

ARCADIA

Bathurst Hospital
Landscape SSDA Report

Prepared for BLP
January 2025

We recognise the First Nations People of Australia and celebrate their continuing cultural practice and connection to Country.

We acknowledge the Traditional Custodians of the land that our site sits on today, the Wiradjuri People of the Wiradjuri nation, as well as extending our respects to the Traditional Custodians of the lands we live and work on across Australia.

We are proud that we live in the country with the world's oldest continuous living cultures, and we are working on playing our part as allies to First Nations people across Australia.

Always was, always will be.

Issue E: Landscape SSDA Report

Date: 24th January 2025

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Front Cover: Sydney University Susan Wakil Health Precinct

Image Credit: Arcadia Landscape Architecture

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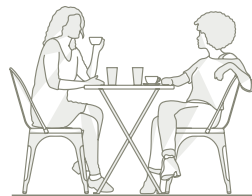
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Contents



Introduction	4	Vision	15	In The Detail	24
Context and Analysis	5	Landscape Vision	16	Mitre Street Arrival	25
Wiradjuri Country	6	Design Principals	17	Garden Rooms and Terraces	30
Context	6	Urban Design Moves	18		
Geology	7	Landscape Masterplan	19		
Hydrology	9	Masterplan Analysis	20		
Flora	11	Landscape Typologies	20		
Fauna	13	Tree Canopy Cover	21		
		Landscape Lighting	22		

Introduction

This landscape design report has been prepared by Arcadia on behalf of Health Infrastructure for the redevelopment of the Bathurst Hospital at 361-365 Howick Street, Bathurst.

The site is located at 361-365 Howick Street, Bathurst, in the Bathurst Local Government Area. It is occupied by Bathurst Health Service, a Level C referral facility in the Western NSW Local Health District.

This report accompanies a State Significant Development Application that seeks approval for the construction and operation of a new-build expansion, refurbishment and repurposing works to the existing Bathurst Health Service main hospital building. Proposed works will include:

- + A new-build, three-storey health services building expansion (including 1 plant level) to include overnight inpatient accommodation and non-admitted care services and a new hospital front-of house and entrance
- + A new-build, two-storey expansion to the Emergency department and Operating Theatres (plus 1 plant level)
- + A new-build, single-storey expansion to the existing Cancer Service building – Daffodil Cottage
- + Refurbishment and repurposing to areas of the existing hospital
- + Site establishment, demolition of some existing structure, cut and fill and remediation works
- + Vehicular circulation and car parking improvements
- + Tree removal
- + Landscape works
- + Alteration and amplification of existing hospital plant and services infrastructure
- + For a detailed project description, refer to the Environmental Impact Statement prepared by Ethos Urban.

Secretary’s Environmental Assessment Requirement (SEARS) Table

Issue and Assessment Requirements	Relevant Section of the Report
8. Trees and Landscaping	
Assess the number, location, condition and significance of trees to be removed and retained and note any existing canopy coverage to be retained on-site.	Refer Landscape SSDA Report, Tree Canopy Cover Plan p. 20
Provide a detailed site-wide landscape plan, that: <ul style="list-style-type: none">+ details the proposed site planting, including location, number and species of plantings, heights of trees at maturity and proposed canopy coverage (as a percentage of the site area).+ provides evidence that opportunities to retain significant trees have been explored and/or informs the plan.	Refer Landscape SSDA Documentation Set L400 Series Refer Landscape SSDA Report, Landscape Masterplan.
Demonstrates how the proposed development would: <ul style="list-style-type: none">+ contribute to long term landscape setting in respect of the site and streetscape.+ mitigate the urban heat island effect and ensure appropriate comfort levels on-site.+ contribute to the objective of increased urban tree canopy cover.+ maximise opportunities for green infrastructure, consistent with Greener Places and having regard to any bush fire risk.	Refer Landscape SSDA Report, Section 4.0 In the Detail

1.0

CONTEXT AND ANALYSIS



Wiradjuri Country

Context

Wiradjuri means, “People of the Three Rivers”.

Wiradjuri people are originally from the lands bordered by the three rivers:

- + Wambool (now known as the Macquarie River),
- + the Kalari (the Lachlan River) and,
- + the Murrumbidjeri (the Murrumbidgee River).

They have lived in these lands and along these rivers for more than 40,000 years.

For the Wiradjuri People, the rivers supplied a variety of consistent and abundant food provisions. They fished from canoes, for shellfish and fish. In the dry seasons, food from the rivers and hunted with spears and nets for was supplemented, and hunted with spears and nets for duck, kangaroo, goannas, snakes, lizards, emus, possums, wallabies and waterfowl. Fresh food was also gathered from the land between the rivers. Fruit, nuts, yam daisies, wattle seeds and orchid tubers were staples in their diet.

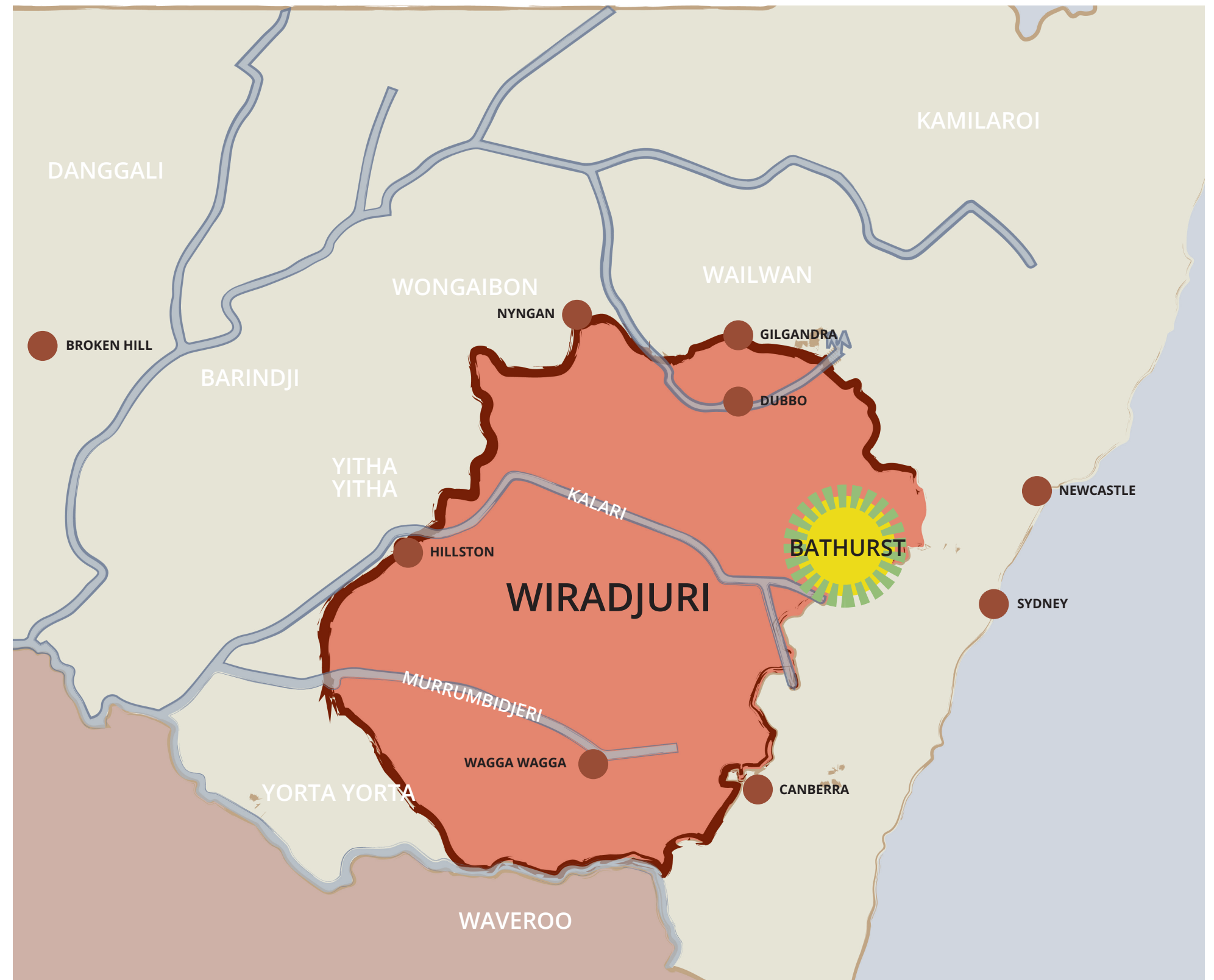
Bathurst - Known as “Dalman” or “Place of Plenty”.

Bathurst was once known for its fertile floodplains, where yams were cultivated for centuries.

The most easterly groups of Wiradjuri Country were the tribes whom Windradyne became leader. They roamed throughout the O’Connell, Bathurst and Macquarie Plains and along the Wambool (Macquarie) River.

Locations of cultural significance in Bathurst:

- + Windradyne’s Grave
- + Flat Rock (the creation story of the Billaduring - Platypus)
- + Wahluu (Mt Panorama)
- + Gumbuu (Evan’s Crown)
- + Peace Park & the Potato Fields
- + Gunnabulla (Mt Canobolas)
- + Yuranigh’s Grave
- + Borenore Caves
- + Maiyingu Marragu (hand painting caves)



Wiradjuri Country

Geology

Bathurst is regarded as a district of considerable geological importance, because of its relationship to other areas.

Bathurst is nearly at the centre of an undulating tract of country, forming a tableland at a hiegh of about 670 metres above the sea and surround by a distance of about 20 kilometres by higher ground which reaches the east of Bathurst about 60 metres above the city.

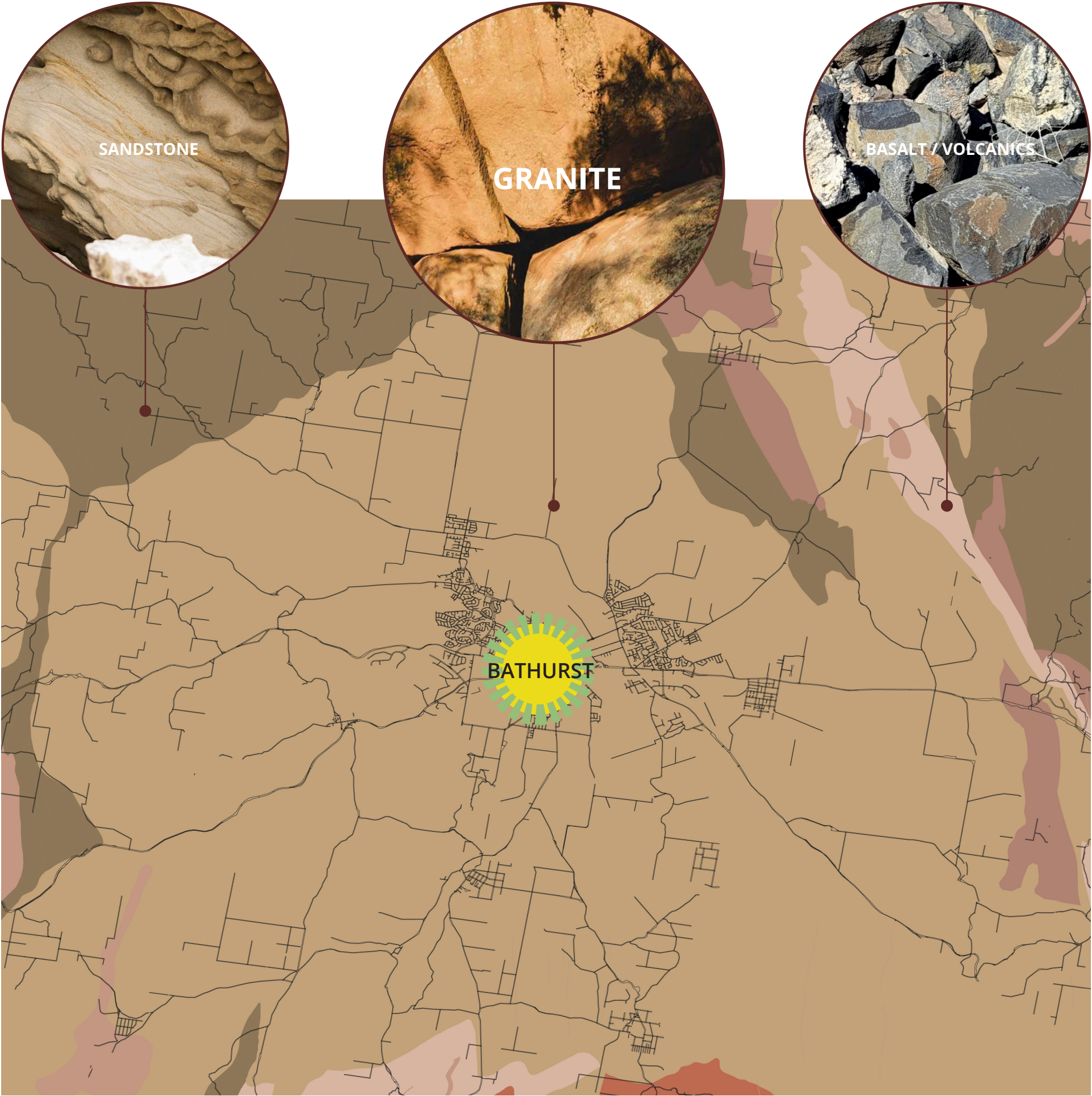
The surface rock surrounding Bathurst is granite, overlain in places by beds of river gravel. Bald Hill and a few other isolated hils in the neighbourhood is capped in Balsalt (an old volcanic lava).

The granite is much decomposed to some distance from the surface, but most of the undulations appear to have a core of less altered rock.

At Mt. Pleasant, it is seen to be a rather coarse grained rock, composed of crystals of quartz, Orthoclose Felspar with some Olijoeve, Black Mica and Harnbleude.

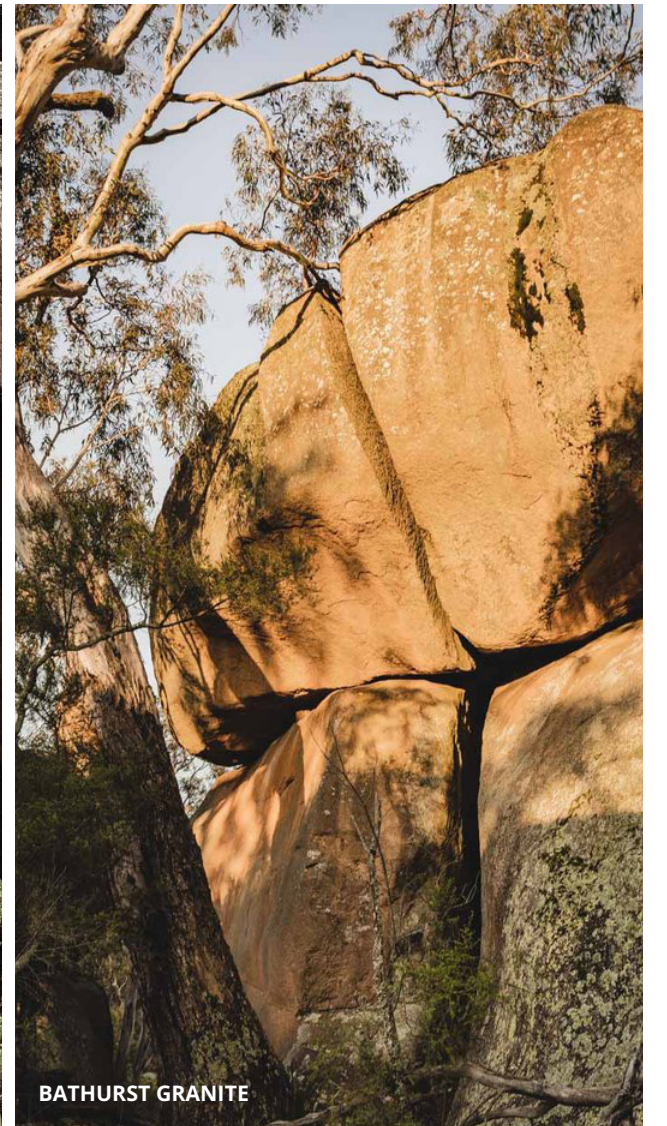
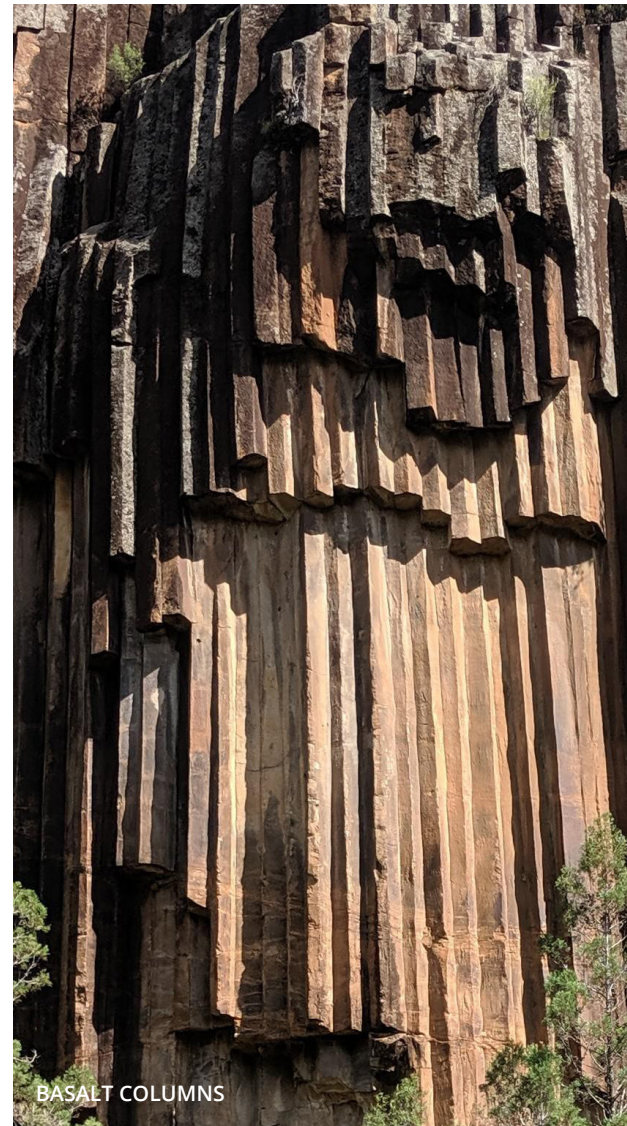
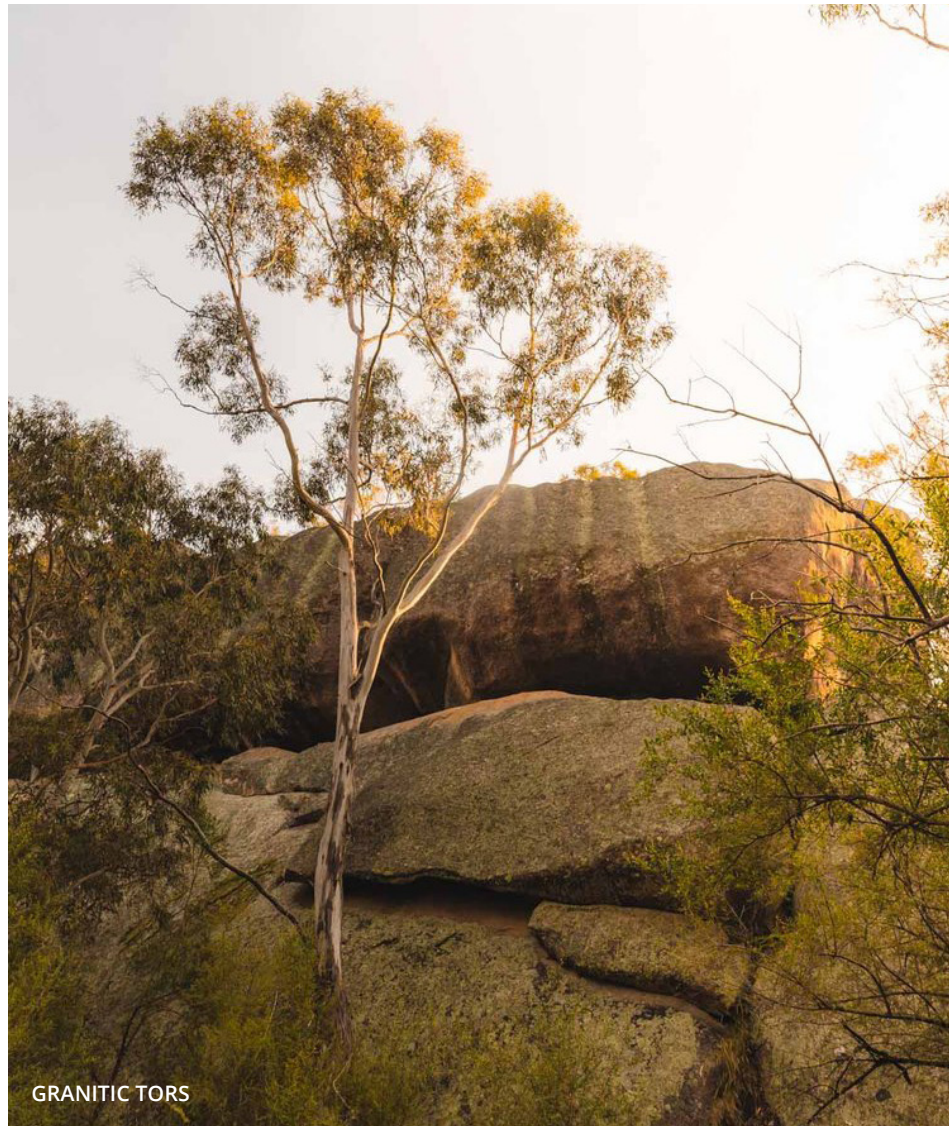
Outside the immediate neighbourhood of Bathurst there are granites of several different types. One of these at Locksley about sixteen miles east of Bathurst is a very fine granite carrying large crystals of deep red orthoclese in a fine grained matrix.

At a distance of about 16 kilometres from the city, granite changes to Silurean rocks. The latter consists mainly of schists and slaty rocks. Interbedded with the slate rocks are beds of limestone in places.



Wiradjuri Country

Geology



Wiradjuri Country

Hydrology

Bathurst; Known as “Dalman” or “Place of Plenty”.

Wambool (Macquarie River), which is part of the Murray-Darling basin, the largest river system in Australia, runs through the centre of the city. A number of levee banks have been erected in Bathurst to protect the region from occasional flood events.

Wambool divides Bathurst with the CBD located on the western side of the river. Four road bridges and two rail bridges span the river within the city area.

From the upstream side they are:

- + Macquarie River Railway Bridge;
- + Evans Bridge (1995);
- + Denison Bridge (pedestrian only);
- + Gordon Edgell Bridge on George Street; and
- + Rankens Bridge at Eglinton.

Other surrounding hydrological influences include:

- + Creek and streams
- + Marshes and floodplains, and
- + waterfalls of the distant mountains.

Water for the city of Bathurst is sourced from two dams, Chifley and Winburndale, along with flow from the Fish River.

The major water storage for Bathurst is Chifley Dam located on the Campbell's River 17 kilometres upstream. Water released from the dam flows down the Campbells River into the Macquarie River. It is then drawn from the Macquarie to supply Bathurst.

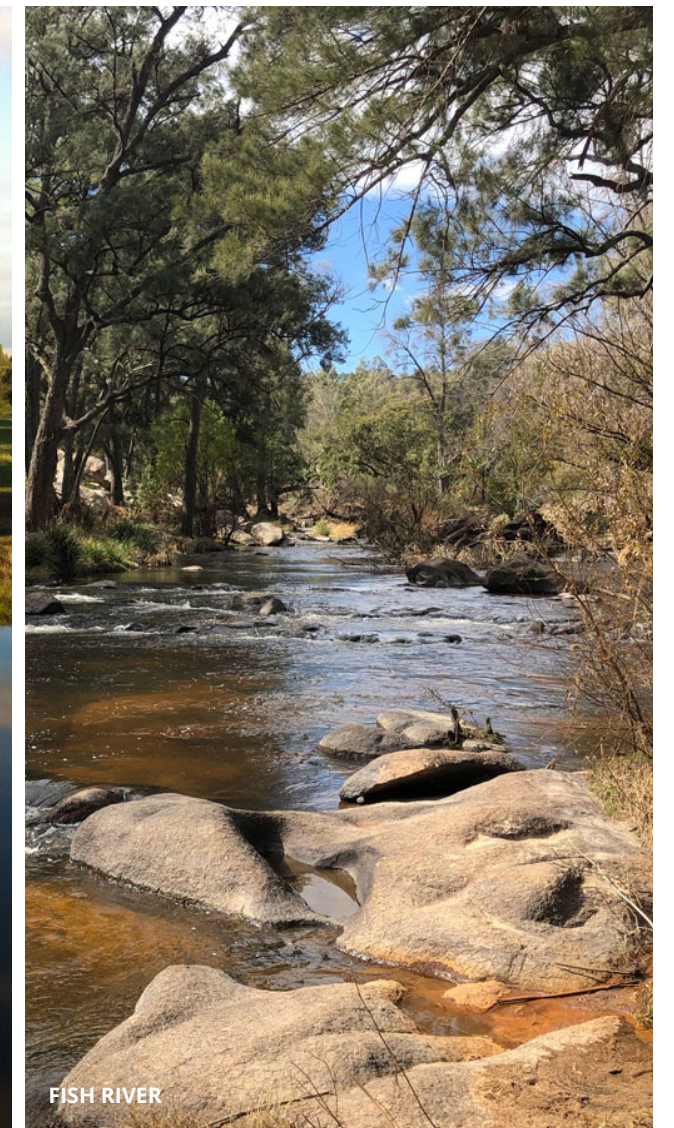
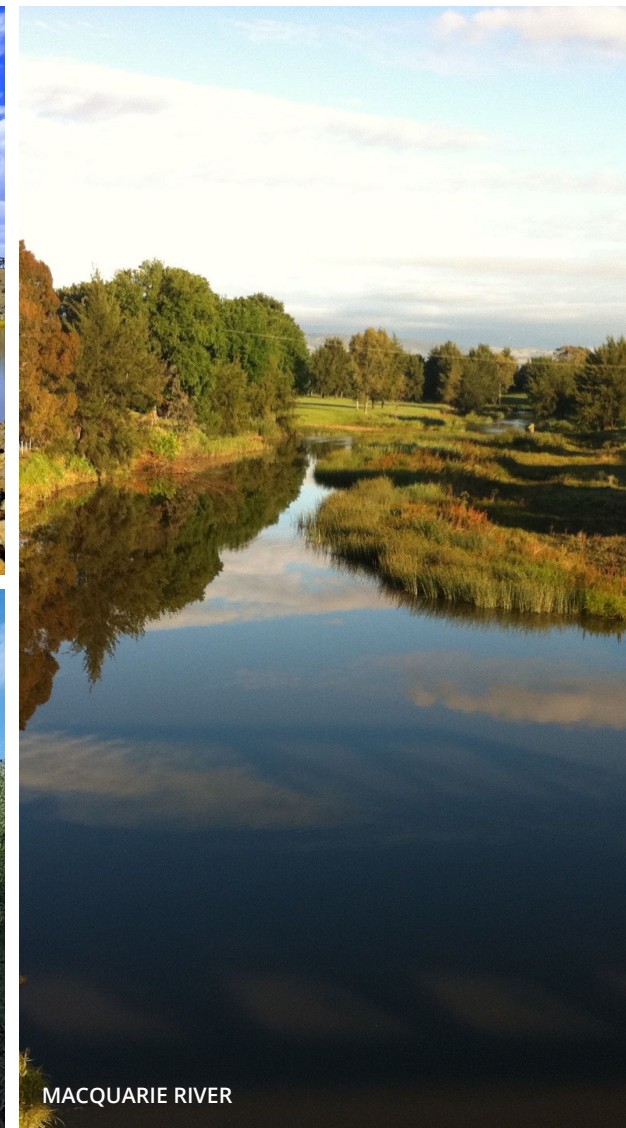
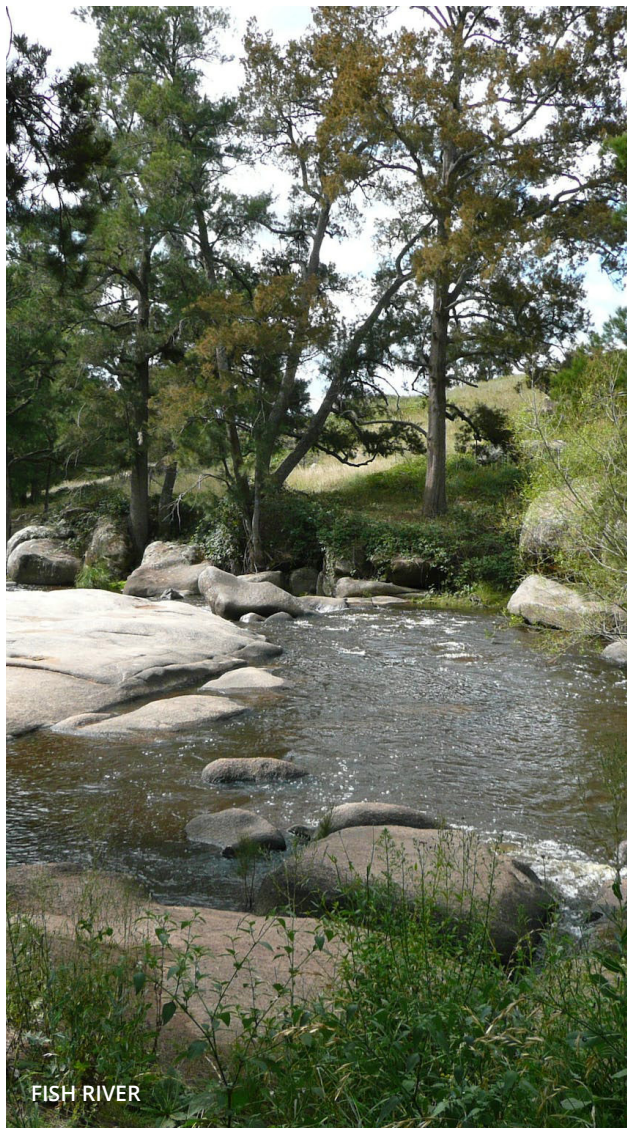
Legend

- 1 Wambool (Macquarie River)
- 2 Queen Charlottes Creek
- 3 Raglan Creek
- 4 Fish River
- 5 Campbells River



Wiradjuri Country

Hydrology



Wiradjuri Country

Flora

Bathurst is located in the Central Tablelands of New South Wales, Australia. The vegetation communities found in Bathurst NSW vary depending on the altitude and soil type.

In the lower areas, the vegetation is dominated by grasslands and woodlands, with Eucalyptus trees such as White Box, Grey Box, and Yellow Box being the most common. Acacia species are also present.

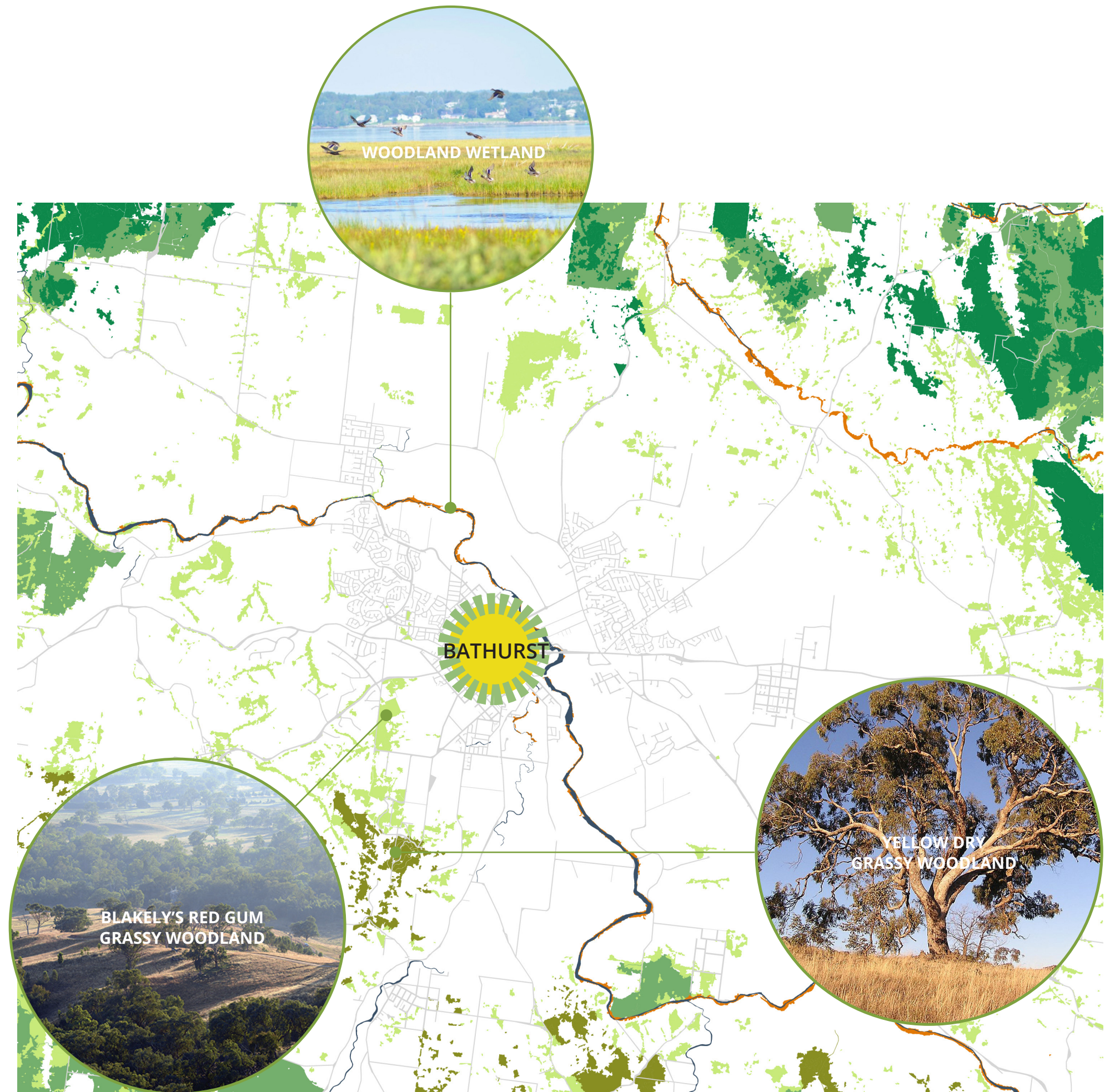
At higher altitudes, the vegetation changes to forests and woodlands, with Snow Gum and Mountain Gum being dominant species. The understorey is typically shrubby and includes species such as, Heath Banksia and native Raspberry.

Riparian vegetation is also present along the rivers and creeks, which is dominated by River Red Gum and Willow species. Wetland vegetation is dominated by sedges, rushes, and reeds.

Overall, the vegetation communities found in Bathurst are a mix of grasslands, woodlands, open forests, and riparian vegetation, with a variety of tree and shrub species present.

Legend

-  Macquarie River
-  Roads
-  Long-Leaved Box / Red box / Red Stringybark Mixed Open Forest
-  Derived Grasslands
-  Apple Box - Yellow Dry Grassy Woodland
-  Inland Scribbly Gum / Red Stringybark Open Forest on Hills
-  Yellow Box - Blakely's Red Gum Grassy Woodland
-  River Oak Forest and Woodland Wetland



Wiradjuri Country

Flora



BLAKELY'S RED GUM (FOLIAGE)



BORONIA DEANEI



EUCALYPTUS BRIDGESIANA - APPLE BOX



THEMEDA TRIANDRA - KANGAROO GRASS



VERONICA BLAKELYI



CALLISTEMON MEGALONGENSIS

Threatened flora species found in Bathurst IBRA sub-region

Website link:
<https://www.environment.nsw.gov.au/threatenedspeciesapp/cmaSearchResults.aspx?SubCmald=361>

Wiradjuri Country

Fauna

Bathurst and its surrounding areas are home to a diverse range of fauna. The region boasts a unique mix of native Australian animals, many of which are endemic to the area.

One of the most iconic animals in Bathurst is the kangaroo, which can often be spotted grazing in the open grasslands around the city. There are several species of kangaroo in the area, including the Eastern Grey Kangaroo and the Red Kangaroo.

Other native Australian animals that call Bathurst home include wallabies, possums, echidnas, and wombats. The region is also home to several species of reptiles, such as the Eastern Brown Snake, the Red-Bellied Black Snake, and the eastern Water Dragon.

Over 200 species of birds have been recorded in the area. Common sightings include the Rainbow Lorikeet, the Sulphur-Crested Cockatoo, and the Eastern Rosella.

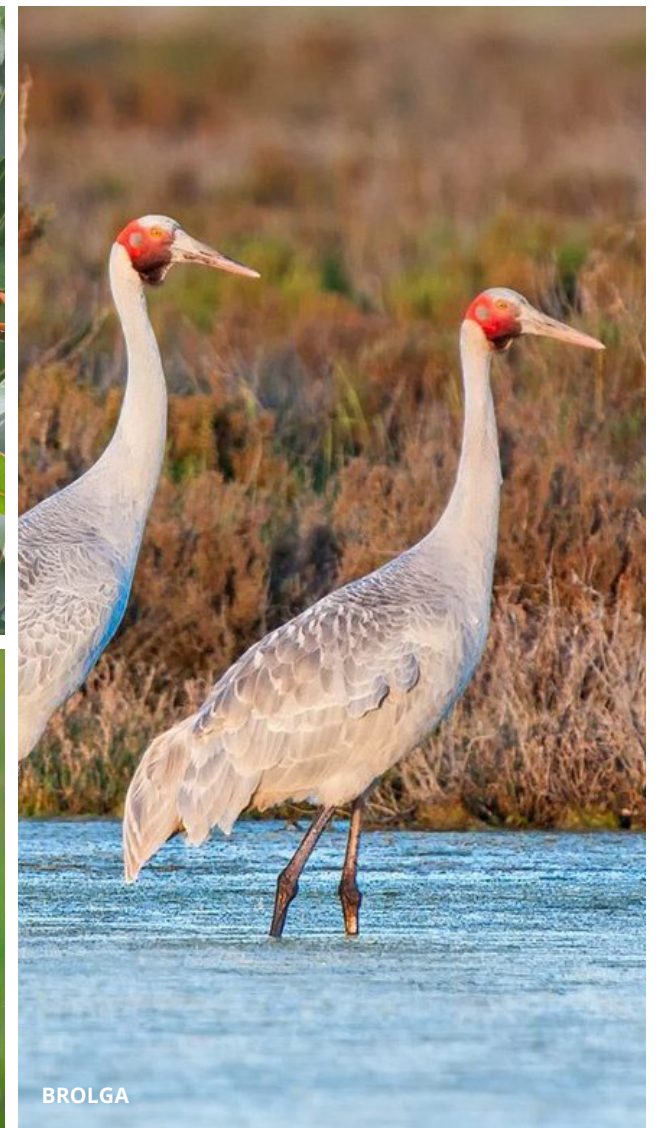
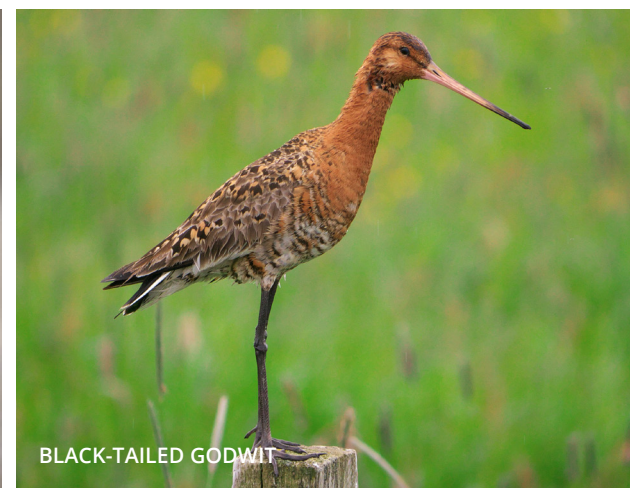
Legend

- 1 **Grassy Woodland**
Yellow-Plumed Honeyeater
- 2 **Red Stringybark Mixed Open Forest**
Squirrel Glider
- 3 **Woodland Wetland**
Magpie Goose
- 4 **Derived Grasslands**
Olive Legless Lizard
- 5 **Grassy Woodland**
Shingleback Lizard



Wiradjuri Country

Fauna



Threatened fauna species found in Bathurst IBRA sub-region

Website link:
<https://www.environment.nsw.gov.au/threatenedspeciesapp/cmaSearchResults.aspx?SubCmald=361>

2.0
VISION

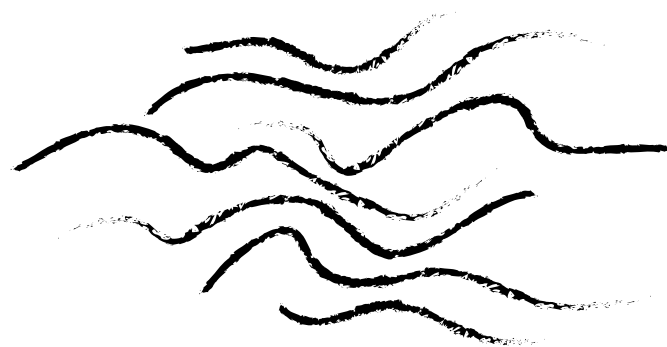
Landscape Vision

Celebrate
Wiradjuri
Country

Create a
Sanctuary

Connect to
Local Ecology

Design Principals



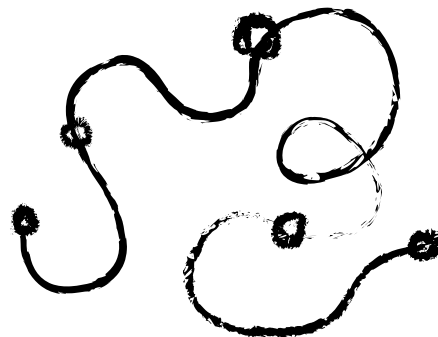
Convey a Tranquil Water Story

The design seeks to reflect and acknowledge its connection to the surrounding river systems; Macquarie, Lachlan and Murrumbidgee Rivers. “Badu” (water) is reflective and life nourishing. Water will be an integral feature on-site, emerging in different forms from the outdoor spaces and into the building.



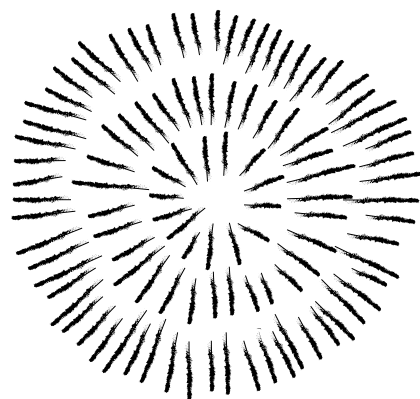
Welcome and Sanctuary

The new hospital will become a place that welcomes all with open arms, a place of sanctuary that invites people in, and feels safe to stay and connect. Landscape spaces must be diverse; sometimes tranquil and protected, other times open to the sky (Birrong) and flexible in its nature.



From the River and Across the Plains

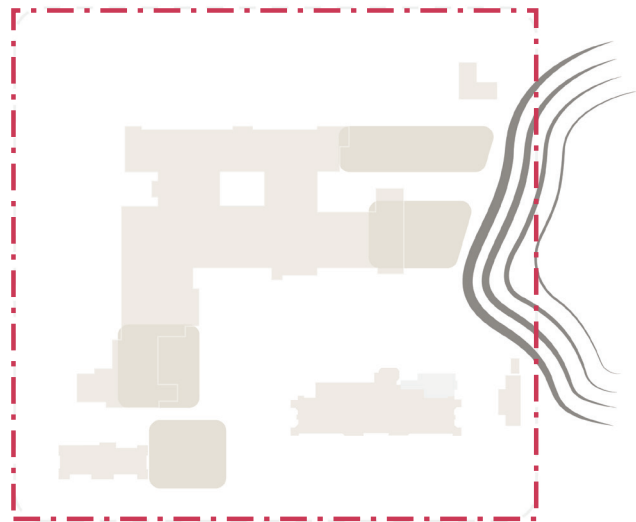
Bathurst is surrounded by unique topography that extends from mountain ridgelines to the river, encompassing several remnant vegetation communities. The landscape design seeks to reflect one’s journey across Country, bringing in plants of these communities to create spaces. Each planting palette is a nod to these vegetation communities and provides an interesting transition between each level.



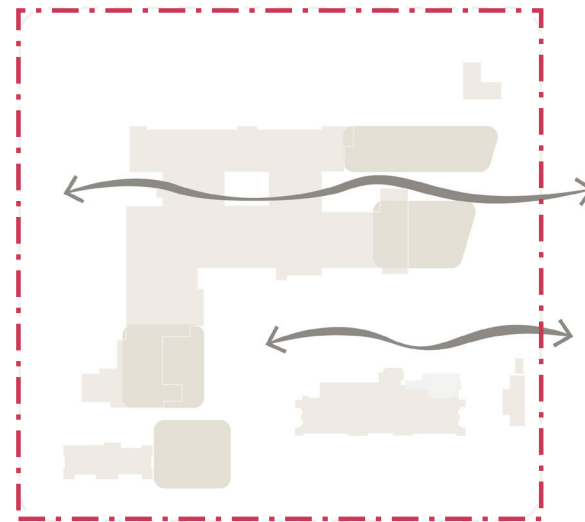
Connection to Country

Sky Country – Birrong. Eora – People. The design seeks to bring people into the space and create spaces that connects back to “Birrong” and honour other elements of Country. Our connectedness to Country is celebrated through materials, planting and landscape design moves that allows Country to exist, and us to exist with Country.

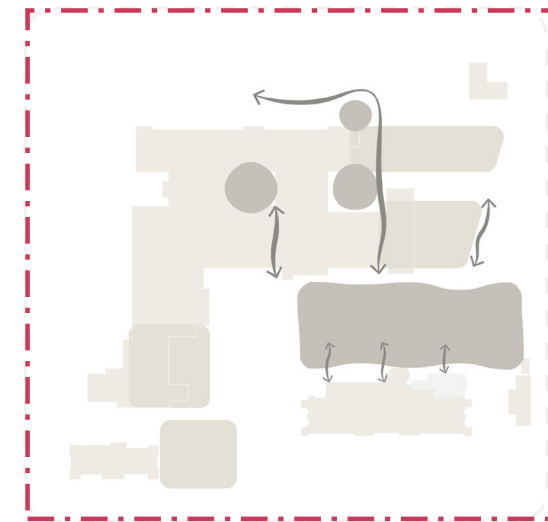
Urban Design Moves



Openness and Engagement



Create Connections



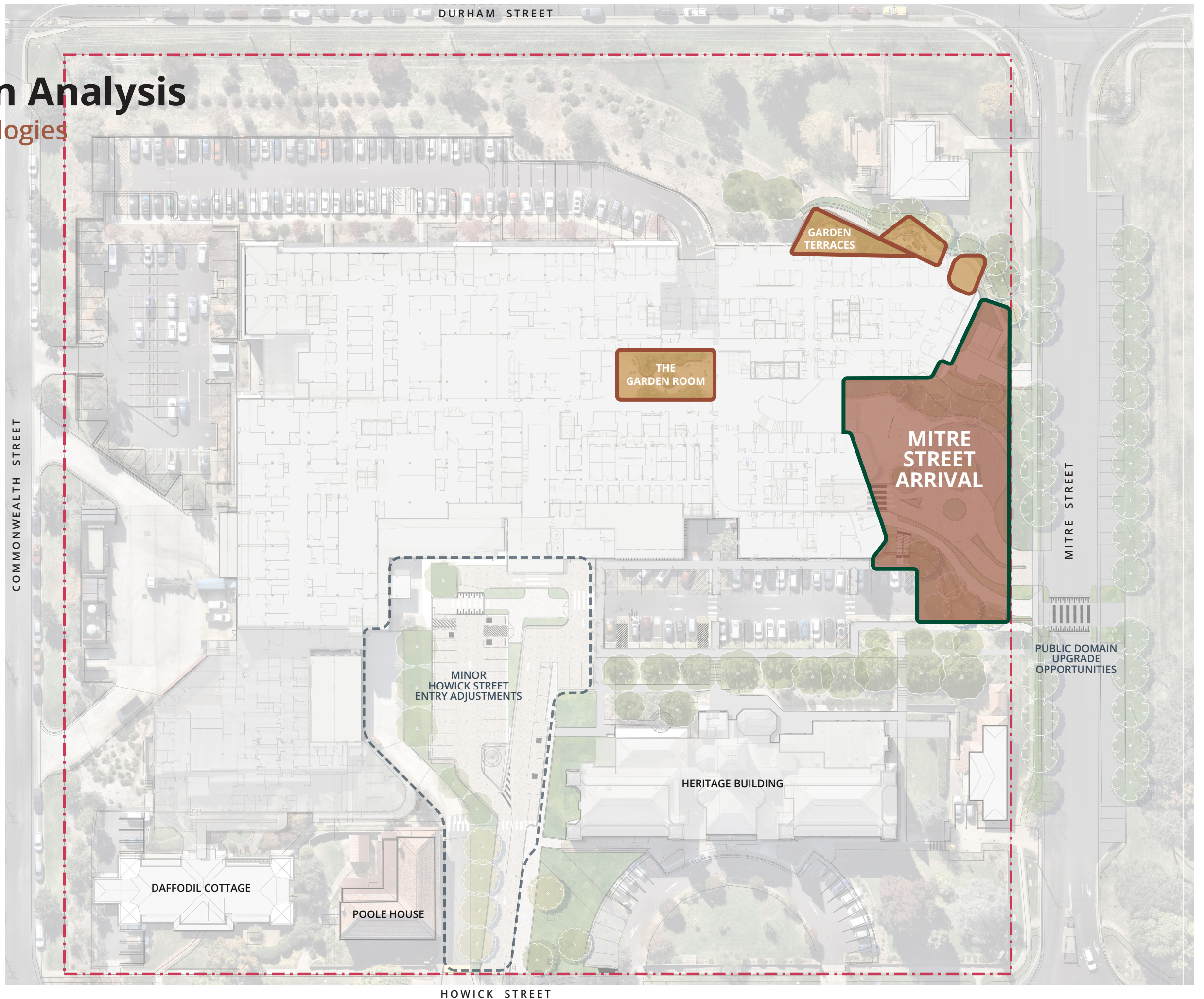
Permeability and Activation

3.0

LANDSCAPE MASTERPLAN

Masterplan Analysis

Landscape Typologies



Masterplan Analysis

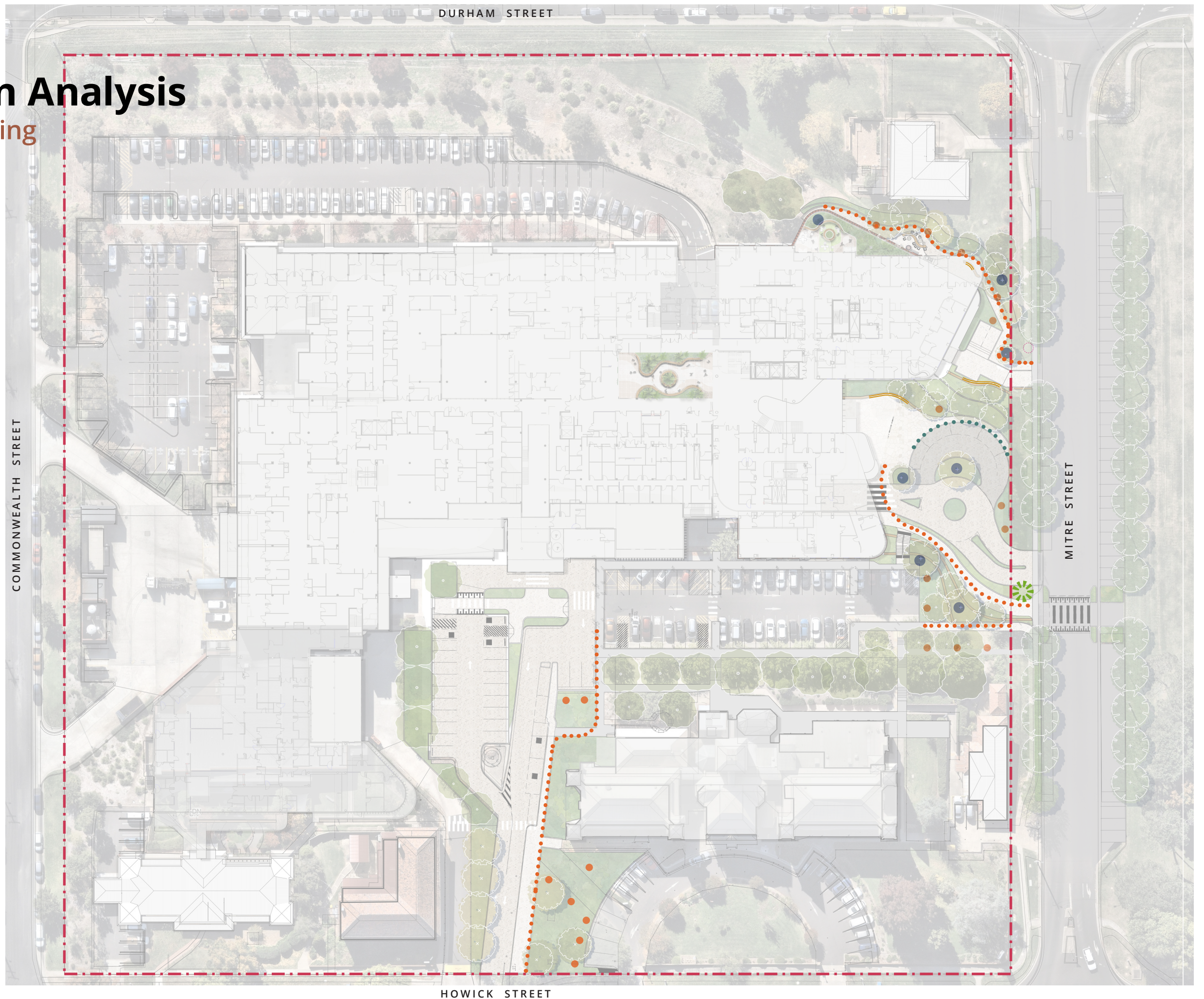
Landscape Lighting

This is a concept plan only, identifying landscape lighting opportunities.

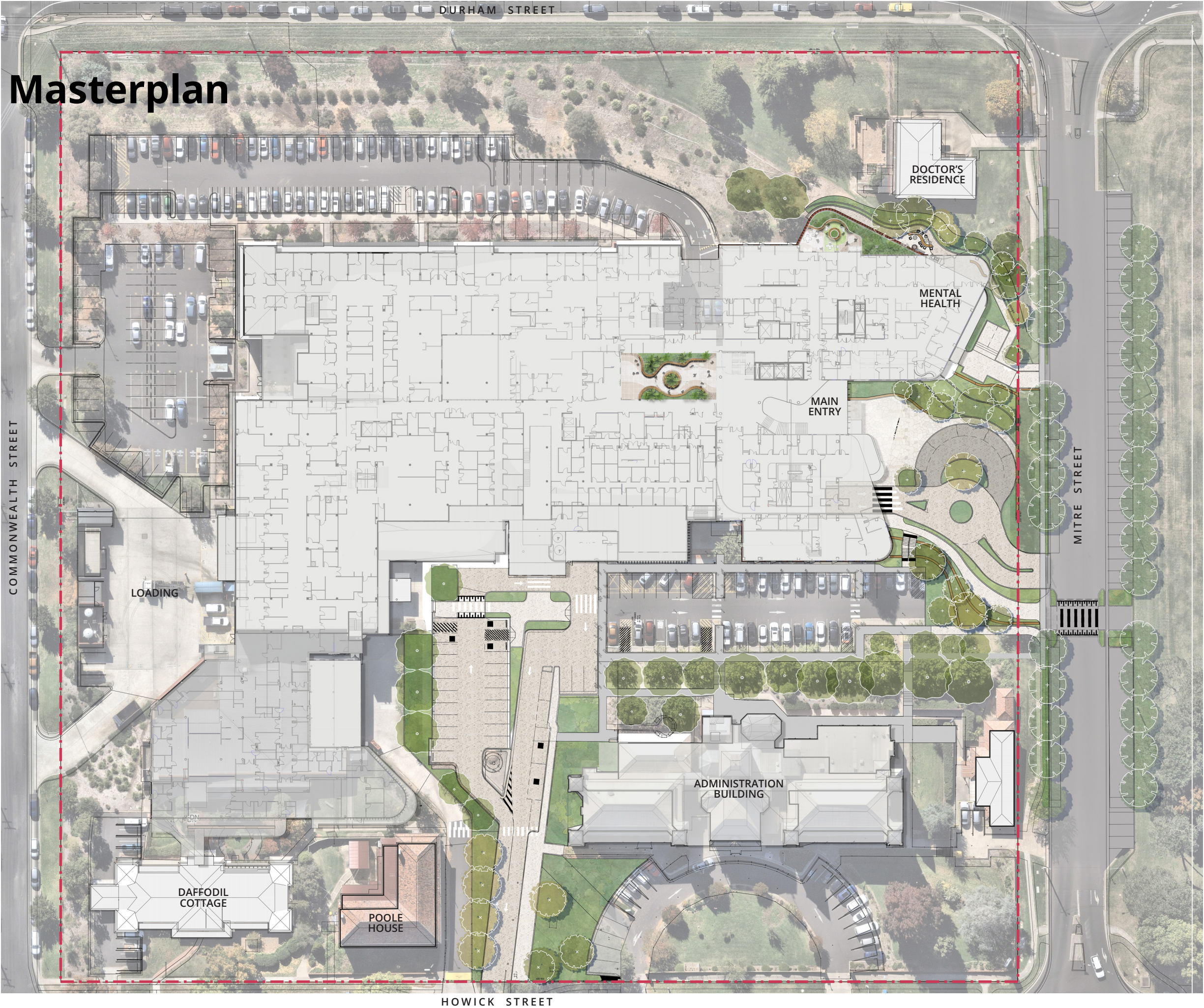
Further coordination with electrical engineer at detailed design phase.

Legend

- Footpath Lighting
- ▬ Integrated Furniture Strip Lighting
- Trees - Up Lighting
- ☼ Signage
- Bollard Lighting to Drop-off
- Garden Bollard Lighting



Landscape Masterplan



4.0

IN THE DETAIL

Mitre Street Arrival

Landscape Detail Plan

A brand-new public arrival to the hospital.

High-quality paving will visually extend the new landscape beyond the architectural colonnade and flip the focus to the pedestrian.

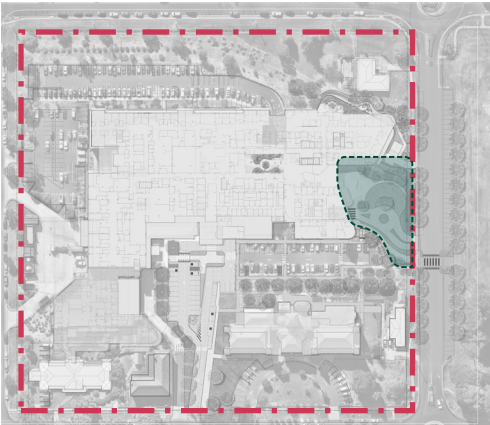
Paving, canopy trees and other visual cues will provide vital tension to this new entry and forecourt and slow motorists down.

The concept design looks to celebrate water through WSUD techniques; looking at opportunities to treat the site's water through capture and re-use.

The proposed tree canopy will provide shade across the site. As the canopy expands with long-term plant growth, the development will maximize green infrastructure, mitigate the urban heat island effect, and enhance both the site and streetscape

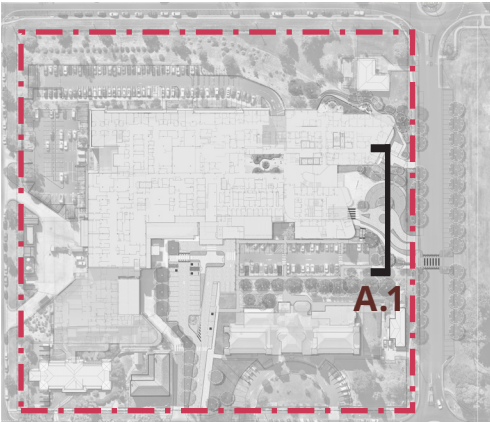
Legend

- 1 Proposed Mitre Street entry
- 2 Main entry drop-off to welcome forecourt
- 3 LLG access to Hospital Building
- 4 Terraced landscape with indigenous planting
- 5 Welcome tree and seating elements.
- 6 Feature tree at main entry drop-off
- 7 Retaining wall and embankment planting to public footpath
- 8 Pedestrian Crossing



Mitre Street Arrival

Landscape Section

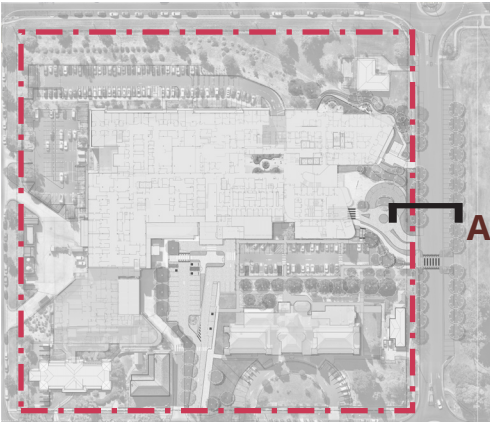


Section A.1
Legend

- 1 LLG access to Hospital Building
- 2 Main entry drop-off to welcome forecourt
- 3 Terraced landscaping with stair access to main pedestrian entry to hospital
- 4 Accessible Footpath to Existing Car Park

Mitre Street Arrival

Landscape Section

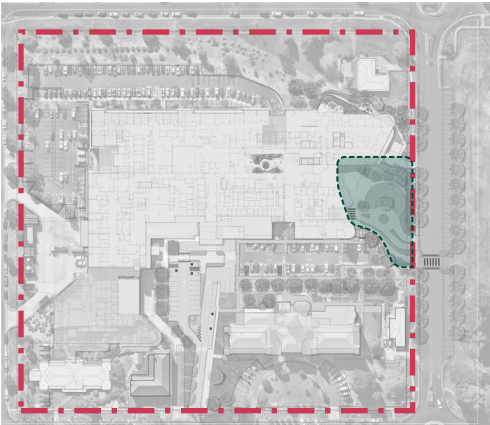


Section A.2

- Legend
- 1 Victoria Park
 - 2 Off-street parkig
 - 3 Public Domain footpath and vegetated verge with Street Trees
 - 4 Retaining wall and buffer ebankment planting to public footpath
 - 5 Main entry drop-off to welcome forecourt

Mitre Street Arrival

Materials Palette



TELLING A WATER STORY IN THE GROUND PLANE



CELEBRATE TOPOGRAPHY



SANDSTONE TO CONNECT TO LOCAL GEOLOGY



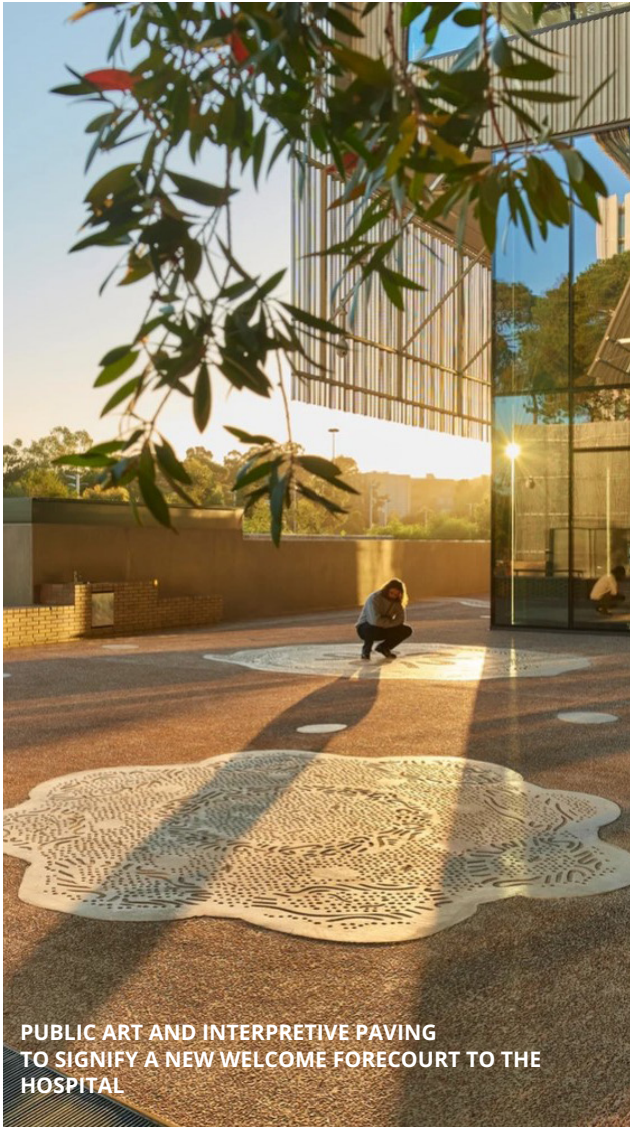
INDIGENOUS PLANTING - BUSH TUCKER



HEALING GARDEN ROOMS THROUGH PLANTING - RE-ESTABLISHING GRASSY WOODLAND



NATURAL MATERIALS - INFORMAL SEATING AND EDGE CONDITION BETWEEN CARS AND PEDESTRIANS



PUBLIC ART AND INTERPRETIVE PAVING TO SIGNIFY A NEW WELCOME FORECOURT TO THE HOSPITAL





Mitre Street Arrival

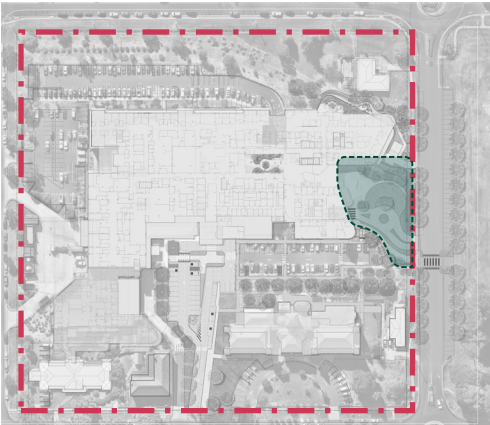
Planting Palette

Please refer to the accompanying landscape documentation package for detailed planting plans and schedule. This is not an exhaustive list.

Plant species identified on this page have significant cultural use for the Wiradjuri people. The planting strategy seeks to educate people and re-heal Country through the use of these endemic species in the new hospital landscape.

Legend

-  Food
-  Tools
-  Medicine
-  Shelter



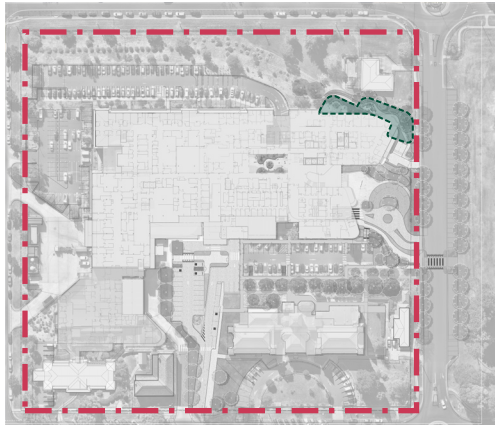
Canopy Trees

Shrubs

Understorey

Garden Rooms and Terraces

Landscape Detail Plan



Level 00 and 1 Mental Health Garden Terraces (MH-IPU-COURTYARD)

The Garden Rooms are a series of intimate, landscaped spaces set within the building.

Connection to the outdoors are through cutouts in built form (connection to Sky Country) and long vistas through windows. Shade loving plants that are commonly found along the river and creeks will connect visitors back to the local ecology. The use of natural materials for seating and dining, is a nod back to the geology of the area (granite and sandstone).

Ample seating opportunities will allow people to stop, pause and reflect, with water an opportunity to continue the site's water narrative.

The Level 1 Mental Health Garden Terrace is located on the eastern edge of the hospital, offering a space for visitors to gather outdoors with family and friends. BBQ and seating opportunities allows for outdoor entertainment, as well as capturing long views over Mitre Street and Victoria Park.

Legend

1

Outdoor BBQ under awning

2

Built-in central seating element

3

Movable fire pit indicative location

4

Continuous planter edge to terrace / balustrade height

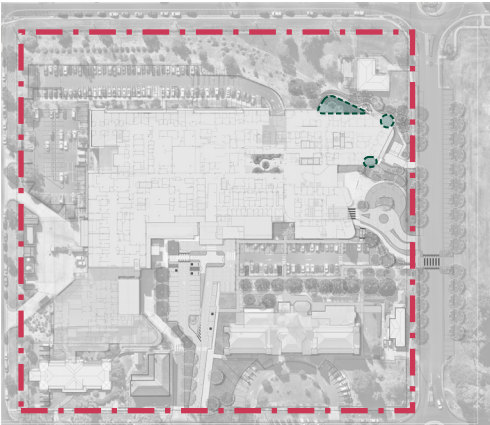
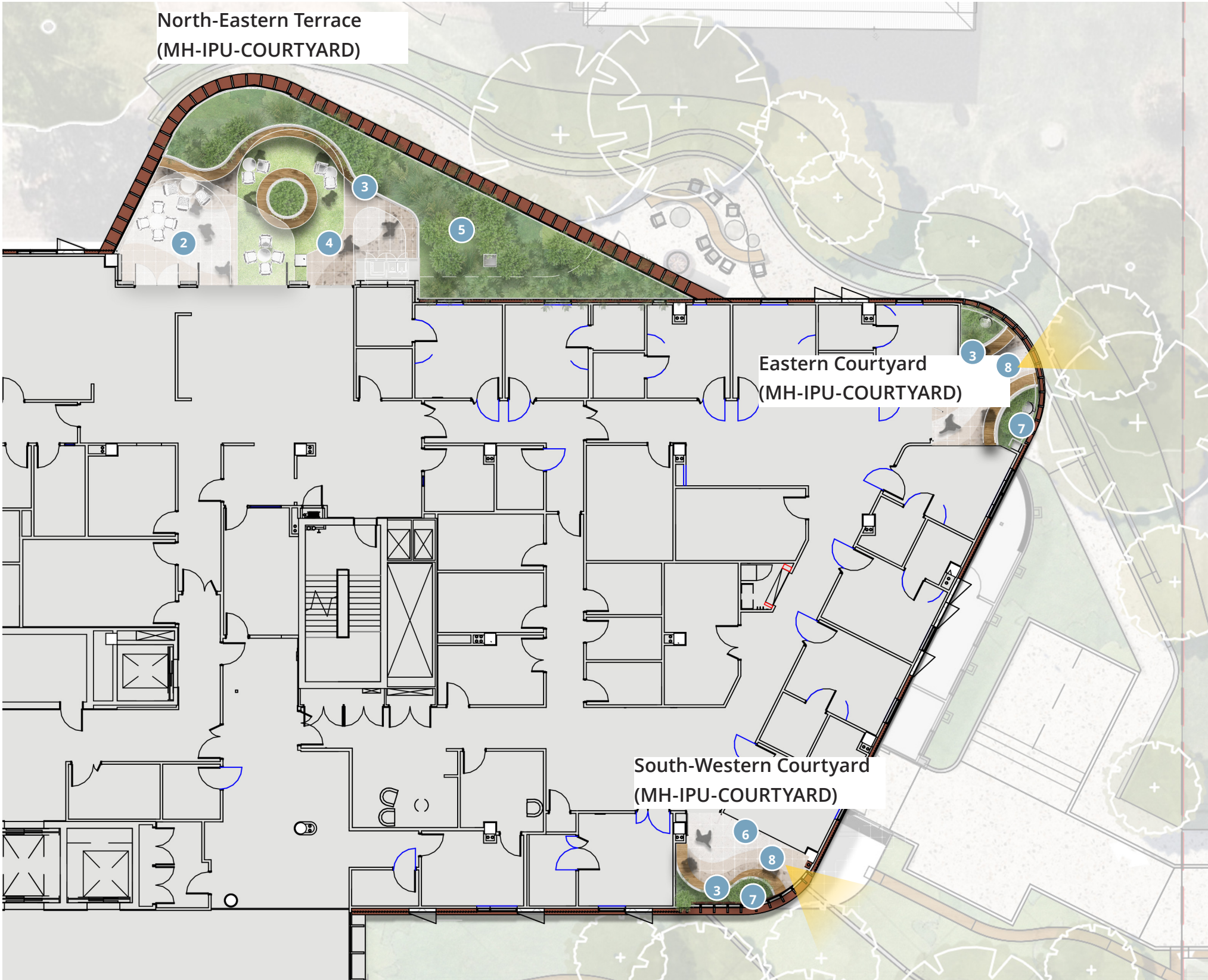
5

Proposed tree and understorey planting to base of terrace



Garden Rooms and Terraces - LEVEL 01

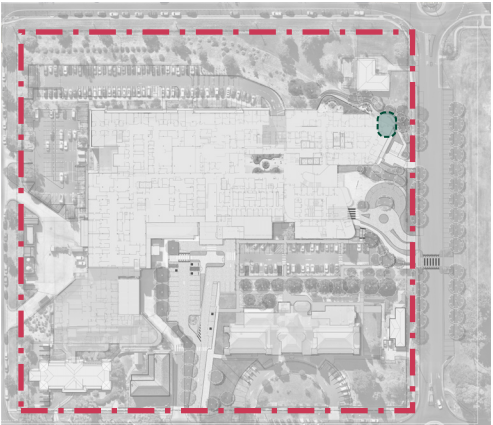
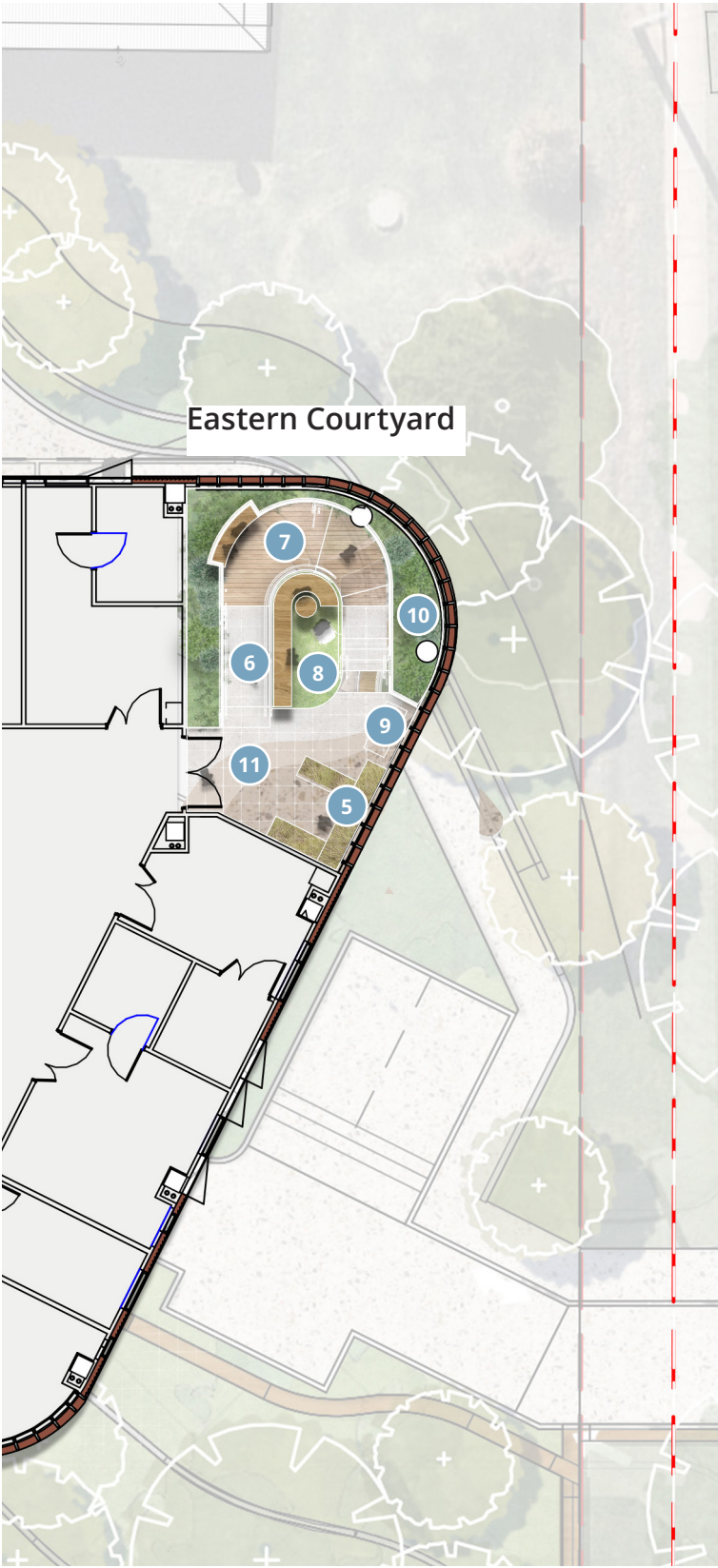
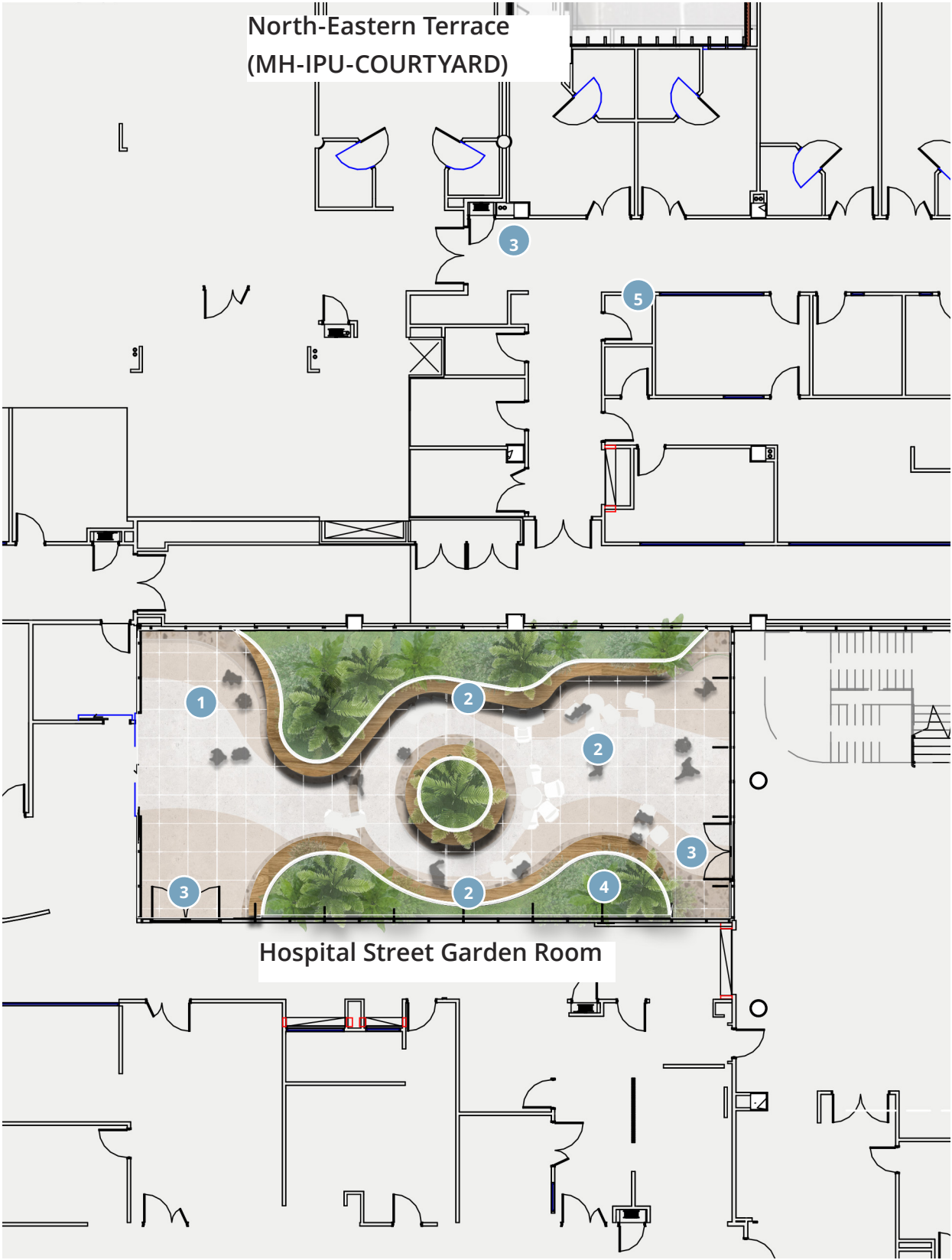
Landscape Detail Plans



- Legend**
- 1 Outdoor BBQ with storage
 - 2 Pergola / awning over flexible dining area
 - 3 Bench seating integrated with GRC planter wall
 - 4 Unit paving and artificial lawn ground plane
 - 5 Dense understorey planting to provide additional privacy to adjacent bedrooms
 - 6 Splading Basketball Hoop - 137 x 87 cm, H 2.3 - 3m
 - 7 Indoor Understorey planting and screening
 - 8 Views overlooking Mitre street and landscape below

Garden Rooms and Terraces - LEVEL 02

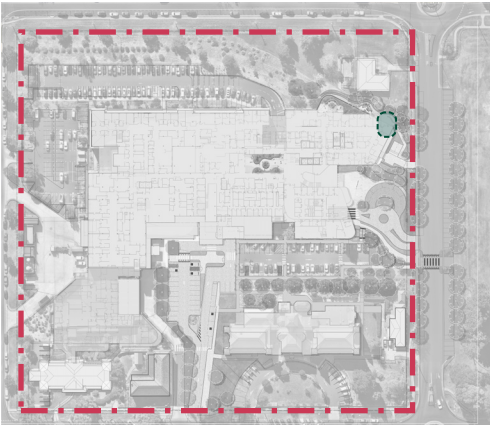
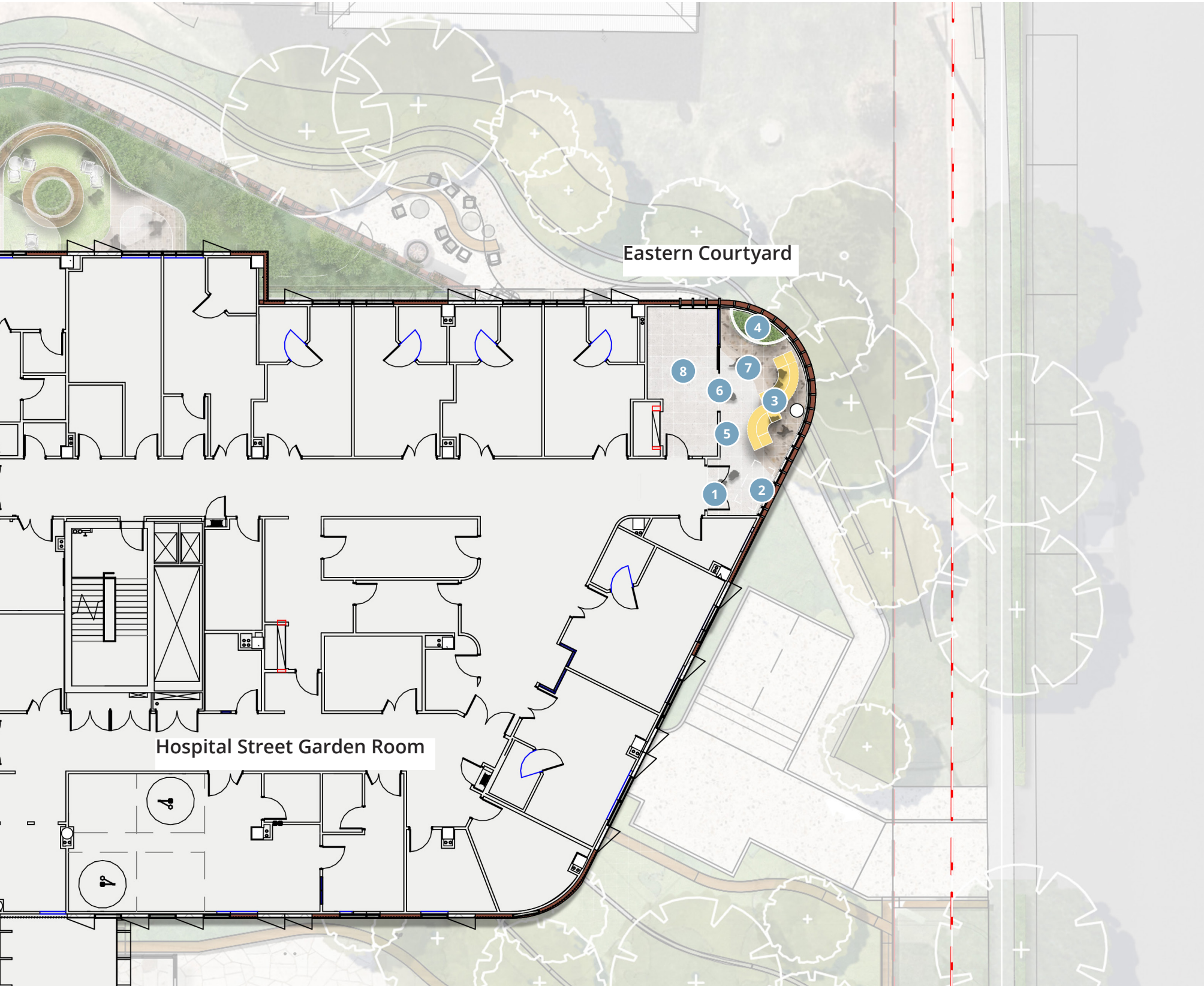
Landscape Detail Plans



- Legend**
- 1 Outdoor cultural lounge zone adjacent to meeting rooms
 - 2 Planters with integrated seating edges. Movable dining furniture.
 - 3 Access back into Hospital Street.
 - 4 Shaded, gully planting strategy to create intimate seating areas
 - 5 4 No. 1500mm x 600mm x 800mm Movable therapy planters
 - 6 Rehabilitation loop - Ramping with handrails
 - 7 Timber Deck - Textural change in ground plane.
 - 8 Built-in seating with garden tool storage under. Flexible seating zone.
 - 9 Location for movable BBQ
 - 10 600mm deep planter around rehabilitation loop.
 - 11 Flexible zone for various programs

Garden Rooms and Terraces - LEVEL 03

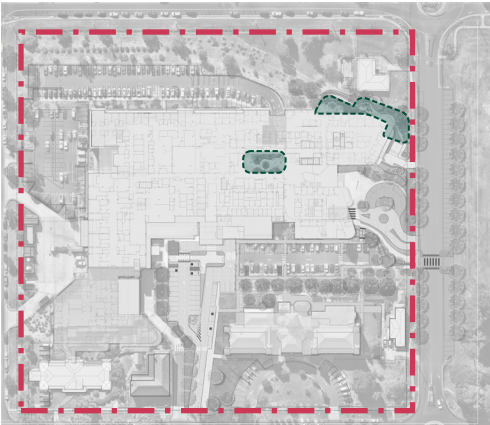
Landscape Detail Plans



- Legend**
- 1 Entry into courtyard
 - 2 Flexible space for single hospital bed
 - 3 Modular lounge seating with high back. Suitable for two families.
 - 4 600mm deep planter for herbs and edible plants. Place for potting.
 - 5 Wall for grab rail.
 - 6 Doors to open up to indoor playroom
 - 7 Courtyard with unit paving. Space for movable furniture.
 - 8 Indoor Play

Garden Rooms and Terraces

Materials Palette



INTEGRATED BENCH SEATING



AMPLE SEATING OPPORTUNITIES AND REST POINTS



CREATING INTIMATE, LANDSCAPED SPACES BETWEEN BUILDINGS



INDOOR LANDSCAPES WITH A CONNECTION TO THE SKY

Garden Rooms and Terraces

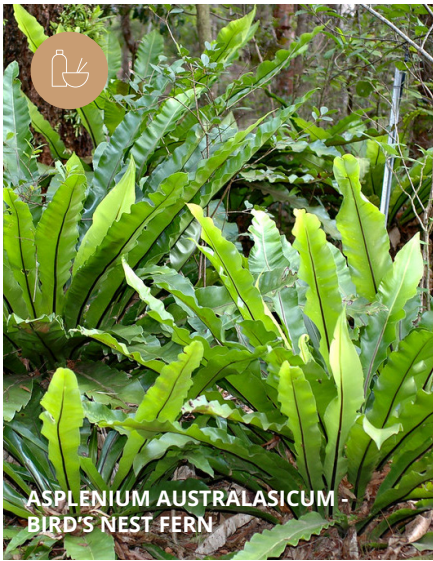
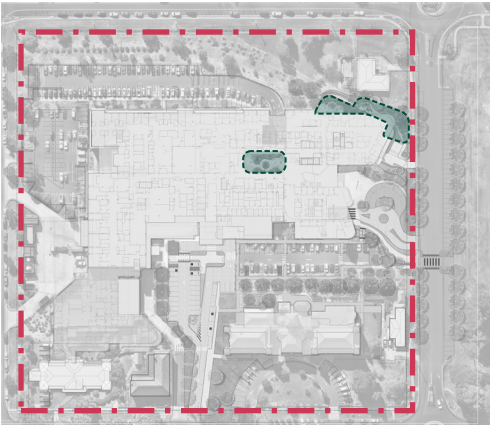
Planting Palette

Please refer to the accompanying landscape documentation package for detailed planting plans and schedule. This is not an exhaustive list.

Plant species identified on this page have significant cultural use for the Wiradjuri people. The planting strategy seeks to educate people and re-heal Country through the use of these endemic species in the new hospital landscape.

Legend

- Food
- Tools
- Medicine
- Shelter



Canopy Trees

Shrubs

Understorey



ARCADIA