effect to the actions and priorities of the District Plan, specifically through the delivery of new housing supply that is supported by infrastructure and the creation of great places.

# 2.4.2 Other Planning Strategies and Policies

#### Future Directions for Social Housing in NSW

Future Directions for Social Housing was adopted by the NSW Government in 2016. It sets out the NSW Government's vision for social housing over the next ten years to 2026. The policy is underpinned by three strategic priorities:

- More social housing.
- More opportunities, support and incentives to avoid and/or leave social housing.
- A better social housing experience.

A key objective of the Future Directions strategy is to achieve de-concentration of social housing within large redevelopment sites by targeting a 70:30 ratio of private to social housing. The redevelopment of Waterloo South and the broader Estate is being progressed by LAHC under the Future Directions program, and will deliver more and better social housing interspersed with affordable housing and private market housing.

#### **Better Placed**

The NSW Government Architects Office has prepared "Better Placed", an integrated design policy for the built environment of New South Wales that establishes principles to support better design and create good places within NSW. The policy also advocates the support of design excellence of future development to create better quality places. This may utilise existing tools, such as design review panels, competitive design processes and guidelines and manuals to support design excellence as part of future development proposals.

Waterloo South and the broader Estate is a significant opportunity for State and local governments, businesses and the community to implement Better Placed through the delivery of high quality places and to promote and achieve excellence in design. The Waterloo South Planning Proposal has been a design-led process, and the proposed planning controls and accompanying DCP emphasises the importance of design quality for both buildings and the public domain.

#### **Greener Places (Draft)**

The NSW Government Architects Office has prepared Greener Places (currently in draft form) to guide the planning, design and delivery of Green Infrastructure in urban areas across NSW. The vision for the draft policy is to establish a network of well-planned Green Infrastructure that will make NSW more attractive, better connected, healthier and more resilient.

The policy outlines the following principles for well-designed Green Infrastructure:

- Integration The principle of integrating green space with urban development and hard infrastructure (e.g. roads, stormwater drainage).
- Connectivity promoting a network of high quality open spaces that connect with other areas of activity, such as town centres, public transport hubs, rivers, creeks and employment and residential areas. This aims to create a network of open space through the Central District and Greater Sydney region.
- Multifunctionality where design of green spaces provides a range of benefits in one area through careful
  planning. This may include the simultaneous function of green spaces for ecosystem, environmental and
  other services.
- **Participation** where stakeholders are involved in the development and implementation of neighbourhood, local, district and regional Green Infrastructure policies and actions.

Importantly, emphasis is placed on using Greener Places as a framework to promote and establish green infrastructure initiatives for State government projects for urban regeneration planning.

#### 2.4.3 Local Plans and Policies

#### City Plan 2036 – City of Sydney Local Strategic Planning Statement

In August 2019 the City of Sydney released City Plan 2036, its draft Local Strategic Planning Statement (LSPS), for public exhibition, representing Council's 20-year vision and strategy for the LGA's future direction on infrastructure, liveability, productivity and sustainability. The LSPS implements the planning priorities and actions identified in the Greater Sydney Region Plan and Eastern City District Plan at the local level. It is also informed by Council's Community Strategic Plan Sustainable Sydney 2030, the Central Sydney Planning Strategy (CSPS) and Employment Lands Strategy. Importantly, it will underpin any future changes to Council's Local Environmental Plan and Development Control Plan. At its meeting on 17 February 2020, Council resolved to endorse the draft LSPS with minor amendments made as a result of public exhibition.

The LSPS identifies that the LGA is expected to grow to a population of up to 340,000 by 2036, with growth focused in Green Square, Central Sydney and Redfern-Waterloo. A series of 'Key Moves' are established in the LSPS, including the following:

- Make great places.
- New and diverse housing.
- Movement for walkable neighbourhoods and a connected city.
- Greening the city and pathways to net zero.
- Aligning development with infrastructure.
- Collaborate and plan for a shared vision.

The LSPS has as one of its key aims to grow the amount of social and affordable housing. The renewal of Waterloo South presents an opportunity to provide to a variety market, affordable and social housing, as well as non-residential floor space, in a highly accessible location, with connections to many of Sydney's technology and employment precincts. **Section 6.2.4** and **Attachment 4** address how the planning proposal gives effect to the City of Sydney LSPS.

#### Housing For All – Draft Local Housing Strategy

The LSPS is informed by the City of Sydney's Local Housing Strategy — Housing for All. The draft Housing Strategy was exhibited along with the draft LSPS during August 2019, with Council resolving to endorse the Strategy at its meeting on 17 February 2020. The Strategy outlines the vision for housing within the LGA and includes seven priorities:

• Facilitating more homes in the right locations.

- Coordinating housing growth with the delivery of infrastructure.
- Increasing diversity and choice in housing.
- Increasing the diversity and number of homes available for lower-income households.
- Increasing the amount of social and supported housing.
- Improving NSW Government controlled site outcomes.
- Increasing liveability, sustainability and accessibility through high-quality residential design.

**Section 6.2.4** and **Attachment 4** demonstrate how the Waterloo South Planning Proposal gives effect to the Housing Study.

#### Sustainable Sydney 2030 Community Strategic Plan 2017-2021

Sustainable Sydney 2030 sets out the long-term vision for the sustainable development of the City to 2030 and beyond. Sustainable Sydney 2030 outlines the aspiration for the city to be Green, Global and Connected. It includes ten strategic directions to guide the future of the City, and 10 targets against which to measure progress.

The strategic directions are:

- 1. A globally competitive and innovative city
- 2. A leading environmental performer
- 3. Integrated transport for a connected city
- 4. A city for walking and cycling
- 5. A lively and engaging city centre
- 6. Resilient and inclusive local communities
- 7. A cultural and creative city
- 8. Housing for a diverse community
- 9. Sustainable development, renewal and design
- 10. Implementation through effective governance and partnerships

**Section 6.2.5** and **Attachment 4** describe how the Planning Proposal implements and is consistent with the Community Strategic Plan.

# 2.5 Current Statutory Planning Controls

This section examines the existing statutory planning framework that applies to Waterloo South. A number of environmental planning instruments presently apply, or are proposed to apply to the site and are key to establishing planning controls and the planning approval pathway for any renewal to occur.

#### 2.5.1 State Environmental Planning Policies

A number of State Environmental Planning Policies (SEPPs) are relevant to the proposal. The following SEPPs are specifically relevant, and others are considered throughout this document where relevant to a specific issue.

#### State Environmental Planning Policy (State Significant Precincts) 2005

Waterloo South and the broader Estate are not identified as, or within any State Significant Precinct under the SSP SEPP. The planning process for Waterloo Estate and the Waterloo Metro Quarter commenced in 2017 with a State Significant Precinct Study, which was intended to establish new planning controls under the SSP SEPP. When the new approach to precinct planning was announced by the NSW Government in late 2019, the planning process for Waterloo Estate has transitioned to a Council-led process, and Waterloo South will be subject to a Planning Proposal process led by the City of Sydney, seeking to amend the Sydney LEP, with the

application made in accordance with the Request for a Planning Proposal issued by the CoS on 19 February 2020.

#### State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development 2015

State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development (SEPP 65) aims to improve the design quality of residential apartments through nine (9) design quality principles and the Apartment Design Guide (ADG). SEPP 65 applies to residential flat buildings (of three or more storeys) and the residential component of a shop top housing development in the Precinct.

#### State Environmental Planning Policy No. 70 Affordable Housing (Revised Schemes)

The purpose of State Environmental Planning Policy No. 70 Affordable Housing (Revised Schemes) (SEPP No.70) is to provide a framework that identifies the need for affordable housing in certain local government areas and allows specified councils to prepare an affordable housing contribution scheme for certain precincts, areas or developments within their local government area.

Section 8 of SEPP No.70 provides the following definition for 'affordable housing':

# 8 Definition of "affordable housing"

For the purposes of the definition of **affordable housing** in section "1.4 (1) of the Act, very low income households, low income households and moderate income households are those whose gross incomes fall within the following ranges of percentages of the median household income for the time being for the Greater Sydney (Greater Capital City Statistical Area) according to the Australian Bureau of Statistics:

Very low income household less than 50%

Low income household 50 or more but less than 80%

Moderate income household 80–120%

SEPP No. 70 identifies that there is a need for affordable housing within the City of Sydney. Currently, Council's affordable housing schemes operate in Ultimo/Pyrmont, Green Square and the Southern Employment Lands. These schemes require a private developer proposing a new development to make an affordable housing contribution either through works in kind or monetary contributions. There are no schemes that currently apply to the balance of the LGA.

The City of Sydney has exhibited a Planning Proposal, currently with DPIE for finalisation (PP\_2017\_SYDNE\_006\_00), that proposes amendments to (including expansion of) current affordable housing schemes that apply to only some parts of the City of Sydney. This includes applying a new affordable housing scheme to 'residual lands' in the LGA (including private-owned lands within the Precinct along Cope Street). The purpose of these changes is to deliver on Council's objective for 7.5% of all dwellings to be affordable rental dwellings in 2030. The Council Planning Proposal does not propose to increase the proportion of affordable housing in areas covered by the Green Square and Ultimo/Pyrmont affordable housing schemes.

# 2.5.2 Local Planning Controls

Both the South Sydney Local Environmental Plan 1998 and the Sydney Local Environmental Plan 2012 apply to the site. The South Sydney LEP 1998 applies to land owned by LAHC, while for privately owned land and land intended to be acquired for public purposes (McEvoy Street widening), the Sydney LEP 2012 applies. A description of the relevant controls is provided in the following sections.

#### South Sydney Local Environmental Plan 1998 and South Sydney Development Control Plan 1997: Urban Design

The South Sydney LEP 1998 applies to the LAHC-owned land within Waterloo South. The South Sydney LEP 1998 contains the following land-use zoning relevant to the LAHC-owned land:

- 2(b) Residential (Medium Density); and
- 9(a) Arterial Road Reservation.

As described at **Chapter 5**, this Planning Proposal seeks to include the entire Waterloo South site in the Sydney LEP 2012. When gazetted, the South Sydney LEP 1998 would no longer apply to the site. South Sydney DCP 1997: Urban Design also applies to the LAHC lands in Waterloo South. This DCP provides additional design guidance to support the statutory planning controls that apply to the site.

The current maximum height limits for the LAHC land range from 9-15 metres, and the maximum floorspace ratio is 1.5:1.

As discussed in Chapter 6 of this report, the current DCP does not reflect the role and function of Waterloo South as envisaged through the LAHC Communities Plus program. A new site specific section of Sydney DCP 2012 is proposed to reflect the intended outcomes for Waterloo South, as described in **Section 5.3**.

#### Sydney Local Environmental Plan 2012 and DCP 2012

The Sydney LEP 2012 contains key development standards, such as building height and floor space ratios, for the privately owned lots within Waterloo South. A summary of the relevant principal development standards and other controls are identified in **Table 4**.

Table 4 | Relevant Principal Development Standards and Controls from the Sydney LEP 2012.

	Waterloo South		
Zone(s)	R1 General Residential		
	SP2 Infrastructure (Classified Road)		
Height	■ O: 15m		
	■ P: 18m		
	- 10111		
FSR	<b>1</b> .75:1		
Acid Sulfate Soils	■ Class 5		
	3,000 0		
Retail Premises	Restricted retail development outside of Green Square Town Centre and other planned centres		
Heritage	The following items of heritage significance are included within the site:		
	Former Waterloo Pre-school (225 Cope Street) including interior (Local, I2077).		
	Two storey Victorian terrace houses, c 1880 (Local, I2078).		
	Duke of Wellington Hotel including interior (Local, 12085).		
	■ Electricity Substation No 174, single storey Inter-War building (I2086).		
Land Reservation Acquisition	SP2 Classified Road (McEvoy Street widening)		
Land Use and Transport Integration	■ Category B		
Public Transport Accessibility Level	Category F		

The Sydney Development Control Plan 2012 (SDCP 2012) applies to privately owned lands within the site, but not the LAHC owned land. The SDCP 2012 sets the development and built form parameters for the CoS LGA. It includes key development standards, such as public domain improvements, street wall heights and active frontages.

# 2.5.3 Development Contribution Plans

Waterloo South is currently covered by The CoS Development Contributions Plan 2015. The Study Requirements and Council's Planning Proposal Checklist require LAHC to propose an infrastructure contributions framework. Section 5.4 of this report describes the proposed approach to local, regional and State infrastructure funding and delivery.

# 3 Options development, community and stakeholder consultation

# 3.1 The Planning Process to Date

#### 3.1.1 Waterloo State Significant Precinct

In May 2017, Waterloo Estate was nominated as a State Significant Precinct (SSP). SSPs are typically large sites or areas owned by the state government that are determined to be of state or regional importance for:

- achieving government policy objectives, particularly those relating to increasing delivery of housing and iobs
- environmental or natural resource conservation
- heritage or historical significance.

In late 2019, the NSW Department of Planning, Industry and Environment (DPIE) announced a new approach to precinct planning to provide certainty and a way forward for precincts across Greater Sydney. This has led to a change in the planning approach for Waterloo Estate, from a State-led rezoning process (through an SSP Study) to a Council-led Planning Proposal process. On 19 February 2020 the City of Sydney wrote to the NSW Land and Housing Corporation to set out matters for consideration in preparation of the Planning Proposal. The matters for consideration reference the SSP Study Requirements and specify matters to be addressed in the Planning Proposal.

#### 3.1.2 LAHC Waterloo Estate Concept Plan Options and Preferred Plan

Underpinned by the vision and guiding principles, three redevelopment options (**Figure 17**) for the broader Estate formed the basis for options testing in October/November 2018. All three of the options established an integrated mix of housing types and tenures across the entire precinct.

More than 1,000 members of the community and other interested stakeholders participated in the options testing consultation process.

The three options included:

- Option 1: Waterloo Estate The Waterloo Estate concept plan option, which drew inspiration from the historic street pattern of Waterloo and proposed a variety of parks, community and cultural facilities, recreation and event spaces connected by a network of pedestrian friendly streets. The Waterloo Estate concept plan option proposed the renewal of Waterloo Green, a new community park at the southern end of the precinct, and a mixed-use urban plaza adjacent to the Waterloo Station and Metro Quarter, intended to act as an arrival space.
- Option 2: Waterloo Village Green The Village Green concept plan option explores the characteristics of connecting parks, community services, spaces and events through a continuous walkable 'blue-green' network that connects people to Waterloo's unique natural and cultural heritage. The option is defined by a large central 'Village Green'. Commercial, cultural and community facilities are concentrated around the Village Green and along the walkable links.

Option 3: Waterloo Park - The Waterloo Park concept plan option offered a new and expanded Waterloo Green immediately adjacent the Waterloo Station and the Metro Quarter, providing a recreational anchor for the neighbourhood. Waterloo Green is adjoined by a pedestrianised and expanded George Street, which continues north-south through Waterloo with a wide, tree-lined and highly walkable 'Green-Line. Under the Waterloo Park concept plan option, the tallest buildings, business space and retail are concentrated around Waterloo Station, the Waterloo Green, and the pedestrianised George Street. The residential buildings are arranged in a courtyard style form, which supports more uniform building heights and additional opportunities for more local communal space throughout the neighbourhood.



Figure 17 | Waterloo Estate Concept Plan Options

Source: Communities Plus

#### 3.1.3 LAHC's Preferred Masterplan

In January 2019, LAHC released a preferred masterplan for the future of the Waterloo Estate (**Figure 18**) delivering 6,800 new homes in line with Future Directions. The preferred plan proposed an amalgam of features of the abovementioned three concept options. During the consultation process for the options testing, this view of access and mobility was critical to the preferred plan's distribution of key amenities and infrastructure like public open space. The preferred plan included two main parks as well as a range of smaller open spaces and a green boulevard along George Street. The preferred plan also sought to balance the spread of community services, open space, retail and community facilities across the site. The preferred Masterplan created a hub of retail outlets, open space, community facilities and services in the centre of the Estate to ensure activation and accessibility and act as the focus of the Waterloo Estate. This reflects the community preference for a balance between centralisation and distribution of community services, open space, retail and community facilities across the site.



Figure 18 | Waterloo Estate Preferred Masterplan

Source: NSW Land and Housing Corporation

# 3.1.4 City of Sydney Alternate Plan

In March 2019, in response to the LAHC preferred plan, the CoS released an alternate approach to the redevelopment of Waterloo Estate. The alternate plan (**Figure 19**) proposed approximately 5,300 dwellings in total, with a split of 30 per cent private dwellings, 20 per cent affordable housing and 50 per cent social housing. In addition, the Alternate Plan included a 2.2 hectare park adjacent to Metro Quarter, a built form typology comprising 12 to 13-storey buildings surrounding the park and predominantly 7 to 8 storeys across the remainder of the Estate, and a widened George Street



Figure 19 | CoS's Alternate Approach Source: City of Sydney Council

# 3.1.5 Alignment Process between LAHC and City of Sydney Council

Commencing in August 2019, LAHC and the CoS undertook an Alignment Process to develop a proposal that considered elements of both the LAHC Preferred Masterplan and the CoS Alternate Plan. This collaborative approach to designing the Estate was realised through amendments to the Preferred Masterplan across a number of key alignment items. Each item and the corresponding design response made by LAHC and the project team to achieve alignment is provided in **Table 5**. One outcome of the alignment process was a decision by LAHC to proceed, at this stage of the planning process, with a planning proposal for Waterloo South only. This staged approach to planning for the precinct will enable the renewal process to commence while the CoS and LAHC continue to work together on the renewal of Waterloo Central and Waterloo North.

In summary, the revised master plan comprises the following key changes, as a result of the alignment process:

- The site extent was amended to comprise Waterloo South only (and not the entire Estate).
- Some building heights have been reduced to a maximum of 32 storeys.
- The central park was increased in size to 2.25 hectares removing built form (known as Cope Street Plaza) and is now directly adjacent to Waterloo Station and the Metro Quarter.
- 50% stationary solar access provided to parks.
- George Street is to be retained as a public road, with improved pedestrian amenities, activation and tree planting.
- 50% of high value and moderate trees retained trees are to be retained Some streets are widened

The outcomes of the alignment process are illustrated at Figure 20.

Table 5 | Items of Alignment between LAHC and City of Sydney

Alignment Item	Aligned?	Amendment to Achieve Alignment	
Bike Path	Yes	Bike path alignment changed from Cope to George Street	
George Street	Yes	Staged delivery of George Street provides for retention as movement corridor in the short term	
Other Streets:	Yes	Existing alignment of John Street retained, Built Form amendments (Lot Q, R, S, T, U, W and X), and Waterloo Common adjusted for wider John Street.	
<ol> <li>John Street Alignment</li> <li>Reeves Street Alignment</li> </ol>	Yes	Existing alignment of Reeves Street retained, and Built Form amendments (Lot O and T).	
3. Increase new Streets to 20m	Yes	Building separation to new east-west street north of McEvoy Street increased to 20m, and Built form amendments (Lot M, Q, T, U, W, Y and Z) to respond to small streets.	
Open Space	Yes	Removal of built form interface (Lot F) to Metro Quarter to provide larger park	
Open Space Solar Access	Yes	50% stationary solar access between 9am – 3pm to the Village Green and Waterloo Common	
Trees	Yes	50% High and Moderate Value trees retained 30% canopy cover target included in draft DCP	
30% Social and 70% Private Housing	No	In line with NSW Government Future Directions for Social Housing	
Retail	Yes	Access to 3m² retail per person possible with the inclusion of Metro Quarter	
Number of Dwellings	No	Planning Proposal has reduced dwelling numbers from Preferred Plan	
Built Form – Height	Yes	Reduction of tower heights from 40 to 29-32 storeys to meet PANS-OPS limit	
Built Form – Amenity	Yes	Amenity requirements achieved and demonstrated in planning proposal	

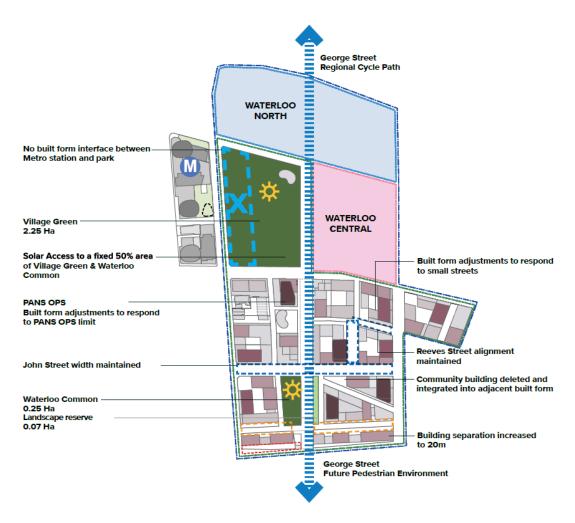


Figure 20 | City of Sydney Alignment Process outcomes

Source: Turner Studio

# 3.2 Community Engagement

Community and stakeholder engagement began when the Waterloo Estate was initially designated a State Significant Precinct in May 2017. While the Estate is now progressing through a local planning process and this Planning Proposal relates only to Waterloo South, the outcomes of consultation undertaken for the SSP Study have informed planning and design work for the broader Estate as well as for Waterloo South. This chapter provides a summary of community and stakeholder engagement undertaken for the broader renewal of the Estate as well as for Waterloo South specifically.

LAHC has undertaken a significant amount of community consultation as part of the renewal of the Estate. This commenced with establishment of the Waterloo Connect office in early 2017 and the visioning phase of consultation for the Waterloo Redevelopment from October to December 2017. Further to this, more than 1,000 members of the community and other interested stakeholders participated in the options testing phase of the consultation process. Elton Consulting have facilitated a series of engagement activities as part of the Waterloo Redevelopment consultation process. This involved focus groups, workshops and the community information days that were independently facilitated by Elton Consulting. This also included two workshops involving private landowners in the options testing phase (and one facilitated by KJA in the visioning phase).

Consultation with the CoS, DPIE and other NSW government agencies such as the Government Architect NSW (GANSW) has occurred through regular meetings, including the Project Working Group (PWG) and Project Review Panel (PRP). Consultation with federal agencies has been undertaken, specifically with the Department

of Infrastructure, Regional Development and Cities (DIRDC) to discuss current aviation constraints that apply to the Estate.

Key elements of the consultation process include:

- Communication and engagement with a wide range of stakeholders including government agencies, non-government organisations and members of the community.
- Commitment to leading practice engagement in line with the IAP2 core values. This includes: involving people who are affected by the redevelopment in the master planning process; providing relevant information to support meaningful participation; seeking input from stakeholders on how they participate; promoting participation in the engagement activities; and identifying how participant feedback will be used by LAHC and its project team as part of the master planning process.
- Identifying the relationship between the options testing phase and visioning phase of consultation and promoting ongoing participation by new and existing participants.
- Addressing key aspects of the redevelopment proposal through the use of visual information, discussions
  and surveys focusing around the five key themes. Under these themes, materials were designed to present
  and test feedback on key elements of the proposal.

Elton has prepared a Consultation Report, which documents the outcomes of the options testing phase of consultation. It also incorporates an overview of the findings from the initial visioning phase of consultation. (refer to **Attachment 6**).

Planning, promotion and participation in the consultation process was supported by early engagement with local community groups and service providers. This included briefings with the Waterloo Redevelopment Group, community and non-government organisations, and close liaison with Waterloo Connect.

Participation in both the visioning and options testing phases of consultation was also supported by wide reaching communications across the Estate and broader community. The consultation process involved online and face to face consultation activities, underpinned by early engagement with local stakeholder groups and residents in order to build capacity and prepare people to participate in the planning process. It involved a combination of targeted engagement activities and whole of community engagement.

#### 3.2.1 Waterloo Precinct Visioning

In late 2017, LAHC undertook visioning for the Waterloo Precinct, including the Estate and the Metro Quarter. To support the community to participate in the engagement and ensure meaningful consultation, as part of the Waterloo Precinct visioning FACS also undertook a number of capacity building initiatives, including:

- Establishing the Waterloo Connect office.
- Funding a Community Development Officer.
- Funding a community capacity building project through the local NGO Inner Sydney Voice.
- Funding bilingual educators to work with the Russian and Chinese members of the local community.
- Funding an independent Aboriginal Liaison Officer.

Approximately 1,570 people provided feedback across more than 40 consultation events, which also included a meeting with private landowners within the Precinct, arranged during November 2017. Consultation on the vision focused on the five key themes of:

- Culture and community life.
- Transport, streets and connections.
- Housing and neighbourhood design.
- Community facilities, services and shops.

Environment and open space.

From this visioning, the community identified that they wanted the Estate to provide better community facilities, services and shops, improved transport options, improved safety, preservation of Waterloo's history and cultural heritage and a mix of social and affordable housing.

Residents, the community and other stakeholders shared their vision of a redeveloped Waterloo. Community and stakeholder input to the vision for a redeveloped Waterloo was used to establish a series of redevelopment principles.

#### 3.2.2 Concept Option Testing

Underpinned by the vision and guiding principles, the three redevelopment options described in **Section 3.1.2** formed the basis for options testing in October/November 2018. All three of the options establish an integrated mix of housing across the entire precinct.

Consultation during the options testing phase focused on five key themes to:

- Ensure the consultation provided information about and invited feedback on all key aspects of the proposed redevelopment as per the SSP Study Requirements.
- Support ongoing engagement with the options testing phase of consultation involving a mix of people
  who had been involved in the visioning phase of the consultation process as well as those who had not
  previously been involved.

More than 1,000 members of the community and other interested stakeholders participated in the options testing consultation process. An overview of feedback received on the concept options based on five key themes is provided below. The feedback from the concept options helped shape LAHC's Preferred Masterplan for the Waterloo Estate. The following sections describe key aspects of the feedback and how this was reflected in the Preferred Masterplan for the Estate.

#### Culture and community life

Feedback from members of the community and other stakeholders confirmed that a wide range of public activity areas, as proposed by the redevelopment options, should be included in the preferred plan. This commonly included community gardens, youth facilities, play areas, and space for entertainment and events. Cafes and exhibition spaces were less frequently discussed.

Feedback on the different elements of the three options indicated that:

- the proposed locations of activity areas within the public domain in and around parks and the George Street boulevard was supported. However, key issues raised by the community in relation to the location of activity areas were:
  - the importance of universal access for people of all abilities.
  - the equitable distribution of these spaces within walking distance of homes for people living on different parts of the estate.
  - ensuring that parks and open spaces enable diverse uses without becoming "congested" and "overused".
  - ensuring pedestrian safety in areas that incorporate shared paths for cyclists including the George Street boulevard; a desire for community gardens to be located at ground level and within proximity of social housing residents' homes.
  - a desire for some activity areas to be co-located and others to be spread out across the estate to
    enable opportunities for social interaction, enhance community safety, and to provide different
    groups of people within the community with "space to breathe" and do their own thing.

the types of public activity areas, their location and factors relating to their use and management are of greater importance than the total number of these areas to be included in the preferred master plan. With the highest number of these spaces included in Option 1 and the lowest included in Option 3, the most relevant feedback relating to volume was that public parks and open space areas should be designed to support a wide range of uses at different times of the day and week by people with different needs and interests, to avoid being overused and feeling overcrowded.

Participants expressed a strong desire for the redevelopment to recognise and celebrate Aboriginal culture and heritage as intrinsic to the past, present and future of Waterloo as a place and community. Facilities and spaces that support knowledge sharing about Aboriginal culture among the broader local community and visitors were regarded as providing opportunities for community learning, healing and pride.

#### Transport, streets and connections

There was strong support for the following common elements of the three redevelopment options:

- Making Waterloo a pedestrian priority precinct.
- Access to the majority of local needs within 200 metres of homes.
- Slow and shared streets.

While there was limited discussion relating to the specific idea of an accessible local movement route for people of all ages and abilities within the precinct, feedback suggests that safe and pleasant connections throughout the local neighbourhood are widely regarded as important.

Some participants questioned whether the proposal to open up Pitt Street could result in rat-running and pedestrian safety issues. The treatment of Cope Street as a slow speed and pedestrian friendly environment, to minimise congestion and maximise pedestrian safety around Waterloo station was also raised. Provision of adequate carparking to meet the needs of new and existing residents was strongly supported, with mixed views expressed on the level of carparking provision proposed by the three options of one parking space per two apartments. The preferred master plan should consider and address traffic and parking concerns with reference to the relevant technical study.

Feedback on the different elements of the three options indicates:

- A mix of views on the most appropriate street types and blocks within the precinct
- Strong support for an accessible public domain for people of all ages and abilities, that provides a pleasant environment and where people feel safe
- The highly walkable character of Option 1 was supported by some, particularly for its interest and sociability, whereas others preferred the diagonal lines and direct connections offered by Option 2
- The preferred master plan should incorporate multiple ways for people to get around the precinct, offering members of the community choice, and providing opportunities for people to come together as well as to enjoy their own space
- Importantly, the preferred master plan should ensure that the George Street boulevard space provides for the needs of both pedestrians and cyclists through adequate separation of these users, best practice design, and slow speed limits for cyclists.

#### Housing and neighbourhood design

There was strong support for the preferred master plan to incorporate the following common elements of the three redevelopment options:

- Mix of apartment sizes and types
- Mix of social, affordable and private housing
- Appropriate arrangement of taller buildings.

Feedback on the different elements of the three options indicates:

- Mixed views on the building heights and types with many people expressing a preference for the building heights as per Option 1, with a maximum of up to 32 storeys.
- There was some support for buildings of 40 storeys in height or taller. Some participants were more concerned with the number of taller buildings rather than the height.
- The preferred master plan should seek to maximise amenity and minimise impacts for residents of the site and surrounding area.
- Key issues for consideration in the preferred plan include maximising solar access to homes and open space areas and addressing potential wind effects.
- No clear preference in terms of building types between the slender towers in Option 1, the landscaped terrace-style podium buildings in Option 2, or the courtyard style buildings in Option 3.
- Green buildings and green spaces around buildings were strongly supported, such as the terrace / rooftop spaces highlighted in Options 1 and 2, and the ground level courtyards in Option 3. The preferred master plan should specify a range of these types of spaces within new buildings.

#### Community facilities, services and shops

Community facilities, services and shops were widely identified as being important. Participants expressed a desire for them to help bring people together, support social interaction and provide opportunities for learning, growth and leadership. Strong support for the provision of learning, health and childcare, along with community rooms, creative and multi-purpose spaces, was also identified.

Members of the community discussed the importance of a range of educational facilities and programs to meet the needs of existing and future residents, commenting on the significant increase in the residential community associated with the redevelopment of Waterloo. Participants expressed a desire for employment assistance and small business support services to enable residents to access employment and acquire the skills to run their own businesses. Further to this, Aboriginal employment and engagement in the redevelopment process were identified as a high priority.

Space within the redevelopment area for health and wellness facilities and programs was widely identified as important to support community wellbeing. Participants emphasised the need for facilities and services that are both accessible and affordable. They expressed strong support for an onsite aged care facility as well as agerelated support services to assist elderly residents to age in place.

Feedback on the different elements of the three options indicates that:

- people were supportive of clustering community facilities, services and shops to create a centre of activity, as part of an activated and sociable neighbourhood where people, services, retailers and businesses thrive
- there were mixed views as to whether the centre of activity should be focused around the 'Metro Quarter and civic plaza' (as in Option 1), or around the 'Metro Quarter directly interfacing the Village Green' (as in Option 2)
- while there was some support for community facilities, services and shops to be focused around Waterloo
  Park (as per Option 3), qualitative comments suggested there was less support for them to be arranged
  along the George Street boulevard (also part of Option 3)
- there was strong support for community facilities, services and shops to be spread out across the precinct, as in all three of the redevelopment options.
- there was strong support for a wide range of new shops and services, with feedback focused on ensuring the type and mix of shops and services is carefully considered to: support the needs of social housing residents and their families, ensure they are welcoming places for all, provide fresh food to meet people's daily needs, and include cost effective options.

#### Environment and open space

People who participated in the consultation process highly value the natural environment and open space on and around the Waterloo social housing Estate and expressed a strong desire for the redevelopment to incorporate green space wherever possible.

Feedback from the community and other stakeholders confirmed the importance of parks and open space areas as an integral element of the Waterloo precinct. People who took part in the consultation process expressed mixed preferences in terms of the layout of public parks and open space. Some wanted to see Waterloo Green retained and renewed as in Option 1, with new parks provided in other parts of the precinct. They expressed a strong desire for equitable access to parks and open space areas for residents living in different parts of the precinct, including the southern part of the Waterloo site. Others preferred the idea of a single large park, primarily to enable the community to hold large scale events and activities.

Overall, the proposed transformation of George Street into a green boulevard attracted strong support. There were mixed views on the most desirable width for the boulevard. Key issues raised in feedback focused on:

- Making this a place that feels safe, pleasant and welcoming; ensuring the space is accessible and usable for people of all ages and abilities
- Supporting pedestrian safety through measures such as speed limits for cyclists and a separate cycle path
- Realising the 'boulevard' as a series of interconnected parks rather than just a linear accessway.

There was also strong support for the following common elements of the three redevelopment options:

- Community gardens / rooftop gardens
- Retaining existing and planting new trees
- Community gathering spaces.

Feedback on the different elements of the three options indicates that:

- A strong preference for Option 1 among some members of the community in terms of renewal of Waterloo Green and the addition of two new parks.
- Others expressed a preference for a larger, central park (as in Option 2 Waterloo Village Green or Option 3 Waterloo Park).
- Feedback on these two options suggested a stronger preference for Option 2, mainly due to perceptions that a larger park located near the Waterloo Station could create safety issues or serve the needs of the wider community over those of the Waterloo neighbourhood.
- Support for Option 1 focused primarily on the number of parks it provides and their distribution across the site, rather than on their smaller size. On this basis, feedback suggests that the preferred master plan should incorporate multiple public parks in different locations across the site including the north and south.
- If possible, at least one of these parks should be larger than those in Option 1 to enable larger community gatherings and events.
- While feedback focused on providing as much open space on the Waterloo site as possible, it suggests that design of the George Street boulevard may be more important to members of the community than its width (ranging from 20 metres wide in Option 1 to 40 metres wide in Option 3).
- Ensuring the George Street boulevard provides an appealing, accessible and safe connection for residents and the wider community.
- A more "intimate" or narrow boulevard (as in Option 1) could be complimented by a larger public park (ie drawing from the additional width offered by the boulevard in Options 2 and 3).
- There was strong support for landscaping of pedestrian links and connections and for the incorporation of water in the preferred master plan (as per the landscaped blue and green pedestrian links in Option 2)

- Of particular importance, pedestrian connections should be accessible for people of all ages and abilities, and should contribute to a walkable neighbourhood that provides easy access to shops, services, parks, Waterloo station, bus stops, and local destinations
- Landscaping of pedestrian links should provide shade, be appealing and incorporate a mix of native and productive plantings.

Elton has prepared a Consultation Report (**Attachment 6**) which outlines how the general outcomes of early consultation and feedback on the proposed concept options have been considered in the proposal.

Multiple meetings and correspondence have been held with private landowners in the Waterloo Precinct to discuss the concept options and approach to fair and impartial development potential between public and private owned land.

# 4 Vision and Principles

# 4.1 Objectives and Intended Outcomes

This Planning Proposal seeks to amend the *Sydney Local Environmental Plan 2012* to enable the redevelopment of Waterloo South, which forms a part of the broader Waterloo Estate. Waterloo Estate will be developed over the next 20 years to enable the replacement and provision of social (affordable rental) housing, and private market housing to create a new integrated and inclusive mixed-tenure community.

Rezoning and redevelopment of the Estate will take place over three separate but adjoining and inter-related stages: Waterloo South, Waterloo Central and Waterloo North. Waterloo South, which is the subject of this Planning Proposal, has been identified as the first stage for renewal. This Planning Proposal will enable the delivery of the first stage, Waterloo South, which will assist in minimising disruption for existing tenants and allow for the up-front delivery of key public domain elements such as public open space, making the delivery of future stages of the Estate smoother. The renewal of Waterloo South itself will enable new and replacement social housing, and increased supply of private (market) housing, public open space and community, retail and employment facilities in close proximity to Waterloo Metro Station.

The following sections of this chapter describe the Place Character Statement for Waterloo, and the vision, objectives and urban design principles for the renewal of the Estate.

#### 4.1.1 Waterloo Place Character Statement

The place character that encapsulates the specific qualities are what defines Waterloo and makes it unique. The urban design principles and Indicative Concept Proposal have been guided by the four fundamental qualities that draw upon the social, environmental, and economic characteristics of the Waterloo Precinct. The qualities and characteristics of place that define the Waterloo Precinct include:

Layered: A rich tapestry

Proud: A place that is home

Distinct: An unmistakable place

Resilient: An enduring place

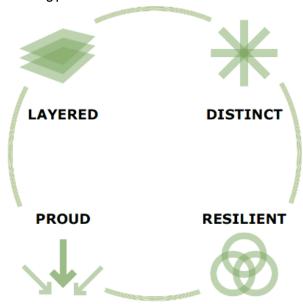


Figure 21 | Place character of Waterloo

Source: RobertsDay

#### 4.1.2 Vision for Waterloo

In late 2017, LAHC undertook visioning for the Waterloo Precinct, including the Estate (as described in **Section 3.1**). Approximately 1,570 people provided feedback across more than 40 consultation events. This collaborative process has led to a vision for the Waterloo Precinct to become a new urban village for Waterloo that is underpinned by key elements that are held of value to the community, as shown in **Figure 22** below.



Figure 22 | Vision for the Waterloo State Significant Precinct

Source: Turner Studio

Building on the objectives for the Waterloo Precinct and the community's vision for a redeveloped Waterloo, LAHC has outlined redevelopment vision principles that have guided the Waterloo South proposal and the renewal of the broader Estate:



#### **Culture and Heritage**

- Recognise and celebrate the significance of Waterloo's Aboriginal history and heritage across the built and natural environments.
- Make Waterloo an affordable place for more Aboriginal people to live and work.
- Foster connection to culture by supporting authentic storytelling and recognition of artistic, cultural and sporting achievements.



#### Communal and Open Space

- Create high quality, accessible and safe open spaces that connect people to nature and cater to different needs, purposes and age groups.
- Create open spaces that bring people together and contribute to community cohesion and wellbeing.



#### Movement and Connectivity

- Make public transport, walking and cycling the preferred choice with accessible, reliable and safe connections and amenities.
- Make Waterloo a desired destination with the new Waterloo Station at the heart of the Precinct's transport network – serving as the gateway to a welcoming, safe and active community.



#### Character of Waterloo

- Strengthen the diversity, inclusiveness and community spirit of Waterloo.
- Reflect the current character of Waterloo in the new built environment by mixing old and new.



#### **Local Employment Opportunities**

• Encourage a broad mix of businesses and social enterprise in the area that provides choice for residents and creates local job opportunities.



#### Community Services, Including Support for Those Who Are Vulnerable

- Ensure that social and human services support an increased population and meet the diverse needs of the community, including the most vulnerable residents.
- Provide flexible communal spaces to support cultural events, festivals and activities that strengthen community spirit.



#### **Accessible Services**

Deliver improved and affordable services that support the everyday needs of the community, such as health and wellbeing, grocery and retail options.



#### Design Excellence

- Ensure architectural design excellence so that buildings and surrounds reflect community diversity, are environmentally sustainable & people friendly – contributing to lively, attractive and safe neighbourhoods.
- Recognise and celebrate Waterloo's history and culture in the built environment through artistic and creative expression.
- Create an integrated, inclusive community where existing residents and newcomers feel welcome, through a thoughtfully designed mix of private, affordable and social housing.

# 5 The Proposal

# 5.1 The Planning Proposal

The proposal for renewal of Waterloo South is to establish a new planning framework through:

- amendments to Sydney Local Environmental Plan (LEP) 2012
- amendments to Sydney Development Control Plan (DCP) 2012
- an outline of proposed infrastructure and future works in kind agreements.

# 5.1.1 The Indicative Concept Proposal

To inform the proposed planning framework, Turner Studio and Turf have prepared an Urban Design and Public Domain Study which establishes an Indicative Concept Proposal presenting an indicative renewal outcome for Waterloo South. The Urban Design and Public Domain Study provides a comprehensive urban design vision and strategy to guide future development of Waterloo South and in turn has informed the proposed planning framework.

The Indicative Concept Proposal has also been used as the basis for testing, understanding and communicating the potential development outcomes of the proposed planning framework. It is not a design that is proposed to be built. The renewal process starts with the proposed planning framework. Once new planning controls are in place for Waterloo South, development proposals will be designed, assessed and determined with reference to the planning controls.

Importantly, the Indicative Concept Proposal includes critical elements of the public domain that will deliver benefits for the local community:

- Approximately 2.57 hectares of public open space representing 17.8% of the Estate (Gross Estate area existing roads) proposed to be dedicated to the City of Sydney Council, comprising:
  - Village Green a 2.25 hectare park located next to the Waterloo Metro Station; and
  - Waterloo Common and adjacent 0.32 hectares located in the heart of the Waterloo South precinct.
  - The 2.57 hectares all fall within the Waterloo South Planning Proposal representing 32.3% of public open space (Gross Waterloo South area – proposed roads)
- Retention of 52% of existing high and moderate value trees (including existing fig trees) and the planting of three trees to replace each high and moderate value tree removed.
- Coverage of 30% of Waterloo South by tree canopy.
- Approximately 257,000 sqm of GFA on the LAHC land, comprising:
  - Approximately 239,100 sqm GFA of residential accommodation, providing for approximately 3,048 dwellings (comprising a mix of market and social (affordable rental) housing dwellings);
  - Approximately 11,200 sqm of GFA for commercial premises, including, but not limited to, supermarkets, shops, food & drink premises and health facilities; and
  - Approximately 6,700 sqm of community facilities and early education and child care facilities.

The key features of the Indicative Concept Proposal are:

- It is a design and open space led approach.
- Creation of two large parks of high amenity by ensuring good sunlight access.

- Creation of a pedestrian priority precinct with new open spaces and a network of roads, lanes and pedestrian links.
- Conversion of George Street into a landscaped pedestrian and cycle friendly boulevard and creation of a walkable loop designed to cater to the needs of all ages.
- A new local retail hub located centrally within Waterloo South to serve the needs of the local community.
- A target of 80% of dwellings to have local retail services and open space within 200m of their building entry.
- Achievement of a 6 Star Green Star Communities rating, with minimum 5-star Green Star Design & As-Built (Design Review certified).
- A range of Water Sensitive Urban Design (WSUD) features.

The proposed land allocation for the Waterloo South precinct is described in **Table 6** below. The key comparisons are significantly more land allocated to public space (owned by Council) and publicly accessible spaces (privately owned but always open to the public), a substantially reduced proportion of the site to be used for development, and a finer grained movement network through more roads and publicly accessible active transport links.

Table 6 | Breakdown of allocation of land within Waterloo South

Land allocation	Existing	Proposed
Roads	3.12ha / 25.3%	4.38ha / 35.5%
Developed area (Private sites)	0.86ha / 6.98%	0.86ha / 7%
Developed area (LAHC property)	8.28ha / 67.2%	4.26ha / 34.6%
Public open space (proposed to be dedicated to the City of Sydney)	Nil / 0%	2.57ha / 20.9% (32.3% excluding roads)
Other publicly accessible open space (Including former roads and private/LAHC land)	0.06ha / 0.5%	0.25ha / 2%
TOTAL	12.32ha	12.32ha

The Indicative Concept Proposal for the Waterloo South is illustrated in **Figure 23**. The Indicative Concept Proposal involves the creation of a network of sub-precincts connected by a layered public realm. The place character of Waterloo South will draw inspiration from its surroundings and enhance what makes them special. This presents the opportunity to create distinct places at the local scale, each with a distinct character. Three sub-precincts have been identified, each with an identifiable character. These include:

- Village Green
- Maker Village
- Hilltop Village.



Figure 23 | Waterloo South illustrative masterplan

Source: Turner Studio

# 5.1.2 Renewal of Social Housing

Waterloo South currently contains 749 social housing dwellings on the LAHC Estate and 125 dwellings on the privately owned sites (privately owned). The renewal of LAHC lands in Waterloo South under the proposed planning framework will deliver residential GFA that has capacity for approximately 3,048 dwellings. LAHC is targeting 30% social (affordable rental) housing that are of a higher standard and better suited to the needs of tenants in terms of size, accessibility and amenity.

To ensure consistency with the surrounding area an LEP clause requiring a minimum of 5 percent affordable housing is proposed to be included the LEP.

The proposed proportion of affordable housing is in line with the 5-10% range indicated by the Greater Sydney Commission.

#### 5.1.3 Public Domain

The public domain will invite and set the foundations for a unique neighbourhood where the existing and future communities of Waterloo South can grow and experience a place where people are proud to live, work and play.

The public domain aims to put the community first; by creating a pedestrian priority precinct, the public domain will create an active, safe and adaptive environment that promotes community interaction through flexibility of uses and a diverse hierarchy of spaces where people can gather, meet and relax. Streets will be places of social connectedness through the inclusion of activated street interfaces and energised ground plane where buildings can contribute to the public domain.

The public domain plan for Waterloo South is shown in Figure 24.



Figure 24 | Waterloo South Public Domain Plan

Source: Turner Studio & Turf

#### Movement Networks

The Indicative Concept Proposal aims to shape Waterloo South into a Pedestrian Priority Precinct that will provide a walkable, accessible, safe and enjoyable city neighbourhood. A fine grain street grid structure and hierarchy has been developed to maximise shared slow streets within the precinct, promoting active transport and connectivity. The clarity, safety and diversity of movement networks (see **Figure 25**) will promote and encourage active transport as the primary transport means in Waterloo South.



Figure 25 | Movement network plan

Source: Turner Studio & Turf

#### Public open space

The Public Domain aims to provide a diverse hierarchy of open space and streets through the inclusion of street interfaces such as shared ways, and parks, ranging from neighbourhood parks to local and pocket parks, while incorporating the Waterloo's significant and unique qualities and elements. The key public open spaces proposed in the Indicative Concept Proposal are:

Village Green (Figure 26), approximately 2.25ha in size, located next to the future Waterloo Metro Station, and with a range of open space, recreation and community functions including lawn areas for informal active recreation, children's play, picnic and BBQ facilities, community activity space and community gardens. The water story, which references the historic and underlying natural context of Waterloo South, is woven through WSUD treatments and potential water play.

Waterloo Common (Figure 27) approximately 0.32ha, Connected to the Village Green by George Street, Waterloo Common will provide additional social and cultural amenity for the community who live, work and, play in the southern end of Waterloo South. Opportunities for social interaction will be strengthened by a series of programmed spaces within the park that will provide a vibrant local community hub for all ages.



#### 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
- Blue line water story
- 6 Park Amenities (i.e. BBQ, picnic areas)



Figure 26 | The Village Green Source: Turner Studio & Turf



Legend

① Urban plaza ② Activity zone ③ Youth and fitness facilities Community gardens
 Lawn + existing trees
 Blue Line water story

Figure 27 | Waterloo Common

Source: Turner Studio & Turf

# **George Street Boulevard**

George Street (**Figure 28**) is an active street that will become the primary north-south movement corridor that connects the Estate. George Street will connect Waterloo South's two primary open spaces, the Village Green and Waterloo Common, strengthening Waterloo's Green Grid and pedestrian connections.

While George Street is currently envisaged to remain open to vehicular traffic, the focus in renewal of Waterloo South will be to improve pedestrian amenity through wider footpaths, more landscaping and tree canopy, community facilities and active uses on the ground floor of buildings fronting George Street. George Street will connect the two public open space areas proposed for Waterloo South, and will be a key movement corridor for pedestrians and cyclists.



Legend

1 Blue Line water story

② Plaza
③ Retained trees

Figure 28 | George Street Source: Turner Studio & Turf

# 5.1.4 Private Domain

The proposed built form and building typology aims to respond to the findings of the context analysis as described within Turner and Turf's Urban Design and Public Domain Study (refer to **Attachment 5**). The proposal comprises a composition of typologies that reflect the surrounding context, including podium, mid-rise and tall buildings.

#### **Building form typologies**

The proposed built form and building typology aims to respond to the findings of the context analysis as described in the Urban Design Study (refer to **Attachment 5**). 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 allow for height diversity to respond to existing neighbourhood context.

The mix of block sizes and building heights support the open space typologies and fine grain public domain 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 scale activity centres.

The key elements of the proposed built form aim to achieve the following:

- Public and private domain interfaces that promote social interaction through active uses along key streets
- Height focused along the new alignment that connects the Estate to open space, the new Metro Station and key destinations
- Variety and a mix of scale, architectural design and character in the built form creates a diverse and enriching urban environment

- Street walls that respond to the human-scale provide a well defined public domain and crafts the street level experience.
- A fine grain ground plane that supports active uses enriches the public domain by providing a visually interesting street level experience
- Height and massing transition that responds to existing and future context
- High quality building design that provides amenity for residents.

#### 5.1.5 Land Use

#### Residential

The range of building typologies of the Indicative Concept Proposal will accommodate residential apartments either by a mixed-use composition or residential flat buildings. The design of buildings aim to maximise views and access to daylight, while minimising wind and noise impacts. The urban design analysis by Turner Studio demonstrates that the Indicative Concept Proposal is capable of achieving minimum solar access and cross ventilation requirements under the Apartment Design Guide (ADG).

#### Retail, social and community facilities

Non-residential uses provide activation at street level. A mix of lot sizes and frontage widths creates a varied and fine-grained pedestrian experience. A Retail Strategy has informed a place led approach to creating a diversity of retail experiences, including the opportunity for cooperative retail models as part of the overall project goals, focusing on equity, activity and affordability.

The preferred locations of retail, social and community uses are shown in Figure 29.



Figure 29 | Indicative locations of social and community facilities

Source: Turner Studio

### 5.1.6 Staging and Implementation

**Figure 30** provides an indicative staging plan. To ensure the redevelopment of Waterloo South is coordinated and delivered in an orderly manner and existing uses on adjacent sites are not adversely affected, key public domain features (i.e. roads, utilities and services) are intended to be delivered as part of each stage.

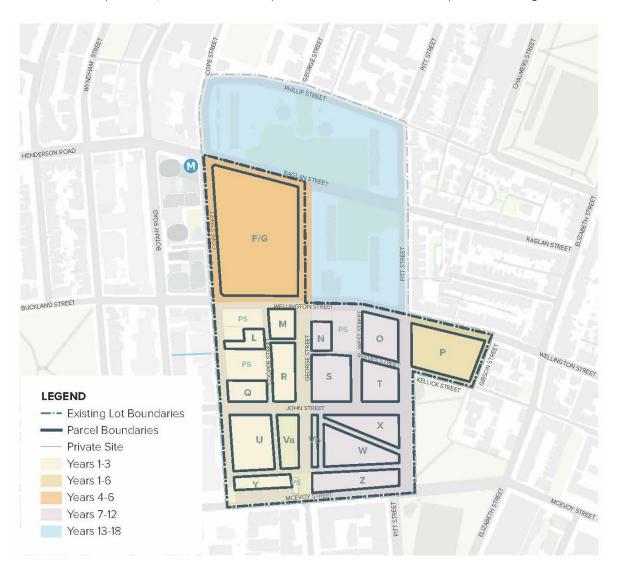


Figure 30 | Indicative staging plan

Source: Turner Studio

# 5.1.7 Gross Floor Area and Development Yields

As described within the Urban Design and Public Domain Study (**Attachment 5**), the Indicative Concept Proposal will accommodate approximately 257,000 square metres of GFA for the LAHC land holdings.

The Urban Design and Public Domain Study (Attachment 5) provides a detailed analysis of built form precedents throughout the broader Green Square area. Description of the proposed building typologies, building envelopes and heights is described in Section 7.1.

**Table 7** below provides a breakdown of GFA by development parcel within Waterloo South, with the location of relevant development parcels shown at **Figure 30**. This will yield approximately 3,048 dwellings, including a 30% target of the residential GFA as social (affordable rental) housing.

Table 7 | Breakdown of GFA by land parcel and use

Parcel reference	Site Area	Total GFA (m2)
F/G	-	-
L	15	1,600
М	235	20,300
N	89	7,230
0	309	24,380
P	415	32,670
Q	256	20,350
R	47	6,600
S	307	27,620
Т	198	15,790
U	377	29,820
V (Public Open Space)	-	-
V (Landscaped Area)	-	-
W	321	27,620
X	260	22,450
Υ	111	10,140
Z	108	10,400
TOTAL	3,048	256,970

#### Floor Space Ratio

While Waterloo South has an approximate gross site area of 12.32 hectares (approximately 65% of the total Estate), the cadastral ownership of LAHC owned lands within Waterloo South is 83,274 square metres (8.33ha). When factoring the gross floor area of the indicative concept proposal, the average FSR across all LAHC lands within the Waterloo South precinct equates to 3.09:1 (refer to **Table 8**), the average FSR across all privately owned lands equates to 3.09:1 (refer to **Table 9**). LAHC's FSR varies from site to site.

Table 8 | Average FSR for the LAHC lands in Waterloo South

Proposed maximum theoretical GFA of privately owned lands in

Total site area of LAHC Lands in Waterloo South	83,274 sqm	
Total GFA of LAHC Lands	256,970 sqm	
Average FSR	3.09:1	
Table 9   Proposed FSR for privately owned lands in Waterloo South		
Approximate site area of privately owned lands in Waterloo South	8,328sqm	
Proposed FSR	3.09:1	

The average is reflected in **Figure 31** where the Gross Floor Space Ratio is apportioned to LAHC and Private Owned Land Holdings.

25,733sqm

Waterloo South

#### **Privately Owned Lands**

Multiple meetings and correspondence have been held with private landowners in Waterloo South to discuss the concept options and approach to fair and impartial development potential between public and private owned land. The key principles that have informed the eventual proposed development potential of private owned lands Water South, include:

- The proposed maximum gross floor space ratio for the privately owned sites is 3.09:1 (refer to Section 5.2.1) would equate to the following maximum theoretical GFAs:
  - 291 George Street and 110 Wellington Street, Waterloo (SP969606 & SP69476) approximately
     9,244 square metres
  - 221-227 Cope Street and 116 Wellington Street, Waterloo (Lots 6-11 DP10721 and Lot 8 DP1147179)
     approximately 7,379 square metres
  - 233-239 Cope Street + 123-131 Cooper Street & 111 Cooper Street (Lot 15 DP10721 & SP 79210) –
     approximately 9,111 square metres
- The average gross FSR across the LAHC lands has been calculated as one measure of an equitable distribution of development yields between the LAHC lands and the private sites. The average gross FSR of the LAHC lands is 3.09:1, so the proposed maximum FSR on the private sites is approximately the same as the total yield across the LAHC lands (refer to **Figure 31**)
- Privately-owned sites will not provide any additional public open space, roads or social housing as a public benefit to the proposal
- The proposed built form massing has been shaped by the same urban design principles used for the LAHC owned lands as part of the Waterloo South Indicative Concept Proposal
- The key design influence for these private-owned sites is to maintain a suitable transition height to existing local heritage items, including:
  - Former Waterloo Pre-school (225 Cope Street) including interior (Local) (CoS LEP 2012 I2077) -
  - Two storey Victorian terrace houses, c 1880 (Local) (CoS LEP 2012 I2078)
  - Duke of Wellington Hotel including interior (Local) (CoS LEP 2012 I2085)

The above approach is considered to be a fair and impartial approach to the distribution of development potential between private and government-owned lands within Waterloo South.

# Average Gross Floor Space Ratio Plan



Figure 31 | Average gross FSR on the LAHC lands

# 5.2 The Proposed Planning Framework

The current planning framework is unable to deliver upon the vision and intended outcome for Waterloo South. On this basis, it is appropriate to consider a new planning framework that:

- Facilitates high levels of land use and public transport integration
- Includes a clear strategic intent
- Is well integrated
- Provides certainty and clarity of development outcomes, while facilitating innovation and site specific responses when detailed design is undertaken
- Is consistent with the Indicative Concept Proposal, and in particular is derived from and aligned with key assumptions and yields.

The new planning framework that will guide the renewal of the Waterloo South considers its heritage, environmental values and physical constraints. The proposed framework includes:

- Amendments to the Sydney Local Environmental Plan 2012 This will include amendments to the zoning
  and development standards (i.e. maximum building heights and floor space ratio) applied to Waterloo
  South. Precinct-specific local provisions may also be included.
- A Development Control Plan (DCP) This will be a new part inserted into 'Section 5: Specific Areas' of the Sydney DCP 2012 and include detailed controls to inform future development of Waterloo South.
- An infrastructure contributions framework This Planning Proposal outlines infrastructure to meet the requirements of the community in Waterloo South, as a basis for future works in kind agreements.

#### 5.2.1 Proposed Amendments to Sydney LEP 2012

#### Land use zoning

A diverse range of land uses will be accommodated by the proposed Indicative Concept Proposal. Provisions of the Planning Proposal and draft DCP have been prepared to guide the allocation of land uses and interface with the public domain (refer to **Section 5.3**). The land uses in the proposed Indicative Concept Proposal are further described below.

A B4 Mixed Use zone is proposed for the majority of Waterloo South (refer to **Figure 32**). This zone will permit a broad range of land uses to accommodate a range of population-serving employment uses and residential land uses. This will also permit a range of social and business enterprise that can provide appropriate employment opportunities, and provides a vibrant and comprehensive services offer for local residents. Overall, land uses within Waterloo South will generally include residential, retail, office and community uses.

The RE1 Public Recreation zone is proposed for the Waterloo Green and Waterloo Common as public open space. The zone objectives relate principally to the use of land for public open space or recreational purposes.

A SP2 Infrastructure zone is proposed to run along McEvoy Street to align with the proposed Alexandria to Moore Park Connectivity Upgrade, which proposes the widening of McEvoy Street between Botany Road and George Street. The proposed SP2 Infrastructure zone matches the current extent of this zone to allow for McEvoy Street widening.



Figure 32 | Draft Land Zoning Map

#### Height of buildings

Amendments to the Height of Buildings Map will aim to facilitate the proposed redevelopment of Waterloo South. The proposed amendment will limit the maximum height of buildings for key development parcels with further guidance on appropriate built form included in the DCP. The maximum floorspace ratio map only permits sufficient floorspace to fill a small percentage of the height envelope, as is illustrated by the reference scheme (refer to **Figure 33**). This approach is consistent with other high density areas in the Sydney LGA.

The maximum heights of taller building are identified by RLs (AHD) in the proposed LEP maps. The area defined for taller building heights is set out in the draft DCP controls and a potential scenario showing how these controls can deliver an appropriate outcome. This is illustrated by the Indicative Concept Proposal to demonstrate that the proposed controls are capable of achieving appropriate amenity outcomes for existing and proposed public open spaces and for residential accommodation in Waterloo South and its surrounds.

The maximum height of building controls ensure future buildings remain below the existing PANS OPS (RL126.4 AHD). Despite maximum building heights of taller buildings being below the PANS OPS, aviation authority approvals may still be required during the development assessment and construction stages of the proposal. Sydney LEP 2012 contains a provision relating to referrals and approvals that would apply to development in Waterloo South under the proposed planning framework.

A maximum building height (or heights) has been applied to each proposed street block, which is based on the tallest building in that block under the indicative concept proposal. This aims to enable flexibility in the distribution of massing for a range of building types. The maximum height of buildings control would work in conjunction with the maximum floorspace ratio control (described below) and provisions in the DCP relating to more detailed built form guidance (which will provide a finer grain of detail and design response), setback controls and maximum street wall height controls. This combination of development standards and DCP controls will ensure appropriate internal amenity for dwellings and amenity within the public domain.

Further guidance on the management of the proposed built form and building heights is included in the draft DCP (refer to **Attachment 3**).



Figure 33 | Draft Height of Buildings Map

#### Maximum floor space ratio

Amendments to the Maximum Floor Space Ratio (FSR) Map will facilitate the proposed redevelopment of Waterloo South. The proposed maximum FSR for Waterloo South is shown on **Figure 34**. The overall maximum FSR for each block has been informed by the proposed yield achieved by the Indicative Concept Proposal.

Maximum FSRs are proposed to be set for the LAHC lands, with individual maximum FSR controls to be applied to the privately owned lots. The intent of the maximum FSR control, working in combination with the maximum Height of Buildings control, is to provide some flexibility in the design of street blocks, with the maximum gross floor area (GFA) permitted under the maximum FSR control able to be distributed across the block to suit the best design outcome. The Indicative Concept Proposal illustrates a design outcome that has been developed and tested to achieve appropriate yield, land use mix and amenity outcomes for the precinct. Any alternative design outcomes that re-distribute GFA within a block will also need to demonstrate compliance with a wide range of development controls and performance measures in the LEP and DCP.

More detailed guidance on the management of the proposed built form and distribution of floor area within Waterloo South is proposed to be included in the draft DCP (refer to **Attachment 3**).

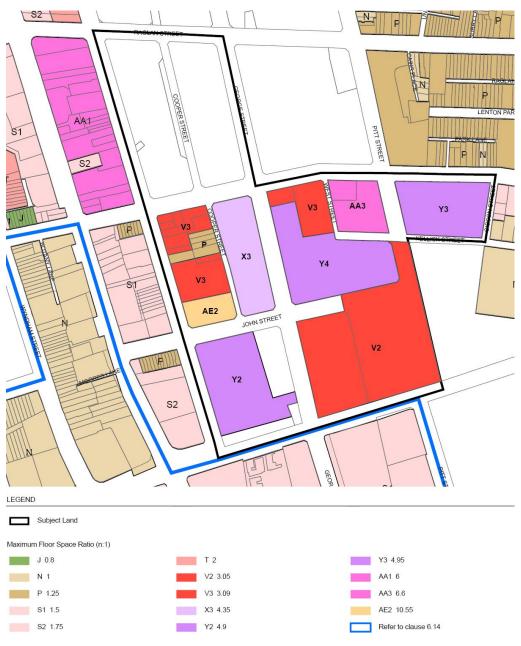


Figure 34 | Draft Floor Space Ratio Map

#### Land Reservation Acquisition

Clauses 5.1 and 5.1A of the Sydney LEP 2012 will apply to Waterloo South to identify the relevant authority to acquire land reserved for certain public purposes.

Key public domain features of Waterloo South have been designated zones for certain public purposes, including RE1 Public Recreation and SP2 Infrastructure. Sydney LEP 2012. A Land Reservation Acquisition Map identifies Village Green and Waterloo Commons as 'Local open space' (refer to **Figure 35**), with the relevant acquiring authority being CoS Council.

The Sydney LEP 2012 'Classified Road' reservation to accommodate widening the north side of McEvoy Street between Botany Road and George Street has been retained within the draft Land Reservation Acquisition Map (refer to **Figure 35**). The relevant acquiring authority will remain Roads and Maritime Services.



Figure 35 | Draft Land Reservation Acquisition Map

#### Clause 6.21 Design excellence

Clause 6.21 of the Sydney LEP 2012 will apply to Waterloo South. This planning proposal seems the inclusion of a new provision under clause 6.21 that will require a competitive design process to be undertaken in Waterloo South for:

- Development with a height above 55 metres, consistent with controls that apply in Central Sydney
- Development having a capital investment value of more than \$100,000,000
- Development in respect of which a development control plan is required to be prepared under clause 7.20, or
- Development for which the applicant has chosen such a process.

#### Part 7, Division 1 Car parking ancillary to other development

Division 1 Car parking ancillary to other development of the Sydney LEP 2012 will apply to future development within Waterloo South. This Planning Proposal will seek to apply City of Sydney's most restrictive Category A and D rates under the Sydney LEP 2012 which aims to identify the maximum number of car parking spaces that may be provided to service particular uses of land and minimise the amount of vehicular traffic generated because of proposed development.

The draft Land Use and Transport Integration Map and Public Transport Accessibility Level Map identifying the proposed car parking rates (Category A and D) for Waterloo South is shown in **Figure 36** and **Figure 37** below.

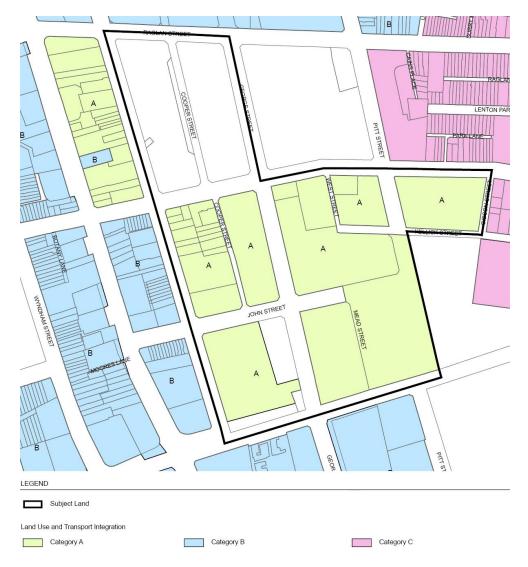


Figure 36 | Draft Land Use and Transport Integration Map



Figure 37 | Draft Public Transport Accessibility Level Map

#### Clause 7.14 Acid Sulfate Soils

Clause 7.14 of the Sydney LEP 2012 is proposed to apply to Waterloo South. A draft Acid Sulphate Soils Map has been prepared to show the classification of Acid Sulphate Soil risk to ensure Acid Sulphate Soils risks are appropriately considered in the assessment and determination of development applications. A Class 5 categorisation has been applied to Waterloo South (refer to **Figure 38**).

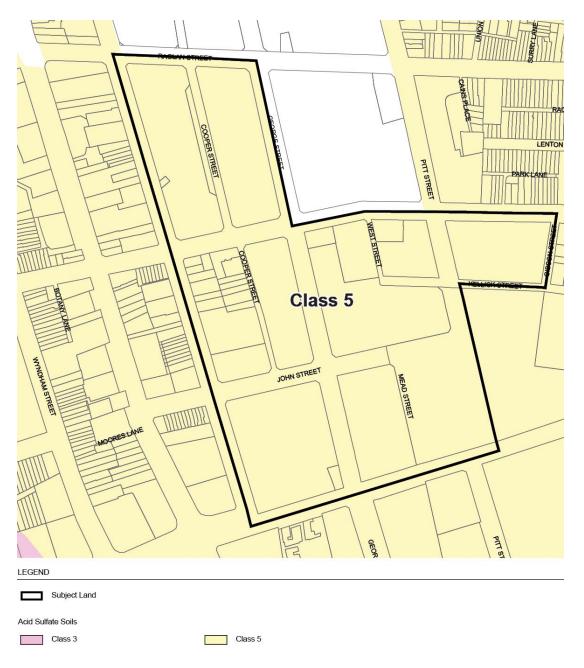


Figure 38 | Draft Acid Sulfate Soils Map

# Clause 7.23 Large retail development outside of Green Square Town Centre and other planned centres

Clause 7.23 of the Sydney LEP 2012 aims to limit large-scale retail development (gross floor area greater than 1,000 square metres) outside of Green Square Town Centre and planned local centres.

Waterloo is recognised by the CoS LSPS as a planned centre, which is intended to be a focus for community infrastructure, activity and most importantly, daily services and needs. The renewal of Waterloo South will provide the community with access to fresh food, retail and services (i.e. supermarkets, cafes, restaurants, and health services) within walking distance.

To ensure Waterloo South will be able to deliver on these outcomes, it is proposed that Waterloo South, excluding the privately owned sites, is not identified as 'Restricted Retail Development' on the Retail Premises Map of the Sydney LEP 2012. This would allow development in Waterloo South to be eligible for shops or markets with a gross floor area greater than 1,000 square metres.

LEGEND

Subject Land

Robal Premises

The draft Retail Premises Map, to give effect to this proposed provision, is shown in Figure 39.

Figure 39 | Draft Retail Premises Map

Restricted Retail Development

#### Locality and Site Identification

Amendments to the Sydney LEP 2012 Locality and Site Identification Map are proposed to identify 'Waterloo South'. This will support the application of site specific provisions related to future development in Waterloo South.

The draft Locality and Site Identification Map is shown in Figure 40.

The following site specific provisions are proposed to apply to Waterloo South:

- An inclusionary zoning provision is proposed, requiring a minimum of 5% of the total residential floor space at Waterloo South be provided as affordable housing
- A clause stating that the maximum floor space ratio control for a building, shown on the floor space ratio
  map, may be exceeded where the consent authority is satisfied the additional floor space is for the
  purposes of community facilities or educational establishments.

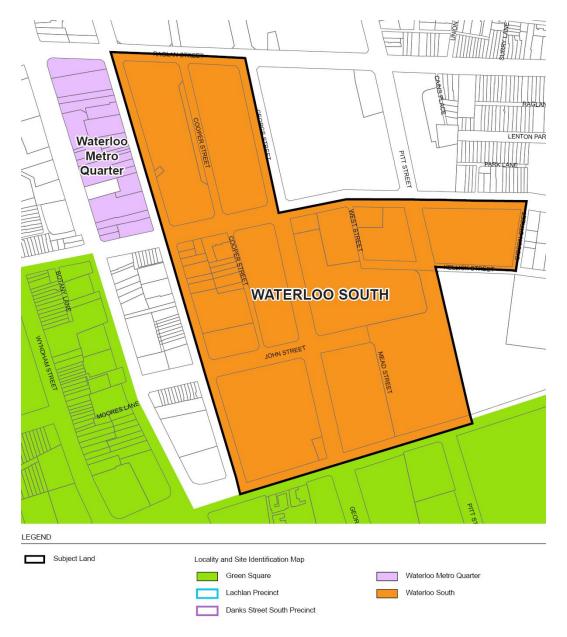


Figure 40 | Draft Locality and Site Identification Map

# 5.3 Draft Development Control Plan

Provisions for Waterloo South are also contained within the draft Waterloo South Development Control Plan (the Waterloo South DCP). The Waterloo South DCP is intended to be prepared under Division 3.6 of the EP&A Act and will provide detailed planning and design guidelines to support the proposed amendments to the Sydney LEP 2012. The draft DCP has been structured to be inserted into Sydney DCP 2012 as part of Section 5: Specific Areas.

The draft DCP for Waterloo South is included at **Attachment 3**. The matters addressed in the DCP include:

- Urban strategy
- Local infrastructure and public space
- Public open space
- Existing and new streets
- Bike routes and facilities

- Tree Canopy
- Waterways and stormwater management
- Built form
- Height of buildings
- Building alignment and setbacks
- Public art
- Fences
- Heritage
- Noise
- Staging and implementation
- Sustainability

# 5.4 State, Regional and Local Infrastructure Delivery Mechanisms

As a result of renewal of Waterloo South, the resident and worker populations will increase due to increased capacity (more dwellings and more floorspace for retail, commercial, community and recreation uses that will attract workers). The increased population will create more demand for some forms of local, regional and state infrastructure. Local infrastructure is generally delivered by (or on behalf of) and managed by councils, in this case the City of Sydney. Regional and state infrastructure is normally the responsibility of NSW Government agencies, authorities or Departments.

The Planning Proposal identifies the required quantum of infrastructure needed to support the development. This includes the delivery, within the precinct, of significant public benefits through new and expanded public open space, streets, community facilities, child care and affordable housing. Infrastructure to be delivered in stages, as renewal proceeds, will meet much of the additional demand generated by population growth in the precinct. Some local infrastructure elsewhere in the City of Sydney will be used by residents, workers and visitors to Waterloo South and will likely require additional capacity. Prior to any development application being approved LAHC will negotiate an agreement with the City of Sydney regarding any appropriate contributions offset against the City of Sydney Development Contributions Plan.

State and Regional infrastructure demand generated by the proposal includes additional capacity for primary and high schools, transport infrastructure and services. LAHC has consulted with the Department of Education and confirmed that demand can be met within existing schools capacity. Waterloo Metro Station will significantly increase the capacity of the transport network, and reduce reliance on private vehicles and demands on the local and regional road network. While population increases will result in more demand for other state level services (for example health care), planning for these services generally takes into account broader patterns of population growth and demographic changes, and is not specifically attributed to particular renewal projects. It is important to note that any value created through the rezoning of the land subject to the Planning Proposal will be used for the renewal and increase of social and/or affordable housing. For this reason, a specific "public benefit" planning agreement is not required for state and regional infrastructure.

### 5.4.1 Current contributions framework

#### Local infrastructure contributions

Council's Contributions Plan 2015 currently applies to development in Waterloo South. The plan projects substantial additional growth over the anticipated life of the contributions plan from 2016 to 2030. Council's Contributions Plan estimates that, by 2030, an additional 60,000 residents and 20,000 workers will come to the area covered by the contributions plan (excluding the central city and areas covered by the Redfern Waterloo Authority Contribution Plan). The bulk of the new resident and worker population, and required new local infrastructure, is anticipated to be in the South Precinct, which includes Waterloo South. The Contribution Plan 2015 South Precinct also includes major urban renewal areas like Green Square and Ashmore.

Contributions Plan 2015 provides an assessment of additional local infrastructure that is anticipated to be required to meet the needs of projected resident and worker population growth. While the redevelopment of Waterloo Estate is not specifically contemplated by the plan, specific infrastructure provision is identified in Waterloo South. The types of infrastructure to be funded through contributions are categorised as:

- Open Space
- Community facilities
- Traffic and transport
- Stormwater

Certain types of development are not required to pay contributions. Most notably, affordable rental housing and social housing (provided by an accredited provider, including LAHC and community housing providers) is not required to pay contributions. The social housing components of the development would therefore not be required to pay contributions.

#### **Contributions Rates**

Contributions Plan 2015 has contributions rate close to the maximum contribution of \$20,000 per dwelling as applies development in established urban areas. Beyond this threshold a submission to IPART is required to justify any additional contribution.

Current contributions rates that apply under Contributions Plan 2015 (from January 2020, noting a CPI increase may result in adjustments from April 2020) are:

#### Contribution rates indexed using the CPI value above

	East	South	West
Per worker	\$2,751	\$4,804	\$1,921
Per visitor	\$6,759	\$11,112	\$7,582
Per resident	\$9,967	\$12,746	\$10,042
Per 1-bed dwelling	\$12,957	\$16,570	\$13,054
Per 2-bed dwelling	\$18,937	\$20,000	\$19,079
Per 3+bed dwelling	\$20,000	\$20,000	\$20,000

Contributions Plan 2015 makes provision for in kind contributions including land dedication and specifies credit rates of \$200/square metre for land that is dedicated to Council. The Contributions Plan indicates that in kind contributions are generally acceptable only for infrastructure included in the schedules and maps.

#### State and Regional infrastructure

There are currently no arrangements in place for contributions towards state or regional level infrastructure, the project is proposed by the State government and the project directs all uplift towards the renewal and creation of social (affordable rental) housing. Supporting studies demonstrate that there is little impost on State infrastructure and any impact created can be managed on an ongoing basis by responsible State agencies.

#### 5.4.2 Proposed contributions framework

#### Local infrastructure

The Planning Proposal and supporting studies identifies the following infrastructure is required to support the proposed population increase in Waterloo South. Much of this infrastructure will have a wider benefit to the community within and surrounding Waterloo South:

• Open space, including Waterloo Green and Waterloo Common, totalling 2.57 hectares of land to be utilised as public open space and owned by Council.

- New streets including the extension of John Street and Pitt Street, to be constructed and dedicated to Council as public roads.
- Water cycle management works to ensure the development meets specified water quality standards and does not impact on local flooding.
- Community facilities.
- Delivery of affordable rental housing (in the form of social housing).
- Bike path
- Art in public domain.

**Table 10** summarises the proposed provision of local infrastructure in Waterloo South.

Table 10 | Proposed local infrastructure for Waterloo South

Infrastructure items	Proposed	Comment
Open space and Recreation	2.57ha of new parks	Two parks, Waterloo Green and Waterloo Common, to be dedicated to Council. 32.3% of the developable area of Waterloo South is to be dedicated as public open space, exceeding Council benchmarks (15%). Open space contributions are fully satisfied through works in kind.
Facilities for the community	Approximately 6,700m² for various purposes	Comprising of potential sports courts, multi-purpose facilities, childcare and library space etc. Specific details of ownership, management and works in kind offsets to be negotiated with Council.
Roads	<ul> <li>New or upgraded local streets:</li> <li>George Street widened and pedestrian improvements</li> <li>Upgraded regional cycle route along George Street</li> <li>Local cycle routes on Wellington Street and Raglan Street</li> <li>John Street extension to Pitt Street</li> <li>Pitt Street connection to McEvoy Street and new intersection</li> </ul>	Travel demand and mode share is managed through a range of transport infrastructure improvements and parking in line with City of Sydney's most restrictive rates for residential, commercial and retail development. Public and active transport are prioritised, including access to Waterloo Metro Station, to reduce traffic growth on the surrounding road network. Contributions for transport infrastructure are fully offset by works in kind.
Stormwater Management	On-site stormwater treatment and detention	No additional contributions are required as all stormwater will be managed to meet Council standards within the site.
Affordable Housing	Target of 30% of residential GFA is committed to social (affordable rental) housing	Social housing exceeds the 25% target set out in Council's Housing Study and draft LSPS, Affordable housing requirements are to be entirely met through works in kind
Bike Path	Connecting the regional bike path through Waterloo	Works in kind offsetting contributions
Public Art	In accordance with the public art plan at Attachment 29	Works in kind offsetting contributions

The proposed delivery of local and neighbourhood level open space within Waterloo South will meet the needs of the anticipated future population of Waterloo South, and potential future renewal of Waterloo Central and Waterloo North. Contributions Plan 2015 identifies demand for new open space to accommodate the needs of population growth projected across the City of Sydney, and the constraints associated with acquiring land. Dedication of land to provide new areas of public open space is an identified strategy within Contributions Plan 2015. Given the constraints to create new public open space faced by Council, the proposed dedication of two new parks within the Precinct will contribute significantly to the quantum, diversity and quality of public open

space in the Waterloo area, and justifies offsetting of contributions otherwise payable under the Contributions Plan.

Contributions Plan 2015 covers stormwater and flood mitigation works. The proposal for Waterloo South includes water cycle management measures to prevent offsite impacts both in relation to water quality and flood mitigation.

Contributions for community facilities would be partially met within the precinct and would partially contribute to demand for facilities outside the precinct, for example libraries. Childcare centres and multi-purpose facilities are also covered by Contributions Plan 2015. It remains to be clarified which of these services will be provided by Council and those provided by private operators. Some of these facilities will be provided in the Waterloo South, including childcare and a multi-purpose community centre. The balance of facilities provided outside Waterloo South and to which development in Waterloo South should reasonably be required to contribute will be subject to further negotiation between LAHC and Council.

Contributions for transport infrastructure normally cover new roads, connections to public transport and active transport including cycle paths and pedestrian facilities. These will be delivered through works in kind within Waterloo South.

#### State and Regional Infrastructure

The project is a state initiative with the primary aim of renewing an existing social housing Estate near a new Metro Station. The supporting studies show little impact on supporting state infrastructure and as such no further contribution will be required beyond the renewal of social (affordable rental) housing on site.

# 6 Strategic Justification

The DPIE Guide to Preparing Planning Proposals sets matters to be considered to demonstrate that the planning proposal has both strategic merit and local merit. This chapter addresses those requirements, demonstrating that the current planning controls applying to Waterloo South will not deliver outcomes that are aligned with the strategic opportunities of Waterloo South by providing more people with greater access to improved public transport services, and a justification for the proposed planning framework with reference to relevant Local, District and Region strategic plans.

# 6.1 The Need for a Planning Proposal

#### Q1 – Is the Planning Proposal a result of any strategic study or report?

The Planning Proposal is a result of the NSW Government *Future Directions for Social Housing in NSW* and the Minister for Planning and Public Spaces new direction for planned precincts. It implements Future Directions by enabling more and better social housing, integrating social housing with market housing, and providing for improved amenity, access to services, facilities and employment, and improved outcomes for social housing tenants.

The Waterloo South Planning Proposal gives effect to a number of strategic studies and reports, in particular the Greater Sydney Region Plan, the Eastern City District Plan, and the CoS local plans including the LSPS and Housing Study.

The Greater Sydney Region Plan identifies Waterloo as an urban renewal area, catalysed by the new Waterloo Metro Station. Renewal of Waterloo South will contribute to achieving the directions of the Region Plan by providing new housing and employment supported by city-shaping infrastructure such as Sydney Metro. Similarly, the Eastern City District Plan identifies Waterloo as an urban renewal area and the Estate as a LAHC Communities Plus initiative.

The City of Sydney's LSPS acknowledges that the future delivery of the Waterloo Metro Station is set to rapidly transform the Estate. The LSPS includes actions that intend to provide new social (affordable rental) housing and new commercial, business and retail opportunities at the site. The City of Sydney Housing Study calls for facilitating homes in the right locations, co-ordinating housing growth with the delivery of infrastructure (such as Sydney Metro), increasing diversity and choice and housing and increasing the amount of social and supported housing throughout the LGA. The Planning Proposal gives effect to these local priorities and actions.

#### Q2 – Is the Planning Proposal the best means of achieving the intended outcome?

This planning proposal is the best means of achieving the objectives and intended outcomes. To achieve renewal of Waterloo South and the delivery of the proposed public domain improvements, the controls under the SLEP must be amended to facilitate approval of future development at the site.

The Planning Proposal has been prepared in accordance with the Minister for Planning and Public Spaces' decision in November 2019 to define a new approach to planned precincts. Waterloo Estate was identified as a precinct to undergo Council-led rezoning. The Council-led rezoning pathway allows for a more collaborative planning process between LAHC and the City of Sydney, resulting in the best overall outcome for the community. This Planning Proposal has been prepared in response to a formal Request to prepare a Planning Proposal made by the City of Sydney, issued on 19 February 2020. It also responds to the outcomes of a series of alignment meetings between LAHC and the City of Sydney, as described in **Section 3.1.5**.

In preparing this Planning Proposal, four options were considered to facilitate the intended outcomes set out in **Chapter 4**. These are listed and discussed below:

- Option 1: Submit a Planning Proposal to rezone the site
- Option 2: Implement new planning controls for the site as a State Significant Precinct

- Option 3: Do nothing
- Option 4: Redevelop the site under the existing planning controls.

#### Option 1 – Submit a Planning Proposal to rezone the site

Option 1 comprises submitting a Council-led Planning Proposal to rezone the site under the SLEP. This rezoning would facilitate redevelopment of the site in accordance with the indicative concept proposal as described in this report. This option is consistent with the new direction for planned precincts announced by the Minister for Planning and Public Spaces in November 2019. Option 1 also includes the alignment of the LAHC Preferred Masterplan and the City of Sydney Alternate Plan for the Estate. This is the preferred option as it represents the best combined outcome for the project's many stakeholders, including LAHC, City of Sydney and existing residents and tenants at the site.

#### Option 2 – Implement new planning controls for the site as a State Significant Precinct

A second option is to continue planning for the site as a State Significant Precinct by progressing an SSP Study in accordance with the Study Requirements issued by DPIE in May 2017 (and updated in March 2018), similar to the process undertaken for the adjoining Metro Quarter. This option is inconsistent with the new direction for planned precincts announced by the Minister for Planning and Public Spaces in November 2019. Therefore, Option 2 is not considered an appropriate pathway for renewal of Waterloo South.

#### Option 3 – Do nothing

Much of the existing social housing stock, particularly for sites located closer to the centre of Sydney, is aging and no longer represents an appropriate outcome for tenants. As part of the NSW Government's *Future Directions for Social Housing in NSW*, three strategic priorities are set for the NSW social housing system over the next ten years:

- More social housing
- More opportunities, support and incentives to avoid and/or leave social housing
- A better social housing experience.

To implement the plan, LAHC established the Communities Plus program, which is an initiative to redevelop LAHC sites throughout metropolitan Sydney into sustainable mixed-use communities. Waterloo South, as part of the broader Estate, has been nominated as a major Communities Plus site as it provides an excellent opportunity to deliver on the priorities set out in *Future Directions for Social Housing in NSW*. The current planning framework that applies to Waterloo South will not enable renewal to occur as envisaged by Future Directions. Option 3 would therefore mean that Waterloo South remains in its current state, with aging social housing, facilities and services that do not respond well to the needs of residents, and housing stick that is not well suited to the specific characteristics of residents. This is not consistent with the NSW Government's strategic direction of providing more, better social housing as part of mixed use communities.

In addition to the above, the NSW Government's commitment to Sydney Metro, which includes the currently under construction Waterloo Metro Station, will improve accessibility to Waterloo South and provides an opportunity to house more residents in a highly accessible location. Maintaining the existing site conditions would be ignoring the potential catalytic effects of the new Metro station and the opportunity for people to live close to transport and services, and with significantly improved access to key employment locations.

Doing nothing is not considered an appropriate outcome for Waterloo South.

#### Option 4 – Redevelop the site under the existing planning controls

Option 4 involves redevelopment of the site under existing planning controls. It is effectively the same as option 3, as both these options will not result in appropriate renewal outcomes for Waterloo South. The existing planning controls would not be capable of supporting a feasible redevelopment of the entire site given the costs of demolition and construction, nor could they support the appropriate future mix of social (affordable rental) and private market housing. The Estate and the broader Waterloo area are identified in the Greater Sydney Region Plan, District Plan and LSPS as an appropriate location for urban renewal, delivery of more housing and improved social outcomes. Retaining the current planning controls would not enable renewal and would mean

that those outcomes are not achieved. Option 4 therefore would not give effect to local, district and regional strategic plans.

# 6.2 Relationship with the Strategic Planning Framework

#### 6.2.1 Waterloo's Strategic Context

Before demonstrating the strategic justification for the Planning Proposal, it is important to understand Waterloo's unique strategic context and how it relates to the Greater Sydney Region and the City of Sydney LGA. The following sections of the report describe the strategic context of Waterloo in relation to Greater Sydney and the City of Sydney, particularly in terms of population, housing, economic activity, liveability, amenity and sustainability. This then sets the scene for consideration of the Planning Proposal against the strategic planning framework which follows.

#### A growing population

At the time of the 2016 census, Greater Sydney Region's population was 4,823,991 people (ABS, 2016).

Sydney's population has grown consistently since 1911. However, over the last ten years, the rate of Sydney's population growth accelerated: between 2001 and 2006 the growth rate was 4.34%; between 2011 and 2016 the rate increased to 9.84% (ABS, 2016).

The Eastern City District Plan sets a target of an additional 18,300 new dwellings in the CoS LGA between 2016 and 2021. This equates to 3,660 dwellings per annum. While Waterloo South is unlikely to contribute new homes to meet this short-term target, dwelling estimates released by DPIE in January 2020 show that the City of Sydney will continue to be one of the highest growth councils in metropolitan Sydney. From 2019-2024, DPIE estimates that the City of Sydney will require 13,650 more dwellings, the third-highest of any council in Sydney. The renewal program for Waterloo South means that new dwellings could be delivered in the precinct within this forecast period, contributing to meeting high levels of demand for new homes in the City of Sydney.

In the longer term, the NSW Government projects that population growth rates will continue to be relatively high until at least 2041. Projections prepared by the Department forecast that Sydney's population will increase by 1,739,900 people, to 7.1 million by 2041. This growth is reflected in the City of Sydney. The Department forecasts the population of the City of Sydney will grow from 222,717 people in 2016 to 287,089 in 2041. This is an increase of 64,372 people.

Council's LSPS and Housing Study acknowledge that demand for new homes will continue, and that locations including Waterloo and Green Square will provide the bulk of capacity for residential growth. The City of Sydney's growth projections forecast a slowdown in the delivery of new dwellings in the City of Sydney over the longer term, reducing from 17.8% between 2016-2021 to 5.5% between 2027–2036 (refer to **Table 11**). This is likely to be due in part to the exhaustion of available land supplies in major committed renewal precincts such as Green Square. To keep pace with demand, it is critical that opportunities for more housing are identified in locations that are suited to increased density and dwelling diversity. Renewal of Waterloo South and the wider Estate will help cater for this demand and is preferable to alternative growth scenarios such as releasing the Sydney Southern Employment Lands or other parts of the City Fringe for residential uses or greater densification of existing, highly constrained suburbs that will not benefit to the same extent from new transport infrastructure.

Table 11 | Projected housing provision within CoS LGA 2016-2036 (CoS, 2020)

	Total 2016	2016–2021 (0–5 year) target	2022–2026 (6–10 year) target	2027–2036 (11–20 year) contribution	Total 2036
Increase in dwellings	117,429	+ 20,875	+ 17,033	+ 18,092	173.429
Rate of growth (5 years)		17.8%	12.3%	11.6%	1/3,429

Waterloo South is therefore a key opportunity to deliver new housing in an appropriate location to meet the needs of projected population growth in the City of Sydney.

#### A distinct population

The Waterloo Precinct (which includes the broader Estate and the Metro Quarter sites) has some significantly different population characteristics to the rest of the City of Sydney, which in turn is demographically distinct (at least in some aspects) from the rest of the Greater Sydney Region. These differences are important in determining appropriate planning and development outcomes for Waterloo South and the broader Estate. Census data from 2016 has been reviewed to establish a demographic profile for the Waterloo Precinct and to discuss relative differences and similarities to the City of Sydney and Greater Sydney. Notable differentiators in the characteristics of the population, include:

- Waterloo Precinct has a significantly older population than the City of Sydney and Metropolitan Sydney, with substantially fewer people in the majority of age cohorts younger than 45 years, and substantially more people in the age cohorts older than 45 years. The greatest differences are in age cohorts older than 55 years.
- Waterloo Precinct has a culturally diverse population, with 58.8% of residents born overseas (2016). This
  compares with 54.6% for CoS LGA and 36.7% for Greater Sydney. The majority of people living in Waterloo
  Precinct who are overseas born are from China (above 15%).
- A substantially higher proportion of people from an Aboriginal or Torres Strait Islander cultural background within the Waterloo Precinct (6.2%) compared to Greater Sydney (1.5%).

The Waterloo Precinct is within the SEIFA index of socio-economic disadvantage 1st decile (most disadvantaged 10%). A number of other indicators support this level of socio-economic disadvantage:

- Just over 50% of residents have completed Year 12 or equivalent (compared to 85% in the City of Sydney and 65% in Greater Sydney).
- Approximately 12.5% of households earn more than \$1,000 or more per week, compared to 62% across the City of Sydney.

#### Liveability and amenity

Enhancing liveability has also been a growing issue in guiding planning policy. As Sydney transitions to a more dense, urban city, additional amenities are required to support this change. These amenities include those at the broader scale, such as greater access to employment and improved public and active transport, to more local interventions such as more and better publicly accessible open spaces, enabling compatible non-residential land uses in predominantly residential area such as childcare centres, home businesses and small scale, low impact industries, and cafes and entertainment venues that enhance the function and convenience of the areas, and an improved public realm.

Creating a built environment that supports health and wellbeing and is safe and welcoming for all people can support a socially diverse community that is connected to its place. Fostering a cohesive and inclusive environment can support physical activity, social engagement, and nurture inclusiveness and cohesion between people from different ages, backgrounds and socio-economic situations.

To facilitate this outcome, HillPDA has prepared a Housing Diversity and Affordability Study for the Estate (refer to **Attachment 9**). As described in **Section 5.1** and the Urban Design Report (**Attachment 5**), the approach to planning for renewal of Waterloo South is focused on improving the public domain, environmental and social outcomes including the delivery of social infrastructure and creation of a high amenity public domain including streets, parks and privately owned but publicly accessible spaces that encourage social interaction.

#### A sustainable city

Driven by issues such as climate change, sustainability has emerged as a key issue affecting the planning of Sydney and other Australian cities. The CoS recognises the importance of sustainability measures within the

LGA. For example, the CoS Environmental Action 2016-2021 Strategy and Action Plan has set a 2030 target of 70% reduction in greenhouse gas emissions in the LGA. The CoS also recognises the need to promote sustainable modes of transportation for residents, workers and visitors in their Environmental Action 2016-2021 Strategy and Action Plan. A key part of achieving this outcome is improving transport corridors that are relied upon by major urban renewal projects to connect businesses and residents to surrounding centres.

The need to address climate change and greenhouse gas emissions is a driving force behind the implementation of Transit Oriented Development (TOD) as an urban policy within Australian cities. By influencing urban development patterns through more density and land use integration around transit nodes, TOD can promote more sustainable forms of travel such as public and active transportation and reduce reliance on car travel.

As part of the Planning Proposal, AECOM has prepared a Climate Change Adaptation Report (Attachment 13) and Ecologically Sustainable Development Study (refer to Attachment 12) for the Estate, that address issues of sustainable and resilient development and community outcomes for the Estate. The indicative concept proposal includes a range of sustainability outcomes including tree retention, minimum standards of canopy cover, and integrated water cycle management. Active transport and access to Waterloo Metro Station are prioritised over car use and ownership.

#### Planning for growth and new local centres

The Greater Sydney Region Plan and District Plan seek to accommodate growth in and around centres, and recognise the potential for new centres to emerge as Greater Sydney grows over the next 20 years. The emergence of new centres and the focus of new development in highly accessible locations is particularly relevant to the Estate because transport access and capacity will be substantially increased by the new Sydney Metro line and Waterloo Metro Station. The Future Transport Strategy identifies the Sydney Metro as a city-shaping transport project that will improve access to jobs and services, and be a stimulus for additional housing supply and new centres focused on stations and transport interchanges.

To guide the creation of new centres, the Greater Sydney Region Plan and District Plan outline principles for developing new centres:

- In established areas, innovative approaches to creating new centres are likely to be part of urban renewal and mixed-use developments
- All new centres are to have good public transport commensurate with the scale of the centre.

Proximity to transport infrastructure means Waterloo South is one of the most accessible locations in Metropolitan Sydney. Waterloo South is aligned with the above principles to deliver a new activity centre based around the Waterloo Metro Station. Waterloo South is also within the walking catchments of Green Square Station and Redfern Station, providing access to a wide range of employment precincts in metropolitan Sydney.

Q3 – Is the Planning Proposal consistent with the objectives and actions of the applicable regional, sub-regional or district plan or strategy (including any exhibited draft plans or strategies)?

#### Strategic Merit Test

A Guide to Preparing Planning Proposals sets out that in order to answer this question, a planning proposal needs to justify that it meets the Strategic Merit Test. The consistency of this Planning Proposal with the mandated assessment criteria is set out below.

#### a) Does the proposal have strategic merit?

Is it:

- Consistent with the relevant regional plan outside of the Greater Sydney Region, the relevant district plan
  within the Greater Sydney Region, or corridor/precinct plans applying to the site, including any draft
  regional, district or corridor/precinct plans released for public comment; or
- Consistent with a relevant local council strategy that has been endorsed by the Department; or

 Responding to a change in circumstances, such as the investment in new infrastructure or changing demographic trends that have not been recognised by existing planning controls.

In response to the question of strategic merit, the following sections of this report demonstrate how the Planning Proposal is consistent with, and gives effect to, the relevant strategic plans and policies, therefore demonstrating strategic merit.

## 6.2.2 Implementing the Greater Sydney Region Plan: A Metropolis of Three Cities

The Greater Sydney Region Plan guides integrated land use planning and infrastructure delivery over the next 20 years, with longer term vision extending 40 years. The plan seeks to reposition Sydney as a metropolis of three cities. To achieve the vision set out by the plan, a number of objectives are put forward. The renewal of Waterloo South directly contributes to the achievement these objectives in the plan. **Attachment 4** includes a summary table showing how the Planning Proposal gives effect to the Greater Sydney Region Plan. In particular, the Waterloo South Planning proposal:

- Aligns infrastructure with growth (objective 1), by locating more dwellings, including more and better
  housing for disadvantaged people, within walking distance of Waterloo Metro Station, Redfern Station and
  Green Square Station, and will contribute to the 30 minute city (objective 14).
- Optimises infrastructure use (objective 4) by targeting population growth where residents, workers and visitors will preference the use of public transport over private vehicles for the majority of trips
- Is the result of a collaborative planning process (objective 5) that has included council, the local community, and a range of NSW Government agencies.
- Includes services and infrastructure to meet the local community's needs (objective 6) and to ensure a healthy, resilient community (objective 7), including delivery of local open space, community facilities, water cycle management works and affordable housing with capacity to meet projected demand from the population growth as a result of renewal of Waterloo South.
- Will increase the supply of housing (objective 10) and deliver more diverse and affordable housing (objective 11) by improving the quality of social housing by renewing the aging housing stock of Waterloo Estate.
- Will increase urban tree canopy cover (objective 30) and provide new public open space that is accessible (objective 31), enhancing the availability and variety of public parks in the local area.
- Will assist with moving towards a low carbon city and net-zero emissions by 2050 (objective 33) and allowing for adaptation to climate change (objective 36).

# 6.2.3 Giving Effect to the Eastern City District Plan

### Giving effect to the planning priorities

The Eastern City District Plan is a statutory consideration under the Strategic Planning provisions of Part 3, Division 3.1 of the EP&A Act. Section 3.8 of the EP&A Act requires that a planning proposal authority give effect to the relevant district strategic plan for the local government area (in this case the Eastern City District Plan). The Eastern City District Plan includes 22 planning priorities. **Table 12** summarises how the Estate proposal will give effect to the relevant planning priorities.

Table 12 | Waterloo South response to Eastern District Planning Priorities

Eastern District Planning Priorities	Waterloo South response
Priority E1: Planning for a city supported by	The Waterloo Metro Station is a key driver for the renewal of the Waterloo Estate. Sydney Metro City and Southwest is a city-shaping transport infrastructure project that creates new opportunities for integrated station precincts that deliver new homes, jobs, amenities and services in a highly accessible and high amenity location.  The Metro Quarter will become the focus of the new activity centre and gateway into Waterloo that complements the future Waterloo Station. This will accommodate a range of uses that will support
infrastructure	the needs of the Waterloo community and will become the civic heart for Waterloo. The Indicative Concept Proposal for Waterloo South aims to expand on these opportunities and will provide a range social serving infrastructure, such as new public open spaces, key services and active infrastructure that will cater for the broader community.
Priority E2: Working through collaboration	LAHC have collaborated with the City of Sydney to progress the Planning Proposal. Other key government stakeholders, including Sydney Metro, DPIE, and the Government Architects Office, have also played important roles in guiding the Planning Proposal through the Project Review Panel established as part of the previous SSP Study investigations. LAHC has also implemented a community and stakeholder engagement program that has contributed to the place-making strategy, vision and principles for Waterloo South.
Priority E3: providing services and social infrastructure to meet people's changing needs	The provision of high quality social infrastructure and services is particularly important for the proposed regeneration of Waterloo South. The local community at Waterloo has specific needs. Waterloo South will provide higher order community uses, such as community facilities and early education and childcare facilities, which will support the elderly, those on lower incomes, the Indigenous community, and people from diverse cultural backgrounds.
	Waterloo South will be a place for the local community to congregate, interact, and access the services they require. New public spaces and community facilities will serve as a place for the community to connect, interact and engage with their surroundings to nurture an inclusive social network.
Priority E4: Fostering healthy, creative, culturally rich and socially connected communities	Planned recreation and community facilities will contribute positively to the social and physical well-being of the Waterloo community. Waterloo South will deliver new community facilities and public spaces, while supporting a diversity of uses that accommodate the needs of the wider population.
	The public domain will be expanded through new plazas, parks and pedestrian connections including a pedestrian priority zone that encourage walking and cycling, community interaction and connections. The planned public spaces will be flexible to cater for multiple uses and activities that serve a wider population. Proposed planning provisions will encourage and streamline the approvals for community events like live music performances and markets.
Priority E5: Providing housing supply, choice and affordability, with access to jobs, services and public transport	Overall, approximately 3,048 dwellings will deliver a mix of dwelling sizes for different household types. The proposed mix of dwelling types and tenures is a direct response to the needs of the local community, in particular the need for social and affordable housing in an area of high housing stress and acute affordability pressures, and projected continued demand for dwellings that are suited to smaller households.
	Waterloo South will deliver housing close to jobs and services within the precinct, and connections to other strategic job clusters like the Sydney CBD through the Waterloo Metro Station.

Eastern District Planning Priorities	Waterloo South response	
Priority E6: Creating and renewing great places and local centres, and respecting the District's Heritage	The place principles have been established to provide direction for the delivery of Waterloo South as an authentic, vibrant and successful place. The principles have shaped the Indicative Concept Proposal.  Heritage items and conservation areas, both in and near the Estate have been considered in the Indicative Concept Proposal. Heritage items in the precinct include the Duke of Wellington Hotel, Electricity Substation 174 on the corner of George and McEvoy Streets, the terrace houses at 229-231 Cope Street and the Former Waterloo Pre-School at 225-227 Cope Street. Conservation areas are located immediately east of the site, and to the west, beyond Botany Road. The urban design strategy directly responds to the significance of these items and conservation areas to the character of Waterloo and understanding of its history.	
Priority E8: Growing and investing in health and education precincts and the innovation corridor	Increased supply of housing and additional floorspace for commercial, retail and community uses will contribute to the diversity, amenity and economic opportunities in the innovation corridor. While locations like Australian Technology Park and the Sydney CBD will continue to be the main focus of economic growth and diversity, the Estate has the potential to offer a range of non-residential spaces for innovative businesses and community activities to establish and grow.	
Priority E10: Delivering integrated land use and transport planning and a 30 minute city	The Waterloo Metro Station provides opportunity for the next stage of renewal of the Estate. Waterloo South is a key element of a new urban structure for Waterloo that will complement Waterloo Metro Station. Given the proximity of Waterloo South to Waterloo Metro Station, the development of Waterloo South is a prime opportunity to create a new precinct where transport and land use are truly integrated.  Residents, workers, customers and visitors of Waterloo South will benefit from high frequency and high quality public transport, as well as new shops, employment opportunities and social services.  An increased population within Waterloo South and nearby areas will increase the proportion of the population that benefits from the 30 minute city, with direct access to key employment centres including Australian Technology Park, Sydney CBD and the global economic corridor stretching from Sydney Airport to Macquarie Park and Norwest.  Waterloo South is in an ideal position to be an emerging centre of activity that offers new homes and a diversity of land uses that provide the local community access day-to-day to community services — with shops, services, cultural places and work environments promoting activity around the new Waterloo Metro Station.	
Priority E16: Protecting and enhancing scenic and cultural landscapes	Waterloo has a rich, diverse and sometimes troubled cultural history which is reflected in the diverse urban environment. The evolution of Waterloo from Aboriginal occupation and use of the land through early industrialisation, mid-20th century public housing, and more recent transition towards an inner city urban village is evident in the physical fabric of the locality.  Waterloo South will continue the evolution of character and the identity of Waterloo while respecting its past. While the Indicative Concept Proposal will result in changes to the scenic and cultural landscape of Waterloo, these changes will reflect the positive progression (as a result of new infrastructure investment and government commitments to urban renewal and improved social housing) to a more connected, accessible, cultural and cohesive community.	
Priority E17: Increasing urban tree canopy cover and delivering Green Grid connections	The renewal of Waterloo South is a significant opportunity to contribute to the Green Grid. Waterloo South will support this outcome through new street tree planting, wider and larger public spaces. A minimum of 50 percent of high and moderate value trees will be retained as part of the renewal of Waterloo South. Overall, these measures will ensure coverage of 30 percent of the site by tree canopy. The landscape strategy includes tree planting in all parts of the proposed public domain that will improve amenity for pedestrians, cyclists, Metro Station customers, residents, workers and visitors who will take advantage of the high quality public spaces proposed for Waterloo South.	

Eastern District Planning Priorities	Waterloo South response	
Priority E18: Delivering high quality public open space	An integrated network of public open space facilitates community cohesion and well-being. Waterloo South will deliver approximately 2.57 hectares of new public open space for the community to connect, interact and engage with their surroundings to nurture an inclusive social network. Each space is resilient, safe, welcoming and accessible for everyone to enjoy, regardless of age, culture or ability. The Village Green provides a social, cultural and recreation focus for Waterloo South and the broader Estate. Public open spaces are located within easy walking distance of all residents. Another park is proposed in the heart of Waterloo South, so that all residents have easy access to a public park.	
Priority E19: Reducing carbon emissions and managing energy, water and waste efficiently	The planning, design and construction of Waterloo South will be informed by a series of Ecologically Sustainable Development principles to achieve best practice sustainability outcomes. An integrated network of sustainable infrastructure and measures intended to reduce energy and water consumption and carbon emissions will also be integrated in the renewal of the Estate. The precinct plan has an objective of moving towards zero emissions and the Climate Change Adaptation Study (Attachment 13) outlines options to achieve this aim.	
Priority E20: Adapting to the impacts of urban and natural hazards and climate change	A sustainability assessment has informed the Indicative Concept Proposal for Waterloo South which has addressed the potential social, environmental and economic effects of climate change on future communities and potential options for the Estate to deliver both net zero buildings and a net zero precinct.  Changes to temperature and rainfall patterns have been analysed and considered in the planning for Waterloo South. A sensitivity analysis was performed and a number of climate risks identified (refer to Attachment 13).  The Indicative Concept Proposal has been designed to consider a minimum 10 percent increase in rainfall outputs due to climate change impacts. A number of adaptation and mitigation measures adopted include WSUD initiatives, 30 percent tree canopy coverage and a minimum of 50 percent of existing trees to provide shade and reduce urban heat island effects, and setting commitments and targets for Green Star ratings.	

#### 6.2.4 Implementing the Local Strategic Planning Statement and Housing Study

The City of Sydney Council has endorsed the LSPS, representing Council's 20-year vision and strategy for the LGA's future direction on infrastructure, liveability, productivity and sustainability. The LSPS is supported by a Housing Study that is also relevant to the Waterloo South Planning Proposal. Many of the actions in the Housing Study are reflected in the LSPS, and **Attachment 4** includes a comprehensive review of the Planning Proposal response to the priorities and actions of the LSPS and Housing Study. In summary, the proposal gives effect to the LSPS in the following ways:

- Delivering more housing in Waterloo, a location identified for population growth in the LSPS and the District Plan (Priority L3).
- Contributing to an expanded and improved network of open space and recreation facilities through new
  and more pedestrian friendly streets, new public parks and other publicly accessible spaces throughout the
  precinct (Action I3.1).
- More than 32% of the developable area of Waterloo South is proposed to be public open space, more than the minimum 15% for NSW Government renewal projects (action I3.2).
- Improving the accessibility of the public domain for people of all ages and abilities (L1.1 and L1.3) in particular catering for the needs of Waterloo residents who are older and more likely to live alone than residents elsewhere in the City of Sydney.
- Creating great places (action L2) by planning for a mixed use precinct where residents can access daily
  needs and essential services including retail, health and personal services, open space and recreation within
  walking distance, including provision for ground floor non-residential uses.

- The proposal includes a target of 30% of residential floor space as social (affordable rental) housing exceeding the 25% target for affordable housing on NSW Government sites (Action L3(c)(ii))
- Providing for a mix of housing types and sizes to meet projected needs of a diverse and growing community (L3.2)
- Protecting and enhancing the natural environment by managing stormwater runoff (S1.1), protecting and enhancing urban bushland and biodiversity (S1.2) through tree retention, new tree planting and landscaping and minimum standards for canopy cover and landscaped areas (s1.3).

# 6.2.5 Implementing the Community Strategic Plan

Sustainable Sydney 2030 sets out the long-term vision for the sustainable development of the City to 2030 and beyond. It includes ten strategic directions to guide the future of the City, as well as 10 targets against which to measure progress. Sustainable Sydney 2030 outlines the aspiration for the City to be Green, Global and Connected. An assessment of the Planning Proposal's consistency with the relevant directions and corresponding objectives is provided in **Attachment 4**.

#### b) Does the proposal have site-specific merit?

Having regard to the following:

- The natural environment (including known significant environmental values, resources or hazards) and
- The existing uses, approved uses, and likely future uses of land in the vicinity of the proposal and
- The services and infrastructure that are or will be available to meet the demands arising from the proposal and any proposed financial arrangements for infrastructure provision.

The proposal has site-specific merit.

Considerations and impacts concerning the natural environment have informed the Indicative Concept Plan and the proposed planning controls. An assessment of the environmental impacts of the Planning Proposal is provided in **Chapter 7** of this report and at the various supporting technical studies.

The existing site is majority-owned by LAHC and contains 749 social housing dwellings that are aging and in need of renewal to provide a higher standard social housing, along with an increased supply of new market housing in the right location. The opening of Waterloo Metro Station will dramatically improve accessibility to the site and surrounding areas, including the Metro Quarter. In accordance with the Communities Plus initiative, Waterloo South presents an opportunity to improve the existing social housing stock at the site, as well as providing new private market housing to create a mixed-tenure precinct. Therefore, existing uses within and surrounding the site make it appropriate for the proposal. **Chapter 2** of this report details the existing site conditions and context, while the Urban Design and Public Domain Study at **Attachment 5** provides a detailed site and context analysis.

The introduction of new city-shaping infrastructure through the new Waterloo Metro Station is the primary catalyst for renewal of Waterloo South. In addition, this Planning Proposal provides a framework to deliver retail, commercial and community floor space identified as needed to service the community in the Social Baseline Report provided at **Attachment 11**. The proposed planning controls will also enable the delivery of 2.57 hectares of public open space/parks, a pedestrian priority precinct and new pedestrian and cycle paths. LAHC will be responsible for the delivery of identified onsite infrastructure. Therefore, the Planning Proposal will result in the provision of appropriate services and infrastructure for the community.

#### Summary

This Planning Proposal achieves the assessment criteria as it demonstrates both strategic merit and site-specific merit. Therefore, it is considered that this Planning Proposal meets the Strategic Merit Test.

Q4 – Is the Planning Proposal consistent with a Council's local strategy or other local strategic plan?

The Planning Proposal is consistent with Council's Local Strategic Planning Statement, Housing Strategy and Community Strategic Plan, as demonstrated in **Section 6.2.4** to **Section 6.2.5**.

#### Q5 – Is the Planning Proposal consistent with applicable State Environmental Planning Policies?

Yes. An assessment of the Planning Proposal against relevant State Environmental Planning Policies (SEPPs) is set out in **Attachment 4**.

#### Q6 – Is the Planning Proposal consistent with applicable Ministerial Directions (s.9.1 directions)?

Yes. An assessment of the Planning Proposal against applicable section 9.1 Directions is set out in Attachment 4.

# 6.3 Environmental, Social and Economic Impacts

# Q7 — Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

No. An assessment against the relevant impacts of the Planning Proposal is provided in Section 7.13.

# Q8 – Are there any other likely environmental effects as a result of the Planning Proposal and how are they proposed to be managed?

An assessment of the relevant environmental effects of the Planning Proposal is provided in **Chapter 7**, including appropriate mitigation and management measures.

#### Q9 - Has the Planning Proposal adequately addressed any social and economic impacts?

Yes. An assessment of the social and economic impacts of the Planning Proposal is provided in Chapter 7.

#### 6.4 State and Commonwealth Interests

#### Q10 – Is there adequate public infrastructure for the Planning Proposal?

Yes. A discussion of the provision of local, regional and state infrastructure is provided in Section 5.4.

# Q11 – What are the views of State or Commonwealth public authorities consulted in accordance with the Gateway determination?

The views of State and Commonwealth public authorities will be known once consultation has occurred in accordance with the Gateway determination of the Planning Proposal.

#### 6.5 Community Consultation

Community consultation has informed the planning for the site to date, as described in **Chapter 3**. Further community consultation will be conducted in accordance with section 3.34 and Schedule 1 of EP&A Act and *A Guide to Preparing Planning Proposals* relevant to this Planning Proposal. This will include public exhibition of the Planning Proposal post-gateway determination as well as potential non-statutory exhibition pre-gateway determination if the City of Sydney chooses to undertake this.

# 7 Key Planning Issues

As discussed in **Section 1.31**, LAHC received a request to prepare a Planning Proposal from the CoS. The request also provided a number of matters for consideration to be addressed prior to lodgement of the Planning Proposal. References to these matters is located in **Attachment 1**, which also contain a reference to where each matter is addressed in this report and/or the accompanying technical studies.

The request to prepare a Planning Proposal also makes reference to the need to comply with the SSP Study Requirements issued by DPIE in May 2017 (and updated in March 2018), with updates as required to ensure currency, particularly with regard to more recent plans and policies. Details of these study requirements and how these are addressed are contained within the accompanying technical studies of this Planning Proposal.

The following sections provides a broad summary of the key planning issues of this Planning Proposal with consideration of the matters outlined in the CoS request to prepare a Planning Proposal and how these matters have informed the proposed planning framework of the Planning Proposal, which seeks to amend the Sydney LEP 2012 and Sydney DCP 2012.

# 7.1 Urban Design

In response to the SSP study requirements and request to prepare a Planning Proposal from the CoS, an Urban Design and Public Domain Study has been prepared by Turner Studio in partnership with Turf (Attachment 5). The Urban Design and Public Domain Study includes a detailed site and context analysis informing a comprehensive opportunities and constraints analysis for Waterloo South under the following themes:

- environment and open space
- transport, streets and connectivity
- housing diversity and liveability
- employment, services, retail, arts and culture
- sustainability and infrastructure.

The Indicative Concept Proposal has integrated plans for the private and public domains, including built form, community facilities, infrastructure and staging. As extensive further subdivision to create new public streets is not proposed, a subdivision plan is not necessary at this stage of the planning process. The Indicative Concept Proposal has been reflected in the draft Waterloo South DCP, with corresponding performance objectives prepared that address all key aspects of the future renewal of Waterloo South. The following sections of this Planning Proposal report details the assessment of key urban design considerations that have informed the Indicative Concept Proposal and the proposed amendments to the Sydney LEP 2012 and Sydney DCP 2012.

Further detail on the design vision, principles, methodology, case studies and amenity measures is provided within the Urban Design and Public Domain Study (refer to **Attachment 5**).

# 7.1.1 Integration with Surrounding Context

The public domain has heavily influenced the proposed built form. The public domain plan was prepared first, with built form developed in response. In particular, built form:

- Reinforces the intent and character of the public domain
- Is sited and designed to engage with and define the public domain
- Ensure that it does not have significant adverse amenity impacts, in particular in relation to solar access.

Community facilities within Waterloo South have been located with consideration to their function within the wider Waterloo Estate, with public domain reinforcing their legibility. Key infrastructure, including stormwater management devices, have been integrated with major public open spaces in the precinct plan.

In terms of its site and context, integration occurs at three main levels:

- Waterloo Precinct (Waterloo Estate and Waterloo Metro Quarter)
- Local
- Broader.

#### Waterloo Precinct

The Indicative Concept Proposal provides Stage 1 of the broader renewal of Waterloo Estate and the second component of the Waterloo Precinct, following the recent LEP amendment of lands located at Waterloo Metro Quarter.

Waterloo South will integrate with Waterloo Metro Quarter by providing the Village Green adjacent to the station, with no built form interface along the western edge of the park. The proposal will also complete most of Cope Street , and provide key public domain elements to benefit the entire precinct, including two large parks of sufficient size and dimensions to provide the flexibility to cater for a range of informal active and passive activities, transitioning George Street into pedestrian priority area and establishing new community facilities within Waterloo South.

#### Local

A number of key design moves retain or enhance integration with local context, including:

- Integrating with the Metro Quarter and future stages of the Estate to create a new activity centre to service the precinct and parts of surrounding suburbs such as Alexandria, Waterloo and Redfern
- Retention of key streets such as George Street and John Street
- Establishing new public open space to complement Waterloo Park and Oval, Alexandria Park and Redfern
   Park and Oval to enhance the amount, distribution and function of local open space within the locality
- Implementing specific design responses to ensure appropriate transition and interface with existing heritage listed items and heritage conservation areas
- Providing opportunity to enhance and establish new cycleways that will seamlessly integrate with City of Sydney's existing cycleway network
- Consideration of adjoining neighbourhoods to the east in the siting, form and height of buildings.

#### Broader

The sites strategic location 3.3km from the Sydney CBD, within the Central to Eveleigh transformation area and within the broader eastern economic corridor provides opportunity for urban, mixed use and transit focussed outcomes.

Key elements of the Indicative Concept Proposal have been set through reference areas that are similar in important attributes such as geographic closeness, function or level of public transport accessibility. For example, height has been set with reference to nearby public transport rich areas such as the western end of Redfern Village to the north, Green Square Town Centre and those further away such as within the Central to Parramatta transit corridor (see **Figure 41**).

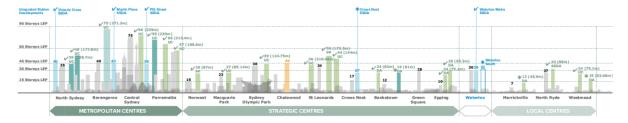


Figure 41 | Height analysis

Source: Turner Studio

## 7.1.2 Interface with Surrounding Land Uses

At a broader level, the Urban Design and Public Domain Study (refer to **Attachment 5**) outlines how the proposal responds to and integrates with its context. This is due to moves such as:

- Being consistent with the nature of renewal of the CBD and Mascot corridor for more sustainable, denser form of urban living located primarily around rail stations
- Breaking down the campus 'island' block structure to better reflect that of surrounding neighbourhoods
- Reinstating George Street as a continuous pedestrian movement corridor through the Waterloo South, linking with communities to the immediate north and south for the first time since the estate was developed
- Drawing people into Waterloo South through the establishment of the diagonals to provide clear, convenient pedestrian movement choice between external neighbourhoods, through Waterloo South to Waterloo Metro Station.

At a more local level, it should first be noted that the current characteristics of Waterloo South and the broader Waterloo, in particular its location adjacent to Waterloo Metro Station, support a scale of development that is well above that of other adjoining older neighbourhoods that were first developed under different circumstances. These circumstances included lower levels of absolute population growth in Sydney, different building methods and much poorer accessibility to the CBD.

An assessment of the Indicative Concept Proposal's response to key surrounding interfaces is provided in Section 6.3 of the Urban Design and Public Domain Study at **Attachment 5**, including contextual, public domain and heritage interfaces. A series of section drawings and assessment demonstrate that appropriate building heights and setbacks are provided to each interface.

#### 7.1.3 Visual Impact

Cardno has prepared a Visual Impact Assessment (refer to Attachment 7).

The assessment has been carried out in accordance with the technical specifications of this study requirements, including the use of photos from surveyed locations taken with a 55mm focal length lens. The assessment identified a series of views form the public domain (parks and street footpaths) at long, middle, close and internal scales.

Key findings identified in the Visual Impact Assessment (refer to Attachment 7), include:

- Where visible in distant views from the public domain it will present as a consolidated new urban centre
  within the context of the Sydney CBD and the other two mentioned developing centres at Green Square
  and the Central to Eveleigh corridor.
- The Indicative Concept Proposal will transform views from within Waterloo South. This assessment has
  found, however, that the master planning will retain and enhance the identified positive visual
  characteristics of the Estate by retaining an open street grid pattern, separating tall buildings, retaining and

- adding to the stock of tall trees in the streets, parks and private spaces and allowing for long views down streets towards open spaces and tall buildings.
- The Indicative Concept Proposal will impact views from streets immediately surrounding Waterloo Estate. In close views, visibility will be variable depending on the context and the existence of local vegetation. Mitigation measures to address these impacts will include design development to result in a high quality ground plane including allowance for healthy growth of forest scale trees in the street and other proposed public places.
- The Indicative Concept Proposal will be visible as a new skyline urban form in medium distant views from all
  directions. Its success as a new element in views from these locations will be contingent on achievement of
  design excellence.
- In distant regional views, the Indicative Concept Proposal will appear in the context of the existing tall buildings in the Northern part of the Waterloo Estate, the proposed Metro Quarter building group and the substantial tree canopy within and adjacent to the Waterloo Estate. If designed in keeping with principles of design excellence, the taller buildings in the Proposal will have an acceptable impact on these views.
- Contingent on achieving design excellence and on maintaining a high quality vegetated foreground, the Proposal has been found to have an acceptable impact on the conservation values of local Conservation Areas including specifically, the Redfern Estate, the Alexandria Park Conservation Area and the Waterloo Conservation Area.
- Overall, contingent on the recommended mitigation measures identified in the Visual Impact Assessment (refer to Attachment 7), the Indicative Concept Proposal has been found to be consistent with the visual quality Planning Principles for development of the Waterloo Precinct and Metro Quarter and is considered to be worthy of support with regard to its effects on the existing visual environment of the precinct and its locality.

Based on the key findings, the assessment recommends a number of mitigation measures, including:

- The principles for design excellence included in local and state government guidelines are considered in the design for Waterloo South and for the individual buildings within the masterplan. Specifically, the NSW Government Architect's Design Excellence Guidelines and Division 4 Design Excellence of the Sydney LEP 2012
- The retention and protection of existing trees and the planting of new trees in judicious locations to soften the visual impacts of the new built form and to provide human scale should be carried through as a principle in the design process at the masterplan level and for individual developments
- The principles for protection of visual quality included in Visual Impact Assessment (refer to Attachment 7) are to be incorporated into the suite of planning controls being prepared for the ongoing development of Waterloo South, including:
  - Develop a unique visual character for the Precinct that maintains the positive elements of its existing character (tall slender buildings in the context of an open, legible ground plane incorporating tree lined streets with long views) and incorporates the positive components of its urban context including fine grain street level character and a street hierarchy including laneway typologies
  - Build upon the precedent of tall buildings in a landscape setting to create a visually distinctive built environment
  - Ensure that tall buildings vary in height and are well separated to create an articulated skyline with a substantial component of sky visible between building forms
  - Retain the open internal qualities and legibility of the Precinct at street level that result from its
    existing development pattern of broad streets in a clear grid pattern
  - Retain the dominance of large forest scale trees at street level
  - Avoid continuous "walls" of built form in local and regional views.

The above mitigation measures have been considered as part of the proposed planning framework. Specifically:

- Clause 6.21 of the Sydney LEP 2012 will apply to Waterloo South. This planning proposal seeks the inclusion
  of a new provision under clause 6.21 that will require a competitive design process to be undertaken in
  Waterloo South for:
  - Development with a height above 55 metres
  - Development having a capital investment value of more than \$100,000,000
  - Development in respect of which a development control plan is required to be prepared under clause
     7.20, or
  - Development for which the applicant has chosen such a process.

The draft Waterloo South DCP includes the provision to retain a minimum 50% tree canopy coverage on streets and laneways which will contribute to soften the visual impacts of future buildings in Waterloo South.

#### 7.1.4 Amenity standards

As part of Turner's Urban Design and Public Domain Study a detailed analysis of the Indicative Concept Proposal to demonstrate that amenity standards can be met, particularly cross ventilation, sun access, building separation and communal open space of residential accommodation (refer to Appendix 7.5 of **Attachment 5**). This assessment demonstrates, based on the indicative concept proposal, that development in Waterloo South under the proposed planning framework is capable of complying with the amenity objectives of the ADG.

#### **Sunlight Access**

Solar access analysis during the winter solstice has been undertaken by Turner Studio (refer to Appendix 7.5 of **Attachment 5**) for the following:

- existing and proposed public open spaces, including Village Green, Waterloo Common and Waterloo Park
- neighbouring dwellings
- residential apartments and communal private open spaces within Waterloo South, with a detailed study being undertaken for Lot S.

#### Public open spaces

Direct sunlight analysis for Winter Solstice (June 21) between 9am to 3 pm for public open space to receive a minimum of 4 hours between 9am and 3pm to a minimum 50% fixed area of the open space area. The indicative concept proposal demonstrates that this standard is achievable.

#### Neighbouring dwellings

Turners assessment showed that with the proposal, Alexandria Park and Waterloo Heritage Conservation Areas and the selected representative neighbouring dwellings (refer **Figure 42** for location) would achieve the following criteria:

- Section 4.1.3.1 Solar access (Provision 1) of the CoS DCP 2012: Development sites and neighbouring dwellings are to achieve a minimum of 2 hours direct sunlight between 9am and 3pm on 21 June onto at least 1 square metres of living room windows and at least 50% of the minimum amount of private open space
- Objective 4A-1 Design Criteria 1 of ADG: Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter.



Figure 42 | Location of neighbouring dwellings and heritage conservation areas assessed against solar access criteria Source: Turner Studio

#### Apartments and private communal open space

Direct sunlight analysis for Winter Solstice (June 21) between 9am to 3 pm has been undertaken for residential development (refer to Appendix 7.5 of **Attachment 5**). Building envelopes have been designed to ensure that 70-75% of the primary envelope facade area - North, East and West - receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid winter (**Figure 43**).

A detailed lot analysis of Lot S was undertaken including indicative internal apartment layouts. Lot S was chosen because it is representative of capacity to comply across the whole Waterloo South precinct. Considering typical floor layouts (refer to Appendix 7.5 of **Attachment 5**) validates the assumptions for the building envelopes, with Lot S meeting or exceeding the ADG Objective 4A-1 Design Criteria for a minimum 70% of apartments to receive 2 hours direct sunlight between 9am and 3pm mid winter.

50% of the principal useable area of communal private open spaces will be capable of receiving a minimum 2 hours of direct sunlight between 9am and 3pm, as required by the ADG. This will be detailed as part of any development application for future buildings within Waterloo South.

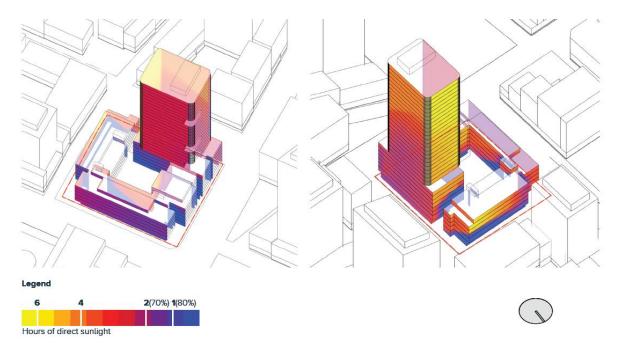


Figure 43 | Hours of direct sunlight to residential apartments of Lot S

Source: Turner Studio

#### Cross ventilation

The detailed lot analysis of Lot S considering typical floor layouts (refer to Appendix 7.5 of **Attachment 5**) validates that buildings within Waterloo South will be capable of meeting or exceeding the ADG Objective 4B-3 Design Criteria for a minimum 60% of apartments to be naturally cross ventilated in the first 9 storeys, achieving between 60-63%. The indicative concept proposal demonstrates that development in accordance with the proposed planning framework will be capable of complying with ADG Objective 4B-3 (**Figure 44**).



Figure 44 | Typical floor plan and achievement of cross ventilated apartments in first 9 storeys for buildings on Lot S Source: Turner Studio

#### **Building Separation**

Turner's Urban Design and Public Domain Study highlights that building separation distances in the Indicative Concept Proposal for Waterloo South have been designed to be capable of complying with the Objective 3F-1 of the ADG.

#### Communal Open Space

The detailed study of Lot S contained in Turner's Urban Design and Public Domain Study (refer to **Attachment 5**) demonstrates how future development will be capable of achieve the required minimum communal open space of 25% of the total site area. This can be achieved through a range of open space typologies at street and roof levels that will maximise solar access to these spaces.

# 7.1.5 Responding to the Urban Design Principles for Waterloo South

An overview of how the urban design principles have informed the Indicative Concept Proposal and the proposed amendments to the Sydney LEP 2012 and Sydney DCP 2012 is described in **Table 13** below.

Table 13 | Land use and built form response to urban design principles

Urban design principle	Land use response	
Locally responsive, distinctive and adaptable buildings, homes and spaces	Design of the public and private domains takes its cue from comprehensive site and context analysis, resulting in a precinct that contributes to global Sydney, the local area and adjoining neighbourhoods	
Diversity of homes and living choices underpinned by innovative delivery and tenure models	Waterloo South is targeting a mix of social (affordable rental) housing (30%) and private (70%) tenure dwellings. Innovative delivery models will be fully explored through the procurement of development partners for individual stages of the development.  The implementation of 'Flexible housing and dwelling mix' provisions under the Sydney DCP 2012 will also encourage a range of dwelling types and provide a mix of dwellings to cater for the needs of the existing and future resident population.	
Emphasise waterloo's character areas and neighbourhoods	The draft Waterloo South DCP breaks Waterloo South down into the following smaller neighbourhoods based on desired future character:  Waterloo Gateway  Maker Village Hilltop Village These sub-precincts are given a distinct statements describing the desired role and character of these areas and their contribution toward vision for Waterloo South.	
A variety of indoor and outdoor shared spaces that support resident needs and wellbeing		
A significant place shaped by the community for gathering in Waterloo	The centrepiece of the renewed precinct will be the Village Green, a large centrally located public open space of sufficient size and dimension to provide the flexibility to cater for a range of informal active and passive activities, including recreation and social interaction.  This area is proposed to zoned RE1 Public Recreation to ensure the lands purpose is for public open space and is supported by the Waterloo South DCP, which outlines the function and design requirements.	
Activated and engaging places for all	The public domain will be activated through a range of activities, including night time activities, and will have an appropriate density of high quality street furniture to make it attractive, comfortable and safe environment.	

Urban design principle	Land use response
Aboriginal people are intrinsic to Waterloo  Embed local stories of people and place	The public art plan establishes the following curatorial narratives for the Waterloo South, including:  Aboriginal Heart  H20  Nourish, Thrive and Grow
	<ul> <li>Compass and Calendar</li> <li>Making Waves/Watershed</li> <li>The draft Waterloo South DCP references the public art plan, which will be used to guide future detailed public art plans to be prepared for each development. This will be an opportunity to celebrate Aboriginal culture of Waterloo as part its renewal.</li> </ul>
Celebrate Waterloo's unique green attributes including topography, water and trees	<ul> <li>A number of initiatives celebrate Waterloo's blue and green attributes, including:</li> <li>Stepping of buildings to reference topography</li> <li>Establishment of the diagonals aligned with natural drainage lines</li> <li>Retention of 50% of existing high and moderate value trees and the planting of three trees to replace each high or moderate value tree removed</li> <li>The following tree canopy coverage for Waterloo South:</li> <li>50% of streets and laneways</li> <li>40% of parks</li> <li>20% of the private domain</li> <li>The Blue Line connecting cultural significance of water through water play, WSUD and bio filtration strategies that visibly celebrate water.</li> </ul>
Promote a sense of wellbeing and connection to nature	Waterloo South features a range of elements designed to Promote a sense of wellbeing and connection to nature, including:  2.57ha of public open space including two large new parks that will focus community interaction  Commitment to biophilic design, with an extensive urban forest at its heart  Indoor and outdoor community facilities  Tree retention initiatives (see above)
A high performing resilient environment	Resilience is promoted through facilitating community interaction through:  A mix of land uses in small scale neighbourhoods  Shared communal open space  Range of productive gardens  Edible landscapes  High amount of canopy tree cover  Incorporation of energy and water efficiency measures.  A series of resilience strategies have been outlined within the Climate Change and Adaptation Study which have been considered as part of the draft Waterloo South DCP (refer to Attachment 3)
An active transport hub and local centre working as one	Waterloo South and the broader Waterloo Estate will integrate with the Waterloo Metro Quarter forming a mixed use, transit oriented activity centre with a revitalised public domain.

Urban design principle	Land use response	
Highly connected neighbourhood that prioritises walking and cycling for all	The foundation of the existing grid street network has been retained and augmented through additional smaller streets such as through block links to promote permeability and walkability.	
	Enhancing the north-south regional cycling route along George Street will maintain existing cycling connections, while creating a Precinct where pedestrians and cyclists dominate.	
Local services to meet every day and everyone's needs	The precinct has largely been included in the B4 Mixed use zone to facilitate the establishment of appropriate, small scale retail and other uses that support the day to day convenience and lifestyle needs of residents in each neighbourhoods.	
Flexible and adaptable land uses, infrastructure and buildings that are responsive to opportunities and needs over time	Strategies include:  inclusion within the B4 Mixed Use zone  greater heights for the ground floor to enable conversion to different uses	
Foster local economies and productive environments to create, learn and share.	The Precinct will include the following amount of floorspace to foster the local economy:  approximately 11,200sqm of GFA for commercial premises  approximately 6,700sqm GFA of community facilities and early education/child care facilities.	

# 7.2 Public Domain: Public Open Space and Streets

In response to the SSP study requirements and request to prepare a Planning Proposal from the CoS, a Public Domain Plan has been prepared as part of the Urban Design and Public Domain Study (Attachment 5).

Consultation has occurred with the CoS during preparation of the Public Domain Plan, including through the Project Working Group as part of the previous SSP Study investigations. Endorsement of the public domain plan will occur as part of the Planning Proposal assessment and post submission to Council. However, detail design of the public domain will not occur until a DA is prepared for such work.

The public domain proposal represents:

- Residential development will have access to open space within 200 metres of the building entry.
- Amenity based renewal focussed around a high-quality public domain, of which parks are a central organising feature
- 2.57ha of publicly accessible open space, to be dedicated to the City of Sydney
- Two parks the Village Green and Waterloo Common
- Transformation of George Street into a pedestrian prioritised central linking element
- Creation of building setbacks to particular streets to protect high value existing trees.

# 7.2.1 Public Open Space

The Planning Proposal includes approximately 2.57ha of public open space to be dedicated to the City of Sydney. The location of the two parks was selected to:

- Anchor private domain development to sources of amenity
- Ensure a well distributed open space network, including having all residents within an easy (400m) walking distance of a park

- Ensure a central location relative to both the north-south and east-west axes, therefore being of optimal utility for the broader Waterloo Precinct as opposed to those external to the site
- Align with the Sydney Green Grid running down George Street
- Be able to be linked by a transformed George Street.

In addition, the location of the Village Green is synergistic with the earmarked activity centre of Waterloo, and Waterloo Metro Station. The high volumes of people attracted to this destination will activate the associated ground plane public domain, increasing vibrancy, attractiveness and safety. Furthermore, the public domain proposal seeks to balance delivery of the City of Sydney's preference for a large, centrally located park and optimal distribution of parks for accessibility outcomes.

#### Amount

The general principles of the City of Sydney Open Space, Sports and Recreational Needs Study 2016 require that a minimum of 15% of the developable part of a site be public open space. The Planning Proposal for Waterloo South seeks to provide 2.57 ha (equivalent to 32.3% of the developable area of Waterloo South; and 20.9% of total land allocation of Waterloo South) of public open space in the form of two new parks: the Village Green in the centre of the precinct and connected to the Metro Quarter; and Waterloo Common at the southern end of the Precinct. Privately (or LAHC) owned open space that is planned to have unrestricted public access will contribute an additional 0.25ha of open space.

The amount of public open space proposed is described in **Table 14**.

Table 14 | Areas of proposed public open space

Туре	Amount (ha)	Amount (% of land allocation)
Public open space (dedicated to the City of Sydney)	2.57ha	20.9%
Other publicly accessible open space (including former roads and private land)	0.25ha	2%
Total	2.82ha	22.9%

#### Type

Engagement with the CoS has occurred during the planning and design process for Waterloo South. In particular, the CoS stated strong support for an outdoor public open space in their Open Space and Recreation Needs Study and City of Sydney's Alternate Plan for Waterloo Estate.

This has been incorporated as a key organising feature of Waterloo South through the proposed Village Green and Waterloo Common.

## Distribution

The general principles aim for every resident to be within 200m of a local open space. Given the location of the proposed public open spaces of Village Green and Waterloo Common, every resident will be less than 200m from public open space.

#### **Function**

The general principles seek that public open space provides a diversity and activities and is flexibly programmed. Both the Village Green and Waterloo Common provide for a range of informal, active and passive recreation activities. The edges of parts of both spaces are also bordered by active frontages, which will provide outdoor space for dining that engage with the public open space.

## Linkage

The general principles seek that open spaces be connected by green streets. George Street will be configured as a key thoroughfare to connect pedestrians to the main parks of Village Green and Waterloo Common, with a

widened and high-quality footpath that also include safe crossing points in the form of pedestrian crossings across John Street and Wellington Street (refer to **Figure 45** and **Figure 46**).

Both George Street and Wellington Street will also provide space for on-road cycle paths, with the Wellington Street including protected on-road cycle lanes on both sides of the street, connecting Waterloo South to other nearby public open spaces such as Waterloo Park and Oval.

#### Design

The general principles require that public open space be recognisable as public, have streets on all sides and have a high level of solar access. The proposed public open spaces in the form of Village Green and Waterloo Common will be clearly recognisable as being for public purposes, engaging with the adjoining public streets.

Village Green will provide a central lawn for active recreation and community breakout space, as well as the opportunity to provide a large community garden. Enclaves of activity zones flank its southern half providing opportunity for play space, sporting and youth zones, waterplay and community gardens. Ample shading is provided along the perimeter of the Village Green and within key activation stations.

Waterloo Common will become a local park, with programmed spaces that will provide a vibrant local community hub for all ages. Productive landscapes, an urban plaza and play space accompany passive shaded lawns for community use.

Turner and Turf's Public Domain Plan (refer to **Attachment 5**) provides a conceptual framework for detailed park design and programming proposal that have informed the public domain provisions of the draft Waterloo South DCP. In accordance with the City of Sydney's Open Space Delivery Plan, the parks will be programmed to provide a diversity of, settings, activities and experiences.

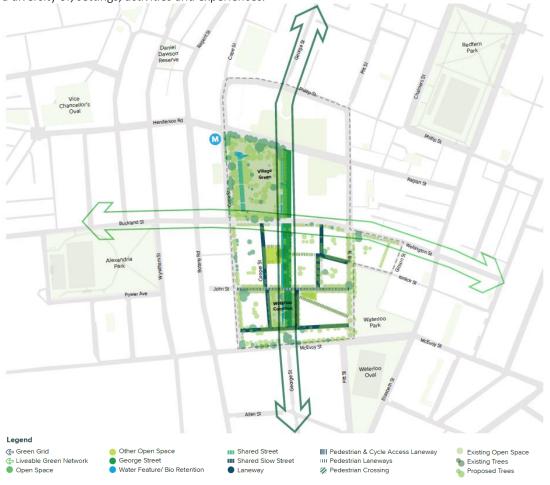


Figure 45 | Proposed open space network

Source: Turner Studio

#### 7.2.2 Streets and Connectivity

Shaping Waterloo South as a Pedestrian Priority Precinct will help provide a walkable, accessible, safe and enjoyable city neighbourhood. The Precinct's fine grain street grid and hierarchy has been developed to maximise shared slow streets, promoting green transport and connectivity.

All streets across Waterloo South will function on reduced speed levels, ranging from Pedestrian only traffic to a maximum of 40km/hr along existing local streets. The connected street network focuses on providing safe and accessible corridors into residential areas. With wider footpaths, shared paths, increase 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 green transport as the primary transport means to and from the precinct.

Intersections along McEvoy Street and Botany Road have been identified as the main locations where pedestrians and cyclists are likely to interact with predominantly through traffic travelling at higher speeds. Existing signalised intersections of McEvoy Street with George Street and Pitt Street. The Indicative Concept Proposal and the draft Waterloo South DCP includes the following initiatives to enhance the movement network of Waterloo South (refer to **Figure 46**):

- Creating a walkable, pedestrian priority community through an integrated, fine grain network of publicly accessible streets
- Retention of the underlying walkable street grid pattern
- Breaking up the long street block walls through pedestrian laneways
- Providing efficient, attractive connections to the metro station from all parts of the precinct through the diagonals
- Transformation of George Street as a pedestrian boulevard as the primary north-south movement corridor
- Better connecting the two parts of George Street across McEvoy Street
- Reopening Pitt Street to McEvoy Street to reduce vehicular traffic on Raglan and Wellington Street
- Shaping the layout and design of streets to cater for a variety of complementary activities, including walking, cycling and vehicle movement
- Creating of slow and shared street through lower design speeds to enable activities to occur, safely
- A range of different street typologies to add character and diversity
- Promoting the activation of streets by having active frontages and in the case of residential uses, having engaging frontages
- Establishing a cycle network, including a new multi-use (commuter and recreational) on road regional cycle
  way along Cope Street and a slower speed, recreation focussed cycle path along George Street that retains
  the street primary function a as pedestrian boulevard.



Figure 46 | Movement network plan

Source: Turner Studio & Turf

# 7.2.3 Safety and CPTED

The public domain has been configured to address CPTED principles through a range of design measures, including:

- Clear purpose and function for each area within the public domain
- Legible, direct movement corridors
- Clear sightlines throughout all parts of the public domain, including to adjoining streets and Metro Station entrances
- No concealed, elevated or sunken areas of the public domain
- Lighting of the public domain
- Attractive public domain
- Active frontages bordering key areas of the public domain
- Provision of opportunities for passive casual surveillance form the private domain, including from apartments.

A full CPTED analysis will accompany future development applications for detailed design. This will be in accordance with Section 3.13.1 of the Sydney DCP 2012.

#### 7.2.4 Indicative Materials and Furniture Palette

Turner Studio has prepared an indicative material and furniture palette for the parks and street types.

The overall intent of the palette is to:

- Adopt a place-based approach by reinforcing a desired future character for each neighbourhood, including through references elements of the past
- Create a public domain that is a focal point of social interatom for the future community, including being attractive, comfortable, vibrant and safe.

Street furniture is to be provided in a co-ordinated way in accordance with a Public Domain Plan prepared for each stage as part of the development application process.

# 7.2.5 City of Sydney Public Domain Design Codes

The concept public domain plan has been prepared having regard to CoS public domain codes, as identified in Appendix 7.3 of the Turner and Turf's Urban Design and Public Domain Study (refer to **Attachment 5**). Each stage is supported by a Public Domain Plan that demonstrates consistency with the proposed DCP and City of Sydney public domain codes and addresses:

- Street trees and other vegetation
- Paving and other hard surfaces
- Lighting, including the use of LED
- Seating and other furniture
- Stairs and other methods of managing
- Gradient change
- Refuse bins
- Signage, including wayfinding signage
- Public art.

# 7.3 Transport

In response to the SSP study requirements and request to prepare a Planning Proposal from the CoS, a Transport Study has been prepared by Jacobs (Attachment 8). As part of the Transport Study, a detailed traffic and transport assessment of the proposal has been undertaken that considers future travel mode shares, parking and demand management and vehicular access throughout Waterloo South.

Based on this assessment, the Transport Study (found that the overall transport network will be sufficient to cater for all demands generated by Waterloo South, assuming the following interventions.

- The introduction of Sydney Metro City & Southwest, including the new Waterloo Metro Station
- Bus service improvements to integrate with the new Waterloo Metro Station, including:
  - Route 355: Bondi Junction to Marrickville Metro via Waterloo. Increase frequency and span of hours to match metro operation and re-route via Wellington Street to more directly serve the station.
  - Route 309: Port Botany to Central via Botany Road. Increase frequency and span of hours to match metro operation and serve significant bus-rail interchange demand.

- The delivery a fine grain urban grid with improved pedestrian permeability, through-site links and the transformation of George Street into an activity street
- The provision of safe and dedicated cycling routes along Wellington Street and George Street
- The extension of Pitt Street southwards to connect to McEvoy Street with a signalised intersection
- The potential for rat-running along Pitt Street north of McEvoy Street would be mitigated by the introduction of traffic calming measures including pedestrian crossings and threshold treatments, narrowing of the street and low speed limits. These measures would reinforce the local access function of Pitt Street.

The proposed planning framework aims to support the intended outcomes to create a pedestrian priority precinct featuring a permeable network of streets, pedestrian and cyclist connections at Waterloo South. Specifically:

- The draft Waterloo South DCP (refer to **Attachment 3**) includes provisions for the future movement network of Waterloo South that reflect the Indicative Concept Proposal and the recommended measures identified on **Figure 47**. This includes:
  - the location, layout and function of streets and laneways
  - the Accessible Local Movement Route which establishes a safe and accessible route for children of all
    abilities to access key destinations and amenity in a loop form
  - proposed bike routes through and surrounding Waterloo South
  - proposed access points into Waterloo South
  - proposed vehicular entry points for car parking and loading areas.
- General transport and parking provisions contained within the Sydney DCP 2012 will apply to future development within Waterloo South. This will manage other transport and parking matters, such as, but not limited to, basement layouts, bicycle parking, services vehicles and car share schemes.
- City of Sydney's most restrictive car parking rates under the Sydney LEP 2012 will apply to Waterloo South, specifically:
  - Category A rates for residential uses; and
  - Category D rates for non-residential uses.



Figure 47 | Proposed transport measures for Waterloo South

# 7.4 Housing

Source: Jacobs

In response to the SSP study requirements and request to prepare a Planning Proposal from the CoS, a Housing Diversity and Affordability Study has been prepared by Hill PDA (Attachment 9). Specifically, the study:

- Undertakes a housing needs analysis for the Estate to identify the appropriate mix of dwelling types, tenures, sizes and price-points necessary to support a diverse, healthy and socially sustainable community
- Demonstrates how the proposal will support the achievement of housing and tenure objectives
- Discusses the renewal and distribution of social housing throughout the site
- Identifies and assesses mechanisms to deliver affordable housing.

This Planning Proposal targets 30% of all dwellings at Waterloo South as social (affordable rental) housing. The Housing Diversity and Affordability Study finds that the Planning Proposal responds to the housing needs of Waterloo Estate and the surrounding Housing Market Study Area by enabling:

- An increase in the supply of housing generally;
- Improvements in the quality of social housing generally;
- Improved outcomes for social housing tenants through improved housing, amenity and the benefits arising from a socially mixed precinct; and
- Development that can provide for a range of dwelling types, dwelling sizes, tenures and price points. To ensure consistency with the surrounding area and the District Plan a provision equivalent to the clause 6.45 affordable housing provision on the Metro Quarter has been proposed requiring a minimum or 5% of floorspace to be used for affordable housing, this will apply to all land in Waterloo South including private sites.

#### 7.4.1 Recommendations

The study makes a range of recommendations for consideration across the planning, design and delivery stages of the project to ensure appropriate provision of housing across the continuum. These recommendations include:

- Increase the supply of studios and one bedroom dwellings to match with the high proportion of single person households and couple households in the development area
- Consider the housing needs of older people at the detailed design stage and in the management and allocation of dwellings
- Cater to the considerable Aboriginal and Torres Strait Islander population in the Estate to continue the long standing ties of the Aboriginal community to Waterloo, which will require a mix of housing including housing for families through further consultation with the Aboriginal Community
- Acknowledge the considerable Chinese and Ukrainian communities in the Estate and provide for accommodation that is suited to small communities, so that existing networks can continue
- Provide housing specifically suited to transitioning people from social housing to market housing, providing an intermediate step in terms of rents while maintaining social ties
- Ensure that the current number of social housing units is at least maintained and targets the delivery of 30 per cent of dwellings as social (affordable rental) dwellings
- Ensure that the redevelopment process delivers a mix of social (affordable rental) and market housing as well as essential tenant support services to promote equity, social cohesion and inclusivity at Waterloo South
- A building by building tenure mix model will provide a workable management framework that removes the need for strata fees and maximises efficiencies for servicing and maintaining the dwellings
- Social (affordable rental) housing buildings will be dispersed across the site to create a new blend, mixed tenure environment
- There will be a range of people in the social (affordable rental) housing cohort, which will be designed to the silver level of Liveable Housing Design
- A clear strategy for the management of communal space and access to communal space by social housing residents should be developed at an early stage to avoid conflict and gain cost efficiencies
- Maximise amenity of all housing including the social (affordable rental) and market housing
- Manage relocation of tenants through a relocation program:
  - A relocation program would be developed and implemented to minimise the need for offsite relocations in the initial stages of redevelopment, establishing a model intended to minimise the impact on residents and will move towards a model whereby residents move directly to a new onsite dwelling within Waterloo South; and

 The relocation program would be developed with input from Department of Communities and justice and would draw from learning in managing the relocation of tenants during the redevelopment of other social housing estates.

The above recommendations have been considered in the design of the planning framework and the Indicative Concept Proposal. In accordance with NSW Future Directions for Social Housing and the Communities Plus initiative, 30% target dwellings on the Waterloo South site will be provided as social (affordable rental) housing. To ensure consistency with the Eastern City District Plan, a provision will be inserted into the LEP requiring a minimum of 5% of the total development floor space at Waterloo South be provided as affordable housing (refer to Section 5.2.1). The Indicative Concept Proposal has been designed to provide adequate amenity outcomes for all housing and can accommodate a tenure-blind arrangement with an appropriate mix of dwelling sizes. LAHC is committed to implementing the remainder of the above recommendations throughout the delivery, management and maintenance phases of the project in line with its commitments as a social housing provider.

# 7.5 Population Demographics

In response to the SSP study requirements and request to prepare a Planning Proposal from the CoS, a Population Demographics Study has been prepared by .id (Attachment 26). Specifically, the study:

- Outlines the future community profile in age groups and time series
- Identifies key population and employment drivers and trends impacting the Precinct
- Identifies the key population and employment attributes of comparable higher density inner city Sydney
- Prepares a population and employment profile of the future community
- Prepares time series population and employment profiles of the precinct based on existing development capacity without the Planning Proposal
- Prepares time series population and employment profiles of the precinct based on employment forecasts of the precinct and surrounding community based on strategic modelling with the Planning Proposal.

In response to the above study requirements, .id has prepared a Population and Demographics Study (refer to **Attachment 26**). The Study identifies key trends impacting future growth patterns, profiles the demographic and employment context of Waterloo Precinct today and growth forecasts for Waterloo South to 2036.

## 7.5.1 Current precinct profile

The study profiled the current demographic and employment characteristics of the Waterloo Precinct area. Key findings of the current precinct profile include:

- The resident population in Waterloo Precinct is much older than the profile for the broader CoS.
- The area is very multicultural with a high population of elderly Eastern European immigrants (Ukraine and Russia) and an emerging Chinese population.
- There is a much higher share of Indigenous people amongst the resident population than the rest of CoS.
- Education attainment is very low with just over 50% of persons aged 15 or more having completed Year 12 or equivalent.
- The Precinct is highly disadvantaged with all SA1s falling within the most disadvantaged 10% of small areas in NSW and Australia.
- The predominate dwelling stock is high-density social housing, largely occupied by lone person households. Just over three-quarters of dwellings are rented from a State or Territory Housing Authority.
- Participation in the labour force was low (34%), less than half the CoS rate and the unemployment rate was 18.4% in 2016, three times that experienced in the CoS (6.0%).

- The main industries of employment for working residents are Professional, Scientific and Technical Services, Health Care and Social Assistance, and Accommodation and Food Services.
- The largest employing industries in the Precinct in 2016 were Manufacturing, Retail Trade, and Professional Services.
- The main occupations were Professionals and Managers. However, physical based occupations were over-represented compared to the Greater Sydney average.
- Most residents work within the CoS. Unlike other CoS residents, car and train are the most common methods of travel to work, not active methods (walking, cycling).

# 7.5.2 Forecast population and employment profile in 2036 with Planning Proposal

.id have undertaken population and employment projections to 2036 for Waterloo South based on the Planning Proposal being progressed. A breakdown of the forecast population and employment summary is provided in **Table 15** and **Table 16**.

The key findings of these population and employment projections to 2036 are:

- Waterloo South will see an increase in population from 1,719 in 2016 to 5,542 in 2036, based on an increase of 2,300 dwellings in net terms between 2023 and 2032.
- The average household size is expected to increase from 1.78 in 2016 to 1.86 in 2036. This is a result of the assumed migration of both younger adult age groups, primarily to the private dwellings, as well as a broader range of older ages to the affordable and social housing component.
- The area is expected to attract younger adult age groups, primarily to the private dwellings, driven by fast access to CBD jobs in finance, banking and professional services, as well as a broader range of older ages to the affordable and social housing component.
- The age group forecast to have the largest increase is the 25-39 age bracket.
- Employment in Waterloo South is projected to grow from 350 in 2016 to around 760 by 2036
- There will be a period of decline during the construction phase of the project, but then grow in line with the timing and staging of the retail and non-retail uses.

Table 15 | Forecast Population Summary –Waterloo South with Planning Proposal

	2016	2021	2026	2031	2036
Population	1,719	1,425	2,206	5,072	5,542
Change in pop. (5 years)	-	-294	781	2,866	471
Households	965	824	1,228	2,705	2,979
Change in households (5 years)	-	-141	404	1,477	273
Avg. Household size	1.78	1.73	1.80	1.87	1.86

Table 16 | Employment Projections - Waterloo South

	2016	2021	2026	2031	2036	Net additional 2016- 2036
Jobs	350	320	450	740	760	410

# 7.6 Social Sustainability

In response to the SSP study requirements and request to prepare a Planning Proposal from the CoS, a Social Sustainability has been prepared by Elton (**Attachment 12**). Specifically, the study:

- Addresses existing social characteristics, issues and trends for the Waterloo social housing estate and
  adjoining neighbourhoods, capacity for community participation in the planning process, contribution of
  the project to improve social sustainability and considers the proposed project within the local area and it's
  broader context
- Demonstrates how the vision and relevant principles in the City's social sustainability policy will be realised
- Prepares a comprehensive profile of existing, community, neighbouring communities and likely future population
- Considers place, people and process, as the three fundamental elements of social sustainability, and for each examines key findings and opportunities to enable a socially sustainable community at Waterloo South

Elton's Social Sustainability and Resilience Strategy for Waterloo South (refer to **Attachment 122**) provides a series of recommended measures that aim to maximise positive social outcomes for the project, which are based on the thematic framework for social sustainability in the Estate, based on Place, People and Process. The report recognises that some of these strategies are already under way, while others are already identified but not yet implemented reflecting the current stage of the redevelopment project.

The recommended measures, responsibility for implementation, primary group affected and timing of delivery is outlined within the Social Sustainability and Resilience Strategy (refer to **Attachment 12**). LAHC response to the identified social sustainability opportunities are provided in **Table 17**.

Table 17 | Social sustainability recommendations

Recommendations	LAHC Response
Place-based findings and/or recommendations	
Housing	
The project addresses housing quality, dwelling/bedroom mix, partnership options and design including social and health implications of design	The redevelopment will replace older housing with new housing designed to contemporary building codes and standards (i.e. NSW Department of Planning, Industry and Environment Apartment and Design Guide) and which reflects the needs of current social housing tenants as well as future residents
	<ul> <li>All social housing dwellings will be built to minimum silver level liveable homes standard (consistent with the Liveable Housing Design principles) to ensure homes are accessible for people with mobility or physical disabilities</li> </ul>
	<ul> <li>Analysis of the future Waterloo population (Population and Demographic Study, .id, and GHD study) provides indicators on the mix for future residents</li> </ul>
	<ul> <li>Assessment of housing needs has been undertaken as part of the Housing Diversity and Affordability Study. Findings from the study will be embedded in requirements for the redevelopment</li> </ul>
Analyse and prepare a strategy that identifies the specific needs of the local Indigenous population and include exploration of possible Aboriginal Community Housing Provider involvement	<ul> <li>An Aboriginal Housing and Cultural Needs Study has commenced and will involve consultation with local Aboriginal organisations and community members</li> </ul>

Recommendations	LAHC Response
Develop a Local Housing Allocation Strategy to ensure resident needs are matched to housing provision throughout the project including maintenance of social networks, appropriate locations for older people, proximity to services and supports, etc.	<ul> <li>DCJ existing relocation policies take into consideration individual resident needs such as maintaining networks and proximity to services</li> <li>A redevelopment staging approach has been proposed as part of the planning proposal. Residents will be provided with the right of return</li> </ul>
Include strategies and housing responses that support ageing in place to ensure access to appropriate housing and support services for older social housing residents	<ul> <li>The Waterloo South redevelopment project will seek strategies to respond to specific housing and support needs of older people (similar to processes used for the Ivanhoe Communities Plus renewal site)</li> </ul>
	■ LAHC recognises that a large number of existing social housing residents are aged over 55 years. At minimum, silver level dwellings will be provided for all residents ensuring that homes are accessible and adaptable, supporting residents to live independently and age in place
	<ul> <li>The individual needs of older social housing residents will be considered as part of the relocation process including appropriate housing, and access to networks, appropriate care and support services</li> </ul>
	The planning proposal supports safe pedestrian laneways with access to community facilities and services
Access and connectivity	
Assess the planning proposal using the Healthy Urban Development Checklist to support the site's access and connectivity and other healthy built environment matters	<ul> <li>Assessment of the planning proposal in line with the Healthy Urban Development Checklist is underway and will involve collaboration with NSW Health</li> </ul>
	LAHC is working with NSW Health to support residents' health needs
Future design work, staging and delivery, considers overall site accessibility including accessible paths of travel for older people and people with mobility restrictions	<ul> <li>The Urban Design and Public Domain study addresses this finding</li> <li>The planning proposal includes landscaped pedestrian only laneways with connections to open space, retail, services and leisure zones. It allows for high levels of pedestrian access to key destinations including shops, community facilities and public transport</li> <li>The project will comply with City of Sydney planning controls in</li> </ul>
	relation to construction activity
Provide opportunities for all residents to access reliable internet and mobile connectivity, and access to computers at community facilities (where possible) for social housing residents and other specific groups such as students	■ LAHC will explore opportunities for availability of internet and mobile connectivity, and computers for social housing residents through onsite community facilities. This work will be incorporated into procurement processes for the development.
Public Domain	
Landscape and public domain planning that comprehensively addresses issues of access, inclusion, and diversity of use	The planning proposal includes 2.57 hectares of public open space, including two parks. Public spaces will be developed to a higher standard than existing open space with improved walkability, safety and amenity, and have appropriate programming and management to enable maximum benefit, and support improved health and wellbeing/ learning/cultural space to support and recognise local

Recommendations	LAHC Response	
	culture that may be incorporated as part of the later stage redevelopment  Placemaking strategies will support the planning, design and management of public spaces with specific focus on recognising Aboriginal, multicultural and working class culture	

## People related findings and/or recommendations

#### Affordability

Develop strategies that address and provide opportunities for:

- affordable access to fresh food
- community and health services
- development of a social enterprise business model
- affordable use of community facility space for both users and local community service providers
- The planning proposal supports access to community gardens for local food production, as well as an indicative site for a supermarket and retail in Waterloo South, with a target of 80% of dwellings to have local retail services within 200m from their building entry
- Affordable access to services and affordable use of space for local providers will be addressed as part of the ongoing Community Facility planning
- Social enterprise opportunities will be explored as demonstrated with other Communities Plus renewal (for example, Ivanhoe)
- LAHC will encourage commercial facilities and services that cater to a diverse range of household incomes

#### Services and support systems

Mechanisms for a 'whole of government', nongovernment and community approach to the planning and delivery of community services with a high priority on the needs of social (affordable rental) housing residents. Participation in development of the plan includes local community and community services sector

Consultation with local government and non-government stakeholders with a focus on the needs of social (affordable rental) housing residents. This work is to continue throughout and beyond the renewal of Waterloo South. Resident consultation be planned on an ongoing basis

Changes to demand and supply of local services are monitored to ensure resident access to support services

 Planning to identify and monitor service coordination will continue to identify demand throughout redevelopment phases and post completion

# **Employment and training**

Comprehensive employment and training approaches and strategies provide enablers for improved social and economic participation for residents. This will include the provision of:

- traineeships and structured employment spaces (including but not limited to construction and hospitality opportunities)
- training and employment opportunities that support the specific needs of the Waterloo community
- appropriate support services to support social housing residents to participate in employment and training

- Employment and training needs of social housing tenants and relevant support, programs and opportunities will continue to be explored as part of the procurement process as demonstrated at other Communities Plus sites
- Social enterprise opportunities will be explored as a component of the procurement process as demonstrated at other Communities Plus sites
- The ongoing community facilities planning will identify options and opportunities for training and educational spaces
- Opportunities required through redevelopment/construction agreements consistent with other renewal sites (e.g. Ivanhoe). These will include employment and apprenticeship opportunities for Aboriginal people in line with the NSW Government's Aboriginal

Recommendations	LAHC Response		
<ul> <li>employment and training spaces specifically for social (affordable rental) housing residents</li> </ul>	Participation in Construction Guidelines and Procurement Guidelines for Skills and Training in the Construction Industry		
Process related findings and/or recommendations			
Communications and engagement			
Noting the extensive consultation and engagement undertaken to date, continue to review the Waterloo Communications and Engagement process to identify lessons for improvement with a particular focus on strategies to connect with 'hard to reach' groups	<ul> <li>Ongoing review of communications and engagement process will continue to be undertaken by LAHC</li> </ul>		
Ensure continued community involvement in, and awareness of, the project through a variety of means which may include reference, focus or liaison groups	<ul> <li>Continued engagement and participation of residents and local stakeholders in the Waterloo project area will occur through the Aboriginal Housing and Cultural Needs Study, Community Facilities planning and Placemaking and any continued human services planning during and post redevelopment</li> </ul>		
Continue to actively work with key stakeholders, including the City of Sydney, other government agencies, non-government organisations and the local community to develop collaborative and participatory approaches to key issues, such as:	<ul> <li>Key stakeholders will continue to be engaged throughout the redevelopment</li> <li>LAHC will develop a participatory approach to place naming</li> </ul>		
<ul> <li>the design and ongoing programming of public open space, community and cultural facilities</li> </ul>			
<ul> <li>naming of places and spaces</li> </ul>			
service delivery models			
social integration			
Community and cultural development			
Placemaking strategies and community development initiatives (events, activities and programs) emphasise a strengths- based approach that foster integration and connection among all residents	<ul> <li>The Waterloo Public Art Plan identifies a number of opportunities such as celebrating Waterloo's Aboriginal history, culture and heritage</li> <li>Placemaking strategies and initiatives to be developed for community and cultural development will adopt a strengths-based approach</li> </ul>		
Development staging			
Staging of the redevelopment considers environmental, service and social needs	<ul> <li>The planning proposal staging plan commences in lower density areas in order to minimise change for residents and off-site relocations</li> </ul>		
	<ul> <li>The planning proposal outlines community facilities in each phase of the staging plan to enable access to community programs and initiatives</li> </ul>		
	<ul> <li>The Community Facilities Plan and future human services planning will look at strategies to address the environmental, service and social needs of residents</li> </ul>		

Recommendations	LAHC Response
Approaches that support ongoing service delivery and enable an appropriate level of quality community facility space is available in each stage of the development	<ul> <li>Early provision and staging of social infrastructure is being considered as part of the ongoing Community Facility planning to support operation of support services, programs and initiatives.</li> <li>Temporary facility options will be considered for the development stages to produce community benefit while permanent facilities are being developed</li> </ul>
	<ul> <li>The planning proposal aims for development of community facilities spaces at each stage of the redevelopment</li> </ul>
Strategies to manage the potential impact of construction on residents such as:	Consistent with the existing DCJ Relocations Policy, the Relocations     Team meet with individual residents to identify their needs in
<ul> <li>processes and resources to identify and support residents, where needed</li> </ul>	relation to their health and wellbeing and identify relevant supports  Adopt the relevant principles of the Healthy Urban Development
<ul> <li>approaches to educate residents about early identification of potential health impacts strategies to support people navigate physical site changes</li> </ul>	Checklist and continue to work with Health NSW and front line staff to identify strategies for early identification of resident needs and to reduce the impact of relocation on residents
. ,	Stratogics will be developed in collaboration with Health NSW and

#### Governance

Governance models for human services planning, community infrastructure delivery and communications and engagement embed crossagency collaboration, focusing on the coordination of service delivery and clear and regular communication with residents and other stakeholders.

 Continued cross agency collaboration through ongoing governance structures and continued discussions

Strategies will be developed in collaboration with Health NSW and local practitioners to educate residents on health related matters

The project will comply with City of Sydney planning controls in relation to construction activity and management of traffic

that may be incurred through construction

 Ongoing and regular communication strategies to residents and other stakeholders

# 7.7 Social Infrastructure Needs

In response to the SSP study requirements and request to prepare a Planning Proposal from the CoS, a Social Baseline Study has been prepared by GHD (Attachment 11) which considers .id's Population and Demographics Study to inform the likely social infrastructure requirements for Waterloo South. A social infrastructure needs assessment (Appendix E of Attachment 11) was undertaken to identify the likely social infrastructure needs of Waterloo South in 2032. The needs assessment considered four indicators of need:

operations

- 1 Demographic need based on existing and projected community profile to 2032
- 2 Existing need audit of existing facilities
- 3 Identified need through consultation with stakeholders
- 4 Comparative need by comparing against a rate of provision

**Section 5.4** of this report identifies proposed arrangements for delivery of infrastructure to meet the needs of development in Waterloo South.

## 7.8 Utilities

In response to the SSP study requirements and request to prepare a Planning Proposal from the CoS, a Utilities and Infrastructure Servicing Study has been prepared by AECOM (Attachment 10).

Indicative building service loads specifically for Waterloo South have been undertaken to inform lead-in infrastructure requirements only and are subject to change as part of design development. Demand calculations provide the following estimated utility demand:

- Potable Water demand between 1,300 1,700 kL/d
- Sewer Loading between 8 11 L/s
- Electrical demand between 29 39 MVA
- Gas demand between 4,200 5,600 m3/day

Future work that is required to enable detailed development applications includes:

- Further coordination with utility authorities to confirm lead-in infrastructure requirements and routes; Potential hydraulic modelling to confirm potable and wastewater lead-in infrastructure upgrades;
- After further assessment of ESD options to take forward into detailed design, confirm the effects on utility supply and lead-in infrastructure requirements and routes; and
- Augmentation or consolidation works of feeder cables to Surry Hills Zone Substation will be required to service the development area beyond 2026 and a new 132/11kV Zone Substation is anticipated to replace the current Zetland zone substation.

The Utilities and Infrastructure Servicing Study (refer to **Attachment 10**) identifies the indicative location of utility connections to meet respective services needs that would arise from the Indicative Concept Proposal for Waterloo South.

# 7.8.1 Data and telecommunications

A number of communication providers have assets running adjacent to and intersecting Waterloo South, including:

- NBN Co, NSW/ACT
- Nextgen, NCC NSW
- Optus and/or Uecomm, NSW
- PIPE Networks, NSW
- Telstra NSW, Central
- Verizon Business (NSW)
- Vocus Fibre Pty Ltd (NSW).

Due to the scale of development expected, it is expected that new telecommunications servicing will be provided by the National Broadband Network (NBN). The Utilities and Infrastructure Servicing Study (refer to **Attachment 10**) shows the location of proposed telecommunication connection route for Waterloo South.

#### 7.8.2 Rail tunnel infrastructure

The T8 Airport & South Line rail tunnel currently runs underneath George Street within Waterloo South. Record drawings and long sections indicate that the rail tunnel between Redfern Station and Green Square Station has a depth from surface ranging between 20-30m.

Further investigation will be required to confirm the exact location and geometry of the rail tunnel and associated easements and clearances in relation to future development in Waterloo South. This be reviewed against the following guidelines:

- Development Near Rail Tunnels (Nov, 2018);
- Technical note TN 043: 2017 External Developments Standard; and
- Airport Line Tunnel Protection Guidelines, Part B (Technical Matters).

This assessment will occur during the development application stage.

# 7.8.3 Waste and recycling

A Utilities and Infrastructure Servicing Study prepared by AECOM (refer to **Attachment 10**) has developed an operational waste management strategy by adopting the waste hierarchy as a framework for waste management practices to achieve the best environmental outcomes. The preferred order of adoption is as follows:

- Avoid the potential of waste generation
- Reduce waste during operations
- Re-use waste where applicable
- Recycle waste whenever possible
- Recovery of waste materials
- Disposal of waste when there is no reuse or recycling potential.

Waste generation rates from the City of Sydney Guidelines for Waste Management in New Developments 2018 (CoS Guidelines) have been used to calculate the estimated volume of waste to be generated from the Indicative Concept Proposal for Waterloo South. Based on these estimations, waste minimisation measures have been considered and would continue to be developed and implemented during operations.

Waste prevention and minimisation would be addressed, where feasible, through the use of efficient operation techniques to minimise generation of waste not suitable for re-use or recycling. These are identified in the Utilities and Infrastructure Servicing Study prepared by AECOM (refer to **Attachment 10**).

The location, size and access requirements of the loading bays, storage rooms and dedicated waste collection zones will be detailed as part of a future development application for buildings in the Waterloo South. This will be in accordance with the City of Sydney's Guidelines for Waste Management in New Developments and existing provisions contained within Section 3 of the Sydney DCP 2012.

# 7.9 Climate Change Mitigation and Adaptation

In response to the SSP Study Requirements and request to prepare a Planning Proposal, a Climate Change Adaption Study has been prepared by AECOM (**Attachment 13**). The study:

- Details how the proposal will address social, environmental and economic effects of climate change on future communities
- An analysis of climate projections as they apply to Waterloo South.
- A sensitivity analysis was also undertaken for temperature and rainfall impacts, with a risk assessment undertaken to identify potential key risks to Waterloo South and adaptation measures and design responses identified to inform the proposed planning framework.

Of climate related variables, the site's exposure to the increasing frequency and intensity of heat events, extreme rainfall and flooding, and storms have been identified as priority focus areas for adaptation. The following risks were evaluated to have a "high" risk rating:

#### Heat

- Extreme heat both increases demand on the energy network because air conditioning units work harder to maintain temperature and reduces energy network capacity, which can cause brownouts and blackouts when the power grid is overwhelmed
- Extreme heat causes reduced energy network capacity and disrupts communication systems
- Increased heat stress events causing health impacts to residents, particularly vulnerable community members
- Extreme heat increasing requirements for cooling and areas of respite

## **Flooding**

- Greater intensity of rainfall and runoff overwhelming drainage capacity and causing flooding and inundation of roof, ground and subterranean systems
- Greater intensity of rainfall and runoff causing inundation and malfunction effecting underground utilities such as electricity distribution, fibre cables, pumping stations, other network infrastructure

#### Storms

Rain and moisture penetration during storms and high winds causing damages to buildings and plant.

# Drought

 Drought risk affecting water storage systems on site and increasing dependency on mains water supply for non-potable water use.

## **Bushfires**

- Increased bushfire frequency and intensity impacting power supply continuity.
- Increased bushfire frequency and intensity causing reduced air quality leading to health impacts to community members.

# Combined

- In an extreme event where power is lost (outages from storms, bushfires, or from excess demand on the power grid), the interdependencies between healthcare systems and electrical and communications could fail and cause loss of life and injury
- In an evacuation scenario caused by flooding, extreme storms, or bushfires, those who are mentally ill, physically impaired, and those who have limited English proficiency are not evacuated
- Extreme events harming health and wellbeing and activation (safety) due to reduced walkability
- Extreme heat impacting health of vulnerable elderly and community members, especially during overnight extremes
- Extreme heat in areas without air conditioning causing greater demand on shared spaces that are cooled
- Impacts of increased incidence of violent crime during heatwave events on community

# 7.9.1 Recommendations for the planning framework

The site's exposure to increasing frequency and intensity of heat events, extreme rainfall and flooding, and storms have been identified as priority focus areas for adaptation and mitigation. A full list of adaption measures is provided in Section 6 of **Attachment 13**. The draft DCP includes a number of sustainability measures as recommended by the sustainability study.

# 7.10 Heritage

In response to the SSP Study Requirements and request to prepare a Planning Proposal, a Heritiage Impact Statement has been prepared by Urbis (Attachment 14). The study:

- investigated the history, physical evidence and significance of the features within the site;
- involved site inspection and documentary research; and
- was undertaken in accordance with the guidelines set out in the NSW Heritage Manual, the methodology described in 'The Conservation Plan' (J S Kerr 1996) and in the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter).

# 7.10.1 Significance Assessment of Waterloo South

Urbis assessed the following features of Waterloo South for their potential heritage significance to the local area:

- Single Storey Units for Aged Tenants and walk up flat buildings
- Dobell & Drysdale buildings
- Referential Terrace Infill Housing

None of the above elements within the Estate are considered to meet any of the criterion individually at a local and state level,

# 7.10.2 Assessment of potential impact on surrounding heritage items and conservations areas

The Heritage Impact Statement (refer to **Attachment 14**) also assessed the potential impact of the Planning Proposal on surrounding heritage items and conservation areas. This assessment included the following:

- Potts Hill to Waterloo Pressure Tunnel and Shafts (SHR ID 01630)
- Duke of Wellington Hotel at 291 George Street, Waterloo (Item 2085)
- Electricity Substation 174 at 336 George Street, Waterloo (Item 2086)
- Former Waterloo Pre-School at 225 Cope Street (Item I2077) and the adjoining Terrace Houses at 229-231
   Cope Street (Item 2078)
- The Congregational Church at 103-105 Botany Road, Waterloo (Item 2069)
- Waterloo Park & Oval (Item 2079)
- The Cauliflower Hotel (Item 2070) at 123 Botany Road
- Terrace House/Shop heritage item (Item 1345) at 189 Pitt Street, and the Former Somerset Hotel (Item 1346) at 191 Pitt Street
- Terrace Group 'Gordon Terrace' (Item 2087) at 1-25 John Street
- Our Lady of Mt Carmel Church and School Buildings (Item 2088) at 2-6 Kellick Street
- The following Heritage Conservation Areas (HCA) in proximity to Waterloo South:
  - Alexandria Park HCA
  - Waterloo HCA
  - Redfern Estate HCA.

The assessment undertaken by Urbis found that the proposed maximum heights have considered the placement of bulk and scale across Waterloo South to mitigate potential heritage impacts to surrounding heritage items and vicinity HCAs. Urbis notes that while measures have been taken to appropriately respond to the HCAs and provide a transition of scale where possible, they will not prevent the visual prominence of the new development. However, it is acknowledged that the proposed future development is replacing an existing urban environment, which has already deviated significantly from the more traditional two-storey scaled HCAs in the area.

# 7.10.3 Potential Historical (non-Aboriginal) Archaeological Items

Urbis has found that Waterloo South has the potential to contain historical (non-Aboriginal) archaeological material. This may include occupational deposits, including personal items, building remnants, wells and cesspits, post holes, features associated with industrial activity, and features associated with early agricultural use of the land. These remains may date from the 1850s onwards, with potential for material of a greater age to be present.

Based on the results of excavations undertaken within the Metro Quarter to date, this material is likely to be of local significance. However, it is acknowledged that based on the interim Summary report provided by AMBS, there remains potential (pending the completion of analysis and post-excavation reporting by AMBS) for comparable material within the Estate, if found intact, to be of State significance.

#### 7.10.4 Recommendations

Urbis have provided a number of recommendations to ensure heritage is appropriately managed at Waterloo South. These include a set of guiding heritage principles, which are:

- There are a number of listed heritage items and heritage conservation areas (HCAs) located within and in the vicinity of Waterloo South. It is understood that heritage items located within Waterloo South will not be redeveloped as part of the overall project, but will be maintained without change.
- Items and HCAs in the vicinity will need to be considered as part of any proposed redevelopment schemes. New development that adjoins a HCA or that is located adjacent to a heritage item must have regard for the scale and character of significant buildings/items, and should respond appropriately.
- Appropriate responses include allowing for a development buffer between new built form within Waterloo South and adjoining/adjacent HCAs/items, and/or providing a transition of scale between new built form existing adjoining development. Critical interface areas have been identified and should be responded to appropriately. Greater development opportunity in terms of scale and density therefore exists in the parts of Waterloo South which do not interface directly with listed items or HCAs.

The above heritage principles will inform future development at the site. The heritage principles have also informed the DCP provisions recommended by Urbis.

To ensure that an appropriate outcome is achieved for future development within the site, a number of heritage provisions are proposed in the draft Waterloo South DCP (refer to **Attachment 3**). These provisions are to ensure that heritage items and conservation areas within proximity to Waterloo South are protected and conserved. The proposed DCP provisions have been developed with reference to existing heritage DCP provisions under the Sydney DCP 2012 to ensure consistency across the Local Government Area (LGA).

An Interpretation Strategy is has also been prepared by Urbis and is included at Appendix A of **Attachment 14**. The Interpretation Strategy identifies historical themes and narratives to inform future interpretative devices. The strategy recommends that interpretation should focus on:

- Potential future ground plane pedestrian links and public areas, and relate to the heritage items within and within the vicinity of Waterloo South
- Provision of signage, built form, public art and multimedia interpretation in public areas interpreting the identified themes within this report.

Specific locations for interpretation are to be determined (subject to detailed interpretation design at later stages of potential redevelopment.

Further opportunities for interpretation are also identified within the Public Art Plan for Waterloo South (refer to **Attachment 29**) The Public Art Plan established a curatorial narrative for Waterloo South to allow curators to further drill down with future detailed public art plans, within individual developments. The concepts explored as part of the Public Art Plan for Waterloo South, include:

- Aboriginal Heart
- H20
- Nourish
- Thrive and Grow
- Compass and Calendar
- Making Waves/Watershed.

# 7.11 Aboriginal Cultural Heritage

In response to the SSP Study Requirements and request to prepare a Planning Proposal, an Aboriginal Cultural Heritage Study has been prepared by Urbis (**Attachment 15**). The study:

- Investigates the presence, or absence, of Aboriginal objects and/or places within and in close proximity to the subject area
- Provides recommendations for the implementation of the identified management strategies.

# 7.11.1 Assessment of Aboriginal Archeological Potential

The Aboriginal Cultural Heritage Study (refer to **Attachment 15**) has reviewed the relevant historical, archaeological and environmental information relevant to Waterloo South.

Urbis undertook statutory enagmenet on behalf of NSW Land and Housing Corporation to inform the development of the Aboriginal Cultural Heritage Study for Waterloo South. It is identified that Stage 2 of the consultation process will be commenced following approval of the planning proposal, at which project information will be presented to registered Aboriginal parties for comment.

The key findings of the assessment, include:

- There is a low to moderate degree of potential for shell midden and low to moderate potential of stone artefact deposits to be present within the subject area.
- The remaining part of the subject area has low to nil potential for Aboriginal archeological resources (refer to Table 7 in the Study for futher detail).
- The present, such archaelogical material is predicted to occur in the less distrurbed areas of the site, and in proximity to known resource areas, such as the Waterloo Swamp and Shea's Creek to the south/southwest of the subject area.

**Figure 48** maps the discrete area of archaeological potential and categorises the potential as low in Waterloo South. Section 8 in the Study provides a detailed assessment of the area identified as low potential.

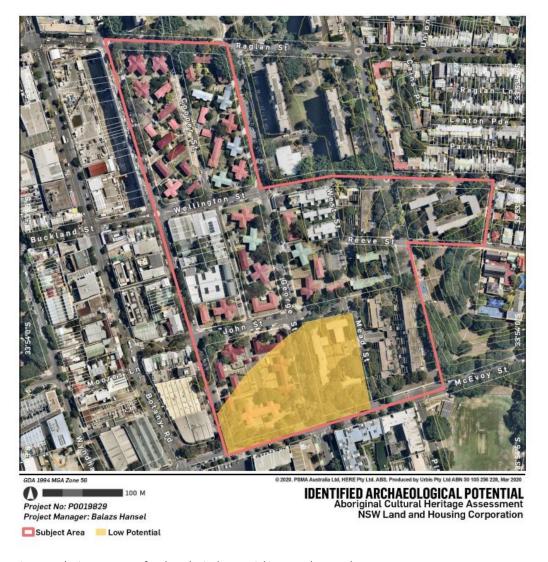


Figure 48 | Discrete area of archaeological potential in Waterloo South Source: Urbis

## 7.11.2 Potential Impacts

The Study identified no known or identified Aboriginal archaeological sites located within the subject area. As such, there are currently no identified impacts to any known or previously identified Aboriginal archaeological sites. In terms of potential impacts to unidentified Aboriginal archaeological sites.,

Physical works that may occur within the subject area in the future have the potential to impact on any Aboriginal archaeological material, sites or deposits that may be present within the area of identified archaeological potential shown in **Figure 48**.

The Study outlines that the identified potential impacts should be subject to further assessment as part of the development application.

#### 7.11.3 Recommendations

Based on the key findings of the assessment, the Aboriginal Cultural Heritage Study (refer to **Attachment 15**) has made the following recommendations:

• Further detailed investigation in the form of an Aboriginal Cultural Heritage Assessment should be undertaken in line with the Guide to Investigating, Assessment and Reporting Aboriginal Cultural Heritage in NSW (OEH, 2011) to assess the potential and significance of Aboriginal cultural heritage.

- As part of the Aboriginal Cultural Heritage process, an Archaeological Assessment should be carried out in line with the Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (DECCW, 2010) to inform the ACHA of Aboriginal archaeological resources of the subject area and resources and to provide strategies to conserve, mitigate, avoid and manage those resources.
- As part of the Aboriginal Cultural Heritage process, a comprehensive consultation procedure should be carried out in line with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW 2010) to inform the Aboriginal Cultural Heritage Assessment of the cultural knowledge of the registered Aboriginal people.
- Should any impact be proposed to Aboriginal cultural heritage, including archaeological salvage excavation, an application for an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the *National Park and Wildlife Act 1974* will be necessary to support the Development application under Part 4 of the *Environmental Planning and Assessment Act 1979*.

Further detailed investigations would be undertaken as part of a development application for areas with archaelogical potential. Any archaeological assessment undertaken as part of a future development application would be in accordance with existing provisions relating to archaeological assessments contained within Section 3.9.3 of the Sydney DCP 2012.

## 7.12 Urban Forest

In response to the SSP Study Requirements and request to prepare a Planning Proposal, an Urban Forest Study has been prepared by Robert Smart from Arterra Design Pty Ltd (**Attachment 16**). The study provides:

- a preliminary arboricultural assessment and report to be prepared to guide urban design to minimise impacts to trees.
- identifies the retention of existing and provision of new trees is to consider relevant factors such as soil, space, species, wind and services.
- demonstrates how the project addresses the CoS targets for Urban Forest such as size, age and species diversity and canopy coverage.
- Provides an indicative tree and landscape planting strategy.
- demonstrates compliance with Council policies, strategies, and master plans.

**Figure 49** shows the location of existing trees within the Estate and adjacent public domain and their retention value. Attachment 6.1 Schedule of Existing Trees in **Attachment 16** provides a comprehensive overview of these existing trees.

The assessment of existing trees relates to the area defined by Waterloo Estate. Within this area, a total of 940 trees were identified, inspected and assessed. This included 551 trees in Waterloo South. The trees are predominantly located in the public domain, the streets and the semi-public areas surrounding the residential towers. A large majority of the existing trees are of 'low' retention value trees due to their small size or because they have been significantly misshapen by overhead power line clearance pruning. If retained, they are unlikely to sufficiently recover their form and become worthwhile contributors to the urban forest.



Figure 49 | Existing trees and their relative positions and existing retention values

Source: Arterra Design Pty Ltd

#### 7.12.1 Recommendations

Based on Arterra's assessment of the Indicative Concept Proposal and consideration of relevant policies relating to urban forest, the following recommendations have been made by the Urban Forest Study (refer to **Attachment 15)**:

- The draft DCP requires a minimum of 50% of moderate and high value trees to be retained.
- Any existing trees identified and proposed to be retained are to be assessed and then protected per the requirements outlined in the Australian Standard 4970 Protection of Trees on Development Sites.
- Overhead power lines and communication cables are to be undergounded within all streets servicing the Precinct to remove the current conflict between overhead cabling and existing and proposed trees.
- A minimum of 20% projected canopy coverage shall be achieved for all private land (non-public) developments (see Figure 50 for definition of areas and calculations).
- A minimum of 50% projected canopy coverage shall be achieved for all streets and laneways, unless it can be clearly demonstrated that it is unreasonable to meet this requirement from an urban design outcome and only in a specific instance (see Figure 50).

- A minimum of 40% projected canopy coverage shall be achieved for all parks (see Figure 50).
- Tree species selection for the public domain are as per the proposed tree species list contained in Appendix
   6.2 of Attachment 16.
- When planted within a potentially constrained soil environment, all trees are to be planted in accordance with the soil volume requirements contained in Section 4.6.1 of **Attachment 16**.
- New street trees to be planted where possible a minimum of 800mm from the face of adjoining road kerbs or parking lanes with a distance of 1000-1200mm preferred.

The above recommendations, where appropriate, have informed the draft DCP for Waterloo South (refer to **Attachment 4**). More detailed recommendations which are not included in the draft DCP will be considered at future design and delivery stages.



Figure 50  $\mid$  Urban Forest calculation method for parks, streets and private land

Source: Arterra

# 7.13 Biodiversity and Urban Ecology

In response to the SSP Study Requirements and request to prepare a Planning Proposal, a Flora and Fauna Study has been prepared by Ecological Australia (Attachment 17).

#### Vegetation

The proposed works would involve the removal of approximately 2.62 ha of canopy vegetation from within the study area, comprising 2.08 ha of planted native species, over a 10 year staged development period. This would include *Ficus sp.* individuals, *Lophostemon confertus* (Brush Box), Eucalyptus/Corymbia/Angophora and *Melaleuca quinquenervia* (Broad-leafed Paperbark; also an endemic species). Approximately 0.46 ha of exotic species would be removed by the proposed works. The draft DCP includes a provision requiring that, for every tree removed, three are planted to replace it.

#### Threatened ecological communities

No threatened ecological communities (TECs) or communities of conservation significance or natural vegetation communities were identified within the study area during the site inspection, and based on the Likelihood of Occurrence assessment, are unlikely to occur (refer to Appendix A of **Attachment 17**).

#### Threatened flora

No threatened flora listed under the TSC Act or EPBC Act, or threatened flora referred to in the UESAP or SSROC CCB, were recorded during the site inspection, and based on the likelihood of occurrence assessment, are unlikely to occur (refer to Appendix A of **Attachment 17**).

#### Threatened fauna and fauna of local conservation significance

#### Pteropus poliocephalus (Grey-headed Flying Fox - GHFF)

The proposed works would remove 2.4 ha of potential foraging habitat for GHFF, including approximately 12 Ficus sp.individuals, 121 individuals of Eucalyptus/Corymbia/Angophora sp., 27 Lophostemon confertus (Brush Box) and 27 Melaleuca quinquenervia (Broad-leafed Paperbark) (a significant feed tree species; Eby and Law 2008).

An Assessment of Significance (AoS) under the TSC Act determined that the proposed works would not cause a significant impact to GHFF, and thus a Species Impact Statement is not required. Furthermore, a Significance Assessment under the EPBC Act determined that the proposed works would not cause a significant impact to GHFF, and thus referral to the Minister for Environment is not required (refer to Appendix D of **Attachment 17**).

## Potential habitat for 'small birds'

Small birds' (a general group under the UESAP), including Phylidonyris novaehollandiae (New Holland Honeyeater) and Pardalotus punctatus (Spotted Pardalote) have the potential to occur within the study area.

The proposed works would remove approximately 2.4 ha of marginal potential habitat for small birds as a general group, as identified under the UESAP. The Flora and Fauna Study prepared by EcoLogical Australia (refer to **Attachment 16**) highlights that the potential habitat within the study area is marginal as it only includes trees, and lacks ground and midstorey structure important for many small bird species.

The study area does not contain any specific roosting habitat for birds such as hollow-bearing trees. Furthermore, small birds as a general group are not listed under the TSC Act or EPBC Act, and therefore a formal assessment using an Assessment of Significance (TSC Act) or Significance Assessment (EPBC Act) would not be required.

## 7.13.1 Recommendations

Based on EcoLogical Australia's assessment of matters relating to biodiversity and urban ecology for Waterloo South, the following recommendations have been made for amendments to the planning framework:

Native streetscapes - a range of native (endemic and non-endemic) canopy tree species be retained where
possible and planted throughout the streetscape bordering and within the study area.

- Mid-storey and understorey planting In accordance with the City of Sydney's Urban Ecology Strategic Action Plan 2016, the overall objectives for the Estate and Metro Quarter combined, mid and understorey plantings using locally native indigenous plants comprise of a minimum:
  - 60% within the public domain; 70 species; and,
  - 40% within private property; 15 species.
- **Urban Green Infrastructure** Integrating types of urban green infrastructure, such as nest boxes and bee hotels, that can provide potential foraging and roosting habitat for native fauna species.

These recommendations will be considered at the relevant detailed design and delivery stages of the project.

#### **Construction Environmental Management Measures**

The Flora and Fauna Study has also identified draft mitigation measures to minimise impacts at the study area before, during and after the proposed works. Detailed measures will be finalised as part of any Construction Environmental Management Plan (CEMP) support a detailed development application.

# 7.14 Ecologically Sustainable Development (ESD)

In response to the SSP Study Requirements and request to prepare a Planning Proposal, an Ecologically Sustainable Development Study has been prepared by AECOM (**Attachment 18**). The study:

- Details how ESD principles as defined in clause 7(4) of Schedule 2 of the EP&A Regulation 2000 are incorporated, specifically identifying:
  - Performance benchmarks to allow sustainability to be considered in site planning, building design and in the construction and operational phases of the development to achieve best practice sustainability outcomes: and
  - Commitments to compliance with a nationally recognised rating system (e.g. Green Star Communities).
- Identifies options to achieve a minimum of 50% renewable energy for the Waterloo Estate by maximising on-site generation and renewable energy generated off-site;
- Identifies and recommends waste management strategies to achieve the NSW Government's Waste Avoidance and Resource Recovery Strategy 2007, complement the NSW Government's Waste Less, Recycle More initiatives, EPA waste and recycling programs, and City of Sydney Waste Management in New Developments policy.
- Includes measures to ensure effective operational waste management, and identifies building and precinct scale solutions;
- Has undertaken a sustainability assessment for the proposal, reflecting the directions outlined in the NSW Climate Change Policy Framework October 2016 and Eastern City District Plan to achieve net zero carbon emissions by 2050;
- Investigates options for achieving both net-zero buildings and a net-zero Estate Precinct; and
- Demonstrates compliance with BASIX and investigates opportunities to deliver beyond BASIX compliance.

The ESD principles have been thoroughly considered throughout the planning process and have directly informed the Sustainability Framework developed by AECOM for the site (refer to section 3.1.2 of **Attachment 18**). The project team have sought to align the design response against the Green Star Communities National Framework which broadly covers the following themes:

- Enhance liveability
- Create opportunities for economic prosperity
- Foster environmental responsibility
- Embrace design excellence

Demonstrate visionary leadership and strong governance

This is considered by the industry as one of the best practice frameworks for integration of sustainability in urban developments, and in this case, it has been applied to demonstrate a practical alignment of the design with the ESD principles as defined within the Regulation. As such, identified sustainability initiatives have been framed against the Green Star Communities National Framework.

To achieve achieving 50% renewable energy at Waterloo South, the following options are explored in **Attachment 18** (noting that on-site options alone are unlikely to succeed due to spatial constraints):

- Fully Integrated Micro grid
- Body Corporate and Base Building Green Power or Power Purchase Agreement for 100% of their load
- Property Title Covenants
- Single Building Owner (Build to Rent).

Further, the ESD Study has also explored the following options to achieve a net-zero precinct:

- Maximising Energy Efficiency
- Elimination of High Carbon Gas Consumption
- Zero emissions Transportation
- Waste to Energy.

Refer to Section 3.2 and 3.3 of Attachment 18 for a detailed description of the above options.

## 7.14.1 Recommendations

The ESD Study makes the following recommendations to be considered at the planning stage:

- 6 star Green Star Communities rating is achieved (based on Version 1.1 submission guidelines);
- 5 star Green Star Design & As Built rating (Design Review certified) is achieved for selected buildings (based on Version 1.2 submission guidelines);
- Commitment to beyond compliance target for BASIX Energy and Thermal Comfort;
- Commitment to beyond compliance target for BASIX Water;
- Detail water sensitive urban design considerations into the DCP;
- At development completion, the Estate is to source a minimum of 50% renewable energy by prioritising on site generation and procuring the remaining deficit through off site renewable energy;
- Engage with energy utilities to incentivise development peak shifting, reducing need for network augmentation;
- Consider NABERS for Apartment Buildings rating to be managed by the body corporate/strata at operational stage; and
- The sustainability framework is considered in preparing any future procurement decisions.

In consideration of the above, the Sustainability Framework will be used to guide future procurements for development of the site. A section in the draft DCP provided at **Attachment 3** incorporates provisions based on the above sustainability recommendations.

In addition to the above recommendations, a set of Management Alternatives/Initiatives and Design Considerations are also recommended for future development at the site to consider. Refer to **Attachment 18** for detail. An operational waste management strategy has also been developed and is described in **Section 7.8.3**.

# 7.15 Water Quality, Flooding and Stormwater

In response to the SSP Study Requirements and request to prepare a Planning Proposal, a Water Quality, Flooding and Stormwater Study has been prepared by AECOM (Attachment 19). The study:

- Provides a comprehensive baseline investigations for flooding and stormwater impacts at Waterloo South
- Recommendations to inform the proposed amendments to the planning framework.

The preliminary flood modelling of Waterloo South under existing conditions as well as for the post-development case has been undertaken using a modified version of the City of Sydney TUFLOW model for the Alexandra Canal Flood Study. Generally, the proposed development does not worsen the flood levels compared to existing conditions. Decreases in flood levels are also observed in the 100-year ARI at locations along Raglan Street, Wellington Street and Cope Street, primarily because of drainage improvements and provision of flood mitigation storage under public open spaces.

The study concludes that the flooding risks at Waterloo South can be mitigated using appropriate on-site detention, flood planning levels, building setbacks, improved drainage and sound emergency response frameworks. Water sensitive urban design (WSUD) measures can be readily implemented for water quality enhancement.

#### 7.15.1 Recommendations

To support the appropriate management for flooding and stormwater risks and ensure WSUD measures can be readily implemented for water quality enhancement, AECOM have made the following recommendations to be considered for Waterloo South.

#### **On-site Detention**

- Flood detention volume of 4,550 m<sup>3</sup> in the public domain.
- As per Sydney Water, combined OSD volume of 2,900 m₃ for all properties including (but not limited to):
  - commercial, industrial and special use (e.g. community, education, recreational) buildings or structures;
  - town houses, villas, home units or other strata subdivisions;
  - dual occupancy lots; and
  - sealed sporting facilities (e.g. tennis, basketball courts)

#### Water quality targets and WSUD

- Reduction of baseline annual pollutant load for litter and vegetation larger than 5mm by 90%;
- Reduction of baseline annual pollutant load for total suspended solids by 85%;
- Reduction of baseline annual pollutant load for total phosphorous by 65%; and
- Reduction of baseline annual pollutant load for total nitrogen by 45%.

# Flood planning levels

- Residential
  - Habitable rooms 100-year ARI flood level + 0.5 m or the PMF (whichever is the higher).
  - Non-habitable rooms (excluding below ground car parks) 100-year ARI flood level.
- Industrial or Commercial (Retail Floor Levels) 100-year ARI flood level with stepped up zone inside property for shelter in place evacuation for emergency response.
- Below ground car parks 100-year ARI flood level + 0.5 m or the PMF (whichever is the higher).

The proposed planning framework intends to carry forward existing provisions pertaining to stormwater and flooding outlined in Section 3 of the Sydney DCP 2012. The above recommendations are detailed and specific, and will be considered during the detailed design phase of the project but are not proposed to form part of the planning framework.

#### 7.16 Noise and Vibration and Pollution

In response to the SSP Study Requirements and request to prepare a Planning Proposal, a Noise and Vibration and Pollution Study has been prepared by SLR (**Attachment 20**). The study addresses relevant plans and policies covering noise, in particular 'Development Near Rail Corridors and Busy Roads – Interim Guideline', the Sydney DCP and the ADG.

#### 7.16.1 Noise

SLR has identified the following sources of noise that could potentially affect the Estate during construction and subsequent operation:

- project construction activities
- road traffic
- aircraft noise
- noise from mechanical equipment including Heating Ventilation Air Conditioning (HVAC), carpark ventilation fans, corridor ventilation systems and carpark entry gates, substation, fire pump and fire control equipment.

Noise monitoring and subsequent detailed modelling (accounting for factors such as road traffic volume flows, attenuation due to distance, ground and air absorption and shielding attenuation and meteorological conditions) as well as input from the project transport planners (Jacobs) and urban designers (Turner Studio) was undertaken to identify the likely nature of noise from these sources.

Results of the modelling indicate that compliance with the internal noise goals for residential receivers can be achieved throughout the daytime assessment period (07:00 am - 22:00 pm).

While compliance with internal noise goals for residential receivers during the night-time period (10:00 pm – 07:00 am) was achieved for nearly all locations. However, there are exceedances to predicted night-time noise levels along the McEvoy Street frontage (at 17m height) in the range of 65-67 dBA Leq,9hr.

#### 7.16.2 Vibration

There are currently no major existing vibration sources in the project area. Road traffic typically generates very low vibration levels which are well below applicable criteria. Where large discontinuities such as potholes, road plates or joins in the pavement occur, vibration levels can be perceived in close proximity to the road when heavy vehicles travel over them. Those vibration generating circumstances are a maintenance issue, rather than a design issue and are not assessed.

As details surrounding the proposed construction methodology, equipment and phasing are unknown, a detailed construction vibration assessment is not possible at this stage. However, it is recommended to mitigate any potential impacts using the recommended safe working distances for vibration intensive plant in accordance with Transport for NSW's Construction Noise Strategy (2018).

## 7.16.3 Recommendations

Based on the SLR's assessment of the Indicative Concept Proposal, the following recommendations have been made for the proposed planning framework.

To achieve compliance for residential receivers during the night-time period, buildings along McEvoy Street frontage should:

- limit the exposure of residential apartments to McEvoy Street frontage, through placing the core and fewer dwellings on this façade
- allow dwellings on this façade to have air enter from alternative frontages (such as the 'side' facades)
- allow for fresh air ventilation paths which can mitigate noise through either shielding (e.g., wintergardens) and/or acoustically attenuated openings.

The proposed massing of buildings along McEvoy Street have been formulated with consideration of the above measures, which have informed the built form and noise amenity provisions of the DCP. In addition to above, the Noise and Vibration Study (refer to **Attachment 20**) provides an example of how internal floor plates could potentially be planned to mitigate McEvoy street noise impacts.

In addition to above, measures have been identified by the Noise and Vibration Study (refer to **Attachment 20**), and with its implementation during the detailed design stage of future buildings, it is expected that the noise ingress requirements can be achieved.

It is noted that future Development Applications for new development in Waterloo South will continue to be assessed in accordance with the noise and vibration requirements contained within the following documents and guidelines:

- Controlling operational noise impacts of the development on surrounding land uses:
  - The Noise Policy for Industry (NPfl) (EPA, 2017)
- Controlling noise impacts for the amenity of future residents of the development:
  - The State Environment Planning Policy (Infrastructure) 2007 (Infrastructure SEPP)
  - The City of Sydney Development Control Plan (SDCP 2012)
  - AS 2107:2016 "Acoustics Recommended design sound levels and reverberation times for building interiors". For non-residential spaces.
- Controlling construction noise and vibration impacts of the development on surrounding land uses:
  - Interim Construction Noise Guideline (DECC 2009).
  - Assessing Vibration: A Technical Guideline dated February 2006 (DECCW, 2006)
  - BS 7385 Part 2-1993 Evaluation and measurement for vibration in buildings Part 2

Subsequent development applications in Waterloo South, particularly those fronting McEvoy Street, will be required to provide detailed assessments on final building configurations to ensure that noise, along with ventilation, requirements can be met. This may require assessment in line with the City of Sydney's draft "Alternative natural ventilation of apartments in noisy environments: Performance pathway guideline" (Sept 2018) or future equivalent where necessary.

# 7.17 Air Quality

In response to the SSP Study Requirements and request to prepare a Planning Proposal, an Air Quality Study has been prepared by SLR (Attachment 21).

The findings of the Air Quality Study identifies the primary source of air emissions in the area immediately surrounding the Waterloo South occurring from vehicles travelling along McEvoy Street and other local roads. The results of the cumulative impact assessment indicated that traffic on the surrounding road network has potential to result in slight exceedances of the ambient air quality criteria for  $PM_{10}$  and  $PM_{2.5}$  at locations within Waterloo South, particularly close to McEvoy Street. Exceedances of the 24 hour average  $PM_{10}$  and  $PM_{2.5}$ 

ambient air quality criteria are limited to days with high regional levels of particulates due to natural causes (bushfires/hazard reduction burns/dust storms).

Other emission sources in the local area that could potentially impact on air quality within Waterloo South were identified as service stations, automotive workshops and food outlets. A qualitative risk-based assessment is undertaken in the Air Quality Study (refer to **Attachment 21**), taking into account the nature and scale of these activities and distance from Waterloo South, it was concluded that they do not have any significant potential to adversely impact on air quality within Waterloo South. No further assessment of these activities is therefore considered to be warranted.

In addition to the above, emission sources within the Estate (e.g. food outlets) could potentially lead to amenity/nuisance impacts at surrounding sensitive receptors or at residential locations within the Waterloo South itself. To manage this potential impact, the Air Quality Study (refer to **Attachment 21**) recommends that further assessment of any potentially air polluting activities proposed within Waterloo South be carried out during the detailed design stage for any proposed development so that appropriate mitigation measures are adopted to reduce the risk of any exceedances of the relevant air quality criteria. This will be undertaken during the development application stage.

The recommended mitigation measures for air quality that have been adopted into the Indicative Concept Proposal and proposed amendments to the Sydney LEP 2012 and Sydney DCP 2012, include:

- Minimising the formation of urban canyons by having buildings of different heights interspersed.
- For buildings along McEvoy Street:
  - Locating no sensitive receptors on the first two floors
  - reducing the number of south facing apartments by designing building cores to the south
  - Provision of only corner apartments to the south
  - Provision of wintergardens to the south facade with fixed glazing to the south and operable windows to the side facade.

# 7.18 Light Spill

In response to the SSP Study Requirements and request to prepare a Planning Proposal, a Light Spill Study has been prepared by SLR (Attachment 22).

To understand the existing light spill conditions for Waterloo South, a baseline survey was conducted to establish current night-time lighting levels. The key findings from the survey, include:

- Significant night-time activity throughout neighbouring areas of the site, with it being a well-developed mixed suburban and commercial retail precinct. Lighting sources consist of street lights, floodlights, light emitted from commercial shops and from passing vehicles;
- In general, areas close to and directly under light fixtures (especially close to road intersections) have high illuminance; and
- A number of surveyed areas exceeded the applicable night-timer lighting level requirements of Australian Standard AS 4282-1997 Control of the Obtrusive Effect of Outdoor Lighting (herein "AS 4282-1997").

A 3D lighting simulation model was used to assess the additional light produced by future development within Waterloo South. The key findings from the model highlighted that:

- The resulting illuminance levels on the facades of surrounding buildings from the Waterloo South Development were seen to meet the requirements of AS 4282-1997.
- Any light spill from proposed development on to the facades of surrounding buildings can be managed to avoid unacceptable impacts because (among other things) lighting can be designed, installed and operated to comply with AS4282.

#### 7.18.1 Recommendations

To ensure that any potential light spill from the proposal complies with the relevant requirements, the following recommendations are outlined within the Light Spill Study (refer to **Attachment 22**).

- New and/or re-furbished or re-located street lights should be aimed downward as much as possible and be shielded to prevent light escaping above the horizontal plane
- When designing outdoor light installations, the general principles set out in AS4282-1997 Control of the Obtrusive Effect of Outdoor Lighting are considered during the lighting design phase
- Lights placed on the outside of the proposed development should be kept as low as practicable and correctly aimed to prevent light spilling on to areas where it is not needed
- Lights should be recessed into the awning where feasible
- Use full cut-off luminaires (all luminaires used in the model were full cut-off)
- Take advantage of smart placement and choice of lights to minimise light spill
- Vegetation, fences and other obstacles may provide additional shielding in the real world case and further reduce light spill. This may be relevant for properties located close to street lights or flood lighting
- Future development will be designed to comply with AS 4282-1997.

The above recommendations are detailed and specific and are therefore not proposed to be replicated in the draft Waterloo South DCP. The recommendations, in conjunction with other existing applicable policies will be considered during detailed design and delivery of the project.

## 7.19 Wind

In response to the SSP Study Requirements and request to prepare a Planning Proposal, a Pedestrian Wind Environment Assessment was carried out by Windtech Consultants for the existing and proposed conditions (as per the Indicative Concept proposal) at Waterloo South, provided at **Attachment 23**. The study:

- Provides an understanding of the existing wind conditions within and surrounding the site, using wind tunnel testing, that considers the wind climate of Sydney, local characteristics including topography and built form
- Provides an assessment of the wind conditions within and surrounding the site based on the Indicative Concept Proposal, using wind tunnel testing
- Identifies areas of wind sensitivity within and surrounding the site
- Provides recommendations, and tests their effectiveness using wind tunnel testing, to ensure spaces attain
  appropriate wind comfort and safety criteria relevant to their intended use that do not rely on the planting
  of new trees.

#### 7.19.1 Baseline Conditions

The study finds that a majority of the existing site and surrounding areas meet the wind safety criteria of a 24.0m/s annual gust, with the exception of point 119, located at the corner of Pitt Street and Wellington Street adjacent to the slab buildings and point 910, located across McEvoy Street from the site aligned with Pitt Street.

A majority of the existing site and surrounds also meets the wind comfort criteria for the walking criterion of a gust-equivalent mean wind-speed of 8m/s (within 5% exceedance). Areas that do not currently meet the walking criterion include between the Turunga and Matavia Towers/areas surrounding the slab buildings (due to funnelling and corner accelerations between the tall buildings), the Cooper Street/Raglan Street and Kellick Street/Gibson Street corners, and across McEvoy Street from the site aligned with Pitt Street.

## 7.19.2 Indicative Concept Proposal Conditions

Wind tunnel testing of the Indicative Concept Proposal indicates that the majority of locations within and surrounding the site will meet the safety wind criteria without any mitigation measures. Many locations also achieve the walking or standing wind comfort criteria, as relevant, without any mitigation measures. The scattered nature of the proposed towers and low-rise built form, in conjunction with the staggered alignment of laneways, assists in stagnating and disrupting strong wind flow through the site. The study identifies the following areas of wind sensitivity:

- The south-western corner of the site, at building corners near the new laneway, McEvoy Street and the south-western corner of Waterloo Common
- The south-eastern corner of the eastern portion of the site, at the corner of Kellick Street and Gibson Street
- Less critical areas of wind sensitivity include:
  - Some areas within the Village Green
  - Areas adjacent to some exposed building corners throughout the site.

#### 7.19.3 Recommendations

Wind mitigation measures were recommended, and their efficacy tested in the wind tunnel. Recommended mitigation measures are detailed in Section 7 of **Attachment 23** and include localised awnings, ground level chamfering of buildings, localised screening, and retention of existing trees (as proposed). With the inclusion of these recommendations, the Indicative Concept Proposal results in acceptable safety and pedestrian comfort wind conditions throughout and surrounding the site. Further, a majority of pedestrian footpaths, public areas and communal spaces within and around each building lot satisfy the standing comfort criteria, including most of the Village Green and sections of Waterloo Common. As detailed design progresses to the DA stage, some areas may utilise localised treatment options to achieve sitting criteria, if the use is appropriate.

The recommendations of the wind assessment have informed the draft DCP at **Attachment 3**. The DCP provisions describe the appropriate wind criteria and where they should be applied throughout Waterloo South, based on the results of the wind tunnel testing. For example, the standing criterion is to be applied to areas of the public domain that are used for casual interaction, including social corners and those parts of Waterloo Common and the Village Green that are used for informal gathering. Longer duration activities such as outdoor dining may demonstrate compliance with the sitting criterion at the future DA stage. The wind criteria proposed to apply to Waterloo South will supersede the general wind criteria under section 3.2.6 of the Sydney DCP 2012 and are the same criteria proposed to apply in Central Sydney under the CoS Central Sydney Planning Strategy, representing the CoS's most recent position on wind comfort.

## 7.20 Aeronautical

In response to the SSP Study Requirements and request to prepare a Planning Proposal, an Aeronautical Study has been prepared by Strategic Airspace (Attachment 24). The study:

- Provides an assessment of existing airspace restrictions related to Sydney Airport
- Advises on measures, if necessary, to ensure the precinct does not have an adverse impact on the operations of Sydney airport.

In preparing this study, Strategic Airspace has reviewed relevant background information to understand the existing and proposed future operations of Sydney (Kingsford Smith) airport. Waterloo South is located in a beneficial location in relation to Sydney airport, being located approximately 5.5km from the airport and approximately midway between the straight-in flight paths to the closest runways (07/25 and 16L/34R).

Based on this review, Waterloo South is:

- Subject to Obstacle Limitation Surface (OLS) height limits that step up from approximately 54.5m AHD at the southern-most part of Waterloo South to approximately 76m AHD at the northern-most part of Waterloo South (refer to Figure 51)
- Subject to the Procedures for Air Navigation Services Aircraft Operations (PANS OPS) height limit for the circling surface for category A and category B aircraft of 126.4m across the entire Waterloo South. (refer Figure 51)
- Subject to a radar terrain clearance chart height limit of 152.4m across the entire Waterloo South,
- Is not constrained by height constraints related to the approach, missed approach and departure procedures to and from Sydney airport runways.





Figure 51 | Sydney Airport OLS (left) PANS-OPS (right)

Source: Strategic Airspace

The key surface for aircraft safety is PANS OPS. As a consequence, the maximum height for permanent (eg buildings) and temporary (e.g. cranes) structures across the majority of Waterloo South is currently 126.4m AHD. The proposed maximum building heights of this Planning Proposal will restrict building to below this limit, with the taller buildings reaching up to 32 storeys (equivalent to 126.40m AHD). It is likely that the same height constraint would be applicable to cranes required for the construction of buildings, except where the applicant can demonstrate that taller cranes can be operated safety and within likely operational approval conditions. Strategic Airspace indicate that the maximum height to which cranes could be approved is likely 152.4m AHD. The relevant approval will be sought at the time of construction for when cranes will be in use.

Proposed buildings of 15 or more storeys in Waterloo South are anticipated to infringe the OLS to varying extents, ranging from 1.2 to 70+ metres. For any permanent or temporary structure that is proposed to exceed the OLS height limit, an application for airspace height approval would need to be made to and approved by the Commonwealth Department of Infrastructure, Regional Development & Cities (DIRDC) under the Airport (Protection of Airspace) Regulation. This application would need to be supported by a full aeronautical assessment and safety case, and referral would be made during the assessment process to Sydney Airport and other aviation stakeholders.

Based on the location of Waterloo South in relation to Sydney Airport, the aspect of the taller buildings in relation to runway alignments, the maximum proposed heights, the configuration of the buildings within the site and the nature of the precinct as comprising mixed-use developments, the following was identified by Strategic Airspace:

• Waterloo South is outside the zones defined in the Civil Aviation Safety Regulations (CASR MOS Part 139) as requiring special external lighting constraints — thus no adverse impact from this point of view

- The proposed maximum building heights of this Planning Proposal would not contribute any negative impact on aviation operations in terms of reflectivity
- Based on the mix of heights of the proposed buildings and their configuration within the site, taken
  together with the location of the site in relation to the runway, no wind turbulence that is measurable to a
  level where it would provide an adverse impact on aviation operations is anticipated.

## 7.21 Geotechnical and Contamination

In response to the SSP Study Requirements and request to prepare a Planning Proposal, AECOM have prepared a Geotechnical and Contamination Study (refer to **Attachment 25**). The study provides an assessment of the local soil, outlining its suitability for the proposed uses with respect to erosion, salinity and acid sulphate soils, and an assessment of the proposed land uses in accordance with State Environmental Planning Policy No 55 – Remediation of Land (SEPP 55).

#### 7.21.1 Geotechnical

Waterloo South is underlain by Quaternary Sediments (Qhd), described as medium to fine grained marine sand with podsols. The underlying bedrock is Ashfield Shale further underlain by Mittagong Formation and/or Hawkesbury Sandstone. The top of bedrock ranges from about RL+9.5 metres AHD in the north to about RL +6.5 metres AHD in the south.

The Acid Sulfate Soils (ASS) Map provided by the NSW Office of Environment and Heritage (OEH) shows no potential ASS occurrence in the Estate. However, the CoS LEP shows that privately owned lands in Waterloo South as Class 5 land. The LEP requires development consent for works on Class 5 land within 500 metres of Class 1, 2, 3 and 4 land that is below 5 metres Australian Height Datum (AHD), and where the groundwater is likely to be lowered below 1 metres AHD on the adjacent Class 1, 2, 3 and 4.

The Geotechnical and Contamination Study (refer to **Attachment 25**) confirms that basements should be practicable for future development in Waterloo South with conventional structural elements and normal construction techniques.

#### 7.21.2 Contamination

Based on the review of available historical information and available imagery, the following potential sources of contamination were identified, which may impact the condition of soil and groundwater within Waterloo South:

- Commercial and light industrial properties adjacent to the Waterloo South, including car repair centres (J&S
  Smash Repairs), car servicing and mechanical repairs (All Mechanic Repairs and Waterloo Automotive),
  panel beaters and/or spray painters, cleaning product manufacturers, printer machinery and supplies, sheet
  metal workers, woodworking machinery and battery manufacturers.
- Dry cleaning facilities including Waterloo Laundry.
- Service station including former Total Service Station.
- Use of fill material of unknown origin that could potentially contain or be impacted with contaminants.
- Historical use of asbestos containing material (ACM) within buildings and structures erected and demolished (without appropriate management) since the 1920s.
- Historical use of lead based paints on the interior and exterior of historical and current buildings.

#### 7.21.3 Recommendations

Aecom confirms that the ground conditions and likely contaminants encountered can be suitably managed during the DA phase and therefore the site is fit for its intended use, in accordance with SEPP 55 and the contaminated land management guidelines.

For geotechnical purposes, further investigations are recommended to be undertaken during the Development Application stage. Specifically, allowance for up to 15 cored boreholes to 20 m depth and five standpipe piezometers in five of these boreholes to allow for groundwater monitoring (should site-specific information not be available).

Based on the findings of the Geotechnical and Contamination Study (refer to **Attachment 25**) Aecom have made the following contamination recommendations for Waterloo South:

- A Stage 2 Contamination Assessment to characterise the nature and extent of potential soil and groundwater contamination targeting the potential areas of concern identified within Waterloo South (identified within Geotechnical and Contamination Study (refer to Attachment 25))
- Remediation and/or management of impacted areas may be required to mitigate risks associated with the identified impacts during the proposed construction works
- Preparation of a site-specific Health and Safety Plan (HASP) including consideration of environmental management.

Any remediation works which may be required as an outcome of the Stage 2 Contamination Assessment would be informed by the preparation of a Remediation Action Plan. Existing statutory requirements will be considered at the future detailed design stages of the project.

# 7.22 Economic Development, Local Retail and Services

In response to the SSP Study Requirements and request to prepare a Planning Proposal, Macroplan have prepared the Waterloo South Economic Development, Local Retail and Service Study (Attachment 27).

#### 7.22.1 Current retail trade area

The Study reports the that the current residential main trade area population is estimated at around 21,490 people (at mid-2019). The residential trade area is defined as the extent of the trade area or catchment that is served by any shopping centre or retail offer, shaped by the interplay of the relative attraction of the retail offer or centre, proximity and attractiveness of competitive retail precincts, available road network and public transport infrastructure and significant physical barriers.

Over the last three years, the trade area population has increased by around 3.1% per annum (equivalent to 620 people per annum). It is forecast to increase at an average annual rate of 3.3% to reach 37,140 by 2036. This represents an increase of 73% over the current population.

**Figure 52** shows the residential trade area and surrounding competition. It illustrates the extent of the residential trade area that could potentially be served by retail and ancillary non-retail facilities at Waterloo South.

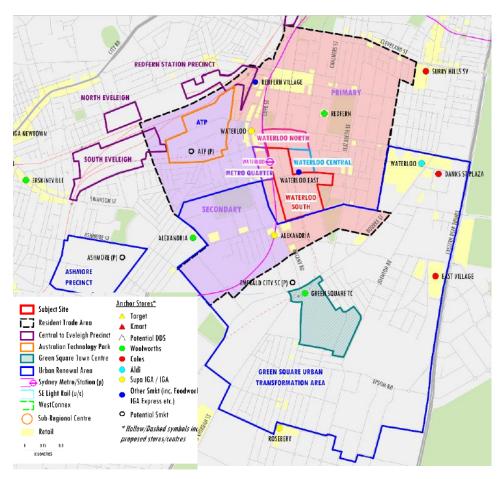


Figure 52 | Resident trade area and competition

Source: Macroplan

The customer profile and socio demographics include a mix of working professionals and families, students and social housing tenants. The worker trade area population is expected to grow from an estimated 17,940 persons at June 2019 to over 33,000 persons by 2036. The worker population has higher average incomes than other metropolitan areas, but lower average incomes than the Sydney CBD.

The Study looked at retail expenditure capacity of the study area population. The data draws on ABS Household Expenditure Surveys, national accounts data and Census data. The retail expenditure across the main trade area is estimated at \$352 million (at June 2019) and forecast to increase to \$679 million (\$2018/19) by 2036, at an average annual rate of 3.9% in real terms. This market growth is driven by population growth at 3.3% per annum and real per capita spending growth at 0.6% per annum.

## The key findings include:

- Estimated per capita retail expenditure across the main trade area is 11% above the average for metropolitan Sydney
- Estimated per capita expenditure on food is around 16% above average across the main trade area, and around 5% above average for non-food.
- Estimated per capita expenditure on F&B/food catering is 32% above average, which is reflective of the high proportion of 20-39 year olds, and relatively affluent nature of the population broadly across the main trade area. It is noted that the social housing tenants represents around 10-15% of the total population across the main trade area.
- Per capita spending by trade area residents is above the metropolitan Sydney average for all retail categories with the exception of fresh food (-0.5%) and general retail (-4.2%). Spending is highest above average for food catering (32.5%), packaged liquor and retail services (both 26.2%) and leisure (25.6%).

# 7.22.2 Retail floorspace demand

The Study undertook an analysis of the expected demand for retail floorspace generated by the catchment population. The retail floorspace demand would be served by existing and future retail facilities in the surrounding region. The analysis notes that not all of this demand would be, or should be, retained within Waterloo South, with much of the demand directed to higher order regional and sub-regional retail facilities across the surrounding region.

The Study estimates the amount of retail floorspace demand generated by residents in the defined main trade area over the period 2019 to 2036 (refer to Section 1.4). The method applies an average retail turnover density (RTD) to the estimated available retail sales volume by category. The RTD is the level of sales per sqm which retails typically achieve.

The data shows the main trade area population is estimated to generate some 55,020 sqm of retail floorspace demand as at 2019, and this demand is expected to increase to 93,289 sqm by 2036 which reflects population growth in the trade area over the period. This is underpinned by development within the Waterloo Precinct. The increase could be served by existing or new retail facilities.

The role of retail facilities at Waterloo South is to serve the food, grocery and convenience-oriented needs of the future residents of Waterloo South and local residents in surrounding areas. Therefore, retail facilities at Waterloo South have the potential to retain a moderate proportion of the fresh food, take-home liquor and grocery spending of local residents. These retail categories typically include convenience-orientated uses such as pharmacies, hairdressers, dry cleaners and optometrists. It is unlikely that Waterloo South will accommodate apparel and household goods retailers as they are often located at higher order centres.

## 7.22.3 Worker customer expenditure

Using NSW Transport Performance and Analytics (TPA) and forecast id, the Study identified that the worker population within the main trade area is estimated to reach over 33,000 by 2036. The primary sector worker population is projected to increase by 48% to around 14,000 and the secondary sector worker population is projected to increase by 128% to around 19,000 to 2036.

The worker population generally earns a higher average income than other areas across metropolitan Sydney, being around 8% above average and in the 14% above the average in the secondary sector.

# 7.22.4 Opportunities to support the Precinct

The Study highlights that the retail and ancillary non-retail offer at Waterloo South should meet the needs of local residents and workers; both existing and future. It outlines the role of the new Metro Station to facilitate the movement of people from across the broader region to the Precinct and the opportunity that presents to activate the Precinct in the evenings and on weekends.

The analysis looked at retail floorspace provision at other high density residential locations across metropolitan Sydney. Macleay Street at Potts Point accommodates around 10,000-15,000 sqm of retail/commercial GLA (excluding Kings Cross), Wentworth Point which has around 7,000 dwellings accommodates around 17,000 to 18,000 sqm of retail/commercial GLA and Wolli Creek contains around 20,000 sqm of retail/commercial GLA.

The potential scale and composition of retail and ancillary non-retail uses is detailed in **Figure 53**. A total of 17,900 sqm of retail, community/cultural GFA is proposed under the Waterloo South masterplan. This is based on there being 190 car-parking spaces dedicated to or adjoining the supermarket in Waterloo South.

Category	(sq.m)	Tenant examples
RETAIL		
Major tenants		
Supermarket and liquor	3,800	Woolworths, Coles, BWS, Liquorland
Total majors	3,800	
Mini-majors		
Fresh food	400	Flannerys, Taste Growers
Other	<u>400</u>	Chemist Warehouse, Officeworks
Total mini-majors	800	
Other - retail specialties		
Fresh food	800	Sonoma Bakery, Pryde Meats, Costis, local Chicken/Deli
Food catering/F&B	2,000	Betty's Burgers, Belle's Chicken, Pattisons, Pasta Pantry, Schnitz
Household	350	Local gifts, homewares
Leisure	450	Bookface, WH Smith, local news
General	750	Priceline, Fone King, Zap Variety, Kidstuff, Pearsons
Retail services	250	Local operators, Dresden Optics, Maurice DCs.
Total retail specialties	4,600	
Other - non-retail		
Banks, insurance, travel etc.	800	Big 4 bank/s, Bendigo, local travel, Yellow Brick Rd.
Allied/Community Health	1,200	My Health, Osana Medical, local ancillary
Total non-retail	2,000	
Total - retail	<u>11,200</u>	
COMMUNITY FACILITIES		
Child care	1,200	Big Fat Smile, Little Zacs, Only About Children
Library	500	Council
Community centre	800	Community centre, health, arts, child care
Activity centre	500	
Creative arts centre	750	
Creative spaces	150	
Satellite health	100	
Multi-purpose Indoor Rec (Youth)	1,200	
Total - Community	<u>5,200</u>	
CULTURAL		
Learning/Cultural/Wellbeing	1,500	
Total - Cultural	<u>1,500</u>	
TOTAL	17,900	

Figure 53 | Waterloo South potential scale and composition, retail and ancillary non-retail GFA by category Source: Macroplan

# 7.22.5 Recommendations

Based on the analysis, the following recommendations were made.

- A mix of traditional supermarkets/majors floorspace, mini-majors, specialty retail (including food catering/F&B floorspace) is recommended.
- An allocation of space to non-retail uses such as banks, travel allied and community health is also recommended. Community services floorspace will encompass 5,200 sqm will be dedicated to cultural learning and wellbeing.
- The likely trade area will be relatively contained, the surrounding higher order retail offer is very strong and will have significant bearing on the ultimate scale of mix of retail in Waterloo South.

- Specialty retail floorspace provided at Waterloo South should be delivered in the form of street/strip retail
  in nodes or precincts. It is recommended that the retail mix be convenience focused, with a strong F&B
  offer.
- Major non-food anchors like department stores or discount department stores are not recommended at the site, as the potential trade area served is relatively contained and the surrounding higher order retail offer is very strong.
- A key opportunity for Waterloo South is to provide employment opportunities, which could help drive commuter flows through Waterloo Metro Station, countering the expected outflow movement of residents travelling from Waterloo for work.

# 7.23 Feasibility and Economic Benefits

#### **Economic Benefits**

In response to the SSP Study Requirements and request to prepare a Planning Proposal, Macroplan have prepared the Waterloo South Economic Development, Local Retail and Service Study (**Attachment 27**) to estimate the economic benefit of the proposed renewal for Waterloo South.

In its redeveloped form, the Waterloo South will comprise a mix of service industries and residential living. At its full capacity, these service industries will employ approximately 470 people, generating an IVA (Industry Value-Add) of close to \$32m.

Other economic benefits associated with the renewal of Waterloo South, include:

- Increased expenditure: e.g. worker / visitor/ private expenditure, generated by the construction and ongoing operation of the precinct
- Investment stimulus: e.g. enhanced private investment, increased land values, encouragement of landlords to redevelop neglected or underutilised property for higher and better use
- Employment generation: i.e. identified employment impacts through construction and operational phases
  of the project; plus the induced employment that is attracted to the area through its improved amenity,
  helping to both attract and retain new workers
- Transport-related benefits: i.e. generated through a centralised population, reduced vehicle movements
  and enhanced commuter and community safety generated through 'activating' the station precinct,
  evening trading etc.

#### Feasibility considerations

To address feasibility considerations raised within the study requirements (**Attachment 28**), HillPDA has provided a Letter of Assurance.

HillPDA have confirmed that based on the input assumptions provided by the above experts, that the financial modelling results demonstrate a commercially viable development, achieving the overarching principles and objectives of LAHC to deliver increased community benefit and social housing in a prudent commercial manner.

#### 7.24 Public Art

In response to the SSP Study Requirements and request to prepare a Planning Proposal, a Public Art Study has been prepared by Milne & Stone (Attachment 29). The study:

- Establishes a framework to influence the public art process for Waterloo South and was developed in consultation with the City of Sydney, the City's Public Art Advisory Panel, key cultural stakeholders and the community.
- The Public Art Plan has also been informed through community and stakeholder consultation, responding
  to unique characteristics and stories of the area and aligns with the City of Sydney Guidelines and Policy for
  public art.

The Public Art Plan establishes public art principles and objectives, linking to themes that integrate with overall urban planning and placemaking strategies for Waterloo South and the wide Waterloo Estate. While the curatorial narrative for Waterloo South builds a thematic scaffolding for the precinct, to allow curators to further drill down with future detailed public art plans, within individual developments. This includes the preparation of artist's briefs and plans for artwork projects, leading onto the commissioning, design, fabrication, installation and maintenance of the artwork.

The concepts explored as part of the Public Art Plan for Waterloo South, include:

- Aboriginal Heart
- H20
- Nourish
- Thrive and Grow
- Compass and Calendar
- Making Waves/Watershed.

Site-specific opportunities have been identified within the Public Art Plan for Waterloo South. These opportunities are shown in **Figure 54** below.



Figure 54 | Public art opportunities
Source: Milne & Stonehouse and Sue Boaden

The Public Art Plan prepared by Milne and Stonehouse (refer to **Attachment 29**) is proposed to be implemented through the draft DCP, which requires a detailed public art plan to be prepared for each development and is to be consistent with the principles, objectives, opportunities, commissioning processes and curatorial narrative of the Public Art Plan for the Waterloo South.

# 8 Conclusion

This Planning Proposal has been prepared by LAHC in response to a Request to Prepare a Planning Proposal provided by the CoS, after a new approach to planning for the Waterloo Precinct was announced by DPIE. The proposal seeks to amend the *Sydney Local Environmental Plan 2012* to facilitate the renewal of Waterloo South. The proposal is the result of a collaborative approach that has involved the local community, the City of Sydney and various NSW Government agencies.

Waterloo South is the first stage in the renewal of the Waterloo Estate, which will be renewed in its entirety over approximately 20 years into a new integrated an inclusive mixed-tenure community, replacing and providing fit for purpose social (affordable rental) housing as well as private market housing in accordance with *Future Directions for Social Housing in NSW* and the subsequent Communities Plus initiative.

This Planning Proposal is justified for the following reasons:

- The proposal is consistent with the objects of the EP&A Act, in that it promotes the orderly and economic use and development of land.
- The proposal is consistent with the strategic planning framework for the site, including the Greater Sydney Region Plan, the Eastern City District Plan, the City of Sydney Local Strategic Planning Statement and Local Housing Strategy.
- The development concept which the Planning Proposal aims to facilitate:
  - Approximately 2.57 hectares of public open space representing 17.8% of the Estate (Gross Estate area existing roads) proposed to be dedicated to the City of Sydney Council, comprising:
    - o Village Green a 2.25 hectare park located next to the Waterloo Metro Station; and
    - Waterloo Common and adjacent 0.32 hectares located in the heart of the Waterloo South precinct.
    - The 2.57 hectares all fall within the Waterloo South Planning Proposal representing 32.3% of public open space (Gross Waterloo South area proposed roads)
  - Retention of 52% of existing high and moderate value trees (including existing fig trees) and the
    planting of three trees to replace each high and moderate value tree removed.
  - Coverage of 30% of Waterloo South by tree canopy.
  - Approximately 257,000 sqm of GFA on the LAHC land, comprising:
    - Approximately 239,100 sqm GFA of residential accommodation, providing for approximately
       3,048 dwellings (comprising a mix of market and social (affordable rental) housing dwellings);
    - o Approximately 11,200 sqm of GFA for commercial premises, including, but not limited to, supermarkets, shops, food & drink premises and health facilities; and
    - o Approximately 6,700 sqm of community facilities and early education and child care facilities.
  - A variety of building typologies ranging up to 32-storeys in height to create a more varied and interesting character, reflect the existing mix of built form in Waterloo Estate and to free up space at ground level for public domain, landscaping, canopy cover and socialisation.
- The proposal is consistent with the applicable SEPPs and Ministerial Directions.