

Alex Avenue Public School, Schofields: Statement of Heritage Impact and Historical Archaeological Assessment

FINAL REPORT Prepared for School Infrastructure NSW 12 March 2019



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Glossary

с.	Circa
CBD	Central Business District
CHL	Commonwealth Heritage List
DEE	Department of Environment and Energy
DP	Deposited Plan
EP&A Act	Environmental Planning and Assessment Act 1979
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
Heritage Act	Heritage Act 1977
LEP	Local Environmental Plan
NHL	National Heritage List
NSW	New South Wales
OEH	NSW Office of Environment and Heritage
SoHI	Statement of Heritage Impact
SHR	State Heritage Register
SHI	State Heritage Inventory
study area	The area of impact for the proposed works



Summary

Biosis Pty Ltd was commissioned to undertake a statement of heritage impact (SoHI) and historical archaeological assessment of an area of land proposed for the development of the Alex Avenue Public School on a greenfield site on the corner of Farmland Drive and future realignment of Pelican Road ,Schofields (study area). The study area is located approximately 7.8 kilometres north-north-west of Blacktown and approximately 34.5 kilometres north-west of the Sydney central business district (CBD).

The proposed development will be assessed as a State Significant Development under Section 89(c) of the EP&A Act and Schedule 1 of the State Environmental Planning Policy (SEPP) (State and Regional Development) 2011 (SSD 9368). In accordance with requirement 9 of the Secretary's Environmental Assessment Requirements (SEARs) issued for this development (22 June 2018); an assessment of historical heritage was required in order to assess any impacts to potential historical heritage and archaeological items within the study area. These SEARs were reissued on the 2 October 2018 and resulted in the removal of the historical heritage requirements.

The historical research undertaken for this report indicates that the study area has been largely used for farming and animal management activities. The study area formed part of the Pye family farm for over a century from 1831, and likely continued to be used for agricultural or grazing purposes, as well as horse training, during the 20th century.

This assessment has identified that there may be archaeological material present within the study area related to the historical use of the land for pastoral and agricultural purposes, such as paddock and stockyard fencing, informal farm outbuildings and historical ploughing. However, these archaeological materials have been assessed as not holding heritage significance. The impacts to the study area for the proposed works associated with the SSD application are considered acceptable, as there are no items of heritage significance within the study area that will be impacted by these activities, provided that an unexpected finds policy is implemented to identify and record any archaeological material that may be encountered during the proposed works.

These recommendations have been formulated to respond to client requirements and the significance of the site. They are guided by the ICOMOS *Burra Charter* with the aim of doing as much as necessary to care for the place and make it useable and as little as possible to retain its cultural significance.¹

Recommendation 1 No further assessment required

This assessment has identified no items of heritage significance or archaeological potential within the study area, and no negative heritage impacts to surrounding heritage items. As such, no further assessment is required prior to the approval of the SSD application. Prior to any ground disturbance occurring within the study area, an unexpected finds procedure should be implemented as outlined in Recommendation 2.



Recommendation 2 Development of an Unexpected Finds Procedure

Relics are historical archaeological resources of local or State significance and are protected in NSW under the *Heritage Act 1977*. Relics cannot be disturbed except with a permit or exception/exemption notification. Should unanticipated relics be discovered during the course of the project, work in the vicinity must cease and an archaeologist contacted to make a preliminary assessment of the find. The Heritage Council will require notification if the find is assessed as a relic.



1 Introduction

1.1 Project background

This historical heritage assessment has been prepared by Biosis on behalf of the Schools Infrastructure NSW (the Applicant). It accompanies an Environmental Impact Statement (EIS) in support of State Significant Development Application (SSD 18_9368) for the new Alex Avenue Public School at the corner of Farmland Drive and future realignment of Pelican Road in Schofields (the study area) (Figure 1 and Figure 2). The study area is legally described as proposed Lots 1 and 2, being part of existing Lot 4 in DP1208329 and Lot 121 in DP1203646.

The new school will cater for approximately 1,000 primary school students and 70 full-time staff upon completion. The proposal seeks consent for:

- Construction of a 2-storey library, administration and staff building (Block A) comprising:
 - school administrative spaces including reception
 - library with reading nooks, makers space and research pods
 - staff rooms and offices
 - special programs rooms
 - amenities
 - canteen
 - interview rooms
 - presentation spaces.
- Construction of four 2-storey classroom buildings (Block B) containing 40 home bases comprising:
 - collaborative learning spaces
 - learning studios
 - covered outdoor learning spaces
 - practical activity areas
 - amenities.
- Construction of a single storey assembly hall (Block C) with a performance stage and integrated covered outdoor learning area (COLA). The assembly hall will have OOSH facilities, store room areas and amenities.
- Associated site landscaping and open space including associated fences throughout and games courts.
- Pedestrian access points along both Farmland Drive and the future Pelican Road.
- Substation on the north-east corner of the site.
- School signage to the front entrance.



All proposed school buildings will be connected by a covered walkway providing integrated covered outdoor learning areas (COLAs). School staff will use the Council car park for the adjacent sports fields pursuant to a Joint Use agreement. The proposed School pick up and drop off zone will also be contained within the future shared car park and will be accessed via Farmland Drive.

The Statement of Heritage Impact and Historical Archaeological Assessment was_required by the Secretary's Environmental Assessment Requirements (SEARs) for SSD 18_9368 issued on 22 June 2018, however these conditions have since been removed from the reissued SEARS provided on 2 October 2018 and 30 January 2019. This table identifies the SEARs and relevant reference within this report.

SEARs Item	Report Reference
The EIS must include a Heritage Impact Statement (HIS), prepared by a suitably qualified heritage consultant in accordance with the guidelines in the NSW Heritage Manual. The HIS should identify any State and local heritage items and heritage conservation areas with the SSD site and in the vicinity and provide an assessment of heritage impacts. Where impacts are identified, the HIS should outline the proposed mitigation measures.	Section 6
The EIS must include a Heritage Archaeological Assessment (HAA), prepared by a suitably qualified historical archaeologist. The HAA should identify what relics, if any, are likely to be present within the SSD site or in the vicinity, assess their significance and consider the impacts from the proposal on this potential resource. Where harm is likely to occur, it is recommended that the significance of the relics be considered in determining an appropriate mitigation strategy. If harm cannot be avoided in whole or part, an appropriate Research Design and Excavation Methodology should also be prepared to guide any proposed excavations.	Section 4

Table 1SEARs and relevant references issued on the 22 June 2018.

1.2 Location of the study area

The study area is located within the suburb of Schofields in the Blacktown Local Government Area (LGA) on the corner of Farmland Drive and the future realignment of Pelican Road, Schofields (Figure 1). It encompasses 2 hectares of private land. It is currently zoned SP2 – Infrastructure and R3 – Medium Density Residential.



1.3 Scope of assessment

This report was prepared in accordance with current heritage guidelines including *Assessing Heritage Significance, Assessing Significance for Historical Archaeological Sites and 'Relics'* and the *Burra Charter*.² This report provides a heritage assessment to identify if any heritage items or relics exist within or in the vicinity of the study area. The heritage significance of these heritage items has been investigated and assessed in order to determine the most appropriate management strategy.

The following is a summary of the major objectives of the assessment:

- Identify and assess the heritage values associated with the study area. The assessment aims to
 achieve this objective through providing a brief summary of the principle historical influences that
 have contributed to creating the present day built environment of the study area using resources
 already available and some limited new research.
- Assess the impact of the proposed works on the cultural heritage significance of the study area.
- Identifying sites and features within the study area which are already recognised for their heritage value through statutory and non statutory heritage listings.
- Recommend measures to avoid or mitigate any negative impacts on the heritage significance of the study area.

1.4 Limitations

This report is based on historical research and field inspections. It is possible that further historical research or the emergence of new historical sources may support different interpretations of the evidence in this report.

The historical research undertaken for this report is based on primary documents including Crown and deposited plans, Certificates of Title and historical parish maps. This information was supplemented by existing assessments and reports. Together this information was utilised to present a history of the study area. The archaeological survey was constrained by the presence of dense grass coverage throughout the study area, limiting the observations of ground surface and identification of potential archaeological resources.

Although this report was undertaken to best archaeological practice and its conclusions are based on professional opinion, it does not warrant that there is no possibility that additional archaeological material will be located in subsequent works on the site. This is because limitations in historical documentation and archaeological methods make it difficult to accurately predict what is under the ground.

The significance assessment made in this report is a combination of both facts and interpretation of those facts in accordance with a standard set of assessment criteria. It is possible that another professional may interpret the historical facts and physical evidence in a different way.

² NSW Heritage Office 2001; NSW Heritage Branch, Department of Planning 2009; Australia ICOMOS 2013







2 Statutory framework

This assessment will support a State Significant Development Application (SSDA) under Section 89(c) of the EP&A Act and Schedule 1 of the SEPP (State and Regional Development) 2011. In NSW cultural heritage is managed in a three-tiered system: national, state and local. Certain sites and items may require management under all three systems or only under one or two. The following discussion aims to outline the various levels of protection and approvals required to make changes to cultural heritage in the state.

2.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Act 1999* (EPBC Act) is the national Act protecting the natural and cultural environment. The EPBC Act is administered by the Department of Environment and Energy (DEE). The EPBC Act establishes two heritage lists for the management of the natural and cultural environment:

- The National Heritage List (NHL) contains items listed on the NHL have been assessed to be of outstanding significance and define 'critical moments in our development as a nation'.³
- The Commonwealth Heritage List (CHL) contains items listed on the CHL are natural and cultural heritage places that are on Commonwealth land, in Commonwealth waters or are owned or managed by the Commonwealth. A place or item on the CHL has been assessed as possessing 'significant' heritage value.⁴

A search of the NHL and CHL did not yield any results associated with the study area.

2.2 NSW Heritage Act 1977

Heritage in NSW is principally protected by the Heritage Act (as amended) which was passed for the purpose of conserving items of environmental heritage of NSW. Environmental heritage is broadly defined under Section 4 of the Heritage Act as consisting of the following items: 'those places, buildings, works, relics, moveable objects, and precincts, of State or Local heritage significance'. The Act is administered by the NSW Heritage Council, under delegation by the Heritage Division, Office of Environment and Heritage (OEH). The Heritage Act is designed to protect both known heritage items (such as standing structures) and items that may not be immediately obvious (such as potential archaeological remains or 'relics'). Different parts of the Heritage Act deal with different situations and types of heritage and the Act provides a number of mechanisms by which items and places of heritage significance may be protected.

While SSD projects do not need to comply with the provisions and conditions of the *Heritage Act* 1977, the values protected under this act need to be considered under this assessment.

³ 'About National Heritage' <u>http://www.environment.gov.au/heritage/about/national/index.html</u> ⁴ 'Commonwealth Heritage List Criteria' <u>http://www.environment.gov.au/heritage/about/commonwealth/criteria.html</u>



2.2.1 State Heritage Register

Protection of items of State significance is by nomination and listing on the State Heritage Register (SHR) created under Part 3A of the Heritage Act. The Register came into effect on 2 April 1999. The Register was established under the *Heritage Amendment Act* 1998. It replaces the earlier system of Permanent Conservation Orders as a means for protecting items with State significance.

A permit under Section 60 of the Heritage Act is required for works on a site listed on the SHR, except for that work which complies with the conditions for exemptions to the requirement for obtaining a permit. Details of which minor works are exempted from the requirements to submit a Section 60 Application can be found in the Guideline 'Standard Exemptions for Works requiring Heritage Council Approval'. These exemptions came into force on 5 September 2008 and replace all previous exemptions.

There are no items listed on the SHR within the study area.

2.2.2 Archaeological relics

Section 139 of the Heritage Act protects archaeological 'relics' from being 'exposed, moved, damaged or destroyed' by the disturbance or excavation of land. This protection extends to the situation where a person has 'reasonable cause to suspect' that archaeological remains may be affected by the disturbance or excavation of the land. This section applies to all land in NSW that is not included on the SHR.

Amendments to the Heritage Act made in 2009 changed the definition of an archaeological 'relic' under the Act. A 'relic' is defined by the Heritage Act as:

'Any deposit, object or material evidence:

(a) which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and

(b) which is of State or Local significance'.

It should be noted that not all remains that would be considered archaeological are relics under the NSW Heritage Act. Advice given in the Archaeological Significance Assessment Guidelines is that a 'relic' would be viewed as a chattel and it is stated that,

'In practice, an important historical archaeological site will be likely to contain a range of different elements as vestiges and remnants of the past. Such sites will include 'relics' of significance in the form of deposits, artefacts, objects and usually also other material evidence from demolished buildings, works or former structures which provide evidence of prior occupations but may not be 'relics'.⁵

If a relic, including shipwrecks in NSW waters (that is rivers, harbours, lakes and enclosed bays) is located, the discoverer is required to notify the NSW Heritage Council.

Section 139 of the Heritage Act requires any person who knows or has reasonable cause to suspect that their proposed works will expose or disturb a 'relic' to first obtain an Excavation Permit from the Heritage Council of NSW (pursuant to Section 140 of the Act), unless there is an applicable exception (pursuant to Section 139(4)). Excavation permits are issued by the Heritage Council of NSW in accordance with sections 60 or 140



of the Heritage Act. It is an offence to disturb or excavate land to discover, expose or move a relic without obtaining a permit. Excavation permits are usually issued subject to a range of conditions. These conditions will relate to matters such as reporting requirements and artefact cataloguing, storage and curation.

However, SSD projects are not required to obtain an excavation permit under Section 139 of the Heritage Act, as per Section 5.23 (1) (c) of the EP&A Act. Despite this, section 146 of the *Heritage Act 1977* is still applicable to SSD projects. If during the course of the development, substantial intact archaeological relics of state or local significance not identified in the archaeological assessment are unexpectedly discovered during excavation, work must cease in the affected area and the Heritage Office must be notified in writing in accordance with section 146 of the *Heritage Act 1977*. Depending on the nature of the discovery, additional assessment may be required prior to the recommencement of excavation in the affected area.

2.2.3 Section 170 Heritage and Conservation Registers

Section 170 of the Heritage Act requires that culturally significant items or places managed or owned by Government agencies are listed on departmental Heritage and Conservation Register. Information on these registers has been prepared in accordance with Heritage Division guidelines.

Statutory obligations for archaeological sites that are listed on a Section 170 Register include notification to the Heritage Council in addition to relic's provision obligations. There are no items within or adjacent to the study area that are entered on a State government instrumentality Section 170 Register.

2.3 Environmental Planning and Assessment Act 1979

2.3.1 Blacktown Local Environmental Plan 2015

The Blacktown LEP 2015 contains schedules of heritage items that are managed by the controls in the instrument. While SSD projects do not need to comply with the provisions and conditions of the Blacktown LEP 2015, the values protected under the LEP need to be considered under this assessment. There are no heritage items in the vicinity of the study area.

2.3.2 Blacktown Development Control Plan 2015

The Blacktown Development Control Plan 2015 (DCP) outlines built form controls to guide development. The DCP supplements the provisions of the Blacktown LEP.

The aims and the objects of the Blacktown DCP is primarily to conserve the environmental heritage and the heritage significance of heritage items, and to conserve archaeological sites. This includes the fabric, settings, and views.



3 Historical context

Historical research has been undertaken to identify the land use history of the study area, to isolate key phases in its history and to identify the location of any built heritage or archaeological resources which may be associated with the study area. The historical research places the history of the study area into the broader context of Schofields.

3.1 Topography and resources

The study area is contained within the Blacktown soil landscape. This landscape is characterised by its low reliefs and gentle slope, and is generally associated with a landform pattern of gently undulating rises. The local relief is around 30 metres, with slopes of 5 per cent.

Common landform elements within these systems include hillslopes, crests, drainage depressions, valley flats, and stream channels. A review of topographic maps of the study area indicates that it is dominated by gentle slopes. Landform units present in the vicinity of the study area include crests, alluvial plains, hillslopes, and creek banks.

Within the Cumberland subregion of the Sydney Basin Bioregion there is a variety of vegetation types present, with grey box, forest red gum, narrow-leaved ironbark woodland, and spotted gum are present on shale hills. Hard-leaved scribbly gum, rough-barked apple, and old man banksia are identified on alluvial sands and gravels. Broad-leaved apple, cabbage gum, forest red gum, and swamp oak are present on river flats. Tall spike rush, and juncus with Parramatta red gum is noted around lagoons and swamps.⁶

Native fauna that would have been present in the vicinity of the study area include: Australian wood duck, white-faced heron, eastern long-necked tortoise, eastern water skink, garden skink, welcome swallow, purple swamphen, as well as arboreal fauna including owls, ring- and brushtailed possums, and gliders.

3.2 Aboriginal past

Despite a proliferation of Aboriginal heritage sites there is considerable ongoing debate about the nature, territory and range of pre-contact Aboriginal language groups in the greater Sydney region. These debates have arisen largely because, by the time colonial diarists, missionaries and proto-anthropologists began making detailed records of Aboriginal people in the late 19th century, pre-European Aboriginal groups had been broken up and reconfigured by European settlement activity. The following information relating to Aboriginal people on the Cumberland Plains is based on such early records.

Early interactions between local Aboriginal groups in the Sydney region and European settles varied in nature between peaceful and hostile. It was not long before the effects of colonisation proved detrimental to local



groups, with farming practices employed by the settlers removing land that had until that point been used for subsistence.⁷

Early observers made no note of the language of the local groups, and it was not until the latter part of the nineteenth century that the name Darug was used. Matthews⁸ stated that "The Dharuk speaking people adjoined the Thurrawal on the north, extending along the coast to the Hawkesbury River, and inland to what are now Windsor, Penrith, Campbelltown, and intervening towns". Subsistence activities varied based on the local landscapes, with Darug groups closer to the coast employing different food sources and means of hunting in order to survive, compared to those further inland.⁹

3.3 Schofield – historical development

3.3.1 Exploration (1790s to 1845)

The region was first discovered in the early 1790s by an expedition to investigate if the Hawkesbury and Nepean Rivers connected. This expedition was led by Governor Arthur Phillip, and consisted of Lieutenant Tench, Lieutenant Dawes, Surgeon White, Mr. Collins, a servant, three convicts, eight Marine privates, two sergeants, one captain, and two Aboriginal guides, Colbee and Boladeree. By 1802 Governor King had set aside land to be used for grazing. James Meehan, a government surveyor, conducted the first systematic survey of Eastern Creek in 1806, and land was subsequently granted to free and emancipated settlers by Governor Macquarie.¹⁰

John Schofield arrived as a convict in 1821, and within four years was granted a ticket of leave. During this time he worked on a farm owned by Thomas Harley, at Baulkham Hills. In 1845 he purchased a 600-acre property, which is now present day Schofields.¹¹

3.3.2 Early development and farming by the Pye family (1815 to 1880s)

The study area is located within the Parish of Gidley, County of Cumberland. It is also contained within a land grant of 100 acres (40.4686 hectares) initially made to Josh Ward in 1815, and later made to Joseph Pye on 19 October 1831 by Crown grant (Plate 1).¹²

⁷ Attenbrow 2002

⁸ in Attenbrow 2002, 32

⁹ Kelleher Nightingale Consulting 2010, 10,

¹⁰ GML Heritage 2018

¹¹ Riverstone & District Historical Society and Museum 2010

¹² NSW Department of Lands, Vol. 1101 Fol. 101, Colonial Secretary's Office 1831





Plate 1 Extract from an 1833 Gidley Parish Map, with the study area highlighted (Source: NSW Land Registry Services)

Joseph's father John had arrived in Australia in 1791 on the 'Britannia' as a convict at the age of 21. He had been convicted at the Warwick Assizes to 14 years in 1790.¹³ John married Mary Phillips in 1791 and together had eight children. Having served five of his fourteen year term, John was granted 30 acres in Baulkham Hills, which began the Pye family orchards.¹⁴ John and his son Joseph were granted 85 acres of land each on adjoining properties, of which Joseph's land includes the study area. In 1825, Joseph put an advertisement in the paper looking for a tenant for their land adjacent to Eastern Creek. It listed a garden, dwelling house, farm, and outhouse, and orchard of 5 acres.¹⁵ By 1828, John owned 762 head of cattle, and had been selling horses for a number of years previously.¹⁶

In 1815, Joseph Pye married Elizabeth Ward, and had six children together. His father John's parcel of land had been cleared by convicts by 1825 and the Pye homestead was established (located outside of the study

¹³ State Library of Queensland 1948

¹⁴ Australian Dictionary of Biography 2018

¹⁵ Sydney Gazette and New South Wales Advertiser 1825, 4

¹⁶ AHMS 2015, Sydney Gazette and New South Wales Advertiser 1823, 1



area).¹⁷ They named the homestead Waawaarawaa, which means 'fresh water' in Darug, and is likely to be in relation to Eastern Creek.¹⁸ Waawaarawaa was used continually up until it's demolition in 1942, and changed in name to Liberty Estate by the 1920s.

In 1831, Joseph acquired the study area by Crown grant. Joseph Pye died in 1853, and his son David inherited the land.¹⁹ A 1842 plan of Windsor shows the study area in relation to Waawaarawaa, and that the study area still had vegetation on it (Plate 2). During his ownership, David became known as one of the best orchardists and best known authorities on stock in NSW.²⁰ In 1864, the Richmond Railway line²¹ was constructed through the Pye family owned land. This introduced new industry to the area. The Pye family continued their agricultural pursuits over the years. A Crown plan dating to 1881 shows the Richmond Railway and Schofields Road; a dam is recorded near the study area, but no structures are recorded within or in the vicinity (Plate 3).



Plate 2 1842 Windsor district plan (Source: NSW State Library)

¹⁷ GML Heritage 2018
¹⁸ GML Heritage 2018
¹⁹ GML Heritage 2018
²⁰ Windsor and Richmond Gazette 1897, 8
²¹ Sydney Morning Herald 1864, 8





Plate 3 1881 Crown plan of Schofields Road, with the study area highlighted (Source: NSW Land Registry Services)

3.3.3 Separation of the Pye farm, the Langlade dairy and 20th century development (1890s to present)

In 1893, David Pye divided the land between his sons, James John Pye and Sydney George Pye; this includes the land originally owned by Joshua Ward in 1815.²² David Pye died in 1887 at Parramatta,²³ but his son James John Pye continued to purchase cattle for the family business.²⁴ A 1908 Gidley Parish map shows that land surrounding the study area had begun to be subdivided into smaller lots, while the Ward/Pye grant containing the study area remained in its original form (Plate 4).

²² NSW Department of Lands, Vol. 1101 Fol. 101

²³ New South Wales Government Gazette 1897, 8199

²⁴ Windsor and Richmond Gazette 1899, 12





Plate 4 1908 Gidley Parish Map, with the study area highlighted (Source: NSW Land Registry Services)

In 1938, Sydney then on sold part of the land to Joseph and Harold Langlade, who established 'Langlade's Dairy'. Joseph and Harold kept the land for four years, and during this time they constructed several dairy buildings near Waawaarawaa/Liberty Estate.²⁵ It is believed these buildings were located outside of the study area. Sydney also sold part of the land onto Charles Edmund Fisher in 1939. Charles Fisher was witness to a R.A.A.F crash in 1939, and his occupation was listed as a baker.²⁶ In 1946 Fisher oversaw the construction of a dam on Eastern Creek as well as a water pump.²⁷ This dam is most likely to be located to the south east of the study area.

In 1947 Francis James Pye, a farmer, was listed as the owner of the study area, and was the last Pye to do so. Over the course of 118 years, the Pye family had established themselves as orchardists and farmers. However, the study area appears to have been utilised as agricultural grazing land. A 1925 Gidley Parish map shows relatively little change in the division of land surrounding the study area since 1908 (Plate 5).

²⁵ AHMS 2015

²⁶ Daily News 1939, 1

²⁷ Government Gazette of the State of New South Wales 1946, 578





Plate 5 Extract from a 1924 Gidley Parish Map, with study area highlighted (Source: NSW Land Registry Services)

In 1949, Mary Austin Geddes, wife of Harold Geddes, a master butcher, was listed as the next owner of the study area. By 1960, the land was transferred to Cecil Gordon, with an occupation listed as a horse trainer. In 1973 the study area was passed on to Frederick Jones of Marayong, with his occupation listed as a farmer. Easement for a transmission line was listed on the 1973 plans.²⁸ A 1964 Gidley Parish map shows no change to the land parcel containing the study area, but some development north-west of the study area of Schofields town centre (Plate 6).





Plate 6 Extract from a 1964 Gidley Parish Map with the study are highlighted (Source: NSW Land Registry Services)

Aerial photographs from the mid-20th century onwards reveal detail of the use of the study area (Plate 7, Plate 8, Plate 9, Plate 10, Plate 11, Plate 12, Plate 13). Table 2 provides a summary of the changes to the study area from 1956 to 1991.

Year	Comments
1956	A large proportion of the study area appears to have been ploughed, specifically in the northern sections. The southern areas retain some bushland but app has been partially cleared.
1961	Significant changes to the study area, with the installation of an unsealed oval track in the north- eastern portion of the study area; this may have been a horse track considering the ownership of the study area by a horse trainer at this time. Possibly some earthworks or terracing in the south and south-eastern portions of the study area. Some bushland has been retained in the south-eastern corner, and plough marks are also strongly evident.
1965	Similar to previous aerial, with the track less defined and sparser bushland in the south-eastern corner.
1970	The track appears to be out of use, having been grown over. Bushland in the south-eastern corner appears to be in similar condition to the previous aerial.
1978	Very little evidence of the track remains; possibly used for grazing animal stock.
1982	Several tracks run through the study area, and potentially an earthwork in the north-eastern corner.
1991	Western portion of the study area has been developed for agricultural purposes, with grass cover appearing sparse in this area.

Table 2Analysis of aerial photographs of the study area





Plate 7 1956 aerial of the study area, highlighted in red (please note the pink boundary is the area assessed by Environmental Investigation Services 2017) (Source: Environmental Investigation Services 2017)



Plate 8 1961 aerial of the study area, highlighted in red (please note the pink boundary is the area assessed by Environmental Investigation Services 2017) (Source: Environmental Investigation Services 2017)





Plate 9 1965 aerial of the study area, highlighted in red (please note the pink boundary is the area assessed by Environmental Investigation Services 2017) (Source: Environmental Investigation Services 2017)



Plate 10 1970 aerial of the study area, highlighted in red (please note the pink boundary is the area assessed by Environmental Investigation Services 2017) (Source: Environmental Investigation Services 2017)





Plate 11 1978 aerial of the study area, highlighted in red (Source: NSW Spatial Services 2018)



Plate 12 1982 aerial of the study area, highlighted in red (please note the pink boundary is the area assessed by Environmental Investigation Services 2017) (Source: Environmental Investigation Services 2017)





Plate 13 1991 aerial of the study area, highlighted in red (please note the pink boundary is the area assessed by Environmental Investigation Services 2017) (Source: Environmental Investigation Services 2017)

The history of the study area can be summarised as a continual agricultural parcel of land initially dating to the 1830s.

3.4 Chronology of the study area

No structures were identified in the historical research for the study area. The chronology in Table 3 is therefore based upon the property ownership details of the land within which the study area is situated.

Table 3Chronological ownership of the study area

Name	Occupation	Date
Josh Ward		10 June 1815
Joseph Pye		19 October 1831
David Pye	Orchardist	1853
Sydney George Pye and James John Pye	Farmer	5 July 1893
Joseph Langdale and Harold Smith Langdale (in part from Sydney George Pye)	Dairy farmer	14 November 1938
Charles Edmund Fisher (in part from Sydney George Pye)		24 April 1939
Francis James Pye	Farmer	1 December 1947



Name	Occupation	Date
Mary Austin Geddes and Harold Geddes	Master Butcher	28 October 1949
Cecil Gordon	Horse trainer	15 March 1960
Frederick Jones	Farmer	24 July 1973

3.5 Research themes

Contextual analysis is undertaken to place the history of a particular site within relevant historical contexts in order to gauge how typical or unique the history of a particular site actually is. This is usually ascertained by gaining an understanding of the history of a site in relation to the broad historical themes characterising Australia at the time. Such themes have been established by the Australian Heritage Commission and the NSW Heritage Office and are outlined in synoptic form in NSW Historical Themes.²⁹

There are 38 State Historical Themes, which have been developed for NSW, as well as nine National Historical Themes. These broader themes are usually referred to when developing sub-themes for a local area to ensure they complement the overall thematic framework for the broader region.

A review of the contextual history in conjunction with the local historical thematic history has identified one historical theme which relates to the occupational history of the study area.³⁰ This is summarised in Table 4.

Table 4Identified historical themes for the study area

Australian Theme	NSW Theme	Local Theme	
Developing local, regional and	Agriculture	None specified, but examples include rural	
national economies		landscape, dairy, orchards and plough markings.	



4 Physical inspection

A physical inspection of the study area was undertaken on 20 November 2018, attended by Charlotte Allen (Archaeologist – Biosis). The principal aims of the survey were to identify heritage values associated with the study area; this included any heritage items (Heritage items can be buildings, structures, places, relics or other works of historical, aesthetic, social, technical/research or natural heritage significance. 'Places' include conservation areas, sites, precincts, gardens, landscapes and areas of archaeological potential).

4.1 Site Setting

The study area is located within a developing suburban landscape and consists of Lot 4, DP 1208329. The study area is bounded by Farmland Drive to the north, Lots 2-4, DP 1209060 to the east, Lot 1, DP 1209060 to the south and Lot 121, DP 1203646 to the west. The majority of the study area consists of open fields with grass coverage and scattered trees (Figure 3, Figure 4). The study area contains a crest and ridgeline in the northern portion, with a simple slope ascending south towards an unnamed creek south of the study area (Figure 5). A dirt road runs through the north-western corner of the study area and a wooden historic fence line was observed (Figure 3, Figure 7).



Figure 3 Typical view of open field with grass coverage within the study area, facing south-west





Figure 4 Typical view of scattered trees within the south-eastern portions of the study area



Figure 5 Several mounds of overgrown deposited materials in the northern portion of the study area, facing east





Figure 6 Dirt road running through the north-west corner of the study area, looking west



Figure 7 Wooden fence post in fence line running roughly north to south through the study area, looking south-west

4.2 Built fabric assessment

The only element of the built environment on this site was the wooden posts comprising the fence line running roughly north to south throughout the study area. No other items of built fabric were observed during the site inspection



4.3 Archaeological assessment

The potential archaeological resource relates to the predicted level of preservation of archaeological resources within the study area. Archaeological potential is influenced by the geographical and topographical location, the level of development, subsequent impacts, levels of onsite fill and the factors influencing preservation such as soil type. An assessment of archaeological potential has been derived from the historical analysis undertaken during the preparation of this report.

4.3.1 Archaeological resource

This section discusses the archaeological resource within the study area. The purpose of the analysis is to outline what archaeological deposits or structures are likely to be present within the study area and how these relate to the history of land use associated with the study area.

The historical context presented in this report indicates that the study area has been largely used for agricultural or pastoral purposes with no formal structures identified on Crown plans or plans contained within Certificates of Title. There could potentially be archaeological resources related to this land use, such as postholes or footings for paddock and stockyard fencing and informal farm outbuildings. There may also be evidence of historical ploughing in the form of ridges and furrows within the soil profile, as well as evidence of the horse track in the form of earthworks, as identified in the historical aerial photographs (Plate 7, Plate 8, Plate 9, Plate 10, Plate 11). There were several overgrown mounds of recently deposited materials, perhaps associated with the development on the adjacent property to the east.

4.3.2 Integrity of sub-surface deposits

At time of writing no archaeological investigations are known to have been undertaken on this site. This land was owned by a farmer between 1947 and 1949 and again from 1973. Any ploughing undertaken during this time period it has likely impacted the integrity of the possible sub-surface deposits. Other owners of this site included a dairy farmer, master butcher and horse trainer, all of which activities would not have greatly disturbed the sub-surface deposits.

4.3.3 Research potential

Archaeological research potential refers to the ability of archaeological evidence to provide information about a site that could not be derived from any other source and which contributes to the archaeological significance of that site. Archaeological research potential differs from archaeological potential in that the presence of an archaeological resource (i.e. archaeological potential) does not mean that it can provide any additional information that increases our understanding of a site or the past (i.e. archaeological research potential).

The research potential of a site is also affected by the integrity of the archaeological resource within a study area. If a site is disturbed, then vital contextual information that links material evidence to a stratigraphic sequence may be missing and it may be impossible to relate material evidence to activities on a site. This is generally held to reduce the ability of an archaeological site to answer research questions.

Assessment of the research potential of a site also relates to the level of existing documentation of a site and of the nature of the research done so far (the research framework), to produce a 'knowledge' pool to which research into archaeological remains can add.

Developing local, regional and national economies - Agriculture and Pastoralism

The study area has been likely utilised for both agricultural and pastoral purposes since the land was granted to Josh Ward in 1815. However, while there may be both disturbed and undisturbed archaeological material



associated with these activities within the study area, it is unlikely that any remains would provide further information regarding agriculture and pastoralism that cannot be ascertained from historical documentation.

4.3.4 Summary of archaeological potential

Through an analysis of the above factors a number of assumptions have been made relating to the archaeological potential of the study area, these are presented in Table 5 and Figure 8.

The assessment of archaeological potential has been divided into three categories:

- **High archaeological potential** based upon the historical context and documentary evidence presented within this report there is a high degree of certainty that archaeologically significant remains relating to this period, theme or event will occur within the study area.
- **Moderate archaeological potential** based upon the historical context and documentary evidence presented within this assessment it is probable that archaeological significant remains relating to this period, theme or event could be present within the study area.
- **Low archaeological potential** based upon the historical context and documentary evidence presented within this assessment it is unlikely that archaeological significant remains relating to this period, theme or event will occur within the study area.

Description	Probable feature(s)	Possible construction date	Archaeological potential
Paddock fencing, informal farm outbuildings	Postholes and associated cuts, remains of fencing posts, wiring	Mid-late 19th- century	Low
Areas of historic ploughing	Ridges and furrows	Mid-late 19th- century	Low

Table 5 Assessment of archaeological potential





5 Significance assessment

An assessment of heritage significance encompasses a range of heritage criteria and values. The heritage values of a site or place are broadly defined as the 'aesthetic, historic, scientific or social values for past, present or future generations'³¹. This means a place can have different levels of heritage value and significance to different groups of people.

The archaeological significance of a site is commonly assessed in terms of historical and scientific values, particularly by what a site can tell us about past lifestyles and people. There is an accepted procedure for determining the level of significance of an archaeological site.

A detailed set of criteria for assessing the State's cultural heritage was published by the (then) NSW Heritage Office. These criteria are divided into two categories: nature of significance, and comparative significance.

Heritage assessment criteria in NSW fall broadly within the four significance values outlined in the Burra Charter. The Burra Charter has been adopted by State and Commonwealth heritage agencies as the recognised document for guiding best practice for heritage practitioners in Australia. The four significance values are:

- historical significance (evolution and association)
- aesthetic significance (scenic/architectural qualities and creative accomplishment)
- scientific significance (archaeological, industrial, educational, research potential and scientific significance values)
- social significance (contemporary community esteem).

The NSW Heritage Office issued a more detailed set of assessment criteria to provide consistency with heritage agencies in other States and to avoid ambiguity and misinterpretation. These criteria are based on the Burra Charter. The following SHR criteria were gazetted following amendments to the *Heritage Act 1977* (Heritage Act) that came into effect in April 1999:

- Criterion (a) an item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area).
- Criterion (b) an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area).
- Criterion (c) an item is important in demonstrating the aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area).


- Criterion (d) an item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons.
- Criterion (e) an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area).
- Criterion (f) an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area).
- Criterion (g) an item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places; or cultural or natural environments; or a class of the local area's cultural or natural places; or cultural or natural environments.

5.1 Levels of heritage significance

Items, places, buildings, works, relics, movable objects or precincts can be of either local or State heritage significance, or have both local and State heritage significance. Places can have different values to different people or groups.

Local heritage items

Local heritage items are those of significance to the local government area. In other words, they contribute to the individuality and streetscape, townscape, landscape or natural character of an area and are irreplaceable parts of its environmental heritage. They may have greater value to members of the local community, who regularly engage with these places and/or consider them to be an important part of their day-to-day life and their identity. Collectively, such items reflect the socio-economic and natural history of a local area. Items of local heritage significance form an integral part of the State's environmental heritage.

State heritage items

State heritage items, places, buildings, works, relics, movable objects or precincts of State heritage significance include those items of special interest in the State context. They form an irreplaceable part of the environmental heritage of NSW and must have some connection or association with the State in its widest sense.

The following evaluation attempts to identify the cultural significance of the study area. This significance is based on the assumption that the site contains intact or partially intact archaeological deposits.

5.1 Statement of Significance

The study area may contain archaeological material associated with paddock and stockyard fencing, informal farm outbuildings and historical ploughing. However, these possible archaeological materials are not considered an important component of the cultural history of NSW or the Blacktown LGA, and they are not associated with the life or works of a person(s) of importance in local or state cultural history. These possible materials will not yield information that will contribute to a greater understanding of the cultural history of NSW or the Blacktown district, and they unlikely to demonstrate aesthetic characteristics or a high degree of creative or technical achievement in the state or local area. They do not hold a strong or special association with a community or cultural group for social, cultural or spiritual reasons in NSW or the Blacktown district. The possible archaeological materials are not considered to possess uncommon, rare or endangered aspects of NSW or the Blacktown district's cultural history, nor do they demonstrate the principal characteristics of a class of cultural places or environments within the state or local area.



The possible archaeological materials associated with the historical pastoral and agricultural activities within the study area do not hold heritage significance.



6 Statement of heritage impact

This SoHI has been prepared to address impacts resulting from the proposed redevelopment of the study area. The SoHI identifies the level of impact arising from the proposed development and discusses mitigation measures which must be taken to avoid or reduce those impacts.

The proposed development will consist of a new school to which will have capacity for 1,000 students and 70 staff members. The project involves the following elements:

- Two two-storey home base buildings
- a two-storey admin and staff building
- a two-storey library
- a hall and out of school hours care facilities
- three learning courtyards and sports court
- covered outdoor learning area and walkway
- interconnected external area
- two storey home base building.

The proposed impacts under the SSD includes estate works including vegetation clearing, bulk earthworks, civil engineering works (for example stormwater, sewer, water and electrical supply works), several buildings, and landscaping.

This assessment has identified that there may be archaeological material present within the study area related to the historical use of the land for pastoral and agricultural purposes, such as paddock and stockyard fencing, informal farm outbuildings and historical ploughing. However, these archaeological materials have been assessed as not holding heritage significance.

The impacts to the study area for the proposed works associated with the SSD application are considered acceptable, as there are no items of heritage significance within or adjacent to the study area that will be impacted by these activities, provided that an unexpected finds policy is implemented to identify and record any archaeological material that may be encountered during the proposed works.



7 Conclusions and recommendations

7.1 Conclusions

Using a combination of historical research, site inspections and analysis it is concluded that it is unlikely a significant archaeological resource is present at this site. While the research did yield a possibility of subsurface remains such as post holes, informal building footings and furrows, the subsequent use of the land, including ploughing in the early twentieth century would have disturbed any remains. The site visit also noted a historic fence line. It is unlikely any of these remains would provide further information regarding agriculture and pastoralism that cannot be ascertained from historical documentation. These remains have been assessed as not holding heritage significance and as such the impacts associated with the SSD application are considered acceptable.

7.2 Recommendations

These recommendations have been formulated to respond to client requirements and the significance of the site. They are guided by the ICOMOS *Burra Charter* with the aim of doing as much as necessary to care for the place and make it useable and as little as possible to retain its cultural significance.³²

Recommendation 1 No further assessment required

This assessment has identified no items of heritage significance or archaeological potential within the study area, and no negative heritage impacts to surrounding heritage items. As such, no further assessment is required prior to the approval of the SSD application. Prior to any ground disturbance occurring within the study area, an unexpected finds procedure should be implemented as outlined in Recommendation 2.

Recommendation 2 Development of an Unexpected Finds Procedure

Relics are historical archaeological resources of local or State significance and are protected in NSW under the *Heritage Act 1977*. Relics cannot be disturbed except with a permit or exception/exemption notification. Should unanticipated relics be discovered during the course of the project, work in the vicinity must cease and an archaeologist contacted to make a preliminary assessment of the find. The Heritage Council will require notification if the find is assessed as a relic.



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Appendices



Appendix 1 Proposed development







