# TELOPEA URBAN RENEWAL

#### **PUBLIC DOMAIN PLAN**







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#### **Acknowledgment of Country**

Our Sydney studio is located on Gadigal country. We acknowledge and respect the Gadigal people as the original custodians of the land and water upon which we work. We honour their Elders past, present and emerging whose knowledge and wisdom has, and will, ensure the continuation of cultures and traditional practices.

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#### Document Control Rev Date Approved By Description

**Draft For review** 

16.11.2022

04

## BURRAMATTAGAL

## DARUG COUNTRY



Telopea is located on Darug Country. We acknowledge and respect the Darug people as the original custodians of the land and water upon which we work. We honour their Elders past, present and emerging whose knowledge and wisdom has, and will, ensure the continuation of cultures and traditional practices.

For over 60,000 years, the area comprising present day Parramatta has been occupied by the Burramattagal people, a clan of the Darug, who first settled along the upper reaches of the Parramatta River. Burramattagal is thought to be derived from the Aboriginal word for 'place where the eels lie down' to breed (within the Parramatta River).

Telopea Urban Renewal Public Domain Plan [Draft for information]

### INTRODUCTION

The Telopea Concept Plan places the health and wellbeing of its community at its core. Creating a place which is open, inclusive and highly connected with a focus on green spaces and healthy living. The Telopea Public Domain Plan establishes a framework to guide future development applications and ensure delivery of the Telopea Concept Plan vision. The Telopea CPA Design Guidelines supports the Public Domain Plan, ensuring a robust design excellence process to deliver high-quality public domain outcomes.

#### **Purpose of this plan**

The Telopea Public Domain Plan will guide the design of streets, public and communal spaces within the revitalised Telopea precinct.

This Plan has been prepared by Hassell for use by;

- Plannners, urban designers and landscape architects
- Consultants engaged in the planning and design of public domain in Telopea
- Frasers Property Australia
- City of Parramatta Council including development assessment officers
- Community

#### **Aims of this Plan**

The Public Domain Plan aims to;

- Identify how the public domain will support the Connecting with Country Framework
- Support the implementation of a high-quality and consistent public

#### realm

- Identify a palette of materials, finishes and furnishings that are:
  - Robust, long-lasting and low maintenance
  - Sustainable
- Nominate an approach to the placement of urban elements
- Reinforce and enhance the existing charater of Telopea
- Establish a strategy for planting
- Create a framework for public art

#### **Scope of the Public Domain Plan**

The Plan will apply to the land associated with the Telopea CPA, identified in Figure 1.

In this Plan, the public domain is defined as all open spaces within the Telopea CPA including current publicly owned land, land proposed to be public open space or managed as public open space as well as privately owned communal open spaces and/or managed as well as communal

open spaces under private ownership.

Public domain areas include streetscapes, parks, gardens and civic spaces. Public domain principles extend to setbacks, forecourts, ground-floor and rooftop communal open spaces.

#### Application of the Public Domain Plan

The Telopea Public Domain Plan does not establish a fixed outcome for future project stages. Each development application is to demonstrate general consistency with this Plan.

Master plan or illustrative details shown within this Plan are indicative only and subject to detailed resolution by any relevant development applications.

## PROJECT BACKGROUND

**The Telopea Public Domain Plan supports a Concept Development Application** for the Telopea Masterplan and Stage 1A Development **Application, a State Significant Development** (SSD) submitted to the **Department of Planning** and Environment (DPE) pursuant to Part 4 of the **Environmental Planning** and Assessment Act 1979 (EP&A Act). It has been prepared by Hassell for **Frasers Property Australia** Pty Ltd (Frasers) on behalf of NSW Land and Housing Corporation.

#### **Project Background**

The Telopea CPA forms part of the Telopea Precinct Master Plan (February 2017), which was prepared by NSW Land and Housing Corporation (LAHC) and City of Parramatta Council to facilitate the rezoning of the Precinct in March 2017. The Master Plan seeks to revitalise the Telopea Precinct through the redevelopment of LAHC's social housing assets, as well as sites under private ownership, to deliver an integrated community with upgraded public domain and community facilities – and to capitalise on access to the new Parramatta Light Rail network.

The Telopea CPA is the land identified in Figure 1 and is currently owned by LAHC. The proposed redevelopment of the CPA is part of the NSW Government Communities Plus Program, which seeks to deliver new communities where social housing blends with private and affordable housing with good access to transport, employment, improved community facilities and open space. The Program seeks to leverage the expertise and capacity of the private and non-government sectors.

In December 2019, the NSW
Government announced that a
Frasers-led consortium, were awarded
the contract to redevelop the Telopea
CPA. The SSDA represents the first
step in the delivery of the planned
redevelopment of the Telopea CPA
and the Stage 1A works will provide
the first market housing development
on the site, as well as a new arrival
plaza for the Parramatta Light Rail.

The Concept Plan and Stage 1A
Project Application were publicly
exhibited by the DPE from 13 October
2021 until 9 November 2021. Since
then, the DPE has requested Frasers
respond to the feedback received
from the City of Parramatta Council,
NSW Government agencies, and

members of the public. This Public Domain Plan specifically responds to the feedback raised during the statutory public exhibition of the Concept Plan and Stage 1A Project Application, and should be read in conjunction with the Response to Submissions Report and accompanying appendices (Urbis, November 2022).

#### **Ownership Context**

Frasers has engaged in detailed discussions with landowners of the existing church and library sites within the Core Precinct. Acquisition of these sites has been assumed in the proposal described in this Public Domain Plan.

The acquisition of the church and library sites allows their facilities to be consolidated into the upper core community hub adjacent to the station. The Evans Road retail strip does not form part of the Concept Plan proposal, but the intent is to allow for its eventual consolidation into the renewed neighbourhood through future development (subject to landowner intent).

The Design Guidelines give consideration to the future development of isolated lots, setting the framework for them to develop in a manner consistent with the Concept Plan approach.

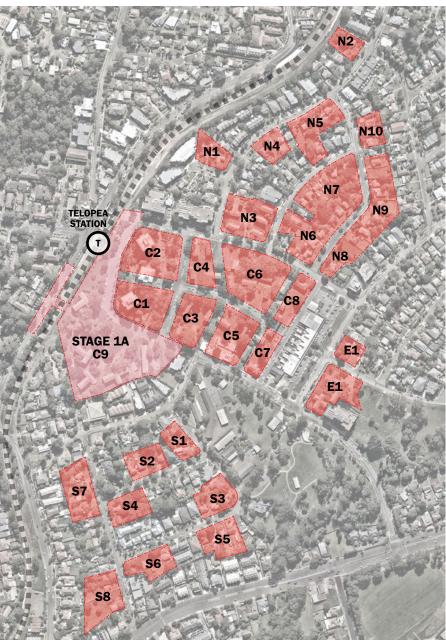
## THE PROPOSAL

#### **Site Description**

Telopea is located in the Parramatta Local Government Area (LGA). It is approximately 4km north-east of the Parramatta Central Business District (CBD), 6km south-west of Macquarie Park Strategic Centre, and 17km from Sydney CBD.

The Telopea CPA site is approximately 13.4 (ha) and comprises 99 individual allotments (refer figure 1). It currently accommodates 486 social housing dwellings, across a mix of single dwelling, townhouse, and 3-9 storey residential flat buildings. The project area also currently accommodates a range of existing community facilities including the Dundas Community Centre, Dundas Branch Library, Community Health Centre, Hope Connect Church, and Telopea Christian Centre.

The immediate surrounds comprise predominantly residential properties within an established landscape setting. The broader Precinct contains the Telopea Public School, a local centre known as the Waratah Shops, and two large Council parks known as Sturt Park and Acacia Park



he Site

Figure 1: Site Key Plan

## THIS DOCUMENT

The Telopea Public Domain Plan sets out objectives, guidelines and strategies for design of Telopea's public domain elements. There are six key elements, they include:



#### **Designing with Country**

"We commit to helping support the health and wellbeing of Country by valuing, respecting, and being guided by Aboriginal people, who know that if we care for Country – it will care for us."

NSW Government Architects 'Designing with Country'
Draft Framework



#### **Streetscapes**

Permeable and accessible

New streets, laneways and mews as well as upgraded streetscapes across the Telopea CPA.



#### **Open Spaces**

Telopea Commons: A collection of open spaces

The Telopea CPA open spaces combine to create the Telopea Commons, a biodiverse network of open spaces that restores the ecosystems.

Open spaces include both public areas owned by the City of Parramatta Council and under private ownership (both existing and proposed).

Communal open spaces include open spaces associated with residential development lots such as rooftops, ground floor residential gardens and landscaped setbacks.



#### **Planting**

Biodiverse and resilient

The Public Domain Plan nominates guidelines for the selection of trees and groundcovers in the public domain. Guidelines include species palette, sizes, and densities.

The Plan aligns with the City of Parramatta Street Tree Master Plan.

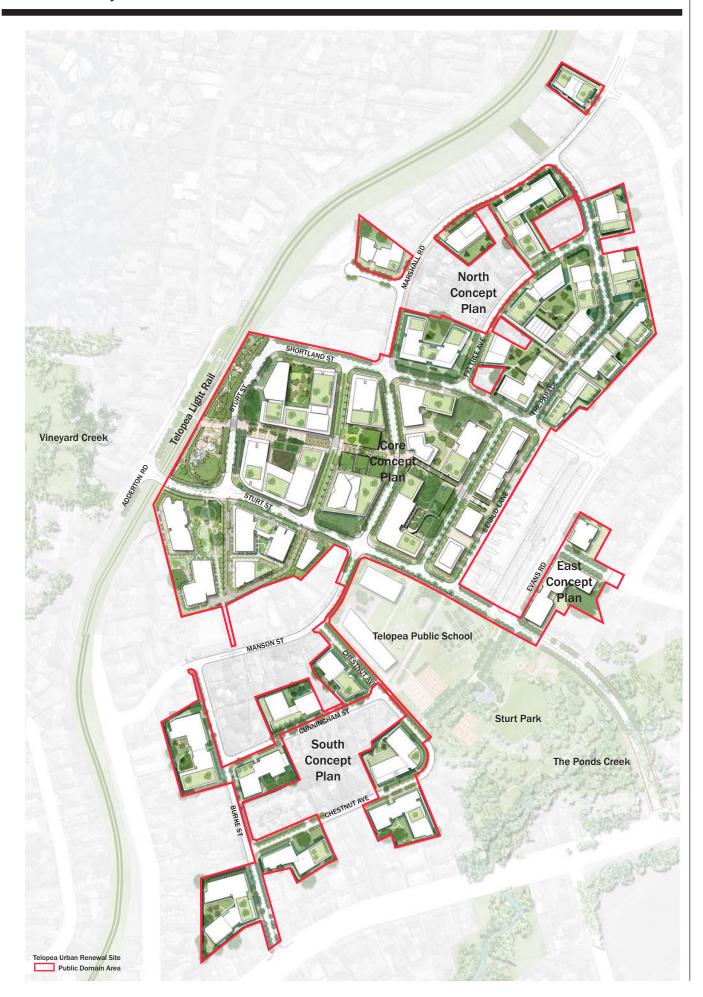


#### **Materiality**

Robust, durable and sustainable

The Public Domain Plan nominates guidelines for the selection of furniture, fixtures and finishes that aligns with project sustainability targets.

The range of street furniture located throughout Telopea may include; seats, bins, drinking fountains, bike hoops, planter boxes, bollards & pedestrian fences, shade structures & bus shelters, lighting and signage & wayfinding elements.



## STRATEGIC BACKGROUND

In developing the Telopea
Pubic Domain Plan it has
been critical to ensure
consistency with NSW
Government and City
of Parramatta Council
policies and strategic
priorities. The documents
identified here are seen as
the key strategy and policy
documents of relevance
ensuring alignment across
all levels of government.

#### **Greater Cities Commission**

- A Metropolis of Three Cities

This strategic plan was created under the Environmental Planning and Assessment Act, 1979 (EP&A Act). Metropolis of Three Cities is built on a vision of three cities. Parramatta is identified as the Central River City. One of the three cities of the metropolis.

- Central City District Plan

This District Plan was created under Environmental Planning and Assessment Act. Telopea is set within the the Central River City and Central City District. The Telopea CPA aligns with the future directions outlined for infrastructure, liveability, productivity and sustainability outlined in the Central City District Plan.

 Greater Parramatta and the Olympic Peninsula

This strategic plan created by the former

Greater Sydney Commission positions the Greater Parramatta and the Olympic Peninsula as Sydney's economic centre, taking in 'Quarter 2: Next Generation Living from Camellia to Carlingford' and Telopea.

#### Department of Planning and Environment

- Open Space

This policy created by DPE, outlines a 50 year vision for Greater Sydney's Open Space and Parklands. The four principles for open space outlined in the policy are embedded in the Telopea CPA including parks for people, connecting people to parks, ensuring green and vibrant spaces as well as caring for the environment.

#### New South Wales Government Architects

- Draft Connecting with Country

This Draft Policy is a framework for developing connections with Country to inform the planning, design, and delivery of built environment projects in NSW. It is intended to help project development teams – advocating ways they can respond to changes and new directions in planning policy relating to Aboriginal culture and heritage, as well as place-led design approaches.

- Sydney Green Grid

This policy document, created by GANSW, has identified a network of high-quality green space that connects town centres, public transport hubs, and major residential areas. Known as the Sydney Green Grid, it is an integral part of the Greater Sydney Region and District Plans. The Carlingford Rail Line, including Telopea Station is identified as a project opportunity cluster, within the Parramatta CBD and Urban Renewal Areas.

- Better Placed

This policy establishes a baseline of what is expected to achieve good design, across all projects in NSW. Better Placed establishes the value of good design, and identifies key concepts, good process, and objectives for good design outcomes.

- Greener Places

Greener Places is a green infrastructure policy produced by the Government Architect NSW to guide the planning, design and delivery of green Infrastructure in urban areas across NSW

- Draft Greener Places Design Guide

The Draft Greener Places Design Guide framework provides information on how to design, plan, and implement green infrastructure in urban areas throughout NSW. The draft Guide provides a consistent methodology to create a network of green infrastructure.

#### **City of Parramatta Council**

 City of Parramatta Environmental Sustainability Strategy

The Strategy puts in place the thinking, planning and actions to ensure that the City grows economically, while also creating vibrant, smart, resilient neighbourhoods, and great places to play. The Telopea CPA and Public Domain Plan aligns with the Strategy's four key themes connected and resilient communities, a city in nature, leading by example and built for the future.

- Parramatta Ways

Parramatta Ways is a strategic plan to improve walkability across Parramatta. Walkability is a measure of how pleasant and attractive an area is to walk. Internationally, it is recognised as one of the key aspects that make a city liveable.

 Parramatta Community Infrastructure Strategy

This Community Infrastructure Strategy

#### **Executive Summary**

Greater Sydney
Commission



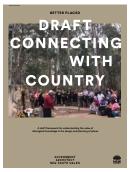














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**PARRAMATTA** 

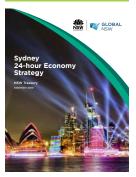












outlines City of Parramatta Council's long term direction for community infrastructure provision. The Strategy focuses on community infrastructure over which Council has primary responsibility, or has chosen to play a role in delivering, or seeks to advocate for on behalf of the community.

- Parramatta Bike Plan

This Bike Plan supports the City of Parramatta's Vision to be Sydney's Central City, sustainable, liveable, and productive. The Telopea CPA aligns with the principles set out in the Proposed Parramatta Cycling Network, providing on-road cycle routes on Shortland and Sturt Street, connecting with the broader precinct networks.

- Public Domain Guidelines

Parramatta's Public Domain Guidelines provide design strategies, technical guidelines and materials palettes for streets and public places in the City of Parramatta. The Telopea Public Domain Plan builds upon these guidelines ensure the co-ordination of materials while establishing a material palette that is responsive to the Telopea precinct.

- Parramatta DCP

The purpose of this DCP is to supplement the Parramatta LEP 2011 and provide more detailed provisions to guide development. Under Section 79C of the Environmental Planning and Assessment Act 1979, Council is required to take into consideration the relevant provisions of this DCP when determining an application for development.

#### Other references

- Parramatta Light Rail Tree Offset Strategy

The Parramatta Light Rail Tree Offset Strategy will see at least 3,500 new trees planted over four years in local streets, parks and reserves, as well as along the light rail corridor. Transport for NSW will continue its collaboration with City of Parramatta Council on the delivery of this strategy.

- Guide to Urban Cooling Strategies
- Sydney 24-hour Economy Strategy

## 3.

# COUNTRY COUNTRY

"Country" (capital C) has a specific and significant meaning for Aboriginal peoples. In the Aboriginal sense of the word, Country relates to the nation or cultural group and land that we belong to, yearn for, find healing from and will return to. However, Country means much more than land, it is our place of origin in cultural, spiritual and literal terms. It includes not only land but also skies and waters.

Country incorporates both the tangible and the intangible, for instance, all the knowledges and cultural practices associated with land. People are part of Country, and our identity is derived in a large way in relation to Country.

— Dr Danièle Hromek, Budawang/Yuin, Researcher and spatial designer, 2019 from the GA NSW, Connecting with Country Draft Framework



# UNDERSTANDING COUNTRY

**Sensing (listening to) Country - Start with Country** 



Telopea sits within Country of the Burramattagal people of the Dharug Nation. Burramattagal people have occupied Country around Parramatta River for over 60,000 years. The name Burramattagal illustrates the significance of Country's water stories, with the name thought to have come from the Dharug word for 'place where the eels lie down to breed'.

#### Developing an understanding of Country

The Telopea Public Domain Plan is guided by the principles established in the GA NSW, Connecting with Country Draft Framework.

The Plan embraces the Framework's vision to think differently, work differently and make decisions that prioritise Country.

As guided by the Framework, the Plan begins by developing an understanding of Country. This chapter of the Public Domain Plan outlines a brief history of the Burramattagal people. This summary should be seen as discussion points and entry points to the detailed design of the public domain.

Each stage within the Telopea CPA will develop a connection with Country that will inform the planning, design and delivery.

**Pre-contact history from 'Telopea** 

#### Connecting with Country Strategy', written by The Fulcrum Agency

Eels made up part of the traditional Burramattagal diet, along with other fish and local game and flora. To navigate the rivers, the Burramattagal fashioned stable, bark canoes often held a central small fire, built on a mound of soil, to cook up their fresh catch.

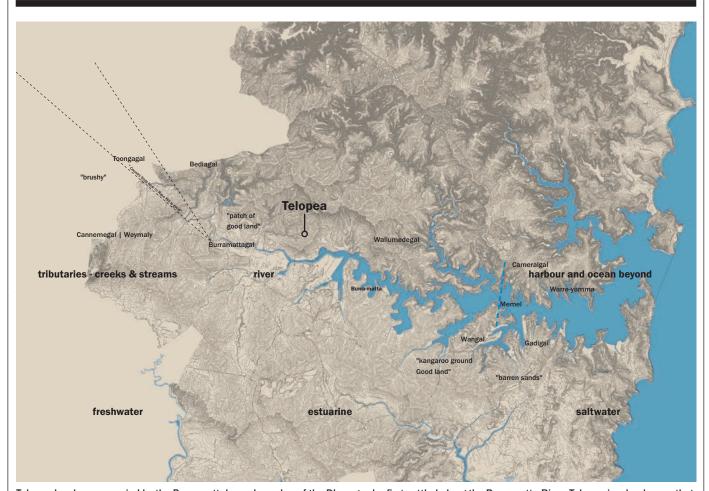
Mounting evidence from Bruce Pascoe (Dark Emu) and Bill Gammage (The Biggest Estate on Earth) indicates that pre-colonial and early colonial Indigenous Australians were active in the management and development of their Country and its resources. Pascoe and Gammage argue that fish traps, sophisticated fire management, seed production, trade and the construction of shelters were commonplace activities in pre-contact Australia. Burrmattagal would have likely engaged in much of this activity and trade with

neighbouring clans was common.
'Fire-stick farming', employed to burn vegetation to facilitate hunting and to change the composition of plant and animal species in the area, was also practiced by the Burramattagal people.

Soon after colonisation in 1788, Parramatta was developed as a farming settlement. This led to the immediate and tragic displacement of the Burramattagal people and their neighboring clans. Local Aboriginal groups organised a resistance against the colonists, most prominently, local warrior and Bidjigal man, Pemmulwuy.

#### Places of significance include;

- Galaringi and Vineyard Creek Reserves form part of the City of Parramatta Wildlife Protection Areas. They are home to a diverse range of native animal species such as fairy wrens, honeyeaters, tree frogs, sugar gliders, water dragons, skinks and owls.
- Burramatta artefacts can be found at Old Government House, and the mortar is made of shell grit from Middens.
- Third Settlement Reserve, Toongabbie is the site of the 1797 Battle of Parramatta when Aboriginal resistance leader Pemulwuy, a Bidjigal man, led an attack of 100 men on Toongabbie, challenging the garrison of redcoats to battle. Pemulwuy was shot seven times by redcoats after he threw a spear at a soldier.
- A section of Domain Creek has been rehabilitated to pre-contact conditions by the Western Sydney Aboriginal Landcare Group - in collaboration with the Parramatta Park Trust.



Telopea has been occupied by the Burramattal people, a clan of the Dharug, who first settled along the Parramatta River. Telopea is a landscape that has been shaped by water. It is bounded by Vineyard Creek in the west and Ponds Creek to the east.



Map illustrating places of significance within 5km radius of the Telopea CPA. Sourced from Fulcrum Agency 'Telopea Connecting with Country Strategy.'

- 1. Project Site
- 2. Galaringi Reserve
- 3. Vineyard Creek Reserve
- 4. Old Government House
- 5. Domain Creek

- 6. Third Settlement Reserve, Toongabbie
- 7. Creek System (Darling Mills, Blue Gum, Saw Mill)
- 8. Balaka Falls
- 9. Parramatta River

# DESIGNING WITH COUNTRY PROCESS

"Country is living, constantly changing, and evolving. Many different ecosystems exist across different realms of Country including both living and non-living elements. Country has purpose, operating at multiple scales from the cosmic to the molecular and everything in between."

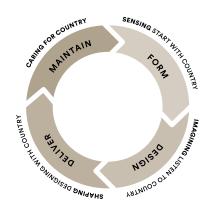


Diagram from GA NSW Draft Connecting with Country, illustrating project life cycles with an Aboriginal perspective

**GA NSW Draft Connecting with Country, Draft Framework** 

The Public Domain Plan aligns with Framework's mission that by valuing, respecting, and being guided by Aboriginal people, who know that if we care for Country – it will care for us.

This is achieved by thinking differently about Country, moving away from traditional approaches of prioritising people and their needs over nature and non-human uses.

This thinking is summarised in the Telopea Public Domain Plan's two key drivers:

- Repairing and reconnecting the ecosystem.
- Wrapped in landscape; a home in landscape.

#### **Site Specific Opportunities**

The 'Telopea Connecting with Country Strategy' prepared by the Fulcrum Agency identifies opportunities for deepening the project's connecting with Country response.

Listed below is a summary of the opportunities. These are seen as idea generators to assist in future engagement with Traditional Custodians when designing public open spaces.

#### 1. Landscape Narratives

Embedded pre and post contact Aboriginal history and culture into the open spaces. Design strategies to do this include;

- Seek Aboriginal knowledge of land management practices to inform the design approach to restoration of ecological systems.
- Talk with Aboriginal knowledgeholders to understand historical narratives of site to overlay on landscape plan. This narrative could inform species selection, hardscape materials, wayfinding and public

art.

 Seek intersections of Aboriginal and non-Aboriginal narratives to inform landscape.

#### 2. Caring for Country

Establish a long-term approach to care and maintenance of landscape within the Telopea CPA. Design approaches to do this include;

- Engage Aboriginal community groups for the cultivation and maintenance of community gardens.
- Engage Aboriginal contractors for maintenance of publicly accessible private open spaces.
- Seek Aboriginal stakeholder input on how to manage cultural practice spaces.
- Prioritise local materials and colour palettes in buildings and hard landscaping.
- Seek to reflect Burramattagal understanding of seasons.

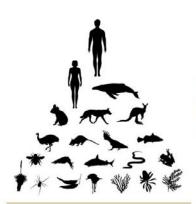




Diagram from Government Architects Draft Connecting with Country, adapted from German architect Steffen Lehmann, Eco v Ego diagram 2010 illustrating "human-led" design with 'Country-lead" design.

- Include Aboriginal stakeholders in species selection and landscape management to contribute to health and wellbeing of Country.
- Augment and contribute to City of Parramatta Council initiatives or develop Country specific studies of biodiversity, such as auditing, surveying and trap and trace programs.
- Consult with Traditional Custodians and Aboriginal Stakeholders to establish clear aims, performance criteria and metrics for the health and wellbeing of Country. Such aims might consider vegetation, biodiversity and riparian corridors and water health.

#### 3. Foreground Contemporary Aboriginal Culture in Public Spaces

Identify aspects of contemporary Aboriginal Culture that Traditional Custodians and other Aboriginal Stakeholders seek to foreground at Telopea. These might be quiet spaces for Yarning, facilities that promote walking Country or natural auditoriums for dance, music, and official ceremonies, such as Welcome to Country and Smoking Ceremonies.

Designers should engage with Traditional Custodians to;

- Seek ways of incorporating Aboriginal narratives understanding of Country.
- Embed design features that present Aboriginal culture as a living, thriving culture with enduring links to its past.
- Explore how contemporary and traditional culture can be expressed in the public spaces at Telopea. For example, this may include fire pits, Yarning Circles, dance grounds, Welcome to Country and/or Smoking Ceremony facilities.
- Identify opportunities for a dance circle or small auditorium and

stage.

- Leverge active and vibrant spaces for small cultural events.
- Investigate ways to incorporate walking on Country in to the design of Eyles Street Pedestrian Link.

#### 4. Aboriginal Art

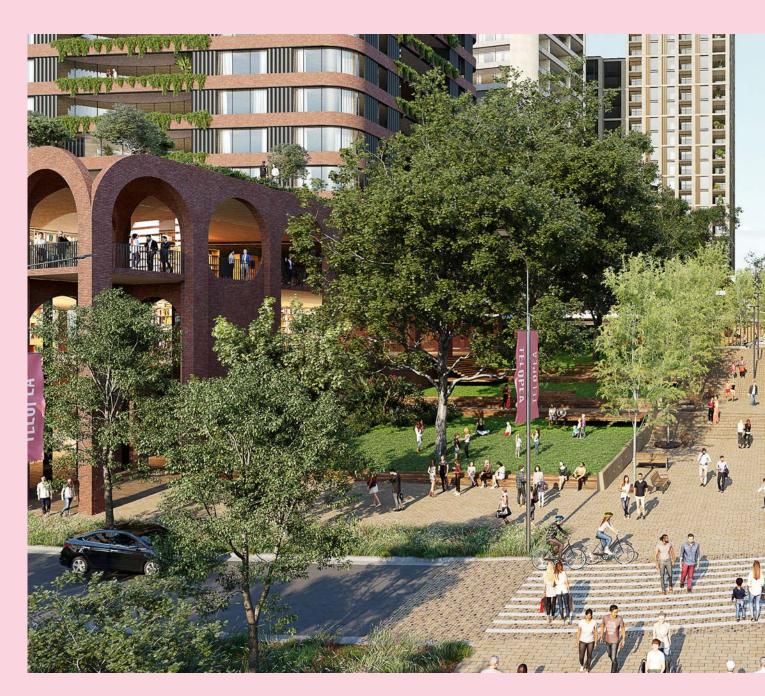
Aboriginal art offers an entry point into an engagement with and understanding of Aboriginal culture and knowledge. Pathways for the integration of public art include;

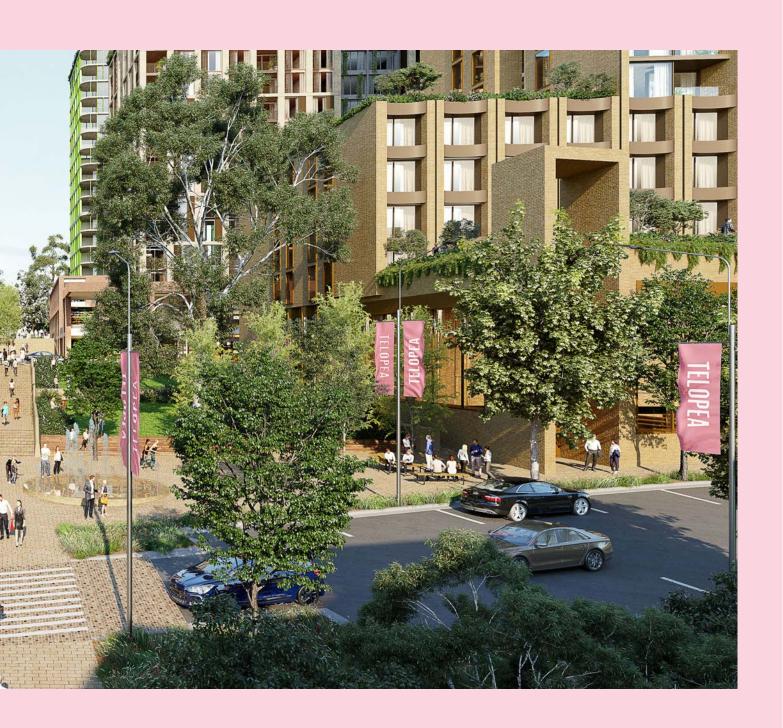
- Welcome and/or acknowledgement of Country incorporated into open spaces at entires into the precinct.
- Collaborate with Aboriginal Artists to identify opportunities to incoporate art into landscape
- Seek forms of expression based on site context

Future stages within the Telopea CPA will design with Country and demonstrate how these opportunities have been explored.

## 2.

# PUBLIC DOMAIN VISION





# REPAIRING AND RECONNECTING THE ECOSYSTEM

The Country led Concept
Plan approach aims to care
for Country by repairing
and reconnecting the flora
and fauna belonging to
the critically endangered
Sydney Blue Gum High
Forest and Alluvial
Woodland through new
streets and open spaces.

#### **Repairing and Reconnecting**

The design aims to repair and reconnect the highly fragmented ecosystem using green infrastructure initiatives to create a biodiversity corridor between existing wildlife protection areas of Vineyard Creek Reserve and Ponds Creek Reserve.

Biodiversity corridors are areas of vegetation that allow animals to

travel from one patch of native forest to another. A corridor provides shelter, food and protection from predators by imitating the structure and diversity of native vegetation. Fauna that would otherwise be isolated in one native forest patch, can utilise corridors to move between patches with relative ease and safety.

#### **Creating a Resilient Place**

The network of open spaces at Telopea have been strategically planned and designed to both improve biodiversity and create a climate resilient place with environmental, economic and social benefits.

The vision prioritises the provision of green infrastructure throughout the Concept Plan.

The design creates places for flora, fauna and people across green roofs, private and semi private gardens, public plazas, tree lined streets, parks, connections to creek corridors, sports and recreation facilities as

well as natural green spaces and community gardens.

Through the integrated design of green infrastructure elements we are able to enhance the urban micro climate, air quality and water quality while reducing flooding risk, ambient noise, CO<sup>2</sup> and urban heat island effect.

#### The Green Grid - Building for the Future

Drawing from the objectives set out in the 2017 'Sydney Green Grid: Spatial Framework and Project Opportunities' and the 'City of Parramatta Environmental Sustainability Strategy', the design has been strategically planned with each 'grid' in mind; the recreational, ecological, hydrological and agricultural.

Of particular significance is our approach to hydrology. The irrigation of open spaces is critical to ensuring parks remain healthy, lush and biodiverse - especially during drought and heat waves. However, in 2017 the



City of Parramatta contributed 150 megalitres to water consumption, predominantly in the irrigation to parks and green spaces.

The project will utilise grey-water reuse on site to irrigate the landscape spaces. This approach will enable the repaired and reconnected biodiversity corridor and green infrastructure to be resilient to the changing climate.

#### Repairing and Reconnecting the Ecosystem

Two ecological groups are found at the edges of Telopea, the critically endangered Sydney Blue Gum High Forest and the Alluvial Woodland. The creation of the Telopea biodiversity corridor seeks to repair and reconnect the vulnerable flora and fauna community.

Sydney Blue Gum High Forest (1) species are brought through the corridor such as the Sydney Blue Gum, Grey Ironbark and White Stringybark. Along Second Ponds Creek Alluvial Woodland (2) species are reintroduced into Sturt Park,

such as the Prickly-leaved tea tree, Turpentine and Rough-barked Apple.

Local endangered and threatened birds will be supported by the reinstated corridor, such as the Regent Honeyeater (3), Gang Gang Cockatoo (4), Swift Parrot (5) Barking Owl, Powerful Owl (6), Fork-Tailed swift and the Cattle Egret (7). Other vulnerable species will be supported including the Grey-headed Flying-fox (8), Eastern Flase Pipistrelle, Eastern Bentwing-Bat and Greater Broadnosed Bat.

In addition to creating habitat for local threatened flora and fauna - the Telopea Commons corridor will also focus on creating a thriving habitat for small birds (9) insects and pollinators. (10) This means creating places for small birds to find food, shelter and nesting trees.

+2450

Over 2450 new trees throughout the public domain and upgraded streetscapes will support and reconnect the local ecosystem for both flora and

49,000m<sup>2</sup>

Over 49,000m² of new tree canopy wil provide habitat connections as well as amelioration of the urban heat island effect.

# WRAPPED IN LANDSCAPE; A HOME FOR ALL

Through its renewal and revitalisation, Telopea will become a place of enhanced wellbeing: where natural systems are relinked and rehabilitated, where communities connect, where people have access to a range of activities, opportunities and pathways. Like its floral namesake, Telopea will become a place of beauty and balance.

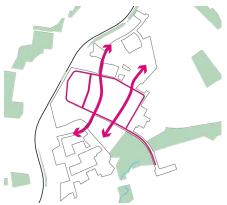
A driving concept of the Concept
Plan is the connection of remnant
bushland (the Vineyard and Second
Ponds Creek corridors) through
Telopea; a powerful green gesture,
focused on retained vegetation. From
Station Plaza, through the Eyles
Street Pedestrian Link and gardens
to Sturt Park, a safe home is provided
for some of Telopea's most vulnerable
wildlife, as well as a diversity of social
spaces and buildings for its growing
community.

The focus on ecological and social wellbeing is translated at multiple scales and locations across Telopea, including a greywater treatment system, a constellation of community spaces (a church, library, school, health centre and much more!) and a network of walkable streets and laneways.



#### A green place

Surrounding bushland corridors are connected by the generous Eyles Street Pedestrian Link - a collection of green spaces that support social and ecological systems. This thread of open space is referred to as the Telopea Commons.



#### An accessible place

Regional (light rail) and local (pedestrian/ cycle) connections run across flatter topographies, with local bus services looping the site, providing a well integrated and accessible transport system.

The urban design framework enhances the existing character of the site, linking the established forest and creek corridors with a high quality public open space network. The Eyles Street Pedestrian Link is activated by three new public places - Telopea Plaza, Community Courtyard, and The Gardens. Trees are retained throughout and create green moments within the urban landscape.



#### An integrated place

By considering an expanded site (including the existing church, library, school), greater community benefit can be delivered for Telopea's new and established residents.



#### A sustainable place

Streets and spaces are the foundation for a neighbourhood-wide greywater system, with recycled water collected and used to irrigate landscape across the Telopea neighbourhood.



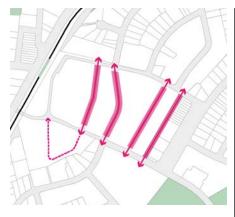
#### A social place

Thoughtfully considered public spaces, buildings and programs, distributed throughout the entire site, support a cohesive but diverse community.

## NURTURING A RESILIENT COMMUNITY

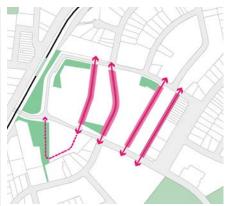
Telopea's Core Precinct has been configured with social and ecological resilience at the forefront. New neighbourhood parks are created around stands of existing Eucalypts, defining where new building clusters are located. Cross-streets and laneways stitch the centre into surrounding neighbourhoods.

Through the middle of the Core
Precinct, the steep hillside is
navigated by a stepped and
staggered pedestrian link. Activated
by a sequence of community uses
and spaces, this link provides an
accessible route between the light rail
station, a revitalised Sturt Park and
the Ponds Creek Corridor.



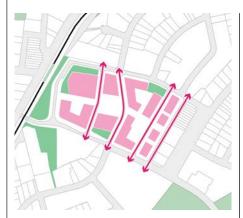
#### **Local linkages**

New streets and laneways, running along flatter topographies, stitch the Telopea's Core Precinct into surrounding residential areas - creating a sense of connectivity and cohesion between new and existing residential areas.



#### **Green wedges**

Public parks are created around stands of existing trees to create a green and welcoming edge to Telopea's Core Precinct, and providing neighbourhood-scale spaces for a diverse community to enjoy together.



#### **Neighbourhood blocks**

Clusters of residential buildings are located around these green spaces, activating surrounding streets and public spaces and creating clusters of 3-4 residential buildings.



#### One community space

A stepped sequence of public spaces run along the Eyles Street Pedestrian Link, connecting the community to the hill-top transport plaza and containing stairs, ramps and lifts to ensure an accessible and enjoyable journey for all.



#### **Many special moments**

At every turn, on every level, in every space ... a journey of delight and engagement unfolds along this central spine, with a range of different community spaces and uses such as garden plots, a library and church.



## STREETSCAPES



Telopea Urban Renewal Public Domain Plan [Draft for information]

### **DESIGN APPROACH**

Telopea's streets are where the daily life of the community plays out. The Public Domain Plan vision for a resilient, walkable precinct is achieved through the delivery of new streets and the retrofitting of existing streets — transforming them into connected, resilient and active open spaces.

This chapter of Public Domain Plan outlines the master plan vision and principles for new and retrofitted streetscapes within the Telopea CPA.

The Public Domain Plan prioritises creating a connected, resilient and active streetscape network.

#### Connected

The proposed street network recognises the CPA's sloping topography and the associated accessibility challenges.

The Plan prioritises pedestrian and cycle connections on the flatter north-south streets. These networks stitch Telopea's Core Precinct into the surrounding precincts, and are characterised by their generous footpaths, tree-lined verges and biodiverse groundcovers.

The pedestrian and cycle accessibility of Telopea's existing east-west streets is improved through widened footpaths, provision of regular rest stops, new bus stops, landscape and

cycleways.

Eyles Street Pedestrian Link is a pedestrian street designed to compliment the existing parallel roads of Sturt and Shortland Street. It is designed for comfortable and accessible pedestrian connection with regular rest stops through a variety of high-amenity open spaces. Refer to 'Open Space Framework' for details.

#### **Green infrastructure**

New and retrofitted streets within the Telopea CPA will function as public spaces that support a thriving and resilient ecological and hydrological system.

This is achieved by delivering on green instrasrutcture targets, aligned with those set out in NSW Government Architect's Greater Sydney Green Grid and Greener Places Design Guide.

The streetscapes across the Precinct contribute to the sense of place by planting species native to the locally-

occurring Blue Gum High Forest.

The Telopea CPA streetscapes are essential green infrastructure assets, enabling the Concept Plan to deliver on the NSW Government Architect's Greater Sydney Green Grid target of providing greater than 25 per cent tree canopy cover in urban residential areas (medium to high-density). This will be achieved by providing minimum 40 percent canopy cover to streets and open spaces within 20 years.

Streetscapes will act as biodiversity corridors, creating habitat connection between Vineyard Creek Reserve and Ponds Creek Reserve.

#### Scope of streetscape works

New streets, laneways and mews in Telopea's Core Precinct include;

- Marshall Street extension
- Fig Tree Avenue extension
- Wade Lane
- Mews

Streetscapes retrofitted to deliver on the project vision include:

- Sturt Street
- Shortland Street
- Benaud Lane
- Marshall Road
- Fig Tree Avenue
- The Parade
- Chestnut Avenue
- Burke Street
- Cunningham Street

# PROPOSED STREETS

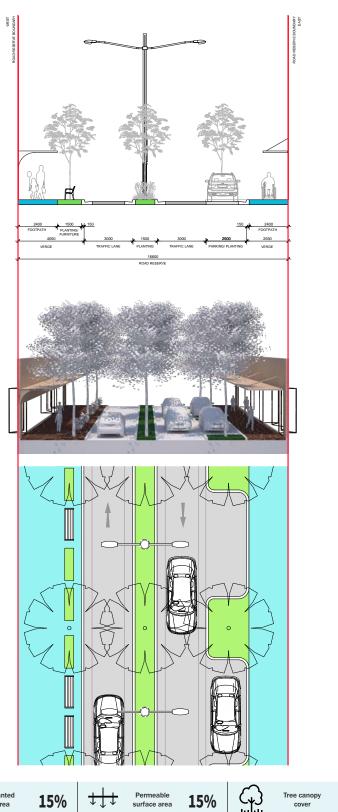
#### **Wade Lane**

A bustling streetscape connecting passers-by to Telopea's community amenities. The human-scaled lane is a place where you will find residents, commuters, shoppers and visitors.

#### **Key elements**

- → Wade Lane is a comfortable street. Pedestrians are sheltered by connected tree canopies and awnings - setout to avoid conflict with one-another.
- → Conveniently positioned street furniture on the west offers pause points for pedestrians adjacent to retail.
- → On-street parking to the east facilitates convenient access to adjacent community amenities such as library, church, residential aged-care and independent living units. Especially important for the mobility challenged.
- → A central green spine creates a 'green ceiling' to create an intimate, human-scaled street for pedestrian amenity.
- → Paved pedestrian crossing at Eyles Street Pedestrian Link (not raised).





Typical section design targets (subject to detailed road design).

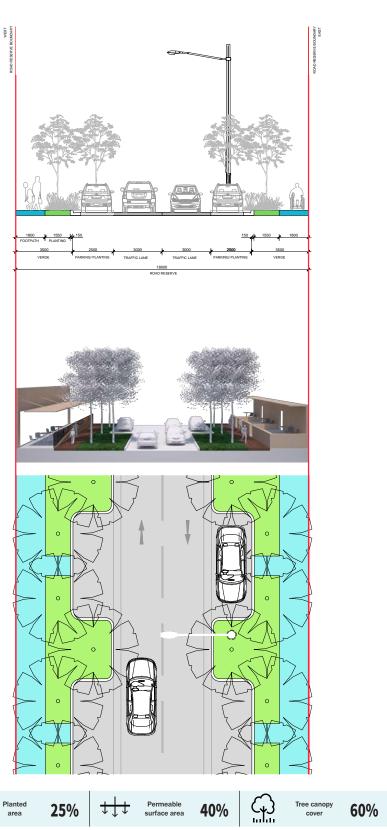
#### **Marshall Street**

The extension of Marshall Street is an important neighbourhood link, creating a new connection from southern Manson Street to northern Marshall Street. The streetscape echoes the character of the adjoining streets.

#### **Key attributes**

- → Street verges are designed for comfortable, walkable and safe pedestrian connectivity.
- → On-street vehicular parking and driveway access is balanced with regular street trees and landscaped blisters between sets of parking bays for a positive environmental outcome.
- → Street services, such as light poles are positioned to align adjoining street designs.
- → Paved pedestrian crossing at Eyles Street Pedestrian Link (not raised).
- → Permeable paving to parking bays.





Typical section design targets (subject to detailed road design).

# PROPOSED STREETS

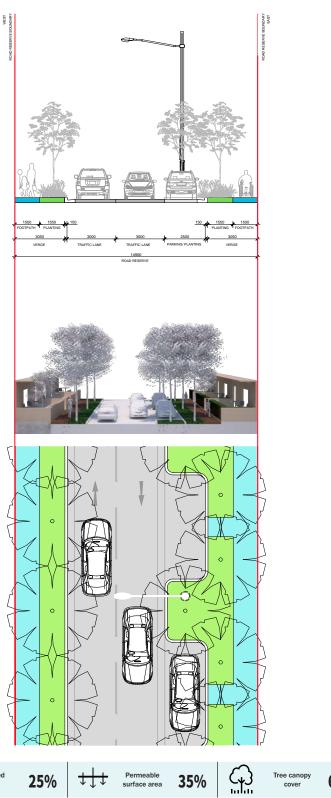
#### **Fig Tree Avenue**

Fig Tree Avenue is a local neighbourhood link, servicing adjacent residential dwellings while providing an informal connection to Telopea Public School and Sturt Park.

#### **Key attributes**

- → Street verges are designed for comfortable, walkable and safe pedestrian connectivity.
- → On-street vehicular parking and driveway access is positioned to the west, allowing for on-street parking to the east.
- → For continuous street tree canopy, trees are set both within the verge and between each parking bay.
- → Permeable paving to parking bays.





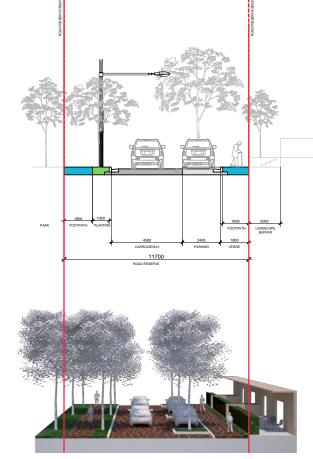
Typical section design targets (subject to detailed road design).

#### **Mews street**

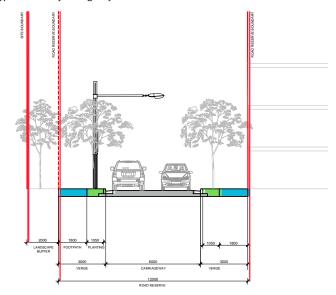
The mews make neighbourhood laneway connections, allowing for low-speed vehicle movements, parking for residential visitors, access to car park and lobby entries.

#### **Key elements**

- → A combination of one-way and two-way carriageways are configured to allow for vehicle access as required while prioritising pedestrian circulation and open space.
- → Street verges are designed for comfortable, walkable and safe pedestrian connectivity.
- → On-street vehicular parking and driveway access is balanced with regular street trees and landscaped blisters between sets of parking bays for a positive environmental outcome.
- → Permeable paving to carriageway surface, parking bays and footpath paving.



Mews Type A - One-way carriageway



Mews Type B - Two-way carriageway



Typical section design targets (subject to detailed road design).



## RETROFITED STREETS

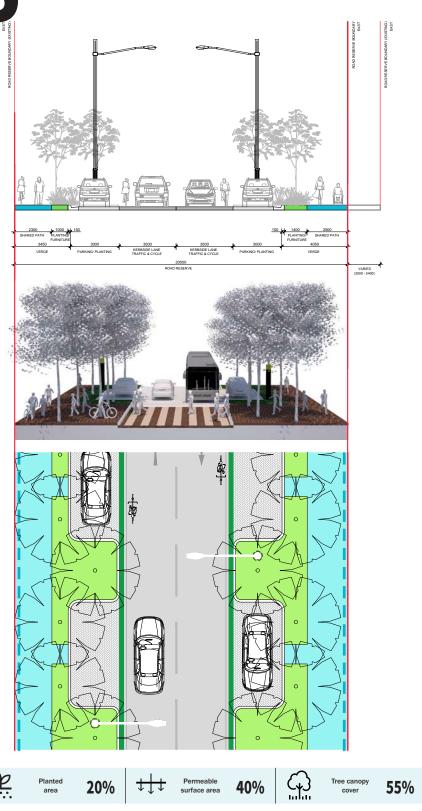
#### **Sturt Street**

Sturt Street directly links Telopea Light Rail Station with Telopea Public School and Sturt Park. The existing street is retrofitted to balance vehicular movement with the movement needs of pedestrians and cylists to create a safe, green and comfortable streetscape.

#### **Key elements**

- → Pedestrians are prioritised for increased safety and improved journey experience, achieved by reducing carriageway width and increasing footpaths.
- → Lanes and parking are designed to accommodate buses, taxis, kiss & ride and ride share.
- → Landscaped verges are prioritised to deliver connected tree canopies and shade.
- → Cycleway amenities include on-road shared cycleway, shared footpaths Telopea lightrail plaza for fast-moving traffic, shared footpaths and a shared zone at Telopea Station Plaza.
- → Where possible, on-street parking has been provided with permeable paving.
- → Existing bus stops are upgraded.
- → Permeable paving to parking bays.





Typical section design targets (subject to detailed road design).

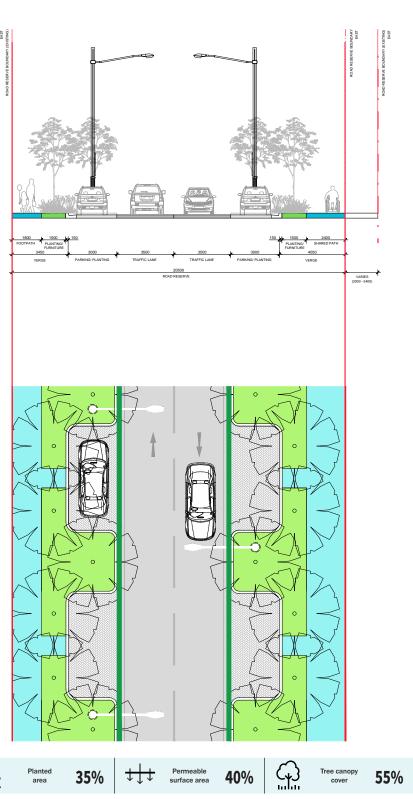
#### **Shortland Street**

Shortland Street directly links Telopea Light Rail Station with the Evans Road shops. The existing streets are retrofitted to balance vehicular movement with the movement needs of pedestrians and cylists to create a safe, green and comfortable streetscape.

#### **Key elements**

- → Pedestrians are prioritised for increased safety and improved journey experience and public domain increased by reducing carriageway to the east.
- → Carriageways and parking designed at dimensions suitable for buses, taxis, kiss & ride and ride share.
- → Generous street tree planting along verges for connected canopies and shade.
- → Telopea light-rail plaza a shared space for pedestrians and cyclists.
- → Where the existing carriageway allows, onstreet parking has been provided.
- → Upgrade to existing bus stops.
- → On-road shared cycleway.
- → Permeable paving to parking bays.





Typical section design targets (subject to detailed road design).

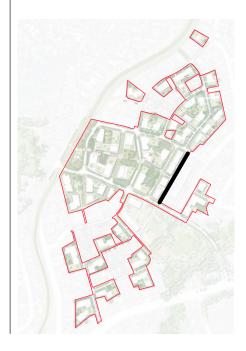
# RETROFITED STREETS

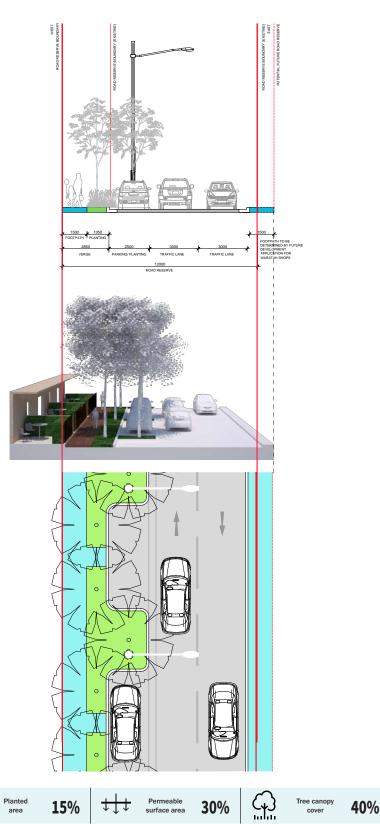
#### **Benaud Lane**

An existing laneway, Benaud Place is re-imagined as a complementary pair to Fig Tree Avenue. The revitalised lane will be a neighbourhood street providing convenient access into adjacent dwellings and act as a local pedestrian connector.

#### **Key elements**

- → Street verges are designed for comfortable, walkable and safe pedestrian connectivity.
- → A functional street providing direct access into adjacent dwellings.
- Tree canopy is maximised by layering trees in the verge and between each on-street parking bay.
- → Opportunity to upgrade eastern verge in potential future development.
- → Paved pedestrian crossing at Eyles Street Pedestrian Link (not raised).
- → Permeable paving to parking bays.





Typical section design targets (subject to detailed road design).

#### **North Precinct**

Telopea's existing streets in the North Precinct are revitalised adjacent to development lots.

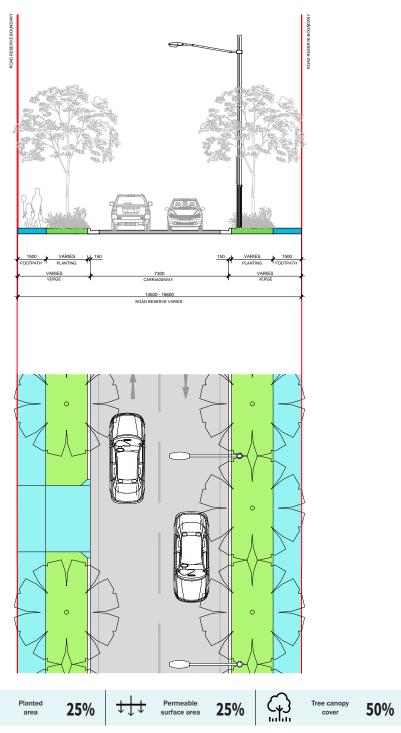
Trees and groundcover planting, consistent with the City of Parramatta Council Street Tree Guide are planted in verges to support local biodiversity while ameliorating the urban heat island effect.

Future developments may explore reallocating overhead services below ground to increase opportunities for tree canopy cover.

#### **Key elements**

- → New 1.5m footpaths adjacent road reserve boundary.
- → Planted verges of street trees and groundcovers.
- ightarrow Existing kerb and carriageways retained.





Typical section design targets (subject to detailed road design).

## RETROFITED STREETS

#### **South Precinct**

Telopea's existing streets in the South Precinct are revitalised adjacent to development lots.

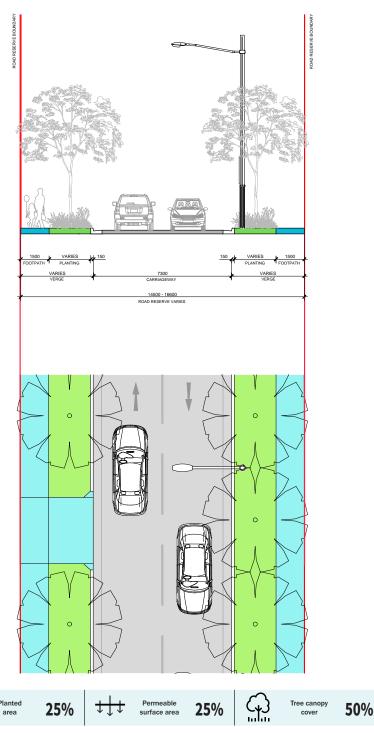
Trees and groundcover planting, consistent with the City of Parramatta Council Street Tree Guide are planted in verges to support local biodiversity while ameliorating the urban heat island effect.

Future developments may explore reallocating overhead services below ground to increase opportunities for tree canopy cover.

#### Key elements

- → New 1.5m footpaths adjacent road reserve boundary.
- → Planted verges of street trees and groundcovers.
- → Existing kerb and carriageways retained.





Typical section design targets (subject to detailed road design).

## **ACTIVE TRANSPORT**

The active transport strategy for the Telopea Concept Plan aims to align with the vision set out in the City of Parramatta's 'Parramatta Bike Plan 2017 - 2037'. Proposed cycle links connect into the existing precinct network and provide new paths as outlined in the Plan.

In addition to the above, the steep topography of the site is addressed by emphasising the flatter cross-connections to creating better cycle connectivity through new paths and "pit stops" at the light rail, Eyles Street Pedestrian Link and Sturt Park. Pit stops include cycle parking, repair stations and opportunities for cycle rental stations.



### Legend

Telopea Concept Plan Precinct Extents

**Proposed Parramatta Cycling Network** 

On-road - Mixed traffic

Off-Road - Separated (by others)

Shared zone - Pedestrians/ Bicycles

Off-road cycleway (provided by Frasers)

**Proposed Bicycle Facilities** 

Local site connections - on-road

mixed traffic

Local site connection - shared pedestrian

path (both sides of Sturt)

**Bicycle Parking** 

Potential bicycle Repair Station

Potential bicycle Rental Facility

w

# **5.**

# OPEN SPACES



Telopea Urban Renewal Public Domain Plan [Draft for information]

### **DESIGN APPROACH**

A network of public spaces throughout Telopea's Core Precinct provides new and inviting places for residents to shop, gather, dwell and commune. The stepped sequence of public spaces run along the Eyles Street Pedestrian Link, platforms for community buildings and programs connect people to transport, retail and civic destinations.

The Public Domain Plan prioritises creating a diverse collection of open spaces that will appeal to the diverse community.

Public and communal open spaces are planned to maximise solar access, deep soil zones, pedestrian connectivity and the retention of significant existing trees.

### **Public Spaces**

Public spaces include both public areas owned by City of Parramatta Council and under private ownership.

These public open spaces will be the heart of the Telopea community. They include;

- All streetscapes in the Telopea CPA
- Light Rail Plaza
- Neighbourhood Park
- Eyles Street Pedestrian Link
- Telopea Square
- Community Courtyard
- The Gardens
- Pocket Parks

### **Communal Open Spaces**

Communal open spaces will provide

key amenity to residents. These spaces have been arranged to provide a mix of space at both ground and at roof level.

Communal open spaces include:

- Ground floor gardens
- Residential Rooftops
- Landscaped setbacks

Program within the communal open space may include biodiverse gardens, community gardens, lawns, water features and outdoor picnic spaces with barbecue amenities.

# PUBLIC REALM AT THE CORE

### **Vision**

A network of public spaces within Telopea's Core Precinct provides new and invited places for all to shop, gather, dwell and commune.

Centered around the stepped sequence of public spaces running along the Eyles Street Pedestrian Link, platforms for community buildings and programs connect people to transport, retail and civic destinations.

The Core Precinct Incorporates passive recreational facilities to complement those already provided in Sturt Park and other nearby Council public open spaces.

### **Connection to landscape**

To celebrate the established landscape character of the Core

Precinct, the Concept Plan framework prioritises both visual and physical connection to landscape. The Concept Plan does this by celebrating retained trees in new public open spaces.

### **Access and circulation**

Considering the steep topography of the site, the Eyles Street Pedestrian Link has been designed to ensure it is accessible to people of all levels of mobility.

The Link will be transected by a number of flatter streets and laneways, including to Wade Lane, Marshall Street and Figtree Avenue. These new streets provide easy access between Telopea's Core Precinct and surrounding residential areas and nearby bus stops.

The journey along the Link (from Figtree Avenue to the Station

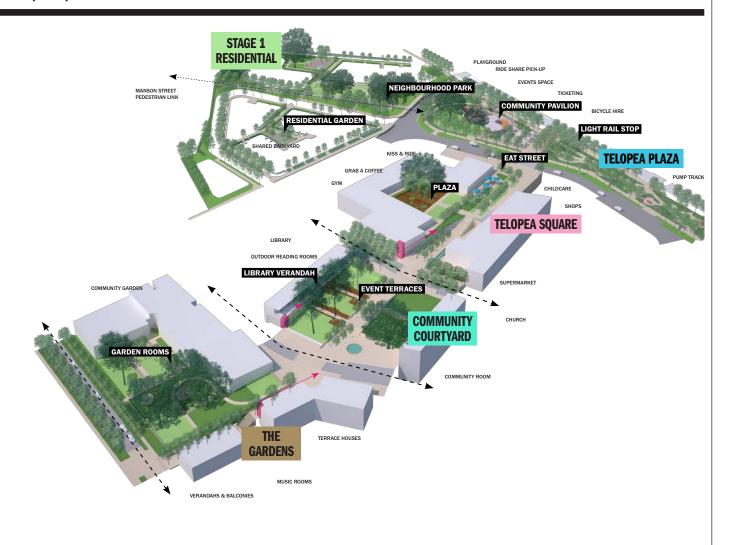
Plaza) is made up of a series of flat platforms: new parks and plazas edged and activated by surrounding buildings. Each platform is linked by steps, ramps and/or lifts that are accommodated into adjacent community and commercial buildings. Together, these elements create a sequence of special moments: emphasising the distinct natural setting of Telopea while providing a legible and accessible means for traversing the steep site.

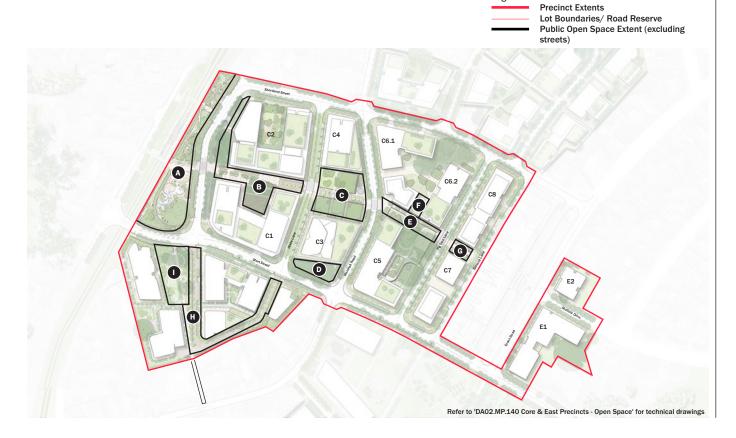
This approach recognises and accommodates the full spectrum of mobility: wheelchair and pram users, slow-speed walkers (who might need a short rest between stairs) and the amateur athletes chasing their daily 10,000 steps.

### **Publicly Accessible Open Space**

Area summary (excluding streets)

	Lot	Public Open Space (m²)	Privately Owned	To be dedicated to City of Parramatta Council
Α	Telopea Station Plaza	4621		<b>✓</b>
В	Telopea Square	3346	<b>✓</b>	
С	Community Courtyard	2753		<b>✓</b>
D	Pocket Park	764		<b>✓</b>
E	The Gardens	1206		<b>✓</b>
F	The Gardens	211	<b>✓</b>	
G	The Gardens	503		<b>✓</b>
Н	Mews	2250	<b>✓</b>	
I	Neighbourhood Park	2057		✓





Hassell © 37

Legend

# TREE RETENTION & DEEP SOIL

### **Principles**

### **Existing Tree Retention**

The bushland character of the area is defined by the high quality and established trees on the site. The adjacent diagrams illustrate single species and clusters of trees to be retained.

These species have been identified by the arborist as Important trees suitable for retention for more than 10 years. They are worthy of being a material constraint for their biodiversity value, shade and retention of site character.

### **Deep Soil**

Built form and basements have been configured to ensure retention of the nominated trees to be retained.

Future development works shall not exceed 10 percent encroachment into the tree protection zone.

All public open space dedicated to Council will be deep soil with no underground car parking. This approach maximises the retention of significant existing trees.





Refer to 'DDA01.MP.120 Core & East Precincts - Deep Soil' for additional detail

### **Core Precinct**

### Deep soil

Lot	Deep Soil >6m (m²)	Deep soil dedicated to Council
C1	1088	-
C2	733	-
C3	-	764
C4	-	-
C3/ C4 Link	-	2753
C5	1304	
C5/ C6 Link		1206
C6	1394	-
C7	-	-
C8	0	-
C5/ C6 Link		503
C9	2,239	2057
E1	1310	
E2	427	
Station Plaza		4621

### Trees to be retained

Lot	Trees to be retained
C1	T 253, 254, 255, 256, 257, 258, 259, 260, 261, 263, 264
C2	T 173, 174, 175,176,177, 178,183, 1887, 188
C3	T 62, 64, 66, 67
C4	T 04, 05, 06, 48, 49, 50
C5	T 33, 34, 37, 38, 41, 12
C6	T 94, 95, 96, 97, 98, 99, 100, 103
C7	NIL
C8	NIL
C9	T 298, 299, 304, 305, 306, 307, 309, 310, 313, 314, 373
E1	T 292, , 284, 297, 300, 303, 304, 305, 308
E2	T 269, 283
Station Plaza	T 192, 212, 217, 218, 226, 234, 235, 280 281, 282, 283, 319

# TREE RETENTION & DEEP SOIL



### Legend

Deep Soil >6m

Deep Soil 4-6m

### Deep Soil 4m setback (50% impacted)

### **North Precinct**

### Deep Soil: 31% Precinct Wide

Deep Soil >6m (m²)	Deep Soil 4-6m (m²)	Deep Soil %
508	256	324
301	358	39
1690	296	40
585	217	39
1,110	451	33
2,009	923	23
1,584	1,146	31
486	84	28
	>6m (m²) 508 301 1690 585 1,110 2,009 1,584	>6m (m²)

### Trees to be retained

Lot	Trees to be retained
N1	T 60, 61, 62
N2	T 11, 6
N3	T 70,71,78, 81, 88,89,90,91
N4	NIL
N5	T 28, 29, 36, 37, 47, 136
N6	T 101, 173, 177, 185
N7	T 115, 117, 143, 145, 162
N8	NIL
N9	T 237, 238, 239, 240, 241
N10	T 257, 268



### **South Precinct**

### Deep Soil: 31% Precinct Wide

Lot	Deep Soil >6m (m²)	Deep Soil 4-6m (m²)	Deep Soil %
S1	382	278	31
S2	416	301	26
S3	444	455	28
S4	552	338	32
S5	531	528	30
S6	804	252	37
<b>S7</b>	904	158	25
S8	1278	104	31

### Trees to be retained

Lot	Trees to be retained
S1	T 321, 332, 333, T334
S2	T 335, 337, 339, 340, 346
S3	T 512
S4	T 363, 364, 366, 372
S5	T 482, 498
S6	T 476, 479
S7	T 392, 395, 405, 418, 430, 431, 433
S8	T 442, 446, 458, 459, 451, 452, 453, 454, 460, 461, 462, 463

# COMMUNAL OPEN SPACE

### **Principles**

### SEPP 65 and ADG

Communal open spaces have been arranged to provide a mix of space at both ground and at roof level.

Consistent with the requirements of SEPP65 and ADG, each site provides >25% of the site as communal open space where possible.

### Access

Communal open spaces are accessible to residents of the associated lots. Security fencing is to be discreet and integrated into the landscape setting.

To improve precinct connectivity, publicly accessible through-site connections are provided within the North Precinct's communal open spaces. These are to be designed in accordance with the Telopea Design Guidelines.



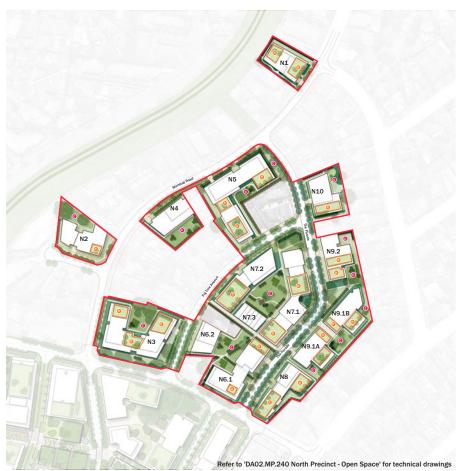
### **Core Precinct**

Communal open space area summary

Lot	Open Space Roof (m²)	Open Space Ground (m²)	Total Open Space (m²)
C1	1257	0	1257
C2	1574	0	1574

СЗ	1063	0	1063	
C4	529	0	529	
C5	882	1701	2583	
C6	1116	2137	3253	
C7	0	332	332	

C8	0	0	0	
C9	539	2670	3209	
E1	0	1057	1057	
E2	0	381	381	



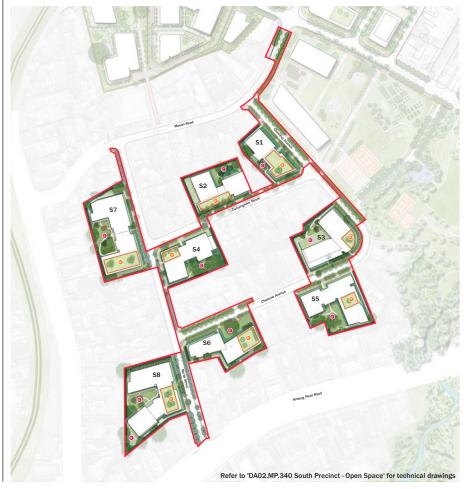


Precinct Extents
Lot Boundaries/ Road Reserve
Communal Open Space
- Ground Level
- Rooftop Extents

### **North Precinct**

Communal open space area summary

Open Space Roof (m²)	Open Space Ground (m²)	Total Open Space (m²)
112	445	557
422	0	422
600	637	1237
0	612	612
506	641	1147
221	815	1036
1148	1020	2168
560	0	560
935	815	1750
243	276	519
	Roof (m²)  112  422  600  0  506  221  1148  560  935	Roof (m²)         Ground (m²)           112         445           422         0           600         637           0         612           506         641           221         815           1148         1020           560         0           935         815



### **South Precinct**

Communal open space area summary

Lot	Open Space Roof (m²)	Open Space Ground (m²)	Total Open Space (m²)
S1	395	0	395
S2	154	529	683
S3	335	466	801
S4	222	468	690
S5	194	668	862
<b>S</b> 6	352	375	727
<b>S7</b>	566	510	1076
S8	416	728	1144

# **OPEN SPACES**

### **Eyles Street Pedestrain Link - Core Precinct**

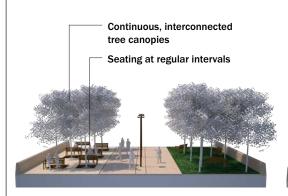
Eyles Street Pedestrian Link will be a continuous, uninterrupted public open space from Telopea Station Plaza to Benaud Lane, with opportunity to connect through to Evans Road shops in the future. The key design principles for Eyles Street Pedestrian Link are:

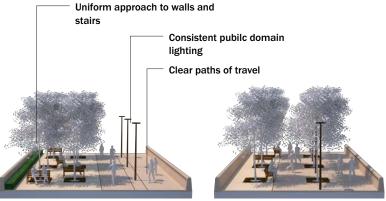
- Continuous circulation space
- Places to dwell
- Diversity of edges
- Consistent suite of unifying elements
- Continuous tree canopy
- Street furniture reinforce structure of the link

Considering the steep topography of the site, the Eyles Street Pedestrian Link has been designed to ensure it is accessible to people of all levels of mobility.

The journey along the link (from Fig Tree Avenue to the Station Plaza) is made up of a series of flat platforms: new parks and plazas edged and activated by surrounding buildings. Each platform is linked by steps, ramps and/or lifts that are accommodated into adjacent community and commercial buildings. This approach recognises and accommodates the full spectrum of mobility: wheelchair and pram users, slow-speed walkers (who might need a short rest between stairs) and the amateur athletes chasing their daily 10,000 steps.







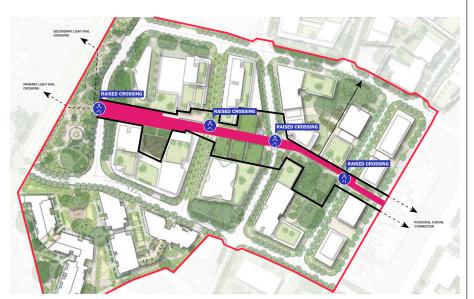
Eyles Street Pedestrian Link varies in width as it transitions from high intensity use, transitioning in scale to residential uses adjacent Benaud Lane.

### **Creating an accessible** precinct through Eyles **Street Pedestrian Link**

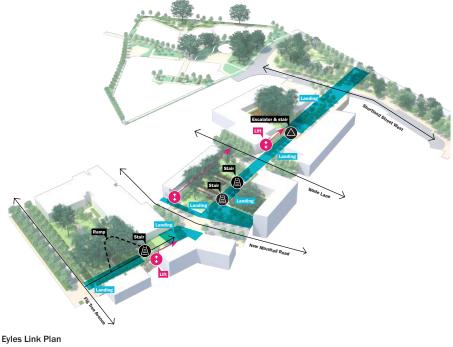
Our approach to access within the steep Telopea site is to provide diverse access options that can cater for people of all abilities (mental & physical) and all ages.

Accessibility strategies include;

- Upgraded footpaths on Shortland and Sturt Streets follow the existing topography. These steep streets provide direct access from Telopea Station Plaza to Evans Road. Rest zones with seating are positioned at regular 50m intervals adjacent footpaths.
- New north-south streets are flat, providing easily accessible northsouth links between the North, Core and South Precincts.
- Eyles Street Pedestrian Link is made up of a series of landings connected via a diversity of access options to support accessibility for the whole community.
- Lift VT options are found on prominent corners of public buildings including Library, Church and retail buildings. They will be accessible 24 hours.
- Stairs connect each landing. Stair runs are kept short with regular rest stops at each landing.
- An escalator in the Telopea Plaza supports movement of the bustling retail precinct.



Eyles Link Plan



## **OPEN SPACES**

### **Telopea Station Plaza - Core Precinct**

A welcoming entry into Telopea that celebrates the local landscape character. It is an attractive place to move through and dwell within.

- → Simple & intuitive
- → Layering of spaces
- → Attractive & immersive
- → Open & permeable

Telopea Station Plaza will be a destination of vibrant community activity.

The design aims to balance the needs of commuters to easily move around while ensuring we create an attractive place community gathering place.

Set beneath a bosque of Sydney Blue Gums, Telopea Station Plaza is a civic place which has been designed for a diversity of uses, including; peak-hour daily commuter movement, passive activities including watching native bird life between tree canopies on shaded benches or grabbing a coffee from the a pop-up cart before the weekend market event.

At the south of the plaza a vibrant, community recreation area. This space facilitates a range of activities for individuals, as well as small and large groups. The area includes a locally accessible play space for the new community including multi-use court, kick-about lawn, shade structure and multi-level playground.





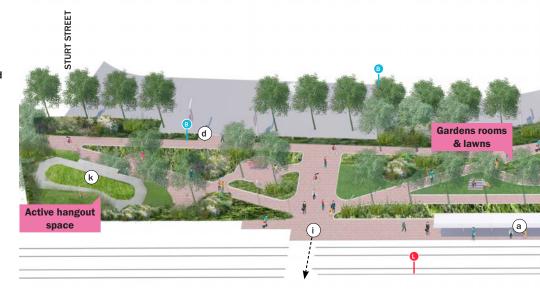


### **Key elements**

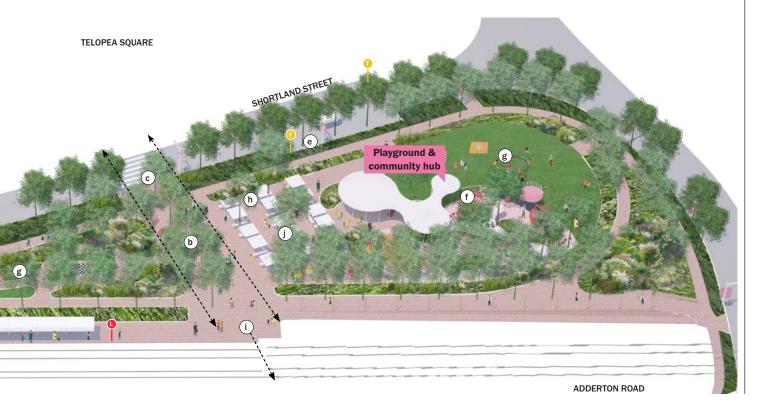
- a. Telopea light rail station
- b. Arrival plaza
- c. Sturt street pedestrian crossing (paved and level with road surface)
- d. Bus stop & bus shelter
- e. Taxi, kiss & ride, ride share pickup
- f. Playground & community hub
- g. Park gardens & lawns
- h. Bicycle parking
- i. Pedestrian connection to Adderton Road
- j. Market stall pop up area

### Images:

- 1. The Barbican Centre, London, UK
- 2. Sunset Heritage Precinct, Perth, Australia
- 3. Cifi Fuzhou Kids Playground.







### **OPEN SPACES**

### **Telopea Square - Core Precinct**

A sunny, outdoor shopping & dining precinct. A convenient stop off point or attractive destination for residents, the local community and visitors.

- → Vibrant & diverse edges
- → Passive & active places
- → Canopies, colonnades & dappled light
- → Morning to evening attractors

Telopea Square will be a vibrant and active space lined with outdoor dining, retail and community use facilities.

Pedestrian movement from the light rail stop, through Eyles Street Pedestrian Link to open spaces and residential movement will create day-round activation.

Places to meet, gather and dwell are created beneath existing trees in 'the square' and amongst planting in Eyles Street Pedestrian Link

### **Key elements**

- a. Avenue of trees from Telopea Plaza to Wade Lane
- **b.** Central square and existing trees for outdoor dining, play & events
- c. Garden beds & lawns
- d. Vertical transport including stair, lift & escalator
- e. Water feature & seating bench along shopping centre edge
- f. Dwell zone outside shoping precinct

### Images:

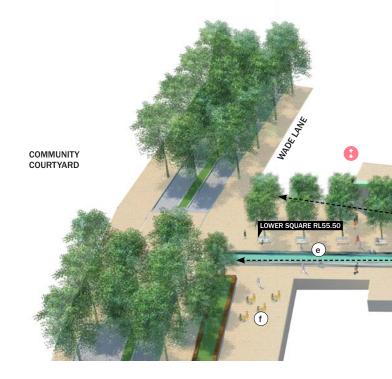
- 1. Parisian cafe. Image source unknown
- 2. James Street, Brisbane, Australia
- 3. The Casbah, Sydney, Australia
- 4. Le Banc de Neig, Quebec City, Canada















# **OPEN SPACES**

### **Community Courtyard - Core Precinct**

A place to meet, gather and play beneath existing eucalypts. Visitors to the library and church site spill out into the green courtyard to create a vibrant community destination.

- ightarrow Dwell places along the journey
- → Places to relax
- → Open & flexible
- → Playful & engaging

Eyles Street Pedestrian Link runs through the centre of the Community Courtyard and provides landscape connections across lawns and gardens to new Library and Church.

Landscape links navigate between existing trees with platforms, landings and seating along the way for gatherings of all sizes.

### **Key elements**

- a. Eyles Street Pedestrian Link spine; Marshall Road to Wade Lane
- b. Multi-purpose landscape platforms
- c. Day-beds beneath tree shade
- d. Connection to library verandah
- e. Existing Euc. molcucanas retained
- f. Lawn and flowering groundcover planting







### Images:

- 1. Lincoln Centre, North Plaza, New York
- 2. Cafe de L'Homme Terrasse aile Jardin, Paris, France
- 3. Private garden. Photography by Daniel Shipp



### **The Gardens - Core Precinct**

A garden destination of residents and local community. The verdant garden is a place of respite, quiet reflection and open space gatherings.

- → Tranquil and immersive
- → A place for respite
- → Garden gatherings
- → Connect with seasonal nature

Telopea's residential gardens shall support connection and revitalise ecosystem, while providing residents access to nature's respite.

Steps and terraces work to retain existing trees while also providing places to dwell.

Gardens and lawns will support local biodiversity and create dynamic places to connect with nature.

### **Key elements**

- a. Raised garden beds provide privacy between communal and private open space
- b. Community lawn
- c. Terraces and seating as places to dwell
- d. Water features
- e. Communal gardens







### Images:

- 1. Private garden. Image from Made By Tait
- 2. Chelsea Gardens 2014. Photographer Unknown.
- 3. Felicity Jones Garden. Photography by Georgina Reed



# **OPEN SPACES**

### **Neighbourhood Park - Core Precinct**

At the entry to Telopea, the park is a place for the community to meet, gather and play.

- → Tranquil and immersive
- → A place for respite
- → Garden gatherings
- → Connect with seasonal nature

The Neighbourhood Park is created around stands of existing trees, forming a neighbourhood-scale public open space for both passive and active recreation.

The Park is a green and welcoming edge to the centre. Three main entry points into the Park are designed at key nodes into the Park, ensuring connectivity to the centre and light rail station.

#### **Key elements**

- a. Public access links from Telopea Plaza to Mason Street
- b. Picnic lawns
- c. Paths and seating between existing trees
- d. Existing trees retained
- e. Shade canopy
- f. Gathering area with BBQ and picnic seating







### Images:

- 1. Turruwull Park, Sydney, Australia
- 2. Central Park, New York, USA
- 3. A Park of Encounter, Xantern, Germany



### **Pocket Park - Core Precinct**

Pocket parks are created beneath stands of existing trees to create a green a welcoming edge to Telopea centre, and providing neighbourhood scale.

- → Shared backyard for adjoining neighbours
- ightarrow Celebration of the Sydney Blue Gum Forest
- → Attractive & inviting entry into Telopea center
- → Lush garden settings suitable for dog walking

Telopea's pocket parks are a place to live in nature. Existing Sydney Blue Gums are retained to support biodiversity, create cool places to dwell and create an attractive outlook to neighbouring residents.

Swathes of groundcover planting create a pleasant street frontage. Steps and terraces create small garden 'rooms' to allow for a diversity of activities at once.

### **Key elements**

- a. Accessible links from perimeter streets into the centre
- b. Stands of existing trees retained
- **c.** Terraces create places to gather and play games close to nature
- d. Flowering groundcover planting







### Images:

- 1. BIGyard apartments, Berlin, Germany
- 2. Gustave & Leonard Hentsch Park, Switzerland 3. Private courtyard. Photographer Unknown.



## **OPEN SPACES**

### **Biodiversity Rooftops - Core, North and South Precincts**

The rooftop gardens across the Telopea North, Core and South Precincts provide open space and visual amenity, support local biodiversity and assist in the amelioration of the urban heat island effect.

- → Functional habitats
- → Sustainable living
- → Outdoor recreation
- → Connection to nature

A combination of accessible and inaccessible rooftop gardens are distributed across fifty percent of the new Telopea rooftops.

These rooftop spaces include a mix of community, edible and ornamental gardens as well as orchard style planting.

### **Key elements**

- a. Raised planter beds with flowering grass and groundcover species suitable for low-growing media profile
- **b.** Gathering zones beneath lightweight pergolas for wind, rain and solar protection
- c. Play lawns
- d. Tree species suitable for wind conditions such as olives and bottle-brush







### Images

- 1. Eve Street Apartments, Sydney, Australia
- 2. M Central, Sydney, Australia
- 3. Eve Street Apartments, Sydney, Australia



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### **Ground Level Communal Open Spaces - North and South Precincts**

A shared backyard for residents, a multifunctional space where people can come together in nature.

- → Tranquil and immersive
- → Versatile and multifunctional
- → Garden gatherings
- → Connect with nature

Telopea's North and South Precinct communal open spaces support connections between people and revitalised ecosystems, while providing residents access to nature's respite.

These outdoor spaces include a mix of community, edible and ornamental gardens as well as orchard style planting.

Gardens and lawns support local biodiversity and create dynamic places to connect with nature.

### **Key elements**

- a. Incidental play elements
- b. Retained existing trees
- c. Multi-functional lawns for picnics, gatherings and informal sports
- d. Quiet places to sit amongst nature







### Images

- 1. Eve Street Apartments, Sydney, Australia
- 2. M Central, Sydney, Australia
- 3. Eve Street Apartments, Sydney, Australia



# **6.**

# PLANTING DESIGN



### **DESIGN APPROACH**

The vision for Telopea is a resilient and biodiverse neighbourhood, where natural systems are re-linked and rehabilitated. Vegetation communities of the Sydney Blue Gum High Forest and Alluvial Woodlands are restored in the public domain streets and open spaces.

This chapter of Public Domain Plan outlines the Concept Plan vision and principles for planting across the site.

### Planting design aims

High-quality planting will be provided across Telopea's public domain to;

- Protect, restore and support the natural ecosystem and promote biodiversity by creating connections between Vineyard Creek Reserve and Ponds Creek Reserve
- Create landscapes and green spaces that significantly enhance local areas and wildlife habitats
- Promote blue-green infrastructure networks to promote sustainable water and biodiversity flows and urban resilience
- Design for climate change resilience, incorporating features for mitigation of urban heat island, overheating, flooding and extreme weather events
- Support the mental health and wellbeing of the neighbourhood by strengthening community

- connections and access to nature and natural features.
- Promote sustainable transport modes by creating attractive, cool green streets

### **Urban Tree Canopy**

Urban tree canopy is prioritised across Telopea's public realm. Urban canopies will provide shade, reduce ambient temperatures and mitigate urban heat island effect. Tree canopies will also provide habitat, protect the health of waterways and remove fine particles from this area.

Aligning with green infrastructure targets set by NSW Government Architects and Greater Cities Commission, Telopea will provide 40 percent canopy cover to streets and open spaces within 20 years.

Tree canopy will be provided along streets, in parks and public spaces as well as on privately owned land.

Challenges to providing urban tree canopy within Telopea include the lack of space within existing street corridors, including conflict with above and below ground infrastructure. Opportunities to design out these conflicts should be explored in the design of the public domain.

Urban tree canopy is supported by planting on the groundplane, rooftops and green walls.

### Planting with purpose

For planting to support more life and to be more resilient, planting palettes will be diverse.

The design of Telopea will look beyond the 'business as usual' blocks of planting mono-cultures. Planting will be florally attractive, comprised of multi-species vegetation mixes that maximise of both human well-being and biodiversity support.

Planting specified in the public realm will be selected for their resilience to climate change, low water requirements and contribution to pollinators.

## PLANTING PALETTES

Public open spaces are planted out with species mixes that reinforce the character of Telopea, the open space program and scale. Below is outlined the approach to planting within each key open space type.

### Streets, parks and plazas dedicated to City of Parramatta

Telopea's upgraded streetscapes and City of Parramatta dedicated open spaces will be restored with biodiverse, native planting. Species mixers will prioritise the use of Sydney Blue Gum High Forest palettes where appropriate.

### **Characteristics**

Planting palettes will capture the key characteristics of this plant community including;

- Tall canopies of eucalypts
- A multi layered understorey
- A midstorey of mesophyllous shrubs and small trees
- Groundplane of herbs, ferns and grasses

### **Species selection**

- Tree species may include Eucalyptus pilularis (Blackbutt) or E. saligna (Sydney Blue Gum).
   Angophora costata (Smooth-barked Apple), A. floribunda (Rough-barked Apple). Eucalyptus paniculata (Grey Ironbark)
- A datum of small trees including Pittosporum undulatum (Sweet

Pittosporum), Elaeocarpus reticulatus (Blueberry Ash) and Allocasuarina torulosa (Forest Oak). Shrub species are typically mesophyllous, such as Breynia oblongifolia (Coffee Bush), Pittosporum revolutum, (Yellow Pittosporum), Clerodendrum tomentosum, Notelaea longifolia forma longifolia (Large Mock-olive), Maytenus sylvestris (Narrow-leaved Orange Bark), Polyscias sambucifolia subsp. A (Elderberry Panax) and Rapanea variabilis (Muttonwood).

### Eyles Street Pedestrian Link dedicated to City of Parramatta

Eyles Street Pedestrian Link will be a continuous, connected open space extending between Telopea Station Plaza and Benaud Lane. Planting along the length of this new open space will be a consistent palette of species, creating consistency within this open space.

### **Characteristics**

Planting palettes will capture the key characteristics of this community including;

- Tall canopies of eucalypts
- A multi layered understorey
- A diverse palette of groundplane species that vary in height, form and texture
- A diverse palette will provide flowering plants for pollinators throughout the year, and create visual interest
- Hardy species suitable for the urban environment

### **Species selection**

 Plant along the length of Eyles Street Pedestrian Street may be species from the Blue Gum High Forest or Alluvial Woodlands.

### Privately owned gardens, communal open spaces and rooftops

These spaces are characterised by inviting places to dwell and connect with nature.

### **Characteristics**

Planting palettes will respond to the relaxed setting, and be comprised of diverse planting with high diversity and seasonal interest. Planting designs in these spaces are diverse and may be comprised of ornamental gardens, community gardens or native gardens.

### **Species selection**

- Comprised of native and exotic species
- High proportion of species that support local biodiversity
- Consideration of species resilience in a changing landscape including water use, extreme heat and flooding.



Concept illustration: Planting with Purpose

# SUCCESSION PLANTING

A key driver of the Telopea Concept Plan is the retention, protection and enhancement of Telopea's existing urban forest. Establishing a resilient and enduring tree canopy is critical in creating a healthy neighbourhood. Below is outlined the approach to succession planting to be applied to each development stage.

### **Drivers**

Protection, maintenance and enhancement of existing tree canopies

- Improve quantity and quality of the urban forest with the introduction of new tree planting across open spaces and streets with species native to site
- Existing and new trees will contribute to the character of Telopea, create a quality public domain and define the precinct

Create a lasting interconnected urban canopy that:

- Assists in climate mitigation and adaptation
- Reduces urban heat island
- Improves health and well-being
- Supports healthy ecosystems and

biological diversity

- Improve urban ecology
- Links green spaces

### **Approach**

Replacement quantity

- The Concept Plan aims to maintain a minimum of 40 percent tree canopy cover across the Telopea CPA public open spaces and streestcapes
- Removed trees shall be replaced at the following ratios:
  - Category AA Trees removed are proposed to be replaced at a rate of 10:1
  - Category A Trees removed are proposed to bereplaced at a ratio of 5:1

### Species selection

- Species section guided by relevant research and tools including 'Which Plant Where', to ensure urban longevity and success of planting in changing climate for a resilient urban landscape.
- Species representative of local species that support ecosystems and biological diversity
- Tree species will be reviewed to ensure it is suitable for the site location and should not impact the future proposed development or compromise open space.

### **Succession planting stages**

### Phase 1

- 1.1. Risk mitigation
- Aborist to review existing trees and complete site report. Pro-actively remove tree species designated as

- high risk, in poor health or unable to be retained due to development.
- Replace each removed species
- 1.2. Tree canopy assessment and management: Assess and select the most suitable trees for preservation and remove smaller of unhealthy trees competing with selected trees.
- Arborist to conduct an assessment of site trees
- Implement pruning and management as recommended by arborist
- Replace each removed species

Step 2: detailed development applications

- 2.1. Tree removals and pre-emptive or post removal replacements
- Aborist to review existing trees within the Development Application site and complete site report and complete Stages 1 & 2 above.
- Arborist to review developed lots regularly to identify requirements for pre-emptive removal, completing site report. Tree replacements as outlined in Stages 1 & 2 above.

# **7.**

# MATERIALITY



### **DESIGN APPROACH**

The fabric of Telopea's public domain will establish the character of the public realm, dictate the functionality and comfort of open spaces and provide essential amenity. Sustainability principles will drive material selection including low embodied carbon materials, low-carbon intensity energy sources, zero waste strategies and ethically sourced products.

This chapter of Public Domain Plan outlines the vision and principles for materials and urban element design across the Telopea Concept Plan.

### Public Domain Plan materials, furniture and finishes scope

This Public Domain Plan includes principles for selecting materials, furniture and finishes including:

- Street furniture in the public domain including seats, bins, drinking fountains, bike hoops, planter boxes, bollards & pedestrian fences and bus shelters
- Materiality including footpaths and walls
- Lighting
- Signage and wayfinding

### Aims and approach

### 1. Precinct consistency

Applying a unified and consistent

material palette will create a singular identity for Telopea, while allowing for flexibility in the arrangement of the public domain.

### 2. Places to dwell

The provision and placement of furniture to support the use of open spaces and adjoining building uses.

### 3. Accessibility & universal design

All public domain furniture to be compliant with 'Design for access and mobility General requirements for access' (AS1428.1), ensuring furniture is accessible to all users.

### 4. Durability & sustainability

Elements to be made from durable materials that can withstand external conditions, minimising the need for maintenance and/ or replacement.

### 5. Sustainability

Eliminate the use of materials that have high environmental and social impacts, including high toxicity

materials, plastics, non-renewably sourced timber products and high-VOC materials.

Demonstrate a preference for locally sourced, ethically produced and low embodied carbon materials.

Focus own material efficiency - use structural and architectural design techniques to use less material and use detailing techniques that will preserve the value of materials for as long as possible.

Undertake life cycle carbon and cost assessments throughout the design process and use it to inform design decision-making

### 6. Pedestrian movement & comfort

The placement of furniture elements should consider the movement patterns of pedestrians and cyclists, to ensure open spaces and streets are permeable, safe and accessible.

### 7. Safety

The placement of furniture elements can assist in providing additional safety to open spaces and streetscapes, by acting as vehicle mitigation, improving passive surveillance and introducing lighting. Furniture should align with Crime Prevention Through Environmental Design Principles (CPTED).

# PAVING SPECIFICATION

# There is an environmental approach to the selection of paving materials across Telopea.

With developing research being carried out into cooler paving materials, such as the Cool Road Trials by Western Sydney University, new approaches need to be taken to the selection of paving material in order to address climate change and urban heat island effect. The following principles are to be taken into account in the selection of paving materials at Telopea.

### 1. Use low embodied carbon materials

Use materials with a low embodied carbon required for production and installation/construction.

### 2. Use recycled content materials

Reduce the consumption of virgin material and avoid landfilling useful materials by using materials with recycled content.

### 3. Use regional materials

Reduce energy use for transportation and promote regional identity by supporting the use of local resources.

### 4. Reduce urban heat island effects

Use reflective materials to help mitigate urban heat island effects.

### Support responsible extraction of raw materials

Protect ecosystems, respect cultural and community values and improve land use.

### 6. Support sustainability in materials and manufacturing

Select materials from manufacturers whose practices minimise impacts on the environment.

### Strategies to improve environmental performance of paved surfaces across the master plan

#### 1 Selection of matierials with low emodied carbon

Paving type	Potential for utilising recycled content	Regionally sourced	Embodied energy per sqm of material*	Potential for future recycling/upcycling	Total / ranking
	1= Raw material 2 = Partially recycled 3 = Completely recycled	1 = International 2 = Australian 3 = NSW	1 = Poor 2 = Reasonable 3 = Good	1 = Partially recyclable 2 = Fully recyclable 3 = Completely upcycled	
Imported dimension granite	1	1	1	3	6/12
Local dimension granite	1	2	1.5	3	7.5/12
Concrete paver	2	3	3	3	11/12
Bricks	2	3	2.5	3	10.5/12
In situ concrete	3	3	2	1	9/12

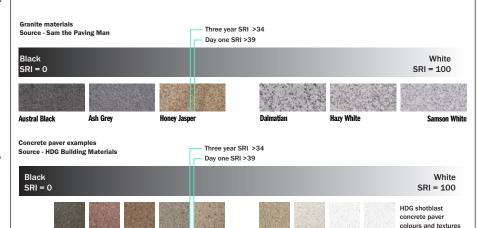
<sup>\*</sup> Estimates only - requires further investigation

### 2 Selection of materials with a low solar reflect index

Solar Reflectance Index (SRI) is a measure of a material's ability to reject solar heat. Standard black (reflectance 5%, emittance 90%) is 0 and standard white (reflectance 80%, emittance 90%) is 100.

All external pavements should meet with the following SRI requirements:

(i) a three year Solar Reflectance Index > 34 or (ii) an initial Solar Reflectance Index > 39



<sup>\*</sup> Figures based on material performance only - sub-bases are not factored into the material performance

### URBAN FURNITURE

The selection of urban furniture within Telopea will align with the principles set out in the Parramatta Public Domain Guide and establish a consistent character across the Precinct. Key principles are;

- Urban furniture will contribute to the overall aesthetic quality of Telopea - drawing from the colours of the surrounding Blue Gum High Forest
- 2. Provide a coordinated look and feel across the public open spaces.
- 3. Streetscapes to select furniture from the standard furniture palettes from City of Parramatta's Public Domain Guidelines.
- 4. Bespoke furniture pieces limited within City of Parramatta open spaces, focused to special places such as Telopea Station Plaza and Eyles Street Pedestrian Link.
- 5. Use robust, eduring products that can withstand the demands of public use
- 6. Prioritise sustainability principles in furniture selection

Indicative furniture palette

























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