

# ECOLOGICAL AND CULTURAL MANAGEMENT STRATEGY



Prepared for  
**BESMAW PTY LTD**  
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**THE HOLT ESTATE** 1861



We acknowledge Country and the cultural landscape of the Kurnell Peninsula. We acknowledge the custodianship of its people and the privilege and responsibility to connect with Country.

We acknowledge the Gweagal, Bidjigal, Gadigal, Wangal, and Gaymeygal peoples and their ongoing connections to the land and waterways. We recognise and acknowledge the surrounding clans to the North, South, East, and West, whilst honouring and celebrating Elders past and present.

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# 1. INTRODUCTION

## 1.1. PURPOSE OF THIS STRATEGY

The purpose of this Ecological and Cultural Management Strategy (strategy) is to provide a framework and principles to ensure the cultural and ecological values of the proposal can be delivered and managed in the future, capturing the vision and intent of the master plan.

This strategy is a collaboration between Yerrabingin, Dr Chels Marshall, Cumberland Ecology and the Holt Estate. The intent is to achieve the best ecological, cultural, land management and design outcomes for the site.

This strategy has embedded Connecting with Country principles and outcomes into the site-specific development control plan (DCP). The DCP, will guide future cultural, social and ecological outcomes in the development of the site, which prioritise Aboriginal ways of connecting to Country. It identifies a framework for the intended governance structure to ensure collaboration and alignment for stakeholders including SMEs, Aboriginal community, local residents, and tourism/business representatives.

This strategy is to be read in conjunction with the Local Provisions relating to the site, contained in the Sutherland Shire LEP 2015, the site-specific DCP and the Government Architect Connecting with Country Framework.

- It is intended that this strategy is a live document that is to be update from time to time.
- The preparation and assessment of future development applications are to have regard to this strategy and the management plans produced under this strategy.

The Local Provisions which apply to the site identifies that cultural practices and physical structures within the C2 Environmental Conservation zone, associated with the cultural trail, is development that is permissible without consent.

## 1.2. LAND TO WHICH THIS STRATEGY APPLIES

This strategy applies to land at 251, 260R, 278, and 280-282 Captain Cook Drive, Kurnell (the site) and legally described as Lot 2 in DP1030269, Lot 9 in DP586986, Lot 2 in DP559922 and Lot 8 in DP586986, as illustrated in *Figure 1: The site and ecological and cultural framework*.



Figure 1: The site and ecological and cultural framework

### 1.3. PILLARS FOR IMPLEMENTATION

This strategy sets out the vision, guiding principles, governance structure and the framework for the future management of the cultural and ecological elements of the site.

The following management plans are to be prepared prior to development consent being granted for the first building, to guide the future development outcomes, cultural activities and ecological practices on the site.

- Cultural Management Plan
- Biodiversity Management Plan
- Operational Management Plan

## 2. VISION & OBJECTIVES

This strategy is an undertaking that seeks to harmoniously blend the principles of Connecting with Country, celebrating cultural heritage, regenerating the natural environment, and creating a sustainable, vibrant “home” for all who will live, work, and play on this land.

Our vision is to create a place that deeply respects and celebrates its rich cultural heritage, revitalises the natural environment to establish a connected ecological system, and delivers a vibrant and sustainable “home” for its community. The vision is rooted in the Connecting with Country framework, which guides our commitment to First Nations wisdom and sustainable practices, weaving together the past, present, and future in a tapestry of environmental and cultural harmony.

We honour the deep history and connections of First Nations communities to this land by embracing their knowledge, traditions, and stories. The master plan will feature a cultural centre, public art, and educational spaces that provide a platform for cultural exchange, fostering a profound respect for the heritage of the region. Traditional practices and ceremonies will be integrated, generating a strong sense of belonging and cultural identity unique to the Kurnell Peninsula.

Corridors will be established throughout the site of varying widths of up to 460m as identified in the master plan (Figure 2). These will support the site’s regeneration, strengthen the biodiversity values, allowing for the reintroduction of native flora and the movement of fauna across the site. The Kurnell 2020 Corridor Delineation report describes the need for re-creation of corridors, and, consistent with that plan, a suite of substantial new habitat corridors can be created and revegetated to link north-south, and east-west across the site. These will form habitat linkages with, and buffers to adjoining conservation areas include Towra Point Nature Reserve and Kamay Botany Bay National Park, Wanda Reserve.

Revegetation of open space corridors within the site will also help to improve water quality and so improve water flowing into Quibray Bay, Bate Bay and Boat Harbour, which have significant marine environments of high conservation value.



Figure 2: Master plan

## **3. CULTURAL**

Cultivating a strong sense of community and custodianship is integral to Connecting with Country outcomes for the Kurnell Peninsula and the site.

Culture and cultural practices are ongoing and evolving, often reflecting the various customs, traditions, and activities collectively shared by the community. The Kurnell master plan has the opportunity to identify, honour, and explore traditional practices connected to the site, whilst also, welcoming and facilitating new connections and customs unique to Kurnell.

### **3.1. LIVING ON COUNTRY**

Living on Country refers to the capacity for First Nations peoples to live on the lands. In the context of the Kurnell Peninsula, Living on Country refers to the ability for elders to live within the on land of cultural significance.

First Nations peoples were living and visiting the land and waterways across the region now referred to as Kurnell for thousands of years. Post 1770, First Nations groups continued to live and camp near the entrance of the Cooks Rover and along the north shore of Botany Bay and south of the bay along the Kurnell Peninsula. However, with the rise of industrialisation within the region, access to Country became restricted and First Nations groups were displaced.

Now for the first time in 162 years, the Kurnell Peninsula may once again be a place to call “home” for First Nations peoples and the wider community with the development of a range of housing precincts. This strategy highlights the desires of community members to Live on Country and the importance of this to the social, cultural, and economic outcomes and viability of the master plan.

#### **3.1.1. Community Engagement**

Community engagement undertaken by First Nations design and consultancy company, Yerrabingin Pty Ltd, identified the significance of Country and the ability to Live on Country. Specifically, Elders expressed their desire and wish to have appropriate facilities for the elderly members of the community to enable them to return to Country, remain on Country and ultimately thrive on Country.

This strategy therefore acknowledges and expands upon the wishes of community, identifying a range of opportunities to Live on Country on the Kurnell Peninsula.

#### **3.1.2. Opportunities**

The master plan identifies an area within Lot 2 North for elders to live on Country. Once developed, these homes are intended to be dedicated to the La Perouse Aboriginal Land Council or another registered housing provider. These homes should be designed in collaboration with Elders to reflect their specific housing needs, including orientation, separation and ability to connect with nature, from within the dwelling.

## **3.2. DESIGNING WITH COUNTRY**

Designing with Country refers to interventions that seek to preserve, restore, and remember the interconnected histories between First Nations peoples and the land. All aspects of the master plan have the ability to consider and explore how Country can be respected and incorporated within the development and future use of the site.

This strategy employs the approach outlined by the GANSW Connecting with Country Framework. Initial and ongoing community engagement will guide the development of the site, ensuring that First Nations perspectives are embedded within the design.

### 3.2.1. Outcomes for Country

As defined by GANSW, Designing with Country must consider the following outcomes of success for the future development of the site:

1. *Healthy Country*
  - a. *Healthy Ecology*
  - b. *Physical form of Country remains recognisable and restored where possible*
2. *Healthy Community*
  - a. *Strong cultural identity, connected to place and community*
  - b. *Cultural safety*
  - c. *Relief for Aboriginal communities who are fatigued by the workload imposed on them by project teams seeking their advice on Country*
  - d. *Training (spatial design skills for community, financial supports including scholarships for built environment)*
  - e. *Employment opportunities*
3. *Protecting Aboriginal Cultural Heritage*
  - a. *Aboriginal cultural advisors guiding project teams and clients to better connect with Aboriginal community*
  - b. *Project teams and processed for project delivery of ICIP*
  - c. *Access to Country is provided*
  - d. *Aboriginal language and place names are used*
4. *Cultural Competency*
  - a. *Ongoing cultural awareness training develops skills and competency in delivering Country-centred design projects*
5. *Better Places*
  - a. *Planning and design projects creating places that are Connected with Country*
  - b. *Planning and design outcomes support living cultural practices*
  - c. *Original landscapes are repaired or restored*

### 3.2.2. Cultural Management Plan

A Cultural Management Plan (CMP) will be prepared to provide an overview of cultural stakeholders and their role within the context of the Kurnell Peninsula. Identifying cultural stakeholders ensures the relevant and appropriate peoples are able actively contribute to the development of the site. Maintaining and strengthening relationships between the local First Nations community and broader stakeholders (e.g., landowner) is essential to the achieving meaningful outcomes for Country for both First Nations peoples and all users within the site.

The CMP will include site specific guidelines for the future design and construction of the cultural opportunities and key activations outlined in sections 3.3 and 3.4.

## 3.3. KEY ACTIVATIONS

The Kurnell master plan provides a range of opportunities to regenerate and reignite Country and cultural practices, as illustrated in Figure 3. Embedding First Nations and site-specific knowledge within and throughout the development is crucial to the overall success of outcomes for Country and community. This strategy identifies areas of key activation, outlining their significance and function within the context of the site:

### 3.3.1. Cultural Trail

The cultural trail will acknowledge and celebrate Country, providing a clear and interconnected pathway for First Nations peoples and the wider community to engage and interact with the unique environment of Kurnell. Meandering through the site, the cultural trail seeks to leverage the natural environment to establish a series of cultural touch points within the site.

### 3.3.2. Cultural Hub

The Cultural Hub will feature a unique structure designed to foster and encourage connections to Country. Operating as a multipurpose built form, the Cultural Hub has the opportunity to suit a range of users and communicate the significance of Kurnell via its design. This is intended to be a gathering space.



### **3.3.3. Middens**

Middens are a significant cultural feature and living artefact within the master plan. Balancing access to the middens with ongoing preservation techniques is integral to the cultural and educational outcomes of the site. The elevated working trails near the midden provide an opportunity for educational experiences but need to be designed in consultation with the Aboriginal community to ensure that it does not impact the living artefact.

### **3.3.4. Nursery**

The inclusion of a nursery within the master plan creates cultural, educational, and economic opportunities. Functioning as a place to celebrate and showcase endemic species, the nursery is a key area of knowledge exchange.

### **3.3.5. Quibray Bay**

Quibray Bay is a significant water frontage and place for local First Nations Elders. As outlined in section 3.1.1, dedicating spaces for First Nations peoples to Live on Country. Additionally views towards Sydney CBD and Botany Bay can be captured within built form design.

### **3.3.6. Wanda Reserve**

Although Wanda Reserve sits outside of the perimeter of the master plan, it is important to ensure seamless linkages to ensure future residents have access to open spaces.

### **3.3.7. Bate Bay**

The Bate Bay Coastline is the largest expanse of saltwater Country within the master plan. Providing clear access points and connecting to the cultural trail and larger wayfinding strategy of the Kurnell Peninsula, Bate Bay should retain open spaces for all users to enjoy.

### **3.3.8. Boat Harbour**

Boat Harbour is a key location to connect with Country, nestled within the cultural trail and neighbouring Tabbigai lands. Future development of Boat Harbour intends to leverage the existing environment and create a harmonious balance between built forms, landscape, and the sea.

### **3.3.9. Tabbigai**

Similar to Wanda Reserve, Tabbigai is located outside the perimeter of the master plan. The cultural trail and walking tracks connect with surrounding lands providing a seamless user experience.

## **3.4. OPPORTUNITIES**

Building on the areas identified in section 3.3, this section looks to further categorise opportunities by user experience, seeking to identify all potential educational and enterprise opportunities underpinned by culture. The following is a non-exhaustive summary of opportunities and benefits of the future development of the site that should be explored and implemented as part of the ongoing cultural management of the site:

### **3.4.1. Education**

- Develop bush food foraging trails within green corridors.
- Provide appropriate and accurate signage to educate users about endemic species and their stories.
- Partner with nursery to offer educational talks and tours within the site.
- Partner with local schools to offer educational talks that connect to the NSW curriculum.
- Develop overarching public art and wayfinding strategy to connect site to surrounding context and places (e.g. Tabbigai, Cronulla etc).

- Ensure signage includes accurate and appropriate information for identified cultural heritage sites.
- Consider use of traditional place names for appropriate precincts within the master plan (e.g. Eco Bridge, Elderly facility, cultural centre).
- Consider and explore the educational opportunities for the cultural centre / hub.

### **3.4.2. Enterprise**

- Partner with local First Nations Rangers to implement land care strategies (burning, fishing, landscape maintenance).
- Maximise First Nations employment opportunities within all aspects of the future development and construction of the site through procuring First Nations goods and services (First Nations consultants, design practitioners, rangers, tourism businesses, construction companies etc.).
- Create social enterprise opportunities for cultural tours within key areas of activations (e.g. kayaking across Quibray Bay, Camping in Boat Harbour, cultural tours led by local First Nations peoples).
- Consider partnership with First Nations nursery to supply native stock to future café development.
- Explore how cultural centre / hub may function to house First Nations businesses.

### **3.4.3. Locals**

- Ensure adequate accessible pathways and open spaces for residents.
- Establish communal amenity to maximise social cohesion opportunities.
- Explore ways for residents to engage with care for Country (e.g. bush care programs, citizen science).

### **3.4.4. Visitors**

- Provide ample parking to access open spaces and waterways.
- Ensure wayfinding is clear and provides insights to the area.
- Develop strong partnerships with Tourism Australia / Destination NSW to ensure unique identity is communicated to visitors through targeted campaigns.



Figure 3: Location for opportunities within the cultural trail

## 4. ECOLOGICAL

### 4.1. GUIDING PRINCIPLES FOR SITE ECOLOGY

In line with the project's vision, the ecological guidelines should seek to maximise the significant opportunities presented by the site to regenerate the landscape while recognising the balance it strikes with the cultural and economic opportunities it presents.

Restoration of the sand-mined landscape will afford substantial opportunities to rehabilitate a range of ecological systems on site, and to reconnect habitats on the Kurnell Peninsula, which have been significantly fragmented and impacted since European settlement took place.

A detailed Biodiversity Management Plan (BMP) will be prepared to guide ecological restoration to maximise biodiversity and sustainability of the future landform within open space areas and around the built environment. Consistent with the CMP it should also reintroduce aboriginal food plants and use cultural burning practices to help manage the resultant landscape.

The locality around the site once included a range of forests and other types of vegetation that were extensively cleared and modified soon after European settlement. The BMP will provide for the restoration of such key habitats within the extensive open space corridors to be created as the quarried landscape is remediated.

The BMP will provide for:

- Protection and enhancement of existing native vegetation and wildlife habitats;
- Restore or reintroduce vegetation types that were historically removed from the landscape after European settlement;
- Restoration of some important wildlife habitats such as habitats for the endangered Green and Golden Bell Frog; and
- Prescribe a major reconnection of habitats across the site and to other key ecological areas of the Kurnell Peninsula, consistent with the Kurnell 2020 Corridor Delineation Plan (DECC 2009).

The BMP will guide the establishment of a suite of substantial biodiversity corridors to provide connectivity to allow movement of fauna and seed dispersal. Substantial biodiversity corridors have been proposed for the site which will link with Botany Bay National Park and Towra Point.

Nature Reserve and other currently fragmented patches of vegetation. Such initiatives will connect the environment from the marine and intertidal zones to the terrestrial zones.

As some lands are to be zoned C2 and dedicated the national park, the BMP should also provide objectives for the management of the ecology of land, indicating the vegetation condition to be attained prior to dedication.

The BMP should be based on the latest scientific information about biodiversity of the Kurnell Peninsula and should use best practice management and monitoring to adaptively manage the ecology of the open space corridors. It should have key performance indicators based upon plant community benchmarks and attainment of optimal conditions should be monitored and adaptively managed.

### 4.2. ECOLOGICAL ZONES & SPECIES

The ecological approach to the site includes a variety of different zones which identify specific ecological communities that serve a role in function. Figure 4 below shows some indicative vegetation zones where different plant communities will be maintained or recreated.

The zones comprise remnant native vegetation area, including threatened ecological communities, and areas where land and vegetation communities are proposed for restoration within open space corridors. The vegetation and wildlife habitats that are proposed for recreation include a range of communities and habitats that have been historically removed from the site and locality.

The proposed reconstructed plant communities should be comprised of species that:

- Complement the existing communities and landforms remaining on the site.
- Regenerate ecological communities at risk elsewhere on the peninsular, including the threatened ecological communities of Littoral Rainforest, Kurnell Dune Forest, Bangalay Sand Forest and Freshwater Wetlands.
- Support and protect native species from the region:
  - Fauna including but not limited to threatened species (eg Green and Golden Bell Frog, Grey-headed Flying Fox, and threatened microbats), Shorebirds, Microbats and a range of ground dwelling mammals, amphibians and reptiles.
  - Flora including a wide range of plant species from original communities of the site and surrounds;
- Are planted in appropriate areas and microhabitats to successfully grow within the rehabilitated site's varied hydrological functions.
- Are planted in a way that will respond appropriately to future cultural burning and bushfire hazard reduction.
- Are resilient and respond to the current and anticipated future climate within this area of the Kurnell Peninsula.



Figure 4: Potential ecological communities

### 4.2.1. Ecological communities

Ecological communities to be recreated in the open space corridors include but are not limited to the following threatened ecological communities:

- Estuarine Saltmarsh and Reedland
- Coastal Freshwater Wetland
- Coastal Swamp Paperbark-Swamp Oak Scrub
- Littoral Rainforest
- Kurnell Dune Forest

All such communities have undergone significant clearing and modification on the Kurnell Peninsula since European settlement, and all are capable of being re-established on the new soil landscapes, which will be comprised of sandstone, clay and other VENM materials rather than deep aeolian sands, now removed by quarrying.

#### **4.2.2. Vegetation regeneration**

The BMP will prescribe for the maintenance and improvement of remaining native vegetation. The existing vegetation should be subject to long term active management to control weeds and feral animals, and promote the diversification of native plant species. Such communities will be connected via a new network of planted vegetation, to be comprised of local native species.

A nature positive strategy should be implemented and should result in a significant net increase in the number and area covered by native plant communities and wildlife habitats such as wetlands.

#### **4.2.3. Habitat recreation**

Habitat for the endangered Green and Golden Bell Frog should be created in the open space corridors and should include breeding, foraging and dispersal areas. This will be consistent with the aims of the Kurnell 2020 Corridor Delineation Plan (DECC 2009) and the Recovery Plan for the Kurnell Population of the bell frog.

### **4.3. WET AREAS**

Low lying areas of the Kurnell Peninsula were originally comprised of a mosaic of different wetland vegetation, including swamp forests, freshwater wetlands, brackish wetlands, saltmarsh and mangroves.

The existing and future remediated site contours will provide pooling of water within central gullies, allowing for a natural connection to existing wetlands as well as infiltration into the aquifer.

The existing and future contours will drain along the site's southeastern and western boundaries, providing both a buffer for bushfire management and the ability to create vegetation ecosystems suitable for the soil profile and hydrological functions.

The new wet habitats proposed to be created in the remediated landscape should be revegetated to support swamp forests and wetlands which varying salinity. Such habitats will drain towards the saltmarsh, mangrove and marine habitats off site. They will help to buffer the high conservation areas within Towra Point Nature Reserve.

### **4.4. BUSHFIRE MANAGEMENT**

The BMP, together with the Cultural Management Plan, should provide for active management of fire in the landscape in perpetuity. Cultural burning practices should be reinstated and used to manage the biodiversity and fuel hazards within the open space corridors.

Wetlands, including ponds to be created in the open space corridors for Green and Golden Bell Frog should be incorporated into the bushfire management strategy for the corridors. Where possible, recycled water should be used for sustaining wetlands and ponds within the open space areas.

### **4.5. ECOLOGICAL LAND MANAGEMENT**

The BMP should prescribe active ecological management in perpetuity. The open space corridors should be divided into management zones, each with specific management objectives. The objectives should be set with reference to benchmark values for each plant community type that occurs on site, and according to the known requirements of threatened species, or requirements for cultural land management.

Adaptive management of the ecological zones should be regularly monitored. Management responses should be guided by the results of monitoring, and potential responses should be documented in a trigger action response plan (TARP).

The BMP should provide a summary of staff and organisational responsibilities for implementation of various measures in the plan. In areas including those adjacent to Quibray Bay, it should also provide guidance as to the ecological condition to be attained before land is dedicated as public land.

## 5. GOVERNANCE STRUCTURE

The land to which this strategy relates will be retained within a community title or similar management and governance structure. The details of the governance structure will evolve through further consultation with community and stakeholders to ensure the right outcome is achieved for the site.

### 5.1. THE TRUSTEE

The governance structure for the cultural trail and associated activities may operate under a trustee, which will include both Indigenous and non-indigenous members.

It is likely that the members associated with the trustee may include representatives from

- Tourism NSW
- Members of La Perouse Land Council
- Aboriginal Community
- Local Residents
- Holt Estate

The governance structure and framework will define the terms of the agreement, such as:

- *What is their role?*
- *How do they get nominated?*
- *What is their power or what type of decisions will they make?*
- *What happens to the excess funds generated by the cultural trail? (it is intended that funds would initially support the maintenance and delivery of the trail as a cultural tourism venture)*
- *Do they approve the design of structures?*

### 5.2. THE COMMUNITY MANAGEMENT ASSOCIATION

The ecological elements of the site will be retained on community title and may be managed by a Community Management Association (CMA).

It will set out the nature of the relationship with the Aboriginal Land Council as well as the obligations on each party to manage and maintain the land to be consistent with the ecological and cultural strategies to ensure that a healthy and active biodiversity ecosystem is established on the site.

The CMA will be responsible for implementing and organising cultural burning practices, as seasonal requirements permit, ongoing curation of the landscape with consideration to the overarching strategies and ensuring that the ecological outcomes align with the broader biodiversity management plan.