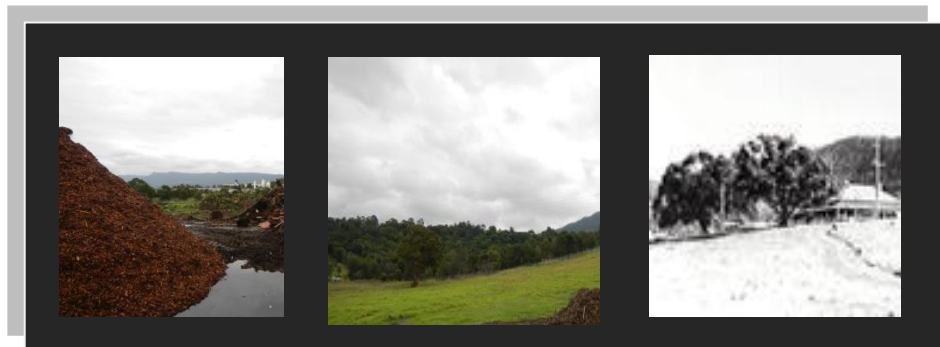


Preliminary Heritage Assessment, 50 Wyllie Road, Kembla Grange

Preliminary Assessment of Aboriginal and non-Aboriginal Heritage

March 2014



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Executive summary

Artefact Heritage has been engaged by TCG on behalf of Bicorp Pty Ltd to prepare a preliminary Aboriginal and non-Aboriginal heritage assessment for Lot 10 DP 878167, No. 50 Wyllie Road, Kembla Grange. This assessment will form part of an Environmental Impact Statement (EIS) to accompany the State Significant Development Application for the site.

At present sections of the study area are being utilised as a building material storage and recycling facility. A State Significant Development Application for intensification of current activities at the facility (the proposal) has been lodged with NSW Department of Planning and Infrastructure and is currently under consideration for development approval. An EIS has been prepared by TCG to accompany the application.

The NSW Department of Planning and Infrastructure has requested that a preliminary heritage assessment is undertaken to assess heritage impacts of the proposal. This preliminary heritage assessment has been prepared according to the Office of Environment and Heritage (OEH) *Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* 2005, and the relevant NSW Heritage Council guidelines.

This preliminary heritage assessment found that there were no registered Aboriginal objects or listed heritage items within the study area, or in the immediate vicinity of the study area. Four locally listed heritage items were located within 700 metres of the study area but would not be impacted by the proposal.

This preliminary heritage assessment has found that a portion of the study area has been impacted by previous development associated with the establishment of the waste recovery facility. The northern and eastern sections of the study area which would not be impacted by the current proposal were less disturbed.

The northern and eastern sections of the study area which would not be impacted by the proposal have been assessed as having low-moderate Aboriginal archaeological potential. The remainder of the study area, including the area of proposed impacts was found to have a low Aboriginal archaeological potential. The entire study area was found to have a low non-Aboriginal archaeological potential.

It is therefore recommended that there are no heritage constraints on the current proposal. If impacts are proposed outside the current development footprint in areas of low-moderate Aboriginal archaeological potential further investigations would be required.

Contents

1.0	Introduction and Background	1
1.1	Introduction.....	1
1.2	Background	1
1.3	The study area	1
1.4	The project	4
1.5	Report authorship	6
1.6	Report limitations	6
2.0	Legislative Context.....	7
2.1	Aboriginal heritage legislation	7
2.2	Non-Aboriginal heritage legislation	8
2.3	Management documents.....	9
3.0	Register Searches.....	11
3.1	Aboriginal Heritage Information Management System register	11
3.2	Non-Aboriginal heritage register searches.....	12
4.0	Environmental and historical context	15
4.1	Environment	15
4.2	Aboriginal Archaeological and Historical Context	15
4.3	Historical context	17
5.0	Site inspection	20
5.1	Methodology.....	20
5.2	Observations	20
6.0	Preliminary heritage assessment	24
6.1	Aboriginal archaeological potential	24
6.2	Non-Aboriginal Archaeological Potential.....	25
6.3	Assessment of the non-Aboriginal heritage significance of the study area	26
7.0	Impact Assessment.....	28
7.1	Impacts on Aboriginal heritage.....	28
7.2	Impacts on non- Aboriginal heritage	28
8.0	Conclusions and recommendations	29
9.0	References	30

Figures

Figure 1: The study area (shaded yellow). Source: SIXmaps, NSW LPI.	2
Figure 2: Current state of development to Lot 10, DP 87867 (SIXmaps NSW LPI)	3
Figure 3: Proposed developments to be made to Lot 10, DP 87867.....	5
Figure 4: Sites registered on AHIMS within 2km of the study area. Data from AHIMS.	11
Figure 5: Items listed on the Wollongong LEP 2010 in the vicinity of the study area.	14
Figure 6: Kembla Grange crown plan showing original land grant given to Messrs Andrew Lang and Gerard Gerrard. Source: SIXmaps, NSW LPI.....	18
Figure 7: Original 2000 acre land grant superimposed over modern map of Kembla Grange and surrounding areas. Source, SIXmaps, NSW LPI and aerial © Google 2013.....	19
Figure 8: Building waste stockpile area, view north-west towards Illawarra escarpment.	21
Figure 9: Building waste stockpile area, view north-west towards Illawarra escarpment.	21
Figure 10: Water recycling pond and building waste stockpile area, view north-west towards Illawarra escarpment.	22
Figure 11: Building waste stockpile area and cleared land, view north-west towards Illawarra escarpment.	22
Figure 12: Foothills of escarpment showing relatively undisturbed vegetation, view north-west towards Illawarra escarpment.....	23
Figure 13: Aboriginal archaeological potential within the study area.....	24
Figure 14: Non-Indigenous Archaeological potential within the study area.....	25

Tables

Table 1: Items listed on the Wollongong LEP 2009 in the vicinity of the study area. 13

Table 2: Significance assessment criteria..... 26

Table 3: Impact assessment 28

1.0 Introduction and Background

1.1 Introduction

Artefact Heritage has been engaged by TCG on behalf of Bicorp Pty Ltd to prepare a preliminary Aboriginal and non-Aboriginal heritage assessment for Lot 10 DP 878167, No. 50 Wyllie Road, Kembla Grange. This assessment will form part of an Environmental Impact Statement (EIS) to accompany the State Significant Development (SSD) application for the site.

This preliminary heritage assessment has been produced according to the Office of Environment and Heritage (OEH) *Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* 2005, and the relevant NSW Heritage Council guidelines.

1.2 Background

At present the study area is being utilised as a building material storage and recycling facility, a development which was approved on 29 April 2010 (DA 2009/1553). On July 2012 a modification approval was issued (DA 2009/1153/A) granting approval to an increase in the annual tonnage. The current facility includes a number of stockpile areas, a dam, workshop, site office and two shipping containers (Figure 2). The site features a varied zoning of both IN2 Light Industrial and RE2 Private Recreational pursuant to the Wollongong LEP 2009, with the recycling area zoned IN2 Light Industrial.

A SSD application for the site has been lodged with NSW Department of Planning and Infrastructure (DPI). The application is currently under consideration for development approval. An EIS has been prepared by TCG to accompany the application. DPI has requested that a non-Aboriginal and Aboriginal heritage assessment is undertaken to assess whether there will be any heritage impacts as a result of the proposal.

1.3 The study area

The study area is an irregular shaped plot comprising a total of 21.72 hectares (Figure 1). It measures approximately 661 metres from east to west and 500 metres from north to south at its maximum point and 250 metres as its minimum point. The study area is bounded by Wyllie Road to the south east, West Dapto road to the south and Farmborough Road to the north. The site is well elevated and located above the Mullet Creek/Lake Illawarra flood plain south of the area. The site is bisected by a natural watercourse that flows north-south though the central portion of the site. Two transmission lines traverse the site (Figure 2).

Only a section of the study area would be impacted by the proposal. The northern and eastern sections of the study area are outside the development footprint.

Figure 1: The study area (shaded yellow). Source: SIXmaps, NSW LPI.

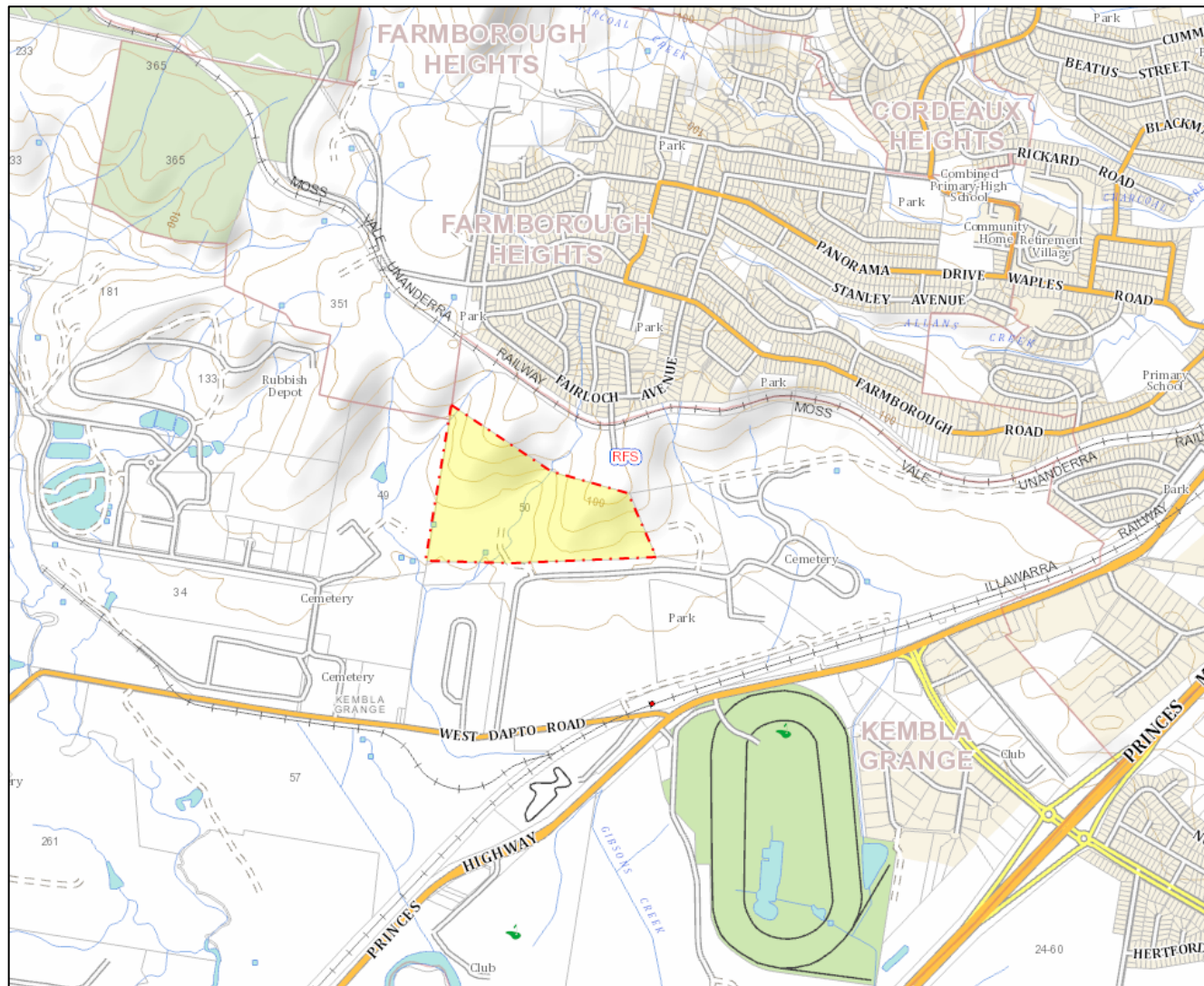


Figure 2: Current state of development to Lot 10, DP 87867 (SIXmaps NSW LPI)

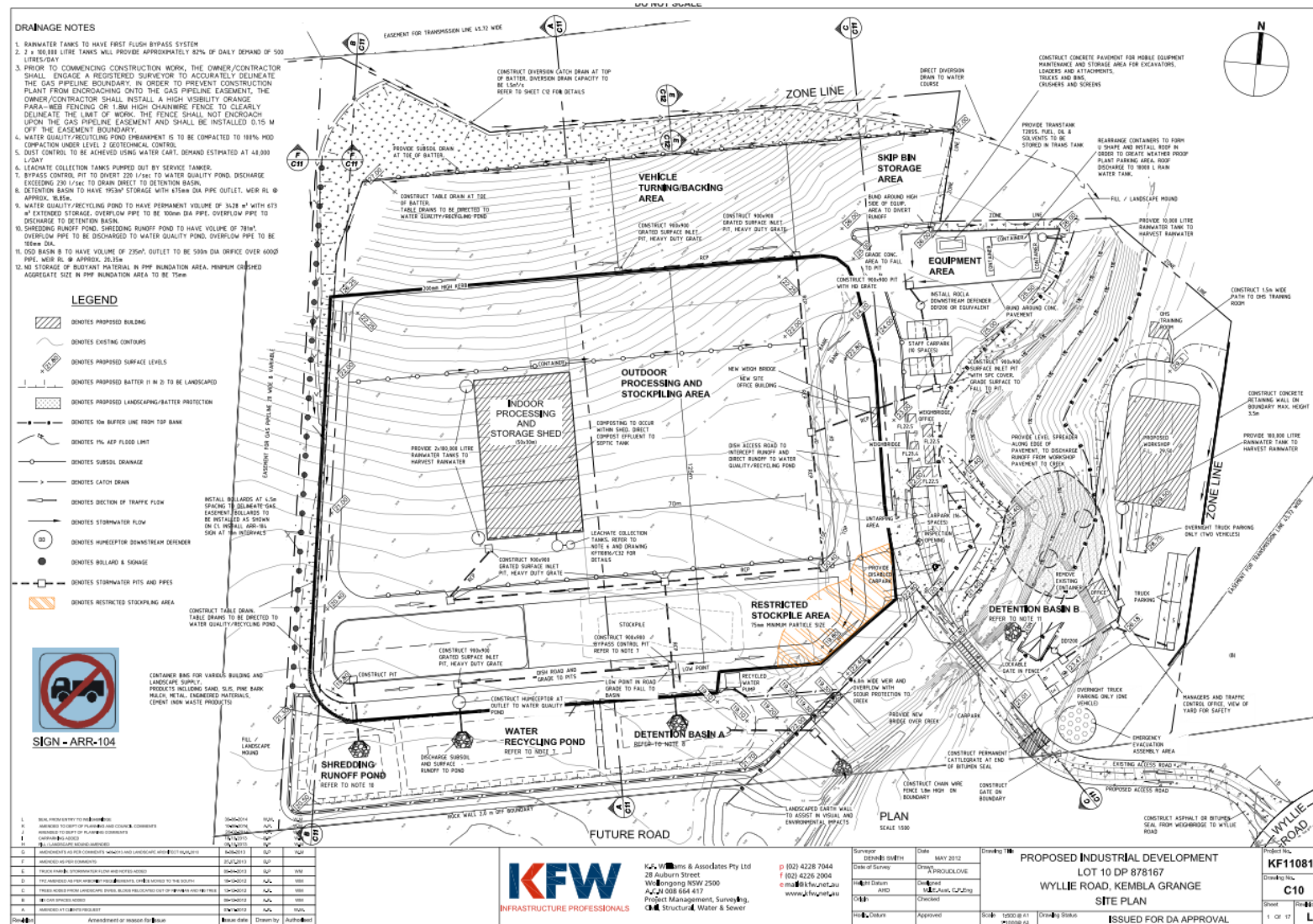


1.4 The project

The redevelopment of Lot 10, DP 878167 (Figure 3) would involve the following:

- Construction of concrete pavement for mobile equipment maintenance and storage area for excavators.
- Construction of 7 X 900 x 900 m grated surface inlet pit and heavy duty grate around border of processing area.
- Construction of pit south west of green waste shredding area.
- Construction of grated box drain around green waste shredding area.
- Construction of 900x900 m bypass control pit north of water quality recycling pond.
- Construction of humeceptor at outlet to water quality recycling pond.
- Construction of table drain on western border of development. To be directed towards water quality/recycling pond.
- Construction of concrete retaining wall on eastern boundary with maximum height of 3.5 m.
- Construction of disabled parking area.
- Construction of OSD basin with volume of 235m³.
- Construction of new bridge over existing creek.
- Construction of asphalt or bitumen seal for 15m to property boundary from Wyllie Road.
- Construction of permanent cattlegrate at end of bitumen seal.
- Construction of new access road next to existing one.
- Construction of gate at property boundary.
- Construction of workshop on eastern edge of site.
- Construction of batter along southern and western borders of property.
- Construction of table drain at toe of batter.
- Construction of diversion catchment drain with capacity of 1.5 m³/2 at top of batter.
- Installation of 1.8 m high chain wire fence at property boundary.
- Installation of bollards at 4.5 m spacing to delineate gas easement on western border. Bollards are to be installed at 10 m intervals.
- Installation of 2 x 100,000 litre rainwater tanks on south-west and north-west edges of indoor processing shed.
- Installation of 50x30 m indoor processing shed
- Redirection of diversion and subsoil drains at northern borders of development.
- Construction of landscaped earth wall at southern border of property to assist in visual and environmental impacts.

Figure 3: Proposed developments to be made to Lot 10, DP 87867.



1.5 Report authorship

This report was written by Heritage Consultant Adele Zubrzycka and reviewed by Senior Archaeologist Mike Hincks.

1.6 Report limitations

This report outlines preliminary Aboriginal and non-Aboriginal heritage research for the study area. Preparation of the report did not involve a comprehensive survey of the study area. A site visit was conducted on 28 February 2014 by Adele Zubrzycka and Jenny Winnett to establish the level of disturbance at the site due to its current use but did not involve detailed survey of the entire study area.

2.0 Legislative Context

This study has been undertaken in the context of several items of legislation that relate to Aboriginal and non-indigenous heritage and its protection in New South Wales.

2.1 Aboriginal heritage legislation

National Parks and Wildlife Act (1974)

The *National Parks & Wildlife Act 1974*, administered by the OEH provides statutory protection for all Aboriginal 'objects' (consisting of any material evidence of the Aboriginal occupation of NSW) and for 'Aboriginal Places' (areas of cultural significance to the Aboriginal community) under Section 90 of the Act.

The protection provided to Aboriginal objects applies irrespective of the level of their significance or issues of land tenure. However, areas are only gazetted as Aboriginal Places if the Minister is satisfied that sufficient evidence exists to demonstrate that the location was and/or is, of special significance to Aboriginal culture.

A Section 90 permit or Aboriginal Heritage Impact Permit (AHIP) is granted by the OEH. Various factors are considered by OEH in the AHIP application process, such as site significance, Aboriginal consultation requirements, ESD principles, project justification and consideration of alternatives. The penalties and fines for damaging or defacing an Aboriginal object have also increased.

As this project is being assessed as a SSD permits issued under the NPW Act 1974 are not required.

The Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (the EP&A Act) establishes the framework for cultural heritage values to be formally assessed in the land use planning and development consent process. The EP&A Act requires that environmental impacts are considered before land development; this includes impacts on cultural heritage items and places as well as archaeological sites and deposits. The EP&A Act also requires that local governments prepare planning instruments (such as Local Environmental Plans and Development Control Plans) in accordance with the EP&A Act to provide guidance on the level of environmental assessment required. The current study area is within the boundaries of Wollongong City LGA and is subject to their LEP and DCP.

The proposal will be assessed under Part 89C of the EP&A Act, which determines the identification of SSD. Part 89J of the EP&A Act specifies that AHIPs under the *National Parks and Wildlife Act 1974* and approvals or permits under Part 4 or Section 139 of the *Heritage Act 1977* are not required for approved SSD. However, approval from the Minister of Planning and Infrastructure is required and an EIS must be submitted. The EIS must address the impact of the proposal on heritage items, through the framework of existing heritage legislation including the Heritage Act, and the local LEPs and DCPs.

Aboriginal Land Rights Act (1983)

The *Aboriginal Land Rights Act 1983*, is administered by the NSW Department of Education and Communities - Aboriginal Affairs. This Act established Aboriginal Land Councils (at State and Local levels). These bodies have a statutory obligation under the Act to; (a) take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law, and (b) promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area.

The study area is within the Illawarra Local Aboriginal Land Council (ILALC) boundary.

Native Title Act (1994)

The *Native Title Act 1994*, was introduced to work in conjunction with the Commonwealth Native Title Act. Native Title claims, registers and Indigenous Land Use Agreements are administered under the Act.

There are no Native Title claims within the study area.

2.2 Non-Aboriginal heritage legislation

There are several items of State legislation that are relevant to the current study. A summary of these Acts and the implications for the project follow:

Heritage Act 1977

The *NSW Heritage Act 1977* (the Heritage Act) is the primary piece of State legislation affording protection to items of environmental heritage (natural and cultural) in New South Wales. Under the Heritage Act, 'items of environmental heritage' include places, buildings, works, relics, moveable objects and precincts identified as significant based on historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic values. State significant items are listed on the NSW State Heritage Register (SHR) and are given automatic protection under the Heritage Act against any activities that may damage an item or affect its heritage significance.

The Heritage Act also protects 'relics', which can include archaeological material, features and deposits. Section 4(1) of the Heritage Act (as amended 2009) defines 'relic' as follows:

"relic means 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, and
- (b) is of State or local heritage significance."

Section 139(1) of the Heritage Act states that:

"A person must not disturb or excavate any land knowingly or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being

discovered, exposed, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.”

Permits to disturb or excavate ‘relics’ are issued by the NSW Heritage Council or a Delegate of the NSW Heritage Council under Section 140 (for relics not protected by an SHR listing) or Section 60 (for relics protected by an SHR listing) of the Heritage Act. Exceptions or exemptions to these permits may be applicable under certain conditions. These permits would not be required for the proposal as it will be assessed as SSD under the EP&A Act.

The Heritage Act also requires all government agencies to identify and manage heritage assets in their ownership and control. Under Section 170 of the Heritage Act, government agencies must establish and keep a register which includes all items of environmental heritage listed on the State Heritage Register, an environmental planning instrument, or which may be subject to an interim heritage order that are owned, occupied or managed by that government body. Under Section 170A of the Heritage Act all government agencies must also make sure that items entered on its register are maintained with due diligence in accordance with State Owned Heritage Management Principles approved by the NSW Minister for Planning & Infrastructure on advice of the NSW Heritage Council.

Wollongong LEP West Dapto, 2010

The *Wollongong LEP for West Dapto 2010*, is a plan aimed at defining provisions for local environment planning within the local government area known as the West Dapto and Dapto Regional Centre. The plan aims to achieve economically and socially sustainable urban growth within this area, developing and protecting land for conservation, sustainability, commercial and employment generating purposes. The plan is also aimed at establishing development controls for the land in this area by creating controls for environmental and cultural heritage in the region.

There are four heritage items listed on the LEP within 700 m of the study area.

Wollongong City Wide Development Control Plan 2009

Part E of the *WCC Development Control Plan* (DCP) (2009) outlines requirements for any development proposal which may impact on a known or potential Aboriginal site, a place of Aboriginal cultural heritage significance, an item of environmental heritage, land within a heritage conservation area, and land within the vicinity of a heritage item or heritage conservation area.

The study area is covered by the WCC Development Control Plan (DCP) (2009). However, as this is a SSD project, the Wollongong citywide DCP does not apply to the study area.

2.3 Management documents

Illawarra Escarpment Strategic Management Plan

In addition to the statutory documents for heritage management within the study area, management plans have been prepared by WCC and OEH to identify, protect and conserve heritage items within

the Illawarra Escarpment. The Illawarra Escarpment Strategic Management Plan (IESMP) covers the study area and the surrounding landscape. The site falls within the West Dapto Bowl Precinct of the IESMP.

The IESMP was developed by WCC following the completion of a Commission of Inquiry (COI) into the long-term planning and management of the Illawarra Escarpment in 1999 (WCC 2006). One of the outcomes of the COI was that the escarpment should be managed from planning and conservation perspectives as a single entity and that further baseline mapping of the escarpment zone was required (WCC 2006: 5).

The aim of the IESMP was developed with the 'principal aim and objective of natural and cultural resource protection, conservation and management' (WCC 2006: 4). The IESMP was developed in consultation with the local Aboriginal community, and synthesised information from the Aboriginal heritage study (AMBS 2007) and Illawarra Escarpment heritage assessment (MWA et al 2007) commissioned as part of the development of the IESMP.

The entirety of the study area is considered part of the Illawarra Escarpment area for the purposes of the IESMP. The IESMP outlines a series of management issues regarding the cultural and heritage assets of the escarpment, as well as principles to be considered during development of future planning documents for relevant portions of the Escarpment and foothills. The Wollongong LEP and DCP are the current relevant planning documents for the study area, and incorporate the principles of the heritage management guidelines outlined in the IESMP.

West Dapto Release Area Aboriginal Heritage Management Plan

The West Dapto Release area stretches from Yallah in the south to Kembla Grange in the north. The current study area was originally part of the WDRA but in 2005 the extent of the WDRA was reduced and the study area was part of the area excised.

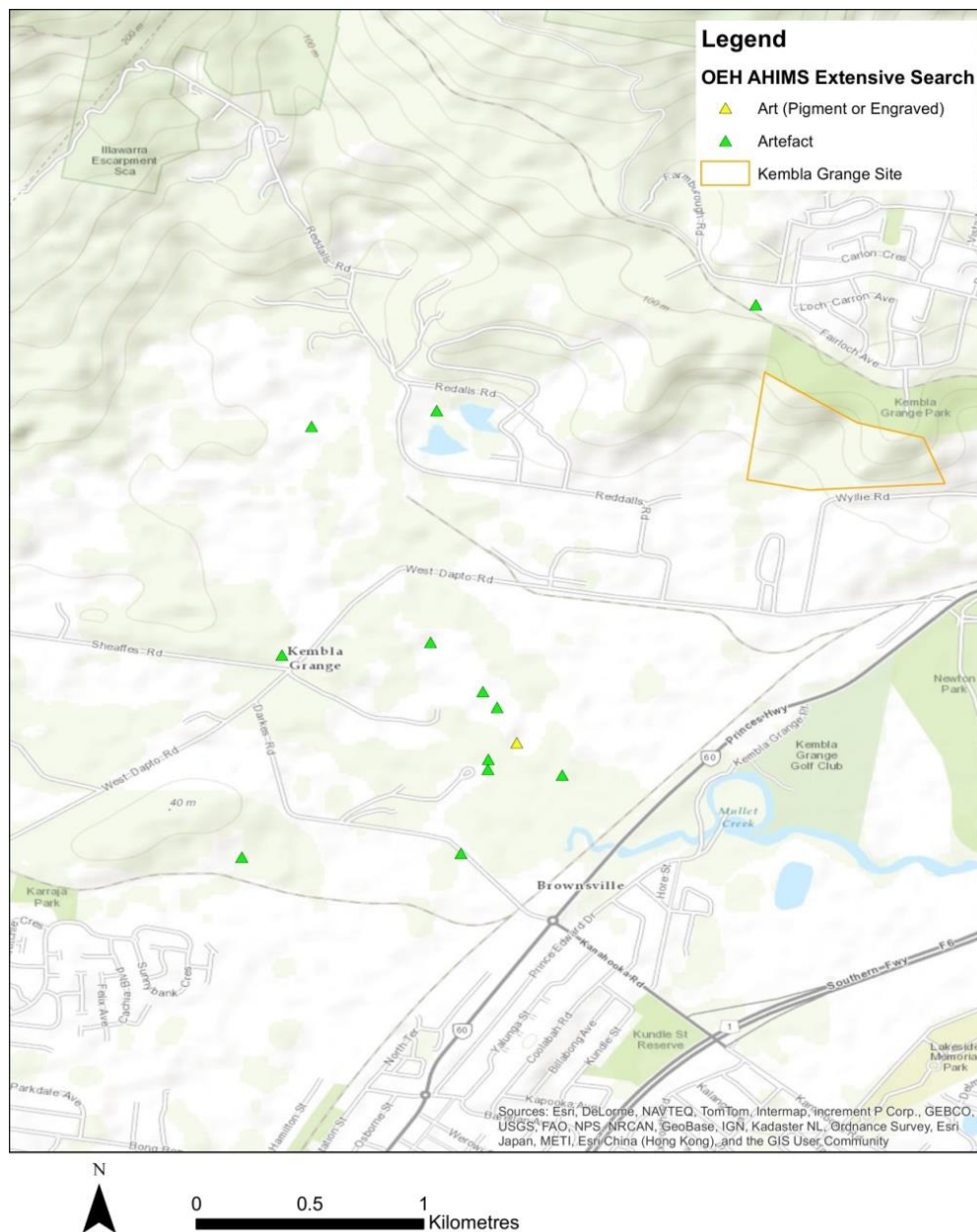
The study area was taken into account in early management documents including the West Dapto Release Area Aboriginal Heritage Management Plan (AMBS 2006). The management plan shows that no recorded Aboriginal sites were located within the study area but that undisturbed portions of the study area had a moderate archaeological potential (AMBS 2006:150).

3.0 Register Searches

3.1 Aboriginal Heritage Information Management System register

OEH maintains a database of Aboriginal objects and Aboriginal places that have been reported to the Director General of the Department of Premier and Cabinet. The information is contained within the Aboriginal Heritage Information Management System (AHIMS). Information in the AHIMS site register is accessed by searching within particular geographical areas.

Figure 4: Sites registered on AHIMS within 2km of the study area. Data from AHIMS.



A search of the OEH AHIMS site register was conducted on 26 February 2014 for recorded Aboriginal sites within a 2 kilometre x 2 kilometre radius of the study site (GDA 1994 MGA 56 Easting from

298004E to 300219E, northing from 6183033N to 6185124N, with a 1000 metre buffer). A total of 13 recorded Aboriginal sites were located within the AHIMS site register in the vicinity of the site (Figure 4). No recorded Aboriginal sites listed on the AHIMS site register were located within the study area.

3.2 Non-Aboriginal heritage register searches

Statutory registers provide legal protection for heritage items. In NSW, the Heritage Act and the EP&A Act give legal protection. The State Heritage Register (SHR), the s170 registers, and heritage schedules of LEPs are statutory listings. Places on the National Heritage List are protected under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The State Heritage Register 1977

The SHR was established under Section 22 of the Heritage Act and is a list of places and objects of particular importance to the people of NSW, including archaeological sites. The SHR is administered by the Heritage Division of the OEH and includes a diverse range of over 1500 items, in both private and public ownership. To be listed, an item must be deemed to be of heritage significance for the whole of NSW.

No items in or near the study area are included on the SHR.

Section 170 Registers

The *Heritage Act* requires all government agencies to identify and manage heritage assets in their ownership and control. Under Section 170 of the Heritage Act, government instrumentalities must establish and keep a register which includes all items of environmental heritage of State or local significance that are owned, occupied or managed by that government body. All government agencies must also ensure that all items entered on its register are maintained with due diligence in accordance with State Owned Heritage Management Principles approved by the Minister on advice of the NSW Heritage Council. These principles serve to protect and conserve the heritage significance of identified sites, items and objects and are based on relevant NSW heritage legislation and statutory guidelines. Relevant s170 Registers were checked.

No items within the study area were listed on relevant s170 registers.

Environmental Protection and Biodiversity Conservation Act 1999

Under the EPBC Act 1, nationally significant heritage items are protected through listing on the Commonwealth Heritage List or the National Heritage List.

No items in or near the study area are listed on the Commonwealth Heritage List.

The Wollongong LEP, 2010

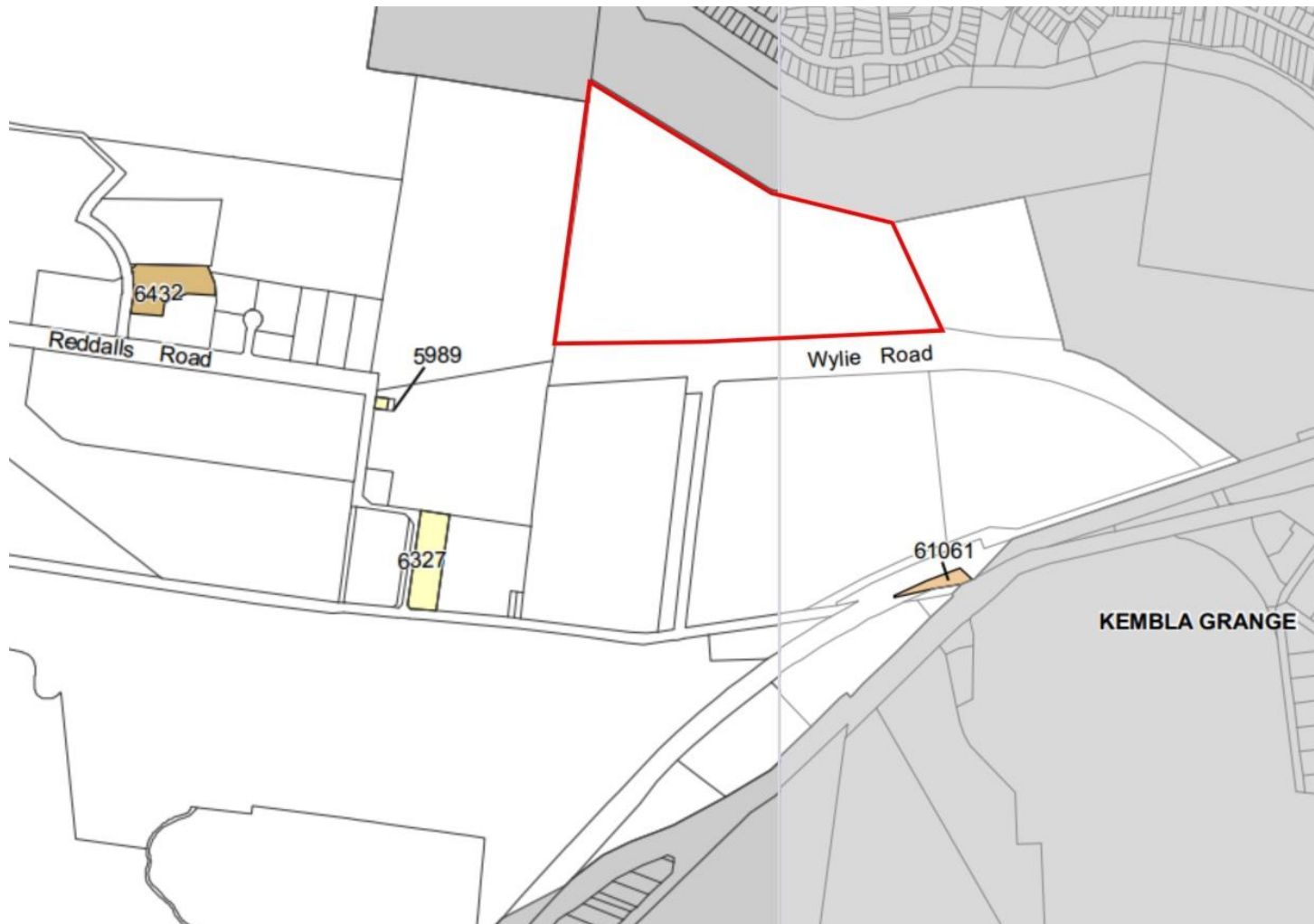
The *Wollongong LEP 2010*, includes a list of sites / items of heritage significance within the local government area.

A total of four heritage items within the vicinity of the study area are listed on the LEP (Table 1, Figure 5).

Table 1: Items listed on the Wollongong LEP 2009 in the vicinity of the study area.

Suburb	Item	Address	Lot/DP	Description
Kembla Grange	61061- Kembla Grange Racecourse Railway Station	Corner West Dapto Road & Princes Highway (on South Coast Rail Line)	-	An example of a late 19 th century single platform railway station used to transport coke and dairy produce to Sydney.
Kembla Grange	5989-Settlers' Cemetery and World War II Cemetery	Reddalls Road	Lot 7002, DP 1055632	An example of an early cemetery which contains the graves of many of the early settlers of the Dapto region.
Kembla Grange	6327- Cemetery	West Dapto Road	Lot 113, DP 771098	An example of an early cemetery which contains the graves of many of the early settlers of the Dapto region.
Kembla Grange	6432- "Glengarry" Homestead	107 Reddalls Road	Lot 53, DP 1022266	A large and significant homestead and gardens representing the late Victorian Georgian style and the vernacular homestead in its setting

Figure 5: Items listed on the Wollongong LEP 2010 in the vicinity of the study area.



4.0 Environmental and historical context

4.1 Environment

The study area is located on an elevated terrace within the West Dapto Bowl Precinct of the Illawarra escarpment. The study area is situated between the Farmborough Heights urban development to the north and Mullet Creek/ Lake Illawarra flood plain to the south. This area is located within the Sydney Basin, a large sedimentary basin extending from Newcastle to Batemans Bay and west to Lithgow. The portion of the Illawarra escarpment that runs along this precinct is approximately 9 kilometres to Mt Kembla and 4.5 kilometres along the Farmborough Heights ridgeline. The site is bisected by a natural watercourse that flows north-south through the central portion of the area. The study area is underlain by volcanic sandstone with underlying sedimentary rocks of the Permian age, as well as the Quarternary talus on the higher slopes (Maunsell Pty Ltd: 1992). The highest elevation near the study area is the crest of Mt Kembla, an outlying Hawkesbury Sandstone plateau. The terrain drops steeply, including some precipitous areas, in all directions from the crest of Mt Kembla. The upper geological layers of Mt Kembla include the predominant sandstone layers within the Sydney Basin. These sandstone units include Hawkesbury Sandstone, across the crest of Mt Kembla, and underlying Narrabeen Group sandstones, including Newport and Garie Formations, Bulga Sandstone and Stanwell Park Claystone (Stroud et al 1985). Underlying the Sydney Basin sandstone units around the base of Mt Kembla and across most of the undulating terrain within the study area were units of the Illawarra Coal Measures. These predominantly consisted of the Sydney Subgroup and the Pheasants Nest Formation. The Sydney Subgroup included interbedded quartz-lithic sandstone, grey siltstone, and claystone, carbonaceous claystone, clay, laminate, and coal (Stroud et al 1985). The Pheasants Nest Formation consisted of interbedded lithic sandstone, coal, carbonaceous claystone, siltstone, and claystone (Stroud et al 1985).

The study area occupies the toe slope of the Illawarra escarpment, with steeper slopes rising to the ridges of Farmborough Heights in the north and east. The study area has been subject to widespread land clearing associated with farming and grazing. Before clearing, the area was mostly *Eucalyptus tereticornis* woodland as well as that of typical rainforest. Natural drainage points including an unnamed second order stream run down from the escarpment ridge where the Farmborough Heights development is situated. Mullet Creek, located south of the study area drains this portion of the escarpment. Mullet Creek is a fourth order stream and is one of the primary catchments within the Lake Illawarra catchment. It flows generally from west to east, ultimately draining into Lake Illawarra (AMBS 2010: 30). Lake Illawarra lies approximately 4 km to the east of the study area. This is a large estuarine lagoon on the coast, extending over 9 km in length and 5 km in width (Roy 1984). At the present time the site has largely been zoned for industrial usage.

4.2 Aboriginal Archaeological and Historical Context

The oldest dated sites for Aboriginal occupation in the Sydney Basin are from the late Pleistocene period, with a securely dated site at the base of the Blue Mountains of 14,700 years before present

(yBP), and two coastal sites south of Wollongong at Bass Point and Burrill Lake in the Shoalhaven both dated to around 20,000 yBP (Lampert 1971; Nanson et al 1987).

Aboriginal people traditionally lived in small family or clan groups that were associated with particular territories or places. The study area was located within the Dharawal language group area (Attenbrow 2010: 34). The Dharawal language group was largely coastal and is thought to have extended from the Shoalhaven River in the south, to Botany Bay in the north and then inland to Camden (Attenbrow 2010: 34). The Dharawal language group was bordered to the north in the Botany Bay – southern Sydney region by the Darug and to the west in the Mittagong – Moss Vale region by the Gundungurra.

The area covered by the Dharawal language included a variety of landscape and resource types, including coastal and estuarine environments, rolling hills and creeks bordering the coastal environment, and the large sandstone escarpment and plateau. Sullivan (cited in Rich 1988: 23) suggested that the boundary between the Gundungurra and the Dharawal was the divide between the coastal and inland river systems, which runs on an approximate south-west to north-east line east of Wingello, Bundanoon, Robertson and Mittagong. Movement across these different terrain types and resource areas may have been dictated by the season (DEC 2005: 8). Additionally, exchange with people from surrounding language groups included Gundungarra and Wiradjuri people travelling to the coast to exchange foods and raw materials, whilst the Dharawal and Awabakal (Central Coast region) shared ceremonies (DEC 2005: 8).

Long-term areas of interaction and ‘travel corridors’ for movement between different language groups may have existed where there were shared boundaries. Laila Haglund has suggested that the Campbelltown area in south-west Sydney may have represented the intersection between the boundaries of the Dharawal, Darug and Gundungurra, and that the Narellan Valley may have been part of a ‘travel corridor’ facilitating movement between the north-western Sydney and the Illawarra (JMcD CHM 2007: 21 after Haglund 1989).

Early interaction between the Dharawal and the British was intermittent and brief. The earliest sighting of British people by the Dharawal would most likely have been when they saw sailing ships along the coast. The records of Captain Cook and several of his crew document seeing numerous fires and occasional Aboriginal people on the coastline in the Illawarra region (Organ 1993: 46). Organ (1993: 49) documents an anonymous exploration journal attributed to surveyor George William Evans, which documented an overland expedition north from Jervis Bay via Wollongong in 1812. The exploration party encountered several groups of Aboriginal people, and at one point exchanged some of their possessions with one of the groups for oysters (Organ 1993: 49).

Several of the early British settlers in the Illawarra recorded large gatherings of Aboriginal people, including a reference by Navin (1994: 8) that Robert James, a local resident of the area, recorded a camp of around 100 Aboriginal people on the banks of American Creek at Mount Kembla. In 1836

group of around 200 Aboriginal people were observed in the Illawarra area as they were preparing to travel to Cowpastures in south-west Sydney (Griffin 1986: 6 cited in AMBS 2010: 33).

A variety of flora and fauna resources were utilised in the Illawarra region for subsistence, personal ornament and tool requirements. The variety of subsistence resources in the Illawarra included marine, estuarine, freshwater and hinterland flora and fauna. Early British records documented torchlight spearing of bream and consumption of whale meat (Organ 1993: 262). The consumption of whale was documented as an important event linked to the spirits of their ancestors (Organ 1993: 262). Cabbage trees were used for various purposes, including utilisation of the fibre (Organ 1993: 155), used to make bridges over creeks and for food (AMBS 2010: 35). Other plant species utilised for food and tools included bats-wing tree, grass tree, Gynea lily, various Eucalypt sp., mat-rush, sticky hop bush, Melaleuca and black wattle (AMBS 2010: 35).

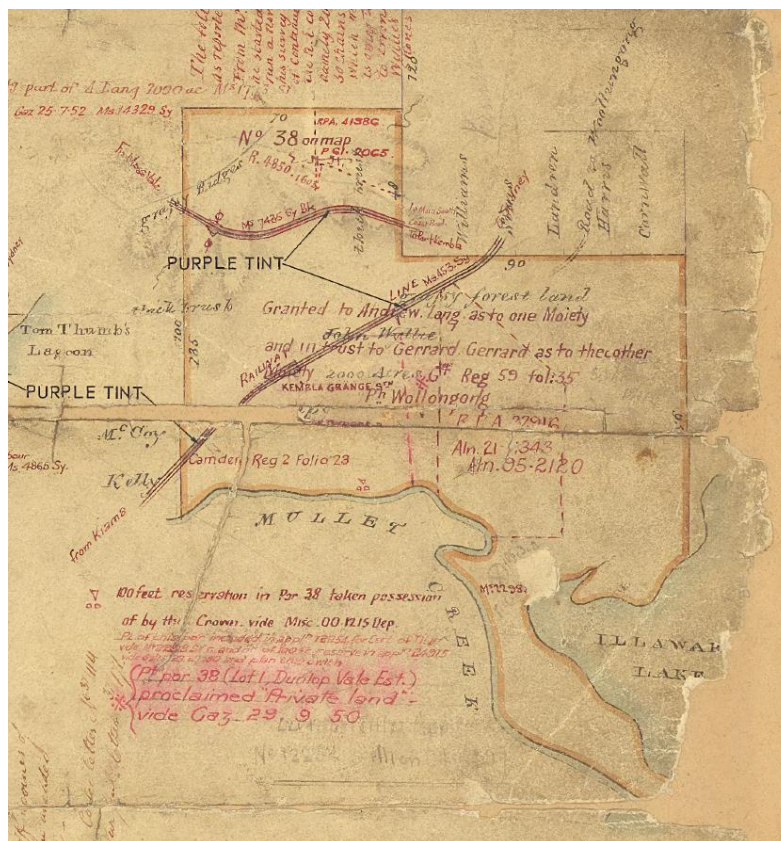
4.3 Historical context

Kembla Grange, a 2000 acre land grant, was originally promised to John Dunlop Wylie by Governor Darling in 1829 who named the property “Dunlop Vale” after his uncle James Dunlop (AMBS 2010: 51; Kass 2010: 25). Soon afterwards Wylie began moving cattle onto the property (AMBS 2010: 51). The deed was never granted due to financial troubles which forced Wylie to sell his rights to the land in 1840 at which time the land was purchased from mortgagees by Mr Andrew Lang and Dr Gerard Gerrard (Figure 6). Both men were prominent figures in the Illawarra region and played an extensive role in the settlement of dairy farms and economic growth in the area. Gerrard was one of the founding members of the Illawarra district council and donated money for the improvement of infrastructure at Wylie’s flat as well as being a significant shareholder in Illawarra’s first steamship company “The Illawarra Steam Packet Co”. In addition, Gerrard was a prominent cattle man in the area and is considered to be one of the aristocracy of the early dairying industry in the region and held a position on the committee of the Illawarra Agricultural and Horticultural Association (Cousins: 1994).

Lang’s portion was bordered by Lake Illawarra to the southeast and extended over the Farmborough Heights ridgeline in the north. The study area occupied a small parcel of the original 2000 acre land grant near the western limits of Lang’s land. The gentle slope to the west of the study area was occupied by the West Dapto Catholic Cemetery from as early as the 1830s, but otherwise the area appears to have been largely underutilised. The crown plan for Lang’s property indicates that the land within the study area was mostly scrubby brush. Lang named his share of the property “Canterbury” and subdivided the south of the property into 34 farms on the banks of Mullet Creek. These farms varied in size from 10 to 70 acres (The Sydney Monitor and Commercial Advertiser: 9/5/1840). Over the following year, a number of these lots were occupied yet there are no available descriptions of these dwellings or their uses. Census surveys indicate that the majority of dwellings on the land were either bark huts or wooden structures (Lindsay-1934: 28).

Gerrard's portion was named "Kembla Grange" (Lindsay-1994: 28). Kembla Grange was bordered by the Illawarra escarpment to the north and west and what is now the Kembla Grange Race Course to the south. In 1841, Gerrard donated 100 pounds toward improving the road that ran through what was later known as Wyllie's flat, located to the east of his property (Cousins: 1994; Jervis: 1942). Soon after this, Gerrard sold his share of the grant to Robert Howarth, a convict who had been transported to Australia 1834 for forgery (Wollongong Council: 2012). Gerrard then departed for New Zealand and the property was divided between Howarth and Reverend John Dunmore Lang (son of Andrew Lang). In 1883, Howarth was in able to purchase the entirety of Gerard's land from him, a consequence of building a successful tannery business in Wollongong.¹ In 1856, Howarth put his share of the property up for lease.² Today, this western section of land is home to the Kembla Grange Racecourse (Figure 1) (Lindsay-1994).

Figure 6: Kembla Grange crown plan showing original land grant given to Messrs Andrew Lang and Gerard Gerrard. Source: SIXmaps, NSW LPI.

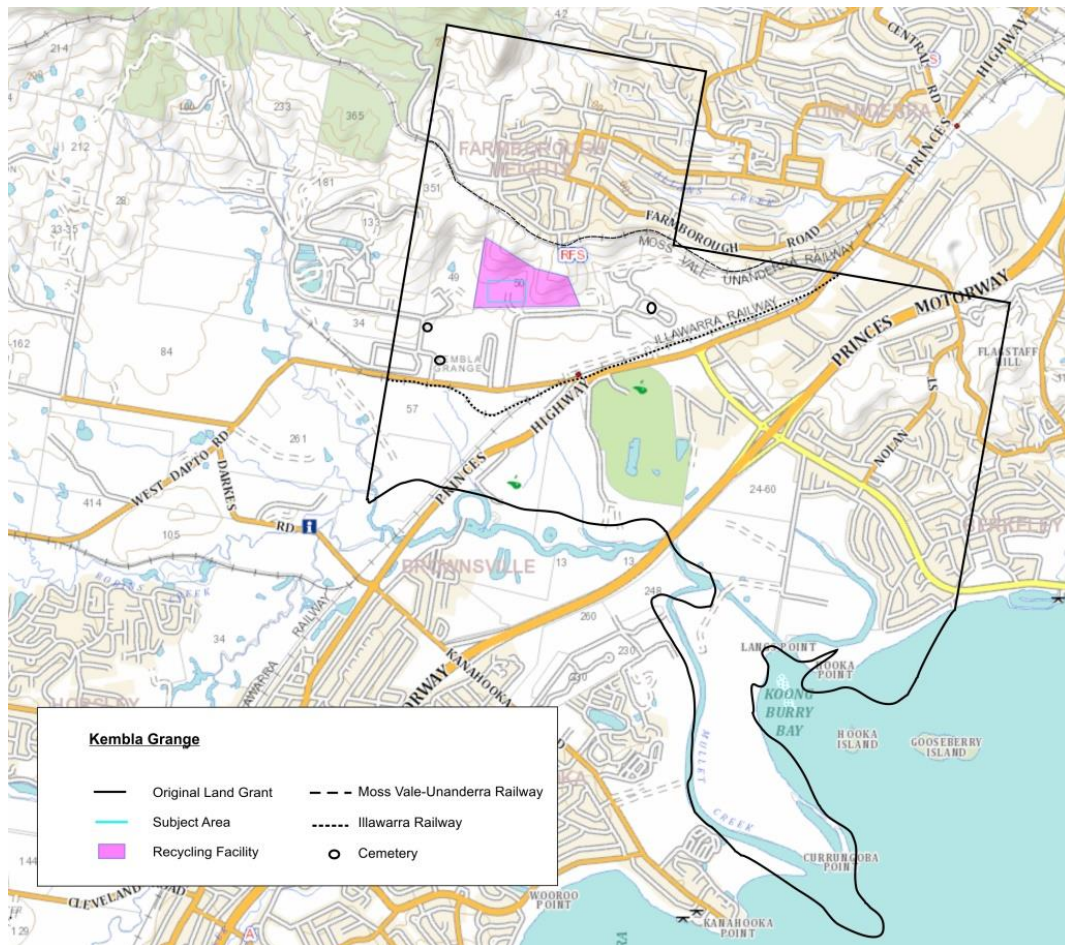


A number of now heritage listed items were built on the 2000 acre land grant during this period. These were the Dapto West Catholic Cemetery (est. 1830) the Kembla Grange Settler's Cemetery (est. 1907), Glengarry Homestead (est. 1830) and the Kembla Grange Railway Platform (est. 1890) (Figure 5). There is no historic evidence to indicate that the area covered by the current study was built on or distinguished in any way during the period in which it was managed by Lang and Gerrard.

¹ www.wollongong.nsw.gov.au

² www.wollongong.nsw.gov.au

Figure 7: Original 2000 acre land grant superimposed over modern map of Kembla Grange and surrounding areas. Source, SIXmaps, NSW LPI and aerial © Google 2013.



5.0 Site inspection

5.1 Methodology

A site inspection of the study area was conducted on 27 February 2014 By Jenny Winnett and Adele Zubrzycka (Artefact Heritage). The aim of the site inspection was to establish the level of disturbance to the site in order to further inform the archaeological predictive model. The site is currently occupied by Kembla Grange Waste Recovery Facility. The recycling and storage facility currently contains a number of stockpile areas, a dam, workshop, site office and two shipping containers.

The inspection of the study area was undertaken on foot and in accordance with best practice standards.

A photographic record was kept for the study area. Photos were taken of the study area to represent the landform units and levels of disturbance. The red and white scale used in the photographs is one metre long.

5.2 Observations

The development footprint is located in the central and western portions of the study area with an entrance route coming off Wyllie Road. The building material recycling and storage facility is located on an elevated terrace directly south of the Illawarra escarpment which forms the northern, eastern and some western boundaries of the developed land (Figures 9 and 10). The steep slopes and foothills of this escarpment have remained relatively undisturbed and are covered by dense vegetation (Figure 12). Two transmission lines are located on the north eastern foothills of the escarpment and a gas pipeline runs below the central portion of the study area. Work involved in the installation of the gas pipe resulted in the clearing and disturbance of large portions of the site. Natural drainage points run down from the escarpment ridge to the north where the Farmborough Heights development is situated. These drainage points are active during periods of high rainfall, often running down the natural drainage line depositing rainwater and household waste to the study area below. Southern and eastern portions of the study area have been subject to widespread land clearing associated with industrial activity over the past sixty years.

Site inspections revealed that a large portion of the study area has undergone extensive landscape disturbance in recent years. Sections of the escarpment slopes have been dug-out to level off land needed for on-site activities such as construction waste storage and roadways. A small dam has been constructed on the southern edge of the site (Figure 11) and transmission lines and a gas main traverse the north western portions of the study area. A small creek which runs through the northern centre of the site has undergone extensive disturbance. Recent satellite imagery of the study area indicates that extensive land clearing up to escarpment slopes has taken place in the past four years (Figures 8 and 11).

According to on-site sources, the property was originally used as a waste storage facility by BHP Billiton at which time the site was filled with slag and other unwanted materials associated with mining activity in the greater Illawarra region. This activity resulted in extensive land remediation in the mid-1990s.

Figure 8: Building waste stockpile area, view north-west towards Illawarra escarpment.



Figure 9: Building waste stockpile area, view north-west towards Illawarra escarpment.



Figure 10: Water recycling pond and building waste stockpile area, view north-west towards Illawarra escarpment.



Figure 11: Building waste stockpile area and cleared land, view north-west towards Illawarra escarpment.



Figure 12: Foothills of escarpment showing relatively undisturbed vegetation, view north-west towards Illawarra escarpment.



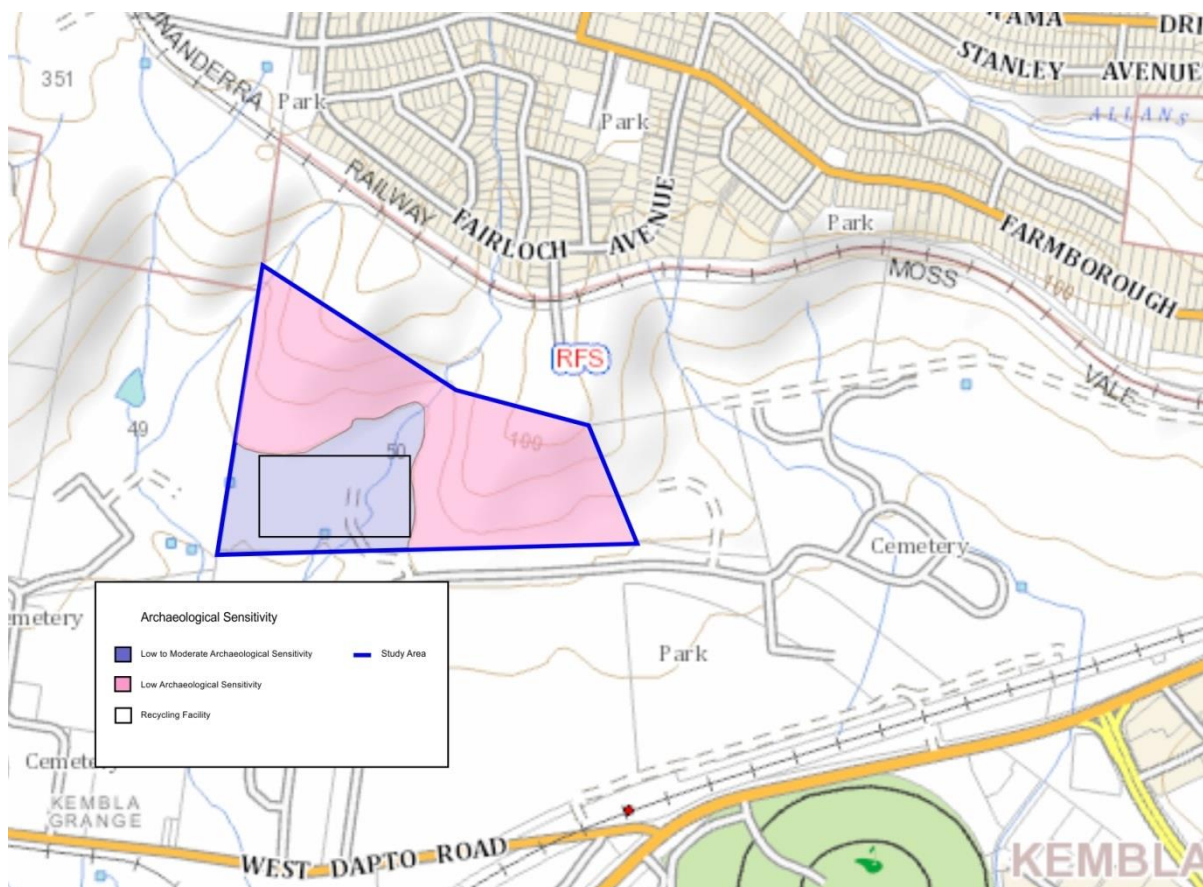
6.0 Preliminary heritage assessment

6.1 Aboriginal archaeological potential

Aboriginal archaeological potential should essentially be understood as the assessment of the likelihood that Aboriginal objects may occur above or beneath the ground surface based on observations during the site inspection, levels of ground disturbance and local archaeological context. An AHIMS search did not locate any recorded Aboriginal sites in the study area. However, thirteen Aboriginal sites were recorded within a two kilometre radius. Stone artefacts would be the most likely Aboriginal site type within the study area and densities may vary. Rock art may also be present at certain locations within the study area.

There is a low potential that proposed area of development will contain Aboriginal archaeological material due to disturbance associated with industrial activities that have taken place over the past sixty years. However, there is a low to moderate potential that areas to the north and east, within the Illawarra escarpment slopes and foothills which have not been affected by recent developments, may contain Aboriginal objects. Figure 13 shows the zones of archaeological potential as assessed by this study.

Figure 13: Aboriginal archaeological potential within the study area.



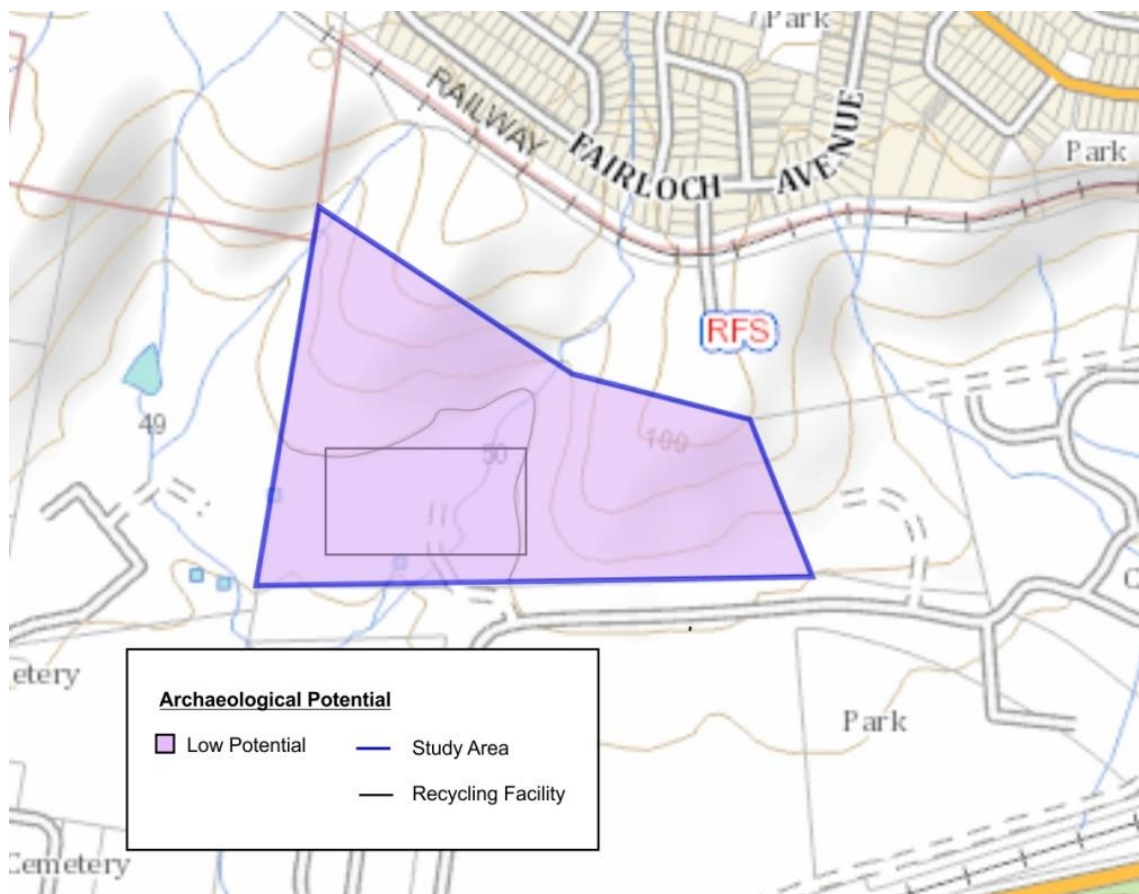
6.2 Non-Aboriginal Archaeological Potential

Non-Aboriginal archaeological potential is defined as the potential of a site to contain archaeological relics, as classified under the Heritage Act. Archaeological potential is assessed by identifying former land uses and associated features through historical research, and evaluating whether subsequent actions may have impacted on evidence for these former land uses. Typical types of archaeological remains likely to be found in the Illawarra region include structural remains to buildings such as footings and postholes and associated items such as wells, cesspits or privies, rubbish pits/dumps and evidence of landscape modification.

The study area was originally sold to Messrs Andrew Land and Gerard Gerrard as a smaller portion of a larger 2000 acre land grant. This land grant was then divided and subleased into smaller holdings. The dominant land use in the vicinity was dairying in the nineteenth century and mining and waste recycling in the twentieth century. Historical evidence indicates that the study area remained undeveloped during this period with vegetated slopes of the Illawarra escarpment to the north of the study area retained as a public reserve. It is likely that lower slopes of the study area were subject to land clearing during this period.

As there are no known former structures recorded within the study area it has been assessed as having a low archaeological potential (Figure 14).

Figure 14: Non-Indigenous Archaeological potential within the study area.



6.3 Assessment of the non-Aboriginal heritage significance of the study area

Determining the significance of heritage items is undertaken by utilising a system of assessment centred on the Burra Charter of Australia ICOMOS. The principles of the charter are relevant to the assessment, conservation and management of sites and relics. The assessment of heritage significance is outlined through legislation in the *NSW Heritage Act 1977* and implemented through the NSW Heritage Manual and the Archaeological Assessment Guidelines (NSW Heritage Office 1996; 25-27). If an item meets one of the seven heritage criteria, and retains the integrity of its key attribute, it can be considered to have heritage significance. The significance of an item or potential archaeological site can then be assessed as being of Local or State significance. If a potential relic is not considered to reach the local or State significance threshold then it is not a relic under the *NSW Heritage Act 1977*. The criteria are summarised in Table 2.

Table 2: Significance assessment criteria

Criteria	Description
A – Historical Significance	An item is important in the course or pattern of the local area's cultural or natural history.
B – Associative Significance	An item has strong or special associations with the life or works of a person, or group of persons, of importance in the local area's cultural or natural history.
C – Aesthetic Significance	An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the local area.
D – Social Significance	An item has strong or special association with a particular community or cultural group in the local area for social, cultural or spiritual reasons.
E – Research Potential	An item has potential to yield information that will contribute to an understanding of the local area's cultural or natural history.
F – Rarity	An item possesses uncommon, rare or endangered aspects of the local area's cultural or natural history.
G – Representative	An item is important in demonstrating the principal characteristics of a class of NSWs (or the local area's): <ul style="list-style-type: none"> - cultural or natural places; or - cultural or natural environments.

The study area does embody some of those characteristics identified in the Australia ICOMOS Burra Charter important for assigning heritage value. The study area represents a small part of the original

2000 acre land grant of Messrs Andrew Lang and Gerard Gerrard. The historical use and subdivision of the land are linked to the growth and establishment of dairy industries in the region, activities in which Lang and Gerrard played an important role. However, the land within the study area does not contain any structures or the remains of any known structures associated with these historical developments or persons.

The study area does not provide good research potential as there were no areas of non-Aboriginal archaeological potential to be investigated. The study area is not rare in the local context.

As a part of the Illawarra escarpment, the study area is considered to be representative of a class of the local area's natural places. However, industrial development in the area means that its significance under this criterion has been substantially compromised.

The study area does not meet the threshold for an assessment of Local or State significance.

7.0 Impact Assessment

7.1 Impacts on Aboriginal heritage

There are no previously registered Aboriginal sites within the study area and there were no Aboriginal sites recorded within the study area during the site survey. The section of the study area which is proposed for development has previously been disturbed and has been assessed as having a low Aboriginal archaeological potential. There would therefore be no known impacts to Aboriginal heritage as a result of the proposal.

If the area of low-moderate archaeological potential were to be impacted by future development, further assessment would be required in the form of an Aboriginal Heritage Impact Assessment.

7.2 Impacts on non- Aboriginal heritage

Four items listed on the Wollongong Council LEP are located within the vicinity of the site. The study area sits within an industrial development in Kembla Grange, south of the Farmborough Heights suburban development.

There will be no impacts to the four locally listed items within the vicinity of the study area as a result of the proposal. All items are located at least 300 m from the study area. The study area has been found to have a low non-Aboriginal archaeological potential, so it is unlikely that there would be impacts to relics within the study area.

Table 3: Impact assessment

Suburb	Item	Address	Approx. distance from the study area	Impacts
Kembla Grange	61061- Kembla Grange Racecourse Railway Station	Corner West Dapto Road & Princes Highway (on South Coast Rail Line)	450 m	None
Kembla Grange	5989-Settlers' Cemetery and World War II Cemetery	Reddalls Road	300 m	None
Kembla Grange	6327- Cemetery	West Dapto Road	400 m	None
Kembla Grange	6432- "Glengarry" Homestead	107 Reddalls Road	650 m	None

The proposal is unlikely to have any further impacts on views and/or vistas towards the escarpment, from the Farmborough Heights development and within sites listed on the Wollongong LEP.

8.0 Conclusions and recommendations

This preliminary heritage assessment found that there were no registered Aboriginal objects or listed heritage items within the study area, or in the immediate vicinity of the study area. Four locally listed heritage items were located within 700 metres of the study area but would not be impacted by the proposal.

This preliminary assessment has found that a portion of the study area has been impacted by previous development associated with the establishment of the waste recovery facility. The northern and eastern sections of the study area which would not be impacted by the current proposal were less disturbed.

The northern and eastern section of the study area which would not be impacted by the proposal has been assessed as having low-moderate Aboriginal archaeological potential. The remainder of the study area, including the area of proposed impacts was found to have a low Aboriginal archaeological potential. The entire study area was found to have a low non-Aboriginal archaeological potential.

It is therefore recommended that there are no heritage constraints on the current proposal. If impacts are proposed outside the current development footprint in areas of low-moderate Aboriginal archaeological potential further investigations would be required.

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