ABORIGINAL DESIGN PRINCIPLES







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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.

Reviewed by Ashleigh Hyland (Anaiwan), WSP. Ashleigh specialises in Sustainability and holds a variety of knowledge in relation to Cultural Land Management Practices.

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 cover: Cockle Bay now Darling Harbour, ca. 1819-20 By James Taylor. Source: Mitchell Library, State Library of New South Wales Back cover: Sydney 1830 [view of the Domain and Mrs. Macquarie's Point] By A.W.F. Fuller. Source: State Library of NSW This document acknowledges the elders, past and present, of the **Darug People** as the traditional custodians of the land and its knowledge

"Warami wellamabamiyui, yura." It is good to see you all, people.

"One day our history will be known And through our own books be shown Our children will be proud In the knowledge their heritage is sound."

Ruth Simmin in 'A History of Aboriginal Illawarra Volume 1 Before Colonisation' by Dharawal Publications

Indigenous Specialist Services

Indigenous design statement

Indigenous peoples and the built environment have had a problematic 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 what 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 the Darug people and Country. While more consultation and permission must be sort from the local elders, the ideas set out in this document should be seen as an introduction to the engagement process.



View in Port Jackson by R. Cleveley. Source: Dixson Library, State Library of New South Wales

Aboriginal Design Principles

Aboriginal design principles

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

Community involvement/ The local Aboriginal communities to be engaged in this process; can we use their patterns? Can they design patterns for the project?

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

Design approach

Image - Signage/surface treatment/ walls/art/ Signage tells the Country and its people's story. Surface treatments use local Aboriginal design knowledge, commissioned from artists, or urban designers who engage with community for approval.

Space - Indigenous space/ landscaping/ Aboriginal Space. A space or landscape where Aboriginal culture can be celebrated, including cultural land-management practices, firestick farming, daisy yam propagation, and the like

Language - Using 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. It is best contrasted against human-focused design, depicted below.

How might this shift or enhance current practices?

Country, over Community, over Individual



Country focused design

Darug Country

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'. 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'.

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."



Aboriginal people hunting kangaroos by Joseph Lycett, 1817. National Library of Australia

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.

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.

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



People using fire to hunt kangaroos by Joseph Lycett, 1817 National Library of Australia,



Darug Country

Darug Country

There are about 29 Aboriginal groups in the Sydney metropolitan area, which is now referred to collectively as the Eora Nation. There has been extensive debate about which group or nation these 29 clans belong to.

It is generally acknowledged that the Eora are the coastal people of the Sydney area, with the Darug people occupying the inland area from Parramatta to the Blue Mountains. The Dharawal people's lands are mostly confined to the area south of Botany Bay, extending as far south as the Nowra area, across to the Georges River in Sydney's west.³

Each group is distinguished from other groups by different designs and decorations on tools and weapons, unique body decorations – for example painted designs worn during ceremonies, also the cicatrices (scarification) formed during initiation rites. Some groups also had distinctive hairstyles.⁴

At the time of colonisation coastal groups used stone as implements less often than those on the Cumberland Plain, and bone or shell was used in its place for items such as spear barbs, adzes and scrapers.

Coastal Darug Country and People

Eora is the name given to coastal people around Sydney. The word Eora simply means 'here' or 'from this place'. Local people used the word to describe to the British where they came from and so the word was then used to define the Aboriginal people themselves. The name Eora is proudly used today by the descendants of those very same people. Central Sydney is therefore often referred to as 'Eora Country'.

Traditionally people moved seasonally between camps accessing different resources.. The main coastal diet was fish, with men using multi pronged spears, and women using hooks and lines. Both fished from Nawi which are canoes made of bark. Women also gathered shellfish and plant foods such as fern roots and native figs.⁵

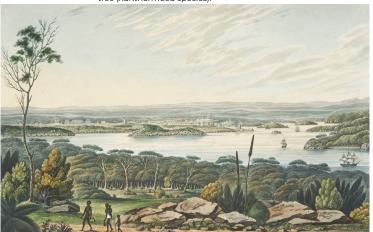
The original inhabitants of coastal Sydney suffered from the trauma of occupation and the severing of their spiritual bonds to Country. Within two years of settlement, kinship ties in the area were ruptured, more than half the Eora died from smallpox.⁶

Alternative names: Dharruk, Dharrook, Dhar'rook, Darrook, Dharug

Gadigal People

The Gadigal (Cadigal) are a harbour-dwelling clan, inhabiting the area from Inner South Head at the entrance to Port Jackson through the present Eastern Suburbs to Woolloomooloo Bay, Farm Cove and Warrane or Warrang (Sydney Cove), terminating at the entrance to Darling Harbour-Barangaroo.⁷

The suffix 'gal' denotes 'people of', thus, the **Gadigal** are the people of the **Gadi** or grass tree (Xanthorrhoea species).⁸



Distant view of Sydney from the lighthouse at South Head New South Wales, by Joseph Lycett.
Source: State Library of New South Wales

Cultural Heritage of the Greater Sydney Region

Middens

These are mounds of shell built up over hundreds or thousands of years as a result of countless meals. They primarily contain mature species of edible shellfish species. They might also contain bird and animal teeth and bones, campfire charcoal and stone tools.¹⁰

Rock Shelters - "giba gunyahs"

These are places where the Cammeraygal people would have taken shelter. This would have been a warm place to eat, sleep, repair or fashion tools and, we can imagine, talk of stories and exploits. Artefacts such as stone tools may be found in the rock shelters.¹⁰

Rock Art

Stencils are produced by mixing ochre in the mouth with other material into a wet paste and spraying it over the object to be stencilled. Often we find stencilled hands and tools represented in rock shelters. Other forms of artwork include ochre painting as well as charcoal drawings and etchings.¹⁰

Grinding Grooves

These are grooves resulting from the production or sharpening and maintenance of an edge ground tool such as a stone axe. These sites are usually located near a water source, like a water hole.¹⁰

Engravings

Engravings were made by drilling or pecking a series of holes in the rock which were then connected to form a line. An accepted understanding of these engravings is that they are the product of sacred ceremonies and were periodically re-engraved as part of ongoing ritual and to pass on knowledge and stories.

Shields were coated with white pipeclay and often painted with a red vertical line crossed by one or two horizontal lines.¹¹

Scar Trees

These trees are evidence of bark and wood being removed for shields, shelters, coolamons and canoes. They are rare in the Sydney region and can be divided into three categories:

- Bark removal for use eg. coolamons (water / grain containers) and canoes.
- Wood removal for use eg. boomerangs and digging sticks
- Evidence of climbing footholds eg. hunting possum and 'sugar bag' (honey)

The tree was not killed by these methods and therefore scarring is evident.¹²



Middens are remnants of feasts and gatherings, they are time capsules that show what types of food were collected and eaten



Grinding grooves are made from tool sharpening activities and are often found in sandstone near water.



Engravings into sandstone show important cultural features and often have stories associated with them.



Scar trees are rare in the Sydney region

Aboriginal Sites of the Sydney region

Aboriginal Sites the Sydney region

In the Sydney region, some 600 rock art sites have been recorded with over 4,000 separate figures mainly of plants, animals, fish and people, which recall the dreamtime and events from the past. ¹³

Meeting sites: Places where different group of Aboriginal people met to trade and partake on corroborees together. In the Sydney region, such corroborees are known to have taken place near Hyde Park and The Domain near the CRD ¹³

Sacred sites: are areas set aside for religious ceremonies, initiations etc. Very little evidence of the use of such sites remain, the major tell-tale signs being the arrangement of stones in patterns or formations.

Most sacred sites were located on hilltops which offered panoramic views of the tribal lands. Such locations were preferred as the women were not permitted at such sites and the chance of them coming across the sites by accident was lessened if they were located away from the tribal hunting grounds. A prerequisite for such sites was a large slab of flat rock upon which engravings recording tribal history and culture could be made.¹³

Economic Sites: Generally campsites which show evidence of occupation. Often close to or within rock overhangs and caves used to give shelter, evidences of occupation include middens (piles of discarded shells at feasting sites), fish traps, scarred trees, cooking mounds, wells, watering holes (often depressions carved into flat rock surfaces used to catch the water), remnants of discarded tools, quarries and axe sharpening grooves.¹⁵

Burial sites: Senior members of the tribe or clan were buried or cremated at sacred sites from which their spirits were freed to travel skyward. Other family members were buried within the tribal area, often near campsites, in caves and beside middens. Often such sites were marked by earth mounds, stone arrangements and carved trees.¹³



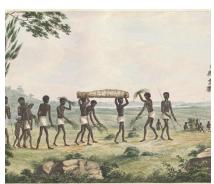
Corroboree at Hyde Park, *Yoo-long Erah-ba-diang.*1 Engraving by James Neagle after Thomas Watling, 1798.



Rock engravings at Ben Buckler, North Bondi.



Grinding grooves and a water well at Sylvania-6



An Aboriginal funeral by Joseph Lycett, National Library of Australia nla.obj-138501624

Significant Sites within Eastern Sydney Region

There are many sites that hold significance for Aboriginal people in the Sydney Harbour Bridge area. The following are a few sites of interest in the region:

1 Oxford Falls: Moon Rock- is well known for about 50 engravings which depict different phases of the moon, tools and weapons used and animals caught and eaten in the area. It is a traditional gathering place to meet, learn and heal. 1

2 Gumbooya Reserve- 68 rock carvings including fish, hunting implements, a dolphin and a large human figure which appears to be inside or on top of a whale. ¹

3 Lane Cove National Park- over 40 sites recorded within the park including shelters, cave art, engravings, middens and axe grinding grooves. A sunburst motif is the only known example of its kind in the Sydney area.³

4 Dobroyd Head- Axe grinding grooves and rock carvings of footprints, known as mundoes, have been found on the rocks below Scenic Drive.¹

5 South Head near Hornby Lighthouse- are carvings of fish, whale, wallaby swordfish, and kangaroo. ³

6 Mosman- 79 known sites within the area are catalogued. These are occupation sites, religious and ceremonial sites and rock art sites. ³

7 Linley Point- a number of weathered carvings have been engraved onto flat rocks on the west side of the point. There are a number of shelters and middens nearby. ⁴

8 Glades Bay Native Gardens- a traditional campsite with 11 carvings, with two jumping kangaroos which are among the best preserved of the remaining examples of rock art in the CBD. Axe grinding grooves can be found on rocks beside a nearby creek.³

9 Iron Cove- rare engravings due to the scarcity of suitable rock with a shell midden nearby. 4

10 Balls Head- some of finest examples of cultural sites on the lower north shore. Large caves and rock shelters along waterways and trade routes are another popular location for local groups.³

11 Yoo-lahng Ceremonial Ground- at Farm Cove Gadigal performed large initiation ceremonies in bora rings as late as 1795, this area is of great significance.²

12 Rushcutters Bay- here in the 1890s a settlement contained several gunyahs around a central campfire.⁵

13 Milk Beach, Vaucluse- fish, shields and human figures have been carved into the rocks near the waterline. The remains of two hand stencils and a painting of a boomerang are situated in an cave. 6

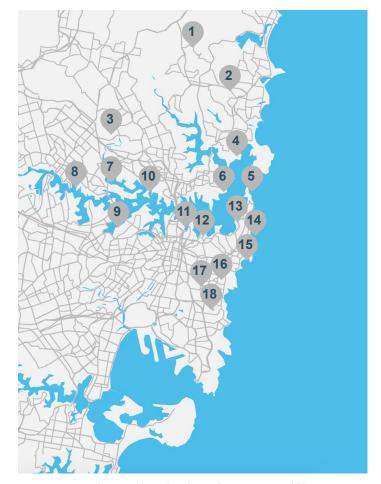
14 Rodney Reserve- the figure of a man in warlike or corroboree gesture is etched on bedrock here. ⁶

15 Ben Buckler, North Bondi- numerous examples of Aboriginal rock art on the cliffs above the ocean at North Bondi. A whale and three elongated figures have either been buried by silt or destroyed when the path and staircase were built. ⁶

16 Queens Park- a campsite with a large rock overhang, scatters of campfires and artefacts including bones of mammals, birds and fish, charcoal and stone artefacts. ⁷

17 Randwick Stabling Yard - over 22,000 artefacts around 3000 years old uncovered on a construction site for Sydney's Light Rail line. There are spear tips, knife blades, scrapers, cutters and about 12 marriage stones, given to a man when he comes of age and gets married.⁹

18 Randwick Hearth and campsite near Prince of Wales Hospital- a hearth and campsite, dated to 8,000 years ago, one of the oldest such sites in coastal Sydney. ⁸



Please note: these sites are publicly available information and are not a definitive assessment nor an archaeological study of the area. Locations are indicative only.

Topography and Geology of Darug Country

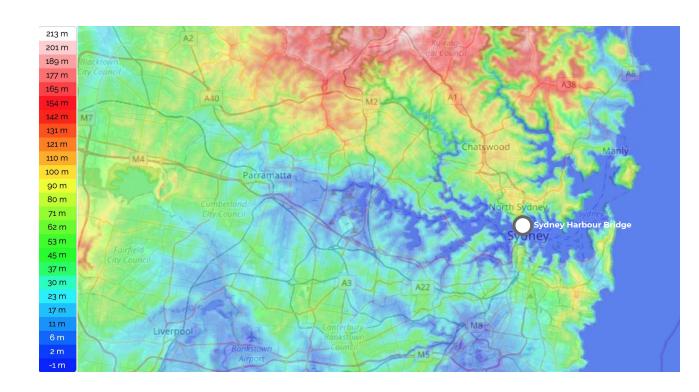
Topography

The Sydney Harbour Bridge spans across Port Jackson harbour connecting the north and south sides. The harbour is situated within the Sydney Basin Bioregion which lies on the east coast and covers a large part of the catchments of the Hawkesbury-Nepean, Hunter and Shoalhaven river systems. Here sedimentary rocks have been uplifted with gentle folding and minor faulting during the formation of the Great Dividing Range.⁹

Erosion by coastal streams has created a landscape of deep cliffed gorges and remnant plateaus across which an east-west rainfall gradient and differences in soil control the vegetation of eucalypt forests, woodlands and heaths. The Sydney Basin Bioregion includes coastal landscapes of cliffs, beaches and estuaries.⁹

Geology

The Sydney-Bowen Basin was formed when the earth's crust expanded, subsided and filled with sediment between the late Carboniferous and Triassic. Early stages of development were as a continental rift that filled with marine volcanic sediments, but deposition shifted to river and swamp environments in a cold climate in the early Permian.⁹



Darug Eora Key Issues

Ground disturbance

For Darug Eora people the ground plane is important and should not be disturbed too much or else you change the ecosystem.

Any construction should have as minimal disturbance to the ground as possible.



Important viewpoints

Elevated spaces provide a good place to look at Country.

How might the design cater for any important views points of Darug Eora Country?



Celebrate Country

The project has the potential to celebrate Darug Eora Country and culture.

Can the project provide a space to celebrate this important Country?



Tell our stories.

Sydney area is a center of trade, yet to get there you and to cross many rivers, the Parramatta being the most significant, and in the process cleanse your body and mind, ready for clear headed trade.

How might we tell the stories of this Country and it's first peoples?





Potential use of Darug Eora design



Entry statement, significant site marker sculpture referencing Darug Eora Design.



Shared pathway with Darug Eora patterns in coloured asphalt.



Resting place Darug Eoradesign treatment in pavement, seating, landscape art.



An iconic sculpture to mark important gateway or zone.



Bridge abutments, piers and safety screens are canvases fo Darug Eora art



Bridge piers painted up in colours and patterns of Darug Eora Country.



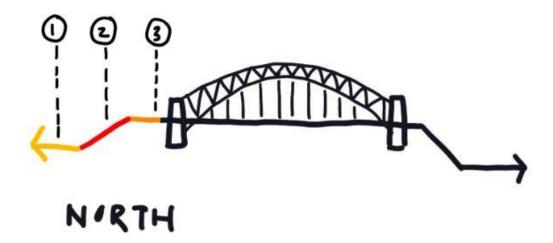
Wall treatment, anti throw screens, abutments, noise walls etc



Sculptural or murals, message sticks, landscape communicating stories and design.

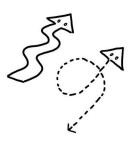
Design Opportunities

- 1. Connection to Ground
- 2. Bike Path Ramp
- 3. Connection to Bridge (Sky/Water)



Key Themes















. Rainbow Serpent Narrative

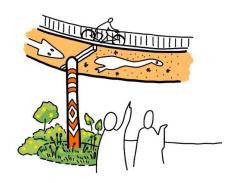
2. Bridging between Earth and Sky

3. Important Totems

Design Opportunities



1. Connection to Ground Ground plane Signage and Paving



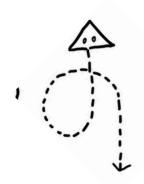
2. Bike Path
Soffit and Structure Treatment



3. Connection to Bridge Gateway Signage

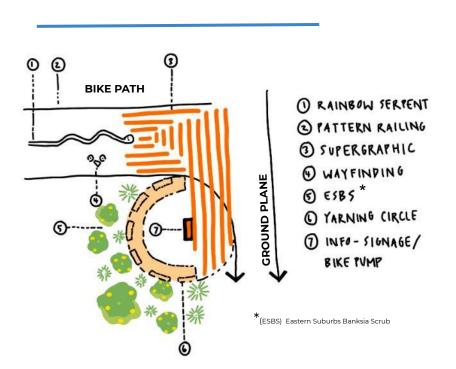
Design Opportunities

Art under the loop - either pavement, sculptural, lighting feature etc, can enhance the space inside the loop option

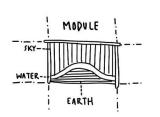




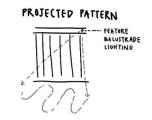
Key Strategies



2. Pattern Railing







4. Wayfinding



7. Info-signage/Bike Pump



Acknowledging Moruya Materials



Moruya Quarry



Dressing Granite Blocks



Lifted Masonry for Pylon Tower

STORY OF THE STONE



The Pedestrian Experience

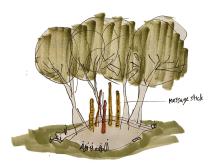
A space to celebrate culture, such as a viewing, yarning or sitting place with references to local design and stories allowing leaders to tell the story.

Integrated Art High quality photo / print of local artist, or electronic or light display artwork. Example below is of Reid Highway WA upgrade with Noongar design translated by artist Drew Straker through a community led co-design process.

Client: Decmil / Main Roads WA

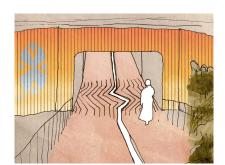
Storytelling and wayfinding devices

help connect people and orientate them to Gadigal Eora Country and the stories and history that came before. Signage, surface etching, sandblasting of language etc Undercroft spaces, abutments and substructures can be activated with bright and meaningful Darug design either through direct application, moulding / relief or light installation. This serves the benefit of beautifying otherwise dull features and providing engaging, fun, safe and accessible areas.









How to apply these themes

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.



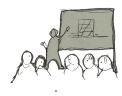
2. Co Design

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



Further Indigenous participation

1. Consultation with Aboriginal Community. Elders, community, respected community members etc

The use of Aboriginal patterns and motifs must be done with approval - and hopefully involvement - from the elders and community. A document like this can begin these conversations between community.

We need to ask:

- Can we use your Countries patterns?
- Do you want to make patterns for the project?
- How would you like to be involved?

2. Engage Aboriginal artists and designers

Aboriginal artists should be engaged from the local community who acknowledge Country / culture in their designs

3. A Smoking Ceremony recommended on the site

Smoking Ceremonies are conducted by Aboriginal people with specialised cultural knowledge. The ceremony aims to cleanse the space in which the ceremony takes place (this site being of major significance). Given the significant nature of the ceremony, smoking ceremonies are usually only performed at major events.

4 Perform a Welcome to Country when site opens .

Generally, providers offer participants local Aboriginal history and cultural information and will go on to welcome the delegates to the Country.



References

1 Parramatta Heritage Centre, Darug People and the Environment. Viewed 18/5/2020. Available:

http://arc.parracity.nsw.gov.au/blog/2017/07/17/darug-people-and-the-environment/

2 Gammage, B., 2011, The biggest estate on earth: how Aborigines made Australia, Crows Nest. N.S.W. Allen & Unwin

3 Heiss A., Gibson M., Aboriginal people and place, viewed 1/6/20 availablehttps://www.svdnevbarani.com.au/sites/aboriginal-people-and-place/

4 Unknown author, Identifying Aboriginal Sites, Aboriginal Heritage Office, viewed 1/6/20, available- https://www.aboriginalheritage.org/sites/identification/

5 Indigenous history, *Aboriginal history of Randwick*, viewed 12/3/21, available-https://www.randwick.nsw.gov.au/about-council/history/our-story/indigenous-history

6 Vincent Smith K., 2006, Eora Mapping Aboriginal Sydney 1770–1850, viewed 12/3/21, available-

https://www2.sl.nsw.gov.au/archive/events/exhibitions/2006/eora/docs/eora-guide.pdf

 $7\ Vincent\ Smith\ K., 2018, Memel\ /\ Bennelong's\ Island, viewed\ 16/6/20, available-https://www.eorapeople.com.au/places/$

8 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

West

 $\label{lem:https://www.centennialparklands.com.au/getmedia/e32ae90a-e730-4c28-82c4-4b17e9e 3c5el/Appendix_S_-_Pre-colonial_Archaeology_report_Val_Attenbrow.pdf$

9 NSW Department of Planning, Industry and Environment, Sydney Basin - landform, viewed 12/3/21 available-

https://www.environment.nsw.gov.au/bioregions/SydneyBasin-Landform.htm#:~:text=It %20consists%20of%20a%20geological.of%20the%20Great%20Dividing%20Range.

10 Unknown author, Coal Loader Sustainability Learning Guide – Aboriginal Heritage, viewed 1/6/20, available-

https://www.northsydney.nsw.gov.au/files/assets/public/docs/4_waste_environment/co al loader/coal loader guide chapter 2 aboriginal heritage.pdf.

11 Hoorn J., The Lycett Album, viewed 16/6/20, availablehttps://www.nla.gov.au/sites/default/files/thelycettalbum.pdf 12 Unknown author, Identifying Aboriginal Sites, Aboriginal Heritage Office, viewed 1/6/20, available- https://www.aboriginalheritage.org/sites/identification/

13 Unknown author, Great Eora fisherwomen remembered in 'bara' artwork, viewed 16/6/20, available-

https://news.cityofsydney.nsw.gov.au/articles/great-eora-fisherwomen-remembered-in-bara-artwork

Significant Sites References-

1 Unknown author, Aboriginal Sites: Northern Beaches and Pittwater, viewed 16/6/20, available- http://www.visitsvdnevaustralia.com.au/sites-nb.html

2 Vincent Smith K., 2018, Yoo-long Erah-ba-diang 1795, viewed 16/6/20, available-https://www.eorapeople.com.au/uncategorized/1795-initiation-at-farm-cove/

3 Unknown author, Aboriginal Sites: Lower North Shore, Sydney's Aboriginal Heritage, http://www.visitsvdnevaustralia.com.au/sites-Ins.html

4 Unknown author, Aboriginal Sites: Inner West, viewed 1/6/20, available-http://www.visitsydneyaustralia.com.au/sites-iw.html

5 Irish P., 2013, The Rushcutters Bay settlement, viewed 16/6/20, available - https://www.sydneybarani.com.au/sites/the-rushcutters-bay-settlement/

6 Unknown author, Aboriginal Sites: Eastern Suburbs, viewed 16/6/20, availablehttp://www.visitsvdnevaustralia.com.au/sites-es.html

7 Irish P., & Goward T., Moore Park Engraving, viewed 16/6/20, availablehttps://www.svdneybarani.com.au/sites/moore-park-engraving/

8 Curby P., Randwick, viewed 16/6/20, availablehttps://dictionaryofsydney.org/entry/randwick

9 Ly P., 2016, Calls to stop work and preserve Randwick light rail site after discovery of Indigenous artefacts, viewed 16/6/20, available-

https://www.sbs.com.au/nitv/the-point-with-stan-grant/article/2016/03/30/calls-stop-work-and-preserve-randwick-light-rail-site-after-discovery-indigenous?cid=inbody.randwick-artefact-site-may-be-scene-of-massacre%E2%80%99-as-protest-calls-for-permanent-protection

