# Historic Heritage Report



Cookson Plibrico Site, Bulli, Illawarra Region, NSW

Sandon Point ARV Concept Plan: Heritage Impact Assessment
Report to Anglicare & the NSW Depart of Planning & Environment

18 July 2018

# **Contents**

Introduction	1
Background	5
History	7
First People	7
Settlement	7
Dairying	g
Industry	ξ
Heritage	15
Legislation	15
Listings	16
Survey	21
Significance	30
Proposal	33
Impacts	35
Appraisal	35
Statement	36
Recommendations	37
References	38
Attachments	41
A1. 75W SEARs	42
A2. Historical Archaeological Testing Report	43
A3. SHI Turpentine Forest Listing	44

## Introduction

Anglicare (formerly Anglican Retirement Villages/ARV) are planning for the redevelopment of land at the Cookson Plibrico Site at Bulli in the Illawarra Region of NSW. On this long disused site of a former late-twentieth century refractory and dairy cooperative, the client intends to establish a townhouse estate with seniors housing across Lots 2 and 3 DP 1176767: an area of approximately 79,511m<sup>2</sup> bordered by Wilkies and Geraghty Streets (to the north and west), and Cooksons and Tramway Creeks (to the south and east).

Refer figures 1 - 4.

### **Proposal**

The site has been subject to development planning for some time (over 10 years) with the original concept plan by Stocklands and ARV for an aged care village approved as a Major Project in 2006 (MP 06\_0094). The recent merger of ARV and Anglicare, has seen a renewed interest in the redevelopment of the site; not as originally envisaged, but as staged townhouse precincts (in the north), with seniors housing, including a Residential Aged Care Facility (RACF), independent living units (ILU's), communal facilities and services to support the retirement village (in the south). The development is to be set about heritage-listed, remnant and regenerating Turpentine forest.

Refer figure 5.

### **Project**

As the proposal is a variation on the original major Project concept approval, it requires appraisal by the NSW Department of Planning (NSW DoPE). The Secretary's Environmental Assessment Requirements (SEARs) issued under Section 75W(3) of the *NSW Environmental Planning & Assessment Act 1979* in relation to the proposed modification (MP 06\_0094 Mod 5) require that modification request include:

Item 12: A revised Heritage Impact Assessment prepared in accordance with the NSW Heritage Manual which addresses the significance, and provides an assessment of, impacts on the heritage significance of heritage items, landscape features and vegetation on the site and items in the vicinity.

Refer attachment A1.

### Report

This document is Heritage Impact Assessment (HIA) that addresses the SEARS requirements outlined above. It is principally concerned with non-indigenous heritage and is a companion document to the Revised Aboriginal Cultural Heritage Assessment (MDCA 2018); Visual Impact Assessment (JSA 2018); Landscape Concept Plan (Turf Design Studio 2018) and Vegetation Management Plan (Cumberland Ecology 2018).

### Acknowledgements

This report was prepared by Dan Tuck (MDCA archaeologist and heritage consultant). The author would like to thank Dr Paul Irish; Mary Dallas (MDCA); Ken Douglas-Hill (EPM Projects) and Jennie Buchanan (Ethos Urban) for providing assistance, background information and site access.

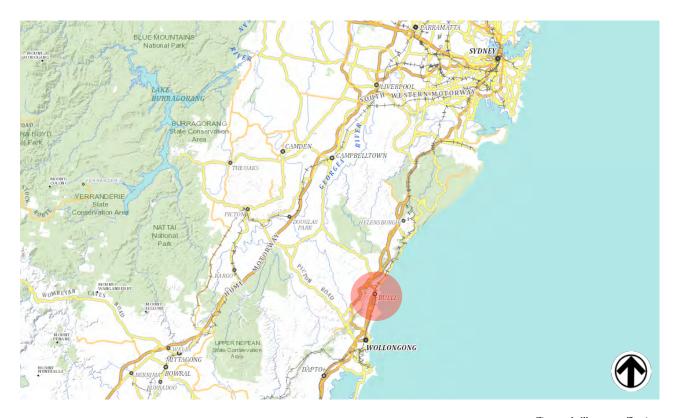
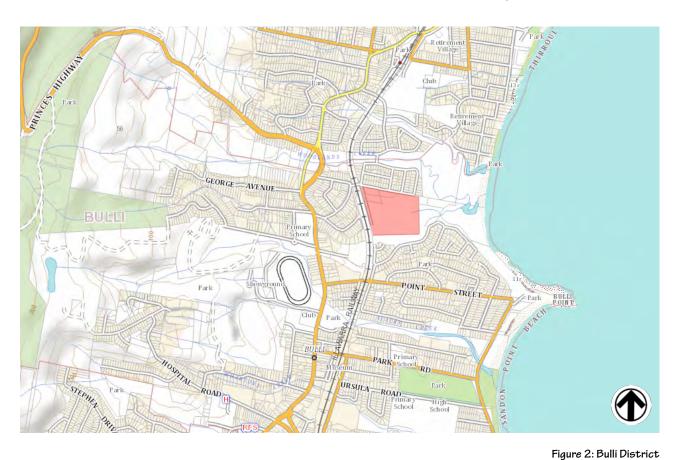


Figure 1: Illawarra Region
NSW Spatial Services SIX Viewer 2018



NSW Spatial Services SIX Viewer 2018



Figure 3: Study Area (map)

NSW Spatial Services SIX Viewer 2018



Figure 4: Study Area (satellite)

NSW Spatial Services SIX Viewer 2018



Figure 5: Proposed Site Plan

JSA Studio Architects 11 July 2018

# Background

Over the past twenty years, a number of studies have sought to identify and address the heritage values of the contentious and contested Sandon Point-Thirroul/Bulli area. These studies have included:

Organ, M. 1992. Woodlands - Sandon Point/South Thirroul Conservation and Development: A Report Concerning Sites of Historical, Archaeological, Aboriginal and Environmental Heritage Significance in the Sandon Point/South Thirroul Area, NSW.

Gutteridge, Haskins & Davey (GHD). 1993. Sandon Point Local Environmental Study. Heritage component prepared by Godden Mackay.

Meredith Hutton. 1996. Report on the Archaeological Zones Within the site of BMP Refractories LTD. Report to BMP Refractories.

Graham Brooks & Associates (GBA). 2003. Sandon Point-Thirroul/Bulli: European Heritage. Submission to the Commission of Inquiry. Report prepared on behalf of the Stockland Trust Group.

The later study related to a Commission of Inquiry (COI) into landuse at Sandon Point, where Graham Brooks & Associates (GBA) were expert consultants on European heritage. The study reviewed previous work, undertook additional investigation, and concluded that the two items of heritage value within the greater locale were on land to the north of the current study area: Woodlands Cottage and the Thirroul Brickworks Site.

**Woodlands Cottage** was the mid-nineteenth century occasional residence of early Illawarra pioneer and painter Captain Robert Marsh Westmacott. Occupying a prominent ridge in the Woodlands Estate north of the study area, the cottage was destroyed by fire in the 1920s. A weatherboard cottage & dairy were built near the site of the cottage in the 1940s & these were rented out until their demolition in the 1970s.

Thirroul Brickworks started to manufacture firebricks and on the former Woodlands Estate in approximately 1920, with their product in great demand for use in gas retorts & furnaces in the heavy processing industries such as Port Kembla & Newcastle Steelworks. Over time, the extraction of clay & expansion of facilities & production subsumed much of the old estate (including the site of Woodlands Cottage). The enterprise - variously owned or operated by Vulcan, Newbolds, Australian Industrial Refractories & BHP - was a major local employer until closing in the 1990s. The works were demolished in the late-1990s) & the land rezoned from industrial to medium density residential (2010). The brickworks site, in its entirety, is now a housing development set north of Sturdee Avenue.

The GBA study discounted the possibility of there being significant intact remains associated with Woodland Cottage, however, it noted that '... fragments of glassware and pottery exposed on the walkway (Wilkies Walk) towards the beach may be associated with the 19th century cottage' and that these '... should be investigated' (GBA 2003: 2; 22). However, historical archaeological test excavations conducted by MDCA in 2015 - under permit 2014/S140/26 in association with DA 2011/1383 consent conditions - determined that the alignment of Wilkies Track had been moved; that Sturdee Avenue had been built over the original Wilkies Track (where the artefacts had been observed); and that no historic artefacts of significance were evident along the northern margin of the study area (MDCA 2015).

Refer figures 6 - 8 and Attachment 2.



Figure 6: Bulli, Illawarra, N.S.W (1840-1846)

Robert Marsh Westmacott nla.pic-an3706347-v



Figure 7: My cottage, Woodlands, Illawarra, N.S.W (1840-1846)

Robert Marsh Westmacott nla.pic-an3706191-v

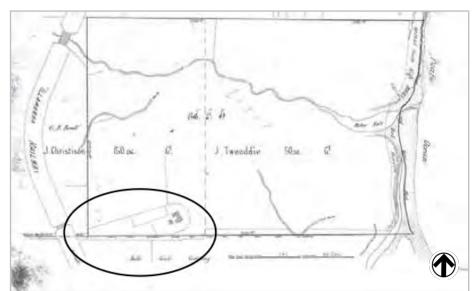


Figure 8: Woodlands in the 1890s

Land Title Document Image presented in GBA 2003: 14

# History

Previous heritage studies have focussed on the broader Sandon Point-Bulli area and/or the former Woodlands/ Thirroul Brickworks lands that were redeveloped by Stocklands to the immediate north. The following focuses on the study area specifically and provides a summary history of the locale.

### **First People**

For thousands of years, the Illawarra was the sole domain of the *Wodi Wodi*: a clan group of the Dharawal speaking Aboriginal people whose territory included the Illawarra and notable localities including Lake Illawarra, Berkeley and Hooka Creek. The Sandon-Bulli area provided the *Wodi Wodi* with a host of terrestrial, maritime and estuarine resources: a consequence of the unique and varied landscape that included the Pacific Ocean and its prominent headlands; the extensive dune system adjacent; and the creeks, swamplands and forests of the foothills of the Illawarra escarpment. The traditional name for the Bulli area is reputed to have been *Bulla* (meaning mountain) or *Bulla Bulla*: meaning two mountains (Mt Kembla & Mt Keira). Other meanings of the name Bulli have been given as *white grubs* and *place where the Christmas Bush grows*.

### Settlement

One of the earliest white settlers in the Bulli area appears to have been Cornelius O'Brien, who as a contractor to the army, is reported to have supplied two thousand pounds of beef to the government in 1817.<sup>2</sup> O'Brien received one of first grants in the district of 300 acres on 31 March 1821 (though it was not officially issued until 1 May 1833).<sup>3</sup> The grant (portion 114 in the Parish of Woonona) extended from the escarpment to the sea between Bulli Point and Woniora Point. O'Brien's neighbour to the south was William Bowman (300 acres), while Christianson and Tweedle held land to the north in the Parish of Southend.<sup>4</sup> **Figure 9.** 

O'Brien ran shrub cattle and engaged in a short-lived, largely unsuccessful whaling venture in the early 1830s.<sup>5</sup> In 1836, he sold to Robert Marsh Westmacott and moved to Yass. Westmacott also acquired other land thereabouts, including Christianson's 150-acre lease (where he built his Woodlands homestead). The study area is within the the northern part of the original O'Brien grant, though there is no evidence that he (or Westmacott) made any use of the subject land, aside from initial clearing and probable grazing.

By the 1840s, the Bulli area was well established as a pastoral area on the route between Appin and Wollongong. In 1841 the Private Town of Bulli, consisting of some 900 acres, was offered for sale (largely comprising the former grants of O'Brien, Bowman and George Tate). Later the area between the immediate town was further subdivided into farms of between 25 to 165 acres. By the close of the century, Bulli was a service town for pastoralists and small farmers and a centre of the Illawarra coal mining industry that had commenced with the opening of the Bellambi (Woonona) mine in the 1850s. Figure 10.

<sup>&</sup>lt;sup>1</sup> Place Names of the Wollongong Region

<sup>&</sup>lt;sup>2</sup> Sydney Gazette 18 October 1817

<sup>&</sup>lt;sup>3</sup> Land Title Records appendix in EIS 2015

<sup>&</sup>lt;sup>4</sup> Lindsay 1994; Map of the Parish of Woonona, County of Camden 1889

<sup>&</sup>lt;sup>5</sup> Organ 1992

<sup>&</sup>lt;sup>6</sup> Bayley 2002

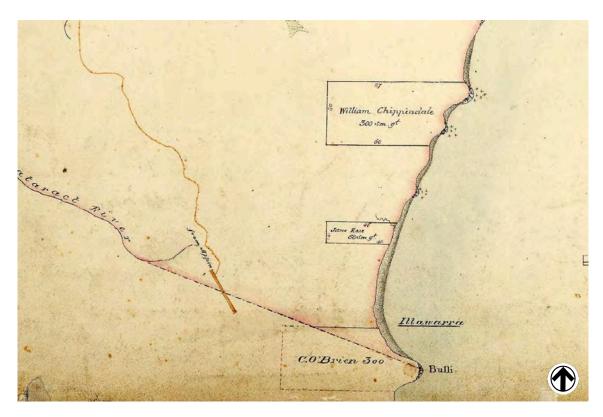


Figure 9: Map of the Parish of Southend (1835)

Thomas Mitchell - NSW Land Registry Services Historic Lands Record Viewer

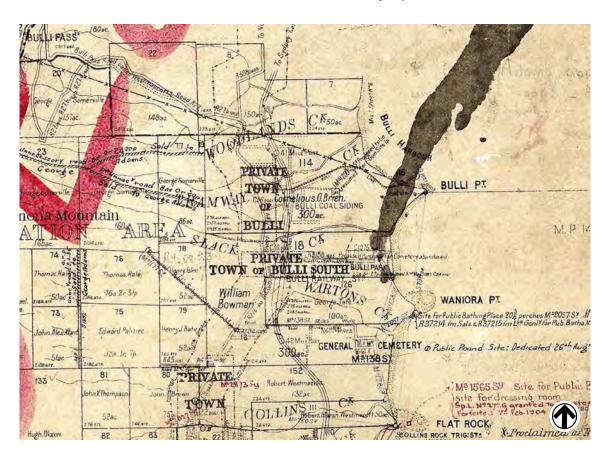


Figure 10: Map of the Parish of Woonona (1898)

NSW Land Registry Services Historic Lands Record Viewer

### **Dairying**

For the first half of the twentieth century, the subject land appears to have been cleared and vacant land set west of the Illawarra Railway Line: above the Bulli Coal Siding and associated tramway, and separated from it by Tramway Creek. After a succession of joint private owners from the 1920s, commencing with William Adams (hotel manager), David Harvey (accountant), Gerald Barry and William Finley (Solicitors), both of the subject lots were acquired and owned by Ernest Edgar Smith (dairy farmer) between 1947 and 1955 and thereafter by the The Dairy Farmer's Co-Operative Milk Company Limited. The cooperative (and other related entities) operated and retained Lot 3, where they established a small cooperative warehouse, which appears to have been in use until the c.1980s. Lot 3 was sold to developers Stocktons in 2001.

### Industry

Lot 2 was sold by the dairy farmer's cooperative to South Coast Refractories Pty Limited in 1965. The southern part of the lot was subsequently infilled and levelled and a refractory complex was constructed thereon, commencing operations in 1968. Initially confined to the southwest corner of the study area, the complex of offices, factory buildings-sheds and storage facilities were extended in the 1970s.

### Refractories

A **refractory mineral** is a mineral that is resistant to decomposition by heat, pressure or chemical attack. It most commonly refers to a material which retains its strength and form at high temperatures. **Refractories** are technically defined as a non-metallic materials (including certain ceramics and super alloys) having chemical and physical properties that make them applicable for structures, or as components of systems, that are exposed to environments above 538 °C (1,000 °F). Refractory materials are commonly used in furnaces, kilns, incinerators and reactors. Locally, refractory materials are used in the steel industry - an employment stalwart in the Illawarra for many years.

Known locally as 'The Farm', 'Thornies' or 'Cooksons', the refractory complex was owned and operated by various entities over its 40-odd year production lifetime. Notable owners included Soucoare Properties Pty Limited (1981-1989) and Votraint No. 505 Pty Ltd/Cookson Plibrico Pty Limited (1989 - 2007) who became Vesuvius Australia Pty Ltd (2010). Nearing the end of its tenure onsite, the refractory specialised in high-heat industry refractory operations such as crushing and screening; ball mill operation; dry-powder blending; plastics refractory; slab production; precast slab production; and taphole clay production. Finished products were shipped as premixed powders (in various bag sizes); packaged wet clays and precast concrete shapes (for use in the steelmaking and aluminium smelting industries). Production capacity at time of closure was approximately 15,000 to 20,000 tonnes per year. Vesuvius ultimately moved their operations to Port Kembla.

Both Lots 2 and 3 were acquired by Anglican Diocese of Sydney between 2007 and 2009 and have been untenanted since that time.

<sup>&</sup>lt;sup>7</sup> Land Title Records appendix in EIS 2015; HLA Envirosciences 2005; Organ 2006

<sup>&</sup>lt;sup>8</sup> Land Title Records appendix in EIS 2015; HLA Envirosciences 2005

<sup>&</sup>lt;sup>9</sup> Land Title Records appendix in EIS 2015; HLA Envirosciences 2005

<sup>&</sup>lt;sup>10</sup> JRPP No. 2011STH010 Construction of refractory development and boundary realignment: Assessment Report & Recommendations

<sup>11</sup> https://www.engineersaustralia.org.au/portal/news/vesuvius-port-kembla-hosts-illawarra-sutherland-regional-group

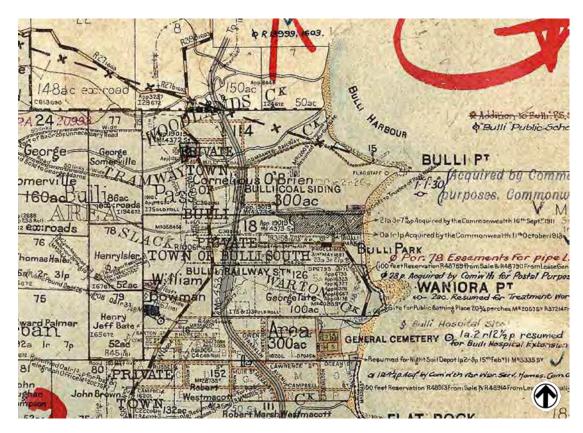


Figure 11: Map of the Parish of Woonona (1914)

NSW Land Registry Services Historic Lands Record Viewer

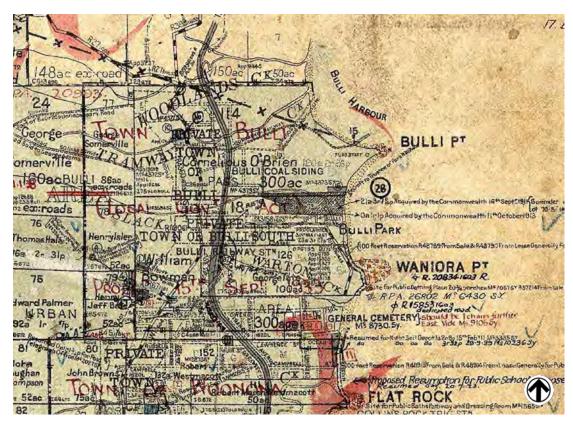


Figure 12: Map of the Parish of Woonona (1923)

NSW Land Registry Services Historic Lands Record Viewer

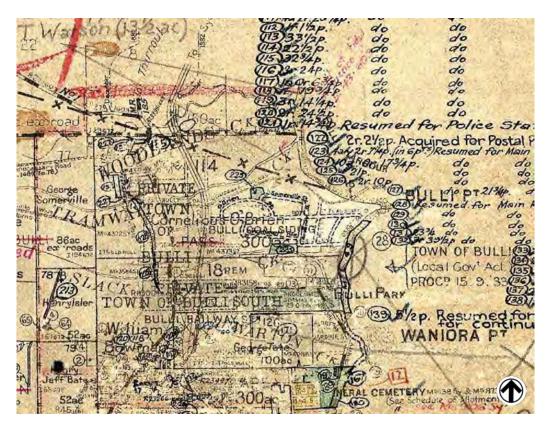


Figure 13: Map of the Parish of Woonona (1923)

NSW Land Registry Services Historic Lands Record Viewer

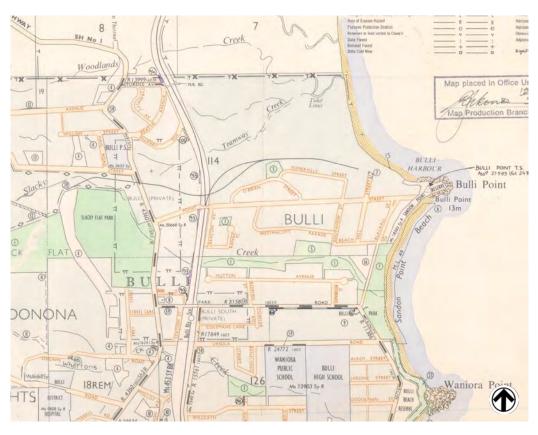


Figure 14: Status Branch Map of the Parish of Woonona (c. 1970s)

NSW Land Registry Services Historic Lands Record Viewer



Figure 15: Historic Air Photo (1938)

In this image from the 1930s, the brickworks have been constructed to the north of the study area (above Woodlands Creek). The study area is cleared and unoccupied with only a small remnant patch of vegetation is visible above Tramway Creek. GBA 2003



Figure 16: Historic Air Photo (1955)

In this image from the 1950s, the Thirroul brickworks have expanded. The study area remains clear and undeveloped. GBA 2003



Figure 17: Historic Air Photo (1955)

In this image from the 1970s, the brickworks have grown and the impacts of storage and extraction can be seen marking the surrounding landscape. Within the study area, a coop building has been constructed on Lot 3 (c1960s) and a new industrial complex takes up much of the southeast quarter of Lot 2(early 1970s). GBA 2003



Figure 18: Historic Air Photo (1955)

This photo and overlay from 2001 post-dates demolition of the brickworks and shows the extent of landscape modification due to brickworks activity. Within the study area, revegetation has occurred and the refractory complex has been extended at the eastern end.  $GBA\ 2003$ 

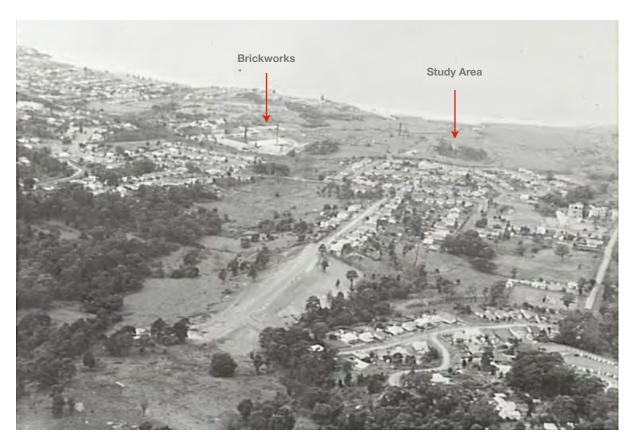


Figure 19: Historic Air Photo (1959)

This air view looks east-northeast along George Street and into Sturdee Avenue. The stacks and sheds of the brickworks can be seen in the middle distance as can the undeveloped study area. Jack Southern - Wollongong Library



Figure 20: Satellite Image of the Study Area (2008)

Google Earth Pro

# Heritage

The following section details heritage legislation and listings schedules (statutory and non-statutory) as they relate to the study area. It also presents the results of a recent site inspection/field survey and an appraisal of the historic heritage significance of the locale.

### Legislation

### **NSW Heritage Act 1977**

The NSW Heritage Act 1977 is the principle document governing the management of heritage items (relics and places containing relics) in NSW.

http://www.austlii.edu.au/au/legis/nsw/consol\_act/ha197786/

The Act defines a relic as:

any deposit, artefact, object or material evidence that:

- (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, &
- (b) is of State or local heritage significance.

http://www.austlii.edu.au/au/legis/nsw/consol\_act/ha197786/s4.html

All relics are afforded automatic statutory protection by the relic's provisions of the Act. Sections 139 to 145 within Division 9 of The Act prevent the excavation or disturbance of land for the purpose of discovering, exposing or moving a relic, except by a qualified archaeologist to whom an excavation permit from the Heritage Council of NSW has been issued. Section 146 of The Act requires that the inadvertent discovery of relics be reported to the Heritage Council in a timely and appropriate manner.

Where a development is determined as being of State Significance the requirement for an excavation permit to disturb relics is turned off, but the relics provisions of the Act remain relevant.

### **Environmental Planning & Assessment Act 1979**

The NSW Department of Planning and Environment (DoPE) administers the EPA Act, which provides the legislative context for environmental planning instruments to be made to govern and guide the process of development and land use. Local heritage items, including known archaeological items, identified Aboriginal Places and heritage conservation areas are protected through listings on Local Environmental Plans (LEPs) or Regional Environmental Plans (REPs). The EPA Act also requires that potential Aboriginal and historical archaeological resources are adequately assessed and considered as part of the development process, in accordance with the requirements of the NPW Act and the Heritage Act.

http://www.austlii.edu.au/au/legis/nsw/consol\_act/epaaa1979389/

### Listings

The following statutory registers and planning documents were reviewed during preparation of this report:

- Wollongong LEP 2009
- Wollongong DCP 2009
- Sandon Point SEPP 2005 & SSD SEPP 2009
- NSW Heritage Office's State Heritage Inventory (SHI)
- NSW Heritage Office's State Heritage Register (SHR).

### **Wollongong Shire LEP 2015**

The Wollongong Local Environmental Plan (WLEP) as amended, is the primary local government planning instrument. Part 5.10 Heritage Conservation provides objectives for heritage conservation and identifies when development consent is required (or not required) for heritage items, archaeological sites and Aboriginal places, or locations in the vicinity thereof.

https://www.legislation.nsw.gov.au/#/view/EPI/2010/76/part5/cl5.10

**Schedule 5** list items of *Environmental Heritage* consecutively under Heritage Items (part 1) and Heritage Conservation Areas (part 2).

https://www.legislation.nsw.gov.au/#/view/EPI/2010/76/sch5

No items of heritage significance are listed within the study area.

Nearby listings are:

- Former Railway Route (Item 6527) approximately 215 metres SW of the SW corner of the study area & separated from it by the Illawarra Railway Line
- Methodist Manse & Church (Item 6355) approximately 350 metres SW of the SW corner of the study area & separated from it by the Illawarra Railway Line
- Rail Bridge (Item 5988) approximately 300 metres WSW of the SW corner of the study area
- Sandon Boat Sheds (6487); Norfolk Island Pine (6191) & Site of Westmacott's Sandon Cottage (6358) all over 700 metres SE of the W corner of the study area.

Refer table overleaf as well as figure 21.

https://www.legislation.nsw.gov.au/maps/8c49dac3-8712-4d08-81db-2911f3c3e1bf/8450 COM HER 023 020 20180102.pdf

WLEP 2009: Schedule 5 Heritage Items in General Vicinity of the Study Area						
Suburb	Name	Location	Property	Significance	Item	
Bulli	Former Railway Route (Bulli Colliery)	Railway Reserve	Lot 2/DP 1094964	Local	6527	
Bulli	Methodist Manse & Church	151 Princess Highway, Bulli	Lot 1/DP 779555; Lot 1/DP 780740	Local	6355	
Bulli	Rail Bridge over the Pacific Highway	Pacific Highway near Hobart Street Junction	Rail Reserve	Local	5988	
Bulli	Sandon Boat Huts	Sandon Point	Lot 103/DP 7813	Local	6487	
Bulli	Norfolk Island Pine	Bulli Point	Forefore	Local	6191	
Bulli	Site of Captain Westmacott's Sandon Cottage	Bulli Point (Sandon Point) Trig Station	Lots 1-6 & 103/DP 7813	Local	6358	

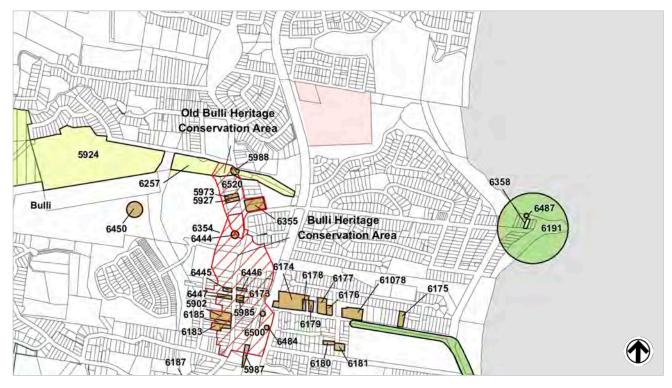


Figure 21: WLEP 2009 - Heritage Map
Heritage Map - sheet HER\_023

### **Wollongong DCP 2009**

The Wollongong Development Control Plan 2009 (DCP) outlines planning controls for the city. It sets out specific controls and parameters that apply to development proposals. The Wollongong DCP 2009 applies to all development proposals in Wollongong lodged from 3 March 2010. Part E (Chapter 11) addresses development controls as they relate to heritage conservation.

### **SEPP (State Significant Precincts) 2005**

This plan is the EPI that has enabled the development study area (south of Wilkies Street). The Minister for Planning granted approval under Section 750 of the EPA Act for a Concept Plan, subject to modifications, involving:

- Subdivision to create a combination for up to 180 residential detached dwelling allotments & three super lots for up to 105 multi-unit housing dwellings (townhouses & apartments) comprising a total of 285 potential dwellings
- A retirement development including a Residential Aged Care Facility; independent living units; communal facilities; services to support the village; access & car parking.

The plan as it stands enables a broad range of development options, and allows for the establishment of low and medium residential development.

https://www.legislation.nsw.gov.au/EPIs/2009-549.pdf

The Turpentine forest within the study area is identified in SEPP heritage mapping.

https://legislation.nsw.gov.au/#/view/EPI/2005/194/maps

Refer figures 22 & 23.



Figure 22: Figure Constraints Map

Cardno 2017

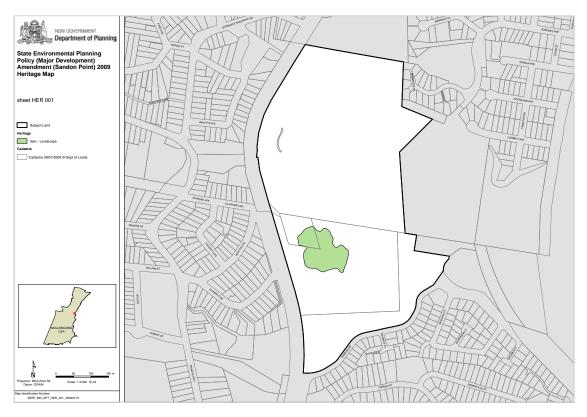


Figure 23: Sandon Point SEEP 2009 (Heritage Map)

NSW Government Department of Planning Sheet Her 001

### State Heritage Register & Inventory

The State Heritage Register (SHR) is a list of heritage items that have been assessed and acknowledged as having state heritage significance. The NSW Office of Environment and Heritage's Heritage Council maintains the register, and any development proposal that is likely to affect items on the register generally requires NSW Heritage Council approval (s.60), excepting where the proposal is deemed as of State significance.

Neither the study area, nor any items within it or in the vicinity, are listed on the State Heritage Register.

The State Heritage Inventory (SHI) lists items of both state and local heritage significance. Generally the listing of items on the SHI results from their inclusion in local and regional planning instruments or heritage studies. Any development proposal that is likely to affect items on the inventory generally requires NSW Heritage Council approval (s.140), excepting where the proposal is deemed as of State significance.

### **Remnant of Coastal Turpentine Forest**

http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2700056

This landscape feature was first identified in the City of Wollongong Heritage Study (McDonald McPhee Rogers Conacher Fullarton 1991: Item L17-N). Although it doesn't appear in the WLEP heritage schedule, it is considered, as mentioned previously, in the Sandon Point SEPP. Refer **attachment 3**.

In the vicinity, the following items are listed in the SHI:

### The Bulli Colliery Rail Bridge & Alignment

http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2700811

### **Methodist Manse & Church**

http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2700513

### **Sandon Boat Sheds**

http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5062351

### **Norfolk Pines at Sandon Point**

http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5062381

### Sandon Cottage (site of)

http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2700810

### Aboriginal Places Listed under the NPW Act

### **Sandon Point**

http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5062917

Gazetted February 2007; beachfront between Hewitts Creek and Sandon Point; East of the study area.

http://www.environment.nsw.gov.au/conservation/AboriginalPlacesNSW.htm

### Survey

Initial survey of the study area was undertaken in February 2015. A re-familiarisation survey of the study area on behalf of MDCA was undertaken on the morning of Wednesday 4 July 2018. The following dot points highlight the main observations:

### General

- The study area is an irregular, trapezoid shape with an area of approximately 8.11 hectares. The dimensions are approximately 360 metres along the northern boundary; 280 metres along the southern boundary; 220 metres along the eastern boundary; & 305 metres along the western boundary.
- The site is undulating for the most part: sloping from the northern boundary to the south to Cooksons Creek, and east towards the flats approaching McCaughleys Beach.
- The site's north western corner is the most elevated part of the site (approximately RL 27 m AHD).
   Cooksons Creek & the eastern boundary form the lowest parts of the site (approximately RL 8 m AHD).
- The building platform along the southern part of the study area is the most level portion of the site & has been established by the introduction of a considerable volume of mixed fill, which brings the elevation up to approximately RL 11.5m AHD in that location.
- Immediately south of the building platform the land falls away towards Tramway Creek.

### Vegetation

- The study area beyond the industrial complex in the south is generally heavily overgrown with grasses, woody weeds & regeneration native vegetation.
- Notable among the vegetation communities are the Turpentine Forest (Syncarpia glomulifera), which covers
  around one hectare in the central northern part of the study area & comprises remnant and regenerating
  forest, & the grass & scrublands on the eastern part of the site which comprise both exotic & native species.

### **Refractory Complex**

- The refractory complex constructed in the late 1960s and extended in the 1970s runs west east along the southern part of the site & is set on an infilled building platform (approximately 250 x 100 metres).
- The complex comprises a range of office, workshop, production & storage buildings & facilities surrounded by concrete/bitumen hardstand. It is approached from the north, by way of Geraghty Street, which bounds the site to the west. Beyond the street easement is the Illawarra Railway Line corridor.
- Features include a two-storey brick office; three large steel framed, corrugated iron sheds (with amenities & workshops), miscellaneous tanks, drains and silt traps & a water treatment shed.
- The buildings have been disused for over ten years & have been stripped of their internal furnishings & all equipment & have been universally subject to vagrancy and graffitied.
- On the north side of the complex the grassy verge approaching Cooksons Creek and the Turpentine Forest is partially landscaped.

### **Dairy Cooperative Complex**

- A former late 1960s dairy cooperative building occupies part of Lot 3 in the extreme northeast of the study area, fronting both Sturdee Avenue & Geraghty Street.
- The remnants of a rectangular brick building (22 x 13 metres) occupy the central part of this levelled site, which covers & area of approximately 50 x 30 metres.
- The building appears to have been used for dairy distribution and a loading dock is evident, but all of the plant has been removed.
- Much of the corrugated iron roof is missing, & like the refractory complex, the structure has been graffitied.

### Other

- Earth mounds & hollows exist both within the forest and the grass/scrublands in the east. These are mostly remnants of informal BMX/trail bike tracks & jumps
- An area in the northern central part of the study area was subject to minor quarrying for clay extraction in the twentieth century (c.1950s). This location is presents as a heavily overgrown depression.
- The site has been used for illegal dumping in the past & general rubbish including abandoned white goods are occasionally evident

No items of historic heritage significance, nor items or areas of historical archaeological potential or sensitivity were identified within the study area.

Refer figures 24 - 40.



Figure 24: Annotated Survey Plan (2018)

SIX Viewer 2018 as amended



Figure 25: View west along northern property boundary /Sturdee Ave

View W - Dan Tuck 2018



Figure 26: View towards refractory complex from Sturdee Avenue

View SW - Dan Tuck 2018



Figure 27: View along Geraghty St Access Road towards Sturdee Ave Junction

View N - Dan Tuck 2018



Figure 28:
Refractory complex office block
View SW - Dan Tuck 2018



Figure 29:
Refractory Complex building
View WNW - Dan Tuck 2018



Figure 30:
Refractory Complex shed
View SSE - Dan Tuck 2018



Figure 31: Refractory Complex buildings (northern side)

View W - Dan Tuck 2018



Figure 32: Refractory Complex building (indicative interior)

View W - Dan Tuck 201\*



Figure 33:
Refractory Complex building
(indicative interior)

View W - Dan Tuck 2018



Figure 34: Former Water Treatment Station  $\mbox{\it View NE - Dan Tuck } 2018$ 



Figure 35:

Grassy verge north of Refractory

Complex (with Cooksons Creek line +

Turpentine Forest in background)

View NW - Dan Tuck 2018



Figure 36: Clearing approaching the SW corner of the Turpentine Forest

View WNW - Dan Tuck 2018



Figure 37:
Turpentine Forest (indicative)
View NE - Dan Tuck 2018



Figure 38: Former Dairy Cooperative building  $\label{eq:ViewE-DanTuck} \begin{tabular}{ll} View E-Dan Tuck 2014 \end{tabular}$ 



Figure 39:
Former Dairy Cooperative building

View SW - Dan Tuck 2014

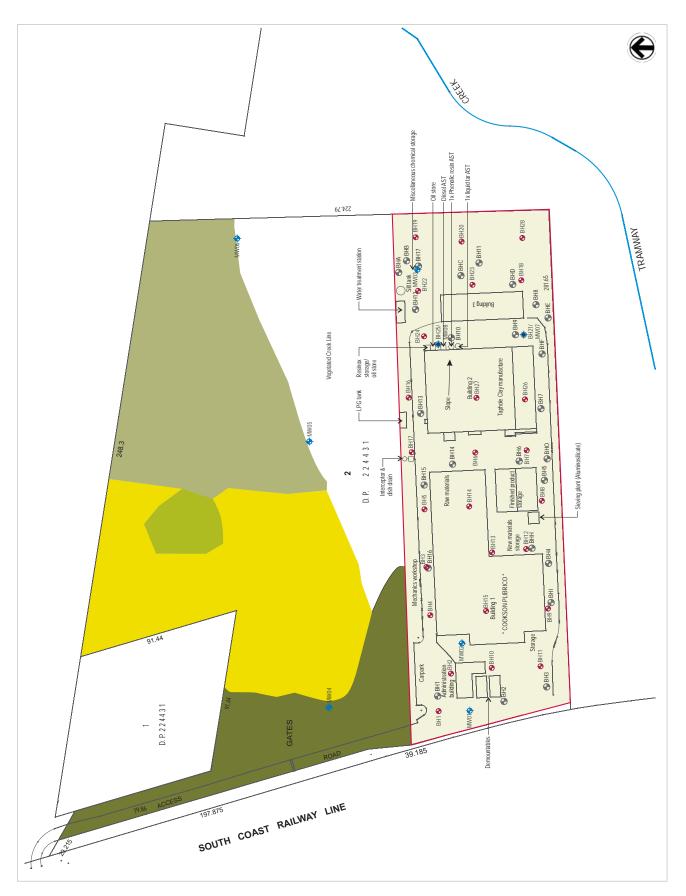


Figure 40: Annotated Survey Plan (showing refractory layout)

 $HLA\ Envirosciences\ Pty\ Ltd\ 2005$ 

### **Significance**

This following section provides an appraisal the heritage significance of the study area. The first part outlines the principles and criteria under which a significance appraisal is made; the second provides an assessment under the established criteria and presents a summary statement of significance.

Heritage significance and cultural significance are terms used to describe an item's value or importance to our society. The Australian ICOMOS Burra Charter defines cultural significance as,

Aesthetic, historic, scientific or social value for past, present or future generations.

This value may be contained in the fabric of the item, its setting and relationship to other items, the response that the item stimulates in those who value it now, or the meaning of that item to contemporary society.

Accurate assessment of the cultural significance of sites, places and items, is an essential component of the NSW heritage assessment and planning process. A clear determination of a site's significance allows informed planning decisions to be made, in addition to ensuring that heritage values are maintained, enhanced, or at least minimally affected by development.

Assessments of significance are made by applying standard evaluation criteria. These criteria can be used to assess both Aboriginal and European items and landscapes. These criteria are as follows:

- (a) An item is important in the course or pattern of NSW's cultural or natural history (or the cultural or natural history of the local area)
- (b) An item has strong or special associations with the life or works of a person, or group of persons, of importance in NSW' cultural or natural history (or the cultural or natural history of the local area)
- (c) An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area)
- (d) An item has strong or special associations with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons
- (e) An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area)
- (f) An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area)
- (g) An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places; or cultural and natural environments.

The above criteria were established under Part 3A of the *NSW Heritage Act 1977* for the listing of items of environmental heritage (defined as 'buildings, works, relics, moveable objects and precincts') that are of state heritage significance. These criteria are commonly used to assess all items of heritage significance whether state or local.

# (a) An item is important in the course or pattern of NSW's cultural or natural history (or the cultural or natural history of the local area)

The study area comprises a semi-degraded, industrialised landscape set about the regenerating remnants of a coastal Turpentine forest. The site is associated with district dairying and the growth of noxious trades (brickworks/refractories) in the Bulli area in the second half of the twentieth century, but prior to this was subject to little more than clearing and grazing.

While the bulk of the site is unremarkable, the Turpentine forest is a rare example of the type of sub-tropical rainforest that would once have been a feature if this part of the Illawarra District prior to the broad-scale land-clearing that accompanied pastoralism and industry in the nineteenth century.

The study area is not considered significant under this criterion, excepting the Turpentine forest, which is considered significant at a local level.

# (b) An item has strong or special associations with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area)

The study area is associated in a limited way with early Bulli area landholder and resident Cornelius O'Brien as it constitutes a small part of his original 300-acre grant. There is however, no evidence that he made particular use of the location and his efforts are known to have been concentrated elsewhere. More recently the site has been associated with both the Illawarra dairying industry and the mid-late-twentieth century expansion of the refractory materials industry.

The study area is considered to minor significance under this criterion at a local level.

# (c) An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area)

The industrialised parts of the site are vacant, run down and devoid of the machinery and plant that formerly characterised the operation of the refractory complex. The extant structures are unremarkable and are not notable for their aesthetic value nor are they tangible evidence of high creative or technical achievement.

The Turpentine forest and the gully's associated with the intermittent creek line adjacent is a notable landscape feature that does have aesthetic qualities and scenic appeal (and would more so if subject to remediation).

The study area is not considered significant under this criterion, excepting the Turpentine forest, which is considered significant at a local level.

# (d) An item has strong or special associations with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons.

The Sandon Point area has strong and acknowledged association with indigenous community groups including traditional owners and other stakeholders. The remnant Turpentine forest is viewed as part of the broader landscape of Illawarra Aboriginal cultural heritage.

The study area is considered significant under this criterion at a local level.

(e) An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area)

The study area has no potential to provide information that will significantly contribute to our greater understanding of the non-indigenous cultural history and development of the study area. Significant relics or areas of historical archaeological potential have not been identified and the study area features no extant landscapes, structures or other items of cultural heritage significance that would benefit from historical archaeological investigation.

The Turpentine Forest does however possess inherent scientific and environmental value.

The study area is not considered significant under this criterion, excepting the Turpentine forest, which is considered significant at a local level.

- (f) An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area); &
- (g) An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places; or cultural and natural environments

The Turpentine forest has been identified and listed as an example of the type of forest that would once have been a significant feature of the immediate near-coastal hinterland but is now increasingly rare.

The study area is not considered significant under these criteria, excepting the Turpentine forest, which is a rare, demonstrative pocket forest considered significant at a local level.

### **Summary Statement of Significance**

The study area has an history of land clearing superseded by dairying and industrial landuse from the mid-late twentieth century. Generally, the study area has a largely unremarkable history, limited historical cultural heritage significance and no historical archaeological sensitivity. That said, the Turpentine Forest has acknowledged scenic, scientific and other environmental attributes and is considered of high heritage value.

### Note:

The above appraisal relates to the historical (European; non-indigenous) heritage significance only. It is acknowledged herein that the Sandon Point-Bulli area (as a whole) has particular and special significance and value to Aboriginal stakeholders including Wodi Wodi descendants for a range of historic, environmental, social and spiritual reasons. It is further acknowledged that Aboriginal artefacts has been shown, through testing, to exist along parts of the northeastern portion of the study area: evidence of both past Aboriginal occupation of the place and continuing connection to, and association with, the locale.

For further information on Aboriginal cultural heritage significance specifically, and management recommendations that relate to it, the reader is directed to the Aboriginal Cultural Heritage Assessment companion report (MDCA 2018).

# Proposal

The original development proposal was to see the subject area developed as an aged care village in its entirety. The revised proposal seeks to establish:

- Two precincts of residential townhouses (Hill Top & Ocean View Precincts) in the northeast & northwest
- A Seniors Housing complex including a Residential Aged Care Facility (RACF), independent living units (ILU's), communal facilities & services to support the retirement village (in the south)

Associated with this development will be:

- Site preparation (including bulk earthworks)
- Access road formalisation & parking
- Construction
- Drainage & utilities infrastructure
- · Conservation & rehabilitation of the Turpentine Forest
- · Rehabilitation of the creek easements & riparian corridor
- Landscaping & the establishment of private open space for recreation, as well as open space for public recreation and environmental protection (retained in private ownership).

Plans showing the developable land and an indicative layout/site plan are presented as figures 41 & 42.



Figure 41: Developable Land

Cardno 2018



Figure 42: Site Plan

JSAS 11 July 2018

# **Impacts**

The following section discusses the potential impacts of the proposed development on the heritage values of the site (and nearest listed heritage listed items).

#### **Appraisal**

The ensuing questions are from the NSW Heritage Office guideline document *Statements of Heritage Impact* and are the established means of assessing the impact of development proposals on heritage items in NSW.

#### What aspects of the proposal respect or enhance the heritage significance of the study area?

The site is physically degraded though at its centre is an area (of approximately one hectare) of remnant and regenerating Turpentine forest that is recognised and listed as an item of natural cultural heritage value. While its specific treatment as part of the development will be detailed elsewhere as part of the Landscape Management Plan, it is intrinsic to the proposal that the forest stand be retained and rehabilitated. Active and careful management of this forest, which will be an estate asset, will both respect and enhance this endangered vegetation community and ensure its survival into the future. In addition, rehabilitation of the riparian zone and adjacent Cookson Creek corridor will enhance the forest's setting and provide connectivity with the McCaughleys Beach foreshore back-dune flats.

# What aspects of the proposal could detrimentally affect the heritage significance of the study area or sites nearby?

Beyond the Turpentine forest, which is accounted for in project planning and will be enhanced by development-related conservation measures, the site features no extant historic heritage items or areas of historical archaeological potential. Consequently, there are no aspects of the proposal that will modify or otherwise impact the historic heritage values of the place directly. With regard to listed items nearby:

- The WLEP-listed former Railway Route (Item 6527), Methodist Manse & Church (Item 6355) & Rail Bridge (Item 5988) are variously between 200 and 350 metres west & south of the study area & separated from it by the raised Illawarra Railway Line easement & associated embankments & other rail & road infrastructure (including the Princess Highway). Establishment of the proposed development is therefore unlikely to have any material effect on these items, or on views to or from them.
- The WLEP-listed Sandon Boat Sheds (6487); Norfolk Island Pine (6191) & Site of Westmacott's Sandon Cottage (6358) are all over 700 metres south & east of the western corner of the study area. They are downslope of the study area and views to these localities (and indeed Sandon Point itself) will be a feature of some of the premier locations within the development area. Views from these items to development area will alter with the infilling of this near-vacant space, but significant viewscapes along Sandon Beach, to the Turpentine Forrest & beyond to the Bulli escarpment will not be significantly affected by the development proposal.

Refer the WRLEP Heritage Map at figure 43.

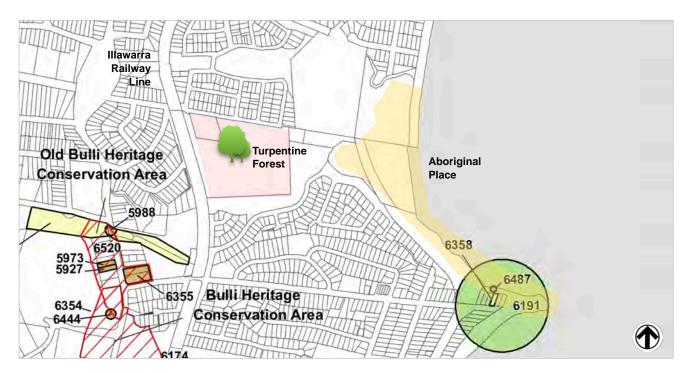


Figure 43: WLEP 2009 - Heritage Map Excerpt (as amended)

Heritage Map - sheet HER\_023 with MDCA additions

#### Have more sympathetic development options been considered? If so, why were they discounted?

Planning for the development of this site has been ongoing for many years and has been subject to considerable scrutiny and debate. The State government has enabled this development with site-specific planning legislation - SEPP (State Significant Precincts) 2005 - and the developers and planners are working to ensure that development of the site is both commercially viable and appropriate to the location.

Other, more intensive, site treatment options have been considered in the past, but these have been discounted in line with development constraints and in the interests of development that best fits the site; its surrounds: and the broader location.

#### Statement

The study area features a Turpentine forest that is a listed item of natural cultural heritage that will be retained, rehabilitated and enhanced should the development proposal progress. Beyond this, the study area has no demonstrable historical cultural heritage significance nor historical archaeological sensitivity. Consequently, the proposed development will not impact on the heritage values of the place directly beyond the positive impacts on the forest stand. With respect to potential impacts on heritage items nearby, the proposed development is unlikely to alter the cultural heritage values of these items/localities in any measurable way: either physically or with respect to viewscapes.

Note: There is an area of Aboriginal archaeological potential that has been investigated and defined in the northeastern part of the study area and a registered Aboriginal Place at Sandon Point/McCaughleys Beach to east of the study area. These are not addressed herein, but rather in the companion document to this report: the Revised Aboriginal Cultural Heritage Assessment (MDCA 2018).

# Recommendations

The following recommendations acknowledge the history and heritage of the study area, NSW Heritage Division guidelines and State and local planning controls.

#### It is recommended that:

- The study area overlooks Bulli (Sandon) Point; is part of an early Illawarra land grant; features a unique
  Turpentine forest; and has Aboriginal significance and an industrial history. In association with the
  development, the history of the locale should be interpreted to new residents and visitors alike via low-key
  information plaques/interpretive signage.
- 2. Consideration should be given to the naming of any intra-site access roads or landscape features in a manner that reflects the past history and/or heritage of the site. Examples may include Turpentine Lane; Refractory Place; Westmacott Lookout; Tramway Gardens; Cooksons Street.

## References

Australia ICOMOS Inc. 1999. The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance.

Australian Heritage Commission. 1998. Protecting Local Heritage Places: A Guide for Communities. Australian Heritage Commission, Canberra.

Binford, L. 2002. In Pursuit of the Past. University of California Press, California.

Binford, L. 1964. 'A Consideration of Archaeological Research Design' in American Antiquity 29: 425-441.

Balme, J. & Paterson, A. 2014. *Archaeology in Practice: A Student Guide to Archaeological Analysis*. Blackwell Publishing, Carlton, Victoria.

Bayley, W. 2002. Black Diamonds - History of Bulli District, New South Wales. Illawarra Historical Society Publications, Wollongong.

Bourke, H., Morrison, M. & Smith, C. 2017. *The Archaeologists Field Handbook (2nd edition)*. Allen & Unwin, Crows Nest.

Californian Office of Historic Preservation. 1991.
Guidelines for Archaeological Research Designs.
Department of Parks & Recreation, Office of Historic Preservation.

Chesters, A. 1983. Refractories: Their Production & Properties. The Metals Society, London.

Cleere, H. (ed.). 2005. Archaeological Heritage Management in the Modern World. Routledge, United Kingdom.

Conneh, G. 1988. The Archaeology of Australia's History. Cambridge University Press, UK.

Cardno. 2018a. Geotechnical Review: Sandon Point Aged Care Facility. Report to Anglicare

Cox, P. & Lucas, C. 1978. Australian Colonial Architecture. Landsdowne Editions, Melbourne.

Douglas Partners. 2008. Report on Geotechnical Investigation: Proposed Retirement Village (Stage 1). Prepared for Anglican Retirement Villages.

Environmental Investigation Services (EIS). 2015. Report to Anglican Retirement Villages on the Environmental Site Assessment of a Proposed Aged Care Facility at Geraghty Street, Bulli, NSW.

Godden Mackay Logan. 2001. Thirroul Brickworks Site: Interpretation Plan. Unpublished Report prepared for the Stockland Trust Group.

Graham Brooks & Associates (GBA). 2003. Sandon Point-Thirroul/Bulli: Submission to the Commission of Inquiry. Report prepared on behalf of the Stockland Trust Group.

Gutteridge, Haskins & Davey (GHD). 1993. Sandon Point Local Environmental Study. Heritage component prepared by Godden Mackay.

Hagan, J. & Wells, A. (ed.). 1997. A History of Wollongong. University of Wollongong, Wollongong.

Hall, M. & Silliman, S. 2006. Historical Archaeology. Blackwell Publishing.

HLA Envirosciences. 2005. Stage II Environmental Site Assessment: Southern Portion of Lot 2 DP 224431, Sturdee Avenue, Bulli, NSW.

Meredith Hutton & BHP Refractories: Historical Archaeological Photographic Recording. Prepared for BHP.

Meredith Hutton. 1996. Report on the Archaeological Zones Within the site of BMP Refractories LTD. Report prepared for BMP Refractories.

JBA Urban Planning Consultants. 2006. Environmental Assessment: Concept Plan Application Cookson Plibrico Site. Report prepared in behalf of Anglican Retirement Villages.

Jervis, J. 1942. 'Illawarra: A Century of History' in JRAHS XXVIII Pp: 65-107; 129-56; 193-248; 273-302; 353-374.

Kass, T. 2010. A Thematic History of the City of Wollongong. Final Report to Wollongong City Council.

McDonald, W. 1966. Earliest Illawarra by Its Explorers and Pioneers. Illawarra Historical Society, Wollongong.

Mary Dallas Consulting Archaeologists (MDCA).

Draft Revised Aboriginal Cultural Heritage

Assessment. Report to Anglicare.

MDCA 2015. 2 Sturdee Avenue Bulli, Illawarra Region, NSW: Historical Archaeology: Test Excavation Report. Report to the NSW Office of Environment & Heritage (Heritage Division) on behalf of Anglican Retirement Villages (ARV).

MDCA 2014. 2 Sturdee Avenue Bulli, Illawarra Region, NSW: s140 Excavation Permit Supporting Document. Report to the NSW Office of Environment & Heritage (Heritage Division) on behalf of Anglican Retirement Villages (ARV).

MDCA. 2012. Aboriginal and European Archaeological Investigations Management Strategies. Anglican Retirement Village Site at Sandon Point [Lot, and 2 in DP 22443, 2 Sturdee Avenue Bulli, NSW]. Report by Mary Dallas and Susan McIntyre-Tamwoy to Anglican Retirement Villages.

MDCA. 2005. Preliminary Aboriginal Assessment Report: Cookson's Land Bulli, NSW. Report to the Anglican Retirement Villages.

NSW Department of Planning. 1993a. Historical Archaeological Sites: Investigation & Conservation Guidelines. NSW Department of Planning in association with the Heritage Council of NSW.

NSW Department of Planning. 1993b. Historical Archaeological Excavations: A Code of Practice. NSW Department of Planning in association with the Heritage Council of NSW.

NSW Heritage Branch. 2009. Assessing Significance for Historical Archaeological Sites and Relics. NSW Department of Planning.

NSW Heritage Council. 2013. Recommendations for Local Council Heritage Management. Heritage Information Series.

NSW Heritage Council. 2005. Local Heritage Management.

NSW Heritage Office. 2008. Levels of Heritage Significance. Update report prepared by Claudine Loffi for the Heritage Office, NSW Department of Planning.

NSW Heritage Office 2006. Photographic Recording of Heritage Items using Film or Digital Capture.

NSW Heritage Office. 2004. Revealing the Past: An Introduction to Historical Archaeology.

NSW Heritage Office. 2002. Statements of Heritage Impact. Update - first published in 1998 as part of the NSW Heritage Manual.

NSW Heritage Office. 2001. Assessing Heritage Significance. A NSW Heritage Manual Update. Published by the NSW Heritage Office.

NSW Heritage Office. 1996a. Archaeological Assessments: Archaeological Assessment

Guidelines. Publication prepared by the Heritage Office (NSW), Department of Urban Affairs & Planning.

NSW Heritage Office. 1996b. Heritage Terms & Abbreviations. Publication prepared by the Heritage Office (NSW), Department of Urban Affairs & Planning.

Organ, M. 2006. 'Brickies: Working life at the Thirroul Brickworks 1972-1983' in Illawarra Unity - Journal of the Illawarra Branch of the Australian Society for the Study of Labour History 6(2): 55-71.

Organ, M. 1992. Woodlands - Sandon Point/South Thirroul Conservation and Development: A Report Concerning Sites of Historical, Archaeological, Aboriginal and Environmental Heritage Significance in the Sandon Point/South Thirroul Area, NSW.

Pearson, M. & Sullivan, S. 1995. Looking After Heritage Places. Melbourne University Press, Melbourne.

Rogers, B 2002. An Archival Record of the Industrial Heritage of Sandon Point, Bulli, NSW: Part 1 & 2.

Susan McIntyre-Tamwoy. 2007. Land Proposed for Residential Development at Sandon Point North: Assessment of Archaeological Potential. A report to Stockland Residential via Don Fox Planning Pty Ltd.

Susan McIntyre-Tamwoy. 2003. Land Proposed for Residential Development at Sandon Point: A Desktop Assessment of Archaeological Potential Lots: 2 DP595478; Lots 1 & 2 DP224431. A report to the Stockland Trust Group via Don Fox Planning.

Taylor, K. 2011. 'Cultural Landscapes: A Bridge between Culture & Nature' in International Journal of Heritage Studies 6: 537-554.

Warne, C. 2007. Wollongong: Pictorial History. Kingsclear, Sydney.

# **Attachments**

#### **A1.75W SEARs**

# Secretary's Environmental Assessment Requirements Section 75W(3) of the Environmental Planning and Assessment Act 1979

Application	MP 06_0094 MOD 5			
Project	Modification to the Concept Plan Approval for the Redevelopment of Sandon Point to permit standard residential lots (for townhouses) in place of seniors' housing on the Ocean View and Hilltop precincts of the ARV lands.			
Location	Lots 2 and 3 in DP 1176767, Sandon Point			
Proponent	Anglicare			
Date issued	February 2018			
General Requirements	The Modification Request must include:			
Key issues	<ul> <li>The modification request must address the following specific matters:</li> <li>1. Land Use Planning</li> <li>Address the statutory provisions applying to the site and all relevant strategic planning objectives outlined in the documents listed at Attachment A.</li> <li>2. Comparison with the Concept Plan Approval (MP 06_0094)</li> <li>Demonstrate how the proposed modification can be assessed and determined within the scope of section 75W of the Environmental Planning and Assessment Act 1979, and in particular, address any environmental impacts beyond those already assessed for the Concept Plan Approval; and</li> <li>Provide a comparative assessment (qualitative and quantitative) of the proposed modification against the Concept Plan Approval, and provide a clear rationale for the proposed amendments. This should particularly address the road network and vehicular connectivity, site coverage, character and scale.</li> <li>3. Development Layout</li> <li>The modification request shall include details of the proposed subdivision layout, design and staging, which:</li> </ul>			

- demonstrates that the revised development will be wholly contained within the approved footprint, and there will be no encroachment on the Turpentine Forest:
- includes an indicative subdivision pattern responsive to the site conditions and constraints, including aspect, orientation, slope, drainage lines and vegetation;
- addresses the need for any filling of land and batters, and assesses any associated impacts on the adjacent Turpentine Forest and Aboriginal areas;
- demonstrates future development lots would be orientated to maximise solar access to future dwellings;
- maintains perimeter roads around development boundaries and appropriate buffer areas to riparian corridors;
- includes an indicative layout which can accommodate the revised built form, including adjustments to the internal road network;
- includes measures to minimise land use conflicts, including appropriate landscaping and buffer areas;
- addresses the relationship to surrounding areas, including visual impacts from public coastal locations;
- provides sufficient passive and active open space for the expected additional population and demographic;
- maintains permeability through the site and linkages/connections to the beach;
   and
- minimises potential for vehicle, bicycle and pedestrian conflicts.

#### 4. Built form

- Provide an assessment of the proposed building envelopes with consideration of the proposed height, bulk and scale, massing, setbacks, building articulation, typologies and separation;
- Demonstrate that the proposed building envelopes would facilitate appropriate design within the site's setting; and
- Demonstrate the proposed building envelopes would achieve compliance with the approved maximum height, site coverage and FSR controls.

#### 5. Public Domain

Assess any changes to the public domain and landscaping design as a result
of the proposal.

#### 6. Residential Amenity

- Demonstrate future residential buildings would be capable of complying with SEPP 65 – Design Quality of Residential Apartment Development, and the Apartment Design Guide, including justification for any compliance(s)/non-compliance(s); and
- Demonstrate future Seniors' Living Development would be consistent with the requirements of SEPP (Housing for Seniors or People with a Disability) 2004.

#### 7. Visual Impacts

 Provide a visual impact assessment and view analysis of the proposal from key view points and visual catchments, including a comparative analysis of the potential impacts of the approved concept plan against the proposed modification.

#### 8. Flora and Fauna

Assess any additional biodiversity impacts associated with the proposal, including any additional impacts on adjoining areas, in a Biodiversity Development Assessment Report in accordance with the Biodiversity Conservation Act 2016 (NSW). Management and mitigation actions shall be developed to address any identified impacts of the proposal on biodiversity;

- Provide a Vegetation Management Plan for the riparian area and areas of vegetation to be retained outside of the development footprint area; and
- Provide a Landscape Concept Plan and Arborist Report in accordance with the Council's requirements.

#### 9. Bushfire

 Demonstrate compliance with the relevant provisions of Planning for Bushfire Protection 2006.

#### 10. Flooding, Stormwater and Soils

- Provide an assessment of any additional flood risks associated with the proposal in accordance with the NSW Floodplain Development Manual (2005), including consideration of the potential impacts of climate change;
- Provide a revised stormwater management concept plan which identifies any changes to the stormwater management concept arising from the proposed modification; and
- Assess any additional impacts of the proposal on surface and groundwater, and provide a detailed and consolidated site water balance.

#### 11. Contamination

 Provide a revised Remediation Action Plan in accordance with SEPP 55 – Remediation of Land.

### 12. European Heritage and Aboriginal Cultural Heritage Include a revised:

- Heritage Impact Assessment prepared in accordance with the NSW Heritage Manual which addresses the significance, and provides an assessment of, impacts on the heritage significance of heritage items, landscape features and vegetation on the site and items in the vicinity; and
- Aboriginal Cultural Heritage Assessment in accordance with the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011), and Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW).

#### 13. Transport and Accessibility

Include a revised transport and accessibility assessment prepared in accordance with the RMS' *Guide to Traffic Generating Developments* and the Austroads Guideline to Traffic Management, including the following:

- modelling of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips;
- address any additional road/intersection upgrades to manage any additional traffic generated by the proposal;
- address whether the proposed road layout is capable of complying with the relevant standards taking into consideration the needs of all road users and appropriate facilities;
- address timing for the delivery of vehicular connectivity between Wrexham Road and Point Street, including the provision of a bridge over Tramway Creek, and address connectivity between the site and Beattie Avenue; and
- any required changes to pedestrian and cycle networks and access.

#### 14. Ecologically Sustainable Development (ESD)

 Identify how best practice ESD principles would be incorporated into the development.

#### 15. Contributions

 Address the need for any changes to contributions in accordance with the relevant Development Contributions Plan, or provide details of a planning agreement for appropriate developer contributions in consultation with Wollongong City Council.

#### 16. Statement of Commitments

 The modification request shall include any new or modified Statement of Commitments detailing measures for environmental management, mitigation measures and monitoring for the development.

#### Consultation

During the preparation of the modification request, you are required to consult with the relevant local, State and Commonwealth Government authorities, and utilities service providers, including:

- Wollongong City Council;
- Office of Environment and Heritage;
- Environment Protection Authority;
- Department of Industry;
- NSW Office of Water;
- Transport for NSW:
- Roads and Maritime Services;
- Rail Corporation New South Wales:
- · Rural Fire Service; and
- the relevant Local Aboriginal Land Council.

You are encouraged to consult with the local community in the preparation of your modification request. This includes the Registered Aboriginal Parties (RAPs) which were consulted for the initial proposal, and Wollongong Council Neighbourhood Forum 3.

The modification request must describe the consultation process and issues raised and identify where the design of the development has been amended in response to those issues. Where amendments have not been made to address an issue, a clear justification should be provided.

#### Plans and Documents

The modification request must include all relevant plans, architectural drawings, diagrams and relevant documentation, including:

- a table in the Environmental Assessment (EA) identifying the section of the EA
  where each component of the SEARs is addressed;
- locality/context plan and site analysis plan;
- site survey plan, showing existing levels, locations and heights of existing and adjacent structures/buildings to AHD;
- revised concept plan drawings, staging plan and photomontages clearly illustrating the proposed amendments compared with the Concept Plan Approval;
- changes to approval conditions (by the use of strikethrough and bold text);
- housing typology drawings;
- a table outlining any proposed changes to the conditions of the Concept Plan Approval; and
- geotechnical and structural report.

### **A2. Historical Archaeological Testing Report**

### A3. SHI Turpentine Forest Listing



Home > Topics > Heritage places and items > Search for heritage

# **Remnant of Coastal Turpentine Forest**

### Item details

Name of item: Remnant of Coastal Turpentine Forest

Type of item: Landscape

Group/Collection Landscape - Natural

Category: Vegetation community

Primary address: Sturdee Avenue, Bulli, NSW 2516

Local govt. area: Wollongong City

#### All addresses

Street Address	Suburb/town	LGA	Parish	County	Туре
Sturdee Avenue	Bulli	Wollongong City			Primary Address

# **Statement of significance:**

A rare example of coastal wet sclerophyll forest dominated by Syncarpia glomulifera trees possibly in excess of 100 years of age.

Date significance updated: 04 Sep 00

Note: The State Heritage Inventory provides information about heritage items listed by local and State government agencies. The State Heritage Inventory is continually being updated by local and State agencies as new information becomes available. Read the OEH copyright and disclaimer.

## **Description**

Physical description:

Remnant of coastal Syncarpia glomulifera forest.

Further information:

Very few examples of this coastal vegetaion are now found in Illawarra.

# **Assessment of significance**

SHR Criteria c)
[Aesthetic
significance]

The item has group, landscape and aesthetic value.

SHR Criteria e)
[Research potential]

The item has scientific and natural value.

SHR Criteria f)
[Rarity]

The item has rarity.

SHR Criteria g)
[Representativeness]

The item has representative value.

Assessment criteria:

Items are assessed against the State Heritage Register (SHR) Criteria to determine the level of significance. Refer to the Listings below for the level of statutory protection.

# **Recommended management:**

Recommend site to be a public flora reserve.

# Listings

Heritage Listing	Listing Title	Listing Number	Gazette Date	Gazette Number	Gazette Page
Local Environmental Plan			11 Aug 93		
Local Environmental Plan			07 Jan 00	1/2000	69

# **Study details**

Title	Year	Number	Author	Inspected by	Guidelines used
City of Wollongong Heritage Study	1991	L17-N	McDonald McPhee Rogers Conacher Fullarton	Don Fullerton	N o

# References, internet links & images

None

Note: internet links may be to web pages, documents or images.



(Click on thumbnail for full size image and image details)

### **Data source**

The information for this entry comes from the following source:

Name: Local Government

Database number:

2700056

### Return to previous page

Every effort has been made to ensure that information contained in the State Heritage Inventory is correct. If you find any errors or omissions please send your comments to the **Database Manager**.

All information and pictures on this page are the copyright of the Heritage Division or respective copyright owners.