

A watercolor illustration of a landscape with a large tree on the left, a line of trees in the middle ground, and rolling hills in the background under a cloudy sky.

CONNECTING TO COUNTRY

Aboriginal Design Principles

156-166 RICKARD ROAD, LEPPINGTON // WSP Indigenous Specialist
Services // Feb 2026

A red square logo with the lowercase letters 'wsp' in white.

wsp



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Research by Sian Hromek (Yuin), WSP. Sian specialises in variety of fields relating to Aboriginal Country and landscape design, including Cultural Land Management Practices such as cultural burning, and how these practices might inform built outcomes and inform engagement strategies.

Please note:
In order to highlight the use of Aboriginal Design Principles, this document may contain examples from other Aboriginal Countries.

Warning:
Aboriginal and Torres Strait Islander readers are warned that this document may contain reference to or images of deceased persons.

Front page image: From Fern Hill [Mulgoa], 1857-1861, George Kilgour Ingelow, State Library NSW

*This document acknowledges the Elders, past and present of the **Darug Language** group as the Traditional Custodians of the land and its knowledge.*

Connecting to Country Statement

Aboriginal people and the built environment have had a longstanding relationship as settlements, roads, and railways often cut through and disrupt the connection between people and Country.

Our projects change the environment in significant, and often positive ways, yet Aboriginal people often ask the following question:

“How are you going to leave my Country better than when it was before?”

How can we reconnect the relationship between Country and people? Projects offer an opportunity to acknowledge and celebrate the Aboriginal Country, Culture and people of the land on where the project is located.

Through the project's design elements and our place-based landscape interventions (architecture, infrastructure, art and the like), **we can acknowledge Country** and reveal the site's latent Aboriginal history.

This document describes the principles we use as a starting point to engage with Aboriginal people and Country. While more consultation and permission must be sought from the local elders, the ideas set out in this document should be seen as an introduction to the engagement process.



Aboriginal people climbing trees, 1820, E. C. Close, State Library NSW

Indigenous Design Statement

Aboriginal design principles

We will follow the following principles:

Aboriginal led / Aboriginal people (designers, Elders and community members) should be leading or co-leading the Indigenous design elements.

Community involvement / The local Aboriginal communities will be engaged in a co-design process; where dean teams, client and Aboriginal groups design the project together.

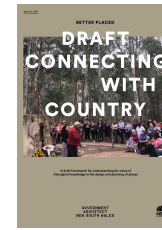
Appropriate use of Indigenous design / All Aboriginal design elements must be approved by consulted Indigenous Knowledge Holders. If approval is not given, the knowledge will not be used on the project.

Design approach

Image - Signage/surface treatment/ walls/art/ Surface treatments using local Indigenous design knowledge, commissioned from artists, or by urban designers with engagement and approval from community. Signage helps to share the story of Country and its people.

Space - Indigenous space/ landscaping/ A space or landscape where Aboriginal people can have their culture celebrated. Yarning circles, space for contemplation, spaces for non human kin, cultural land stewardship practices, cultural fire, yam daisy propagation, etc. 3D forms, such as sculpture and art.

Language words- Using First Nations language in the built environment to use it and keep it alive.



Country focused design

Overall, Aboriginal Australia has a simple but quite different hierarchy when it comes to their connection to nature. Rather than placing humans above all other living entities, we are just as important as everything else, but no more important.

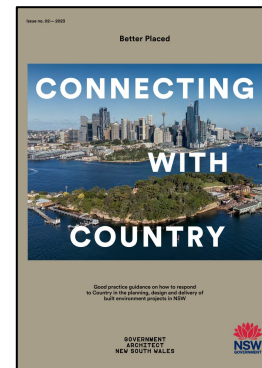
How might this different perspective shift or enhance current practices? Can we improve biodiversity in the built environment through changing the way we think?

Country, over Community, over Individual



Country focused design

NSW Gov. Architects Connection to Country principles



Heal Country

Connection to Country should lead to better physical and mental health, including improved diet, more physical activity, lower blood pressure, and reduced psychological distress.

Site approach: The above can be achieved through a healing of Country approach, bringing green into the building, opening up long views, calming colours, many spaces for different inhabitation

Cultural revitalisation

Connecting to Country can help Indigenous people reconnect with their culture, language, family, and ancestors. This can lead to improvements in financial, emotional, and mental health.

Site approach: Knowledge, stories and designs can reference Darug culture through wayfinding, artworks, threshold details, spaces for sharing culture, spaces Aboriginal people feel welcome to share culture

Strengthened identity

Connection to Country can help Indigenous people strengthen their self-esteem, self-worth, and pride. It can also help them foster a sense of belonging and cultural and spiritual connection.

Site approach: Spaces designed for culture can enhance the above, such as an important space in the development where regular smoking ceremonies can be held, or bush tucker / healing gardens

Empowerment

Caring for Country can empower Indigenous people to become cultural custodians for future generations.

Site approach: The site can celebrate local Aboriginal talent in art, landscape care, Indigenous foods, ceremony performance, cultural businesses etc.

Wellbeing

Connection to Country is a core determinant of health and wellbeing for Indigenous people.

Site approach: Create spaces that reflect the local culture to enhance the identity of Country, place, people and kin.

Our Connection to Country process

1. Stakeholder identification & engagement:

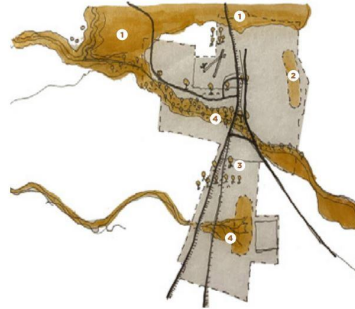
Identify and facilitate co-design with Aboriginal community members, groups, Knowledge Holders and Traditional Custodians to guide and inform research and interpretation of cultural knowledge and coordinate a Walk on Country with the project team.



2. Research & mapping of Country:

Outline traditional and contemporary Aboriginal stories of the areas.

Figure 5: Guidelines for the planning of Gamilaroi Country



- 1. A flooded area**
should be kept aside and used for recreation
- 2. A high point**
provides good regional viewpoints and potential site to appreciate the Country
- 3. Endangered growth**
a scattering of trees provide what little native vegetation resides on the site and must be protected
- 4. Halls and Clarks Creeks**
should be rehabilitated and any future development planned around them

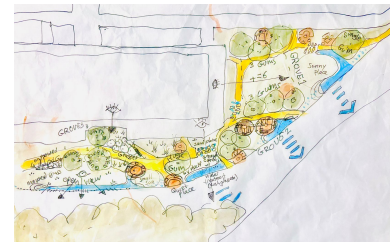
3. Connecting with Country Design Principles:

Develop a set of Aboriginal Design Principles to inform the concept design. May include concepts, beliefs, heritage or story based ideas that are significant to the local Aboriginal Community and identified stakeholders.



4. Design input and review:

Work collaboratively with the project team to incorporate the Aboriginal Design Principles into the concept design.



Our Engagement process

Meeting 1, Listen: introduction of the team and the project to the Aboriginal consultants, then listen to initial thoughts, questions and what they have to say about this site and its stories.



Meeting 2, Show and tell - design team to present initial ideas, how they have integrated the initial ideas and document feedback.



Meeting 3, getting it right - design team to illustrate how feedback from meeting 2 has been incorporated.



Meeting 4, Endorsement - Aboriginal consultants verbally endorse the proposed outcomes.



Country, People, Culture

This section starts to unpack Country through desktop research about the Country, People and Culture of the Leppington area.

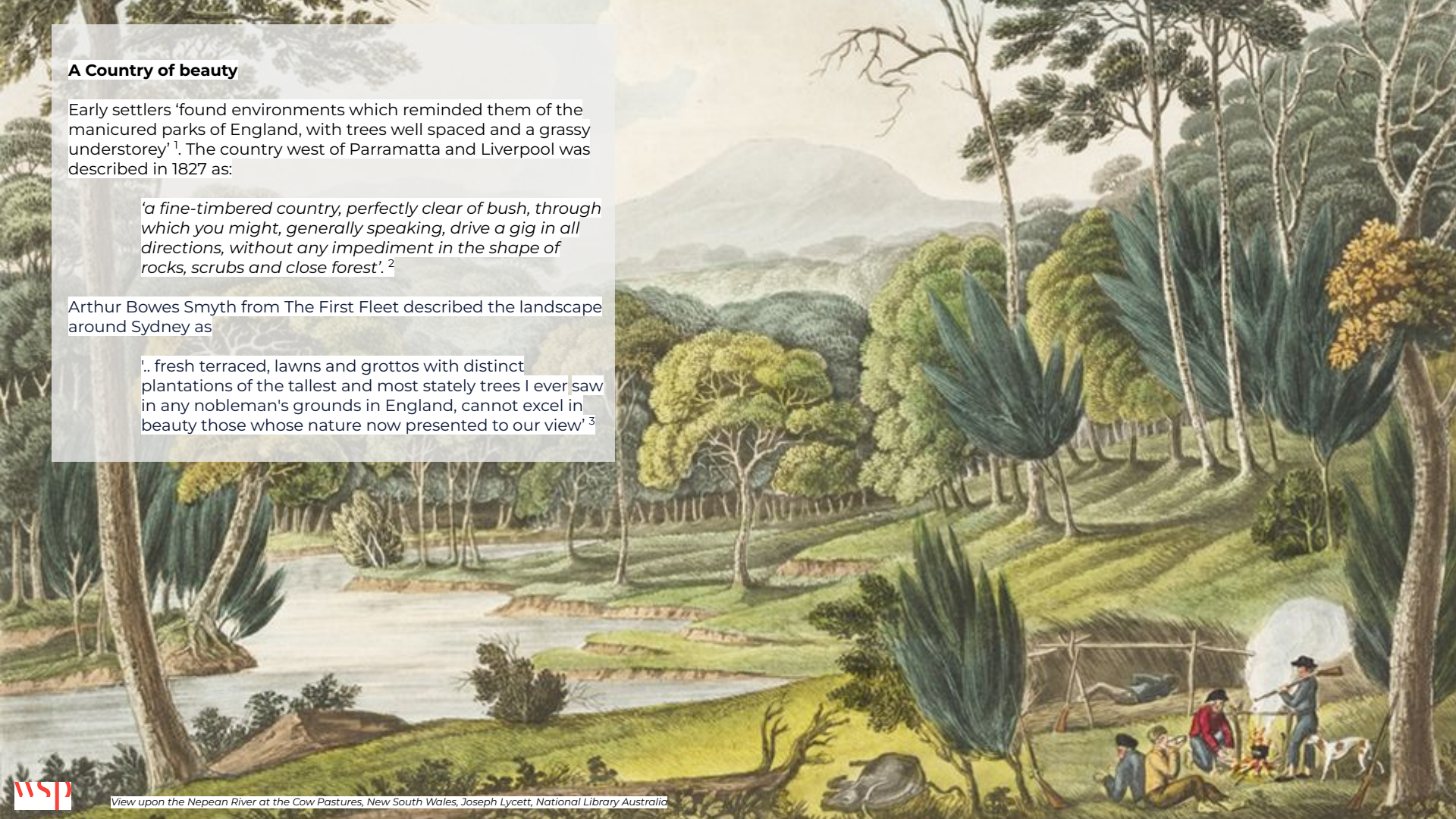
A Country of beauty

Early settlers 'found environments which reminded them of the manicured parks of England, with trees well spaced and a grassy understorey'¹. The country west of Parramatta and Liverpool was described in 1827 as:

*'a fine-timbered country, perfectly clear of bush, through which you might, generally speaking, drive a gig in all directions, without any impediment in the shape of rocks, scrubs and close forest.'*²

Arthur Bowes Smyth from The First Fleet described the landscape around Sydney as

*'.. fresh terraced, lawns and grottos with distinct plantations of the tallest and most stately trees I ever saw in any nobleman's grounds in England, cannot excel in beauty those whose nature now presented to our view'*³

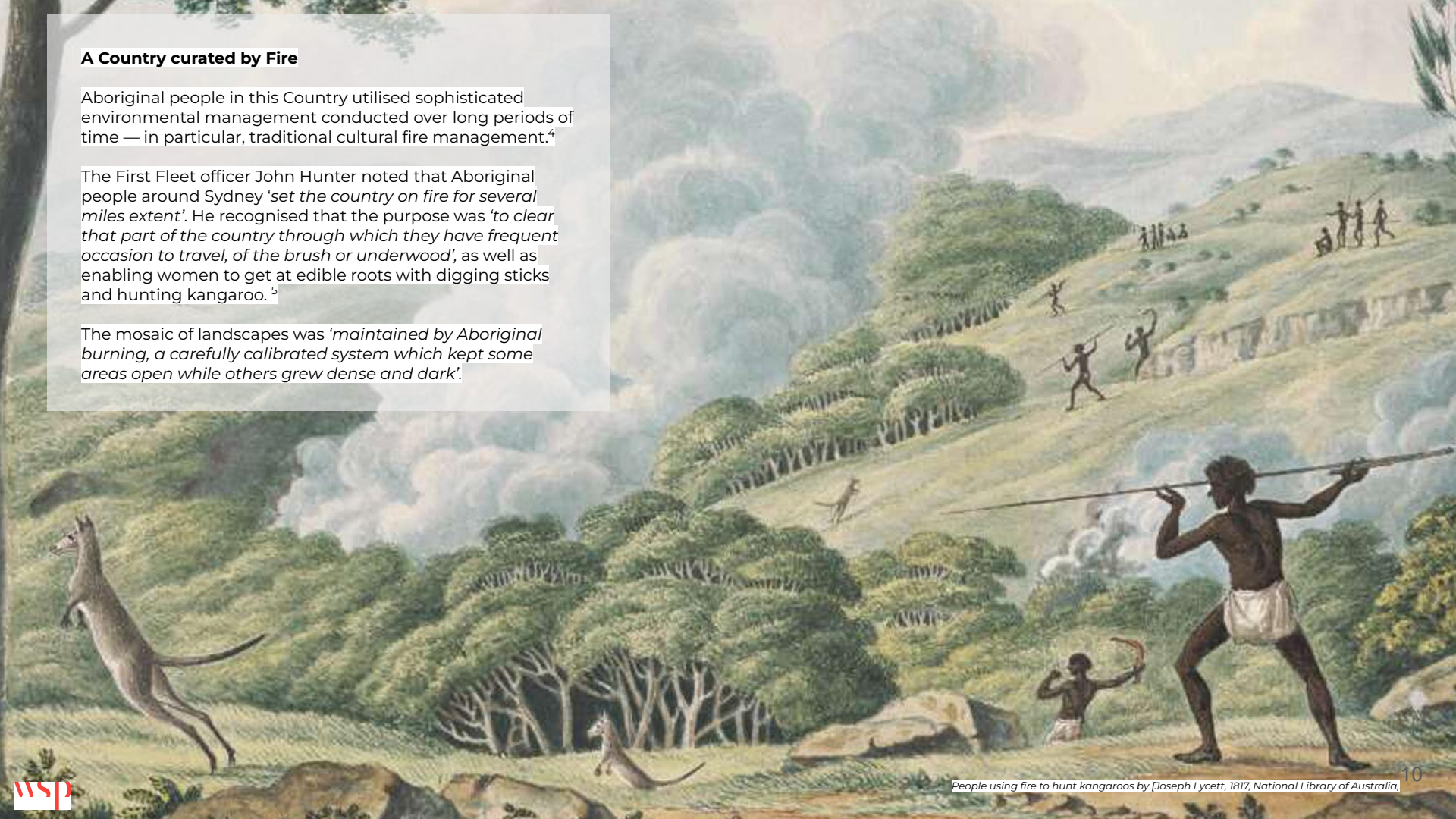


A Country curated by Fire

Aboriginal people in this Country utilised sophisticated environmental management conducted over long periods of time — in particular, traditional cultural fire management.⁴

The First Fleet officer John Hunter noted that Aboriginal people around Sydney 'set the country on fire for several miles extent'. He recognised that the purpose was 'to clear that part of the country through which they have frequent occasion to travel, of the brush or underwood', as well as enabling women to get at edible roots with digging sticks and hunting kangaroo.⁵

The mosaic of landscapes was 'maintained by Aboriginal burning, a carefully calibrated system which kept some areas open while others grew dense and dark'.



Language Groups

The Country around the Sydney Basin traditionally belongs to people of several nations or language groups, including Guringai, Dharug, and Dharawal. The lands of the Darkinjung and Gandangara converge with the Sydney Basin to the northwest and southwest respectively.⁶

The arrival of the First Fleet in 1788 to what we now call Sydney Harbour had severely negative impacts to Aboriginal people, who battled disease, dislocation and a calculated scheme of land theft.

The original inhabitants of Sydney Basin suffered from the trauma of occupation and the severing of their spiritual bonds to Country. Within two years of settlement, kinship ties in the area were damaged, more than half the population died from smallpox.⁷

However, despite this impact to their traditional lives Dharug peoples have survived and remain connected to their Country, land and culture.



First Nation language groups in
and around the Sydney Basin./
By Michael Hromek

Dharug Language Group

The Sydney Basin is traditionally inhabited by people of several language groups which include Darug, Gandangara, Kuringai and Dharawal. Within these language groups it is estimated there were at least 36 clan groups.⁸

Leppington sits within the Darug language cultural group. Darug people are custodians of the land between Port Jackson and Botany Bay in the east, the Georges River to the south and south-west, the Hawkesbury River in the north-west, and west to the Blue Mountains. Their language differs between the coastal and the hinterland plains.⁹

The word 'Darug' means 'yam'. Yams were a commodity as well as a food source, and are known to have been traded with neighbouring cultural groups. Yams were cultivated in specific growing areas which were destroyed when the land was cleared and fenced during colonisation.¹⁰



Freshwater Country

Long Connection to this Country

Aboriginal occupation of the Sydney region is thought to have spanned at least 20,000 years according to archaeological studies, although dates of more than 40,000 years have been claimed for artefacts found in gravels of the Cranebrook Terrace on the Nepean River.¹¹

Many researchers propose that occupation intensity increased from this period, possibly due to the rise in sea level after the melting of the last ice age.

Due to the rise in sea level covering older sites, the majority of archaeological sites date to within the last 3,000 to 5,000 years.¹¹

Freshwater Country

Western Sydney Basin is a Freshwater place, with small creeks, streams and tributaries moving through the landscape, generally flowing in a northerly direction to meet up with the larger Hawkesbury-Nepean river system.

These creeks and other water bodies were the focus of lifestyle for Aboriginal occupation. They provide fresh water, fish, shellfish, eels, waterbirds and plant foods, in addition to terrestrial animals that were drawn to the water.¹²

The cow pastures, New South Wales, 1874?, S. Prout; A. Willmore, National Library of Australia



Geology and Vegetation

Leppington has a surrounding geology consisting of fluvial deposits including sands, silts and clays beneath the South Creek soil landscape, and a bedrock of Bringelly Shale of the Wianamatta Group beneath the Blacktown and Luddenham soil landscapes.¹¹

As a result this geological landscape does not result in stone outcroppings suitable as surfaces for cultural expression such as art, engravings, drawing, painting, sharpening stone axes / tools or artefact manufacture. Nor does the geology create stone caves to be used as shelters for camping.¹³

Two dominant vegetation communities found around Leppington are:

Cumberland Shale Plains

Woodland- A tall sclerophyll open forest to woodland with a sparse mid-stratum of soft-leaved shrubs and small trees with a grassy ground cover on the shale plains.¹⁴

Cumberland Red Gum Riverflat

Forest- A tall to extremely tall sclerophyll open forest with a mid-stratum of soft-leaved shrubs and small trees and dense, grassy ground layer situated on the alluvial flats.¹⁴

Due to the intense clearing since colonisation these communities are endangered, with the Cumberland Shale Plains Woodland being critically endangered.¹⁵



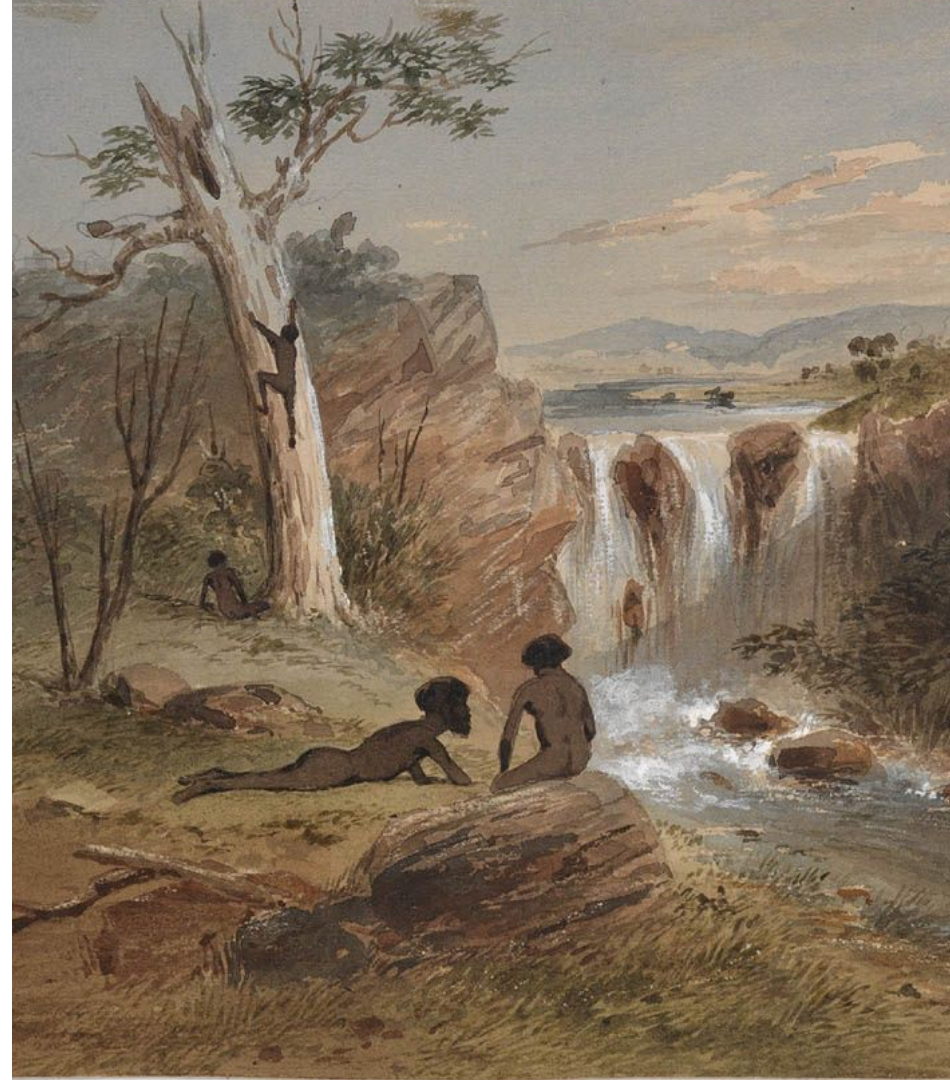
Camden New South Wales on the Nepean, 1857, H. Grant Lloyd, State Library NSW

Tools and Resources

Protein came from small wallabies and possums, and occasionally freshwater mullet from the rivers and creeks. Orchids, lilies and the native 'yam' were dietary staples. Edible roots and leaves and berries were also eaten.

Plants provided medicine and material for making string and rope, and grass-tree resin and beeswax were used to attach hatchet heads to handles and barbs to fishing and hunting spears. Banksias, grevilleas and melaleucas were soaked in water to make a sweet drink called 'bool'.¹⁷

People also traded a local valuable white pipe clay, which was widely used to decorate bodies.¹¹



Fall on South Creek near
Penrith, N.S.Wales,
1862-1863, John Thomas
Doyle & Samuel Thomas
Gill Mitchell Library, State
Library of New South
Wales

Darug Culture

There are many forms of cultural heritage held within the landscape and within the stories and knowledge passed down to each generation of Traditional Owner groups.

Tangible features of cultural heritage include objects such as tools, campsites, artifact scatters and scar trees. Intangible features of cultural heritage include creation stories, traditional ecological knowledge, kinship relations, and dance / ceremony.

Numerous sites and artefacts, but particularly lithics, or 'stone tools', are evidence of Aboriginal people's presence on the Cumberland Plain over many thousands of years. Stone known as silcrete was extracted from quarries in the Plains and was used throughout the wider region. Tools made of flaked glass have also been found, showing how Aboriginal people adapted colonial technologies to traditional culture.¹⁸

Shelter sites and grinding grooves are also found, although mainly around the periphery of the Plain in sandstone geology.¹³

View of cascades,
including Aboriginal
peoples, Samuel Thomas
Gill Dixon Library, State
Library of New South
Wales



Caring for Country

The Leppington area has been managed over millenia using traditional practises such as cultural burning, which is the application of the right type of fire to the landscape at the right time of year to promote health and wellbeing of Country, and all it contains. This created a robust, diverse, ecologically rich suite of plants and animals living within a patchwork of ecological communities that supported the requirements for its inhabitants to survive.

Knowledge about how, when and where to burn Country was passed along to each generation, building upon the knowledge of the past generations in order to maintain their custodial responsibility and honour reciprocal relationships to Country.

NSW Department of Planning and Environment Cultural Fire Management Unit Manager Vanessa Cavanagh (Bundjalung / Wonnarua) explains:

“Cultural burning is one component of traditional land management and not just about fuel reduction, but also about caring for Country, maintaining healthy, ecologically diverse and productive landscapes, and practicing cultural traditions.”¹⁸

Cultural burning is the application of the right type of fire at the right time for Country.



Conflict and Massacre

Rapid and extensive European occupation of Aboriginal land throughout the Campbelltown and Camden area meant that conflict was inevitable. Ongoing tension and conflict occurred with European clearing and fencing of Aboriginal land, irrecoverably changing the patterns of hunting and gathering that had been followed by people for tens of thousands of years.¹⁹

Governor Macquarie ruled that gatherings of six or more Aboriginal people were declared illegal, customary practice was outlawed, as was the carrying of spears, and the non-Aboriginal civilian population was granted permission to shoot and kill those people who did not adhere to the tenets of the various proclamations issued by government. In 1816 Governor Macquarie sent out three detachments of the 46th regiment to *“chasten ... hostile tribes and to inflict terrible and exemplary punishments on them”*.¹⁹

When they came upon a camp at Appin one night, they killed fourteen men, women and children. The massacre site was added to the State heritage Register in 2022. This event, since referred to as the Appin Massacre, is commemorated with an annual memorial event at Cataract Dam.²⁰



A native family of New South Wales sitting down on an English settlers farm c1826, Augustus Earl, National Library of Australia

Colonial Impacts

The traditional life of Aboriginal people in the Sydney region was severely damaged through the course of the early 19th century. The cumulative impacts of colonisation including dispossession of their lands and the effects of smallpox and influenza decimated the Aboriginal population, with individual epidemics killing large numbers of people.²¹

Early colonial settlement of traditional hunting lands deprived Aboriginal groups of sources of food and access to camping and ceremonial sites. Disrupting their way of life and consequently having negative impacts on their survival and culture. This forced individuals to either relocate into the potentially hostile lands of neighbouring Aboriginal groups, partially integrate into colonial society as fringe dwellers, or to resist and face consequences.²¹

Resistance by Aboriginal groups was often met with retaliatory action by white settlers and the colonial administration. A combination of these factors led to the demise of traditional lifestyles and a decrease in the Aboriginal population.²¹

Despite the damage done by colonisation to the various traditional ways of being, an evolution of culture, language and knowledge has survived and now lives on through the descendants of Aboriginal people.



LIVERPOOL,
New South Wales.

Liverpool, New South Wales, J Lycett, 1824, National Library of Australia
London: Published Dec. 1. 1824 by J. Souter 73, St. Pauls Church Yard.

Darug Design

Sydney's Aboriginal people expressed themselves visually across many different mediums including on wooden and stone surfaces, body scarification and painting, incised designs on weapons and tools, and etchings on skin cloaks.

Many other tools made of stone, shell and plant materials were used for making canoes, weapons and to collect food. Ornaments were worn in the hair and, scarring of chest and arms served both ornamental and ritual purposes. Initiated men wore a waistband of plaited possum fur.

Each clan distinguished itself from other clans in having different designs and decorations on their tools and weapons. They also distinguished themselves by having different body decorations – for example painted designs worn during certain rites and ceremonies, and the cicatrices (scarification) formed during initiation rites. Some groups also had distinctive hair styles.²³

French explorer Jules Dumont d'Urville in 1824 describes different Sydney groups gathering for ceremony. Their different body paint is a clear way to distinguish each group from the other: 'on high ground about two miles from the sea' (between Sydney and Botany Bay, and where there) 'were the people from Parramatta, Kissing Point, Sydney, Liverpool, Windsor, Emu Plains, Broken Bay, Five Islands, Botany Bay, and even from the Hunter River etc. All were distinguished by the designs of their body painting'.²⁴

>Fish hooks of NSW, detail of plate from John White's Journal of a Voyage to New South Wales 1790. Image: Mitchell Library, State Library of NSW



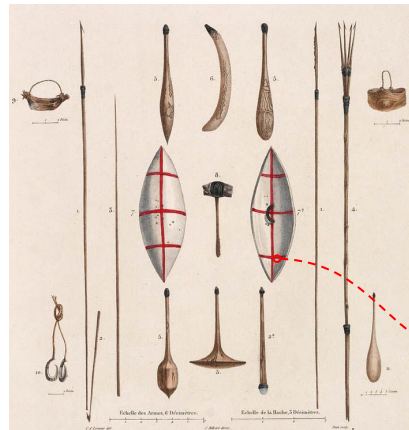
>>Painted shield attributed to coastal Sydney region, 92cm long-Dictionary of Sydney



Shane Smithers, Darug artist and academic describes the horizontal lines as representing Wiari, Mother Earth whom, along with Biari Father sky, is held in the highest respect. Together their generative power is the basis of Darug lore.



^ Necklace worn by females, Fibre cord necklace made of reed pieces (*Phragmites australis*), Port Jackson, c1860s, British Museum

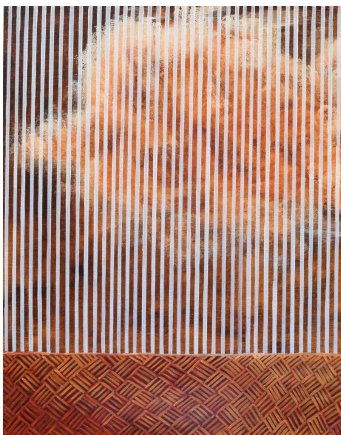


^ Charles-Alexandre Lesueur, *Indigenous Weapons - Sydney Region (1802-04)*, Australian Museum

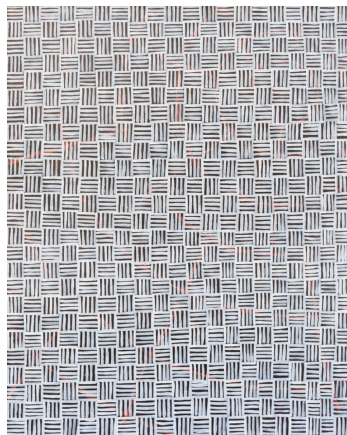


Darug Design

Shane Smithers, Dharug artist and academic describes the horizontal lines as representing Wiari, Mother Earth whom, along with Biari Father sky, is held in the highest respect. Together their generative power is the basis of Dharug lore.



Here the sky is represented by windswept clouds against a dusty backdrop. The white lines indicate our connection to the sky father Biari. Dharug Country is a place where sky meets earth, the generative forces of Wiari (mother earth) and Biari (Father Sky). The hatch pattern represents Country



Vertical lines represent Father Sky, horizontal lines represent Mother Earth. The Hatch here represents community and the multifaceted nature of interaction and how community is located with a landscape.

Nadeena Dixon is a Wiradjuri, Yuin & Gadigal (Dharug -Boorongberrigal clan) Indigenous Multi disciplinary Artist , Her practice encompasses Print Making , Multi Platform Production including Photography, animation, video , editing , sound , webpage design and integration



Dixons Dillybag Series are the result of an ongoing process of exploration responding to the Cosmology of traditional Dillybags and their role in Aboriginal Society

Darug Cultural Seasons

Dharug peoples have a cultural obligation to care for Country. They have used cultural stewardship practices based on a deep knowledge of and respect for the environment for many millennia.¹⁵

This approach allows them to create a sustainable ecological system that provided people with the food and raw materials they needed to make medicine, tools, shelters, and other items for daily living.²⁴

An integral aspect of caring for the land is a thorough understanding of the cultural seasons of a place.

A cultural seasonal calendar was based on observations of environmental indicators involving plants and animals, weather patterns, and the position of the stars, which was passed down through the generations.²⁴

"Our Dharug Ancestors observed subtle indicators of seasonal change such as in temperature, clouds, wind, flora and fauna which assisted in knowing when to burn Country, hunt certain foods and to live in harmony with the Land." — Naa Nora (to see Country) Dharug exhibition book 2012.²⁵



Bayin Gura - cool getting warmer Around November – December

Bayin (cool) Gura (warm)
Dianella blooms-. flower has a blue/purple and yellow pattern. Leaves used to weave into string, nets, bags, baskets and traps. Berries are bush food

Dugara Guwara - cold and windy Around September – October

Dugara (very cold) Guwara (windy) Diamond python wakes from hibernation and seek a mate. Common in the Western Sydney plains. They are a known food source for Dharug, but mainly when other foods are unavailable.



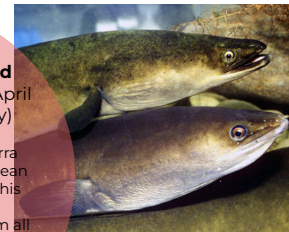
Bunul Marray - warm and wet Around January – February
Bunnul (sunshine) Marray (wet)

Warmer days bring the blue tongue lizard who carry energy and new life. They are passive creatures, when threatened, they stick out their blue tongue. They have strong jaws that crush slow moving prey such as beetles and snails.



Yuruga Burra - hot and thirsty Around March – April
Yuruga (hot) Burra (sky)

The annual migration of barra (eel) from the rivers to the ocean indicates the beginning of this season. This is a signal for people from all over to gather. Barra mimic colours of their environment, such as browns, greens and yellows.



Bayin Dyarra - wet and cooler Around May – June
Bayin (cool) Dyarra (red)

During this time, dyarraba (firestick) cultural burning is the sustainable fire practice used to manage and heal ngurra (Country).

During dyarraba, buru (kangaroo) run from the burning grass.



Dagara - cold and frosty Around July – August
Dagara (cold)

The distinctive call of garad (black cockatoo) signals the coming of rain. Their presence reminds us our Ancestors are part of Country and still with us. The decisions we make today need to align with the values of our Ancestors.



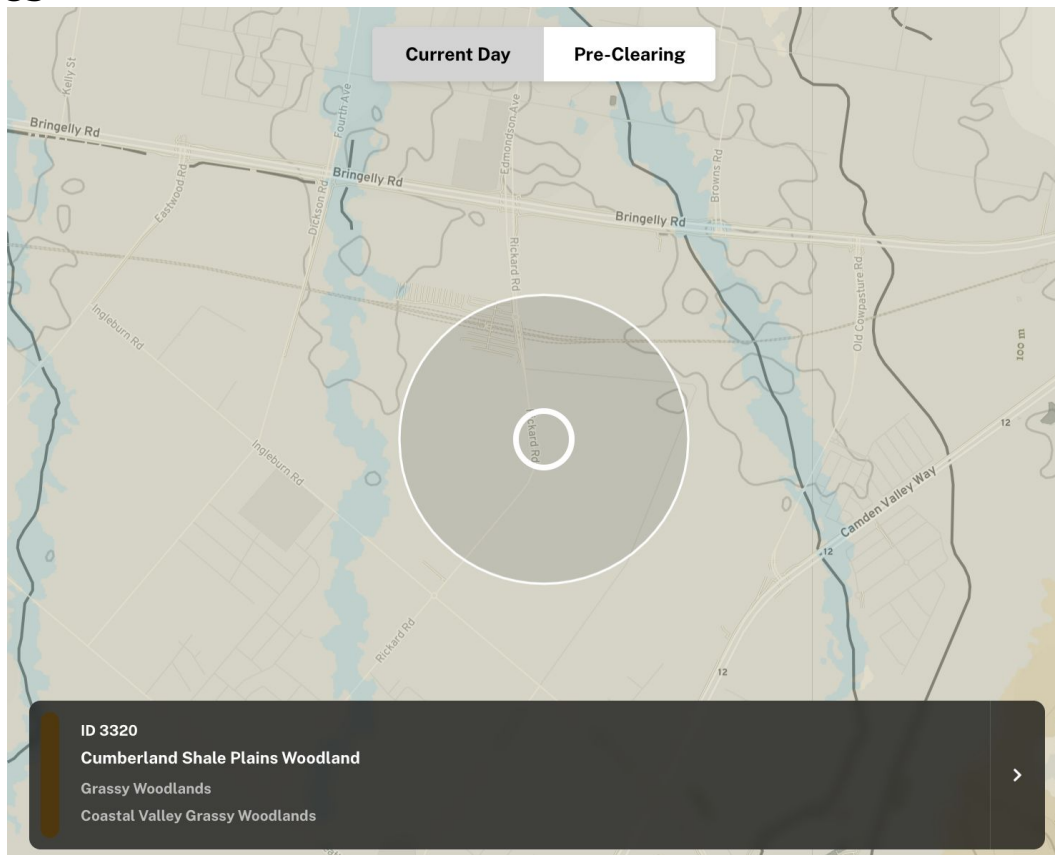
Original Vegetation Communities

The original vegetation community found on the site the Leppington is:

Cumberland Shale Plains Woodland, described as: *'tall sclerophyll open forest or woodland with a sparse mid-stratum of soft-leaved shrubs and small trees with a grassy ground cover on the undulating Wianamatta Group shale plains of western Sydney.'*¹⁴

Since colonisation the original vegetation has been removed over time resulting in the biodiversity and richness of species found here being denuded. Only small amounts of the original vegetation communities remain in small remnants around the creeklines of the area.

Through careful inclusion of local species this project can increase habitat and biodiversity in the landscaped areas providing food and shelter to local species living here.



Engagement

This section will be updated as the engagement with Knowledge Holders is delivered.

How - Engagement strategy

Who:

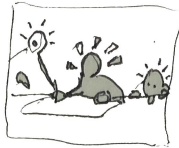
Relevant Aboriginal Elders and Knowledge Holders

How:

- Digital Yarns over TEAMS
- Meetings at the site, an Elders place of choice (park, their house etc)

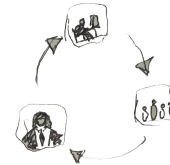
1. Engagement

The first step will be to engage with the relevant Aboriginal group (artist / elder, Lands Council etc), early and often, through a series of 'yarns' or conversations about the potential opportunities to incorporate the theming contained within the document (or other themes) into project outcomes.



2. Co Design

To kick of the co-design process design teams are given time to integrate the themes and ideas into the scope of the project



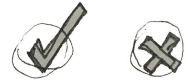
3. Co Design workshops

Engagement workshops with the relevant Aboriginal group will everyone gets in the room to co-design cultural solutions to project outcomes, yet Aboriginal voices should be given preference to ensure they are heard.



4. Endorsement:

All content that uses local Aboriginal theming will be endorsed by the Aboriginal group.



5. Other opportunities:

Should be highlighted and put forward to ensure the local Aboriginal community has opportunities, economic outcomes and better connections to their Country, through the project



Walk on Country

A Walk on Country was conducted on Wednesday 11 February 2026 at 154 Rickard Road, Leppington with Darug Elders attending to provide advice and feedback on the project design.

Uncle Paul Webb opened the Walk on Country with a smoking ceremony. He explained that the ceremony is both a cleansing and a calling upon ancestral spirits to guide and protect those present during the meeting on Country.

Aunty Thelmarie Rudd and Uncle Paul Webb attended along with members of the project team and WSP. The following points were discussed:

The Elders spoke about Caring for Country as a reciprocal relationship. When people care for Country through respectful design and land management, Country in turn cares for the people who live there. With 1200 units proposed across 20-storey buildings, the Elders emphasised that caring for the residents and future community is critical. People need access to open space and places of connection where they can leave their apartments and find solace and community within the landscape.

The Elders recommended that the playground incorporate Dharug cultural design elements with an educational focus. Leanne Watson, a respected Dharug knowledge holder and artist, was recommended to lead the design of the Dharug playground.

The Elders shared the Cabrogal Worm Dreaming Story as a significant cultural narrative for this area. The story connects the mountains with the lyrebird and frogs, weaving together the relationships between landscape, waterways and kin species. The Cabrogal clan, whose name means "people of the edible mangrove worm," have a deep connection to the mangrove worm which was a significant food source and cultural totem. This Dreaming Story should inform the interpretive and design elements throughout the development.

Connecting with Country protocols can be developed and shared to help people identify, appreciate and respect the cultural values of this place.



Walk on Country cont.

Caring for Country and protecting ecology needs to be central to the project's objectives. Ideas shared during the consultation include:

Planting throughout the development should reflect the Cumberland Plain Woodland ecology of this area. Cumberland Plain shrub species and Cumberland Forest plantings should be used to restore and maintain the ecological character of Country.

Uncle Paul identified native plant species with natural insect-repelling properties for use at entry points, communal areas and seating locations. These species carry cultural knowledge about caring for people through Country. Species include Native Thyme, Native Oregano, Lemon Myrtle, River Mint, Aniseed Myrtle and Cinnamon Myrtle. These could be planted in raised garden beds at entry and gathering points.

Water retention should be integrated into the landscape design. Consideration must be given to capturing rainwater runoff and managing potential pollution from stormwater. While onsite water retention can raise concerns about mosquito breeding near communal gathering areas, many of the native plant species recommended by Uncle Paul are known for their natural insect-repelling properties. Strategic planting of these species around water retention features addresses both ecological function and resident comfort. Water retention features can serve both ecological and community purposes, supporting habitat and providing visual amenity for residents.

Lighting design must consider the impact on nocturnal species and the broader ecology. Use soft, low-impact lighting to minimise disturbance to wildlife. Yellow-toned lighting is preferred over white light to reduce ecological impact. Lights should be directed downwards to prevent light pollution and protect nocturnal animals.

Open areas should include shade structures that incorporate Dharug design elements. Covering structures present an opportunity to feature cultural motifs and patterns, including star designs that connect residents with Sky Country.

Seating areas should be arranged to face each other, creating spaces that encourage community connection and conversation. A dedicated barbecue area should be included to support community gatherings and shared meals. These communal spaces are essential for residents who need accessible outdoor areas for family and community use.



Walk on Country cont.

The Elders identified key kin species that hold cultural significance for this Country. These species should be represented through design motifs, interpretive signage and habitat support throughout the development. Kin species include the Waratah, White Cockatoo, snakes, eels, platypus, lyrebird and frogs.

The Elders would like to see Dharug inspired design elements explored for inclusion within the development infrastructure. This could be patterns or motifs of plants and animals that belong here, incorporated into shade structures, fencing, playground equipment and building facades.

The development's colour palette should be drawn from the natural colours of Country. The gum tree alone provides six distinct colours that can inform the external and internal design of the buildings. Bark textures and tones from natural tree species offer additional inspiration for material and colour selections throughout the development.

Dual naming and inclusion of Darug language should be included in interpretive elements to educate people. Signage and wayfinding can incorporate the Cabrogal Worm Dreaming Story, kin species and the cultural values of this Country.

The Elders would like the opportunity to review and provide advice towards future design development to ensure cultural values are being protected and maintained.



Walk on Country cont.

Habitat Boxes for Kin Species

During the Walk on Country the Elders identified the importance of supporting local kin species through habitat creation within the development.

Habitat boxes should be installed in trees and green spaces to support wildlife that depend on hollows for breeding. Box styles are specific to individual species needs and can help species struggling to find safe places to breed. Boxes to include can be for microbats, possums, owls, kookaburras, parrots and gliders.

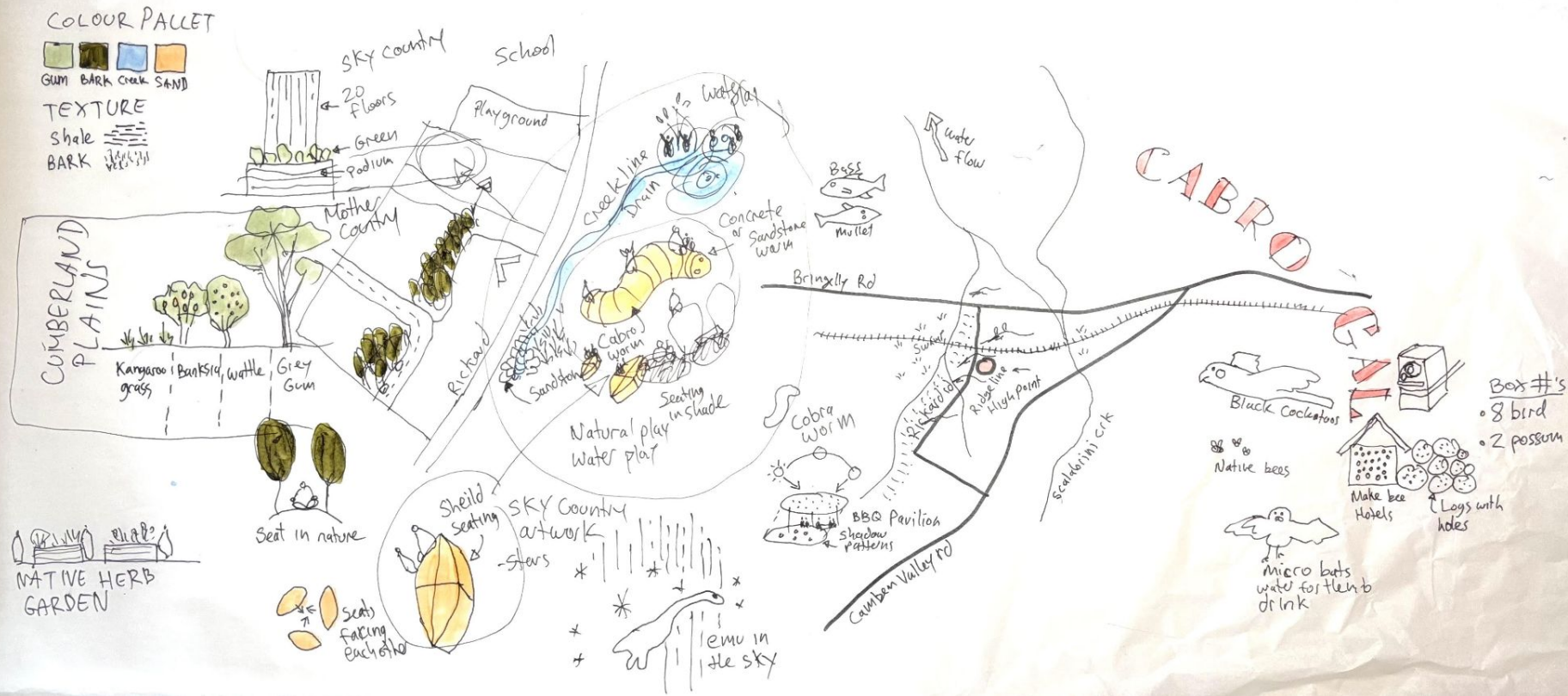
Native bees can also be accommodated with small wooden stacks that bees will use to nest in.

Hollow Log Homes is Australia's leading designer and manufacturer of quality nesting boxes for wildlife. They produce habitat boxes specifically designed to host a range of native species.

Local Darug organisation Muru Mittigar can be engaged to deliver installation, monitoring and maintenance of the boxes, with an annual check to record if the box is being used and by what species. Annual cleaning of boxes may need to occur to remove unwanted ant nests.

<https://www.hollowloghomes.com.au/>





Design Progress

This section offers high level design ideas that may be developed into outcomes for the project by the design team.

Potential use of Local Aboriginal design



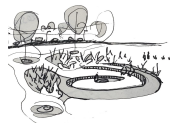
1. Acknowledge Country-

Entry statement, significant site marker, sculpture referencing Country.



2. Building Identity

Activate the building envelope with patterns and motifs that belong to Country.



3. Gathering spaces

A place to rest, enjoy Country, design can include local vegetation, seating, landscape art., signage



4. Care for Water-

employ water sensitive urban design elements to reduce stormwater flows and provide a sponge area for water to recharge soils.



5. Landscape

prioritise local endemic plants; create habitat for kin; maintain the local identity of place and Country.



6. Wayfinding / Ground Plane

Enhance wayfinding through colour, patterns, treatments and signage that respond to Country

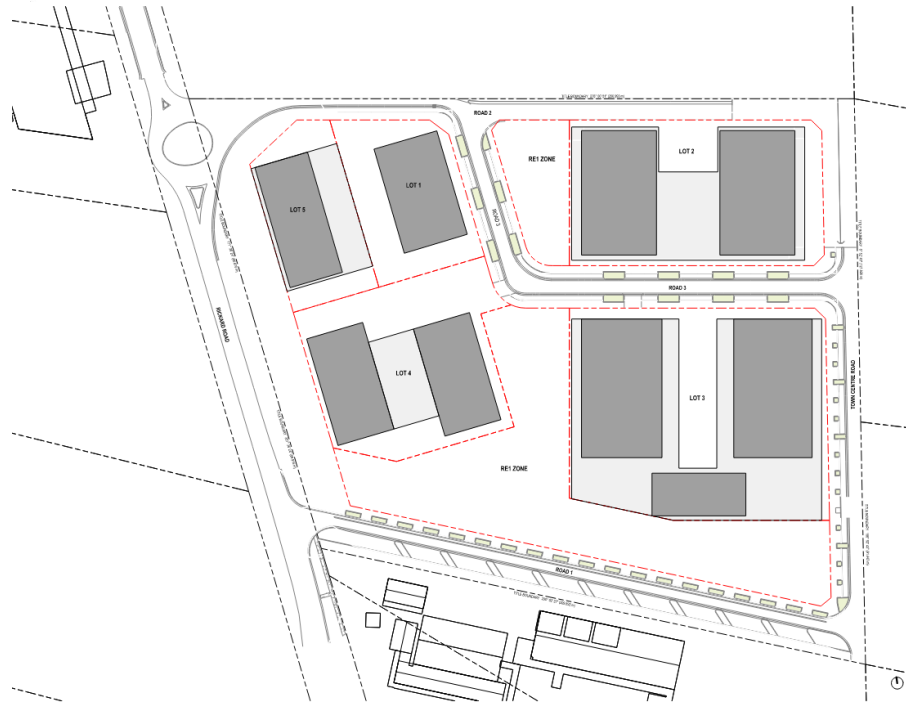


7. Material use the choice of materials can reduce impacts on Country and it's resources. Prioritise recycled; repurposed locally sourced materials.



8. Language

identify opportunities for sharing language within the project.

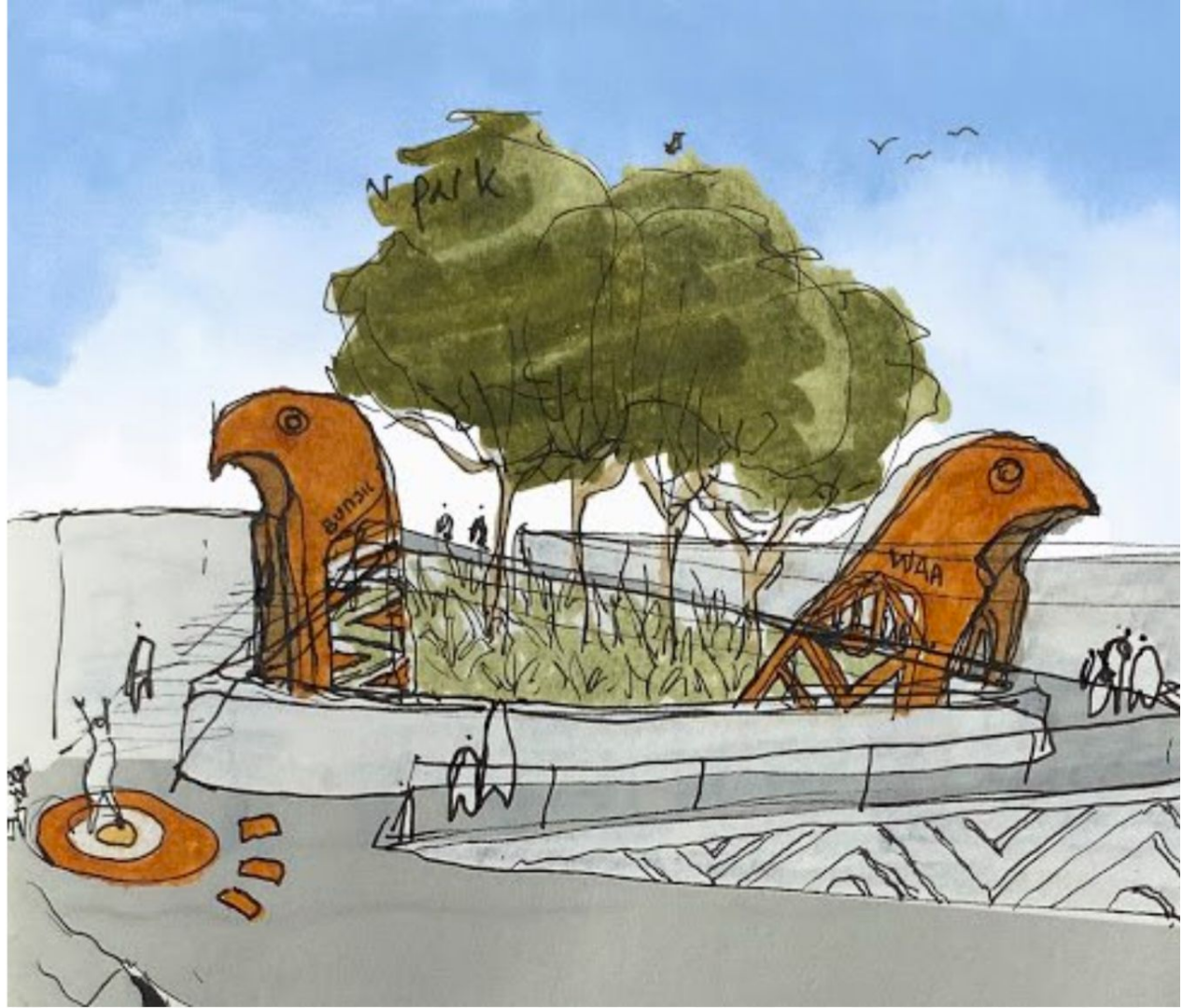


1. Acknowledge Country

Sense of Arrival

Providing Acknowledgement of Country signage at entry points around the site. Engage a local Aboriginal artist to design artwork for the signage.

Co-design iconic sculpture or installations that relate to this area with a local Aboriginal artist to be placed at entry points



1. Acknowledge Country

Sculptural and mural can be combined to share a narrative and Acknowledge Country.



Tell a story at important thresholds- such as arrival points, thresholds and gathering places.



Storytelling and wayfinding devices help connect people and orientate them to Country and the stories and history that came before.



A space to celebrate culture, such as a viewing, yarning or sitting place with references to local design.



2. Building Identity

The building envelope can be activated with patterns and design that enhance the sense of place and identity of Country.

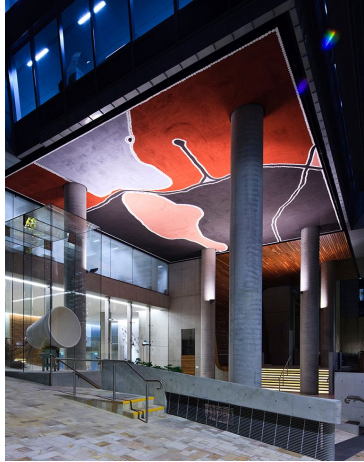
Colours, patterns and motifs can be included to express themes emerging from engagement with Aboriginal consultants.



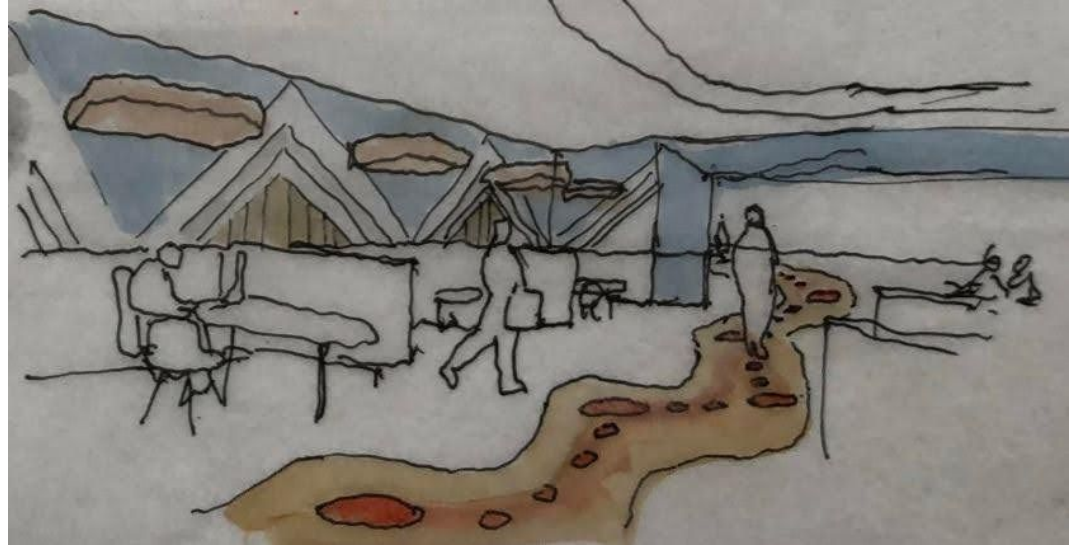
2. Building Identity- internal



Burwood Brickwoods soffit art by Wurundjeri artist Mandy Nicholson



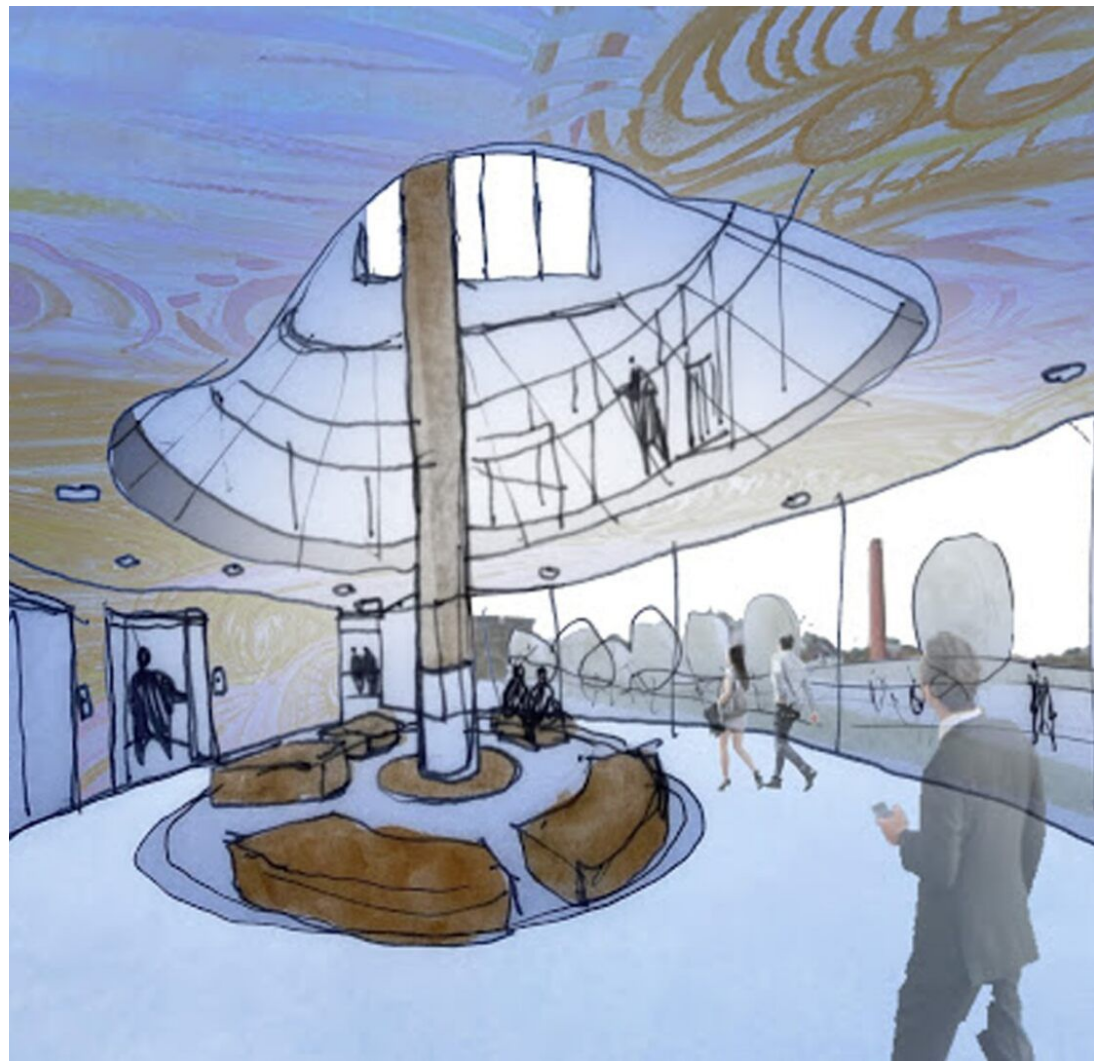
Coca Cola Place, Nth Syd has an amazing soffit art piece that, with the generous triple space height, provides an affective (in that it affects those who see it) example of a building and Aboriginal art integration.



3. Gathering spaces- internal

Create a culturally inspired gathering area inside the building providing occupants with a meeting place, rest area and orientation point.

(Following page) **Outdoor gathering areas can be designed to capture views of Country**, and provide access to Sky Country during the day or night. Consideration of materials, landscaping elements and creating spaces that can be activated with culture and gatherings provide an opportunity to celebrate First Nations culture.



3. Gathering spaces - external

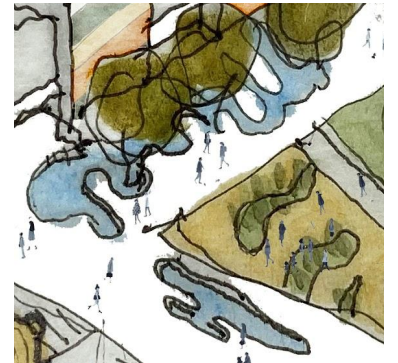
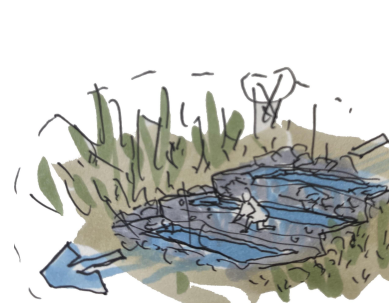
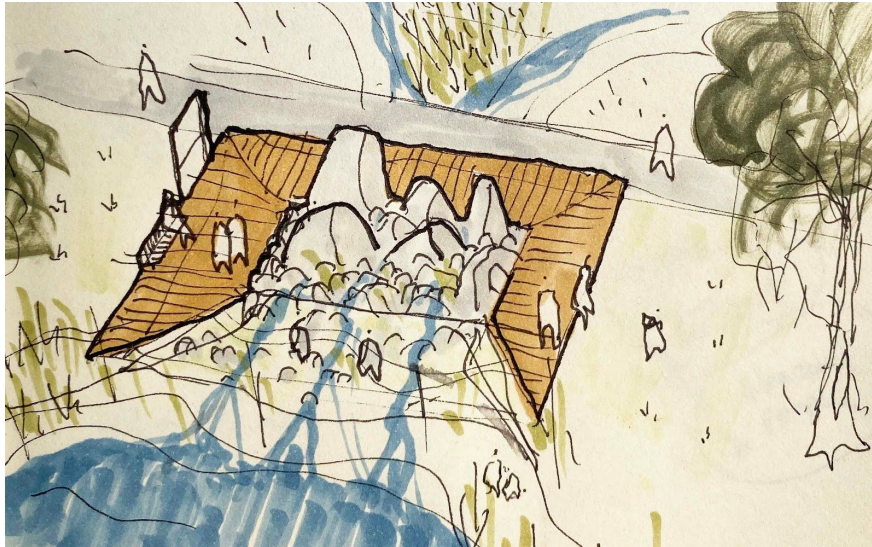
Outdoor gathering areas can be designed to capture views of Country, and provide access to Sky Country during the day or night. Consideration of materials, landscaping elements and creating spaces that can be activated with culture and gatherings provide an opportunity to celebrate First Nations culture.



4. Care for Water

Allocate space for water, consider how stormwater can be cared for using WSUD, natural filtration, sponge areas, detention basins and rain gardens.

Create a water feature for gathering and education about the waterways.



5. Landscape

Creation of a variety of spaces in the landscape to facilitate recreation, rest, and appreciation of Country.

Use plants that belong here to reinforce the identity of Country.

Rooftop gardens provide views and repose. Access to bush tucker foods creates connection with place.



South Eveleigh Native Rooftop Farm by
Yerrabingin



5. Landscape

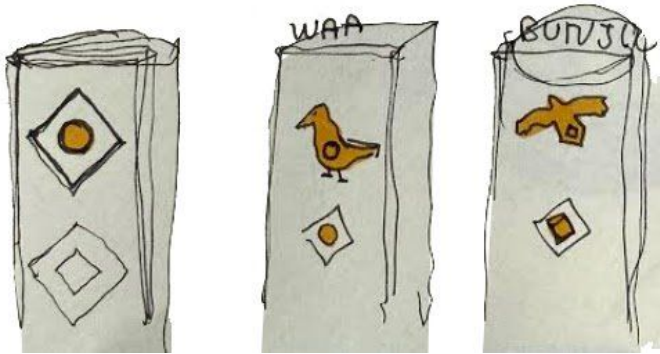
The creation of dwell spots that facilitate education and appreciation of cultural practices such as weaving and culturally significant plants.

Activating areas within the park with a cultural layer can provide opportunities for visitors and occupants to learn, engage and appreciate traditional and contemporary First Nations culture.



6. Ground Plane / Wayfinding

Art, patterns, cultural mapping and signage can activate the ground plane providing users with useful wayfinding devices.

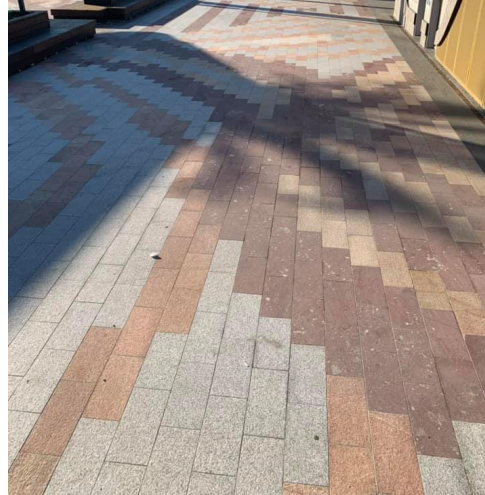


7. Material use

Preference locally sourced recycled / repurposed materials.

Increase permeability on the ground plane through material use such as crushed sandstone, permeable paving.

Materials from Country can contain colours of place- eg. colours of the Wianamatta and Sandstone geology.



7. Materials and precedents

Materials used can respond to Darug Country through using locally sourced, natural materials.

Explore opportunities to reduce the impact on Country by sourcing recycled, repurposed and innovative materials.

Choose materials with low embodied energy.

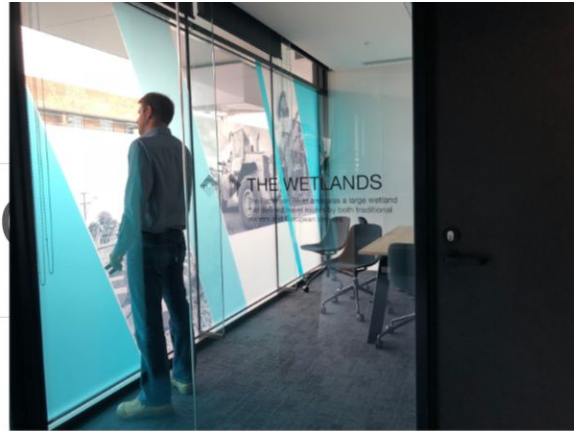
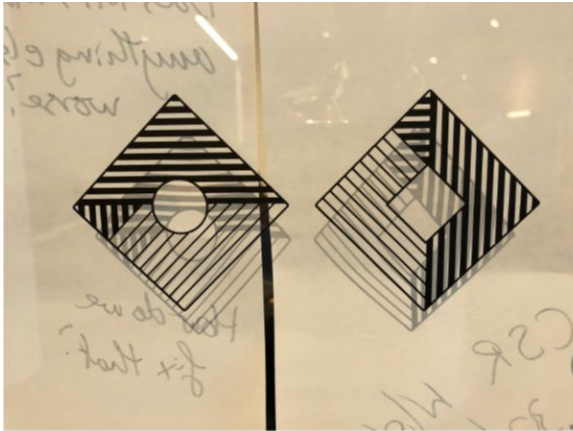
Shale that is dug out for the basements may be used in other parts of the landscape such as in pathways and in rammed earth retaining walls.



8. Language

Language can be used to name rooms, places, spaces, object etc. it can tell a story and educate people by stealth.

Example below of Mentone project office for SPA, LXR of Bunurong cultural patterns and language



Previous Engagement Notes

Walk on Country

In May 2024, a Walk on Country was held onsite at Rickard Rd, Leppington. Attended by First Nations Knowledge Holders Aunty Thelmarie Rudd, Uncle Paul Webb, and Uncle Darryl Wells (Muru Mittigar) along with the design team for this project.

The following pages contain information about the points that were raised and discussed during the Walk, identifying potential themes and cultural features to be considered for inclusion into the design outcomes.



Darug Elders and the Rickard Road design team

Cultural Landscape

The project site is located on Rickard Rd is located on **Cabrogal land**, which is part of the much broader Darug language group. This road is situated along a ridge line connecting **important cultural locations: Mt Annan and Prospect Hill**.

The landscape of the **ridge line** was a **traditional pathway** that the Cabrogal people used to access other parts of Country. This provided easy access of landscapes while avoiding low, wet, boggy areas that cannot be easily traversed. Furthermore, the Cabrogal people located their camps atop these ridgelines and highpoints, because it allowed them to walk down to the creek line to collect resources and perform cultural activities.

These **waterways** are traditionally co-owned by all the clan groups within the area and were **another pathway** to navigate through the landscape. The resources gained in and around the waterways were all shared among the different clan groups.

Mulgoa clan is neighbouring to the site, they are located to the west of Cabrogal lands. During floods **fish** would migrate upstream. Another important native species that was discussed was the **sugar glider**.



Mount Annan is an important feature in the cultural landscape of this area. Views are important to be able to share cultural knowledge of Country

Significant Landscape

During the engagement the Elders highlighted the presence of **artefacts** being present in this area. This prompted the need for further investigation to identify if there are any objects or cultural heritage to **preserve and protect**.

The Cabrogal people lived off the land and only took what they needed. Traditional people of the area would access resources and **give back to Country by looking after it**.

It was discussed that the land was cared for through the practice of **traditional burning** where the grass lands and small shrubs were burned in a controlled manner, encouraging the germination of new seeds. This provides a variety of habitats for native species of plants and animals to thrive. It also promotes the landscape to grow in such a way that it produces an open, grassy understory with large **'Grandparent' trees** that protect the plant community and provide shelter and shade for people.

Throughout the engagement, it was evident that the landscape is important in Connection to Country and a recommendation is for the developer to work closely with **Muru Mittigar** on **seed collection** prior to proposed tree removal.



The use of fire to care for, clean up and promote regrowth of Country is a technique used for millennia by First Nations people.

Respond to Country in the Design

The following points were raised for consideration to be included in the design:

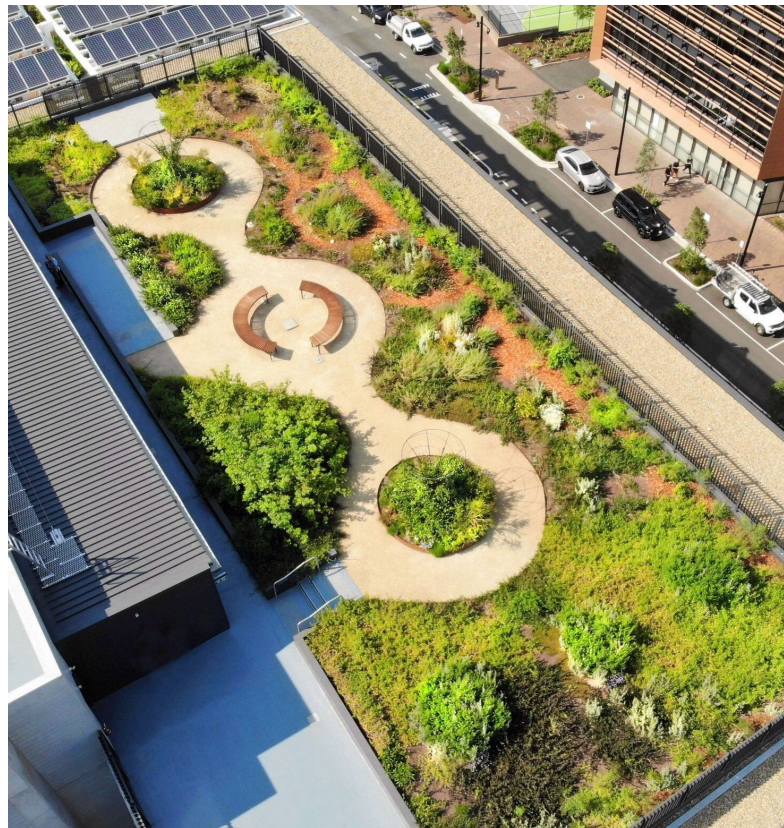
Balance of Landscaping: prioritise native endemic plants over introduced plant species. Need to consider how to leave the site in a better for future generations.

Cabrogal themed walkway through the site to the train station. Elders suggest speaking with Jamie Eastwood Artist (Cabrogal walk) to advise for Cabrogal walkway

Preserving the **Grandmother tree** onsite is crucial as it provides essential habitat and biodiversity for various animals. Incorporating **bush tucker** and a **yarning circle**, designing with a circular concept to foster community connection, and creating a space that is connected to Country.

The ground floor plan should focus on **wayfinding**. Additionally the space should promote a friendlier neighborhood, while **rooftop and community gardens** should include bush tucker and convenience gardens, enhance green spaces and living quality.

Yarning circles are powerful and inclusive, and increasing green spaces while reducing hard surfaces will improve living conditions. Engaging with local people ensures the project connects with the right community members.



South Eveleigh Native Rooftop Farm by Yerrabingin

Important Plants

Bush foods: create a bush foods garden showcasing traditional resources for Cabrogal and Darug people. The garden can also include non native plants that have become naturalised and hold significance to Cabrogal people and culture.

Culturally significant plants:

- Pig face (*Carpobrotus glaucescens*)
- Native Onion (*Cyperus bulbosus*)
- Geebung (*Persoonia linearis*)
- Bush tomato
- Banana passionfruit (naturalised)

Swamp Mahogany (*Eucalyptus robusta*) is more significant than other specs in relation to the site

Geebung is another local significant bush food to this area

Waratah isn't a native to the Cumberland Woodland- and is not appropriate for this project.



Clockwise: *Carpobrotus glaucescens*; *Cyperus bulbosus*; *Eucalyptus robusta*; *Persoonia linearis*

Recommendations

The following recommendations were offered by the Elders for consideration and inclusion into the design outcomes:

- Tree area to stay if possible.
- Artwork to incorporate shadows to tell the story of this place.
- There is a high possibility Artifact's will be on site, a survey is recommended to determine the (Uncle Paul Webb to be the Aboriginal Representative from the Darug Nation)
- There has been a Cultural heritage assessment on Leppington station & the high school would be great to further tell the story of the local People (Cabrogal)
- Darug naming of the site if possible
- Gov Macquarie- write up and the history in the relationship with the Traditional Darug people (for signage?)
- Educate on bush tucker and other elements of Darug Design
- Reference to signs for Land point significant to the traditional ways of the local people
- Darug wayfinding is a great implement for design
- Australia Bush tucker is a great flora to have introduced into the site with education QR codes



Example of a bush food sign that could include a QR code.

References

1 Peter Cunningham, cited in Kohen 1995, p. 41. (Kohen, J. L. (1995). *Aboriginal environmental impacts*. Kensington: UNSW Press, p. 40.)

2 Sydney Morning Herald, *To the Editor of the Herald 11 October 1905*, available- <https://trove.nla.gov.au/newspaper/page/1326522>

3 City of Parramatta, Dharug People and the Environment <https://historyandheritage.cityofparramatta.nsw.gov.au/research-topics/aboriginal/dharug-people-and-environment>

4 Gammage, B. (2011). *The biggest estate on earth: how Aborigines made Australia*. Crows Nest, N.S.W. : Allen & Unwin, p. 39.

5 Karskens, G. (2010). *The Colony: A History of Early Sydney*. (2010 edition). Crows Nest: Allen and Unwin. pp. 46-47.

6 Archaeological & Heritage Management Solutions , 2015, *Shanes Park and West Schofields Precincts: North West Growth Centre Aboriginal and Historic Heritage - Gap*, available- <https://www.planning.nsw.gov.au/sites/default/files/2023-04/north-west-growth-centre-aboriginal-and-historic-heritage-report.pdf>

7 Roads and Maritime Services NSW Government, M12 Motorway Environmental Impact Statement, Appendix 1 Aboriginal Cultural Heritage Assessment, available- <https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSI-9364%2120191004T003628.449%20GMT>

8 Hromek, Dr. D.S., 2021, pers comm.

9 Cumberland City Council, *History and land*, available- <https://www.cumberland.nsw.gov.au/history-and-land>

10 Roads and Maritime Services NSW Government, M12 Motorway Environmental Impact Statement, *Appendix 1 Aboriginal Cultural Heritage Assessment*. October 2019, available- <https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSI-9364%2120191004T003628.449%20GMT>

11 Australian Museum Business Services for NSW Department of Planning and Infrastructure, 2012, *Indigenous Heritage Assessment Project: Austral & Leppington North Precincts, South West Growth Centre*, available- <https://www.planning.nsw.gov.au/sites/default/files/2023-04/austral-leppington-north-precincts-indigenous-heritage-assessment-part-1.pdf>

12 Environmental survey of Commonwealth land at Badgerys Creek: Aboriginal Heritage Australian Museum Consulting for SMEC Australia, 20144, available- https://www.westernsydneyairport.gov.au/sites/default/files/Appendix_C_Aboriginal_Heritage_Report.pdf

13 Leppington Precinct Indigenous Heritage Study: Stage 2 Aboriginal Heritage Assessment Prepared by Australian Museum Business Services for NSW Department of Planning & Infrastructure, 2013, available- <https://s3.ap-southeast-2.amazonaws.com/dpe-files-production/s3fs-public/dpp/183133/Aboriginal%20Heritage%20Assessment.pdf>

14 NSW Government, *Trees near me*, available- <https://www.treesnearme.app/explore>

15 NSW Office of Environment and Heritage, *Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest - profile*, available- <https://threatenedspecies.bionet.nsw.gov.au/profile?id=20403>

16 Camden High School, *Local History*, available- <https://camden-h.schools.nsw.gov.au/learning-at-our-school/aboriginal-education/page-title-goes-here.html>

17 Organ, M., K., *Secret Service: Governor Macquarie's Aboriginal War of 1816* University of Wollongong, available- <https://misacor.org.au/item/3302-acknowledging-terrible-history-in-the-douglas-park-area-appin-massacre-181>

18 Western Sydney Parklands, *Aboriginal heritage*, available- <https://www.westernsydneyparklands.com.au/about-us/our-story/aboriginal-heritage/>

19 Aboriginal Affairs, *Aboriginal working group for cultural fire management*, available- <https://your.nswliberal.org.au/news/aboriginal-working-group-for-cultural-fire-management>

19 Camden History, *History of Camden*-<https://www.camdenhistory.org.au/chhistoryofcamden.html>

20 Karskens, 2015, *Appin massacre*, available- https://dictionaryofsydney.org/entry/appin_massacre

21 Office of Environment and Heritage for the NSW National Parks and Wildlife Service, *Nielsen Park Sydney Harbour National Park Conservation Management Plan*, 2013 <https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Conservation-management-plans/nielsen-park-sydney-harbour-conservation-management-plan-080342.pdf>

22 Attenbrow V., 2002, *Pre-colonial Aboriginal land and resource use in Centennial, Moore and Queens Parks – assessment of historical and archaeological evidence for Centennial Parklands Conservation Management Plan* https://www.centennialparklands.com.au/getmedia/e32ae90a-e730-4c28-82c4-4b17e9e3c5e1/Appendix_S_-_Pre-colonial_Archaeology_report_Val_Attenbrow.pdf.aspx

23 Office of Environment and Heritage for the NSW National Parks and Wildlife Service, *Nielsen Park Sydney Harbour National Park Conservation Management Plan*, 2013 <https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Conservation-management-plans/nielsen-park-sydney-harbour-conservation-management-plan-080342.pdf>

24 Parramatta River Catchment Group, *First Nations People of the Parramatta River and surrounding region*, available- https://www.ourlivingriver.com.au/content/uploads/First-Nations-Peoples-of-the-Parramatta-River-and-surrounding-region_lo-res.pdf

25 Greater Sydney Parklands, *Gabrugal Yana - Six Dharug seasons*, available- <https://www.greatersydneyparklands.nsw.gov.au/explore/gabrugal-yana/gabrugal-yana-six-dharug-seasons>