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WSU Milperra Campus Redevelopment Statement of Heritage Impact

Prepared for Mirvac

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Sydney
Melbourne
Brisbane
Perth

extent.com.au

EXTENT HERITAGE PTY LTD

ABN 24 608 666 306
ACN 608 666 306
info@extent.com.au
extent.com.au

SYDNEY

Level 3/73 Union St
Pyrmont NSW 2009
P 02 9555 4000
F 02 9555 7005

MELBOURNE

13/240 Sydney Rd
Coburg Vic. 3058
P 08 9388 0622

BRISBANE

Level 12, 344 Queen St
Brisbane Qld 4000
P 07 3051 0171

PERTH

1/191 St Georges Tce
Perth WA 6000
P 08 9381 5206

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Author(s):	Gabrielle Harrington

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1. Introduction

1.1 Project description

Extent Heritage Pty Ltd (Extent Heritage) has been commissioned by Mirvac, to prepare a Statement of Heritage Impact (SoHI) for the proposed redevelopment of the WSU Milperra Campus. Mirvac have entered into a development agreement with Western Sydney University (WSU) to complete the development.

The WSU Milperra Campus is one of eleven WSU Campuses throughout metropolitan Sydney. The campus supports students, staff and faculty through providing education spaces, student accommodation, staff offices, parking and all other typical amenities. In 2016, the campus supported approximately 8,166 students, 195 academic staff and 128 professional staff.

It is proposed that the WSU Milperra Campus be rezoned to allow for reinvestment into other projects consistent with the University's objects and functions under the Western Sydney University Act 1997. A Master Plan has been prepared for the WSU Milperra campus in support of the University's transformative initiative, driven by improving the amenity of the local area for existing and future residents. The Master Plan provides open space for passive and active recreation, walkable and cycle friendly public domain areas, and a diverse range of residential types to support affordability and changing types of households. The Master Plan is accompanied by a Planning Proposal that seeks to amend planning controls around land use, height of buildings, FSR, biodiversity, minimum lot size and special provisions controls under the *Bankstown Local Environmental Plan 2015*.

The purpose of the report is to analyse the proposed demolition and rezoning of the WSU Milperra Campus, and the potential impacts on the heritage significance. This report revises a previous SoHI prepared by Extent Heritage in 2017 which referenced a different Master Plan proposal.

1.2 Approach and methodology

The site was inspected and photographed by Gabrielle Harrington on 20 November 2019. The inspection was undertaken as a visual study only.

The methodology used in the preparation of this Statement of Heritage Impact is in accordance with the principles and definitions as set out in the guidelines to *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (Burra Charter)* (Australia ICOMOS 2013) and the latest version of the Statement of Heritage Impact Guidelines (2002), produced by the NSW Office of Environment and Heritage.

This Statement of Heritage Impact (SOHI) will review the relevant statutory heritage controls, assess the impact of the proposal on the subject property and make recommendations as to the level of impact.

1.3 Limitations

The historical overview provides sufficient historical background to provide an understanding of the place in order to assess the significance and provide relevant recommendations, however, it is not intended as an exhaustive history of the site.

1.4 Authorship

The following staff members at Extent Heritage have prepared this statement of heritage impact:

- Eleanor Banaag, Senior Heritage Advisor;
- Gabrielle Harrington, Research Assistant.

1.5 Ownership

The site is owned and managed by Western Sydney University.

1.6 Terminology

The terminology in this report follows definitions presented in the *Burra Charter*. Article 1 provides the following definitions:

Place means a geographically defined area. It may include elements, objects, spaces and views. Place may have tangible and intangible dimensions.

Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Cultural significance is embodied in the *place* itself, its *fabric*, setting, *use*, *associations*, *meanings*, records, *related places* and *related objects*.

Places may have a range of values for different individuals or groups.

Fabric means all the physical material of the place including elements, fixtures, contents, and objects.

Conservation means all the processes of looking after a *place* so as to retain its *cultural significance*.

Maintenance means the continuous protective care of a *place* and its *setting*.

Maintenance is to be distinguished from repair which involves *restoration* or *reconstruction*.

Preservation means maintaining a *place* in its existing state and retarding deterioration.

Restoration means returning a *place* to a known earlier state by removing accretions or by reassembling existing elements without the introduction of new material.

Reconstruction means returning a *place* to a known earlier state and is distinguished from *restoration* by the introduction of new material.

Adaptation means changing a *place* to suit the existing *use* or a proposed use.

Use means the functions of a *place*, including the activities and traditional and customary practices that may occur at the place or are dependent on the place.

Compatible use means a *use* which respects the *cultural significance* of a *place*. Such a use involves no, or minimal, impact on cultural significance.

Setting means the immediate and extended environment of a *place* that is part of or contributes to its *cultural significance* and distinctive character.

Related place means a *place* that contributes to the *cultural significance* of another place.

2. Site

WSU Milperra is located within the Southwest Sydney suburb of Milperra and is identified as Lot 103 and DP 874035. The Campus is one of eleven WSU Campuses throughout metropolitan Sydney. The site has an area of 23.31 ha and is bounded by Bullecourt Avenue to the north, Horsley Road to the east, M5 Motorway to the south, and Ashford Avenue to the west. To the north-west of the site is a council owned and operated hockey field and Mount St. Joseph's Catholic School occupies a large area off Horsley Road. The north-eastern section of the site is occupied by a sizeable tract of protected remnant Cumberland Plain Woodland.

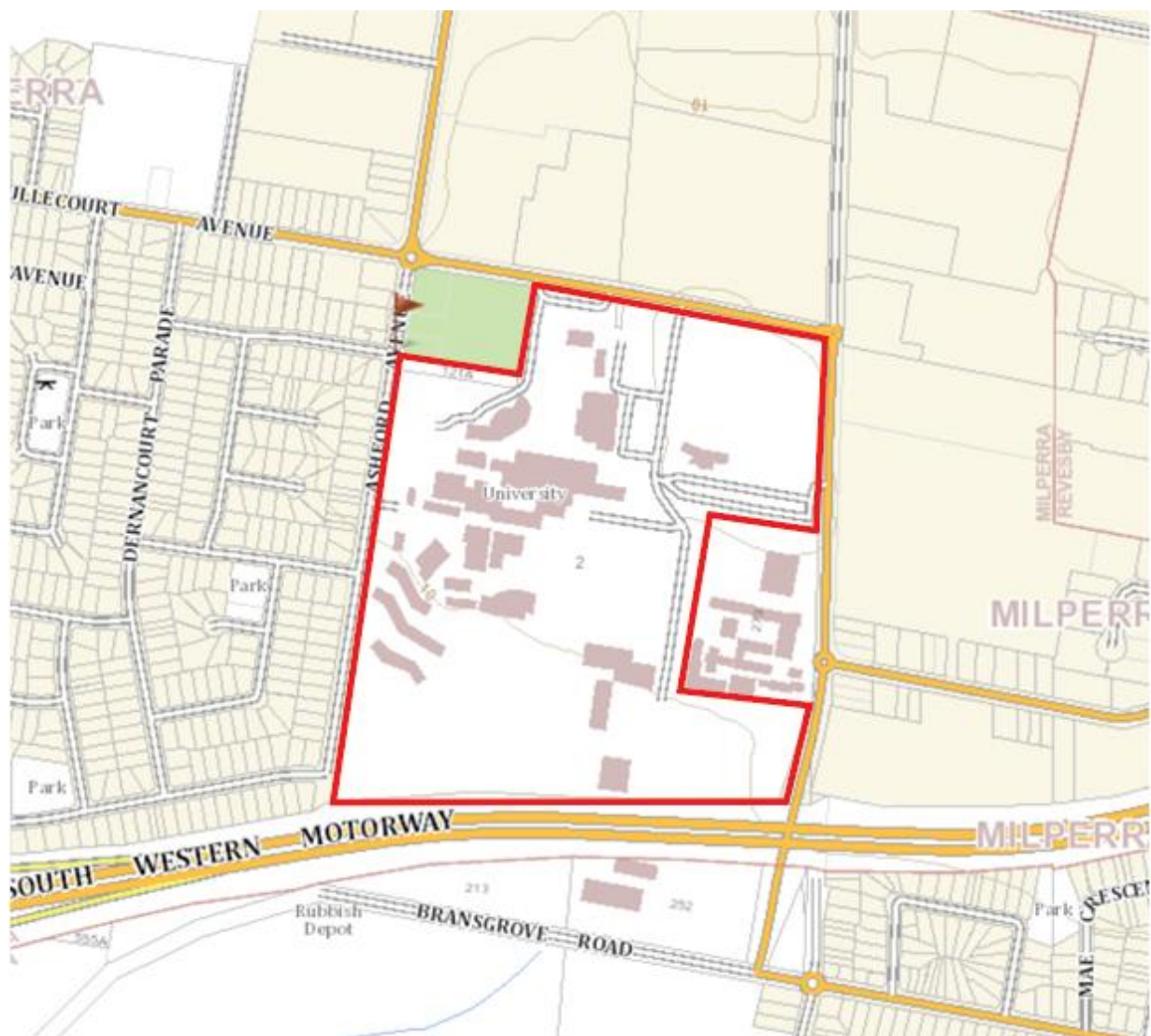


Figure 1. Map indicating location of Western Sydney University Milperra Campus outlined in red. (Source: SixLPI November 2019)



Figure 2. Aerial photograph of Western Sydney University, Milperra with WSU Campus outlined in red. Indicative location of remnant Cumberland Woodland is outlined in green. (Source: SixLPI, November 2019)

3. Listings and controls

3.1 Statutory listings

Heritage status

WSU Milperra is not listed on any heritage register, statutory or non-statutory.

Heritage Items in the Vicinity

WSU Milperra is bounded on its north and west by a heritage item listed on the *Bankstown Local Environmental Plan (LEP) 2015*:

- *Milperra Soldier Settlement (former)* Item No. 129

The heritage item pertains to the street alignments of the former Milperra Soldiers Settlement.

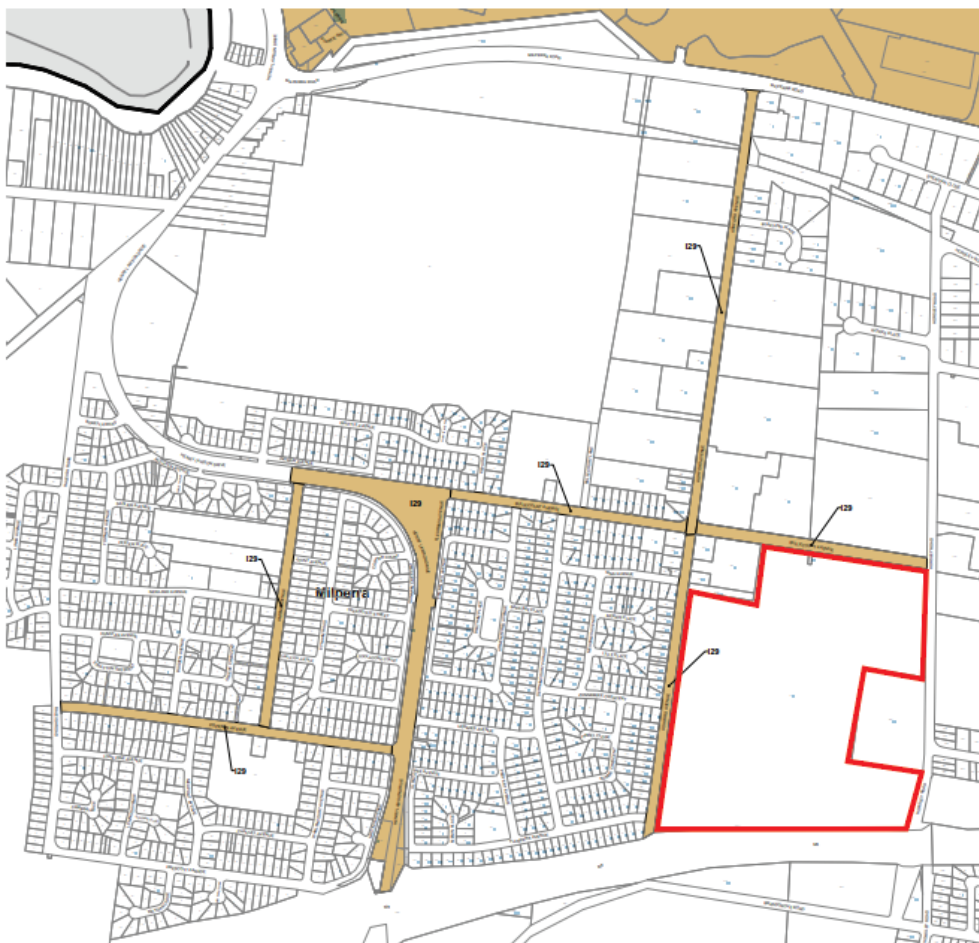


Figure 3. Heritage Map of showing Item No. 129 (street alignments) in brown and the subject area outlined in red. (Source: Bankstown LEP 2015 Heritage Map Sheet Her_002)

4. Historic context

The suburb of Milperra extends across land grants that were made to William Heath, Thomas Bevan, William Mitchell, John Connell, James Connell, and George Johnston Junior. The first land grant in the area was made to William Heath in 1799, with the largest grant of 650 acres awarded to George Johnston Jr. in 1819 (Figure 4). The area was originally referred to as Heath Field and subsequently as Thornes Bush. The current name of Milperra is an Aboriginal word that means “a company, a welcome, a place of recovery of men injured in tribal war or initiation, or a gathering of people (spelt 'milpera') (Beckett 1984, 145 in Allison 2009, 144-157).

By 1917, Milperra was officially known as Bankstown Soldier Settlement and was the first of the group soldier settlements in the Greater Sydney Metropolitan Area established as part of the Soldier Settlement Scheme. The Soldier Settlement Scheme was one of the rehabilitation projects undertaken by the Commonwealth and State governments after World War I, to help repatriate servicemen who had served overseas. NSW was the first state to introduce legislation for this with *The Returned Soldiers Settlement Act 1916* (Allison 2009). The aim of this scheme was to assist returned men to settle on rural land by offering preferential terms and conditions for repayment (Allison 2010). The site at Milperra contained forty-eight poultry and eight vegetable farms, with farm sizes ranging from four to ten acres (Allison 2009). The settlement had five roads including Bullecourt, Amiens, Fleurbaix and Pozieres Avenues, which were named after French towns and key World War I battlefield; and Ashford Avenue, which was named after the then New South Wales Minister for Lands. Entry to the settlement was via Ashford Avenue from Georges River Road (Department of Lands, NRS 8052). The settlement was occupied by returned soldiers and their families between 1917 and 1923, at which point only 18 of the 56 farms were occupied. The remaining vacant blocks were offered to civilians at this point. Constructed on each plot of land were two-bedroom weatherboards cottages each with verandahs and galvanised iron roofing. Around 120 ex-servicemen and their families lived on this settlement.

Milperra began to develop as a suburb receiving a Public School and Post Office in 1918. Although seemingly a promising scheme, the Bankstown Soldier Settlement was largely unsuccessful with one-third of the ex-servicemen living there for less than two years as a result of great personal hardship (Allison 2010).

Presently, the suburb is now occupied by residential developments that occurred during the Post-War period and onwards. All that remains of this soldier settlement is the original streets which retain their original names and alignments.

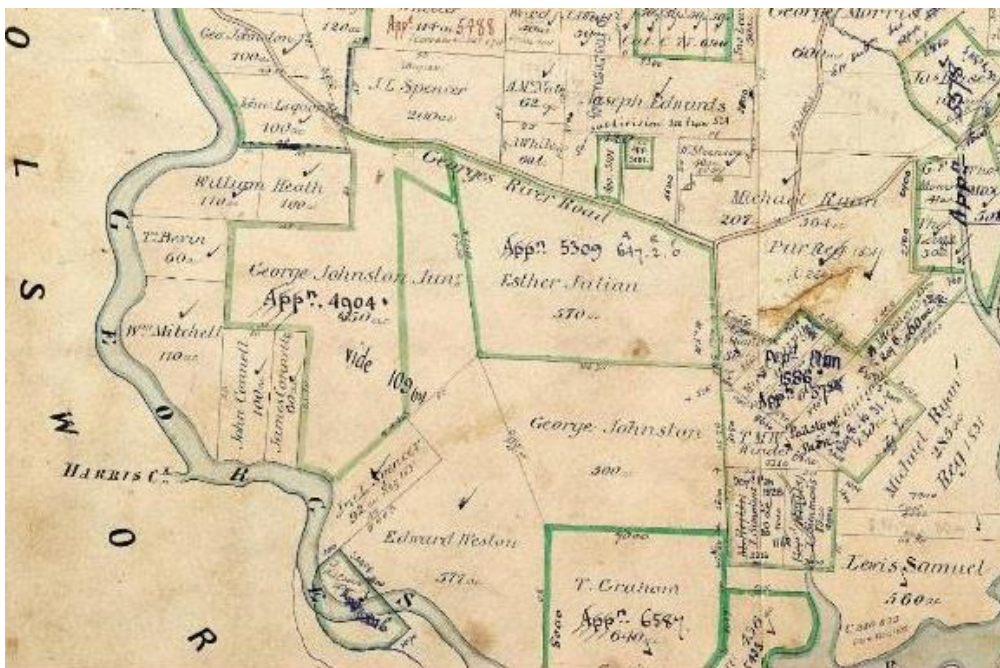


Figure 4. Parish of Bankstown Map n.d., map showing early settlers land grants in the area that surrounding present day Milperra (Source: NSW Government, Land & Property Information: Sheet 2).

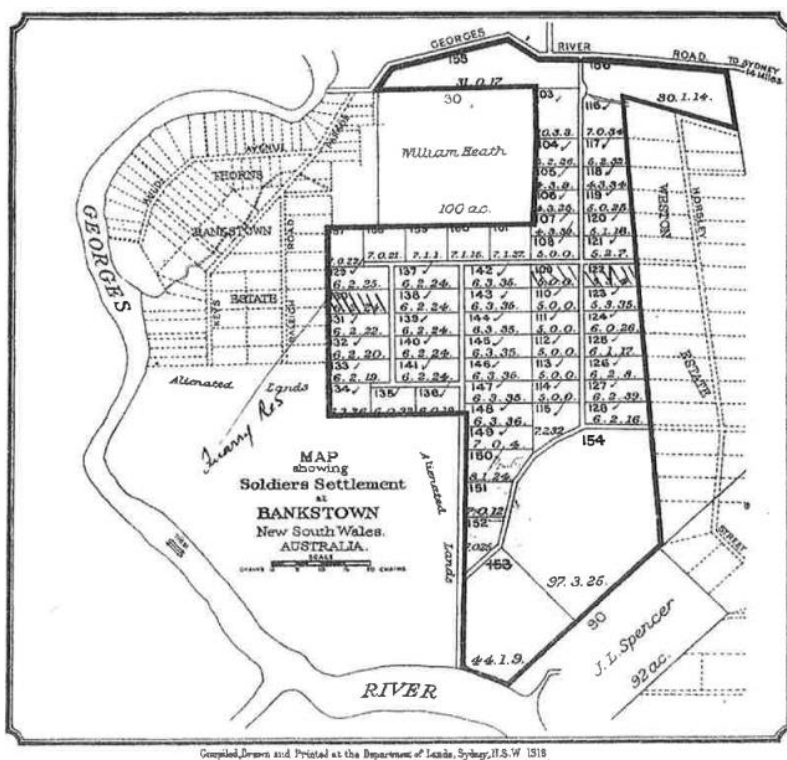


Figure 5. Bankstown Soldiers Settlement, 1918 showing block numbers and acreage. (Source: State Records NSW Department of Lands, Closer Settlement Promotion Files Call No. 10/137114 in Allison 2009, 149)



Figure 6. Bankstown Soldiers' Settlement Estate clearing land (Source: State Archives and Records, 2017)



Figure 7. Bankstown Soldiers' Settlement Estate – initial stages of development (Source: State Archives and Records, 2017)



Figure 8. Bankstown Soldiers' Settlement Estate general view of cleared and uncleared land (Source: State Archives and Records, 2017)



Figure 9. Bankstown Soldiers' Settlement Estate settlers' cottages (Source: State Archives and Records, 2017)



Figure 10. Bankstown Soldiers' Settlement Estate spraying the crops (Source: State Archives and Records, 2017)



Figure 11. Bankstown Soldiers' Settlement Estate attending the poultry (Source: State Archives and Records, 2017)

4.1 Historical Overview of WSU Campus, Milperra

As Milperra continued to develop as a residential suburb, the subject site of the Milperra WSU Campus underwent a series of changes. Part of the site was occupied by the original Milperra Public School in 1918, located at the corner of Ashford Avenue, and Bullecourt Avenue as can be seen in the 1943 aerial photograph in Figure 13 (the possible location of the building is shown outlined). The School comprised of a two-roomed, gabled roof building with a front verandah covered by a skillion roof (Figure 14). Built on brick piers the structure was a brick and timber construction with galvanised metal sheets to the gable and skillion roofs. The School was on the subject site from 1918 up until 1975 when it was relocated to its present site on Pozieres Avenue in 1975 (WSU 2017; Allison 2009, 150). The remainder of the site would have formed part of the Milperra Soldier Settlement to be used for residential and agricultural purposes as can be seen in Figure 12.



Figure 12. 1943 map of Milperra showing the outline of the WSU campus (Source: Six Maps, 2019)



Figure 13. Map of Milperra showing the possible location of the 1918 Milperra Public School building. (Source: Six Maps, 2017)



Figure 14. The original 1918 Milperra Public School. (Source: History of Padstow Revesby Panania Picnic Point East Hills Milperra, 2017)

From 1973, the subject area was subsequently owned by the Department of Education. The Milperra College of Advanced Education (CAE) was established on the site in 1973 to cater to the growing need for teacher's education in NSW. Changes made to the site while it was the CAE campus included construction of the multipurpose Building 1 in 1976, which still exists on site as Building 1 (Figure 13). In 1983, the Milperra CAE was renamed Macarthur Institute of Higher Education (State Records NSW Call No, AGY-2956). Original plans of accommodating 2,500 teachers on site was altered, and there was a push to start tertiary education programs like liberal arts and social welfare. The Macarthur Institute of Higher Education was absorbed into the University of Western Sydney in 1989. It became the third network member of the University of Western Sydney.

While the 1918 Milperra Public School building was used by the CAE staff and students, it was most likely demolished at a later stage by the University of Western Sydney. From aerial maps shown in Figures 12 and 13 it appears the school building was located in the vicinity of the current bus stop for WSU and it is likely that there is no surviving evidence of this building.

During the 1980s, the site underwent numerous changes in the 1980s including extensions to building 1, the construction of building 19 and building 2; and in the 1990s construction of building 4. However, most of the building work on the site has been carried out in the period post 1990s up until recently (Western Sydney University 2017). Presently, the site remains in use for WSU as its Milperra Campus.



Figure 15. The 1976 College of Advance Education building (Source: History of Padstow Revesby Panania Picnic Point East Hills Milperra, 2017)

5. Physical Description

Extent Heritage carried out a physical assessment of WSU Milperra Campus on 20 November 2019. The analysis involved an investigation into the built form and landscape setting. It does not provide a detailed investigation of all fabric but an overview of the elements of the place to assist in determining significance.

The WSU Milperra Campus accommodates educational, administrative and accommodation facilities. There are total of 29 buildings on the campus, with most of the buildings being contemporary in terms of their architectural style, and ranging from single-storey structures to three-storey student housing. Most of the buildings are brick, glass and aluminium construction. The north-eastern section of the site is occupied by a sizeable tract of remnant Cumberland Plain Woodland which is owned by the Department of Education and Training. There are no traces of the original 1918 Milperra Public School on the subject site.

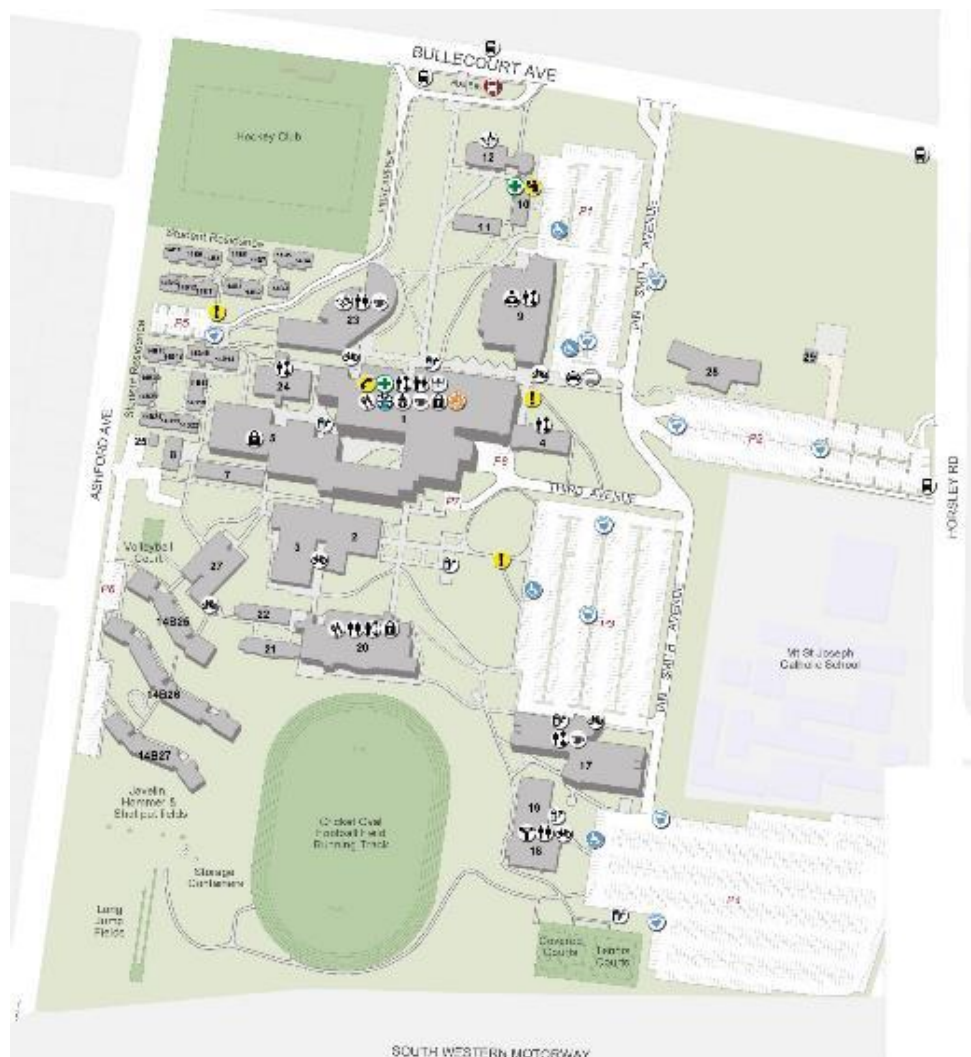


Figure 16. WSU map of Milperra Campus. (Source: WSU, 2017)



Figure 17. View along Bullecourt Avenue looking east.



Figure 18. View of industrial buildings along Bullecourt Avenue.



Figure 19. View of industrial buildings along Bullecourt Avenue.

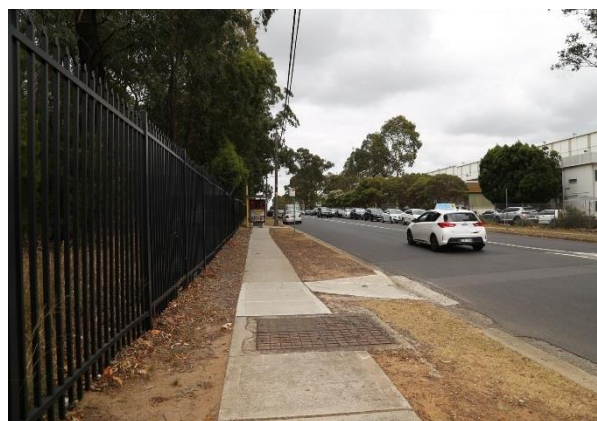


Figure 20. View along Bullecourt Avenue looking west.

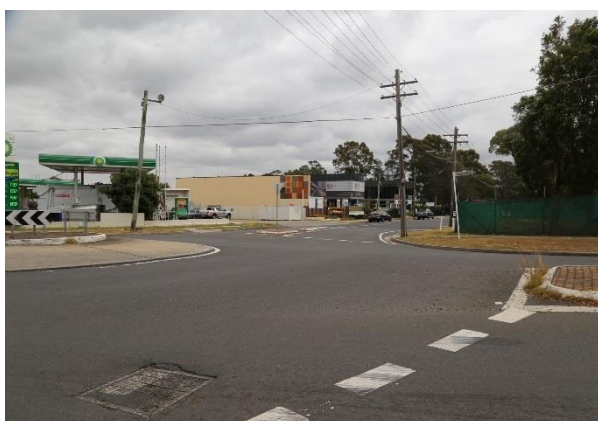


Figure 21. View of intersection of Bullecourt Avenue and Ashford Avenue



Figure 22. View of intersection of Bullecourt Avenue and Ashford Avenue



Figure 23. View of intersection of Bullecourt Avenue and Ashford Avenue.



Figure 24. View along Ashford Avenue.



Figure 25. View southward along Ashford Avenue.



Figure 26. View northward along Ashford Avenue.



Figure 27. View of university buildings from Ashford Avenue.



Figure 28. View of existing university student housing from Ashford Avenue.



Figure 29. View of building 12.



Figure 30. View of building 1 – the 1976 building with extensions.



Figure 31. View of building 11.



Figure 32. View of building 23 Margot Hardy Gallery.



Figure 33. View of WSU village.



Figure 34. View of WSU village.



Figure 35. View of buildings 2 and 3.



Figure 36. View north showing WSU carpark and Mount St. Joseph High School.



Figure 37. View of WSU towards building 20.



Figure 38. View of Library.



Figure 39. View of WSU Bankstown Campus Oval to the southern end of campus.



Figure 40. View of Cumberland plain grove in the north-east corner of the site.

6. Settings and Views

The WSU Milperra Campus is located within the suburb of Milperra and falls within the boundaries of Canterbury-Bankstown Council. It is bound by roads on all four sides – Bullecourt Avenue to the north, the South-Western Motorway to the south, Horsley Road to the east and Ashford Avenue to the west. Mount St. Joseph School Catholic School occupies part of the site to the east, and a hockey field owned by Council is located at the north-west corner of the site. A sizeable, visible portion of a remnant Cumberland Plain Woodland (classified as a critically endangered ecological community) is positioned in the north-east corner of the site.

While the subject site does not have any individually listed items of significance, it is bordered on the north and west by a heritage item– Bullecourt Avenue and Ashford Avenue respectively. These streets both form a part of the locally listed heritage item - *Milperra Soldier Settlement (former)* Item No. I29 on the Bankstown *LEP* 2015.

The northern edge of Bullecourt Avenue is occupied by large industrial warehouses, and its southern edge bordering the WSU campus is lined mostly by trees, and a Council owned hockey field. The western side of Ashford Avenue is occupied largely by residential development comprising of one and two storey dwellings and some commercial buildings. Given the recent and changing nature of development in the area, views along these roads bear little resemblance to the roads that formed part of the Milperra Soldier Settlement (as seen in Figures 6 to 11). It is the alignment of these roads that is significant in terms of representing the establishment of the Milperra Soldier Settlement.

7. Heritage Significance

7.1 Built Heritage

The subject site has undergone considerable changes in terms of its built fabric. Most of the buildings on site date from the 1980s and 1990s. There is no evidence of the original 1918 Milperra Public School building on site, or other remnants that indicate its former purpose as part of the Milperra Soldiers Settlement. While the 1976 CAE multipurpose Building 1 does exist on the site, it has been modified in terms of extensions and additions and is an ordinary example of an institutional building of that period. Therefore, in terms of built heritage the subject site has minimal to no built heritage significance due to lack of original or significant built fabric.

7.2 Archaeological Potential and Significance

Aboriginal Archaeology

Extent Heritage was commissioned to undertake an Aboriginal Heritage Due Diligence assessment of the Western Sydney University Milperra campus in 2017 for the proposed redevelopment of the site. The full due diligence assessment report is attached to this report in Appendix A and is still applicable to the subject site. The summarised findings of the report are that the greater part of the subject area has been heavily disturbed and given the shallow residual nature of the soil landscape would likely have reduced/removed the survivability of Aboriginal objects within the subject area, if present. However, the bushland area in the north-east corner of the subject area appears less disturbed. This area does not contain features that indicate it would have been a favoured location for past Aboriginal occupation but the potential for cultural materials cannot be discounted. As such, any works that would result in ground disturbance within this area would require further assessment prior to being initiated. In current plans this is a conservation area that will not be impacted.

Historical Archaeology - Potential

Following the major University developments in 1973 for buildings, sports fields, parking and associated services, it is unlikely that substantial archaeological evidence has been preserved. The topography of the site has been modified through both cutting and filling to meet the functions of the university. This activity is likely to have reduced the integrity and survival of physical remains including structural remains, landscape elements, archaeological deposits and 'relics'.

Historical Archaeology - Significance

There is no documented evidence for developments within the study area during the 18th and 19th Centuries that are likely to have left significant physical remains. Archaeological evidence of buildings associated with the soldier settlement are likely to be restricted to building piers and

foundations associated with housing, poultry-shed footings, postholes and fence lines. If such remains survive, they are likely to be of local significance with a low research potential. Physical remains associated with the post-1920 development of the site are unlikely to provide any substantive information that would contribute to our understanding of the historical development of the site.

The presence of historical archaeological remains of local significance is considered to be low. Any remains that do survive are likely to have a low research potential.

8. Proposed Works

8.1 Rationale

WSU is embarking on a large scale, transformative initiative, seeking evolution of the University's current 'suburban' campus network into a hybrid campus model which includes both suburban and consolidated city centre vertical campuses, acknowledging the ability of both campuses to service certain aspects of course delivery and research.

The redevelopment of the site is proposed as part of the larger Western Sydney University initiative called Western Growth, which is a large-scale transformative initiative that seeks to bring the highest quality educational opportunities and world-class research expertise to Australia's fastest growing region. The current proposed redevelopment is part of the transition of the Milperra Campus to the new Liverpool CBD and Bankstown CBD campuses. From 2021 educational operations at Milperra will be transferred to a new and more accessible Bankstown CBD campus (Western Sydney University 2017).

As a result, it is proposed that the existing campus at Milperra is rezoned to accommodate housing, open spaces and commercial facilities.

8.2 Outline

Mirvac is partnering with the University to develop a rezoning proposal for a low-rise medium density master planned neighbourhood incorporating a range of attached, semi-detached and free-standing homes. The proposal will sensitively integrate with the surrounding neighbourhood, enhancing the area for future residents and the wider Milperra community (Mirvac 2019).

The proposal as shown on a plan prepared by Mirvac (Figure 41), and dated 2019 is to rezone and redevelop the WSU Milperra Campus. Along with the demolition of the current WSU Milperra Campus buildings, the proposed rezoning and development includes:

- Low-medium density housing consisting of attached, semi-detached and terrace housing (between 430-445 dwellings);
- open space/parks;
- cycle links; and
- some commercial areas;
- childcare centre and community hub

It should be noted the proposal plans to retain the remnant Cumberland Plain Woodland to the north-east of the site.



MILPERRA WSU
Current Masterplan
22.10.19

**MIRVAC
DESIGN**

Figure 41. Current Masterplan overlaid on an aerial photograph of the area. Marked in yellow is the proposed residential development; in blue is proposed commercial zone; in green is proposed green spaces (Mirvac 2019).

9. Assessment of heritage impact

9.1 Built heritage

Demolition

While the subject site and the associated buildings within are considered to have no heritage significance, the roads – Bullecourt Avenue or Ashford Avenue – to the north and western edges of the site are listed as part of the Milperra Soldiers Settlement. The demolition of the existing buildings on the subject site will not impact the road alignments themselves, which will be retained as part of the new development, nor will it impact on the heritage significance of the item.

New Development

The new residential development will consist of medium density development with housing being in the form of terraces, semi-detached and freestanding homes. The majority of this development will be mostly two-storey buildings with a small number of three storey dwelling types that will not exceed the height of the current buildings already existing within the subject area. Part of the proposed development will include open space/parks, cycle links and some commercial development.

The development will be in keeping with the heights of other residences in the vicinity, and will not exceed the height of the current WSU Milperra buildings. Therefore, the impact to settings in terms of building heights will be negligible.

The proposal will have no impact on the heritage significance of the locally listed item, *Milperra Soldier Settlement (former)*, an item consisting of a series of road alignments surrounding the site to the north and west, and the key significant feature of this heritage item.

9.2 Curtilage and subdivision

The proposed works will have no impact on the subject site's curtilage or subdivision. There is a proposal to rezone the site in order to allow for the additional accommodation and community uses. Given the area was originally conceived for the accommodation of a community, rezoning to allow for a master planned location where the design, layout, residences, and public spaces focussing on creating a sense of neighbourhood, this is an acceptable and comparative outcome.

Regardless, the proposal to rezone the area will have no impact on the significance of the surrounding *Milperra Soldier Settlement (former)* heritage item, which is significant for its physical feature as a road alignment, which will be retained through the redevelopment.

9.3 Views and settings

Views to Bullecourt Avenue and Ashford Avenue have changed considerably since the establishment of the Milperra Soldier Settlement, with large industrial warehouses along Bullecourt Avenue and one to two storey residential and retail developments along Ashford Avenue.

The proposed development will not affect these existing views, but will reflect the changing character of the area. The residential nature of the proposed development will help retain the largely residential character of Ashford Avenue and the larger area. Employing the site to provide much needed housing in the area will enable greater residential amenity. The views and settings will generally remain unchanged as the height of the buildings proposed is similar to that which currently exists at the subject site.

9.4 Heritage items in the vicinity

The *Milperra Soldier Settlement (former)*, Item No. 129 on the *Bankstown LEP 2015* is a heritage item in the immediate vicinity of the proposed works.

As previously stated, it is the alignment of the streets Bullecourt Avenue and Ashford Avenue, which directly abut the subject site to the north and east, that give this item its heritage significance. The street alignment will not be altered by the proposed demolition, rezoning or development, and thus the proposed works will have no impact to this heritage item.

9.5 Aboriginal Archaeology

The proposed demolition and development will not have any major disturbances to the ground surface. It is considered that there is a low risk of Aboriginal objects being present within the subject area (excluding the bush land conservation area in the north east). However, the nature of disturbance does not preclude the potential for isolated finds, which is a common site finding, across the region, even in disturbed contexts.

9.6 Historical Archaeology

The proposed works include both demolition of the WSU Milperra Campus buildings and redevelopment of the entire subject site into a master planned residential neighbourhood, including open spaces and some commercial areas.

There will be localised impacts to some areas of the site, however, the degree of survival of any significant physical evidence associated with the pre-1973 development of the site is likely to be limited due to changes made to the site during construction of buildings, sports fields and associated services. The topography of the site has been significantly modified through both cutting and filling which is likely to have reduced the integrity and survival of physical remains.

The presence of historical archaeological remains of local significance is considered to be low. Any remains that do survive are likely to have a low research potential.

10. Statutory controls

10.1 Heritage Act 1977

The *Heritage Act 1977* provides protection for items of State heritage significance that are listed on the State Heritage Register, as well as for unlisted archaeological relics. Works proposed for items protected by the *Heritage Act 1977* are approved by the Heritage Council of NSW or its delegates, as appropriate. Additionally, the *Act* provides exceptions or approvals for work that will likely result in the discovery, movement and/or destruction of relics.

As the subject site is not a heritage item, and the heritage item in the vicinity, *Milperra Soldier Settlement (former)*, is a locally listed item, the Heritage Act is not applicable in terms of its identified built heritage.

There is nothing to suggest that any remains on site would trigger the relics' provisions of the Heritage Act 1977. As such, there is no need to obtain consent from OEH to excavate or disturb land under Section 140 of the *Act*. Since there is no planning mechanism that identifies the site as having archaeological potential, and this report indicates that the relics' provisions of the Heritage Act are unlikely to be triggered, there is no requirement to submit a notification to the OEH for an exception under Section 139(4) of the *Act*.

10.2 Environmental Planning and Assessment Act 1979

For environmental assessment purposes under Part 4 of the *NSW Environmental Planning and Assessment Act 1979*, Section 79C of the *Act* requires that a determining authority: "take into consideration such of the following matters as are of relevance to the development" with respect to the proposed works. Heritage matters fall within the scope of 'environment' with respect to this *Act*. The specific requirements of what must be contained in an environmental assessment are set out in Schedule 2 of the *Environmental Planning and Assessment Regulations 2000*.

This report fulfils the assessment requirements under Part 4 of the EP&A *Act*.

This report fulfils the assessment requirements in relation to heritage matters and is to be included in the documentation accompanying the Development Application to be submitted to Canterbury-Bankstown Council.

10.3 Bankstown Local Environmental Plan 2015

The subject site is within the former Bankstown Local Government Area. Following council amalgamations in May 2016, this area is now part of the City of Canterbury-Bankstown Local Government Area. Until such time as the planning controls are redrafted, the former Bankstown LGA planning controls will apply. While the subject site does not have any heritage significance, the roads bordering the site – Bullecourt Avenue and Ashford Avenue specifically are listed as

items of local heritage significance as part of the *Milperra Soldier Settlement (former)* (item # 129).

The Bankstown *Local Environmental Plan* 2015, Clause 5.10 (4) requires that Council must assess the heritage significance of the item or conservation area and take into account the extent of the impact of the proposed works on the heritage significance of the site or area.

Further, Clause 5.10 (5) states that Council may before granting consent require 'a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned'. This applies to land that is within the vicinity of land on which a heritage item is located.

This Statement of Heritage Impact fulfils the requirement for an assessment of heritage impacts to be made, in compliance with the clauses of the Bankstown *LEP* 2015.

10.4 Bankstown Development Control Plan

There are no clauses pertaining to heritage in the Bankstown *Development Control Plan* 2015 (DCP), the current *DCP* for the former area of the City of Bankstown which applies to the area of the WSU Campus Milperra.

11. Conclusion and Recommendations

11.1 Conclusion

This report seeks to address the impacts of the proposed redevelopment of the subject site of Western Sydney University Milperra Campus. While the subject site is not a heritage listed item, it is bordered by Bullecourt Avenue to its north and Ashford Avenue to its east, roads that are part of the locally listed item *Milperra Soldier Settlement (former)* – Item No. 29 on the *Bankstown LEP 2015*. This report concludes that the proposed development will not have any impact on these roads as all works proposed are to be contained within the subject site, and as such will not affect the alignment of the roads which is key to the item's significance. Furthermore, the proposed development will greatly improve the residential amenity of the larger area, as it will provide much needed housing in the area and its surrounds.

The Aboriginal Archaeological Due Diligence report concludes that the survivability of Aboriginal objects within the subject area would be unlikely given the highly disturbed nature of the site, and its shallow residual soil landscape (excluding the bush land conservation area in the north east of the site).

The range of potential historical archaeological remains within the study area is limited in nature. These remains, if they survive at all are likely to be locally significant. The integrity of these remains is likely to have been compromised by development of the site in the period after 1973. These modifications include a significant remodelling of the site's topography. As such, and consent or exception with regards to the disturbance of archaeological material is not required.

11.2 Recommendations

In recognition of the historical associations of the subject site with the Milperra Soldier Settlement, and the Milperra Public School it is recommended:

- That the further development of the proposal takes into consideration the existing street character of Bullecourt Avenue and Ashford Avenue. This would be undertaken through a sympathetic consideration of the scale (i.e. building height) of other existing buildings in the area.
- An Interpretation Plan be prepared which showcases the history of the site as part of the Milperra Soldier Settlement, and as the site of the original Milperra School, which was on the subject site from 1918 up until 1975. The Interpretation Plan will seek to explore the historic and social values associated with the site, will identify target audiences, site issues, and the potential for interpretation, and will propose interpretation devices at appropriate locations on the site. This Interpretation Plan would be prepared at the Development Application (DA) stage.

The Aboriginal Archaeological Due Diligence report has the following recommendations with regard to Aboriginal cultural heritage:

- With the exception of the area identified as a remnant Cumberland Plain Woodland in the northeast of the site, development work for the majority of the subject area may proceed with caution. It is considered that there is a low risk of Aboriginal objects being present within the subject area. However, the nature of disturbance does not preclude the potential for isolated finds, which is a common site type across the region, even in disturbed contexts. In the event of unexpected Aboriginal objects, sites or places (or potential Aboriginal objects, site or places) are discovered during construction, all works in the vicinity should cease and the contractor should determine the subsequent course of action in consultation with a heritage professional and/or the Office of Environment and Heritage (OEH) as appropriate. A process of consultation with Aboriginal community representatives would also be required in this event.
- If works that will disturb the ground surface are proposed within the remnant Cumberland Plain Woodland conservation area, further assessment of this area would be required. It is recommended that an Aboriginal Cultural Heritage Assessment (ACHA) in accordance with the OEH *Code of Practise for the Archaeological Investigation of Aboriginal Objects in NSW* 2010 is undertaken prior to development within this area. The ACHA would allow for on-site investigation of the soil profile, determine whether cultural deposits are present, assess their significance, and provide the necessary documentation for an Aboriginal Heritage Impact Permit (AHIP) in the event that harm to Aboriginal objects is determined. We highlight that the development of an ACHA usually requires 3-6 months due to mandatory timeframes outlined in OEH guidelines. The subsequent AHIP process if required would result in additional timeframes of 2-4 months, usually after the project approval.
- This document may be summarised within and/or appended to a Development Application, Statement of Environmental Effects (SEE) or Review of Environment Factors (REF). If any Aboriginal objects are later identified within the proposed activity area, this report cannot however be used to support an application for an Aboriginal Heritage Impact Permit (AHIP). Such an application would require more detailed investigation involving a formal process of Aboriginal community consultation and the preparation of an Aboriginal Cultural Heritage Assessment Report (ACHA).
- If human remains are discovered, the Coroners Act 2009 requires that all works should cease and the NSW Police and the NSW Coroner's Office should be contacted. Traditional or contemporary (post-contact) Aboriginal burials which occur outside of designated cemeteries are protected under the National Parks and Wildlife Act 1974 and should not be disturbed. Interpreting the age and nature of skeletal remains is a specialist field and an appropriately skilled archaeologist or physical anthropologist should therefore be contacted to inspect the find and recommend an appropriate course of action. Should the remains prove to be Aboriginal in origin, notification of OEH and the Local Aboriginal Land Council will be required. Notification should also be made to the Commonwealth Minister for the

Environment, under the provisions of the Aboriginal and Torres Strait Islander Heritage Protection Act 1984

Historical Archaeology recommendations include:

- The site, like all places in NSW, is subject to the general conditions of the Heritage Act 1977, there are however no specific permitting or consent requirements under the Act for this site. As part of the on-site environmental management process, an unexpected finds procedure should be put in place, developed by an archaeologist with demonstrated experience and understanding of the required obligations in accordance with the *Act*. This protocol would include a pre-start briefing of contractors regarding the type of material that may be uncovered during works and their obligations under the *Act*. The procedure should also outline a process for protecting and identifying unexpected archaeological material, if uncovered during works.

12. References

Australia ICOMOS. 2013. *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance*. Burwood, Vic.: Australia ICOMOS.

Heritage Office and Department of Urban Affairs and Planning. 1996. *NSW Heritage Manual*. Sydney: Department of Urban Affairs and Planning.

Heritage Office. 2001. *Assessing Heritage Significance*. Parramatta, NSW: Heritage Office.
<https://www.environment.nsw.gov.au/resources/heritagebranch/heritage/listings/assessingheritagesignificance.pdf>.

Allison, G 2010, 'Bankstown Soldier Resettlement Milperra'. *The Dictionary of Sydney*, November 2019, https://dictionaryofsydney.org/entry/bankstown_soldier_settlement_milperra

Allison, G 2009, "From Bullets to Pullets": Bankstown Soldier Settlement', *Journal of the Royal Australian Historical Society*, 95 (2): 144-157.

Beckett, L 1984 'Milperra Memories', unpublished paper.

Department of Lands, Soldier (Closer) Settlement Promotion Files, State Records New South Wales NRS 8052, Bankstown Soldier Settlement.

Mirvac 2019, *Western Sydney University Milperra Campus Masterplan and Rezoning Proposal*, accessed November 2019, <https://www.milperracampusrezoning.com.au/>

Western Sydney University 2017, *Bankstown*, accessed November 2019
https://www.westernsydney.edu.au/uws25/25_year_history/places/bankstown

Western Sydney University 2019, *Western Growth*, accessed November 2019
<https://aem.westernsydney.edu.au/western-growth.html>

State Records Authority of New South Wales n.d, *Milperra College of Advanced Education (1974 -1983) / Macarthur Institute of Higher Education (1983 - 1989)*, Call No. AGY-2956.

Appendix A. Aboriginal Heritage Due Diligence Assessment



10 January 2020

APP Corporation Pty Ltd
166 Miller Street,
North Sydney
NSW 2060

Attn: **Bowen Zu (Assistant Project Manager)**

**RE: Western Growth Project: Milperra Campus Redevelopment–
Aboriginal Heritage Due Diligence Assessment**

Dear Bowen,

APP Corporation Pty Ltd, on behalf of Western Sydney University, commissioned Extent Heritage Pty Ltd to undertake an Aboriginal heritage due diligence assessment of the Western Sydney University Milperra campus for a proposed redevelopment of the site. This letter report provides the details and results of the assessment.

A review of the site context and previous archaeological assessments within the vicinity of the subject area indicated that the site had the potential to contain Aboriginal objects/sites, primarily due to the location of some of the subject area in the vicinity of a first-order tributary - an area of archaeological interest. However, levels of existing disturbance within the site indicate that the potential for subsurface or significant cultural material is now low across the majority of the subject area. The bushland area in the north east corner of the subject area appears less disturbed, and while not containing significant features of interest, cannot be discounted to contain Aboriginal objects.

Taking the above conclusions into consideration, the following recommendations are made with regard to Aboriginal cultural heritage:

- Development work for the majority of the subject area may proceed with caution. It is considered that there is a low risk of Aboriginal objects being present within the subject area (excluding the bush land conservation area in the north east). However, the nature of disturbance does not preclude the potential for isolated finds, which is a common site type across the region, even in disturbed contexts. In the event of unexpected Aboriginal objects, sites or places (or potential Aboriginal objects, site or places) are discovered during construction, all works in the vicinity should cease and APP Corporation Pty Ltd should determine the subsequent course of action in consultation with a heritage professional and/or the Office of Environment and Heritage (OEH) as appropriate. A process of consultation with Aboriginal community representatives would also be required.
- If works that will disturb the ground surface are proposed within the bushland conservation area as shown in **Figure 43**, further assessment of this area would be required. It is recommended that an Aboriginal Cultural Heritage Assessment (ACHA) in accordance with the Office of Environment and Heritage's (OEH) Code of Practise

for the Archaeological Investigation of Aboriginal Objects in NSW 2010 is undertaken prior to development within this area. The ACHA would allow for on-site investigation of the soil profile, determine whether cultural deposits are present, assess their significance, and provide the necessary documentation for an Aboriginal Heritage Impact Permit (AHIP) in the event that harm to Aboriginal objects is determined. We highlight that the development of an ACHA usually requires 3-6 months due to mandatory timeframes outlined in OEH guidelines. The subsequent AHIP process if required would result in additional timeframes of 2-4 months, usually after the project approval.

- This document may be summarised within and/or appended to a Development Application, Statement of Environmental Effects (SEE) or Review of Environment Factors (REF). If any Aboriginal objects are later identified within the proposed activity area, this report cannot however be used to support an application for an Aboriginal Heritage Impact Permit (AHIP). Such an application would require more detailed investigation involving a formal process of Aboriginal community consultation and the preparation of an Aboriginal Cultural Heritage Assessment Report (ACHA).
- If human remains are discovered, *the Coroners Act 2009* requires that all works should cease and the NSW Police and the NSW Coroner's Office should be contacted. Traditional or contemporary (post-contact) Aboriginal burials which occur outside of designated cemeteries are protected under the *National Parks and Wildlife Act 1974* and should not be disturbed. Interpreting the age and nature of skeletal remains is a specialist field and an appropriately skilled archaeologist or physical anthropologist should therefore be contacted to inspect the find and recommend an appropriate course of action. Should the remains prove to be Aboriginal in origin, notification of OEH and the Local Aboriginal Land Council will be required. Notification should also be made to the Commonwealth Minister for the Environment, under the provisions of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*.

Please note that this letter report addresses only the proposed development of the subject area. It is an initial investigation of constraints and opportunities pertaining to identified existing and potential Aboriginal heritage sites and places on and/or in the immediate vicinity of the subject area. It is not an ACHAR and is not sufficient to support an application for an Aboriginal Heritage Impact Permit (AHIP), in accordance with section 90 of the *National Parks and Wildlife Act 1974*.

Should you have any questions or concerns please do not hesitate to contact Dr Tessa Bryant or myself on (02) 9555 4000.

Yours Sincerely,



Dr Alan Williams FSA MAACAI • Aboriginal Heritage Team Leader

Background and Purpose of Document

In NSW, Aboriginal objects, whether recorded or as yet undiscovered, are afforded statutory protection under the *National Parks and Wildlife Act 1974*. Under Section 86 of the Act it is an offence to disturb, destroy or deface Aboriginal objects without the approval of the Director General of the Office of Environment and Heritage (OEH). A breach of Section 86 of the *National Parks and Wildlife Act 1974* could result in prosecution and fines in excess of \$1 million. The OEH provides a series of guidelines as a framework for identifying and managing Aboriginal heritage and the cultural heritage interests of Aboriginal parties within development planning contexts. The Due Diligence process is the first step and is outlined in the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW, 2010) guidelines; and is intended to identify whether or not a proposed activity is likely to harm Aboriginal objects. Further information on Legislation is provided in **Appendix 1**.

Extent Heritage has been commissioned by APP Corporation Pty Ltd, on behalf of Western Sydney University, to undertake an Aboriginal heritage due diligence assessment for the proposed redevelopment of the Western Sydney University Milperra campus (Lot 103, DP 874035) (hereafter the 'subject area', **Figure 42**). Current options for the planned redevelopment have residential and mixed use structures across the majority of the site, and include a conservation area and associated buffer zone in the northeast corner that will not be redeveloped (**Figure 43**).

Please note that this report is an initial investigation of constraints and opportunities pertaining to identified Aboriginal heritage sites and places on and/or in the immediate vicinity of the proposed development site. It is not an Aboriginal Cultural Heritage Assessment (ACHA) prepared in accordance with the guidelines issued by the Office of Environment and Heritage (OEH). As such, it would not be sufficient to support an application for an Aboriginal Heritage Impact Permit, in accordance with s90 of the *National Parks and Wildlife Act 1974*. Similarly, the report does not consider historical heritage, and would not be sufficient to support an application for a permit under s60 or s140 of the *Heritage Act 1977*.

Subject Area

The subject area is situated in the suburb of Milperra within the Canterbury-Bankstown Local Government Area, and forms the Western Sydney University (WSU) Milperra Campus. The WSU Milperra Campus is bounded by Bullecourt Avenue to the north, the South Western Motorway, Horsley Drive and Mount St Joseph to the east, and Flanders Avenue to the west (**Figure 42**).

Existing Environment

The subject area is located in Milperra, and is situated predominantly within the Blacktown soil landscape, with the southern boundary in close proximity to the Richmond soil landscape (**Figure**).

The residual Blacktown soil landscape is characterised by gently undulating rises on Wianamatta Group shales and Hawkesbury sandstone. The local relief is typically up to

30m with slopes less than 5% and broad rounded crests and ridges with gently inclined slopes. This type of landscape restricts a number of archaeological site types, such as rockshelter and rock engravings, which require sharp exposed sandstone relief not common in these areas. Conversely, surface artefact scatter and buried cultural material are likely to be more prevalent. Soils are typically shallow duplex soils, comprised of thin clay loam topsoil (A1 horizon) over heavy clays (B2 horizon), and usually <50cm deep. The heavy clay unit is generally considered to pre-date the Aboriginal colonisation of Australia, and therefore only the upper A1 horizon has the potential to contain Aboriginal objects. The shallow nature of these deposits has implications for the potential and survivability of Aboriginal objects - even minor disturbance and/ or de-vegetation will often result in the complete removal of the upper parts of the soil profile in which objects may occur.

The deposits on the southern margin of the subject area are in close proximity to the Richmond soil landscape. This is a fluvial landscape that consists of Quaternary terraces along the Nepean and Georges River and is characterised by relatively flat slopes, with the local relief of <3m. The soil profile consists of poorly structured orange to red clay loams, clays and sands with texture increasing with depth. Red earths and red podzolic soils occur on terrace surfaces with earthy sands on terrace edges and plastic clays along drainage lines. This landscape is subject to high erosion on terrace edges and minor localised flooding of the Georges River. The Georges River rises from Appin and flows north through an extensive alluvial floodplain between Liverpool and East Hills emptying into Botany Bay. Typically, these environments, especially in close proximity to rivers, have potential for deep soil profiles containing cultural materials of significant antiquity.

Originally, this area would have been dominated by open and/or dry sclerophyll forest, but most of the area is now urbanised and cleared; only creeklines and associated riparian corridors contain dense bushland that may reflect pre-European vegetation.

Particular landforms are known to have been favoured locations for repeated or long-term occupation, and are therefore more likely to retain archaeological evidence of past Aboriginal use. OEH specifies five landscape features which are likely to indicate the presence of Aboriginal objects (DECCW 2010):

- Within 200 m of waters.
- Within a sand dune system.
- On a ridge top, ridge line or headland.
- Within 200 m below or above a cliff face.
- Within 20 m of or in a cave, rock shelter, or a cave mouth.

The first of these landscape features is relevant to the subject area. A first order tributary of the Georges River is approximately 180m to the south of the southern edge of the subject area on the southern side of the M5 Southwestern Motorway (**Figure 55**). The main channel of the Georges River is approximately 1.8km to the west and 1.6km to the south of the subject area.

Archaeological Context

Archaeologically, this region (part of the Cumberland Plain) has been extensively investigated, with research dating back to the 1940s (e.g. McCarthy, 1948). Much of our current knowledge of the region, however, comes from extensive survey and excavations undertaken through compliance-based archaeology associated with development, which began in the 1980s (e.g. Dallas, 1988; Haglund, 1980; 1984; Kohen, 1986, 1993; Smith, 1989) and continues to the present day (e.g. AHMS, 2010, 2012a, 2012b, 2012c 2015; Cultural Heritage Connections Pty Ltd, 2006; Navin Officer Heritage Consulting, 2014; and Steele and Dallas, 2001).

While local variation in the archaeological record is apparent, for the most part the distribution and type of archaeological material across the Bankstown region is well understood. In a recent compilation of several decades of previous research by White and McDonald (2010), it was concluded that the archaeological record in the western Cumberland Plain was almost entirely composed of varying concentrations of Aboriginal objects (isolated finds, background scatters and artefact scatters) all situated within 200m of water sources; and with more extensive/significant deposits all occurring within 100 m of major creeklines.

In terms of archaeological sensitive landforms, high densities of artefacts have been principally found on lower slopes, alluvial floodplains next to high order streams and on middle to upper ridges in the western Cumberland Plain. On more substantial river systems, such as the Nepean River, Parramatta River and Georges River, ridgelines and levee banks over-looking the river have also been shown to contain substantial, and often very old cultural material. Some of these high density sites show evidence of knapping (stone tool making) activities. However, low density artefact scatters have been found on the surface of all landforms including creek banks, creek terraces, flats, lower and upper slopes, elevated spurs, crests and ridge tops. These results are indicative of a 'background scatter' of occupation occurring across the region with sporadic areas of intensive or repeat usage.

Archaeological studies of particular interest to this assessment include work undertaken in the 1980s for the proposed No.5 Freeway (southwestern M5 Motorway, Haglund and Associates 1984), and more recently, work in proximity to the Georges River in Moorebank for the Moorebank Intermodal Terminal project (Navin Officer Heritage Consulting, 2014; AHMS, 2012a, 2012b, 2015) and Glenfield . These works are summarised below:

Archaeological Survey of Freeway No. 5, Section between King Georges Road, Beverly Hills, and Heathcote Road, Moorebank. Laila Haglund 1984.

A survey was conducted in July 1984 for a 12.7km section of the proposed path of the No 5 freeway (current M5 Southwestern Motorway) by Laila Haglund. Part of this survey covered an area adjacent to the southern boundary of the subject area. Two sites, one artefact scatter and one isolated find were located within the Greenwood Golf Course to the west of the subject area. The survey section from Henry Lawson Drive to the River

Road that traversed the southern edge of the subject area was described as a 'low-lying a damp stretch covered in grass and weeds' with most surface appearing disturbed and generally low visibility to the south of Milperra CAE (the subject area).

Aboriginal Cultural Heritage Assessment: SIMTA Moorebank Intermodal Terminal Facility. AHMS 2012a.

In late 2010, AHMS was commissioned by Hyder Consulting Pty Ltd for SIMTA to undertake an Aboriginal Heritage Impact Assessment of the SIMTA site for a Concept Approval under Transitional Part 3A of the *Environmental Planning and Assessment Act 1979*. The SIMTA Moorebank site is located approximately 7.5 kilometres to the south west of the subject area. The project included consultation with six Aboriginal stakeholder groups.

The assessment included an archaeological predictive model which was informed by a detailed background analysis of previous archaeological investigations in the region and information from the AHIMS database. A site survey was also undertaken in conjunction with the Aboriginal communities. The assessment identified that most of the SIMTA site and parts of the proposed rail corridor were heavily disturbed and/or previously developed areas, and the potential for preservation of archaeological materials was low. Ultimately, seven isolated Aboriginal objects and three areas of potential archaeological deposit (PAD) were identified. These areas included: a river terrace on the east side of the Georges River (PAD 1); the golf course south of Anzac Creek (PAD 2); and the southern-most part of the SIMTA site, and the disused rail corridor directly south of and adjacent to the SIMTA site (PAD 3). A strip of land along the western bank of Georges River (and outside the SIMTA Project boundary) was also identified for cultural values. Specifically, the report stated:

Area 1 is considered potentially culturally significant, as it is a wooded area adjacent to the western side of the Georges River, and Aboriginal cultural sites have been identified in a similar landform on the eastern side of the river. It may contain stone artefacts, which are culturally significant to the RAPs as evidence of the material culture of their ancestors.

This area identified as having cultural value is situated adjacent to the railway line on the western side of Georges River.

Indigenous Biodiversity Values Assessment: Sydney Intermodal Terminal, Moorebank, NSW. AHMS 2012b.

In late 2012, AHMS undertook consultation with the registered Aboriginal parties (RAP) in relation to cultural values associated with biodiversity within the SIMTA site. Consultation included documentation and letters to the RAPs outlining the known threatened flora and fauna within the SIMTA site. The work also included an ethnographic review of the literature to identify whether these species were documented as of value or use in the past.

Ultimately, the process identified two plant and four animal species as having been used in the past, specifically:

- *Persoonia nutans* (Nodding Geebung)
- *Grevillea parviflora* (Small-flowered Grevillea)
- *Miniopterus schreibersii oceanensis* (Eastern Bent-wing Bat)
- *Myotis macropus* (Southern Myotis)
- *Mormopterus norfolkensis* (Eastern Free-tail Bat)
- *Pteropus poliocephalus* (Grey-headed Flying Fox)

No specific information on any of these species was obtained for the SIMTA site, but more general evidence indicated that they were all utilised by Aboriginal people in the past for food and other resources. The report concluded: Aboriginal community viewpoints typically embrace conservation of endemic flora and fauna as a general principle and as related to a common sense of custodianship – being the contemporary interpretation of what was a traditional social obligation in relation to the land.

All native species may therefore be considered to have a level of significance attached to them. In this sense, any absences of specific viewpoints on specific vulnerable, threatened or endangered species should be seen to fall back upon this default position.

Aboriginal Heritage Study for Proposed Rezoning of Riverlands Golf Course, Milperra NSW. AHMS 2012c.

AHMS was commissioned by Bankstown City Council to undertake an Aboriginal Heritage study for proposed rezoning of the Riverlands Golf Course, Milperra NSW. The golf course is located approximately one and a half kilometre to the west of the subject area along the Georges River.

This study was based primarily on existing information and a surface site inspection to provide a map of the potential for Aboriginal cultural heritage to be present. The study found that elevated areas in the southeast of the site (and encompassing much of the golf course) had the potential to contain Aboriginal cultural heritage.

Aboriginal Heritage Preliminary Assessment Glenfield Waste Disposal. AHMS 2014

In mid-2012, AHMS was commissioned by Environmental Property Services Pty Ltd for L.A. Kennett Enterprises Pty Ltd to undertake an Aboriginal Heritage Assessment of the southern portion of the Glenfield Waste Disposal site, Glenfield, NSW. The waste disposal site is situated on the western side of Georges River, approximately eight kilometres to the southwest of the current subject area.

Consultation was undertaken with Aboriginal organisations as part of the assessment. Aboriginal representatives participated in two sites visits which were carried in May and July 2012.

The results of the assessment and site surveys highlighted that most of the subject area was heavily disturbed and/or previously developed, and the potential for preservation of archaeological materials was low. However, two areas appeared to be less disturbed: an area of bushland in the western half of the subject area; and an alluvial terrace adjacent to a minor tributary of the Georges River, in the south-eastern corner of the subject area.

Four archaeological sites were identified within the subject area:

- Glenfield 1 (#45-5-3531) – an isolated find located on a track currently in use in association with the ongoing railway expansion. It is considered likely that this site has been archaeologically mitigated and/or destroyed through construction of the Southern Freight Line.
- GWD 3 - an isolated artefact.
- GWD 4 - an isolated artefact.
- GWD 2 - a Potential Archaeological Deposit (PAD) located on a large alluvial terrace on the bank of the Georges River, encompassing a minor tributary.

Two further sites, both scarred trees, were initially identified, but following further investigation and advice from an arborist, were subsequently rejected as of Aboriginal origin.

The assessment recommended that prior to any impact from proposed development; further assessment and characterisation should be undertaken of the identified Aboriginal objects/sites. Responses from the Aboriginal community supported the findings and recommendations of the report, but provided no specific cultural values to the Aboriginal objects/sites identified through the assessment. However, the area was considered to have been significant to Aboriginal people in the past given the proximity of Georges River –an important resource – and recommendations on signage outlining the Aboriginal history of the area were proposed.

Moorebank Intermodal Terminal - Navin Officer Heritage Consultants 2014.

In 2014, an Aboriginal heritage assessment was undertaken of the proposed Moorebank Intermodal Terminal located to the west of Moorebank Avenue. This site encompasses the MIC site, and parts of the Concept Plan Rail Corridor and Stage 1 Rail link.

Their assessment consisted of several field surveys and excavations across the site between 2010 and 2014. Initial field investigations identified five artefact scatters (MA1-MA5 inclusive), three scarred trees (MA6-MA8 inclusive), three PADs (MAPAD1, PAD 1 and PAD 2), and three archaeological sensitive landforms. PADs 1 and 2 referred here

are the same as those documented in AHMS (2012a) (Section 5.2). A further PAD (MAPAD 2) was identified in later field investigations.

Subsequent work consisted of test excavations in 2012 and 2013. The 2012 excavations consisted of 59 test pits excavated across the site, and recovered 264 Aboriginal objects (from 26 test pits). Subsequent excavations undertook a further 45 manually dug test pits and eight mechanically dug trenches, all focussed within MAPAD 2 - a low-lying floodplain running along the west side of Georges River. These excavations revealed three discrete areas of cultural deposit, and were labelled MA11-13 inclusive. While reference is made to MA 10, there is no description as to what or where this site was found. Archaeological materials were generally found in low densities ($<5/m^2$) with the highest densities occurring in MA5 at $124/m^2$; MAPAD1 also contained some test pits with over 20 artefacts. Artefacts were dominated by silcrete and quartz, and were likely of late Holocene age.

Geomorphological assessment of the works identified the deep nature of many of the deposits. The soil profile was generally composed of a deep sandy soil overlying "coffee rock" or clayey subsoils. The majority of the test pits revealed some evidence of disturbance and/or truncation, and it was considered that little of the surface reflected a pre-European landscape. However, no soil analysis to determine the origin of the soil profile, nor dating, appeared to have been undertaken to further characterise the deposits or associated cultural materials.

Ultimately, the investigations identified 13 discrete archaeological sites including MAPAD2 (which was divided into two different units and contained archaeological sites MA11, MA12 and MA13). These sites were assessed under Burra Charter and Commonwealth Heritage listings, and identified three sites as of high significance (MA6, MA7 and MA8), two of moderate-high (MA5 and 9), and the remainder as low (MA1-5 inclusive and MA11-13 inclusive). MAPAD2 was considered to have potentially high significance, but was inadequately assessed due to the base of the deposits ($>1.2m$) not being reached. The assessment also identified the banks of Georges River as of archaeological importance.

Navin Officer made a number of recommendations, including further assessment of the scarred trees, sub-surface investigation of parts of the Georges River corridor, MRSA 2 and MAPAD2, and salvage excavation of MA5 and MA9.

SIMTA Intermodal Terminal – Stage1 Aboriginal Heritage Impact Assessment AHMS 2015.

Following the earlier assessment (referenced above), AHMS carried out a series of test excavations along the Stage 1 rail corridor, focussing on the eastern bank of Georges River and either side of Anzac Creek (PADs 2 and 3).

Overall, 13 test pits ($1m^2$) were excavated at 20m spacing across these areas. The excavations revealed a deep (50-90cm) coarse silt soil unit over-lying coffee rock of clay subsoils, and frequently impacted by introduced fill on the surface. The soil was characteristic of deposition by flooding of Georges River in the past. 28 Aboriginal objects

were recovered from the test pits associated with Georges River, and suggested a low-level of past activity on the maximal upper slope and ridge in this area. Importantly, the assemblage was considered to reflect two different periods of activity in the past. The upper assemblage was characteristic of occupation in the last few thousand years, and this was corroborated by an OSL age of 3.4ka. The lower assemblage was found in association with an age of 18ka, and represents some of the earliest evidence of activity on the Georges River. The sand sheet itself began forming at ~60ka.

The works identified that PAD 3 contained no cultural materials and could be de-listed. PAD 2 was also re-considered and limited to an area encompassing the elevated areas immediately above Georges River. This area was re-labelled as MA14 to reflect its new identification as an artefact scatter and deposits (and to ensure compatibility with other sites labelled similarly nearby). MA14 was considered to have high research potential, and was assessed as being of local significance, with potential to be of State significance. Further archaeological salvage work was recommended for MA14 during later stages of the project.

AHIMS Database

The Office of Environment and Heritage maintains the Aboriginal Heritage Information Management System (AHIMS), a database of known and registered Aboriginal sites in NSW. A search of AHIMS was carried on 31 August 2017 (Client Service ID: 298987) with a 10km buffer, centred on the subject area. The full search results are listed in **Appendix 2** and shown in **Figure 6**.

There are no previously documented sites within the subject area. However, the Georges River, several kilometres to the south and west of the study area, has formed part of numerous studies. Sites along Georges River vary in density, with some of the more significant finds in the region located in close proximity in sandy deposits to the river. Predominantly, sites along Georges River are comprised of artefact scatters and modified trees (either scarred or carved).

Based on the AHIMS data and regional information, should any sites occur within the subject area, it is likely that these will be isolated artefacts; low density artefact scatters, or modified trees. While historical flooding along the Georges River reduces the potential for any Aboriginal objects to survive in flood prone zones, elevated areas are considered to have greater Aboriginal archaeological potential. This supports the regional model of the Cumberland Plain, where Aboriginal sites occur within 200m of major watercourses.

Table 1. AHIMS search results for the 10km buffer, centred on the subject area.

Site Features	Number of Sites Recorded	% of Total
Art (Pigment or Engraved)	16	16.84
Art (Pigment or Engraved), Artefact	3	3.16
Art (Pigment or Engraved), Artefact, Grinding Groove	3	3.16

Art (Pigment or Engraved), Artefact, Shell	5	5.26
Art (Pigment or Engraved), Grinding Groove, Shell	1	1.05
Artefact	24	25.26
Artefact, Potential Archaeological Deposit (PAD)	1	1.05
Artefact, Shell	14	14.74
Burial	1	1.05
Grinding Groove	1	1.05
Modified Tree (Carved or Scarred)	22	23.16
Potential Archaeological Deposit (PAD)	3	3.16
Shell	1	1.05
Total	95	100.00

Site Inspection

A site inspection was undertaken on 8 September 2017 by Extent Heritage archaeologist Dr Tessa Bryant and Gandangara Local Aboriginal Land Council Cultural and Heritage Officer Brad Maybury. The subject area was inspected for the presence of Aboriginal sites, places and objects, or the potential for them to occur. Prior to inspection, it was identified that the subject area contained a number of university buildings, eight tarmac parking areas, a cricket oval and other sporting fields. In the north-eastern corner of the subject area there is an area of vegetation which appears to have been present since the 1940s (**Figure 42** and **Figure 3**).

The site inspection confirmed that the majority of the subject area has been heavily landscaped and developed. An early aerial of the subject area shows vegetation clearance and the use of the land for market gardens (**Figure 3**). Western Sydney University's history of the Milperra Campus, comments that the area was extensively levelled by gardeners, removing previous foundations and garden beds. The southern edge of the subject area shows heavy landscaping with car parking, and sports facilities (**Plate 1** to **Plate 9**). Ground surface visibility was very low; however the limited areas of surface exposure present contained no stone material (**Plate 3**, **Plate 5** and **Plate 9**). The southwestern edge of the subject area was similarly highly landscaped with a large number of buildings present (**Plate 10** - **Plate 12**). Limited areas of ground surface exposure contained sandy soil with no evidence of cultural material (**Plate 10**). The central and northern parts of the subject area were also heavily landscaped with no ground surface exposure (**Plate 13** - **Plate 15**).

The north eastern corner of the subject area is the least developed part of the site, with an unmodified bushland area (**Plate 21**). Areas of exposure near the bushland area (**Plate 16**, **Plate 18**, **Plate 20** and **Plate 21**) show clay subsoils with some ironstone pebbles but no artefactual material present. Within the bushland area the ground surface visibility was generally low (**Plate 19**). There was no evidence of cultural modification to any of the trees within the bushland area and the trees appeared typically of young age.

Overall, no Aboriginal objects or culturally modified trees were observed during the inspection. Exposures across the subject area, particularly the large exposures in the northern subject area revealed that in general the soil profile had been truncated, and over-lying topsoils (and any associated cultural material) were frequently absent.

Previously recorded sites within the region tend to be located in close proximity to the Georges River, located at least 1.5km from the subject area. The heavy landscaping and previous development of the campus indicate that for the majority of the subject area, such activities would have removed Aboriginal objects and deposits from these areas (if they had been present). The north eastern corner while less disturbed, did not contain any features that would have suggested it as a favoured location for past Aboriginal occupation.

Conclusions and Recommendations

The Bankstown area has been extensively investigated over the last 30 years, with a plethora of studies occurring as a result of urban development, re-zonings and land releases. As such, there are robust archaeological models for the region, which demonstrate that cultural deposits are primarily found within 200m of large water bodies, and with more significant sites within 100m, and on elevated terraces or rises. Recent work at Moorebank reinforce this model, with significant cultural deposits found on a ridgeline overlooking Georges River, but absent in areas away from the water course and/or in associated modern floodplains. The southern boundary of the subject area is situated within 200m of a first order tributary, but some distance from any major water tributaries.

A site inspection indicates that the majority of the subject area has been heavily disturbed, and given the shallow residual nature of the soil landscape would likely have reduced/removed the survivability of Aboriginal objects within the subject area, if present. However, the bushland area in the north east corner of the subject area appears less disturbed. This area does not contain features that indicate it would have been a favoured location for past Aboriginal occupation but the potential for cultural materials cannot be discounted. As such, any works that would result in ground disturbance within this area would require further assessment prior to being initiated. In current plans this is a conservation area that will not be redeveloped.

Taking the above conclusions into consideration, the following recommendations are made with regard to Aboriginal cultural heritage (see **Table 2**):

- Development work for the majority of the subject area may proceed with caution. It is considered that there is a low risk of Aboriginal objects being present within the subject area (excluding the bush land conservation area in the north east). However, the nature of disturbance does not preclude the potential for isolated finds, which is a common site type across the region, even in disturbed contexts. In the event of unexpected Aboriginal objects, sites or places (or potential Aboriginal objects, site or places) are discovered during construction, all works in the vicinity should cease and APP Corporation Pty Ltd should determine the subsequent course of action in consultation with a heritage professional and/or the Office of Environment and Heritage (OEH) as appropriate. A process of consultation with Aboriginal community representatives would also be required.
- If works that will disturb the ground surface are proposed within the bushland conservation area as shown in **Figure 43**, further assessment of this area would be

required. It is recommended that an Aboriginal Cultural Heritage Assessment (ACHA) in accordance with the Office of Environment and Heritage's (OEH) Code of Practise for the Archaeological Investigation of Aboriginal Objects in NSW 2010 is undertaken prior to development within this area. The ACHA would allow for on-site investigation of the soil profile, determine whether cultural deposits are present, assess their significance, and provide the necessary documentation for an Aboriginal Heritage Impact Permit (AHIP) in the event that harm to Aboriginal objects is determined. We highlight that the development of an ACHA usually requires 3-6 months due to mandatory timeframes outlined in OEH guidelines. The subsequent AHIP process if required would result in additional timeframes of 2-4 months, usually after the project approval.

- This document may be summarised within and/or appended to a Development Application, Statement of Environmental Effects (SEE) or Review of Environment Factors (REF). If any Aboriginal objects are later identified within the proposed activity area, this report cannot however be used to support an application for an Aboriginal Heritage Impact Permit (AHIP). Such an application would require more detailed investigation involving a formal process of Aboriginal community consultation and the preparation of an Aboriginal Cultural Heritage Assessment Report (ACHA).
- If human remains are discovered, *the Coroners Act 2009* requires that all works should cease and the NSW Police and the NSW Coroner's Office should be contacted. Traditional or contemporary (post-contact) Aboriginal burials which occur outside of designated cemeteries are protected under the *National Parks and Wildlife Act 1974* and should not be disturbed. Interpreting the age and nature of skeletal remains is a specialist field and an appropriately skilled archaeologist or physical anthropologist should therefore be contacted to inspect the find and recommend an appropriate course of action. Should the remains prove to be Aboriginal in origin, notification of OEH and the Local Aboriginal Land Council will be required. Notification should also be made to the Commonwealth Minister for the Environment, under the provisions of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*.

Table 2. Site specific responses to OEH due diligence questions.

1	Will the activity disturb the ground surface or any culturally modified trees?	
	The proposed development would include redevelopment of the subject area, and involve ground disturbance. The less disturbed area containing bushland in the northeast of the subject area are proposed for retention as a conservation area.	Proceed to question 2.
2a	Are there any relevant confirmed site records or other associated landscape feature information on AHIMS?	
	No sites are recorded in or within 200m of the subject area.	Proceed to question 2b.
2b	Are there any other sources of information of which a person is already aware?	
	No.	Proceed to question 2c.
2c	Are there any landscape features that are likely to indicate presence of Aboriginal objects?	
	The southern edge of the subject area is within 200m (180m) of a first order tributary of the Georges River, which is one of the landscape features specified by OEH as likely to indicate the presence of Aboriginal objects. This area and the majority of the subject area have been subject to previous ground disturbance through land clearance, market gardening and landscaping. This ground disturbance is likely to have resulted in the heavy disturbance and/or removal of cultural deposits if present.	Proceed to question 3.
3	Can harm to Aboriginal objects listed on AHIMS or identified by other sources of information and/or can the carrying out of the activity at the relevant landscape features be avoided?	
	No Aboriginal objects are listed on AHIMS or have been identified within the subject area. Areas within 200m of water have been previously disturbed. The less disturbed bushland area within the subject area will be set aside as a conservation area and will not be harmed.	Proceed to question 4.
4	Does a desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely?	
	Desktop assessment indicates that the subject area had some potential to contain Aboriginal objects with the southern edge of the subject area located less than 200m from a water source. Site inspection confirmed that the majority of the subject area has been heavily impacted by historical clearing and development. It is considered unlikely for significant intact subsurface deposits of Aboriginal objects to be present within the subject area, furthermore the soils in this area are generally relatively shallow, so the previous disturbance has a high likelihood of removing any Aboriginal objects were they present.	Further assessment not required; works may proceed with caution.

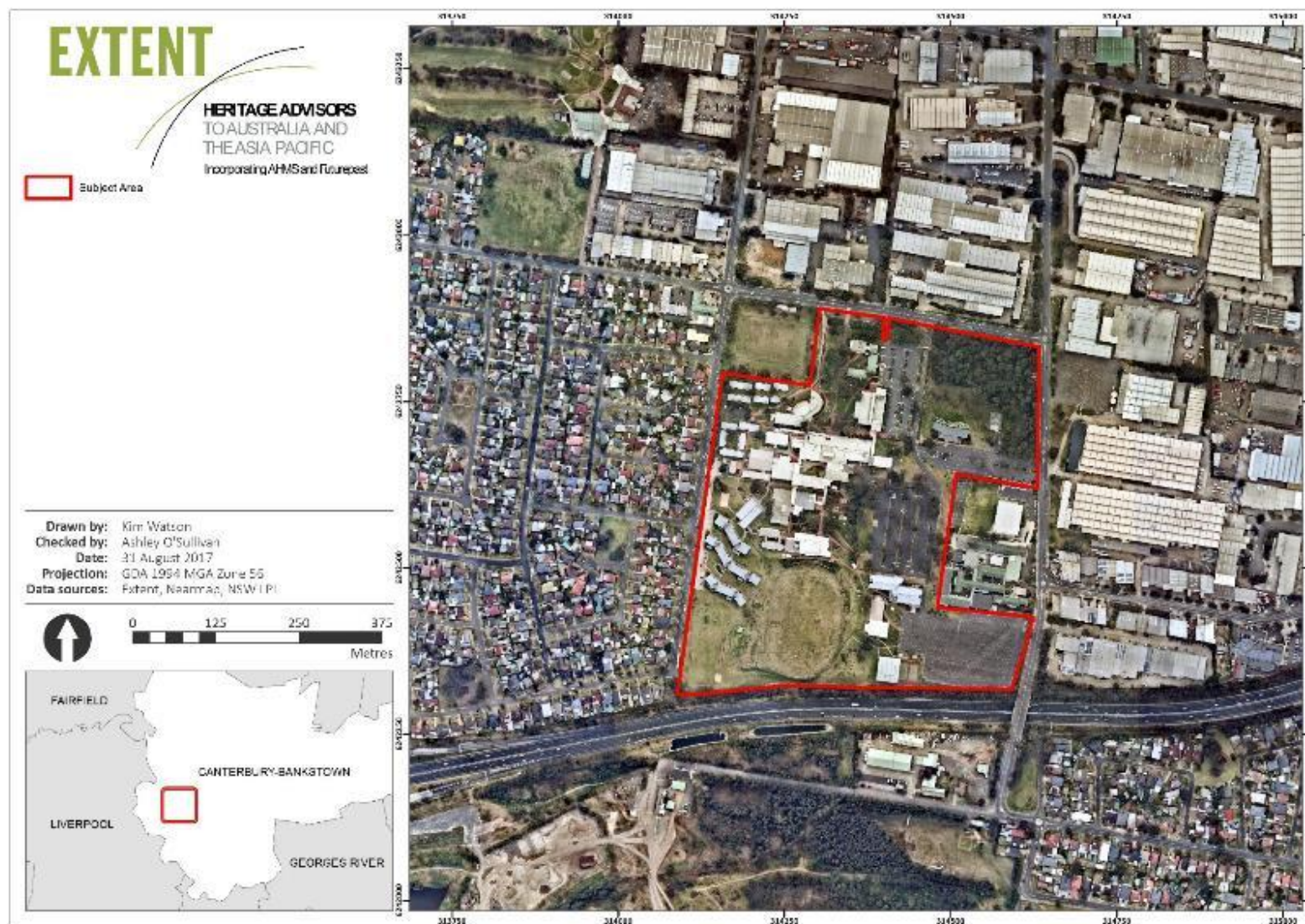


Figure 42. The subject area.

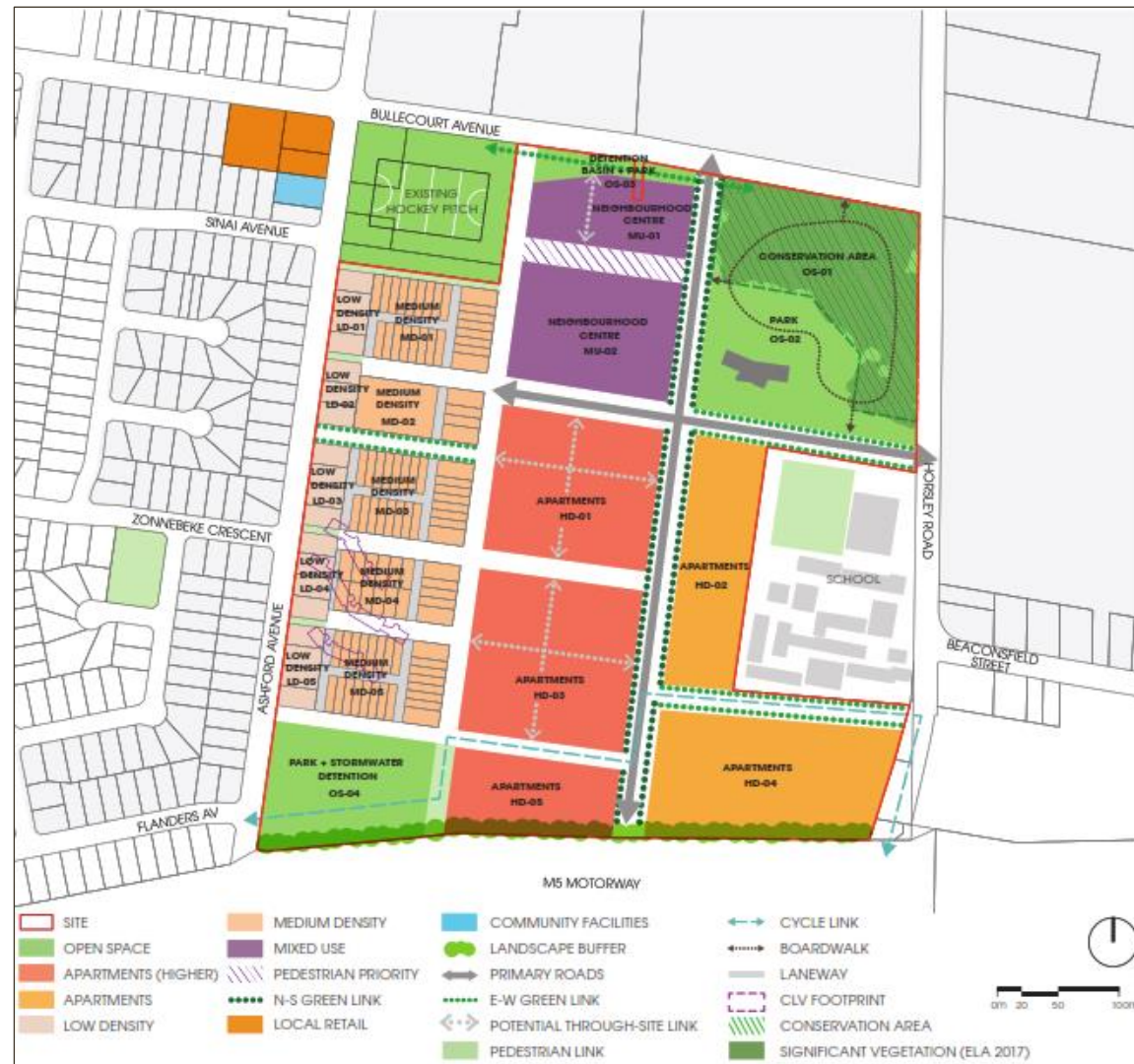


Figure 43. Development concept structures plan option 2C. Note that this plan was WSU's indicative proposal in 2017 in which Mirvac had no involvement or input. (Source: APP September 2017).



Figure 3. The subject area in 1943 (Source: Six Maps).

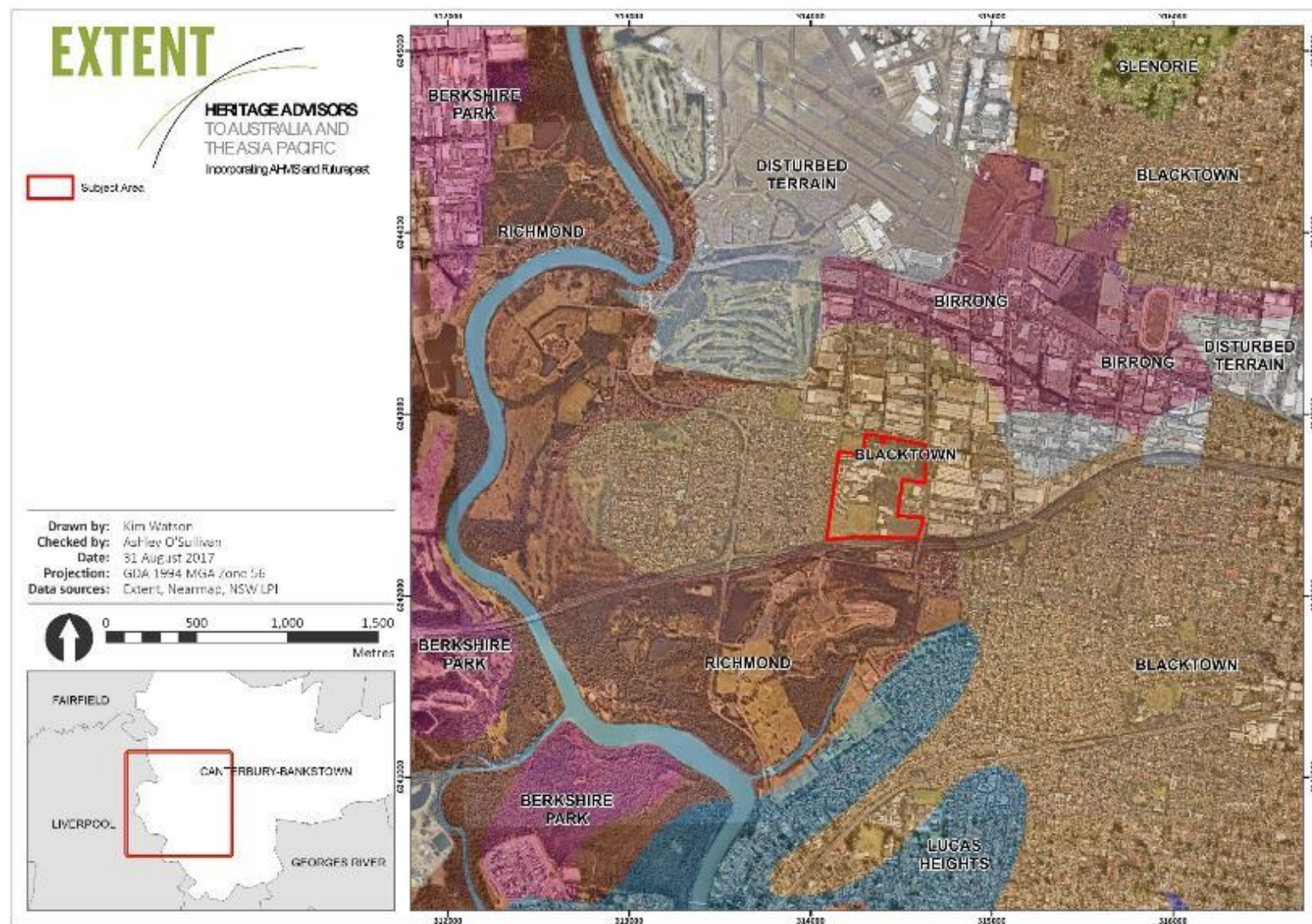


Figure 4. Soil landscapes and their relationship to the subject area.

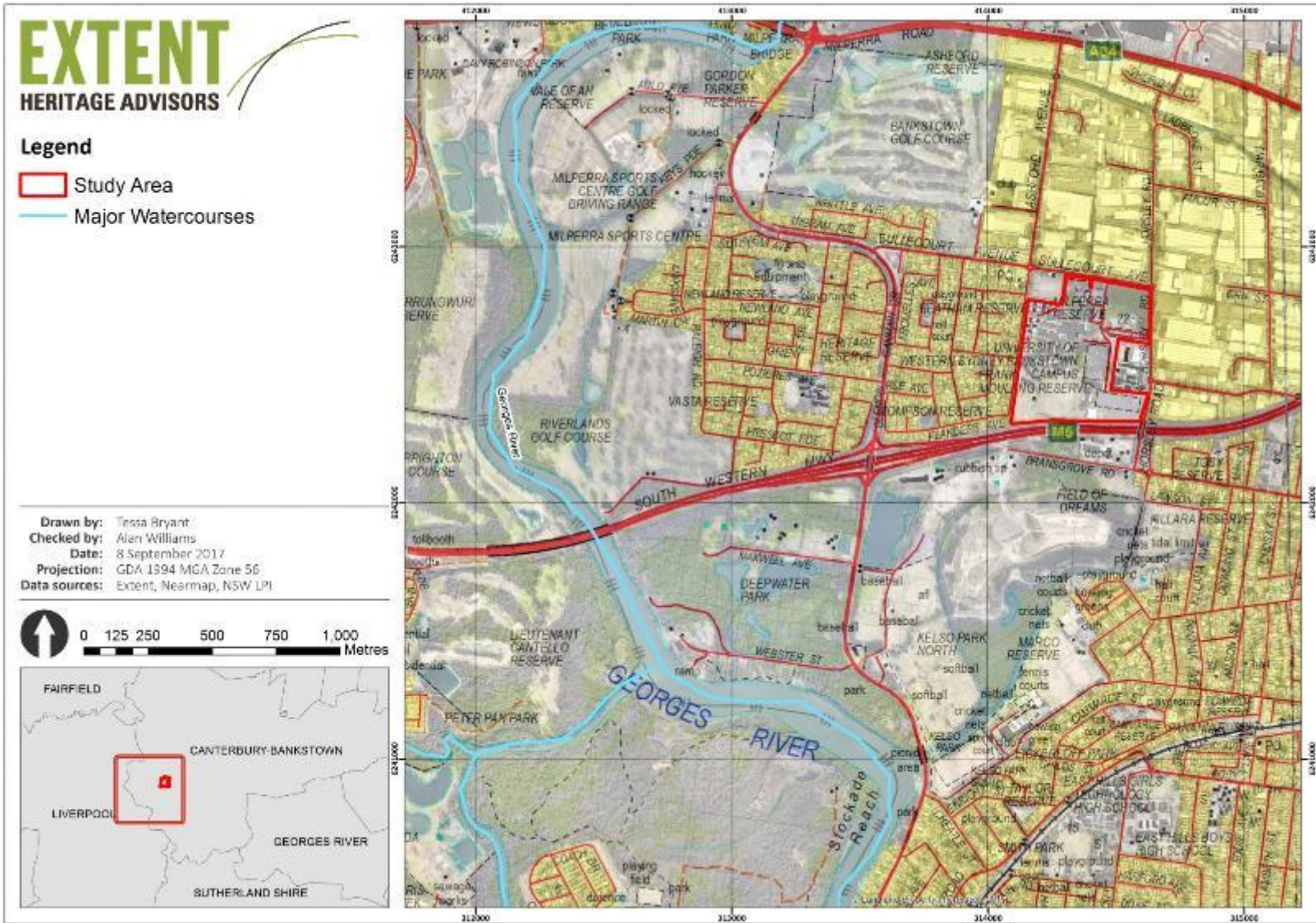


Figure 5. Waterways within vicinity of the subject area. The Georges River flows to the south and west of the subject area.





Plate 1. View east along southern edge of P4 parking showing modified slope. Fence is the edge of the subject area.



Plate 2. View west along southern boundary of subject area.



Plate 3. Patch of ground surface exposure near southern boundary.



Plate 4. Steep slope adjacent to southern edge of cricket oval (white picket fence).



Plate 5. Ground exposure along base of steep slope. Sandy soil visible in vehicle track.



Plate 6. Cricket oval showing levelling of large area of ground surface in southern subject area.



Plate 7. Sports fields in levelled area in southern subject area.



Plate 8. Storage containers in southern subject area with evidence of subsurface services.



Plate 9. Surface exposure in southern subject area.



Plate 10. Areas of exposure near student residences in the southwest. Exposure shows patches of sandy soil likely introduced and clay.



Plate 11. Landscaping in south west of the subject area.



Plate 12. Beach Volleyball court and carpark in the central west of the subject area.



Plate 13. Buildings and landscaping in central subject area.



Heavily landscaped central subject area.



Plate 15. View north towards hockey club (outside subject area).



Plate 16. Large exposure near northern boundary showing ironstone pebbles.



Plate 17. Landscaping adjacent to bushland area and childcare centre.



Plate 18. Exposure to clay near bushland area.



Plate 19. Bushland area in north-eastern subject area. Almost complete ground cover by leaf litter.



Plate 20. Patches of ground surface exposure in bushland area. No stone materials visible.



Plate 21. Patchy ground surface exposure looking west towards childcare centre.

References

- AHMS, 2010. Water Related Services for Northwest and Southwest Growth Centres. Aboriginal cultural heritage Assessment – Desktop Review. Unpublished report to Sydney Water Corporation.
- AHMS, 2012a. Aboriginal Cultural Heritage Assessment: SIMTA Moorebank Intermodal Terminal Facility. Unpublished Report to Hyder Consulting Pty Ltd.
- AHMS, 2012b. Indigenous Biodiversity Values Assessment: Sydney Intermodal Terminal Moorebank, NSW. Unpublished Report to Hyder Consulting Pty Ltd.
- AHMS, 2012c. Aboriginal Heritage Study for Proposed Rezoning of Riverlands Golf Course, Milperra NSW. Unpublished Report to Bankstown Council.
- AHMS, 2014. Aboriginal Cultural Heritage Assessment – Glenfield Waste Disposal, Glenfield, NSW. Unpublished Report to Environmental Property Services Pty Ltd.
- AHMS, 2015. SIMTA Intermodal Terminal Moorebank, NSW – Stage 1 Aboriginal Heritage Impact Assessment. Unpublished Report to Hyder Consulting Pty Ltd.
- Cultural Heritage Connections (Vanessa Hardy), 2006. Southern Sydney Freight Line Aboriginal Cultural Heritage Assessment. Unpublished report to Parsons Brinckerhoff.
- Dallas, M. 1988. Archaeological survey of the Department of Housing Project 12257 Kiawa Estate, Casula, NSW. Unpublished Report to the Department of Housing.
- DECCW, 2010. Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Department of Environment, Climate Change and Water, Sydney.
- Haglund, L., 1980. Report on an Archaeological Survey in the City of Blacktown. Prepared for NSW National Parks and Wildlife Service.
- Haglund, L. 1984. Archaeological survey of Freeway No.5 – Section between King Georges Road, Beverly Hills, and Heathcote Road, Moorebank. . Prepared for Department of Main Roads, NSW.
- Kohen, J. 1986. Prehistoric Settlement in the Western Cumberland Plain: Resources, Environment and Technology. Unpublished PhD Thesis, School of Earth Sciences, Macquarie University, Sydney.
- Kohen, J. 1993. The Darug and Their Neighbours: The Traditional Owners of the Sydney Region. Sydney: Darug Link in association with Blacktown & District Historical Society.
- McCarthy, F. 1948. The Lapstone Creek Excavation: Two Culture Periods Revealed in Eastern New South Wales. Records of the Australian Museum: 22: 1-34.
- Navin Officer Heritage Consultants, 2014. Moorebank Intermodal Terminal, Aboriginal Cultural Heritage Assessment. Unpublished Report for Parsons Brinckerhoff.
- OEH. 2017. 'eSPADE', NSW Soil and land information [electronic database]. Retrieved 31/08/2017, from <http://www.environment.nsw.gov.au/eSpadeWebApp/>.
- Smith, L. J. 1989. Archaeological site survey and analyses of sites on the northern Cumberland Plain. Unpublished Report to NSW National Parks and Wildlife Service
- Steele, D and Dallas, M., 2001. Aboriginal Archaeological Survey of Department of Defence Lands at Moorebank. Unpublished report to Egis Consulting Australia.
- Western Sydney University, n.d.. 'Bankstown' 25 year history [website]. Retrieved 8/09/17, from: https://www.westernsydney.edu.au/uws25/25_year_history/places/bankstown.
- White, E. and McDonald J 2010. Lithic artefact distribution in the Rouse Hill Development Area, Cumberland Plain, New South Wales. Australian Archaeology: 70: 29-38.

Appendix 1: The Assessment Process

Aboriginal Cultural Heritage Assessment

An ACHA determines whether it is relevant in a particular instance to seek an Aboriginal Heritage Impact Permit (AHIP) and the report detailing this assessment must be submitted with the relevant application to seek and obtain an AHIP. It explores the archaeological and cultural values of an area through detailed background review, liaison with Aboriginal stakeholders, and on-site analysis (including surface survey and subsurface investigation). It determines the potential impact of a proposed activity on the Aboriginal heritage values of a place and develops impact mitigation options. ACHA reports are heavily prescribed with regards to format and content, and the ACHA research, assessment, consultation and documentation usually take in excess of 3-6 months to complete.

Two of the most significant tasks of an ACHA are: 1) to undertake consultation with the Aboriginal community in accordance with OEH guidelines; and 2) to allow archaeological test excavations to be undertaken of the site to identify whether any subsurface material culture is present.

Aboriginal Consultation

Aboriginal consultation is outlined in Section 80C of the *National Parks and Wildlife Regulations 2010* and the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW 2010b). Consultation is likely to include Aboriginal participation in archaeological survey and excavation work and involvement in identifying cultural significance, discussing recommendations and approval of the ACHA.

The consultation process is a six stage process that usually requires 12-16 weeks to complete. Stages include identifying the Aboriginal stakeholders with an interest in the area, liaising with them over the assessment process and recommendations, and involving them in on-site works. The process requires public advertisement of the project.

Test Excavations

Test excavations usually consist of a team of archaeologists and Aboriginal stakeholders undertaking a series of small test pits across areas of proposed impact to identify whether a natural soil profile is present and/or whether it contains Aboriginal objects (usually stone tools). These works can be integrated into the ACHA process, without approval from a Consent Authority, as long as they comply with OEH guidelines. These require that excavations are undertaken by hand in a grid-like pattern, and impact less than 0.5% of the potential archaeological deposit or site. Test pits are required to be dug in 0.25m² squares, but can ultimately be up to 3m² in size.

Aboriginal Heritage Impact Permits

Where Aboriginal objects are identified within the subject area, and are going to be impacted by the proposed activity, an AHIP is required to be obtained from OEH. The ACHA process usually identifies whether this will be the case (many ACHAs find that an AHIP is not required). Once complete, the ACHA and other documentation is forwarded to the OEH for its consideration to

issue an AHIP. OEH current policy means that a development consent or approval (DA) is required prior to their consideration or issue of an AHIP. Following the receipt of an AHIP, the project may proceed, however there may be a need for additional impact mitigation (often in the form of salvage excavations and/or archaeological monitoring) before construction works can commence. It is highlighted that OEH requires a minimum of two months to process the AHIP application after it is received. More often, OEH require modifications to the AHIP, and a 3-6 month process may be more realistic.

Mitigation Measures

Depending on the archaeological resource, nature of impact, views of Aboriginal stakeholders and OEH, following receipt of an AHIP further mitigation measures may be required. The nature of these measures can be diverse, but usually include some form of salvage excavations and/or interpretation.

Salvage excavations are similar to test excavations, but focus on specific areas of previously identified archaeological material, and usually consist of careful, fine resolution recovery. It is often undertaken in a handful of locations, and can occur in tandem with elements of the development (i.e. as long as the specific area of salvage is untouched the remainder of the development may proceed). Salvage excavations rarely delay the development (depending on their location), but can be costly, since they can require long timeframes to complete. Given what appears to be a shallow soil profile on the low hills and spur in the central southern part of the subject area, it is considered unlikely that the archaeological resource would require salvage excavations.

Interpretation of the archaeological resource may include signage, displays and other information on the Aboriginal heritage recovered from the site or nearby. This task can usually be undertaken independently of the development, and rarely delays on-site works.